

OCONEE COUNTY PLANNING COMMISSION

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

AGENDA

6:00 PM, MONDAY, NOVEMBER 20th, 2017
COUNCIL CHAMBERS
OCONEE COUNTY ADMINISTRATIVE COMPLEX

1. Call to Order
2. Invocation by County Council Chaplain
3. Pledge of Allegiance
4. Approval of Minutes
 - a. November 6th, 2017
5. Public Comment for Agenda and Non-Agenda Items (3 minutes)
6. Staff Update
7. Election of Chairman

To include Vote and/or Action on matters brought up for discussion, if required.

 - a. Discussion by Commission
 - b. Commission Recommendation
8. Discussion on Planning Commission Schedule for 2018

To include Vote and/or Action on matters brought up for discussion, if required.

 - a. Discussion by Commission
 - b. Commission Recommendation
9. Discussion on the addition of the Traditional Neighborhood Development Zoning District

To include Vote and/or Action on matters brought up for discussion, if required.

 - a. Discussion by Commission
 - b. Commission Recommendation
10. Discussion on amending the Vegetative Buffer

[To include Vote and/or Action on matters brought up for discussion, if required.]

 - a. Discussion by Commission
 - b. Commission Recommendation
11. Discussion on the Comprehensive Plan review

To include Vote and/or Action on matters brought up for discussion, if required.

 - a. Discussion by Commission
 - b. Commission Recommendation
12. Old Business [*to include Vote and/or Action on matters brought up for discussion, if required*]
13. New Business [*to include Vote and/or Action on matters brought up for discussion, if required*]
14. Adjourn

Anyone wishing to submit written comments to the Planning Commission can send their comments to the Planning Department by mail or by emailing them to the email address below. Please Note: If you would like to receive a copy of the agenda via email please contact our office, or email us at: achapman@oconeesc.com.

OCONEE COUNTY PLANNING COMMISSION

415 South Pine Street - Walhalla, SC



TEL (864) 638-4218 FAX (864) 638-4168

6:00 PM, MONDAY, 11/06/2017
COUNCIL CHAMBERS
OCONEE COUNTY ADMINISTRATIVE COMPLEX

Members Present:

Mr. Kisker
Mr. Johnson
Mr. Vassey
Mr. Pearson
Ms. Lyles

Staff Present: David Root, County Attorney
Adam Chapman, Planner I – Community Development
Sherrie Williams, Planner – Community Development

1. Call to Order

Mr. Kisker called the meeting to order at 6:00 PM.

2. Invocation by County Council Chaplain

Mr. Root gave the invocation.

3. Pledge of Allegiance

4. Approval of Minutes

a. October 16, 2017

Mr. Pearson – Motion

Mr. Vassey – Second

5. Public Comment for Agenda and Non-Agenda Items (3 minutes)

Mr. Marcovich has concerns on the language for the Multi-Family in CFD. Does the wording need to be changed in all the zoning districts. All other districts require a minimum lot size and density requirements and allowed only by special exception. Mr. Barnett has concerns about stripping the people of their property rights. Mr. Turetzky stated that be careful with allowing density is very important.

6. Staff Updates

Someone called about a Multi-Family project, and I told him it is doable and is currently being looked at. Building permits are at 46 for the week.

7. Election of Chairman

Tabled until a full board is present.

8. Discussion on proposed "Multi-Family" language for the Control-free District

Staff presented the language Mr. Root came up with to be inserted in Section 38-10.2 CFD.

Multi-family housing within the Control-Free District

Setback requirements do not apply to lot lines separating dwelling units which are part of a multi-family housing structure (e.g., townhouses).

As to multi-family housing structures located on one lot (e.g., duplexes or apartments), setback requirements apply only to the exterior perimeter wall of the entire structure.

Mr. Johnson is concerned if the language would apply to all other zoning districts or only CFD.

A motion was made by Mr. Pearson with a second by Ms. Lyles to approve the Multi-Family Language as submitted.

9. Discussion on the Comprehensive Plan Update

The first 22 pages are the goals that Planning Commission needs to look at first. The update was suppose to be done in 2015. Staff can go through and redline the numbers and present it back to the Commission. Staff will work on doing one section at a time and completeting the Comp Plan by the middle of Februrary 2018. The Commission can then consider that a review and start working to update the Comp Plan in its entirety by 2020.

10. Old Business

No old business

11. New Business

Mr. Smith talked about the letter that has been drafted to send to County Council. Mr. Smith wants the letter to be specific and direct about how the Council moves forward on the Corridors.

The calendar for the meeting schedule for 2018.

12. Adjourn

Mr. Pearson made the motion to adjourn at 6:56 PM

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Title: Traditional Neighborhood Development

Definition: Those areas suitable for relatively intense residential development that offers significant amounts of open space and designed amenities that enhance the surrounding scenic, natural, and cultural characteristics.

Intent: This district is intended to allow flexibility in development that will result in improved public realm, design, character, and quality of new residential developments in order to preserve natural and scenic features of open spaces that might be negatively impacted by more restrictive zoning districts.

Permitted uses: The primary uses for this district are single, multi-family dwelling units, and accessory uses. A complete listing of uses permitted within the Traditional Neighborhood Development district is contained in the Zoning Matrix in section ###. Mobile home and Recreational Vehicle type development are not permitted.

*Dimensional requirements:**

Project Area, Density and Open Space			Minimum Yard Requirements and Lot Size		Max. Height
Min. Project Area	Max. Density	Min. Open Space	Front, Side and Rear Setbacks from project parcel	Front, side and rear setbacks of internal parcels.	Structure Height (ft.)
5 acres	None / or density to open space requirement	___% / or link to density	25' / or	none	65' / or?

Right-of-Way: The road right of ways for the TND may not be submitted for absorption into the County road network. There is no set right of way for roads within the TND. The right of way for all primary roads within a TND must include sidewalks, pedestrian scaled lighting and street trees / vegetation. The right of ways may contain on-street parking, pedestrian amenities such as benches, fountains, public art, low-impact design storm-water management areas, vegetated medians, and roundabouts. All right of ways need approval of the County Engineer and EMS.

A major tenant of TND is a connected road network. Blocks may not be more than 500' long and 250' wide. Cul-de-sacs are not permitted as of right. Roads are required to stub-out to potential future adjacent developments where applicable. TND are encouraged to have multiple entrance points off of the public road network. Alley ways at the rear of houses are permitted to connect the road network to private garages or parking.

Sidewalks: A sidewalk network must connect all homes and buildings within the TND. All sidewalks and crossings must be ADA compliant.

Street trees / vegetation: A vegetative strip shall be within the right-of-way on both sides of the street in between the road and the sidewalk. Additional vegetated areas are permitted within the right-of-way. The purpose is to provide shade, pedestrian protection from vehicles and aesthetic appeal. All vegetation must be native to the region and kept maintained. A vegetation plan must be submitted during the permitting process.

Parking: On-Street Parking is permitted and encouraged on all streets. Lots without alleys will have private driveways accessed from the street. Garages accessed from a private drive shall either be located behind the principal building on a lot (in the case of a detached garage condition) or recessed behind the primary facade of the principle building (in the case of an attached garage condition). On-Street parking is the only parking to be located in the front of any dwelling-unit.

Open-Space: At least ___% of the project site must be dedicated to open- space. Open Space may be passive use – greens, gardens, natural areas ,or active such as swimming pools and accessory structures, children's play grounds, community gardens, equestrian uses, tennis/golf/basketball type activities.

Building Placement and Design: Buildings shall occupy the perimeter of a block and front facades shall face the street. Resident parking and services shall occur behind the buildings that occupy the

perimeter of the block. Exposed alley openings shall be screened by wing walls and landscaping. Residences shall be designed to embrace the street and public realm.

- i. All buildings on a block shall be built to a build-to line where all porches and building fronts are the same distance from the front property line or road centerline.
- ii. All residences shall incorporate a stoop and/ or porch element.
- iii. All parking for single family and multi-family residences must be located at the rear of the residences.
- iv. All buildings shall be built in a similar and complementary architectural style.
- v. Accessory dwelling-units are permitted

DRAFT

Zoning Use Matrix

Uses	TND	AD	ARD	CD	RRD	PRLD	RD	LRD	CCD	HCD	ID	MUD
	Zoning Use Matrix											
Agricultural production, crops, livestock, and poultry	x	P	X	P	P	X	X	X	X	X	X	X
Agricultural production, crops, livestock, and poultry (excluding commercial chicken houses, commercial hog parlors, and commercial feed lots)	x	P	P	P	P	X	P	X	P	P	P	X
Agricultural support services- veterinarians, kennels, feed/seeds, supply stores, implements, etc.	x	P	P	X	P	X	X	X	P	P	P	X
Air strips	P	S	X	X	S	X	X	X	X	S	S	X
Auction houses	x	P	S	X	P	X	X	X	C	C	X	C
Auditorium/Indoor Public Assembly	x	S	X	X	X	X	X	X	P	P	X	X
Bed and Breakfast Inns	P	C	P	S	P	X	S	S	C	P	X	X
Building and Trade Contractors, including materials and supply uses	x	P	S	X	X	X	X	X	P	P	P	P
Cemeteries and accessory uses	x	P	P	P	P	X	P	X	C	P	P	P
Civic, fraternal, professional, and political organizations	x	P	P	X	P	X	S	X	P	P	X	P
Commercial Fishing, Hunting and Trapping	x	P	S	S	S	S	X	X	X	X	X	X
Communications towers	S	S	S	S	S	S	X	X	S	S	S	S
Conservation subdivisions	x	C	C	S	C	X	C	C	X	C	X	C

Convenience stores (excluding motor vehicle services)	x	S	S	X	S	X	X	X	P	P	P	P
Correctional facilities and half-way houses	X	X	X	X	X	X	X	X	X	X	S	X
Day Care Facilities (all ages)	P	P	S	X	S	X	S	S	P	P	X	S
Distribution and other Warehouses	x	P	X	X	X	X	X	X	S	P	P	S
Educational buildings, and Research Facilities (all types)	S	S	X	S	S	P	S	X	P	P	P	S
Emergency services	x	P	P	X	P	X	P	P	P	P	P	P
Farm and roadside markets	P	P	P	P	P	P	X	X	P	P	X	X
Financial Services	x	S	X	X	X	X	X	X	P	P	X	P
Forestry/Silviculture	x	P	P	P	P	P	P	P	P	P	P	P
Fuel supply services	X	P	X	X	X	X	X	X	S	P	P	S
Funeral homes and services	X	X	X	X	X	X	X	X	P	P	X	P
Golf courses, country clubs, driving ranges	P	X	S	X	X	X	P	P	X	P	X	X
Government buildings (excluding correctional facilities)	x	S	X	S	P	P	P	X	P	P	P	P
Group Homes	S	S	S	X	S	S	S	X	X	X	X	S
Greenhouses, nurseries, and landscape commercial services	x	P	P	S	P	X	X	X	P	P	P	P
Gun and Archery clubs and shooting ranges	S	S	X	S	S	X	X	X	X	S	X	X
Health care services, service retail, and	x	P	S	X	P	X	X	X	P	P	X	P

emergency short term shelters												
Home occupations and businesses	C	C	C	C	C	X	C	C	C	C	X	C
Hotels, Motels, and Inns	x	S	X	X	X	X	X	X	P	P	X	X
Laundry Mats	x	P	P	X	X	X	X	X	P	P	X	P
Laundry and dry cleaning services	x	X	X	X	X	X	X	X	P	P	X	S
Light Manufacturing	x	S	X	X	X	X	X	X	S	P	P	S
Liquor stores and bars	X	X	X	X	X	X	X	X	S	S	X	S
Lumber and saw mills (permanent)	x	P	X	X	X	X	X	X	X	X	P	X
Lumber and saw mills (portable)	x	P	P	P	P	P	P	P	P	P	P	P
Manufactured Home Dealer	X	X	X	X	X	X	X	X	X	P	P	X
Heavy Manufacturing	X	X	X	X	X	X	X	X	X	S	P	X
Marinas	x	S	S	X	S	S	S	S	P	P	P	X
Mini storage or mini warehouses	X	X	X	X	X	X	X	X	P	P	P	X
Mining	x	S	X	X	X	X	X	X	X	X	X	X
Mixed Use Buildings and parcels	x	P	X	X	P	X	S	X	P	P	X	P
Motor vehicle parking and garages (as a principal business use)	X	X	X	X	X	X	X	X	P	P	P	X
Motor vehicle sales and rental	x	X	X	X	X	X	X	X	P	P	P	X
Motor vehicle services and repair	x	P	P	X	X	X	X	X	C	P	P	C
Motor vehicle services and gas stations (excluding truck stops)	x	P	X	X	P	X	X	X	P	P	P	P

Roadside Stands	P	P	P	P	P	X	P	P	P	P	P	P
Salvage yard, Junkyard, and Recycling Operations	x	S	X	X	X	X	X	X	X	X	P	X
Single-family detached residential	P	P	P	P	P	X	P	P	P	P	X	P
Single-family subdivisions (10 units or less)	P	S	P	X	P	X	P	P	P	X	X	P
Single-family subdivisions (more than 10 units)	P	X	X	X	X	X	P	P	S	X	X	S
Solid waste landfill and Waste Management Services; (excluding hazardous waste)	x	S	X	X	X	X	X	X	X	X	S	X
Taxidermy, slaughter houses and wild game processing	x	P	S	S	P	X	X	X	S	S	X	X
Waste management services (excluding hazardous waste)	x	S	X	X	X	X	X	X	X	X	P	X

X—Not permitted

P—Permitted

C—Conditional use - permitted if conditions are met

S—Special exception - approved by Board of Zoning Appeals



Goals

This section contains the goals established by this Comprehensive Plan, which are based on the needs and desires set forth in the various elements. Each broad goal is supported by constituent objectives that address those identified needs, with appropriate strategies designed to ensure a successful outcome. It should be noted that specific objectives and strategies stemming from priorities established in more than one element have been appropriately stated to accomplish the desired results expressed in all elements (the elements to which each objective applies is noted). In addition, the county agencies deemed responsible for monitoring and facilitating the success of the effort are also named, as well as a timeline considered sufficient for completion.

Goal # 1

Preserve, protect, and enhance the quality and quantity of Oconee County's natural resources.

Objective 1: Work to guarantee adequate water distribution systems for present and future economic development in Oconee County.

Applicable Elements: Community Facilities; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Work to facilitate the establishment of a partnership with water providers aimed at expanding service into underserved unincorporated areas of the county.	Planning Commission; County Council	2012 Completed/ Ongoing Link to Seneca and Salem
2. Partner with municipalities in inventorying current condition of their water infrastructure systems to determine ability to accommodate future growth.	Infrastructure Advisory Commission; Planning Commission; County Council	Ongoing Not a County initiated project.
3. Work to develop agreements with water providers to coordinate with County on a plan provide for required fire protection for new development.	Emergency Services Commission; Planning Commission; County Council	2012 COMPLETED w/ Fire Station 10 at end of FY17

Objective 2: Improve and expand wastewater treatment within Oconee County.

Applicable Elements: Community Facilities; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Expand sewer service throughout areas designated by the Land Use Element as primary areas of development, while implementing appropriate limits needed to avoid negative impacts on sensitive areas.	Planning Commission; County Council	Ongoing PC TO DO LIST
2. Implement requirements for all developer-initiated sewer expansions to be configured with sufficient capacity to allow existing and future affected property owners to connect to the proposed line.	Planning Commission; County Council	2012 COMPLETE
3. Work with neighboring counties when possible to establish regional efforts to expand sewer service into prime commercial and industrial locations.	Planning Commission; County Council	Ongoing PC TO DO LIST
4. Partner with municipalities and Joint Regional Sewer Authority to coordinate efforts to provide sewer throughout high growth corridors.	Infrastructure Advisory Commission; Planning Commission; County Council	Ongoing Completed/ Ongoing with sewer South to Golden Corner. Seneca & County did 13.2 miles.
5. Establish partnership(s) with regional, state, and federal agencies to find funding sources for wastewater treatment needs.	Planning Commission; County Council	Ongoing TVA / ARC GRANTS
6. Study and establish increased access to sanitary boat dump stations on area lakes.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	2013 COMPLETE Marinas at Keowee & Hartwell implementing

Objective 3: Initiate efforts to develop the foundation of a county storm water management program prior to federal mandates, thereby allowing for the most efficient and cost-effective implementation possible in the event of designation.

Applicable Elements: Population; Natural Resources; Economic Development; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Study and evaluate options available to jurisdictions designated by EPA to establish storm water management programs, identifying those attributes desirable for an Oconee County program.	Planning Commission; County Council	2011 With next Census Federal Regulations will be required.
2. Work with state and federal agencies as required to create necessary components of storm water program, when possible, through a phased approach that will lessen impact of meeting mandates.	Planning Commission; County Council	2011 "As Required"
3. Support regional efforts to protect watersheds.	Planning Commission; County Council	Ongoing This is activity falls under the jurisdiction of SCDHEC

Objective 4: Establish a program of managing both water quantity and water quality throughout the county that will ensure efficient utilization, and appropriate conservation, of our greatest natural resource.

Applicable Elements: Population; Natural Resources; Economic Development; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Work with state and federal agencies to establish a comprehensive network of water monitoring stations in Oconee County watersheds.	Planning Commission; County Council	2014 SCDHEC jurisdiction
2. Establish accurate 7Q10 rating for all water basins in Oconee County.	Planning Commission; County Council	2014 Was created as a reaction to ATL proposed withdrawals from the Chattooga. Not done.
3. Develop a county-wide water usage plan that defines water conservation practices for both normal and drought conditions, and insures that all users share equally in restrictions during drought conditions.	Planning Commission; County Council	2012 Water Commission was created. No plans adopted.
4. Partner with both public and private entities to develop a county-wide education program designed to promote water conservation.	Planning Commission; County Council	2012 PC TO DO LIST
5. Study and evaluate the impact of Oconee County's water supply on ISO ratings, and the resulting cost of fire insurance, seeking to identify opportunities for better ratings.	Emergency Services Commission; Planning Commission; County Council	2012 COMPLETE
6. Partner with adjacent jurisdictions on comprehensive water studies detailing availability from all sources and usages/outflows.	Planning Commission; County Council	Ongoing PC TO DO LIST

Objective 5: Preserve, protect and enhance Oconee County’s environmentally sensitive lands, unique scenic views, agrarian landscapes, and topographic features.

Applicable Elements: Natural Resources; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Encourage use of “Best Management Practices” in farming and forestry operations.	Planning Commission; County Council	Ongoing Soil & Water Conservation Commission’s area of responsibility.
2. Work to partner with public and private entities in developing a countywide greenway system that will offer opportunities for nature-based recreation in areas where few currently exist.	Planning Commission; County Council	2014 Ongoing
3. Encourage and support collaboration between landowners and public and private agencies in the development of ecologically and economically sound plans for preservation and restoration of forests and farmland.	Planning Commission; County Council	Ongoing Establishment of OC Conservation Bank

Objective 6: Promote partnerships and voluntary conservation easements to preserve significant lands and scenic areas under pressure.

Applicable Elements: Natural Resources; Land Use; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Establish a county conservation bank to provide for the transfer of development rights and/or conservation easements to protect rural lands, sensitive areas, and significant natural resources.	County Council	2011 COMPLETE / ONGOING
2. Identify and establish various funding sources for the county conservation bank identified above; these may include grants, corporate gifts, a percentage of development permit fees, and annual revenue designations.	County Council	2011 COMPLETE / ONGOING

3. Provide appropriate assistance from county departments and agencies in efforts to identify and preserve historic structures, significant lands, and scenic areas.	Planning Commission; County Council	Ongoing/ COMPLETE / ONGOING
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Goal #2

Identify, develop and utilize all tools and funding sources necessary to meet the present and future economic development needs of Oconee County.

Objective 1: Continue support of a comprehensive planning process to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and update the various components of the Oconee County Comprehensive Plan as needed, not restricted to the minimum time periods established in state regulations.	Planning Commission; County Council	Ongoing ONGOING
2. Improve communication and cooperation between the County and municipalities, state and federal agencies, and other public and private entities.	Planning Commission; County Council	Ongoing ONGOING Improvements have been made

Objective 2: Review, update, and adopt the Infrastructure Master Plan.

Applicable Elements: Economic Development; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and update the Infrastructure Master Plan, insuring that those steps identified provide for the future growth in the county and limit damage to sensitive areas and resources.	Economic Development Commission; Planning Commission; County Council	2011 PC TO DISCUSS
2. Adopt and implement the Infrastructure Master Plan.	County Council	2011 Infrastructure Master Plan Created NOT Adopted
3. Utilizing the elements of the Infrastructure Master Plan as a guide, work to establish a sustainable infrastructure upgrade and maintenance program supported by a steady revenue stream.	Economic Development Commission; Planning Commission; County Council	Ongoing No adopted plan. Count cannot control State / City Roads

Objective 3: Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County’s citizens.

Applicable Elements: Population; Community Facilities; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1 Seek partnerships with other agencies, municipalities, and private industry to eliminate unnecessary redundancy in facilities and services.	Planning Commission; County Council	Ongoing Building Codes is “one-stop” shop for power and sewer. County shared planner. Health Services Offices partnered with Clemson. DMV in County Treasurer’s Office.
2. Maintain a Capital Projects Plan with specifics on estimated costs for upgrades and replacements, with timeframes for getting new estimates.	Planning Commission; County Council	Ongoing PC TO DISCUSS

Objective 4: Explore and evaluate alternative methods of obtaining revenue and grant monies to fund capital improvements and new infrastructure.

Applicable Elements: Community Facilities; Economic Development; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Identify and work to establish alternative revenue sources such as special tax districts and local option sales taxes.	Planning Commission; County Council	Ongoing
2. Adopt appropriate development impact fees to offset some of the cost of infrastructure and public services.	Planning Commission; County Council	2012 PC TO DO LIST. Ask CC
3. Broaden utilization of grant monies to assist with capital projects.	County Council	Ongoing
4. Seek to establish public-private partnerships, user-based fees, and other revenue sources to help fund infrastructure.	County Council	Ongoing
5. Work with state and federal leaders to change formulas for state and federal funding that use Census figures that fail to account for the large percentage of non-resident property owners.	County Council	Ongoing PC TO DO LIST.

Objective 5: Create and/or update plans for specific priorities.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and update the Community Facilities Plan, amending it to reflect the impact of recent growth and the needs of the aging population.	Planning Commission; County Council	2012 PC TO DO LIST
2. Partner with municipalities to develop coordinated 5- and 10- year Economic Development Plans.	Economic Development Commission; Planning Commission; County Council	2014 ONGOING Propex facility, E.D. plans, Walhalla Industrial & Tech Park
3 Update and adopt the 2004 Infrastructure Master Plan.	Economic Development Commission; Planning Commission; County Council	2011 Falls outside the purview of PC.
4. Evaluate, amend, and implement recreation plans,	Parks, Recreation and	Ongoing

as necessary.	Tourism Commission; County Council	Recreation Task Force
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Objective 6: Complete and properly maintain Oconee County’s Geographic Information System (GIS).

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Complete digitization of parcel data, and implementation and integration of Tax Assessor’s CAMA system.	County Council	2011 COMPLETE
2. Expand public access to GIS, emphasizing the accuracy of data collected, usability of mapping website, and the maintenance of data collected.	County Council	Ongoing COMPLETE
3. Establish and maintain a GIS administrative structure that not only promotes efficient service for county agencies, but also serves the mapping needs other public and private entities.	County Council	2010 COMPLETE

Objective 7: Continue to actively promote the recruitment of employment opportunities that provide the best lifestyle for all Oconee residents.

Applicable Elements: Population; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Work with state and federal agencies to attract agribusiness-related grants and revenue sources, and support efforts to establish pilot programs related to new agricultural technologies and products.	Planning Commission; County Council	Ongoing Oakway School & FARM Center
2. Provide appropriate assistance to expand non-traditional and specialty agribusiness opportunities.	County Council	Ongoing Agriculture Advisory Board
3. Continue partnerships in regional economic development recruitment efforts.	Economic Development Commission; Planning Commission; County Council	Ongoing OEA and Business Partnerships
4. Partner with area colleges and universities to expand local technical training facilities.	Economic Development	Ongoing Tri-County Tech at

	Commission; Planning Commission; County Council	OITP
5. Develop sustainable funding mechanism to maintain availability of structures adequate for the needs of modern industry; this may include, but is not limited to, expansion of revenues designated to economic development, public-private partnerships, and grants.	Economic Development Commission; County Council	Ongoing Santee-Cooper Loan
6. Ensure that all governmental actions be considerate of racial, religious, and cultural groups that comprise Oconee County's population.	County Council	Ongoing

Goal #3

Establish an efficient, equitable, and mutually compatible distribution of land uses that complements Oconee County’s traditionally rural lifestyle, yet supports sustainable economic development, protects the environment, and manages future growth and changes.

Objective 1: Encourage development in a way that protects and preserves our natural resources.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and update existing land use regulations as needed, to facilitate development that preserves forests, prime agricultural lands, sensitive areas, and natural resources.	Planning Commission; County Council	Ongoing
2. Develop reasonable regulations regarding the development of steep slope areas.	Planning Commission; County Council	2011 ONGOING PC TO DO LIST
3. Establish green space/open space requirements for new developments.	Planning Commission; County Council	2011 PC TO DO LIST
4. Establish strategies and adopt measures necessary to create the framework for the efficient implementation of erosion and sediment control regulations.	Planning Commission; County Council	2011 ONGOING
5. Support efforts to educate public in the use of best management practices for construction sites.	Planning Commission; County Council	Ongoing Located in I.B.C.
6. Consider, and possibly adopt, regulatory components of a program to expand the natural vegetative buffer requirement to all lake front properties; this may or may not include provisions for increasing the size of the buffer to 50 feet.	Planning Commission; County Council	2013 PC TO DO LIST
7. Establish a mitigation program for littered and unsafe properties, utilizing funding from alternative funding sources such as state and federal grants, or possibly specialized tax levies.	Planning Commission; County Council	2012 ONGOING Litter control Ordinances and Officer

Objective 2: Manage development in a manner that ensures our natural resources and lifestyle serve to enhance a sustainable economic prosperity.

Applicable Elements: Population; Natural Resources; Cultural; Housing; Community Facilities; Economic Development; Land Use; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Utilize the countywide zoning process to plan appropriate development and protect special areas through rezonings and overlays.	Planning Commission; County Council	Ongoing PC TO DO LIST
2. Work to manage urban/suburban development in Oconee County to insure adequate infrastructure is in place to support balanced growth in primary growth areas, while limiting urban sprawl and protecting those areas deemed special.	Planning Commission; County Council	Ongoing
3. Identify potential county industrial sites in appropriate areas, and work with public and private entities to secure funding to purchase select properties for potential projects within prime industrial areas.	Economic Development Commission; Planning Commission; County Council	Ongoing OITP (Money and Development) , Seneca Rail Site, Demo of Manufacturing Site in Westminster. Golden Corner Sewer
4. Promote a diverse economy that includes a mix of employment sectors, including ecotourism, to insure Oconee County remains economically competitive.	Economic Development Commission; Planning Commission; County Council	Ongoing Agri-Tourism, FARM Center, Oakway School

Goal #4

Manage our community facilities, infrastructure, and public resources in a manner that ensures both the existing population and future generations may enjoy the benefits and economic opportunities that make Oconee County an attractive and affordable place to live.

Objective 1: Seek local, state, and federal funding support in efforts to expand and enhance educational opportunities for Oconee County residents.

Applicable Elements: Community Facilities; Economic Development

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Expand coordination of planning efforts with School District of Oconee County to ensure decisions related to school projects are made with the most complete information available, to include all issues related to infrastructure, accessibility, and traffic planning.	Planning Commission; County Council	2011 State chooses sites and handles traffic issues.
2. Continue to look for opportunities to support and enhance job training, education, and adult back-to-school programs by fostering ties with area universities and vocational technical colleges; this may include promoting the development of satellite programs for better access by local residents.	Economic Development Commission; Planning Commission; County Council	Ongoing TCTC in OITP Career Day Fair Leadership Class
3. Provide the School District of Oconee County appropriate assistance in efforts to enhance and upgrade education.	County Council	Ongoing 2.2 Mils
4. Prioritize expansion and upgrades of libraries through the capital improvements plan and coordinate their location with available infrastructure and the location of schools.	Library Board; Planning Commission; County Council	Ongoing

Objective 2: Promote and enhance access to affordable housing through both public and private cooperation.

Applicable Elements: Population; Housing; Economic Development; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Create a Housing Task Force, non-profit housing agency, or Trust which would analyze regulatory barriers and seek market-based incentives to promote affordable housing.	Planning Commission; County Council	2011 PC TO DO LIST
2. Review and amend land development and subdivision regulations as needed to provide incentives to promote the development of high-quality, low-cost housing.	Planning Commission; County Council	2012 Special Exemption for Habitat for Humanity
3. Work with state and local government to find funding sources, such as growth management infrastructure grants, to assist public and private entities seeking funds to develop and rehabilitate high-quality, low-cost housing.	Planning Commission; County Council	Ongoing PC TO DO LIST
4. Work with local, state, and federal agencies to reduce barriers to affordability; this may include one-stop permitting, pre-approved affordable housing plans, and payback mechanisms for upgrades to infrastructure.	Planning Commission; County Council	Ongoing One stop pre-approval partnership with municipalities for low-cost housing
5. Adopt and enforce substandard housing regulations needed to ensure health and safety; this may include the adoption of the International Property Maintenance Code.	Planning Commission; County Council	2011 COMPLETE

Objective 3: Upgrade solid waste facilities to improve services and allow for needed upgrades and expansion to provide for anticipated growth.

Applicable Elements: Community Facilities; Economic Development; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Study options and develop long-range solution for the County’s solid waste needs; these may include, but are not limited to, constructing an in-county landfill, partnering with other jurisdictions in developing a regional landfill, or the continuation of long-term contracts with outside parties.	Planning Commission; County Council	2011 ONGOING. Solid Waste Ordinance. Update Solid Waste Plan. PC TO DO LIST.
2. Seek to partner in the development of a solid waste research facility at a regional landfill.	Planning Commission; County Council	Ongoing Regional Landfills dying
3. Identify and construct additional construction and demolition landfill sites within the county.	Planning Commission; County Council	2014 Expanding existing. Private landfills being built.
4. Work to reduce the volume of solid waste through increased recycling and composting.	Planning Commission; County Council	Ongoing
5. Seek out innovative and alternative technologies that not only provide for a long-term solution to current and projected solid waste needs, but may also be used in the future to mitigate and reclaim closed facilities.	Planning Commission; County Council	Ongoing PC TO DO LIST Incinerators and Single Stream were studied and proved costly.
6. Seek and establish appropriate uses for closed landfill areas, which may include, but will not be limited to, the establishment of solar power generation facilities and appropriate recreation facilities.	Planning Commission; County Council	2014 PC TO DO LIST

Objective 4: Regularly review public safety needs and enhance facilities as required.

Applicable Elements: Community Facilities; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and upgrade existing emergency facilities plans on a regular basis, implementing established goals in a systematic manner.	Emergency Services Commission; Planning Commission; County Council	Ongoing
2. Provide local public safety agencies appropriate assistance in obtaining funding to expand and upgrade operations.	Emergency Services Commission; County Council	Ongoing
3. Coordinate local public safety planning and activity with regional, state, and federal agencies.	Emergency Services Commission; Planning Commission; County Council	Ongoing
4. Seek to partner with private entities in the development of emergency satellite facilities and specialized response equipment.	Emergency Services Commission; Planning Commission; County Council	Ongoing

Objective 5: Continue to monitor closely Oconee County’s compliance with state and federal air-quality standards, adopting and maintaining reduction strategies as necessary.

Applicable Elements: Natural Resources; Housing; Land Use

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Monitor results of current and future radon research.	Planning Commission	Ongoing PC TO DISCUSS
2. Partner with Home Builder’s Association and other stakeholders to develop a radon response program; this may include, but is not limited to, an educational component that provides information related to both the cost-savings and potential health benefits of incorporating a radon-mitigation option in early construction stages, or the adoption of new standards requiring proven mitigation methods.	Planning Commission; County Council	2012 PC TO DISCUSS
3. Amend and adopt standards as necessary to maintain compliance with the Clean Air Act.	Planning Commission; County Council	Ongoing COMPLETE

Objective 6: Work to address the age-related problems that may arise among Oconee County’s aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.

Applicable Elements: Population; Community Facilities; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and upgrade county-owned medical/residential/nursing care facilities as needed.	County Council	Ongoing
2. Support municipalities in efforts to establish public transportation, seeking ways to expand into various parts of the unincorporated areas as appropriate.	Planning Commission; County Council	Ongoing CAT bus grant
3. Continue to explore ways to increase the efficiency of emergency medical services throughout the county.	Emergency Services Commission; County Council	Ongoing GHS EMS medical response targets.
4. Seek partnerships with public and private entities to study age-related issues, particularly as they relate to potential impacts on Oconee County.	County Council	Ongoing

Objective 7: Upgrade and maintain the county road system in a manner that meets the needs of Oconee County’s growing population and provides safe and efficient routes through the county.

Applicable Elements: Population; Community Facilities; Economic Development; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Develop an ongoing systematic road maintenance and upgrade program based on a steady revenue sources.	Road Department; Planning Commission; County Council	2012 ONGOING
2. Develop and maintain a priority road upgrade list that not only considers existing traffic ‘bottlenecks’ and other sources of trouble, but also reasonably anticipates those expected to emerge in the coming decade.	Road Department; Planning Commission; County Council	2012 ONGOING
3. Consider and adopt appropriate traffic management tools and techniques that utilize concepts such as limiting the number of curb cuts in high-traffic areas.	Road Department; Planning Commission; County Council	Ongoing PC TO DO LIST
4. Prioritize evaluation of all roads lying within primary development areas shown on the Future Land Use Map.	Road Department; Planning Commission; County Council	Ongoing
5. Continue to require developers to provide traffic studies to determine if a road must be upgraded to safely handle increased traffic loads and to cover the costs of road upgrades when necessary.	Road Department; Planning Commission; County Council	Ongoing
6. Enhance communication with local and state D.O.T. staff and projects.	Road Department; Other County Staff	Ongoing

Objective 8: Continue to evaluate and fund public transportation in urbanizing areas of Oconee County, expanding as needed to provide for ongoing growth and development.

Applicable Elements: Population; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Promote and assist in the establishment of commuter parking lots to help encourage car pooling, and decrease traffic congestion.	Planning Commission; County Council	Ongoing
2. Continue to partner with Clemson Area Transit (CAT) in keeping existing services, while looking for other opportunities to expand public transportation, to include, but not be limited to, van services and other non-traditional forms of mass transit.	Planning Commission; County Council	Ongoing Non- traditional not included. Two mass transit studies. Funding issues (Busses are \$300k each)
3. Seek and secure methods of expanding transportation in remote areas for clients of facilities such as DSS, hospitals, medical complexes, government facilities, and parks.	County Council	Ongoing Shared area of Responsibility
4. Support efforts to establish a high-speed rail stop in Clemson, SC and/or Toccoa, Georgia.	Planning Commission; County Council	Ongoing PC TO DO LIST
5. Seek and establish appropriate methods of mass transit that will promote and enhance tourism; these may include, but are not limited to, water taxis, tour boats, and other modes of transport that allow tourists and residents to enjoy natural resources without dramatically increasing traffic.	Mtn. Lakes Conv. & Visitors Bureau; Parks, Recreation and Tourism Commission; County Council	Ongoing Self-guided tourism , camp ground upgrades

Objective 9: Expand bicycle and pedestrian routes to allow for greater use of alternative forms of transportation, and to promote ecotourism opportunities.

Applicable Elements: Natural Resources; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Develop standards that encourage developers to incorporate sidewalks and bicycle trails into subdivision developments.	Planning Commission; County Council	2013 ONGOING County parks / ramps upgraded
2. Seek grants for creating nature trails, sidewalks, bicycle lanes, and other tools designed to make communities more walkable, reduce vehicle traffic, and improve safety for pedestrians and cyclists.	County Council	Ongoing
3. Upgrade county-maintained parks and recreational facilities to encourage and promote ecotourism	Parks, Recreation and Tourism Commission;	Ongoing

opportunities.	County Council	
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Objective 10: Continue upgrades to the Oconee County Airport in a manner that not only serves existing clientele, but will establish the facility as one of the premier small airports in the nation.

Applicable Elements: Community Facilities; Economic Development; Transportation; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Complete ongoing expansion of runway length and upgrade of instrument landing system.	Aeronautics Commission; County Council	2014 COMPLETE
2. Construct planned future upgrades, to include relocation of roads, strengthening of runway, as well as any other necessary components as funding becomes available.	Aeronautics Commission; County Council	2014 ONGOING
3. Construct additional hangar space as needed to accommodate anticipated demand.	Aeronautics Commission; County Council	Ongoing
4. Develop ongoing capital improvements program aimed at upgrading facility to attract additional employers and potential occupants of business parks within the county.	Aeronautics Commission; County Council	2014 COMPLETE AND ONGOING
5. Seek and establish ways to utilize airport to foster partnerships with Clemson University	Aeronautics Commission; County Council	Ongoing Clemson Flying Tigers & Hangar lease agreements.

Objective 11: Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.

Applicable Elements: Population; Community Facilities; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Review and update Community Facilities Plan, amending to reflect impact of recent growth and development and needs of aging population.	Planning Commission; County Council	2013 No CFP PC TO DISCUSS
2. Utilize Capital Improvements Plan to systematically construct and upgrade facilities identified in Community Facilities Plan.	Planning Commission; County Council	Ongoing No CFP
3. Look for alternative to tax payer financing of	County Council	Ongoing

projects such as private partnerships, user based fees, etc.		No CFP
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Goal #5

Expand appreciation for the arts, cultural heritage, significant natural features, and historic treasures in a manner that both enhances our lifestyle and promotes sustainable economic prosperity.

Objective 1: Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.

Applicable Elements: Population; Cultural; Community Facilities; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Seek partnerships and other forms of assistance for the School District of Oconee County in supporting the arts.	Parks, Recreation, Tourism Commission; County Council	Ongoing
2. Support local festivals and entertainment events that promote the heritage of the region; this may include, but not be limited to, grants and other appropriate forms of financial assistance.	Parks, Recreation, Tourism Commission; County Council	Ongoing County holds a number of events
3. Seek to expand role of the Oconee County Heritage Museum in documentation and preservation of local cultural and historical treasures; this may include, but not be limited to, funding of facility upgrades, establishment of various programs and partnerships aimed at promoting specific resources, and addition of staff positions.	Parks, Recreation, Tourism Commission; County Council	Ongoing \$30k per year and an employee. Solicitation of donations and artifacts.
4. Support high quality library facilities, programs, and services that enhance, enrich, entertain, and educate our diverse and growing population and present opportunities for life-long learning and the exchange of culture	Library Board County Council School District	Ongoing

Objective 2: Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.

Applicable Elements: Natural Resources; Cultural; Land Use; Priority Investment

Strategies for Success	Agencies Responsible	Timeframe for Completion
1. Seek to insure the preservation and protection of sites and facilities currently listed on historic registers in Oconee County; this may include, but is not limited to, the development of partnerships to assist in the purchase of development rights, and adoption of standards governing future alterations.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	Ongoing Courthouse to National Registry
2. Study and identify any additional cultural and historic properties worthy of consideration on historic registers.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	2012 Complete and Ongoing
3. Provide assistance to local historical and cultural groups in efforts to obtain funding to study, maintain and manage Oconee County historical sites.	County Council	Ongoing
4. Update and maintain GIS data and maps that can be printed and/or displayed on the county website, to provide the public with information on the location of historical and cultural sites.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	2013 COMPLETE
5. Provide appropriate financial and technical support to the development of the Southern Appalachian Farmstead Project currently underway in conjunction with the U.S. Forest Service and other governmental entities.	Parks, Recreation, Tourism Commission; County Council	2014 DEFUNCT
7. Review and adopt appropriate standards aimed at maintaining the state ‘Scenic Highway’ designation for SC Highway 11 and other routes; such standards may be based on adopted Scenic Hwy Corridor Plans or best practices, and may include the designation of the route as a County Scenic Highway.	County Scenic Highway Committee: Parks, Recreation, Tourism Commission; Planning Commission; County Council	2013 COMPLETE
8. Review and update adopted regulations as needed to ensure all cultural, historical, and natural resources receive the protection necessary to remain a viable component of our lifestyle, as well as playing a role in an expanding tourism economic sector.	Parks, Recreation, Tourism Commission; Planning Commission; County Council	Ongoing

Population Element

Overview

This element examines the demographic and socioeconomic trends of Oconee County. Among the various factors considered are age, gender, race, educational attainment, and income level. When appropriate, ~~comparisons were made with these factors are compared to~~ similar attributes from other counties ~~in~~ of Upstate South Carolina. The latest data available at the time of writing was used in this examination. ~~This element will also include P~~projections of future trends and impacts, as well as statements of goals and policy recommendations based on the expressed wishes of the citizens of Oconee County, ~~are included in this element.~~

Oconee County's population has continued to increase since the adoption of the ~~2004~~ 2010 update to the Comprehensive Plan. As a result, existing plans and strategies related to providing services for Oconee's citizens need to be evaluated in an ongoing manner to insure they adequately meet the needs of the growing population. The demand for services increases as the population grows. ~~If we are not prepared for this, Proper planning for services and infrastructure helps to ensure that~~ existing systems will not become stressed and ~~ultimately see a decrease in quality will decrease and efficiency.~~ Naturally, in a perfect world, funds used to provide and maintain services should increase at the same time to meet the demands of the population. In reality, however, we will have to do the best we can with what is available. Therefore, Oconee County will need to analyze and evaluate ~~provided data to understand what~~ the most pressing needs of the population ~~are, and~~ the services that they require, ~~as well as and~~ find ways of doing more with what is available.

Continued Changes

By looking at the changes in demographic and social trends that have occurred in the past five ~~or ten~~ years we can assemble a picture of Oconee County's current population that will serve as a guide in making decisions to help make Oconee County a better place for all ~~of~~ its citizens. It should be noted, , that much of the information used to create the picture is taken from the 2010 Census and from subsequent ~~yearly estimates,~~ as well as projections from various sources. . Trends indicated by the last census and by updates, as well as significant increases in economic development and new residential construction appear to demonstrate that Oconee County's growth will continue into the foreseeable future.

~~Another~~ One factor that influences issues related to the County's population is the number of residents who do not call Oconee County home, but may own land, have a second home (or 3rd or 4th); ~~or that~~ may be employed in the County, but live elsewhere. This category of individuals has, in one way or the other, a stake in the County, and places demands on services. As a result of the nature of development that occurs in Oconee County, particularly near the lakes, this category is of significant concern.

Therefore, even though the Census Bureau provides a reliable look at population as compared to other regions, it does not give a comprehensive picture of the way that population influences Oconee County. To compensate for this fact, as one examines the trends in population, they should keep in mind that Oconee County has a significant group of individuals that, while their primary residence is elsewhere, is invested in the success of our area nonetheless.

Population Trends and Components of Change

The ~~2000~~ 2010 Census showed the population of Oconee County to be ~~66,215~~ 74,275, a figure reflecting a trend of growth established decades earlier. See Table P-1, which also includes population updates for 2014 and 2016.

Table P-1

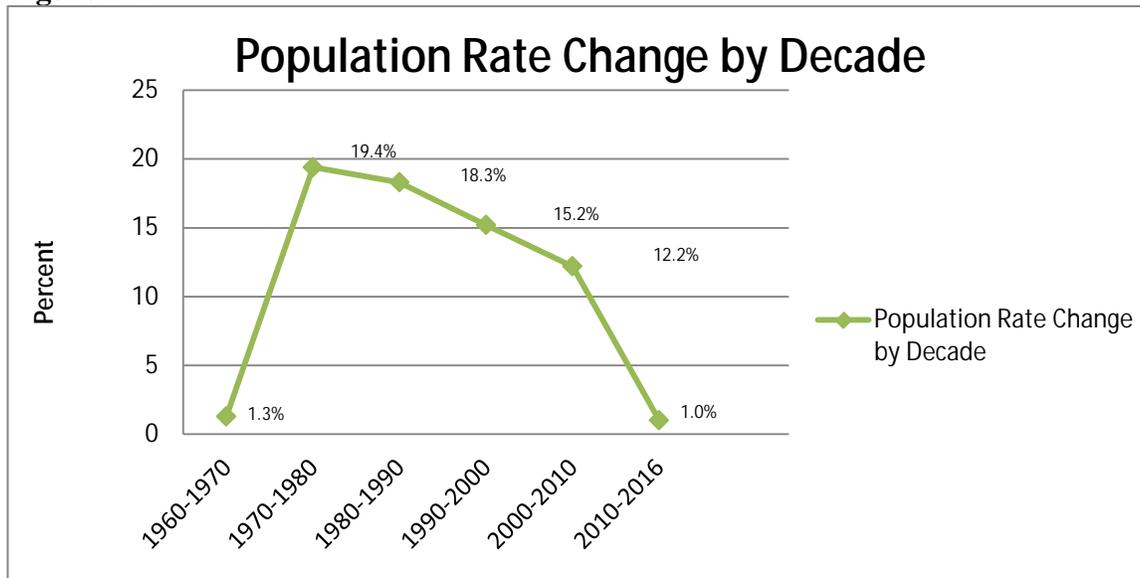
Oconee County Population 1960-2010							
1960	1970	1980	1990	2000	2010	2014	2016
40,204	40,728	48,611	57,494	66,215	74,364	75,192	75,875
Change in population:	+524	+7883	+8883	+8721	+8060	+828	+683
Change in population by percent:	+1.3%	+19.4% or 1.94% per year	+18.3% or 1.83% per year	+15.2% or 1.52% per year	+12.2% or 1.22% per year	+1.1% or .27% per year	+1% or .5% per year

Source: U.S. Census Bureau

During the more than half century covered by Table ~~PP-1~~, Oconee’s population grew by ~~approximately 70% more than 88%~~. A close inspection of the data ~~between 1960 and 1970, and data from previous decades~~, indicates, ~~however, that between 1950 and 1970~~ the population typically increased by ~~4.1% less than 5% per decade~~. It was only after 1970 that dramatic changes occurred, with the ~~eCounty’s~~ population growing an average of ~~63%~~ 16.27% every 10 years, during the next ~~3 4~~ decades up to 2010.

Figure P-1 graphically illustrates the county’s rate of growth during ~~each decade in the last half of the latter part of the 20th century~~ ~~on into the 21st Century~~.

Figure P-1

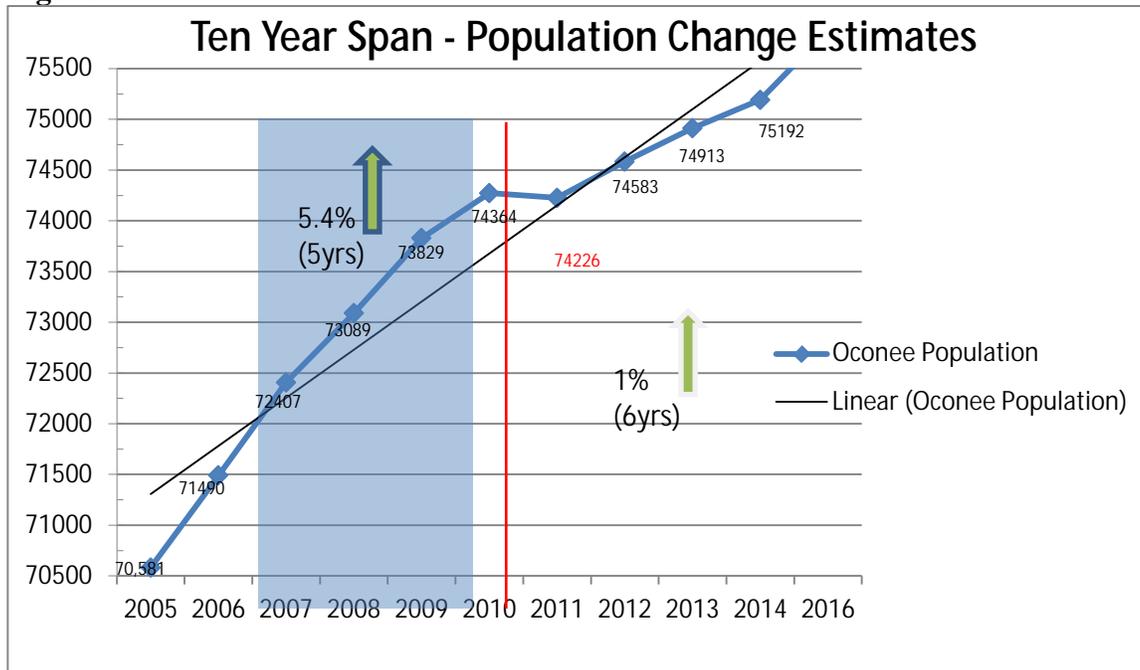


Source: U.S. Census Bureau

Oconee County’s population continued to grow at a slower pace in the years between the ~~2000~~ 2010 Census and ~~2004~~ 2016. That leveling off may be attributed to the economic collapse of 2008, which devastated the real estate and job market on a national level. According to information from the ~~South Carolina Office of Research and~~

Statistics ESRI Demographic and Comparison Profile, the estimated population of Oconee County in 2016 was 67,918, 75,875, reflecting an increase of approximately 2.5%1% between 2010 and 2016. Though low, a rate of 1.% sets Oconee County on pace to nearly double the growth rate seen from 1960-1969, as illustrated in Figure P-1, above.

Figure P-2



Source: U.S. Census Bureau

Estimates from the Census Bureau indicate that the population is continuing to increase. The graph titled “~~Population Estimates for Oconee Ten Year Span – Population Change Estimates~~” (Figure P-2) shows that the population growth is increasing at a steady rate year after year, save a small dip in 2012. ~~The Census Bureau has begun preparations for the 2010 census. County staff participated in verifying and updating the Census Address List to provide the most up to date and accurate information possible. Preliminary findings indicate that 2010 Census may show a dramatic increase in population.~~ However, the rate is not on pace to reach the double-digit growth seen from the four decade span dating from 1970 up through 2009. At its peak, the County population increased at a count of nearly 900 people per year in the 1990’s. It would take a significant increase annually for the remainder of the decade just to bring Oconee back into the double-digit (10%) growth category for the decade.

Oconee’s population increase is a result of a number of factors, not the least of which is the ~~continued~~ national shift in population to the Coast and to the South. ~~As a result, we are fast losing our ties or loyalty to a particular place. Computers and wireless technology have allowed us to be connected to ‘home’ from thousands of miles away.~~ For many, as they get closer to retirement age, with children often living in other states, they begin to look at moving to a warmer climate where the cost of living is lower. ~~Computers and wireless technology have allowed retirees, “secondary home” owners from surrounding metro areas, and the like, to be connected to ‘home’ from hundreds or even thousands of miles away. and~~ This trend is expected to continue. ~~The 2010 Comprehensive Plan have showed that~~ with the majority of growth in Oconee County was a result of an resulting from the ever increasing retirement community moving to the area. Oconee County has a retiree presence that is 25% more per capita than the state of South Carolina average. It should also be noted that the economic recovery that is now underway nationwide has certainly found its way to Oconee County, as evidenced by projects and growth predictions through 2030. Population figures for the County from the S. C. Budget and Control Board, Office of Research and Statistics project a 2020 population of 82,300, a 9 percent increase over the decade, Furthermore, the projection out to 2030 predicts a population of 89,100. These figures predict an increase of 34.6 percent for the 30 year period from 2000 to 2030.

Another factor that is and will continue to influence the County is ~~shortening of the time it takes to commute to Atlanta and Greenville.~~ the central location of Oconee between Atlanta and Charlotte, along with the rapidly expanding metro area of Greenville-Spartanburg. As These cities continue to see enormous growth up and down the I-85 Corridor. The time it takes to commute to Atlanta and Greenville is getting shorter. As these cities continue to grow outward in a sprawling manner, Oconee’s beauty and quality of life ~~get receives more exposure in those area due to a sustained marketing campaign and the closer proximity of this region to the suburban growth of these hub cities.~~ What was once a ~~certain~~ two-hour drive to the metro areas ~~can now only takes~~ be done in as little as 45 minutes to an hour. Preparation and careful planning to meet the needs of an ever increasing and aging population will be vital to the health of the County as a whole.

Regional Population Change

Table P-2 compares Oconee County’s change in population in the ten year period between 2005 ~~2000~~ and 2014 ~~2010~~ to rates experienced by various counties across upstate South Carolina.

Table P-2

Comparison of Population Change of Ten Year Period (2005-2014) in Selected South Carolina Counties	
County	Percent Change
1 Greenville	22.0%
2 Spartanburg	13.2%
3 Pickens	12.9%
4 Anderson	11.6%
5 Oconee	9.1%
6 Greenwood	6.2%
7 Cherokee	4.1% *
8 Union	1.0% *
X Laurens	-1.5%
X Abbeville	-2.3% *
<i>South Carolina</i>	<i>17.5%</i>

Source: U.S. Census Bureau (*Denotes data only available from 2007-2014)

~~Table P-2 reveals that Oconee County’s growth rate during this period, although not quite as high as in the two previous decades, was still three percentage points under the State average. In fact, most upstate counties experienced strong growth, although Union, Laurens, and Abbeville Counties experienced declines. The largest percentage increase was in Greenville County. Oconee’s growth, though not as drastic as in the previous decade, was still strong at approximately 6.9%. Table P-2 above indicates the population change for several Upstate counties between 2005 and 2014. Even with the population dip in 2010-2011, Oconee County continued to experience near double-digit growth numbers over a 10 year period (2005-2014). Table P-2 also reveals that~~

Oconee County’s growth rate during this period was ~~actually 8.4 points below the state average, although not quite as high as in the two previous decades, was still three percentage points under the State average.~~ ~~In fact,~~ Most upstate counties, ~~however,~~ still experienced strong growth, although Laurens and Abbeville Counties experienced declines. The largest percentage increase was in Greenville County at 22%. Oconee’s growth, though not as drastic as in the previous ten year spans, was still strong at approximately 9.1 %.

Components of Change

Table P-3

Components of Population Change in Upstate South Carolina, 2010-2014							
County	Total Change	Number of Births	Number of Deaths	Total Natural Increase (Births + Deaths)	Percent of Total Change Due to Natural Increase (%)	Net Migration	Percent of Total Change Due to Migration
Oconee	917	3364	3547	-183	16.6	1149	83.4
Abbeville	-451	1093	1136	-43	9.5	-396	90.5
Anderson	5687	9512	8353	1159	20.4	4380	79.6
Cherokee	557	2873	2480	393	70.5	266	29.5
Greenville	31,533	25,986	16,133	9,853	31.2	21,025	68.8
Greenwood	-141	3817	2952	865	46.3	-1004	53.7
Laurens	-6	3311	3316	-5	13.0	34	87.0
Pickens	1142	5050	4607	443	38.8	650	61.2
Spartanburg	9237	15234	11817	3417	37.0	5856	73.0
Union	-1087	1291	1568	-277	25.5	-788	74.5
<i>South Carolina</i>	<i>207,081</i>	<i>244,058</i>	<i>182,009</i>	<i>62,049</i>	<i>30.0</i>	<i>139,545</i>	<i>70.0</i>

Source: U.S. Census Bureau

Table P-3 illustrates the components of the change in Oconee County’s population between ~~1990~~2010 and ~~2000~~2014. By examining the rates of birth, death, and migration, it is possible to ~~better~~ identify the major factors driving population increases and decreases. ~~Over the last 5 years, 6 of 10 of the Upstate Counties experienced growth overall. However, only one (Cherokee County) could credit this growth to total natural increase (births + deaths). While it is encouraging to see large numbers of people migrating to the area, it is important to foster a strong and sustaining community that can replenish its population base aside from migration. Of each of the counties that experienced positive growth, Oconee was the only county to not have more births than deaths. Contrarily, a large number of people chose to migrate to the Golden Corner from other areas, making up the difference.~~

In the ~~decade~~ five years ~~between~~1990 since the last Census (2010 ~~and~~2000 2014), the inflow of new residents from other areas accounted for more than ~~¾~~ 80% of Oconee County’s population change. This places Oconee County ~~near~~ at the top of the region in increase due to migration.

Growth by Census Tract

Because population density typically varies from area to area within any given county, the U.S. Census Bureau uses a system of dividing counties into statistical subdivisions, called census tracts. Generally, these tracts are areas that contain between 1,000 and 8,000 people; a tract containing 4,000 people is considered ideal. Over time, as population levels increase or decrease, tract boundaries are subject to change, but because tract limits generally follow established features, such as major landmarks, geographic features, or political boundaries, most are considered stable features. Therefore, while tract boundaries may occasionally be adjusted to accommodate drastic population changes, most typically remain fixed for a number of counts. (U.S. Census Bureau)

Oconee County contains eleven separate census tracts, each of which has a numerical designation between 301 and 311. Figure P-3 illustrates the location of these divisions.

Figur

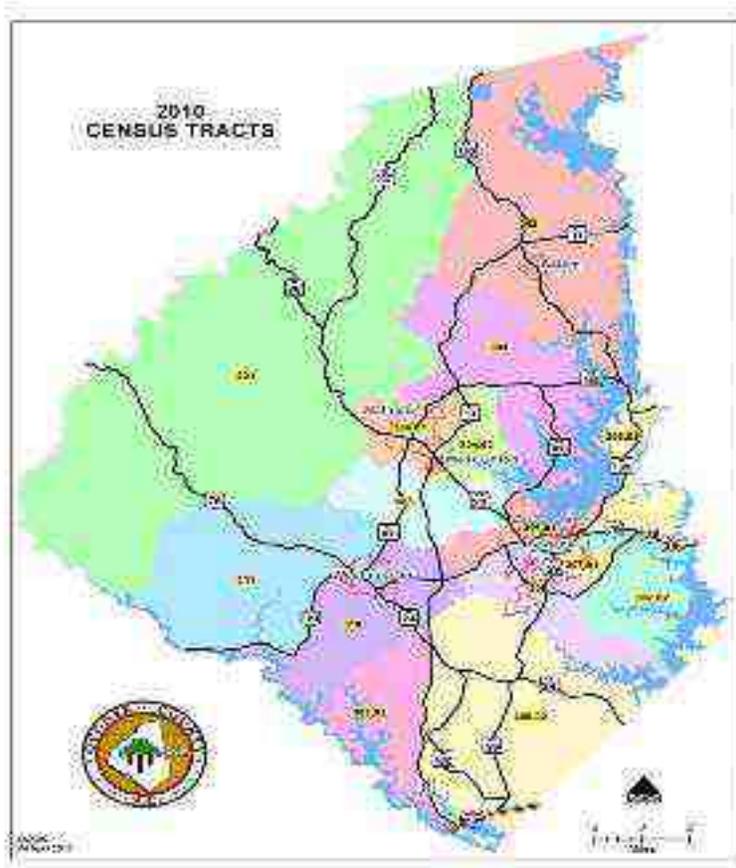
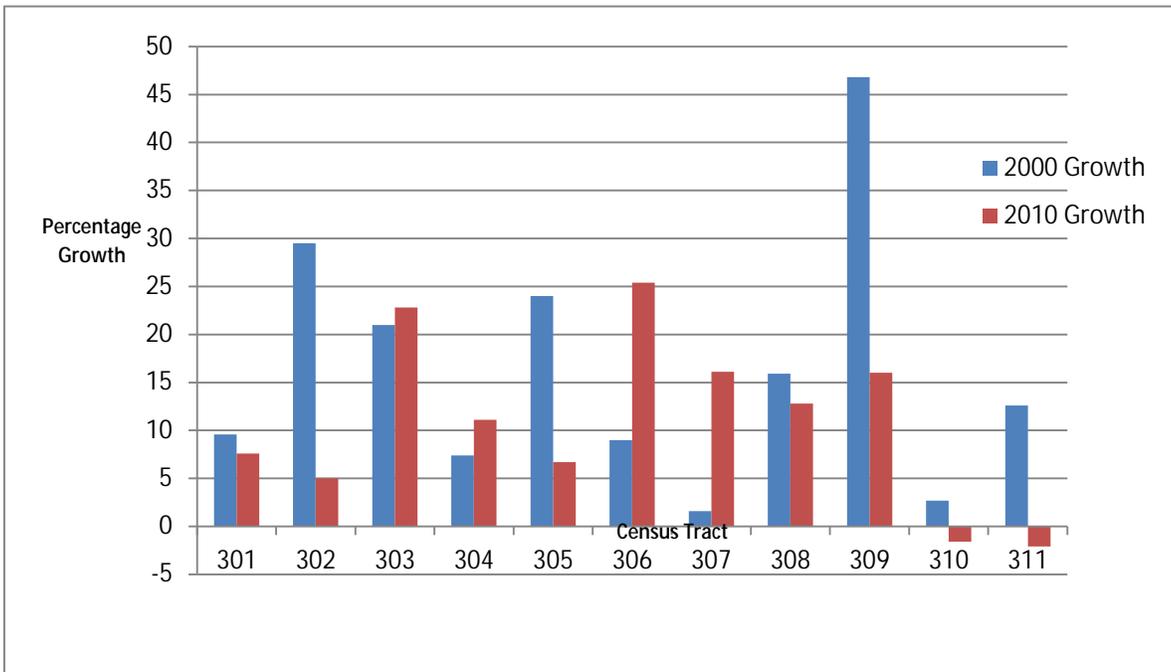


Figure P-4 illustrates the percentage of growth experienced by the areas within each census tract between 1990-2000 and 2000-2010.

Figure P-4



By ~~comparing~~ ~~examining~~ the map in Figure P-3, and then looking over ~~to~~ the chart in Figure P-4 it is possible to ~~better~~ determine the geographic areas of the county that experienced the strongest growth between ~~1990~~ 2000 and ~~2000~~ 2010, as well as the decade 1990-2000. For example, Tract ~~309~~ 306, ~~traditionally one of the County's prime agricultural areas,~~ experienced the most intense growth at, 25.4%, likely due to the ~~conversion of farmland into residential tracts~~ proximity of city amenities of Seneca and Clemson, and the obvious attraction of Lake Keowee. The next highest level of growth was seen in Tract ~~302~~ 303, at 22.8% growth, which is the area that is sandwiched between Walhalla and West Union to the south, and Salem to the north. It is also bordered to the east by Lake Keowee. ~~lies in northeastern Oconee County near Lake Keowee.~~ This area is particularly attractive to retirees from other regions, with many having chosen Lake Keowee as the site of their “dream home”. The 303 tract was also the most consistent growth wise in both decades shown. Tract 303 was the only tract to show growth of more than 20% for both decades. ~~In fact, this area is now the sight of a number of exclusive gated communities, although these communities are not in the majority. Also experiencing significant growth were~~ Tracts 303 310 and ~~305~~ 311, ~~both~~ located around the city of Westminster, both experienced decline in the decade 2000 to 2010. ~~center of the county's main commercial and industrial operations.~~

Projected Growth in Oconee County

Table P-4 projects Oconee County’s future population based on the rates experienced between ~~1990~~ 2000 and ~~2000~~ 2010. It must be stressed that this table was constructed by the Oconee County ~~Planning~~ **Community Development** Department to illustrate approximate population levels *if earlier trends continue at the rates experienced between ~~1990~~ 2000 and ~~2000~~ 2010.* As noted previously other

projection methodology reflected in the 2016 Oconee County Trends Report prepared by the Oconee Economic Alliance predicts a smaller population increase to 89,100 in the year 2030.

Table P-4

Population Projections Based on Rates Experienced Between 2000 and 2010						
Census Tract	2010 Pop.	Growth Rate % (2000-2010)	Previous Projection for 2010 Pop.	Difference from Projection (Total - %)	Projected 2020 Population	Projected 2030 Population
301	4352	7.6	4434	-82	4683	5039
302	5764	5.0	7120	-1356	6052	6354
303	6145	22.8	6056	+89	7546	9266
304	8768	11.1	8476	+292	9741	10,813
305	4375	6.7	5085	-710	4668	4980
306	8890	25.4	7726	+1164	11,148	13,980
307	9819	16.1	8589	+1230	11,400	13,235
308	7214	12.8	7412	-198	8137	9178
309	9980	16.0	12,628	-2648	11,577	13,429
310	5267	-1.6	5499	-232	5183	5100
311	3699	-2.1	4256	-557	3621	3544
County Total	74,273	12.17%	77,281	-3,008 -	83,756	94,918

Source: U.S. Census Bureau

Extending the growth rate illustrated in Table P-4 shows that, without significant change in rates, Oconee County’s population will **not quite** exceed 100,000 by the year 2030. It should be noted, however, that some state sources project Oconee County’s rate of growth to slow from the ~~15.2~~ **12.2%** seen in the last census period, to ~~13.3~~ **6.2%** between ~~2000~~ **2010** and ~~2010~~ **2020**; with a return to double-digit growth at roughly ~~12%~~ **13%** between ~~2010~~ **2020** and ~~2020~~ **2030**. ~~If such estimates prove to be accurate, Oconee’s population would likely not reach 100,000 until around 2040.~~

Projecting from the first four years available at the time of this update, (at a yearly average rate of 1.1% or 11% over a decade) Oconee County’s population is on pace to be 82,443 by the 2020 census.

Long Term Population Projections

Figure F-5

Although the accuracy of projections tend to decrease as time intervals increase, the general trends are worth considering. Oconee’s population is expected to increase **by as much as approximately 40** ~~25%~~ by 2030. If these estimations hold true, population growth will have a **dramatically** impact **on** Oconee’s way of life. Such things as travel time to work will increase due to traffic congestion, while the open space that most now take for granted will significantly decrease. To avoid such outcomes, we need to be considering now how we can guide population growth in a manner that increases the effectiveness of the already existing infrastructure. ~~Also,~~ Because it will be demanded by the growth, where should new infrastructure be located? How can we best exploit our “advantages” in expanding our economic prosperity? And, as

this is an issue increasingly at the forefront of most land use discussions, are there areas of the County too special to be developed? These questions, and many others like them, require citizens to take part and help guide the development of any rules and standards necessary to achieve the balance desired by all.

Population Density

Density, for our purposes, is an objective measurement of the number of people within a given geographic area. Based on the latest estimates, the current population density of Oconee County is approximately 105 persons per square mile. However, it should be noted that the County is blessed with an abundance of national forest land, an abundance of lakes, and an increasing number of areas set aside for conservation. As a result, the basic population density statistic does not take into account the portion of the County that is not available for development.

~~The majority of Oconee County's developable areas are located in and around the 'triangle' of the larger municipalities, Walhalla, Westminster, and Seneca. Therefore, if we wish to arrive at an accurate picture of what we are, we cannot simply look at gross acreage. Still, the trends revealed by basic density evaluations are useful for communicating the potential effects of continued growth and development. We need to remember, however, that it is very likely that levels of growth represented have effects magnified by the growing amount of land that cannot be developed. Figures P-6, P-7, and P-8 illustrate the change in density since 1950.~~

~~Figure P-5~~

~~Figure P-6~~

~~Figure P-7~~

~~The Population Density maps above give us a visual representation of the growth that has been steadily moving toward and into Oconee County. This trend will continue as Atlanta and Greenville continue to expand outward. Being almost in directly in the very middle center of the I-85 Corridor (roughly 600 mile stretch of focused economic commerce along Interstate Highway from Montgomery, AL to Durham, NC) Oconee County finds itself in nicely situated to reap the suppliers and multipliers found in one of the fastest developing highly industrial megapolitan regions in the country. Development will moves out toward areas with cheaper land prices, resulting in the shift sprawl of people away from the cities outward, until the metropolitan areas begin to merge forming a larger megalopolis. In our case, many people believe it will only be a matter of time until "Atlanta meets Greenville", possibly here in Oconee County.~~

In 2007, the U.S. Census Bureau issued new Metropolitan Statistical Area (MSA) Maps that showed Oconee County as a 'micropolitan', an area with an urban cluster of at least 10,000 persons. Figure P-5 (below) is a portion of the ~~2007~~ latest (2013) MSA map.

Figure P-5



The population growth resulting from the continual sprawl of cities is typically different than that which we have been experiencing to date in the County. Generally, the majority of the growth up until now has been largely driven by retirees drawn to Lakes Hartwell and Keowee. Growth from cities, on the other hand, typically consists of those families with the economic means to move away from the congestion of city life, to an area with a more rural quality, with reasonable commutes, and a less expensive cost of living. Along with this type of growth comes an increase in demand for services focused on the young, such as schools and recreation. If so, with the main focus of retirees remaining near the lakes (primarily Lake Keowee), and the metropolitan sprawl establishing itself on the less expensive lands in the southern end of the County, it is quite possible that over time we will see over-time a geographic segregation of population and their associated needs. More recently, the southern end of the County has begun to see increased interest from industry and developers due to infrastructure improvements (i.e. sewer lines) and a County industrial park (Golden Corner Commerce Park). Along with three exits or access points to Interstate 85, the area is primed for significant development. This reality has led to an increased awareness by the community and the County of the need for planning and preservation of the area and its rural character

Gender Division in Oconee County’s Population

The gender division of Oconee County’s population is approximately the same as that reported for the United States as a whole, with approximately 51% of the County’s residents being female, and approximately 49% male. This was the case for the 2010 Census as well as the 2014 estimates. Interestingly, however, the gender division of the population found in the various municipalities varies by as much as several percentage points. In 2010, Walhalla had almost 50% more females than males. As of the 2014 estimates, there are still 20% more females than males within Walhalla city limits, similar to Seneca which had 19% more females in both 2010 and 2014 numbers. See Table P-5 (below).

Table P-5

Gender in Oconee Municipalities in 2010/2014								
Municipality	Male 2010		Female 2010		Male 2014		Female 2014	
	Total	%	Total	%	Total	%	Total	%
Salem	106	54%	91	46%	67	53%	59	47%
Seneca	3706	46%	4318	54%	3719	46%	4428	54%
Walhalla	1712	41%	2484	59%	1919	45%	2312	55%
West Union	163	57%	123	43%	162	50%	159	50%
Westminster	1113	47%	1257	53%	1222	48%	1317	52%
Oconee (total)	35,967	49%	37,068	51%	36,772	49%	37,884	51%

Source: U.S. Census Bureau

Age Ranges in Oconee County’s Population

The median age of Oconee’s population (the age at which half of the population is older and half is younger) is increasing. This is consistent with a nationwide trend reflecting the impact of the aging of the “baby boomers” born in the years following World War II (between 1946 and 1964). In fact, the 2000 2010 Census revealed that the median age of the United States is the highest that it has ever been, rising 2.4 1.9 years over the previous decade to 35.3 37.2 years of age. The median age of Oconee’s population,

however, surpasses this, ~~for it rose~~ rising from ~~35.6~~ 39.5 years in ~~1990~~ 2000 to ~~39.5~~ 43.4 years in ~~2000~~ 2010. This change was perhaps spurred on in large part by a combination of the influx of retirees from other regions, and the effects of the overall improvements in health care, nutrition and working conditions enjoyed by “transplants” and natives alike. ~~Estimates indicate that the U.S. Census Bureau expects the median age to continue to increase throughout the nation at least through the year 2015.~~ (Source: U.S. Census Bureau; South Carolina State Data Center)

The number of “senior citizens” residing in Oconee County has dramatically increased during the last several decades. In fact, the number of Oconee residents over 65 years of age increased over 250% between 1950 and 1990. By the time of the ~~2000~~ 2010 Census, this group accounted for ~~10,311~~ 13,219 Oconee County residents, or ~~15.6%~~ 18.1% of the total population. At the same time, in the neighboring counties of Anderson, Greenville, and Pickens, those 65 years and older represented ~~only 13.7~~ 16.1%, ~~11.7~~ 13.5%, and ~~11.4~~ 14.3%, respectively; and statewide the same age group represented only ~~12.1~~ 14.7%. This strong, **continued** shift toward an aging population in Oconee County becomes even more obvious when looking at historical trends, particularly in the older age groups. In 1950, there were only 77 Oconee residents over 85 years of age. By ~~2000~~ 2010, the number had grown to ~~849~~ 1241 and 1,269 according to 2014 estimates.

(Source: U.S. Census Bureau; South Carolina Office of Research and Statistics)

Table P-6 (below) presents a profile of various age groups in Oconee County. Please note that data for some groups was unavailable.

Table P-6

Profile of Age Groups in Oconee County in 2000 and 2010					
Age Group (years)	2000		2010		Percent Change from 2000
	Number	Percent of Population	Number	Percent of Population	
Under 5	3996	6.0	4168	5.6	-0.4
5-9	4247	6.4	4240	5.7	-0.7
10-14	4338	6.6	4498	6.1	-0.5
15-19	4090	6.2	4798	6.5	0.3
20-24	3752	5.7	4228	5.7	<i>SAME</i>
25-29	4188	6.3	3826	5.2	-1.1
30-34	4299	6.5	3903	5.3	-1.2
35-39	4684	7.1	4390	5.9	-1.2
40-44	4941	7.5	4566	6.1	-1.4
45-49	4741	7.2	5079	6.8	-0.4
50-54	4569	6.9	5556	7.5	0.6
55-59	4254	6.4	5327	7.2	0.8
60-64	3805	5.7	5588	7.5	0.8
65-69	3570	5.4	4828	6.5	1.1
70-74	2667	4.0	3619	4.9	0.9
75-79	2005	3.0	2760	3.7	0.7
80-84	1220	1.8	1604	2.2	0.4
85 and over	849	1.3	1295	1.8	0.5
Total population	66,215	100	74,273	100	---

Table P-6 shows that in 2000, nearly half (47.9) of the population of Oconee County could be accounted for between the ages of 25 to 59, a three and a half decade span. Ten years later, in 2010, the age group from 35 to 69 represented nearly 50% (47.5) of the County's population. The seemingly evident correlation likely means that the County is literally getting older. Young adults are not replenishing the population. Another way to look at it is that the largest five year age group in 2000 was the 40 to 44 year group. 10 years later, it was 10 years older at the 50 to 54 year group. ~~those between 35 and 44 years of age constituted the largest age group and those 85 and older made up the smallest.~~ The table also shows that those age groups ~~45 50~~ 50 years and older in each instance saw increases in their portion of the population. Whereas, for age groups under 50 years old (ten groups), only one (15-19, 0.3%) could account for any increase in their portion of the population. ~~accounted for a larger percentage of Oconee County's population in 2000 than was the case in 1990. Even without easily comparable data for younger groups,~~ It is possible certainly plausible to ~~determine~~ conclude that the County's population is "growing older". The number of citizens 65 years and older living in Oconee County's municipalities is shown in Table P-7.

Table P-7

Citizens 65 and Older in Oconee County Municipalities in 2010				
Municipality	Total Population	Number of Individuals 65 and Older	Percent of Total Population 65 and Older 2010	Percent of Total Population 65 and Older 2000
Salem	126	28	22.2	22.2
Seneca	8147	1483	18.2	16.0
Walhalla	4231	634	15.0	15.7
Westminster	2539	487	19.2	15.3
West Union	321	56	17.4	16.5
Oconee County	73,035	13,219	18.1	15.6

Table P-7 reveals that only ~~22.5~~ 20.3% (~~2,319~~ 2688 out of ~~10,311~~ 13,219) of Oconee County residents 65 years and older live in a municipality. While the population of those people 65 and older increased overall in municipalities, from 2000, the percentage dropped more than 2%.

Racial Composition of Oconee County's Population

Table P-8 (below) illustrates the racial makeup of Oconee County's population.

Table P-8

Racial Composition of Oconee County's Population in 2010									
Area (Census Tract)	Total Pop.	Single Race Pop.	*White	*Black	*American Indian/Alaskan	*Asian	Pacific Islander	*Other	Multi- Race Population
301	3923	3871	3837	0	0	0	0	34	52
302	6319	6283	6262	0	21	0	0	0	36
303	6409	6301	6255	39	0	0	0	7	108
304.01	6841	6718	5801	590	22	0	0	305	123
304.02	1548	1548	1548	0	0	0	0	0	0
305	4621	4515	4392	47	0	0	0	76	106
306.01	3755	3672	3576	84	12	0	0	0	83
306.02	3943	3922	3457	314	0	151	0	0	21
307.01	3754	3720	2383	1316	21	0	0	0	34
307.02	5806	5751	4479	1153	32	87	0	0	55
308	7104	7097	5223	1622	0	74	0	178	7
309.01	2696	2696	2655	0	0	41	0	0	0
309.02	7422	2272	6945	306	21	0	0	0	150
310	5075	5001	4686	270	0	0	0	45	74
311	3819	3806	3751	55	0	0	0	0	13
Total County	73,035	72,173 / 98.8	66,250 / 90.7	5796 / 7.9	129 / <1.0	353 / <1.0	0	645 / <1.0	862 / 1.2

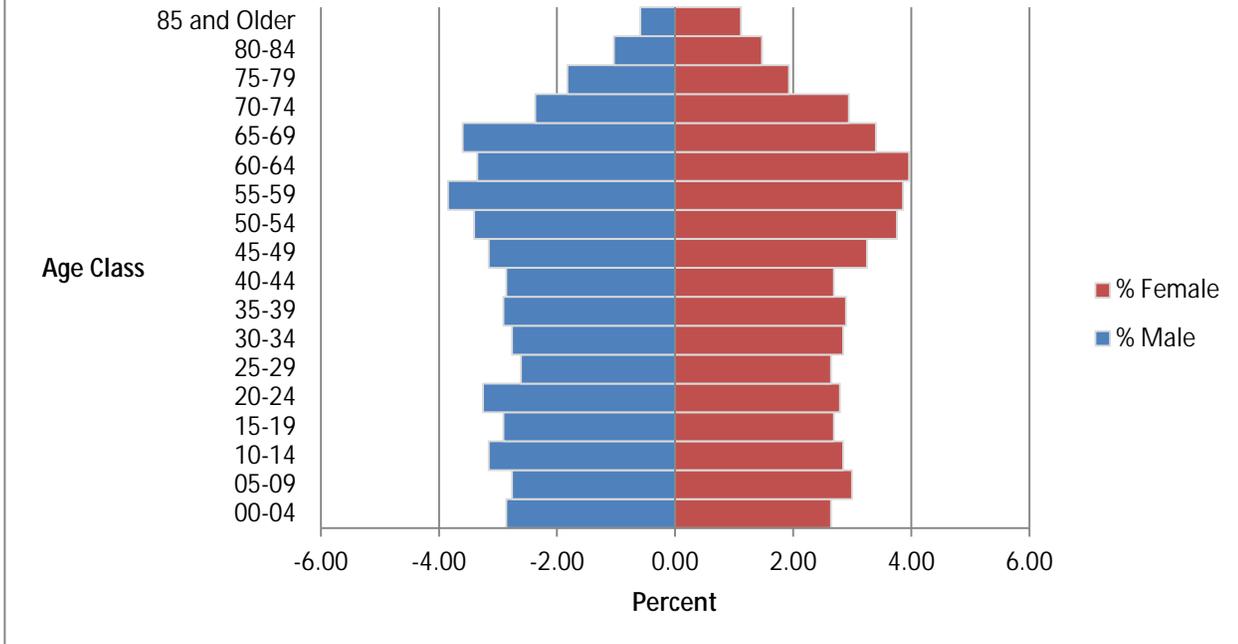
*One racial group **Two or more racial groups

Table P-8 shows that while ~~89.1~~ 90.7% percent of Oconeeans were counted in the white racial group in the ~~2000~~ 2010 Census (a ~~an decrease~~ increase from ~~90.5~~ 89.1% in ~~1990~~ 2000), statewide the percentage is still much lower at just over 67%. Almost all non-white racial groups, ~~however, increased~~ population decreased in Oconee County during the census period ~~per-capita~~. The only exception noted was a ~~slight decrease~~ a roughly 60% increase in the percentage of ~~African American/Black~~ Asian population, which ~~dropped~~ increased to 8.4 to a little over 1%. ~~At the same time, Oconee's Hispanic population showed strong growth between 1990 and 2000, coming to represent almost 2.5% of the county's total population. (Source: U.S. Census Bureau) It should be pointed out that, although there is currently no data available to either confirm or deny the belief; many believe that the Hispanic population was significantly undercounted during by 2000 Census.~~ Another aspect of population growth that typically provides insight for decision makers is the breakdown of population by age. If, for example, a large segment of toddlers will be moving through the educational system over the next few years, consideration of the adequacy of facilities to handle the increase in students or additional early childhood programs may be in order. On the other hand, if the number of toddlers is decreasing, officials need to be looking toward the reallocation of funds to other areas. One of the best ways of examining the population is to look at a population pyramid, which depicts the age structure of the region. Oconee's population pyramid is ballooning, typical of most places in the post-industrialized world. See Figure P-6 (below).

Figure P-6

Population Pyramid - Oconee County 2014, Data

Source: US Census Bureau



Source: U.S. Census Bureau

One of the more noteworthy aspects of Figure P-6 is that the largest segment of the population is over ~~forty~~ **fifty-five** years of age, typically the age range when the individuals have started to reach the top of their earning potential and beginning to think about retirement. In addition, the ~~top of the~~ pyramid is relatively **top heavy large**, with the bottom relatively small. This means that the number of young people coming into the workforce **will continue to** be smaller than the number of people retiring. Under existing systems of social security and other similar programs, the burden of supporting more and more people will be placed on the shrinking younger workforce. ~~Further, the chart shows the amount of people in the retirement age category (60+) is also growing.~~ Typically, one finds population decreasing rapidly in the upper age categories; however, with the current life expectancy in the United States at ~~77.8~~ **78.8** (according to the government agency, the Center for Disease Control, the leading national public health institute of the United States) years of age, the percentage of people 75 and older is increasing. This trend is expected to continue. ~~What~~ This means **two things** for Oconee County: ~~is one, that~~ services to the elderly population will last longer and as a result cost more; **two, Oconee County has a unique opportunity with its natural assets and low cost of living to increase its capacity to cater to an ever growing and lucrative market for retiree services.** Oconee should continue to plan for incentivizing the growth of the types of resources necessary to better enhance its service and retirement economies, thereby increasing opportunities for young entrepreneurs and job seekers. Gigabit internet services are created in some municipalities to help support and recruit tech industry. The County should look at capitalizing on infrastructure that does the same for the retiree economy, in addition to the agricultural, industrial, and tourism economies.

~~The final age group mentioned in this report is those persons 65 and over.~~ A 2012 finding from the Federal Interagency Forum found that the number of senior citizens living in poverty declined from 15 percent to 9 percent since the mid-1970s. Additionally, the proportion of older Americans enjoying a

“high income” increased from 18 to 31 percent. This population segment is increasingly wealthier, meaning more expendable means with which to spur the economy in which they live. Retirees also benefit communities with many hours of volunteer and part time work among other things. Oconee is the 4th oldest county in South Carolina, behind McCormick (51), Georgetown (47), and Calhoun (45) counties. ~~With one of the greatest median age in South Carolina, Oconee County is currently the “oldest” county in the state.~~ Table P-9 (below) shows how Oconee compares with some of its neighboring counties.

Table P-9

County	Median Age
Anderson	40.3
Greenville	37.6
Habersham (GA)	38.9
Jackson (NC)	36.2
Macon (NC)	48.6
Oconee	43.8
Pickens	35.2
Raburn (GA)	47.3
Stephens (GA)	40.9
Transylvania (NC)	49.9

Green = South Carolina counties

Being **one of the oldest counties** in the state, **and the oldest in the Upstate**, has a variety of implications. Most notably, an older population will need to have greater access to medical services and assisted living, particularly as many persons retiring and moving to the area do not bring their family with them. Other impacts, though not as apparent on the surface, also have a tremendous effect on many aspects of life in Oconee County. One of these is the fact that a large, well-educated retired population with sufficient income brings significant political pressure on local government. Currently, Oconee County has several active political and conservation organizations made up of many members of this age group. Their ideals and beliefs have already begun to impact political decisions, and will likely continue to do so in the coming years.

Education in Oconee County

In ~~2009~~ 2015, the School District of Oconee County operated 21 schools that served ~~over approximately 10,377~~ 10,525 students. Among these facilities were 11 elementary schools, 3 middle schools, and 4 high schools, as well as an alternative school, an adult education facility, and a career center. Supporting the schools were ~~991-certified~~ 997 teachers **employees**, and ~~579~~ **over 600** classified employees, which included classroom aides, maintenance and grounds personnel, and clerical and transportation workers. The student teacher ratios at the various school levels were as follows:

Elementary School- 14:1
Middle School- 14:1
High School- 15:1

Sixty four percent (64%) of all professional employees possessed Master’s Degrees or higher. (Source: School District of Oconee County)

Table P-10 (below) compares the average Scholastic Assessment Test (SAT) scores of the ~~239~~ 205 Oconee County high school students that took the test in ~~2008~~ 2015 with state and national averages.

Table P-10

SAT Performance				
	Critical Reading	Math	Writing	Composite
Oconee	508	508	482	1498
South Carolina	488	490	465	1443
National	497	513	487	1497

Oconee County students surpassed ~~both~~ the state SAT averages and ~~virtually~~ mirrored the national averages in 2015.

Overall Educational Attainment of Oconee County's Population

According to information from the South Carolina Office of Research and Statistics, ~~11.1~~ 16% of Oconee adults older than 25 years of age had less than a 9th grade education in ~~2000~~ 2010. In addition, another 15% of this age group had attended high school but failed to attain a diploma. Of the rest of those 25 years of age and up, 16.2% had some college; 6.3% had an Associate's Degree; 11.0% had a Bachelor's Degree; and 7.1% had a graduate or professional degree. Table P-11 (below) compares Oconee County high school enrollment information that from other nearby South Carolina counties.

Table P-11

High School Attendance Data from Upstate South Carolina Counties: 2012-2013							
County	Total Enrollment (Grades 9-12)	Dropouts (Grades 9-12)		Graduates (Spring 2013)			
		Number	Percent	Number	% Entering Postsecondary	% Entering Gainful Employ.	% Joining Armed Forces
Oconee	3017	118	3.9	675	73.2	14.5	5.5
Abbeville	873	26	3.0	125	88.0	4.8	6.4
Anderson	9097	199	2.2	1888	68.6	11.7	3.4
Cherokee	2515	56	2.2	512	77.1	9.2	2.0
Greenville	21,265	590	2.8	3712	79.5	10.2	2.7
Greenwood	3354	79	2.4	460	60.2	17.6	2.0
Laurens	2486	86	3.5	196	75.5	19.9	1.5
Pickens	4858	192	4.0	818	71.1	13.9	3.4
Spartanburg	13576	302	2.2	2798	73.2	11.2	2.9
Union	1205	33	2.7	216	68.1	0.0	1.4

**Although a majority of schools in each County provided records, information was unavailable for some schools.*

Table P-11 also shows that in ~~2000~~ 2013, only ~~three~~ one other regional county (Pickens, 4.0%) had a higher dropout rate than Oconee (3.9%) ~~surpassed the 2.8% drop-out rate reported by Oconee County.~~

Three counties were tied at 2.2% dropout rates (Anderson, Cherokee, and Spartanburg). Oconee County tied with ~~Cherokee- Spartanburg~~ County for ~~6~~ 5th place in the region with ~~65.2~~ 73.2% of high school graduates entering some form of post-secondary education program. Interestingly, in 1999, Oconee would have been second at that rate. This is an indication of the increase in availability for postsecondary education in the last 15 years in addition to the need for some sort of technical degree for many industrial jobs. The county average for students entering postsecondary education in 1999 was 65.4%; whereas, with the most recent data in 2013, the average was 73.4%, or a full 12% increase. Finally, of the remaining graduates in ~~2000~~ 2013, Oconee County ranked ~~fourth~~ second highest in the number of ~~entering~~ students joining some ~~form~~ branch of ~~gainful employment in the fall~~ the Armed Forces at 5.5%. ~~The 2010 Census will provide an update to this data.~~

Income in Oconee County

Table P-12 (below) illustrates the rise of per capita personal income in Oconee County since 1980.

Table P-12

Per Capita Personal Income in Oconee County: 1990-2010				
Year	Per Capita Income (\$)	State Rank	Percent of National Average	Percent of State Average
1990	16,508	8	84	103
2000	24,978	7	84	103
2010	24,055	10	88	103

Though the income amounts are not adjusted for inflation, the table clearly shows that Oconee County's per capita personal income flattened out ~~over the last two decades~~ over the twenty year period ending in 2010. In fact, by ~~2000-2010~~ Oconee was ranked ~~7th~~ 10th in the state. ~~The County had dropped three spots from 7th highest per capita income in the state in 2000 having moved up 10 places in 20 years.~~

Retirement Income

Because Oconee County is home to a growing population of retirees, Social Security benefits and pensions are increasingly important to Oconee County's economic standing. Table P-13 (below) illustrates the percentage of Oconee's population receiving retirement benefits from Social Security, and the way that this compares to the rest of upstate South Carolina.

Table P-13

Retired Workers Receiving Social Security Benefits in Upstate South Carolina					
County	2014			1999	
	Population	Number Receiving Benefits	Percent of Total Population	Percent of Total Population	Percent Change from 1999 to 2013
Oconee	74,656	14,915	20.0	14.0	43%
Abbeville	25,100	4135	16.5	12.0	38%
Anderson	189,763	30,675	16.2	12.2	33%
Cherokee	55,707	7875	14.1	10.5	34%
Greenville	467,087	62,255	13.3	10.0	33%
Greenwood	69,708	10,850	15.6	12.5	25%
Laurens	66,390	10,470	15.8	10.5	50%
Pickens	119,577	17,110	14.3	10.2	40%
Spartanburg	288,728	40,315	14.0	10.6	32%

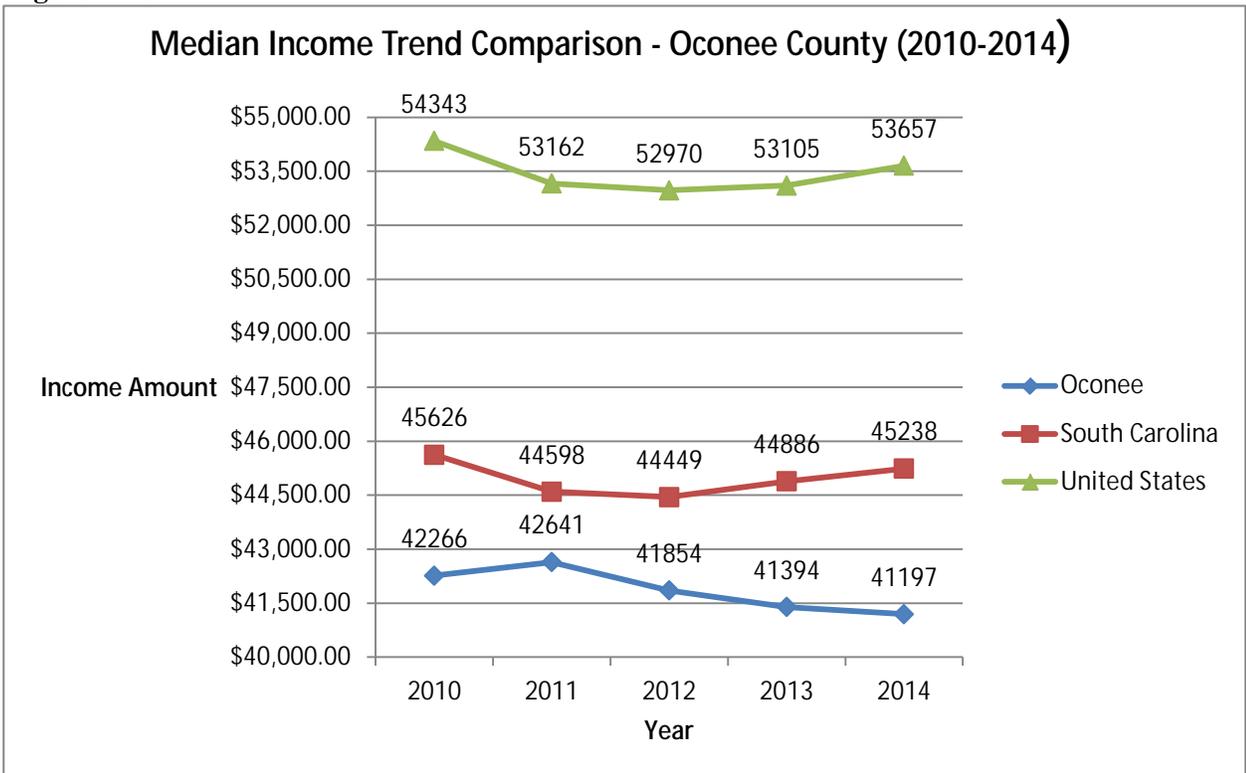
Union	28,329	4770	17.0	13.6	25%
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Oconee County ~~continues to lead~~ lead the upstate with ~~14.0~~ 20% of its citizens receiving Social Security benefits as retired workers, while percentages in adjoining counties Pickens and Anderson trailed behind at ~~10.2~~ 14.3% and ~~12.2~~ 16.2%, respectively. Oconee County’s percentage is also significantly higher than the state average (~~9.9~~ 14.4%). Overall, the Upstate has seen large double digit increases in retirees receiving Social Security since the turn of the century with the average increase per county being 35%. The average total “Percent of Total Population” being retired receiving benefits for each county increased from 11.6% in 1999 to 15.7% in 2014. This is consistent with projections based on the “Baby Boomers” generation reaching retirement and a longer life expectancy in general, nationally. In the Upstate, 15.34 percent of its more than 1.3 million people are retired and receiving Social Security.

Median Income

Median income figures divide a population into two categories, one with an income below that of the median figure and one group with income above the median figure. Generally, the median income is considered a better measurement of wealth in a region than a simple average because it is less susceptible to extreme numbers on either end of the spectrum. The higher the median income is in an area, the greater the presence of wealth throughout the region. With that said, having a high median income figure in an area does not exclude the area from pockets of poverty and economic distress. The Chart below (Figure P-10) shows the changes in median income of Oconee County since the ~~2000~~ 2010 Census. ~~It should be noted that, although the estimations show an overall increase in median income during the period, the current economic situation is most likely to result in at least some negative impacts on future numbers.~~ The median income peaked in 2011 and has steadily declined since. Comparing with state and national averages, Oconee is more than \$12,000 below the national average and more than \$4000 below the state in median household income; and the gap is currently widening with Oconee on a downward trend. Both the United States and South Carolina have been seeing yearly increases since 2013.

Figure P-10



Poverty Rate in Oconee County

According to the South Carolina Office of Research and Statistics, Oconee County’s poverty rate in 1979 (family of four persons earning less than \$7,412) ranked 3rd highest in the upstate, with 14.0% of its residents falling below the poverty line. By 1989, however, the number of Oconeeans living below the poverty line (family of four persons earning less than \$12,674) had significantly decreased, for the County’s 11.4% rate was second lowest in the region, trailing only Greenville County. In fact, Oconee County was one of only four upstate counties that experienced a decrease in its poverty rate during the period. This decline continued throughout the next decade. ~~for~~ Information from the Appalachian Regional Commission showed that Oconee County’s poverty rate in 2000 (family of four persons earning less than \$17,603) had fallen to 10.8%, again only second to Greenville County’s rate (10.5%). **In 2010, Oconee’s poverty rate jumped to 16.6%. Estimates from 2014 show another increase, to 18.8%, as shown in the table below.**

Table P-14

Upstate Poverty Rate Rankings			
County	Rate 2010	County	Rate 2014
1. Greenville	14.1	1. Greenville	15.8
2. Spartanburg	14.8	2. Anderson	16.8
3. Anderson	15.8	3. Spartanburg	18.3
4. Oconee	16.6	4. Oconee	18.8
tie. Pickens	16.6	5. Union	19.0
6. Greenwood	17.6	6. Pickens	19.4
7. Laurens	19.2	7. Laurens	21.0
8. Cherokee	19.5	8. Abbeville	23.1
9. Union	20.1	9. Cherokee	23.5
10. Abbeville	20.7	10. Greenwood	24.5
South Carolina	16.4	South Carolina	18.3
United States	13.8	United States	15.6

Only one county (Union) saw a decrease in poverty, equal to a 5% total decrease. The average poverty rate for the Upstate Counties was 20 percent in 2014, equivalent to nearly 10 percent more poverty than the rest of the state. Compared to the national average, the Upstate is 28% more impoverished than the rest of the country. Oconee has had the fourth lowest rate in the Upstate in both 2010 and 2014; even with a 13.25 percent increase in poverty. Greenwood County saw the biggest increase per capita in poverty: a 39% jump explained their change in the rankings from middle of the pack to dead last with nearly 1 in 4

residents below the poverty line. Almost one in five Oconee County citizens live below the poverty line. This corresponds with earlier references to a continued decrease in median income in Oconee County.

Analysis

Both positive and negative changes have resulted from the strong growth in population experienced by Oconee County over the last several decades. Some of these changes are no different from those experienced all across the South; others, however, are unique to Oconee. The in-migration from other areas of the country, for example, is being seen throughout much of the southern United States as the “sunbelt” economy has expanded. Indeed, a significant portion of Oconee County’s increase in population has apparently stemmed from this migration. Not all of those coming to the County, however, have been drawn by the relocated industry and commercial activity.

To uncover the factors that initiated much of Oconee’s surge in population growth, it is necessary to look at what was occurring in the County at the time the changes began. As this element has shown, Oconee County’s population “boom” began in earnest during the 1970’s. At the time, Oconee and neighboring counties were undergoing dramatic economic changes, for the textile industry, after many decades of dominating the local employment scene, was beginning to wane. In addition, family farms, having traditionally played a vital role in the local economy, began to disappear at an increasing rate. As a result, a new attitude toward the recruitment of business began to take hold on both the state and local level. The active pursuit of economic development began to be taken seriously.

Oconee County, with its mild climate, pristine natural resources, and hard-working population, soon began to enjoy the benefits of these efforts. Increasingly, newcomers began to call Oconee home. Along with the new business and industry locating in and around the area came individuals seeking to take advantage of the growing economy. In addition, it was also during this period that one of the most significant economic events in the history of Oconee County took place. The Duke Power Corporation, seeking to expand their electrical generating capacity, made a decision that eventually led to the investment of billions of dollars in the County. The lakes and electrical generating facilities that resulted from this decision forever changed Oconee, bringing jobs and opportunities that otherwise would not have been available. Now, more than ever before, Oconee became a magnet for not only jobseekers, but also those that had finished their careers.

The Duke Power Project, unlike the Corps of Engineers’ project that resulted in the creation of Lake Hartwell in the early 1960’s, significantly altered the economic course of Oconee County. Not only was the construction project a boon to the local economy, but, once completed, the new facilities provided a tremendous increase to the local tax base. As the lakes developed, thousands of people and millions of dollars were drawn into the region. This single decision, therefore, not only initiated significant development, but also acted as a catalyst that sparked the ancillary growth of talent and wealth from across the nation. As a result, the lives of all but very few Oconee County residents have been significantly impacted by the changes from this period. The development of the lakes has in turn brought new residents to the area and increased volunteerism in the schools, hospital, and civic organizations. Oconee’s population has grown by 88% since 1969, outpacing the U.S. average of 58.4%, almost doubling its population. Interestingly, the population shift share (a standard regional analysis used to determine growth in a given sector, in this case population) from Oconee to South Carolina was 0%. This means Oconee County shared an identical portion of the state population (1.56%) in 2014 as it did in 1969; this despite almost doubling its population. This is because Oconee had an identical growth rate with the state (88%).

Of course, not all of the changes have been positive. Perhaps the most obvious problems arising from a dramatic increase in population are associated with population density and overcrowding. Formerly plentiful resources are suddenly overwhelmed, and those that are of sufficient quantity suffer in quality. Pollution from increased traffic, litter, sewage, noise, lights, and any number of other sources drastically increases as people are forced closer together. Incompatible land use, an issue that was practically unheard of a few decades ago, has become a daily complaint. Long-time residents, looking for an explanation for the apparently new issues plaguing them, blame the newcomers. The new residents, suddenly realizing that life in their new home comes with unexpected problems, blame the “locals” for not having regulated the County better. “Us versus Them”, therefore, is a population issue that must be dealt with in an on-going manner if the bigger problems are to be successfully ~~eradicated~~ mitigated.

There is also the looming issue of a different type of growth that may become apparent in the next few years, for already, there are signs that the metropolitan areas to the north and south are converging on ~~our~~ the area. A number of people live in Oconee County and work within the boundaries of the Atlanta metropolitan area. Due to our relatively low taxes, abundant acreage, and rural lifestyle, we should expect to attract attention from a number of developers seeking to create large numbers of homes for those seeking to escape the sprawling urban areas. Such has been the case with many other rural counties that found themselves adjacent to fast growing metro regions. Soon, of course, such formerly rural areas themselves became part of the urban landscape. If we are to avoid such a fate, we need to realize that this is a real potentiality, and begin to take steps to manage the coming changes in a way that we wish to be. Population estimates show that the number of Oconee residents will continue to grow for many years to come. Along with this growth comes many opportunities; and with the proper attention by its leaders, future life in Oconee could be without compare.

Reasonable, well-planned development that complements the area’s precious natural resources will accentuate the County’s growing prosperity. A successful economic development program will provide Oconee’s residents with steady, high-paying jobs, maintaining the trend of a strong local economy. Still, even under the best of conditions, some problems will arise, but those problems stemming from population growth can be overcome. Thoughtful, adequate regulations that not only address each of the issues, but also preempt the future problems, are therefore not only desirable, but necessary.

Future issues requiring local government attention will include matters not even considered an Oconee County problem a few years ago. As Oconee’s population gets older, for example, issues affecting the elderly will have to be dealt with by the local governments, for not every need will be met by state and federal actions. In addition, the increasing number of foreign-born individuals living in Oconee, both aliens and citizens, will raise the possibility of cultural and ideological friction. ~~All Oconeeans, regardless of origin of birth, will need to be aware that the provocation of unnecessary conflicts can threaten the peace and prosperity of everyone.~~ As Oconee County’s economy moves forward into the new century, efforts will need to be made to insure that every citizen has the opportunity to move forward with it. As high-tech industries assume the dominant **workforce** position formerly held by the textile industry, for example, those individuals unprepared to deal with the new world will be left behind, increasing the burden on the rest of the population.

As this element shows, the population of Oconee County faces a bright future, but there is work to be done. The job will require close attention to issues before they develop into major problems. There is no doubt that dealing with the issues will sometimes be unpleasant, but, by utilizing the tools and resources available in Oconee County, the benefits will outweigh the objectionable moments and provide Oconee’s residents with a bright future.

Population Objectives for the Future

The following objectives are intended to address those needs and desires established within the Population Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Initiate efforts to develop the foundation of a county stormwater management program prior to federal mandates, thereby allowing for the most efficient and cost-effective implementation possible in the event of designation.
2. Establish a program of managing both water quantity and water quality throughout the county that will ensure efficient utilization, and appropriate conservation, of our greatest natural resource.
3. Continue support of a comprehensive planning process so as to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.
4. Develop and implement an effective Capital Projects Program that provides the highest level of service and facilities for Oconee County's citizens.
5. Create and/or update plans for specific priorities.
- ~~6. Complete and properly maintain Oconee County's Geographic Information System (GIS).~~
7. Continue to actively promote the recruitment of employment opportunities that provide the best lifestyle for all Oconee residents.
8. Encourage development in a way that protects and preserves our natural resources.

9. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.
10. Promote and enhance access to affordable housing through both public and private cooperation.
11. Work to address the age-related problems that may arise among Oconee County's aging population, particularly focusing on issues not adequately dealt with by state and federal efforts.
12. Continue to evaluate and fund public transportation in urbanizing areas of Oconee County, expanding as needed to provide for ongoing growth and development.
13. Establish programs to review all existing community facilities to determine needed changes resulting from both the aging of the facilities and the rapid population growth of Oconee County.
14. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.

Natural Resources Element

Overview

This element examines Oconee County's natural resources, providing both an inventory and analysis of the benefits derived from various features. Among the resources considered are soils, including topographical characteristics; plants, animals, and their habitats; hydrology; unique recreational opportunities; and other natural assets impacting modern Oconee County. The results of the assessment will be used to project future trends and needs, which will in turn be addressed in goals and policy recommendations based on the expressed wishes of the citizens of Oconee County.

Since the adoption of the 2004 Comprehensive Plan, the County has continued to work toward sustainability so that our valuable resources are maintained for years to come. Citizens have, also become organized in speaking out about the need to protect Oconee's environmental resources. One of the major success stories of the past few years was the conservation of Stumphouse Mountain. Further, efforts have been made to protect water quality, green space, and farmland. One of the most significant problems we have faced over the past five years has been the ongoing drought that has significantly degraded the County's lakes and water resources.

Natural resources are important to the continued economic vitality of the county. As stated in the Population Element update, the County is experiencing approximately a 6.9% population growth. Increasing population strains the natural resources of an area by increasing the use and intensity of that use. The essay, "Tragedy of the Commons", by Garrett Hardin comes to mind when we begin to think about protecting and enhancing our natural resources. We must strive to answer the question of the "commons" – what can be done to ensure that future persons are able to enjoy and utilize the resources we have been blessed with. Failing to answer questions like this and failure to take action will result in a tragedy. Our natural resources will one day become so degraded that future generations are unable to use or enjoy them.

Defining Oconee County

Section 4-3-420 of the South Carolina State Code of Laws (2000) states:
Oconee County is bounded as follows: on the north by the North Carolina line; on the east by Pickens County from which it is separated by a line beginning in the middle of Seneca River, where Ravenel's Bridge is located over said river (Survey Station No. 1, being the center-width and length of said bridge) thence S. 78° 10' E. 17.60 chains to corner, S. 37.5° E. 6.48 chains to corner, S. 64° 20' E. 4.92 chains to corner, N. 75° E. 8.06 chains to corner, S. 87° 35' E. 23.78 chains then the following courses and distances: S. 83° E. 9.16 chains, S. 72° 10' E. 6.00 chains, S. 54.75° E. 6.08 chains, S. 38.75° E. 1.43 chains, S. 31° E. 10.53 chains, to stone on east side of road near Agricultural Hall, thence S. 72° 50' E. 5.10 chains to corner, N. 85° 25' E. 20.17 chains to corner, N. 89° E. 15.13 chains to corner, N. 84° E. 9.13 chains, S. 76° E. 14.40 chains, S. 61° E. 4.86 chains, S. 33.5° E. 11.86 chains, S. 50° 20' E. 34.96 chains, S. 56.5° E. 21.15 chains, S. 62.25° E. 8.86 chains, S. 43.5° E. 11.44 chains, S. 37° E. 18.45 chains, S. 64.25° E. 19.40 chains, to corner in center of top-soil highway on the Anderson County line. Said corner being N. 65.5° W. 4.81 chains from the northwest corner of cement bridge over Eighteen Mile Creek. It is the intent of this section to establish the new top-soil highway as the boundary of Pickens and Oconee Counties. It is bounded on the south by Anderson County, from which it is separated by a line, commencing at the mouth of Cane Creek on Tugaloo River and running thence along the line which originally separated Anderson and Pickens districts to its point of intersection with the public road leading from Ravenel's Bridge to Pendleton Village; on the west and northwest by the state of Georgia, from which it is separated by the Tugaloo and Chatooga Rivers.
The total area encompassed by Oconee's borders is approximately 670 square miles (432,227 acres).

Climate

Located at the edge of the southern Appalachian Mountains, Oconee County is blessed with a climate that offers its residents four distinct seasons. Summers, though typically warm, usually offer only occasional periods of hot weather. Winters, as well, are generally mild, with extremely cold weather limited to relatively short episodes. And in between, spring and autumn provide Oconee with pleasant days that have served as a

beacon to thousands from other regions looking for a mild climate and relaxed lifestyle. In general: “South Carolina has a warm, moderate climate with hot, humid summers. Rainfall records kept since 1895 show the statewide average rainfall is near 48 inches, although it has ranged from 32 to 70 inches.”¹ The South Carolina State Climatology Office is an excellent resource on statistical data for the State and region. The following table shows some of the weather characteristics of the county.

Table NR-1

Oconee County’s ~~Climate (1948-2008)~~ 30 year Climate Normals

Highest Maximum Temperature	106° F (August 17, 1954) 71.8F 1981-2010
Lowest Minimum Temperature	-5° F (January 21, 1985) 47.1F 1981-2010
Annual Average Maximum Temperature	72.1° F
Annual Average Minimum Temperature	47.0° F
Annual Average Mean Temperature	59.4° F
Highest Daily Rainfall	6.93 inches (May 29, 1976) 9.65 inches 1924
Annual Average Rainfall	87.07 inches 60.32 inches
Wettest Year	110.79 inches (1994) 120.75 inches 2013
Driest Year	33.97 inches (1970) 26.41 inches 2016
Mean Snowfall	5.1 inches 15 inches 1988

Source: South Carolina Department of Natural Resources, State Climatology Office

One of the benefits of Oconee’s climate is a relatively long growing season, which allows for the successful production of a large number of crops. The county lies within the U.S. Department of Agriculture’s Plant Hardiness Zone 7a. Table NR-2 illustrates the dates of the first and last freezing temperatures in Oconee based on data gathered at Walhalla between 1961 and 1990.

Table NR-2

Probability	Temperature		
	24°F or lower	28° F or lower	32° or lower
Last freezing temperature in spring:			
1 year in 10 later than--	April 5	April 20	May 4
2 year in 10 later than--	March 30	April 14	April 29
5 year in 10 later than--	March 19	April 4	April 20
First freezing temperature in fall:			
1 year in 10 earlier than--	November 1	October 15	October 5
2 year in 10 earlier than--	November 5	October 21	October 10
5 year in 10 earlier than--	November 15	November 2	October 20

Source: South Carolina Department of Natural Resources, State Climatology Office

In spite of Oconee County’s temperate climate, extreme weather events do occur, occasionally taking the form of tornados. And though most Oconee tornados are relatively small, property damage and personal injuries are not unknown. According to information from the U.S. National Oceanic & Atmospheric Administration’s National Climatic Data Center, nineteen tornados were detected in Oconee County between 1973 and 2003, which equates to an average of one tornadic event every one and a half years. As this is just an average, however, it should be noted that much longer periods of time regularly elapse without any tornadic activity; of course, in a few cases, a single series of storms have produced multiple tornados on a single day. Table NR-3 below illustrates recorded tornado activity in Oconee County between January 1, 1990 and December 31, 2000.

¹ SC Department of Natural Resources. “The South Carolina Drought Response Program”.

Table NR-3

Recorded Tornado Activity in Oconee County, 01/01/1993 – 12/31/2000 1950-2016				
Location	Date	*Magnitude	Injuries	Est. Property Damage
Oconee (no specific location)	02/10/1990 -1950-2016	F4	1 -15	\$250,000 6.928 million
Westminster	03/23/1993	F0	0	\$1,000
Long Creek to Pickett Post	03/27/1994	F3	12	\$5,000,000
Pickett Post	06/26/1994	F2	0	\$500,000
Fair Play	01/14/1995	F1	0	\$5,000
Tokenna Crossroads	09/16/1996	F1	0	\$200,000
Westminster	02/21/1997	F0	0	\$5,000
Walhalla	05/07/1998	F0	0	0
Oakway	05/07/1998	F0	0	\$5,000
Tokenna Crossroads	10/04/1999	F0	0	0
Westminster	06/16/2000	F0	0	\$5,000
Walhalla	06/16/2000	Funnel Cloud	0	0
Tamassee	06/16/2000	F0	0	0

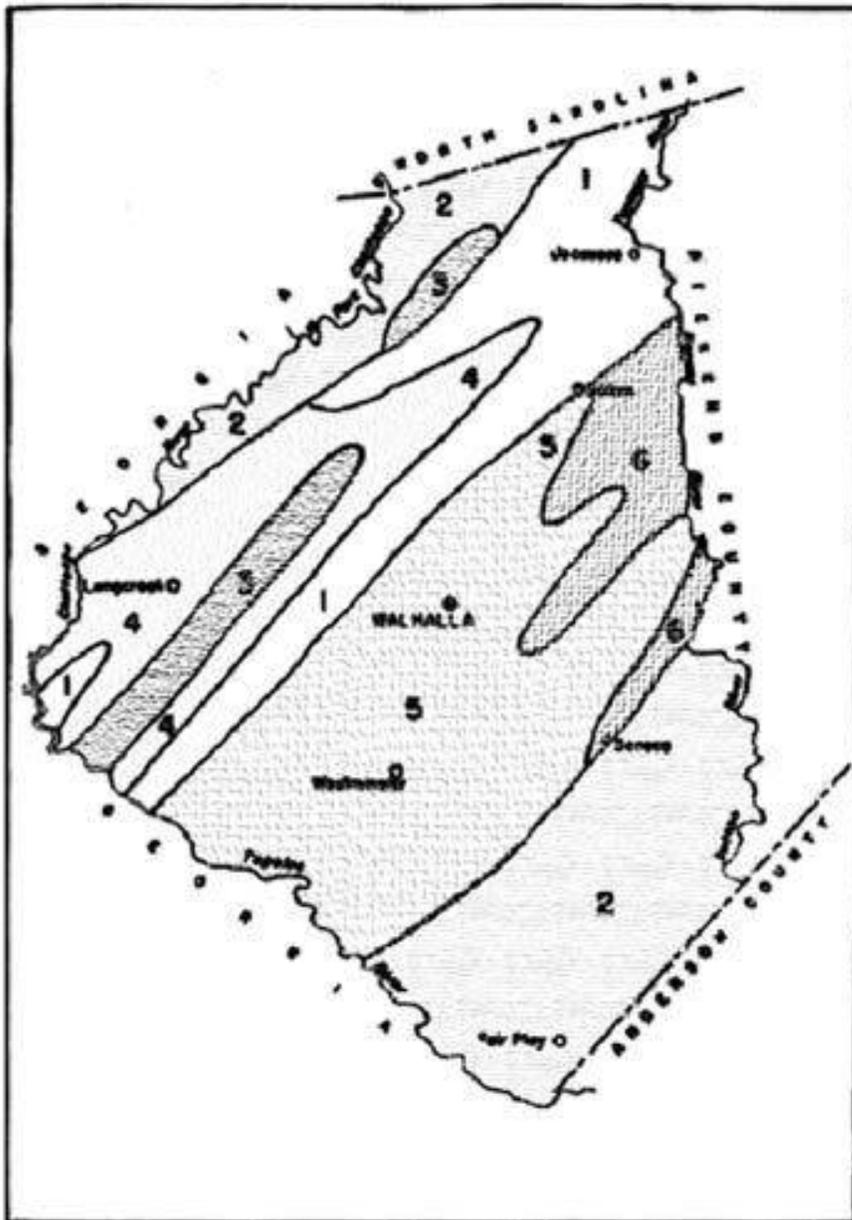
*Magnitude measured by Fujita-Pearson Scale (F0 = 0-72mph windspeed; F1 = 73-112mph windspeed; F2 = 113-157mph windspeed; F3 = 158-206mph windspeed; F4 = 207-260mph windspeed; F5 = 261+ windspeed)

Source: U.S. National Oceanic & Atmospheric Administration, National Climatic Data Center

Though tornados are viewed as perhaps the most extreme climatological threat to Oconee County residents, a number of other threatening weather events commonly occur. According to weather records, Oconee County experienced 57 thunderstorms with winds exceeding 60 miles per hour between 1948 and 2000; 66 hail storms between 1959 and 2000; 35 floods between 1975 and 1995; 59 ice, sleet or snow events between 1975 and 1995; and 552 wildfires (accounting for 2,164 acres burned) between 1975 and 1995. (South Carolina Department of Natural Resources, State Climatology Office)

Geology

Figure NR-1



Geologic Map of Oconee County: (1) Mylonitized granite gneiss and hornblende gneiss; (2) Oligoclase-biotite schist; (3) Cockeysville marble, Setters formation, and associated volcanic rocks; (4) Albite-chlorite schist and garnetiferous phyllonite; (5) Wissahickon schist with igneous injection; (6) Granite, gabbro, and hornblende gneiss.

Source: Soil Survey of Oconee County; Shading by Oconee County Planning Department to Enhance Definition

Oconee County's underlying bedrock is composed of a series of metamorphic and metasedimentary rocks traversed by a series of igneous intrusions. At the beginning of the Paleozoic era, the region was below sea level, leading to the accumulation of deposits of sand, gravel, silt and limestone. During the late Paleozoic, granite intruded into the schists, gneisses, and slates. At the end of the period, tremendous upheaval occurred, leading to significant folding, faulting, and brecciation. The result of such metamorphism is that in modern

times it is sometimes impossible to determine if the original rocks were sedimentary or igneous. ([Soil Survey of Oconee County](#))

The soils in Oconee County resulted from the weathering of, among others, schistose and gneissoid granite, diorite, and volcanic rock. Batholiths, sills, dikes, and surface flows are generally composed of granite, pyroxenite, peridotite, porphyrite, diorite, diabase and gabbro. The northwestern areas of the county are host of outcroppings made up of oligoclase-biotite schist, albite-chlorite schist, and similar rock. Mylonitized granite gneiss and hornblende gneiss can also be found in northwestern Oconee. ([Soil Survey of Oconee County](#))

Granites in Oconee are composed of various textured materials ranging from crystalline to porphyritic. While some are likely of Precambrian age, others may be Carboniferous. The granites have been classified as being mixtures of quartz, feldspar and biotite. ([Soil Survey of Oconee County](#))

Deposits of the following materials have been located in Oconee: gold, silver-lead, corundum, tremolite, talc, soapstone, asbestos, graphite, feldspar, mica, granite-gneiss, granite, limestone, and marble. ([Soil Survey of Oconee County](#))

Radon, a known carcinogen, has been found in Oconee County. This gas, which may be found in soil, rocks, water, and air, results from the radioactive breakdown of uranium. As radon presents a potential health risk to all those contacting it, experts are particularly concerned about the infiltration of the gas into homes. Additionally, in recent years concerns have been raised about levels of radon found in local residential wells. Because surface water in streams and lakes comes into contact with air, much of the gas is dissipated before being contacted by humans. Groundwater supplying wells, however, retains much of the radon. The Environmental Protection Agency (EPA) has classified Oconee County as having a moderate potential (from 2 to 4 picocuries per liter [pCi/L]) for the presence of radon. According to EPA, specific effects on individuals vary with personal health, time of exposure, quantity of exposure, and other factors. In addition, the level of potential assigned to a particular area does not indicate the level of radon to be found in any given location within that area. Because there is no way to accurately predict the level of radon in specific locations, the EPA recommends that each home be tested individually. To guard against infiltration of the gas into homes, relatively inexpensive measures should be taken at the time of construction. For retro-fitting existing structures, however, more costly methods must be employed.

Soils

Although Oconee County's recent economic history has been a tale of increased industrialization and commercialization, the area's traditional lifestyle, not unlike many other areas of the southern United States, was based on agriculture. For generations, therefore, Oconee's soils played a direct role in the lives of almost all county residents. Yet, as was the case in other similar areas, early agricultural practices damaged the area's soils, leaving many fields eroded and streams full of sediment. Today, of course, modern agricultural and conservation methods implement best management practices, and many of the damaged areas have been successfully reclaimed. As a result, Oconee County farmers are able to not only obtain yields unimaginable to their predecessors, but also maintain the health of the source of their prosperity.

In 1958, the United States Department of Agriculture's Soil Conservation Service, now known as the Natural Resources Conservation Service (NRCS), published the results of a soil survey that identified, located, categorized, and mapped all of Oconee County's soils. Soil scientists traveled throughout the county cataloging, in addition to soil types, slopes, streams, plants, agricultural operations, and other items directly impacted by soils. The gathered data was then compared to similar information from other areas, thereby allowing Oconee's soils to be classified and named according to standard procedures. When completed, the information was combined and published as the [Soil Survey of Oconee County, South Carolina](#).

Table NR-4 lists the soil series of Oconee County, along with the range of slope, acreage and percentage of total area that each soil comprises.

Table NR-4

Soil Series in Oconee County				
Soil	Slope Range (%)	Acres	Total Area (%)	*Suitability for Drainfields
Altavista sandy loam	0-6	371	0.1	Sv
Appling sandy loam	2-6	684	.2	M
Appling sandy loam (eroded)	2-6	503	.1	M
Appling sandy loam	6-10	675	.2	M
Appling sandy loam	10-15	247	.1	M
Appling sandy loam	15-30	434	.1	Sv
Ashe sandy loam	25-30	1,794	.4	Sv
Buncombe loamy sand	---	475	.1	Sv
Cecil sandy loam	2-6	1,397	.3	M
Cecil sandy loam (eroded)	2-6	14,061	3.3	M
Cecil sandy loam	6-10	1,358	.3	M
Cecil sandy loam (eroded)	6-10	19,694	4.6	M
Cecil sandy loam	10-15	1,932	.4	M
Cecil sandy loam (eroded)	10-15	9,767	2.3	M
Cecil sandy loam	15-25	9,213	2.1	Sv
Cecil sandy loam (eroded)	15-25	8,414	2.0	Sv
Cecil sandy loam	25-35	3,220	.7	Sv
Cecil sandy loam (eroded)	25-35	2,112	.5	Sv
Cecil clay loam (severely eroded)	2-6	716	.2	M
Cecil clay loam (severely eroded)	6-10	4,356	1.0	M
Cecil clay loam (severely eroded)	10-15	9,148	2.1	M
Cecil clay loam (severely eroded)	15-25	15,422	3.6	Sv
Chewalca silt loam	---	3,013	.7	Sv
Congaree fine sandy loam	---	3,399	.8	Sv
Congaree silt loam	---	2,670	.6	Sv
Davidson loam (eroded)	2-6	277	.1	M
Gullied land (rolling)	---	449	.1	M
Gullied land (hilly)	---	8,447	2.0	Sv
Halewood fine sandy loam	2-6	575	.1	Sl
Halewood fine sandy loam (eroded)	6-10	1,422	.3	M
Halewood fine sandy loam	10-15	815	.2	M
Halewood fine sandy loam (eroded)	10-15	768	.2	M
Halewood fine sandy loam	15-25	3,223	.7	Sv
Halewood fine sandy loam (eroded)	15-25	917	.2	Sv
Halewood fine sandy loam	25-45	38,559	9.0	Sv
Hayesville and Cecil fine sandy loams	2-6	1,072	.2	M
Hayesville and Cecil fine sandy loams	6-10	1,756	.4	M
Hayesville and Cecil fine sandy loams (eroded)	6-10	5,003	1.2	M
Hayesville and Cecil fine sandy loams	10-15	3,251	.8	M
Hayesville and Cecil fine sandy loams (eroded)	10-15	6,819	1.6	M
Hayesville and Cecil fine sandy loams	15-25	21,529	5.0	Sv
Hayesville and Cecil fine sandy loams (eroded)	15-25	10,352	2.4	Sv
Hayesville and Cecil fine sandy loams	25-45	55,642	13.0	Sv
Hayesville and Cecil fine sandy loams (eroded)	25-45	1,540	.4	Sv
Hayesville and Cecil loams (severely eroded)	6-10	415	.1	M
Hayesville and Cecil loams (severely eroded)	10-15	738	.2	M
Hayesville and Cecil loams (severely eroded)	15-45	4,252	1.0	Sv
Hayesville, Cecil, and Halewood sandy loams (shallow)	15-25	449	.1	Sv
Hayesville, Cecil, and Halewood sandy loams (shallow)	25-60	7,298	1.7	Sv
Hiawassee sandy loam (eroded)	2-6	392	.1	M
Hiawassee sandy loam (eroded)	6-10	409	.1	M
Hiawassee sandy loam (eroded)	15-25	292	.1	Sv

Hiwassee clay loam (severely eroded)	10-15	360	.1	M
Lloyd sandy loam (eroded)	2-6	7,954	1.8	M
Lloyd sandy loam	6-10	572	.1	M
Lloyd sandy loam (eroded)	6-10	8,996	2.1	M
Lloyd sandy loam (eroded)	10-15	5,824	1.4	M
Lloyd sandy loam (eroded)	15-25	14,661	3.4	Sv
Lloyd sandy loam	25-35	7,647	1.8	Sv
Lloyd clay loam (severely eroded)	2-6	360	.1	M
Lloyd clay loam (severely eroded)	6-10	4,093	.9	M
Lloyd clay loam (severely eroded)	10-15	5,711	1.3	M
Lloyd clay loam (severely eroded)	15-35	8,891	2.1	Sv
Lloyd loam (moderately shallow-eroded)	15-25	402	.1	Sv
Lloyd loam (moderately shallow)	25-40	734	.2	Sv
Local alluvial land	---	1,729	.4	Sv
Madison fine sandy loam, high	2-6	156	<.1	Sl
Madison fine sandy loam, high	6-10	562	.1	M
Madison fine sandy loam, high (eroded)	6-10	1,193	.3	M
Madison fine sandy loam, high	10-15	1,129	.3	M
Madison fine sandy loam, high (eroded)	10-15	1,620	.4	M
Madison fine sandy loam, high	15-25	2,694	.6	Sv
Madison fine sandy loam, high (eroded)	15-25	1,565	.4	Sv
Madison fine sandy loam, high	25-40	10,206	2.4	Sv
Madison fine sandy loam, high (severely eroded)	15-25	336	.1	Sv
Madison sandy loam (eroded)	6-10	136	<.1	M
Madison sandy loam (eroded)	10-15	174	<.1	M
Madison sandy loam (eroded)	15-30	386	.1	Sv
Mixed alluvial land	---	11,694	2.7	Sv
Mixed wet alluvial land	---	3,189	.7	Sv
Porters loam	25-45	2,071	.5	Sv
Porters stony loam	25-45	1,188	.3	Sv
State fine sandy loam	---	334	.1	M
Stony land	---	377	.1	Sv
Talladega and Chandler loams	10-25	625	.1	Sv
Talladega and Chandler loams	25-60	23,995	5.6	Sv
Watauga fine sandy loam (eroded)	2-6	109	<.1	M
Watauga fine sandy loam (eroded)	6-10	81	<.1	M
Watauga fine sandy loam (eroded)	10-25	138	<.1	Sv
Watauga fine sandy loam	25-40	293	.1	Sv
Wickham sandy loam	2-6	472	.1	M
Wickham sandy loam (eroded)	2-6	1,713	.4	M
Wickham sandy loam (eroded)	6-10	681	.2	M
Wickham sandy loam (eroded)	10-15	429	.1	M
Wickham sandy loam (eroded)	15-25	260	.1	Sv
Wickham clay loam (severely eroded)	6-10	282	.1	M
Worsham sandy loam	0-6	934	.2	Sv
Worsham sandy loam (eroded)	6-15	108	<.1	M

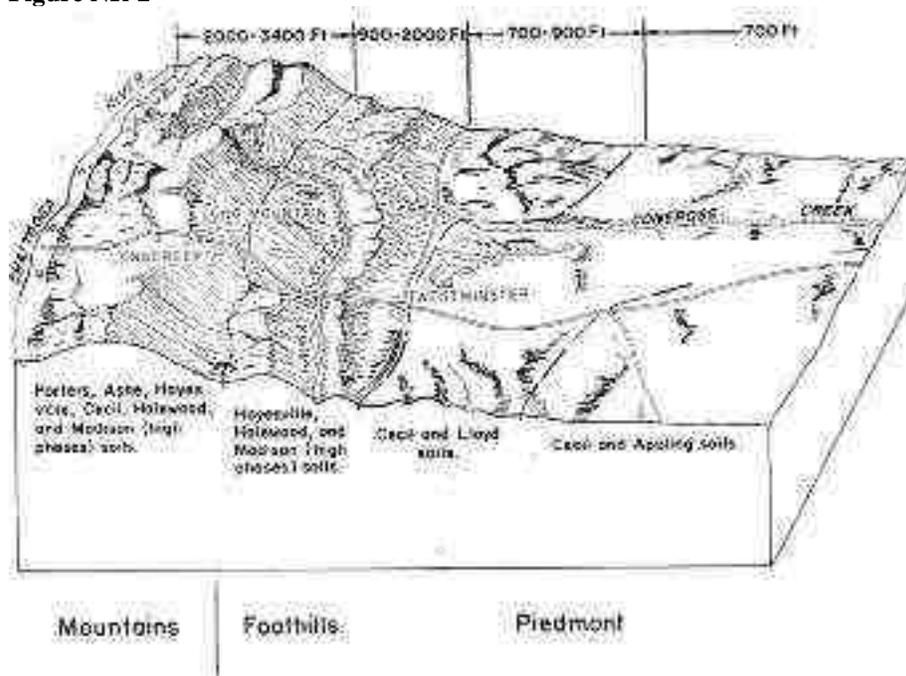
* Limitations for septic system drainfield taken from Sanitary Facilities suitability report for all Oconee County soils, NRCS [Sl = Slight Limitations; M = Moderate Limitations; Sv = Severe Limitations]

Source: Soil Survey of Oconee County; "Sanitary Facilities: All Oconee Soil", Natural Resources Conservation Service (3/18/1999)

As Table NR-4 shows, 23 separate series' of soils are found in Oconee County. The distribution of soils range from Cecil, Appling, and Lloyd soils in the Piedmont Plateau; to the Hayesville, Halewood and Madison soils in the foothills and mountains. While some soils are only found in small quantities, sometimes accounting for only a few acres across the entire county, a few make up tens of thousands of acres. Also, each area of the county offers differing, sometimes unique, combinations of soils that change with varying topography, greatly impacting suitability for various land uses in particular locations. For example, Hayesville and Cecil fine sandy loams in areas with 2-6% slopes are only moderately limited in suitability for septic tank absorption fields. Yet, with the same soils on slopes greater than 15%, absorption is severely limited. Other factors impacting suitability for particular land uses include organic matter content, permeability, and depth. For more detailed information on soils, refer to the Soil Survey of Oconee County.

Figure NR-2 illustrates the general division of soil series related to the county's physiography, showing the regions where much of the major soils can be found.

Figure NR-2



Source: Soil Survey of Oconee County

The Oconee Soil and Water Conservation District is a locally elected board which relies on the technical assistance of the USDA-Natural Resources Conservation Service to promote the conservation of natural resources in the county. Their input on the subject of soils valuable and all efforts to help preserve our resources in soil will need to be in coordination with the District.

One of the areas that have been overlooked as a threatened resource in recent decades is soil. Historically, soil erosion was elevated to a national crisis in the Depression, which resulted in the formation of the Soil Erosion Service (now the NRCS) and local Soil & Water Conservation Districts. The marriage of the US Department of Agriculture with local governing bodies (by county) enabled soil loss to be swiftly abated through installation of conservation practices such as contour farming, terracing, crop residue management, crop rotation, grassed waterways, and field borders. Massive soil erosion was curtailed with the incorporation of these practices in typical farm operations. Movement away from agriculture throughout the decades following the 1930's resulted in the conversion of cropland to permanent sod, trees, and other uses. Thus, the awareness of the need to conserve soil and prevent erosion has taken a back seat to water quality.

If soil erosion was as obvious today as it was during the 1930's, efforts to protect/conservate this resource would be equal to or greater than those for water quality. It takes hundreds, even thousands, of years to create one inch of soil. With that in mind we need to consider the following facts:

1. Without considering the United States Forest Service lands, there are 98 different soils found in Oconee County.
2. Of these, 41 are found to be "prime" or "of statewide importance" (soils most suitable for agricultural production)
3. The 41 different soils make up only 21% of the County's soil resources.
4. The above mentioned acreage falls mostly in the agricultural community in the southern end of the county

A USDA technical bulletin states that prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, and oilseed crops. It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods. In general, prime

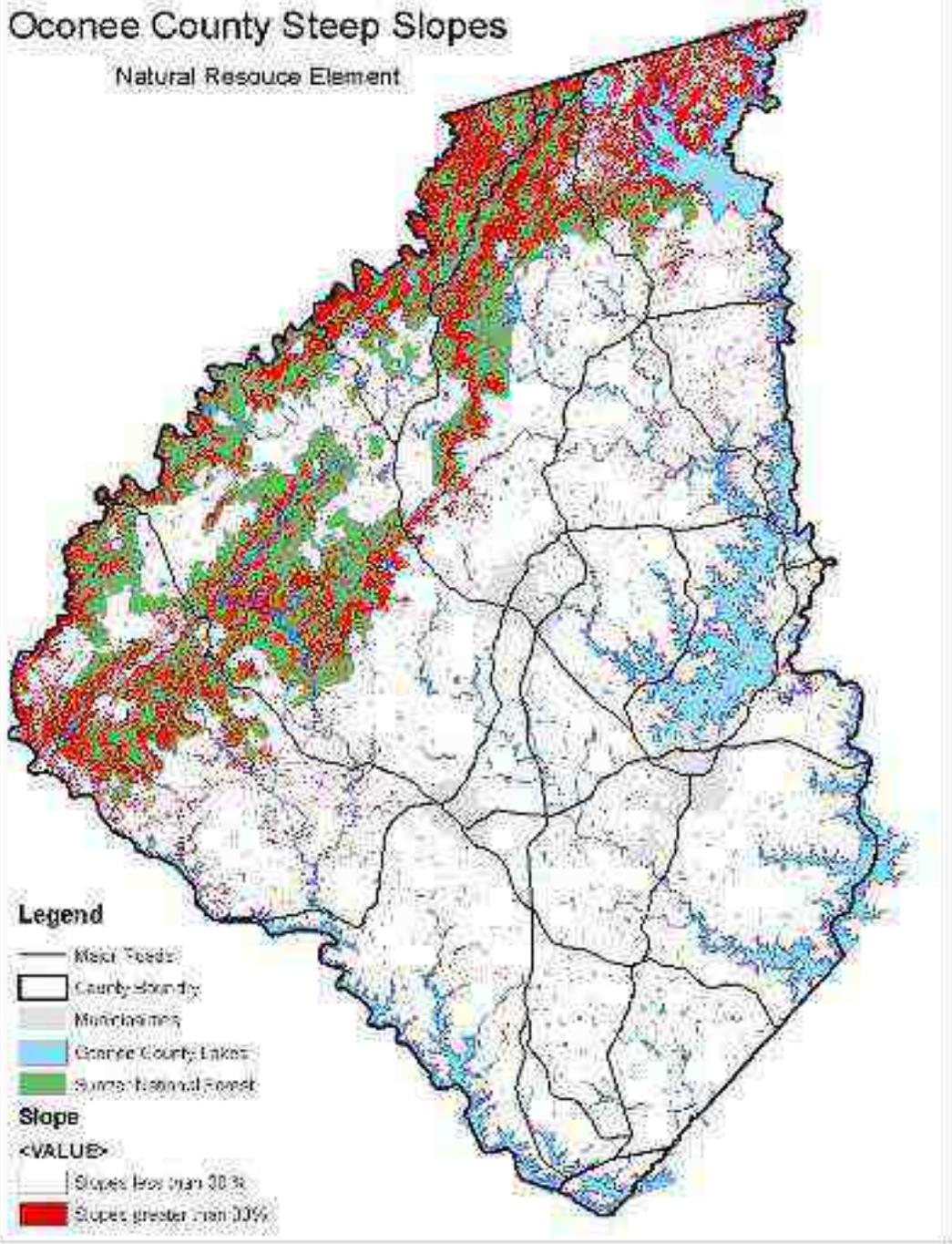
farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks.² Not only should the county look at protecting these prime farmlands from development but efforts to promote best farm practices which promote soil regeneration should be held in similar regard.

The loss of soils is also closely tied to the slope of the land. When steep slopes are encountered, best development practices must be adhered to. Cleared land combined with steep slopes will result in rapid erosion which leads to the sedimentation of creeks, rivers, and lakes. Barren steep slope areas also have the potential to negatively impact the neighboring properties due to runoff problems. Oconee County has been blessed with breath taking mountain views and river valleys but this blessing also brings with it a number of steep slope areas that need to be developed very cautiously. It would be preferable to limit the development on steep slopes and to protect the vegetation on those areas. Minimal disturbance to natural vegetation helps to prevent storm water runoff and maintain the integrity of the soil in the area in question. The following map depicts those areas in Oconee County that have slopes greater than thirty (30%) percent. Due to the scale of the map, all areas may not be visible.

² Natural Resources Conservation Service, USDA. §657.5, 7CRF Ch. VI (1-1-100 Edition), pg 724.

Oconee County Steep Slopes

Natural Resource Element



Terrain

Oconee County is a region of diverse terrain separated into three distinct physiographic areas (See Figure NR-1). The Piedmont Plateau area, which lies predominantly in the southern part of the county, accounts for about 42% of total county acreage, and averages about 690 feet above mean sea level (Soil Survey of Oconee County). Given the availability of easily farmable tracts of land in this region, it has traditionally been the location of most of the intensive row cropping operations in the county, and as such is the site of the majority of the county's remaining prime agricultural lands.

The foothills region of Oconee lies in a band running from southwest to northeast, separating the Blue Ridge Mountains in the north and the Piedmont Plateau in the south. The foothills comprise about 35% of the county, and range in elevation from 780 feet to 2,200 feet above mean sea level (Soil Survey of Oconee County). Because the wide range in elevation includes many areas of severely steep slopes and thinner soils, farming activities have traditionally been more limited than those in the Piedmont Plateau region. The last of the three physiographic regions makes up the approximately 23% of Oconee County, and lies in the Blue Ridge Mountains. Extending in a band lying west and north of the foothills region, the Blue Ridge Mountains are part of the southern Appalachian Mountain chain. With elevations that range from 2,200 feet to 3,400 feet above mean sea level, the terrain in this area of Oconee is often extremely steep and difficult to access (Soil Survey of Oconee County).

Conservation and Land Preservation Efforts

The citizens of Oconee County have expressed a unified desire to preserve the unique characteristics of the region. Although, the common realization that we need to protect both the beauty and quality of the county's resources, vastly different viewpoints always make government involvement difficult. The 2008 Oconee by Choice Plan states: "Citizens want to ensure their community remains "a place where nature is respected not exploited." Several major areas need to be considered as we move forward in the discussion of how to protect our natural resources. Issues such as water, soils, and agricultural preservation will become forefront issues in the years to come.

The preservation of natural resources for future generations is often achieved through government protections and public/private partnerships that protect the land. Examples of government sponsored preservation are prevalent in Oconee County. Sumter National Forest, which comprises a large portion of the northwestern part of the county, is just one example. We are blessed with several state and county parks, which all citizens have the opportunity to use. Governments should continue to look for ways that they can preserve precious land resources as opportunities arise. We have also seen in recent years the increase in public/private partnerships working together to preserve the land.

Another area that must be considered by Oconee Citizens for Protection is the conservation of agricultural lands. With increasing demands placed on farms by development pressure, farm owners are starting to consider how they may protect their farm land. The South Carolina Legislature passed the Right to Farm Law which "gives existing farms some protection from nuisance complaints. Its purpose is to lessen the loss of farmland caused by common law nuisance actions that arise when nonagricultural land uses expand into agricultural lands."³ The protections provided by the Right to Farm Law protect the farm operations from law suits but it does not protect land from being developed into other types uses. True protection of land can be achieved through such mechanisms as land trusts, development rights, and good estate planning. The following table has been adopted from the South Carolina Agricultural Landowners Guide.

Table NR-5

Conservation Type	Summary
Agricultural Conservation Easements ⁴	"An agricultural conservation easement is a voluntary deed restriction that landowners willingly place on their land. It permanently limits subdivision and non-agricultural development."
Conservation Bank	"Signed into law in 2002, the South Carolina Conservation Bank provides funding for protection of natural resources through the cons

³ "South Carolina Agricultural Landowners Guide." American Land Trust.

Estate Planning	“Good estate planning accomplishes at least four goals: transferring ownership and management of the agricultural operation, land and other assets; avoiding unnecessary income, gift, and estate taxes; ensuring financial security and peace of mind for all generations; and developing the next generation’s management capacity.”
Farm and Ranch Lands Protection Program	This program “is administered by the USDA Natural Resources Conservation Service to provide matching funds to help purchase agricultural conservation easements on productive farm and ranch lands. . . To qualify, landowners must work with state and local governments or non-governmental entities to secure a pending offer with funding at least equal to 50 percent of the land’s fair market easement value.”
Forest Legacy Program	This program was established in the 1990 farm bill and is administered by the USDA Forest Service and the SCDNR. Funds are used to purchase conservation easements on working forestland threatened by conversion to non-forested uses. This program is limited to private forest landowners who have prepared a multiple resource management plan.
Grassland Reserve Program	“The 2002 Farm Bill authorized this program. Private lands of 40 or more contiguous acres historically dominated by grasses or shrubs are eligible for the program. The land should have livestock currently grazing. Landowners with eligible property may receive compensation through permanent or 30 year easements, or enter into a 10, 15, 20, or 30 year rental agreement.
Small Farms Program	“The South Carolina Department of Agriculture’s Small Farms Program provides assistance to small family farmers. Special importance is placed on farmer owned marketing cooperatives; land retention, alternative land use and community development. The program also provides assistance with identifying and securing financial resources and locating profitable markets.”
Conservation Reserve Program	This program is administered by the Farm Service Agency to encourage farmers to convert highly erodible cropland and other environmentally sensitive land to vegetative cover. Landowners may also receive funding to fence streams that exclude livestock and to build grass waterways. Eligible land must have a weighted average erosion index of eight or higher and been planted to an agricultural commodity four of the six previous years.
Conservation Security Program	This program was established in the 2002 Farm Bill to provide financial and technical assistance to support conservation efforts on tribal and private agricultural land. All privately owned land that meets established soil and water quality criteria is eligible.

The College of Agriculture, Forestry and Life Sciences at Clemson University has developed a series of web based videos that walk land owners through all aspects of Conservation Easements. Local Extension

Offices are also valuable resources for the public and individuals interested in placing some protections on their land should utilize this resource. The videos can be found at: http://www.clemson.edu/cafls/departments/forestry/conservation_easements/index.html.

Another method of conserving land that has recently joined the conversation is the concept of transferring development rights. As a tool, transferring development rights consists of a conveyance of development rights by deed, easement, or other legal instrument, authorized by ordinance or regulation, to another parcel of land and the recording of that conveyance.⁵ Programs establishing a mechanism for the transfer of development rights from one area are used to preserve land and allow for increased density in other areas of the jurisdiction. Developers are able to buy the right to develop from a property owner who then records a restriction on the property to prevent development. The developer is then rewarded by receiving additional density allotments and the developer is able to apply the number of dwelling units to a development in selected growth areas.

Oconee County should also work to establish a local conservation bank to help preserve and protect not only the areas natural resources but also those historical and cultural resources that are valuable links to the past. The establishment of a local conservation bank will be an asset to all citizens of Oconee County. The conservation bank will be able to assist residents in exploring the advantages and disadvantages of having property conserved. At the same time the local conservation bank will be able to help raise the funds necessary to purchase conservation easements.

Water Resources

Although Oconee County possesses a wide variety of natural resources, it is the area's waters that have traditionally set the county apart. From the farmlands in the south, to the mountains in the north, area residents have never been very far from one of the county's streams. In fact, all but a short length of the county's boundaries are marked by water. With an average annual precipitation ranked near the top of the nation, and a geology that favors water storage, it was perhaps inevitable that the resource played a major role in shaping the county as we know it today. It should be stressed, however, that though plentiful, Oconee County's supply of water is not unlimited.

Widespread concern about future water availability was brought to the fore by events that began in the late 1990's, which happened to be a sustained period of diminished rainfall. As drought increased, lake and stream levels fell to near-record lows, and a number of residents reported that wells were drying up. At the same time, it became known that large metropolitan areas in the region were actively seeking to permit the withdrawal of local surface waters to supply their own growing needs. To date, this issue is still open and ultimately in the hands of state and federal authorities, but many local leaders believe that further stressing Oconee County's reservoirs will inevitably limit the county's ability to chart its own future growth. Another concern noted during the period was the existence of uranium, in the form the radon, in Oconee's groundwater. Although potentially a serious problem, at present it is believed to be a very localized condition that may be dealt with on a case-by-case basis. Finally, Oconee's waters have been affected by increasing pressure from non-point source pollution resulting from poor agricultural practices, development, and increased population density. These factors, combined with a population that grew in excess of 15% during the 1990's, have made insuring sufficient water supplies for both consumption and use in economic development a major concern in Oconee County.

Groundwater

While the groundwater in Oconee County is generally unconfined, local artesian conditions exist when wells penetrate fractures that are hydraulically linked with higher recharge areas. This may also be the case for clayey regolith that forms a confining unit. Typically, water enters the ground, percolating vertically downward through unsaturated materials. Once the water reaches a level of saturation, which is the water table, it moves laterally to seek a point of discharge. This is the source of springs, seeps, baseflow to streams, and seepage to lakes. While the water table may be near the surface in valleys or lowlands, it can be tens to hundreds of feet below the surface of hills and mountains. (Groundwater Atlas of the United States, USGS)

⁵ Freilich, Robert H. and S. Mark White. *21st Century Land Development Code*. Chicago, Illinois: American Planning Association. 2008.

Contrary to popular belief, most groundwater does not flow through underground streams, but seeps through layers of sand or cracked rocks. Because the water moves so slowly, it does not dilute or flush out pollutants very easily. Also, until the water reaches a well or emerges in a body of surface water, detecting pollution is extremely difficult; and by that time, remediation is both problematic and expensive. (Bureau of Water, South Carolina Department of Health and Environmental Control [DHEC])

The replenishment of groundwater supplies is an issue that must be dealt with in all developing areas, including Oconee County. As the amount of impervious surface increases, the amount of area available for recharging the groundwater system is decreased. Buildings, driveways, and paved roads all prevent rainwater from finding its way back into the ground. At the same time, water turned back from these structures greatly increases the amount of runoff that must be dealt with downstream, leading to increased amounts of flooding and property damage. In addition, damage to wetland areas, which also serve as key recharge areas, removes even more groundwater from the system, thereby further reducing the water available to supply new development.

Although pollutants are an increasing threat, the quality of raw groundwater in Oconee and the surrounding region has traditionally been considered suitable for drinking and other uses. Although fluoride, iron, manganese, and some sulfate can be found in the water, levels have rarely exceeded state and federal drinking-water standards (Groundwater Atlas of the United States, USGS). Recently, however, high levels of uranium and radon have been discovered in wells in various parts of Oconee County. At the time of writing, no organized program of response has been implemented.

Streams and Lakes

The waters of many streams and lakes flow through Oconee County. The following is a list of some of the county's more significant waters.

- (1) Lake Hartwell- Created by the impoundment of the Savannah River on the South Carolina/ Georgia border, this 56,000-acre body of water is one of the most popular recreational lakes in the United States. Lake Hartwell was completed in the early 1960's, and is utilized for hydroelectric power generation, flood control, recreation, and water supply.
- (2) Lake Keowee- This 18,372-acre lake was created when Duke Power Corporation dammed the Keowee and Little Rivers for power generation, and is situated on the border between Oconee and Pickens Counties. Its waters are also used for cooling the reactors of the Oconee Nuclear Station. Being located in the foothills, Keowee offers mountain vistas that greatly enhance traditional recreational activities with beautiful scenery. As a result, the often steep slopes surrounding Lake Keowee are the site of some of the heaviest residential development in the county, leading to growing debate regarding the usage of the resource. The lake's waters are used for power generation, recreation, and water supply. It should be noted that some of Lake Keowee's waters are transferred out of basin by the City of Greenville, a point of growing concern among many of those living near the lake.
- (3) Lake Jocassee- Located in northeast Oconee along the county's border with Pickens County, Lake Jocassee's 7,565 acres of clear mountain waters are formed by the impoundment of the Toxaway, Whitewater, and Thompson Rivers. The lake, whose bottom lies approximately 324 feet below surface at its deepest point, was built by Duke Power Corporation for power generation soon after Lake Keowee was completed in the early 1970's. Lake Jocassee's natural shoreline is protected by both thousands of acres of public lands and extremely rough terrain.
- (4) Lake Yonah- Completed in 1925, Lake Yonah was constructed on the Tugalo River to generate hydroelectric power for the Georgia Power Company. Currently offering public access as at two relatively remote Georgia landings, public use of Lake Yonah has traditionally been relative light. In recent years, however, the 325-acre impoundment has been the scene of increased development, particularly on the Georgia side. Extremely steep terrain and an isolated location generally restricts public access on the Oconee side to boat and barge traffic.

- (5) Lake Tugalo- Located upstream from Lake Yonah, Lake Tugalo was one of a series of hydroelectric dams constructed in the early years of the twentieth century by Georgia Power Company. Lake Tugalo's 597 acres of water stretch along the South Carolina/ Georgia border from the end of Section 4 of the Wild and Scenic Chattooga River to its confluence with the Tallulah River.

In addition to the waters listed above, Oconee County's borders encompass a number of private lakes, with many of them home to a number of lakefront communities. Among these are:

- a. Lake Becky
- b. Lake Chattooga
- c. Lake Cheohee
- d. Lake Cherokee
- e. Crystal Lake
- f. Lake Jemiki
- g. Mountain Rest Lake
- h. Whitewater Lake

The following rivers and creeks are generally considered to be among Oconee County's most significant streams:

- (1) Chattooga River- Considered by many to be the jewel of natural resources in Oconee County, the Chattooga flows out of North Carolina and forms approximately 40 miles of border between South Carolina and Georgia. It is widely acclaimed to be one of the best whitewater rivers in the nation, with rapids ranging from Class III to Class V. The Chattooga, one of the first Wild and Scenic Rivers in the nation, attracts thousands of visitors to the county each year.
- (2) Tugalo River- Before the creation of Lakes Yonah, Tugalo and Hartwell, the Tugalo River (sometimes spelled Tugaloo) began at the confluence of the Chattooga and Tallulah Rivers and flowed southeastward to its confluence with the Seneca River, the beginning of the Savannah River. Though today's remaining short section of the river only flows out of Lake Yonah into the backwaters of Lake Hartwell, the Tugalo was once a main artery of travel and commerce for early residents of the region.
- (3) Chauga River- For years the Chauga has been overshadowed by the larger and more famous Chattooga River. Recently, however, the pristine Chauga has begun to attract its share of attention from both whitewater enthusiasts (who extol the river's Class V rapids) and conservationists. Approximately 14 miles of the river flow through U.S. Forest Service lands before entering developed areas near the headwaters of Lake Hartwell, the Chauga's ultimate destination.
- (4) Thompson River- Beginning in North Carolina, the Thompson flows south into Oconee County's Lake Jocassee. This remote river, which is noted for rugged terrain and beautiful waterfalls, supports a healthy population of native trout.
- (5) Coneross Creek- This stream stands as an example of intense utilization of a smaller water source by a significant portion of the county's population. The creek's waters are used as a water source for the town of Walhalla; drinking water for livestock all along its course; an irrigation source for various activities; a source for dilution of treated outfall from the Oconee Sewer Treatment Facility; hydroelectric power generation near Seneca; recreational fishing; and as it enters the backwaters of Lake Hartwell, boating. Beginning west of Walhalla near the base of Stumphouse Mountain, Coneross Creek flows generally southeast through the heart of what has come to be the most heavily developed section of the county, often suffering from the effects of both its usage and location. DHEC's Bureau of Water has listed 18.26 miles of the Coneross as being impaired from high levels of fecal coliform (see Table NR-6). Among the sources of pollution noted by the agency are improperly operating septic tanks, land application of poultry litter, and access to the stream by livestock.

- (6) Brasstown Creek- This stream flows out of Oconee’s mountains through sparsely populated areas, eventually entering the Tugalo River. Noted as a good trout stream by area fishermen, Brasstown Creek flows over one of the more beautiful waterfalls in the region before passing through the Brasstown Creek Heritage Preserve, a habitat for several rare plants.

Other Oconee County streams worthy of note include:

- a. Whitewater River
- b. Little River
- c. Choestoea Creek
- d. Cheohee Creek
- e. Tamassee Creek
- f. Station Creek

Water Classifications

The South Carolina Department of Health and Environmental Control’s (DHEC) Bureau of Water is charged with identifying and classifying the surface waters of South Carolina. These classifications indicate the scope of allowable uses of the waters based on state regulations. Oconee County’s classified waters fall into two categories:

- (1) **Fresh Waters (FW)**- suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of DHEC. Also suitable for fishing, indigenous aquatic fauna and flora, and industrial and agricultural uses.
- (2) **Trout Waters-**
 - a. **Natural (TN)**- suitable for supporting reproducing trout populations and a cold water balanced indigenous aquatic community of fauna and flora, as well as uses listed in Fresh Waters.
 - b. **Put, Grow, and Take (TPGT)**- suitable for supporting growth of stocked trout populations and a balanced indigenous aquatic community of fauna and flora, as well as uses listed in Fresh Waters.

In addition to the classifications, the Bureau of Water enforces quality standards that strictly limit usage of the waters in such a manner as to maintain the classifications assigned to them. (SC Regulation 61-68: Water Classifications and Standards, DHEC)

Table NR-6 lists the classified waters in Oconee County. These range in size from the largest lakes to small creeks, but not all streams in the county are on the list. The state regulations governing the classifications and standards, however, apply to the listed stream and any unlisted tributaries.

Table NR-6

Classified Surface Waters in Oconee County		
Name	*Classification	Description
Bad Creek	ORW	All
Bad Creek Reservoir	FW	“
Battle Creek	TPGT	“
Bear Creek	TN	“
Bearcamp Creek	TN	“
Brasstown Creek	TPGT	“
Burgess Creek	TN	“
Camp Branch	FW	“
Cantrell Creek	TN	“
Chattooga River	FW	From confluence with Opossum Creek to Tugaloo River

Chattooga River	ORW	From NC state line to confluence with Opossum Creek
Chauga Creek (Jerry Creek)	FW	All
Chauga River	ORW	From headwaters to 1 mile above US 76
Chauga River	FW	From 1 mile above US 76 to Tugaloo River
Cheohee Creek	ORW	From Headwaters to end of US Forest Service land
Cheohee Creek	FW	From US Forest Service land to confluence with Tamassee Creek
Choestoea Creek	FW	All
Coneross Creek	FW	“
Corbin Creek	ORW	“
Dark Creek	ORW	“
Devils Fork Creek	TN	“
East Fork Chattooga River	ORW	Form NC state line to confluence with Indian Camp Branch
East Fork Chattooga River	TN	From confluence with Indian Camp Branch to Chattooga River
Fall Creek	FW	All
Fishtrap Branch	FW	“
Hartwell Lake	FW	“
Hemery Creek (Ramsey Creek)	FW	“
Howard Creek	ORW	From headwaters to .3 miles below Highway 130 above flow augmentation system at the Bad Creek Pumped Storage Station dam
Howard Creek	TN	From just above flow augmentation system at the Bad Creek Pumped Storage Station dam to confluence with Devils Fork Creek
Indian Camp Branch	ORW	All
Ira Branch	ORW	“
Jacks Creek	ORW	“
Jerry Creek- SEE CHAUGA CREEK		
Jumping Branch	TN	“
Keowee Lake	FW	“
King Creek	ORW	“
Knox Creek	FW	“
Lake Cheohee	FW	“
Lake Cherokee	FW	“
Lake Jocassee	TPGT	“
Lake Tugaloo	TPGT	“
Lick Log Creek	FW	From headwaters though Thrift Lake
Lick Log Creek	ORW	From Thrift Lake to Chattooga River
Limber Pole Creek	TN	All
Little River	FW	“
Long Creek	FW	“
Martin Creek	FW	“
McKinney's Creek	TN	From headwaters to Highway 25
McKinney's Creek	FW	From Highway 25 to Lake Keowee
Mill Creek	TN	All
Moody Creek	TN	“
Moss Mill Creek	ORW	“
North Little River	TPGT	From confluence of Mill Creek and Burgess Creek to Highway 11
North Little River	FW	Highway 11 to confluence with Little River
Opossum Creek	FW	All
Pig Pen Branch	ORW	“
Pinckney Branch	FW	“
Ramsey Creek- SEE HEMEDY CREEK		
Reedy Branch	FW	“
Sawhead Branch	FW	“
Shoulderbone Branch	FW	“
Slatten Branch	ORW	“
Smeltzer Creek	TN	From headwaters to Highway 130
Smeltzer Creek	TPGT	From Highway 130 to North Fork of Little River
Swaford Crddk	TN	All
Tamassee Creek	ORW	From headwaters to end of US Forest Service

		land
Tamassee Creek	FW	From US Forest Service land to confluence with Cheohee Creek
Thompson River	TN	All
Tilly Branch	FW	“
Tugaloo River	FW	“
Turpin Branch	FW	“
Unnamed Creek	FW	Enters Little River at Newry
West Fork Townes Creek	TN	“
Whetstone Creek	TN	“
White Oak Creek	TN	From headwaters to Knox Creek
Whitewater River	ORW	From NC state line to Lake Jocassee
Wright Creek	ORW	All

*FW = Fresh Water; TN = Natural Trout Waters; ORW = Outstanding Resource Waters
Source: South Carolina Regulation 61-69: Classified Waters, DHEC

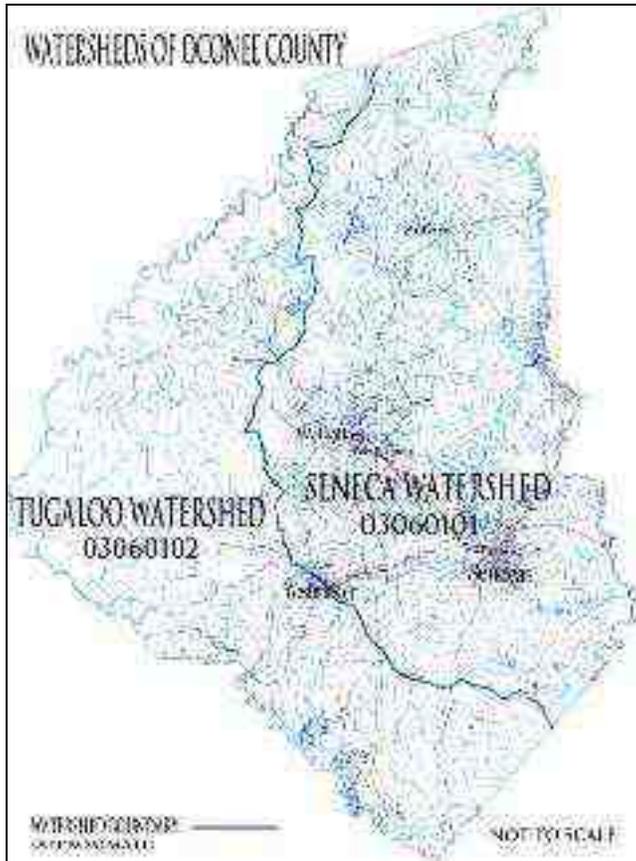
Watersheds

A watershed is a geographic area into which the surrounding waters, sediments, and dissolved materials drain. The edge of a particular watershed extends along the peak of surrounding topographic ridges, directing all surface runoff within the boundary back into the streams of the watershed. Many watersheds often cover large regions, spreading over many thousands of acres. As a result, it is not uncommon for a single watershed to be crossed by a number of counties lying in different states, making it convenient for various governmental entities within the watershed to coordinate in approaching shared issues. The individual watersheds are designated by the United States Geological Survey (USGS), a division of the United States Department of the Interior.

Oconee County crosses two major watersheds, the Tugaloo Watershed (USGS Cataloging Unit #03060102) and the Seneca Watershed (USGS Cataloging Unit #03060101). The two then empty into the Upper Savannah River Watershed. The upper reaches of the Tugaloo Watershed lie in the southern Appalachian Mountains, with approximately 977 square miles encompassed within the borders. The total perimeter measures approximately 200 miles. Counties crossing the watershed include Clay, Jackson, and Macon in North Carolina; Franklin, Habersham, Hart, Rabun, Stephens, and Towns in Georgia; and Anderson and Oconee in South Carolina. There are approximately 1,274 river miles, as well as 82 lakes totaling 22,655 acres, within the watershed. See Figure NR-2.

As noted above, the other watershed crossed by Oconee County is the Seneca Watershed. Like the Tugaloo Watershed with which it shares its western border, the upper reaches of the Seneca Watershed lie in the Southern Appalachian Mountains, and encompasses approximately 1,024 square miles. The watershed is crossed by Jackson and Transylvania Counties in North Carolina; and Anderson, Oconee, and Pickens Counties in South Carolina. The approximately 160-mile perimeter encloses 123 lakes totaling almost 38,940 acres. See Figure NR-2.

Figure NR-4



Source: Oconee County Planning Department

Water Supplies

The United States Environmental Protection Agency (EPA) rates Oconee County’s watershed health as very good, with water quality being seen to have a “Low Vulnerability” to threats. At the present time, therefore, county residents relying on community water systems are supplied with an abundant supply of raw water for treatment by water systems. As growth continues near the most sensitive waters, however, chances for damage will increase. This is particularly true for areas with steep slopes and thin soils. Those relying on private wells for their water supply are in similar circumstances, for while most wells offer safe water supplies, highly developed areas offer increased chances of impaired water quality.

Impaired Waters

The EPA lists waters that are considered to be impaired in quality under the Clean Water Act. Those that flow through Oconee County are listed in Table NR-6.

Table NR-7

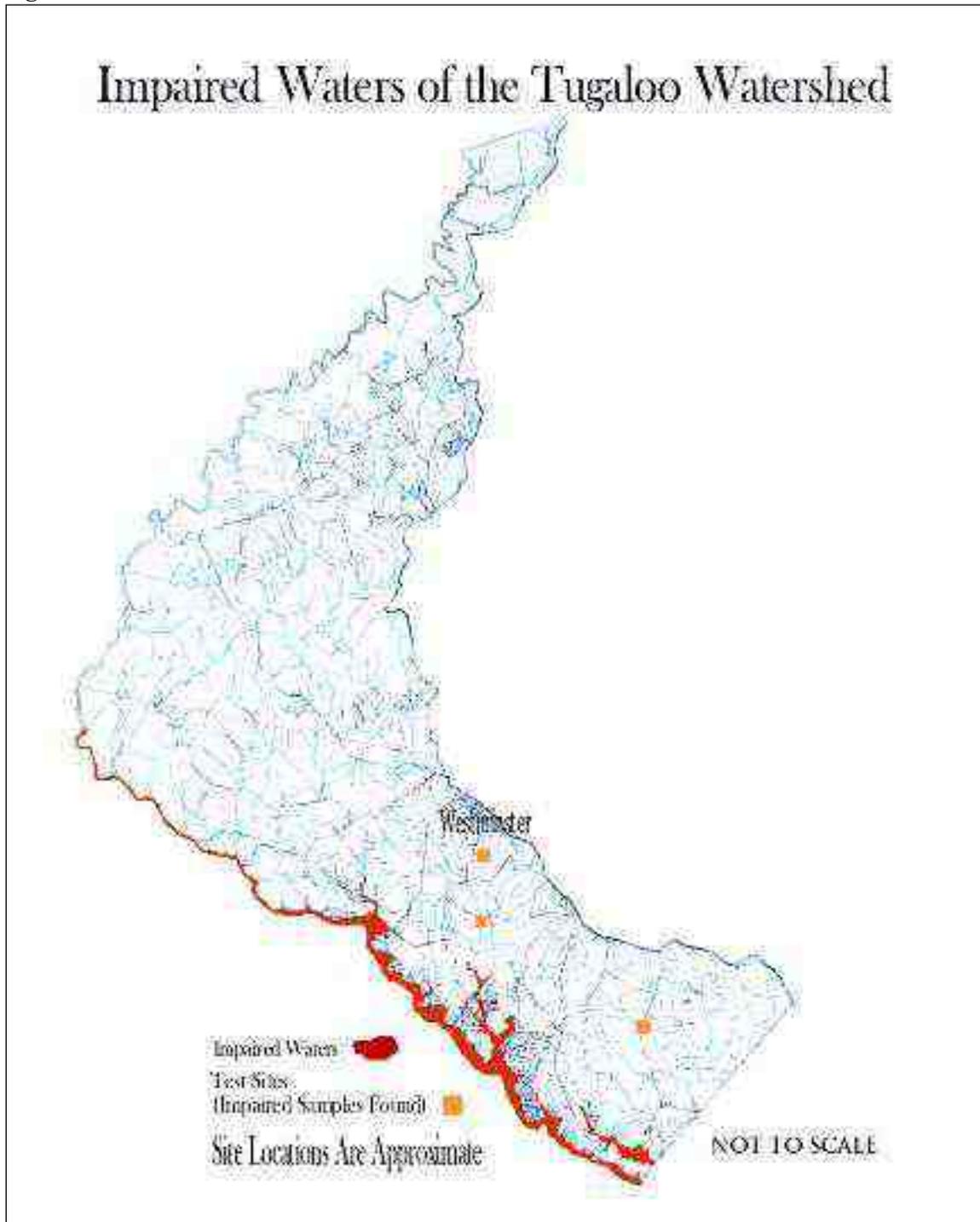
Clean Water Act Section 303(d) Impaired Waters in Oconee County		
Name	ID	Concern
Lake Hartwell (All)	SC-FCA-9995-1998	PCB’s
Lake Hartwell (Seneca River Arm at	SC-SV-288-1998	Copper

Buoy B/W MKRS S-28A & S-29)		
Choestoea Creek (At S-37-49)	SC-SV-108-1998	Pathogens
Norris Creek (At S-37-435)	SC-SV-301-1998	Pathogens
Beaverdam Creek (At S-37-66)	SC-SV-345-1998	Macroinvertebrate/Pathogens
Coneross Creek (At SC 59)	SC-SV-004-1998	Pathogens
Coneross Creek (At S-37-54)	SC-SV-333-1998	Pathogens
Lake Keowee (Cane Creek Arm)	SC-SV-311-1998	Zinc
Lake Jocassee (At confluence of Thompson and Whitewater Rivers)	SC-SV-336-1998	Copper
Lake Keowee (Above SC 130)	SC-SV-338-1998	Copper
Cane Creek (At S-37-133)	SC-SV-342-1998	Pathogens
Little Cane Creek (At S-37-133)	SC-SV-343-1998	Pathogens

Source: EPA (2000)

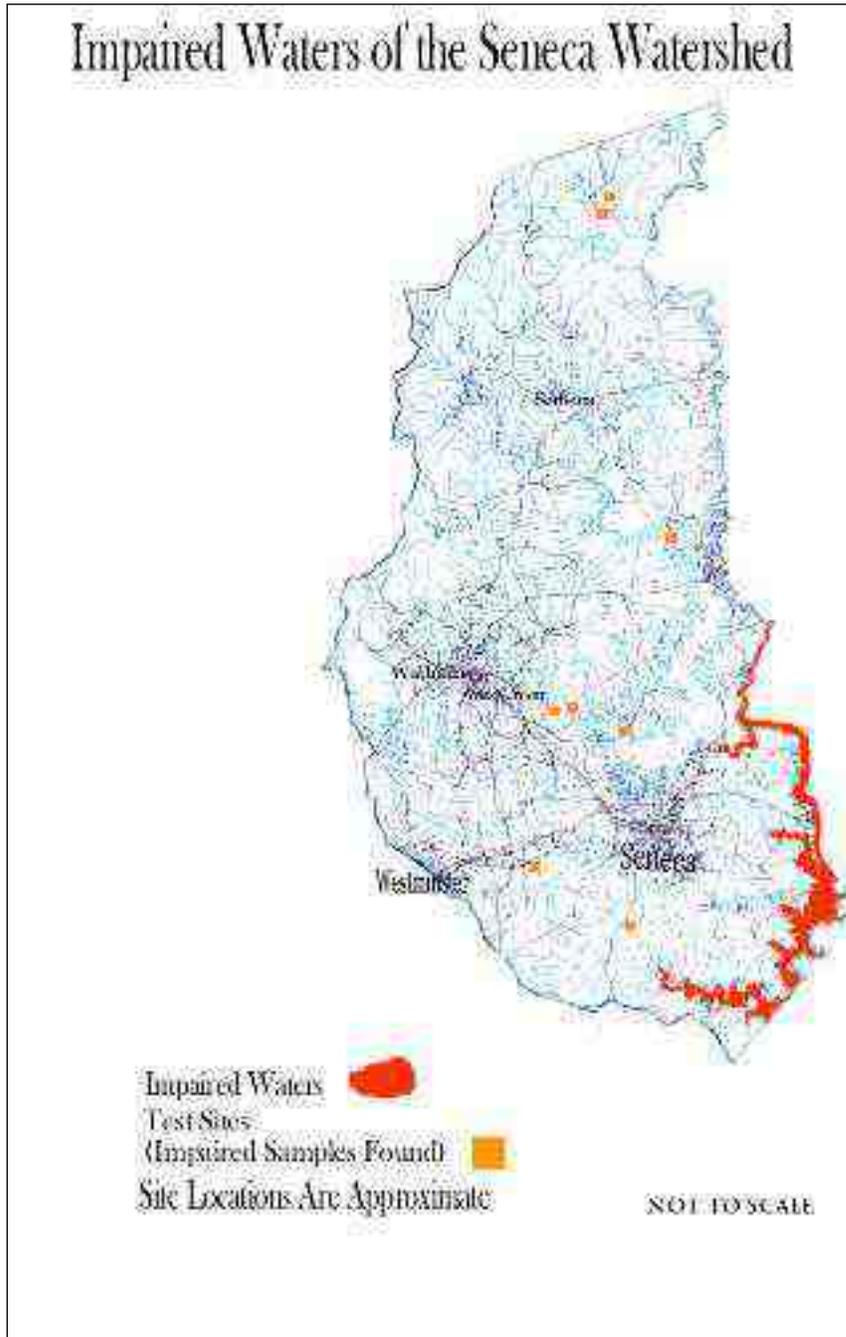
Figures NR-3 and NR-4 graphically illustrate the location of the various impaired waters noted in Table NR-6.

Figure NR-5



Source: Oconee Planning Department

Figure NR-6



Source: Oconee Planning Department

Flora and Fauna

Oconee County is home to a tremendous variety of plants and animals. Because much of northern and western Oconee County is located in the edge of the southern Appalachian Mountains, many life forms not typically found in most other areas of the state may be found there; yet, in the southern end of the county one can find a mix plants and animals typical of what might be seen throughout the rest of piedmont South Carolina. And, as might be expected, the foothills area separating the mountains and piedmont areas offers habitats sometimes acceptable to plants and animals from both regions.

When Europeans first settled in what is today's Oconee County, the forests were primarily comprised of hardwoods interspersed with various stands of softwoods. As the hardwood forests were cleared for limber, farming and other uses, lands allowed to grow back were often taken over by the faster growing softwoods, particularly pines, permanently altering the character of the region. Today, in the piedmont section of the county the most important trees include: loblolly pine; shortleaf pine; Virginia pine; red cedar; yellow poplar; sweetgum; cottonwood; blackgum; ash and oak. In the mountainous forests the dominant trees include white pine; pitch pine; shortleaf pine; Virginia pine; hemlock; red cedar; various oaks; black walnut; and yellow poplar. (Soil Survey of Oconee County) In 1990, over 268,000 acres of Oconee County were counted as forestland. (South Carolina Statistical Abstract)

Many Oconee residents are avid sportsmen, particularly devoting large amounts of time and money to the pursuit of hunting and fishing. Among the game animals found in the county include whitetail deer, wild turkey, rabbits, squirrels, doves, and quail. Black bear and wild boars are hunted in the mountainous areas. In addition, a few individuals remain devoted to the traditional sports of hunting raccoon and opossum. Also, Oconee County fishermen pursue a variety of species, including bass, trout, crappie, bream, and catfish. Many state record fish have been taken from Oconee waters. Of particular note among county lakes in recent years has been Lake Jocassee, the source of quite a few record-setting trout. Mention must also be made of Oconee's cold, pristine streams, home to a number of trout populations, both stocked and native.

Oconee County's sparsely populated remote areas often act as a haven for plants and animals long gone from more developed areas. As a result, Oconee County is widely recognized as a special environment, providing habitats unavailable in most other regions. Table NR-7 provides an inventory of Oconee County's rare, threatened and endangered plants and animals listed by the South Carolina Department of Natural Resources.

Table NR-8

Rare, Threatened & Endangered Species found in Oconee County (Updated 03/28/01)			
Common Name ¹	Global Rank ²	State Rank ³	Legal Status ⁴
Cooper's Hawk	G5	S?	SC
Striped Maple	G5	S1S2	SC
Blue Monkshood	G4	S2	SC
Brook Floater	G3	S?	SC
Nodding Onion	G5	S?	SC
Smooth Indigobush	G4?	S?	SC
Green Salamander	G3G4	S1	SC
Pipevine	G5	S2	SC
Single-Sorus Spleenwort	G4	S1	RC
Black-Stem Spleenwort	G5	S1S2	SC
Walking-Fern Spleenwort	G5	S2	SC
Maidenhair Spleenwort	G5	S?	SC
Georgia Aster	G2G3	S?	SC
New England Aster	G5	S?	SC
Yellow Birch	G5	S?	SC
Brook Saxifrage	G4	S1	SC
Mountain Bitter Cress	G2G3	S?	SC
Divided Toothwort	G4?	S?	SC
Narrowleaf Sedge	G5	S?	SC
Fort Mountain Sedge	G3	S?	SC
Appalachian Sedge	G4	S?	SC
South Carolina Sedge	G4	S?	SC
Biltmore Sedge	G3	S1	NC

Graceful Sedge	G5	S?	SC
Manhart Sedge	G3	S?	SC
Eastern Few-Fruit Sedge	G4	S?	SC
Longstalk Sedge	G5	S1	SC
Plantain-Leaved Sedge	G5	S?	SC
Drooping Sedge	G4	S?	SC
Rough Sedge	G5	S?	SC
Tussock Sedge	G5	S?	SC
Pretty Sedge	G4	S?	SC
Scarlet Indian-Paintbrush	G5	S2	RC
Blue Cohosh	G4G5	S2	SC
Evan's Cheilolejeunea	G1	S1	SC
Southern Broadleaf Enchanter's Nightshade	G5	S?	SC
Enchanter's Nightshade	G5T5	S1	SC
Southern Red-Backed Vole	G5	S2S3	SC
Carolina Red-Backed Vole	G5T4	S2S3	SC
Whorled Horse-Balm	G3	S?	SC
Rafinesque's Big-Eared Bat	G3G4	S2?	SE
Hellbender	G4	S?	SC
Large Yellow Lady's-Slipper	G5	S?	SC
Bulblet Fern	G5	S?	SC
Lowland Brittle Fern	G5	S?	SC
Seepage Salamander	G3G4	S?	SC
Wild Bleeding-Heart	G4	S?	SC
Umbrella-Leaf	G4	S1	RC
Glade Fern	G5	S1	SC
Goldie's Woodfern	G4	S1	SC
Evergreen Woodfern	G5	S?	SC
Smooth Coneflower	G2	S1	FE/SE
Yellow Lance	G2G3	S?	SC
Wahoo	G5	S1	SC
Hollow Joe-Pye Weed	G5?	S?	SC
Mountain Witch-Alder	G3	S1	RC
Showy Orchis	G5	S?	SC
Teaberry	G5	S1	SC
Black Huckleberry	G5	S?	SC
Virginia Stickseed	G5	S?	SC
Liverleaf	G5	S?	SC
Little-Leaved Alumroot	G4	S?	SC
American Water-Pennywort	G4	S?	SC
Small Whorled Pogonia	G2	S1	FT/ST
Butternut	G3G4	S?	SC
Naked-Fruited Rush	G4	S?	SC
Woods-Rush	G5	S?	SC
Ground Juniper	G5	S?	SC
False Dandelion	G3	S?	SC
Large Twayblade	G5	S?	SC
Kidney-Leaf Twayblade	G4	S?	SC
Yellow Honeysuckle	G5?	S2	SC
Climbing Fern	G4	S1S2	SC
Fraser Loosestrife	G2	S1	RC
Canada Moonseed	G5	S?	SC
Two-Leaf Bishop's Cap	G5	S?	SC
Oswego Tea	G5	S?	SC
Sweet Pinesap	G3	S1	RC
Eastern Small-Footed Myotis	G3	S1	ST
Little Brown Myotis	G5	S3?	SC
Northern Myotis	G4	S3S4	SC
Indiana Myotis	G2	S1	FE/SE
Eastern Woodrat	G5	S3S4	SC
Southern Appalachian Woodrat	G5T4Q	S3S4	SC
Nestronia	G4	S2	SC
Adder's-Tongue	G5	S?	SC
One-Flowered Broomrape	G5	S?	SC
Hairy Sweet-Cicely	G5	S?	SC
Outcrop	G?	S?	SC

Allegheny-Spurge	G4G5	S1	RC
American Ginseng	G3G4	S2S3	RC
Hairy-Tailed Mole	G5	S?	SC
Kidneyleaf Grass-of-Parnassus	G4	S1	RC
Purple-Stem Cliff-Brake	G5	S1	RC
Fernleaf Phacelia	G5	S1	SC
Streambank Mock-Orange	G5	S1	SC
Gorge Leafy Liverwort	G2	S?	SC
Mountain Wavy-Leaf Moss	G3	S?	SC
Gay-Wing Milkwort	G5	S1	SC
Pickrel Frog	G5	S?	SC
Wood Frog	G5	S3	SC
Blacknose Dace	G5	S1	SC
Large-Leaved Mnium	G5	S?	SC
Catawba Rhododendron	G5	S?	SC
Sun-Facing Coneflower	G2	S1	NC
Large-Fruited Sanicle	G4	S1	SC
Lettuce-Leaf Saxifrage	G5	S?	SC
Oconee-Bells	G2	S2	NC
White Goldenrod	G5	S1	SC
Cinereus or Masked Shrew	G5	S?	SC
Pygmy Shrew	G5	S4	SC
Eastern Spotted Skunk	G5	S3S4	SC
Clingman's Hedge-Nettle	G2Q	S1	SC
Broad-Toothed Hedge-Nettle	G5T4T5	S1	SC
Mountain Camellia	G4	S2	RC
Swamp Rabbit	G5	S3	SC
New England Cottontail	G4	S2?	SC
Red Squirrel	G5	S3?	SC
Soft-Haired Thermopsis	G4?	S?	SC
Heart-Leaved Foam Flower	G5T5	S?	SC
Carolina Tassel-Rue	G5	S?	SC
Bristle-Fern	G4	S1	RC
Dwarf Filmy-Fern	G4G5	S2	RC
Faded Trillium	G3	S?	SC
Large-Flower Trillium	G5	S?	SC
Persistent Trillium	G1	S1	FE/SE
Southern Nodding Trillium	G3	S?	SC
A Trillium	G3	S?	SC
Painted Trillium	G5	S?	SC
Nodding Pogonia	G4	S2	SC
Barn-Owl	G5	S4	SC
American Bog Violet	G5T5	S?	SC
Yellow Violet	G5	S?	SC
Three-Parted Violet	G5	S?	SC
Three-Parted Violet	G5T?	S?	SC
Three-Parted Violet	G5T3?	S?	SC
Piedmont Strawberry	G2	S2	RC
Waterfall	G?	S?	SC
Eastern Turkeybeard	G4	S1	SC
Meadow Jumping Mouse	G5	S?	SC

¹Reference *South Carolina Rare, Threatened & Endangered Species Inventory* (S.C. Dept. of Natural Resources) for scientific name

²Global Rank- Degree of endangerment world-wide (The Nature Conservancy)

G1: Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction

G2: Imperiled globally because of rarity or factor(s) making it vulnerable

G3: Either very rare throughout its range or found locally in a restricted range, or having factors making it vulnerable

G4: Apparently secure globally, though it may be rare in parts of its range

G5: Demonstrably secure globally, though it may be rare in parts of its range

GH: Of historical occurrence throughout its range, with possibility of rediscovery

GX: Extinct throughout its range

G?: Status unknown

³State Rank- Degree of endangerment in South Carolina (The Nature Conservancy)

- S1: Critically imperiled state-wide because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation
- S2: Imperiled state-wide because of rarity or factor(s) making it vulnerable
- S3: Rare or uncommon in state
- S4: Apparently secure in state
- S5: Demonstrably secure in state
- SA: Accidental in state (usually birds or butterflies that are far outside normal range)
- SE: Exotic established in state
- SH: Of historical occurrence in state, with possibility of rediscovery
- SN: Regularly occurring in state, but in a migratory, non-breeding form
- SR: Reported in state, but without good documentation
- SX: Extirpated from state
- S?: Status unknown
- ⁴Legal Status

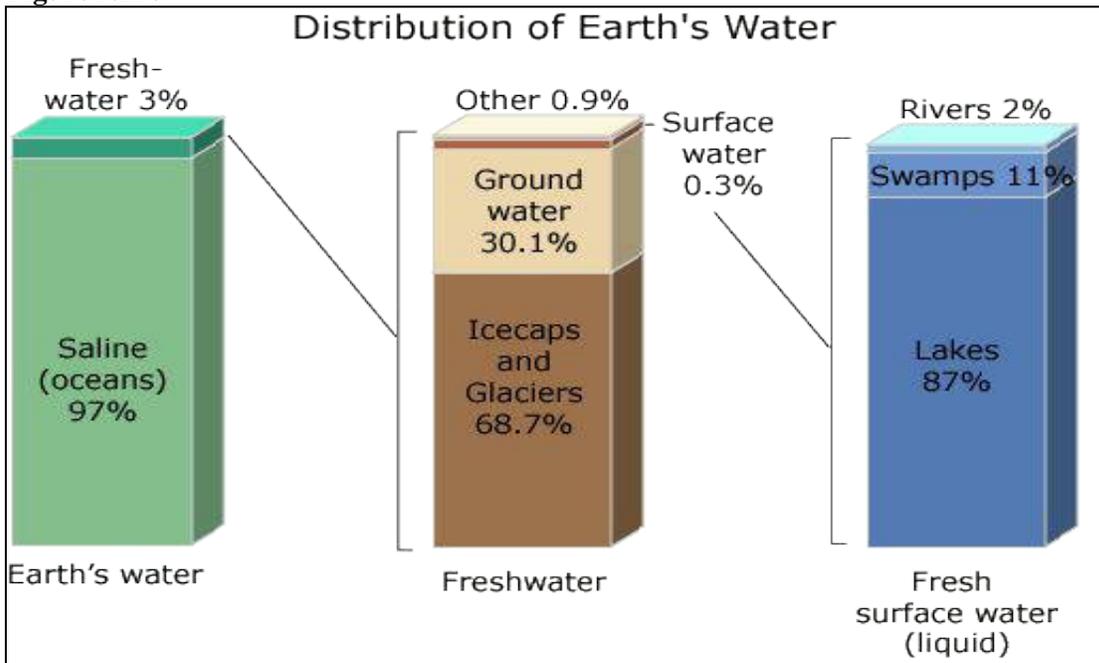
- FE: Federal Endangered
- FT: Federal Threatened
- PE: Proposed for Federal listing as Endangered
- PT: Proposed for Federal listing as Threatened
- C: Candidate for Federal listing
- NC: Of Concern, National (unofficial- plants only)
- RC: Of Concern, Regional (unofficial- plants only)
- SE: State Endangered (official state list- animals only)
- ST: State Threatened (official state list- animals only)
- SC: Of Concern, State
- SX: State Extirpated

Source: *South Carolina Rare, Threatened & Endangered Species Inventory: Species Found in Oconee County (S.C. Dept. of Natural Resources)*

Water 2016 Update

Water availability is closely related to the climate of a particular area. However, the cost of producing clean drinking water is dependent on water availability and the amount of pollution existing in the water. Water is a problem, not only in Oconee County but all around the world. Part of the reason for this is that most of the earth's water is contained in the oceans, while only three percent is fresh water. Of that three percent, the vast majority is found in the icecaps and glaciers. Surface water makes up only 0.9 % of the earth's water resources, and yet is the resource used for most of the drinking water in our region.

Figure NR-8



Source: USGS

The United States is blessed to have an abundance of available drinking water. However, the Southeastern part of the country has had a drought that has been looming over the region. The amount of rainfall in the region has been considerably low in recent years. Lake levels have dropped to as low as thirty feet, leaving quite an impression! Relics of yester years have emerged briefly, revealing what once was. The visibility of the drought has had led to an increasing concern over the last several years over the lack of water in the region. Drought conditions have become quite severe, impacting individuals, agriculture, the local economy and the environment. Farmers have been forced to purchase hay from other regions or sell some of their stock due to the lack of rain. The tourist industry has also been affected by the drought with the closing of marinas and boat ramps.

Drought is a natural event which occurs over a period of time with less than normal rainfall. Many ways of measuring a drought have been developed in the United States, which adds to the difficulty of defining and quantifying its occurrence. Two of the more common drought indices are the Palmer Drought Severity Index (PDSI) and the Standardized Precipitation Index (SPI). The Palmer Drought Severity Index considers water supply (precipitation), demand (evaporation), and loss (runoff). On the other hand, the Standardized Precipitation Index considers only precipitation. In both indices, a negative number indicates drought and a positive number represents wet conditions.

Similarly, the South Carolina Water Plan⁶ defines a “drought as a period of diminished precipitation that results in negative impacts upon the hydrology, agriculture, biota, energy, and economy of the State.” The plan also categorizes droughts into three categories. A meteorological drought is simply a period of time in which there is less rainfall than the average over the given time interval. An agricultural drought causes real damage to the areas crops and farmland. “This type occurs when soil moisture availability to agricultural crops is reduced to a level causing adverse effects on the agricultural production of a region.”⁷ The final classification of drought is a hydrological drought which is signified by a shortage of water in streams, lakes, and ground water supplies.⁸ During the past five years, we have been experiencing all three classifications of drought in our area. In 2009, increasing rainfall has filled up the lakes and returned water tables to pre-drought conditions.

In Oconee County, from September of ~~2005~~ 2016 till the present, rainfall ~~has been below normal~~ near normal according to the Palmer Drought Index, computed by the Regional Drought Monitor (SC State Climatology Office). ~~According to the Standardized Precipitation Index for March 2007—February 2009~~ November 2017. ~~the majority of Oconee is shown as exceptionally dry (-2.00 and below) and a small area in the northern area of the county is indexed as extremely dry (-1.99 to -1.60). Local conditions have been tracked by the South Carolina Department of Natural Resources and one can see that Oconee County was significantly impacted by extreme drought conditions.~~

⁶ South Carolina Water Plan. Second Edition. South Carolina Department of Natural Resources: Land, Water, and Conservation Division. January 2004.

⁷ Ibid.

⁸ Ibid.

Figure NR-9

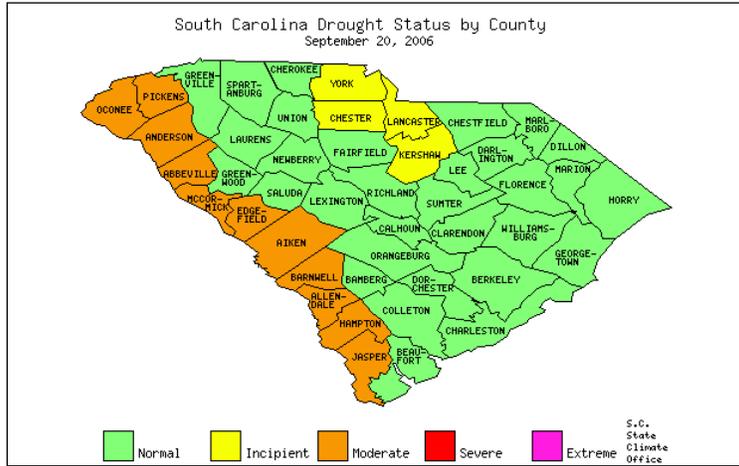


Figure NR-10

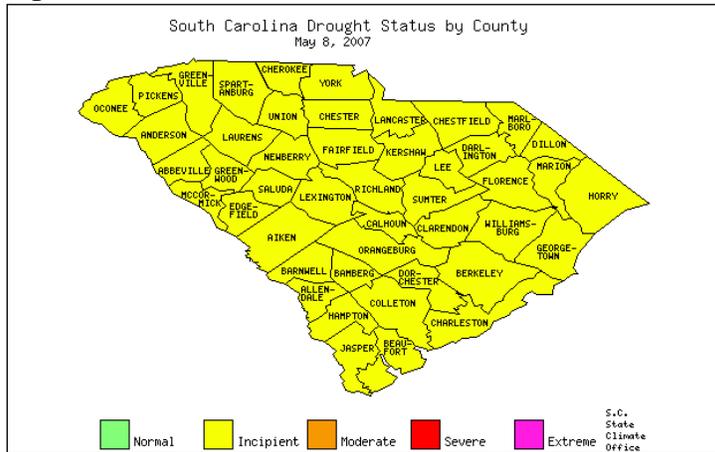


Figure NR-13

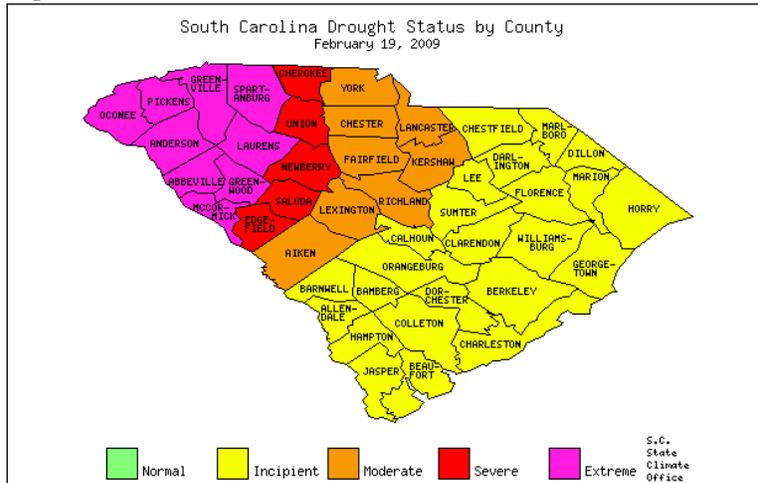
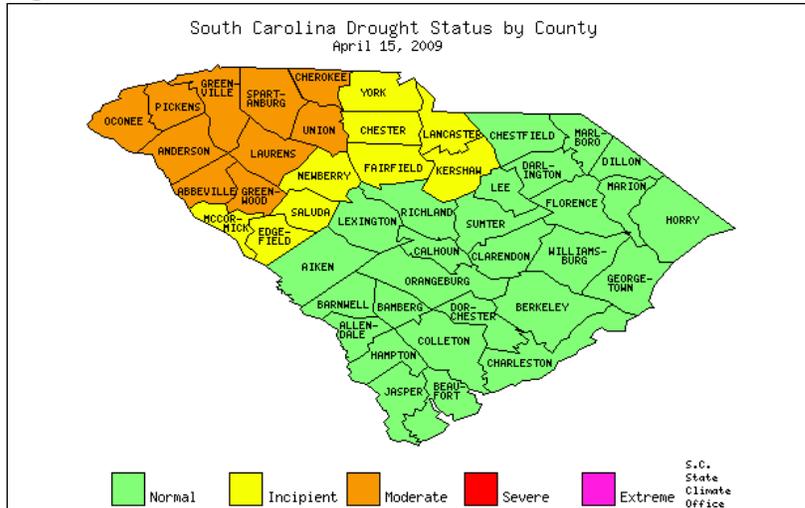
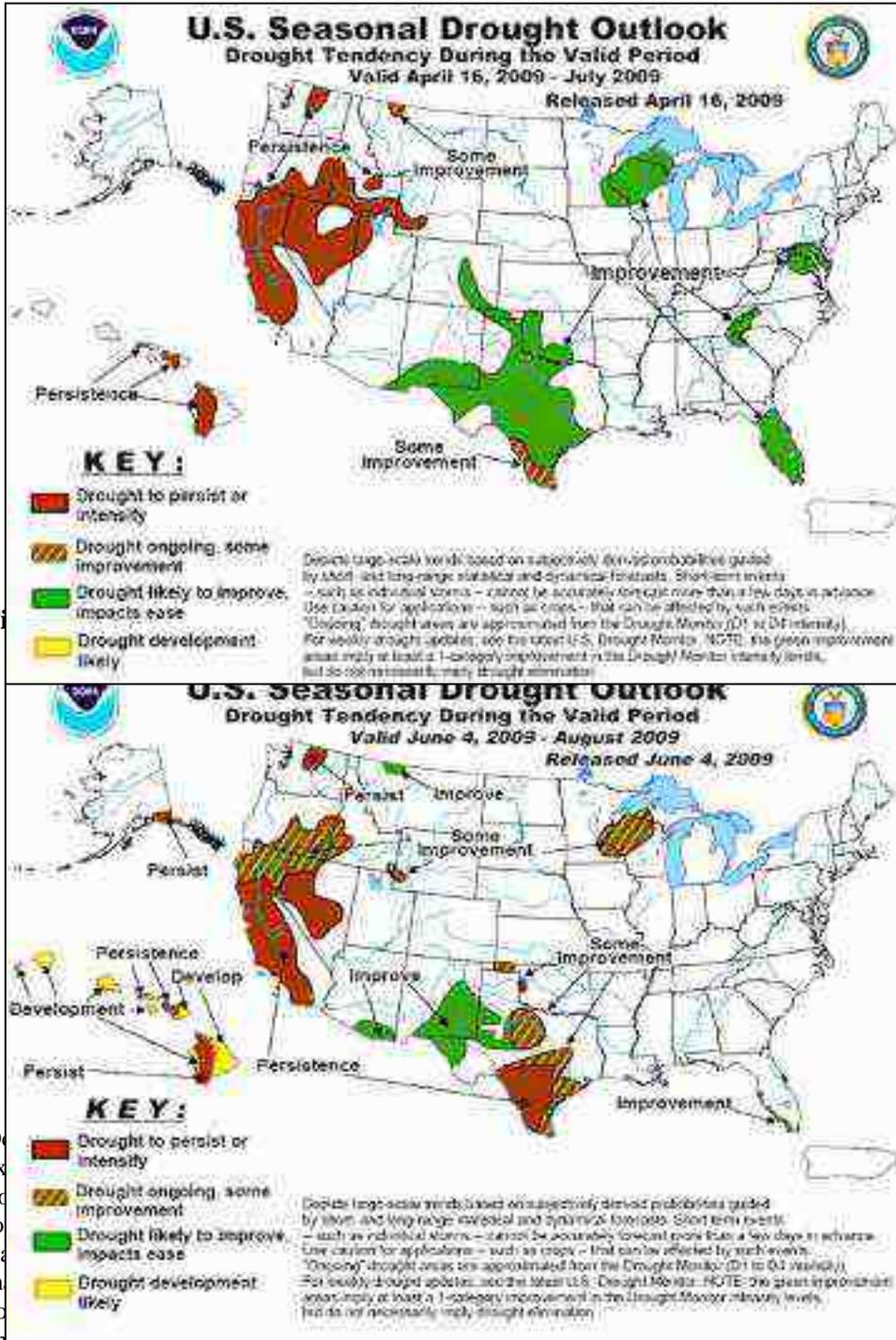


Figure NR-13



The latest drought map shows the recent rains have improved conditions. What these maps are not showing is that the region is just beginning the “dry” season and if the rain pattern of the previous years hold, we will quickly move back into a severe or extreme drought. However, other sources also indicate that the drought status is improving. According to the National Weather Service Climate Prediction Center, drought conditions are expected to improve in the region just to our north.

Figure NR-14



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supplies; developing education programs and demand reduction strategies; defining implementation and

enforcement mechanisms; and outlining review and update procedures.”⁹ Having a document of this nature will aid local officials in dealing with major drought events in the future.

Water can no longer be taken for granted in South Carolina and Oconee County. With the overwhelming presence of water in our county it is easy to take the availability of water for granted but if those resources are allocated to others, Oconee County may be left wanting. The State’s water plan sets out to answer the question: “what steps should the State take now to ensure that adequate amounts of water will be available in the future?” Oconee County must not only ask this question, we must answer it and act to ensure that adequate water is available for generations to come. South Carolina’s water falls under the Public Trust doctrine which means water is too important to be owned by any one person. Therefore, we must work to manage our water resources so that all those involved will access to the water they need. This will mean that during drought conditions that all users share in reducing daily usage.

Water quality is vital to the long term health of the region and worthy of our best efforts to ensure safe, clean water for generations to come. Over the past decade there have been approximately 1000 new residential homes (mobile homes and stick built) per year added to the tax roles. (In the early part of the decade, mobile homes made up a larger portion of the new residences in the county; however lending laws changed and the percentage of mobile homes added to the tax roles decreased significantly.) The average household water usage per day is 350 gallons of water. This means that over the past 10 years, without considering industry, schools, and commercial increases in water usage, the County has increased its water usage by 3,500,000 gallons per day by simply supplying homes with water! The time to preserve water is now, before it is too late!

However, water quantity is also very important in the life of the county. Well placed and sufficient infrastructure preserves natural lands by limiting the areas where development can readily go, thus protecting the natural environment. Public waters systems do more than just provide safe drinking water to businesses and homes. When public water is available with the proper amount of water flow, fire insurance rates will decrease. According to Dennis Gage, the manager of the Natural Hazards Mitigation Division, “communities that don’t have a public water system can still obtain a good fire suppression classification system from the Insurance Services Office (ISO) by using alternative water sources and proper delivery of equipment.”¹⁰ However, for a community to get credit it must have documented permission to use the water source, an all- weather access road to the fill site capable of supporting the responding fire apparatus, access to the water during freezing weather, ability to draft water 365 days a year, documentation that water can withstand a 50 year drought, and documentation that the water supply has a capacity to support a minimum draw of 250 gallons per minute for two hours (minimum of 30,000 gallons).¹¹ Water resources should be used and devoted to ensuring that adequate fire protection is available throughout the county. Continuing to strategically place water tanks and dry hydrants in rural areas is one way of serving the citizens. Developers also have a role to play if they develop in areas that have no public water. They need to incorporate into their development plans adequate water quantities to provide fire protection. During times of drought, water storage facilities and dry hydrants should be checked regularly and adjustments made accordingly.

The Oconee Soil and Water Conservation District and the USDA-Natural Resources Conservation Service state that great strides have been made and continue to be made in the protection and improvement of water quality as compared to previous decades. Federal and State cost share programs and grants encourage the implementation of conservation practices which protect water such as livestock exclusion from natural water bodies, the maintenance of natural vegetative buffers along stream corridors, and appropriate application and timing of nutrients and pesticides in agricultural fields. Water quality and water conservation practices will continue to receive emphasis in technical and financial assistance programs, because the demand for clean, reliable sources of water will increase as the population increases. Since the misuse and pollution of water is easily observable, insuring the protection of water will remain at the forefront of public concern.

The State’s water plan states that two of the most important elements in water resource management are knowing how much water is available and knowing how much is being used. We agree. Oconee County can begin to ensure the most effective use of its water resources by conducting a comprehensive water study for our area. This study should strive to answer how much water is available, how is it currently allocated, how much is available for future allocation, and at what point during drought conditions will all users need to be on water restrictions. When resources are becoming scarce everyone must share the burden of conservation; including

⁹ SC Department of Natural Resources. “The South Carolina Drought Response Program”.

¹⁰ Gage, Dennis. “No Hydrants Required.” Firechief. Penton Media. 1 Nov. 2001. [Accessed online] http://firechief.com/mag/firefighting_no_hydrants_required/. April 28, 2009.

¹¹ Ibid.

those permits that take water out of one basin into another. A flow rate analysis should also be part of this study for all water coming into Oconee County. Answering the question of how much water is available in Oconee will allow us to ensure state and federal regulations are being followed. Of course the man made lakes in the region contain large portions of the available water. The following table shows the surface area and volume of Lake Hartwell, Keowee, and Jocassee. The second table shows an estimated amount of surface water area in Oconee County.

Table NR-9

State Rank	Lake	Drainage Basin	Lake Operator	Surface Area (acres)	Volume (acre-feet)
1	Hartwell	Savannah	Corps of Engineers	56,000	2,549,000
6	Jocassee	Savannah	Duke Power	7,565	1,185,000
8	Keowee	Savannah	Duke Power	18,372	1,000,000

Source: South Carolina Water Plan 2006

Table NR-10

Lakes	Oconee County	Anderson County	Pickens County
Jocassee	5,310		2,043
Keowee	13,102		5,270
Hartwell	11,632	23,633	1,590
Tugaloo	225		
Yonah	160		
Secession		244	
Broadway		640	
Russell		800	
Total Acreage	30,489	25,317	8,903

Any study undertaken to answer how much water is available to meet all the needs of the area must take into account evapotranspiration. As surface area increases, evaporation also increases. Water lost to the atmosphere should still be thought of a type of withdrawal because water is removed from the lake and does not enter the downstream system. Any allocation mechanism must include in the 100-day withdrawal-volume calculation an estimation for water lost due to evaporation.

A monitoring system must be developed if we are to accurately gauge the quantity of water. Without accurate data on how much water is available, no water resource management program can be successful.¹² Currently, there is only one monitoring station in Oconee County. South Carolina's water plan also states that having an adequate number of properly located gauges is vital to the effectiveness of the monitoring network, but it is also very important that these gauges are continuously operated at the same location for a long period of time. With only one station, it will be difficult to monitor the water resources in the County like they should be. Therefore, Oconee County should work with Federal and State agencies to develop a stream monitoring system that will track the available quantity and quality of the water in the major streams and rivers in the County.

The establishment of a county wide monitoring system will provide the data we need to have to determine the appropriate allotments of water. Once this is established, the county will be able to acquire an accurate 7Q10 for Oconee County that will facilitate monitoring the flow of water leaving the County. The 7Q10 is defined "as the lowest mean streamflow over seven (7) consecutive days that can be expected to occur in a ten (10) year period. In any year, there is a ten percent (10%) probability that the average flow for seven (7) consecutive days will be equal to or less than the 7Q10."¹³ If stream flows for seven days reach the defined 7Q10, water availability would be in jeopardy if all the water is allocated. The problem would increase exponentially if the assumptions that have been made on the quantity of water in Oconee County exceed the

¹² South Carolina Water Plan. Second Edition. South Carolina Department of Natural Resources: Land, Water, and Conservation Division. January 2004.

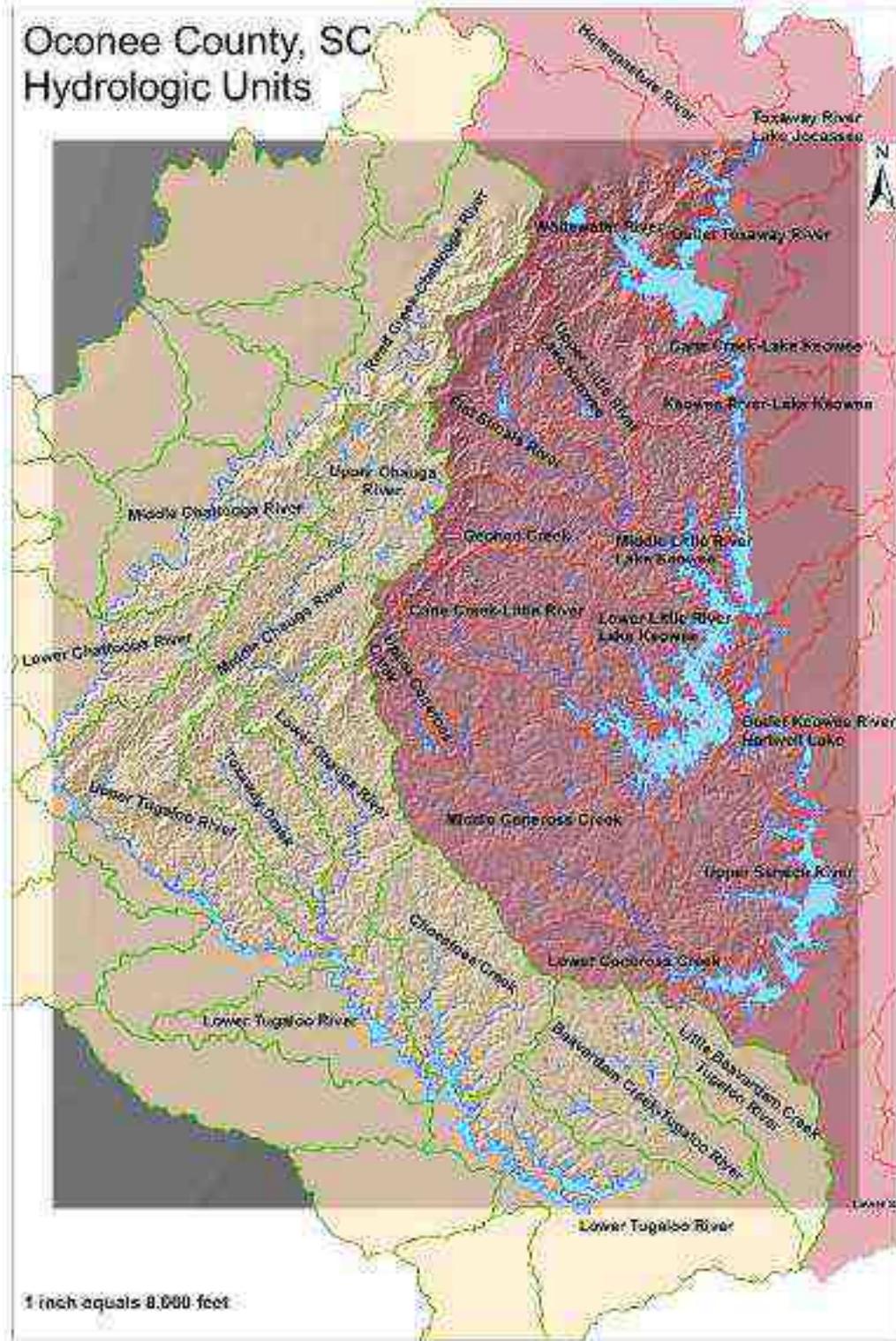
¹³ Ibid

7Q10. As the State Water Plan states, we need to know what flow levels are required in our streams to protect public health and safety, maintain fish and wildlife, and provide recreation, while promoting aesthetic and ecological values. The minimum required flows that need to be maintained will provide for the protection of water quality (is there enough water to adequately dilute pollution?); protect fish and wildlife (is there enough water for wildlife to survive?); maintain navigability (if water course is navigable, what is the minimum amount of water needed to maintain navigability?).

Water quantity and water quality go hand in hand. Oconee County not only needs to protect the quantity of the region's water but also the quality. What good is it to have a large quantity of water that is too polluted to use. County Council has put in place a vegetative buffer of twenty-five feet around the major lakes of the region. A natural buffer helps to maintain water quality by filtering water before it reaches the lake. Some argue that twenty five feet is not enough to achieve the desired results and would like to see a buffer closer to fifty or seventy five feet. If we are serious about the quality of our region's water, a discussion of increasing the buffer will need to take place. This discussion must include applying this buffer to all properties along the lake front so that there is not a patch work of natural buffers along the shore line. Buffers will work if everyone contributes. Other methods of ensuring water quality occur through soil conservation and best management practices that include the minimization of fertilizer use on domestic lawns and golf courses. Another avenue for increasing the quality of water in the region's lakes is to provide more boat dump stations on the lakes. Possible sites may include county maintained parks and landings, which currently have no boat dump stations. Any water plan for Oconee County needs to address the quality of the area water and provide common sense measures for improving the area's water resources.

The following map identifies all the sub-basins in Oconee County that would need to be considered when this study is undertaken:

Figure NR-16



Unique Natural Resource-Based Recreational Opportunities

Recreational activities have become a significant part of Oconee County's economic life in recent years. While it is true that many other counties and cities across the nation have experienced similar trends, the changes in Oconee seem to have come about with less effort and expense than has been the case in many other places. For, unlike those areas that rely on manmade amusement activities to attract crowds, Oconee's recreational pursuits tend to center on its natural assets. Unfortunately, however, because these assets have too often been taken for granted, litter, vandalism, and pollution have occasionally threatened what is now an integral part of the Oconee County economy and lifestyle. Increasingly, however, attention is being focused on such issues, raising hopes for the future of Oconee's natural resources. If successful, such efforts will insure that the benefits of the county's natural assets will be enjoyed by many generations of Oconee County residents to come.

Perhaps Oconee County's best-known unique recreational resource is the Wild and Scenic Chattooga River. The river, which gained international attention during the 1970's as the backdrop for the movie "Deliverance", has attracted many thousands of individuals to the area in the last several decades. The stream has also led to the development of a small industry centered on whitewater sports, with a number of companies offering the public a chance to experience adventurous outdoor activities in Oconee. As a result, the county has experienced a significant economic boost from the river-related activities, with many unrelated businesses benefitting from the increased traffic.

Due to the combination of steep terrain and abundant streams, Oconee County boasts a wonderful collection of waterfalls. Although many guidebooks list up to eighteen of the more prominent ones, many smaller unnamed, yet beautiful, waterfalls may be found throughout the county. The better known Oconee waterfalls include:

- (1) Whitewater Falls- When taken as a unit, this series of six waterfalls located on the border of Oconee County and North Carolina comprises the highest series of waterfalls in eastern North America. Although the North Carolina's upper falls section is easily accessible more frequently visited, Oconee's Lower Whitewater Falls offers visitors a spectacular view of the Whitewater River cascading over a drop of 200 feet.
- (2) Issaqueena Falls- Located above Walhalla near another Oconee attraction, the Stumphouse Tunnel, this easily accessible 100-foot waterfall is one of the most popular waterfalls in the region.
- (3) Station Cove Falls- This stepped waterfall, located in the Tamassee area, has a listed height of 60 feet. An added attraction to the waterfalls is the number of wildflowers and native plants growing in the area.
- (4) Yellow Branch Falls- Accessible from the Yellow Branch Picnic Area off of Highway 28, this 50-foot vertical waterfall has often been overlooked in favor of those easier to reach. Recent trail improvements, however, have made Yellow Branch Falls potentially one of the most popular in the area.
- (5) Chauga Narrows- Seen by some as a waterfall, by others as a difficult whitewater rapid, the Chauga Narrows is a 25-foot drop of the Chauga River spaced within 200 feet. The Narrows is located in the Whetstone area.
- (6) Brasstown Falls- Situated to the west of Westminster on Brasstown Creek, this waterfall is composed of a series of drops over which the stream descends 120 feet.

Other named waterfalls include:

- a. Opossum Creek Falls
- b. Long Creek Falls
- c. Fall Creek Falls
- d. Riley Moore Falls

- e. Blue Hole Falls
- f. Lee Falls
- g. Licklog & Pigpen Falls
- h. Big Bend Falls
- i. Miuka Falls
- j. King Creek Falls
- k. Spoon Auger Falls
- l. Bee Cove Falls

Oconee County also offers a variety of other unique natural features. Scenic vistas can be found at many points throughout the mountainous areas of the county. Hikers can choose from many miles of trails, ranging in difficulty from easy nature trails to the challenging Foothills Trail, which spans 85 miles between Oconee State Park and Jones Gap State Park, in Greenville County, SC. Camping is available all across the county, with campsites available at state and county parks, Corps of Engineers campgrounds, designated Forest Service areas, and privately owned facilities. For the less adventurous, both the Savannah River Scenic Highway and the Cherokee Foothills Scenic Highway begin in Oconee County, providing motorists and bicyclists many miles of picturesque travel.

Analysis

Oconee County's natural resources have played a major role in shaping the lives of area residents. Too often, however, these assets have been ignored, taken for granted, or carelessly wasted and destroyed. In spite of this, recent social and economic changes have brought about an increased awareness and appreciation of these natural blessings. More and more, attention is being paid to efforts to protect, preserve and enhance these precious resources. To date, most local action has been on behalf of the private sector, for county government has taken little action to sustain the benefits received from the resources. While state and federal regulations do help, without complimentary local controls specifically crafted to fit the needs of Oconee County, the resources that area residents deem to be invaluable will continue to be unnecessarily threatened.

The protection of both the quantity and quality of the area's water is a vital issue for Oconee County's future success. First, as the available water supply is allotted to additional users, particularly the large municipalities surrounding our region, the amount available for use in Oconee County will shrink, limiting not only Oconee's ability to attract and manage new development, but also to maintain the lifestyle that the county is known for. To avoid this, Oconee must work to insure that any future division of the resource allows for our own future needs. Also, even if sufficient supplies are guaranteed, the county must work to protect the quality of its waters, for poor agricultural and forestry practices, residential and commercial runoff, and a number of other sources of pollution continue to threaten the resource. Of course, we cannot do this alone, for much of Oconee County's water is shared with other jurisdictions possessing legitimate claims to an allotment; therefore, future plans will likely require at least some compromise to succeed.

It should not be forgotten that, in spite of the many benefits Oconee County receives from its natural assets, some potential dangers do exist. The most obvious of these include tornados, floods, and earthquakes, all of which have struck Oconee County in the past, and will likely revisit the area in the future. Yet, though these threats may be initially devastating, the physical damage they bring is typically short-lived, for proper planning and training, combined with improvements in technology, have greatly lessened the overall impact of such natural disasters. Other recently recognized threats, however, have not been yet been satisfactorily addressed. Radon, for example, has received little attention on the local level. Although some studies have indicated that Oconee County's geology favors the production of the carcinogen, the exact level of the threat has not been established. As a result, few residents have chosen to install protective measures against the invisible menace. As more information becomes available on the topic, however, Oconee County leaders may have to consider implementing more stringent codes to protect county residents.

Also of recent concern is ground-level ozone, a dangerous pollutant that causes a number of breathing-related ailments. The problem occurs when two types of chemicals, volatile organic compounds and nitrogen oxides, are exposed to warm temperatures. As such, the United States Environmental Protection Agency (EPA) has established standards limiting these emissions under the Clean Air Act. Currently, Oconee County has been declared to be in attainment of this standard, but we need to remember that this may change in the future; for, not only will the level of our own growth potentially raise emission levels, but also the continued development of other regions. The fact is that political borders do not affect air pollution, so pollutants emitted in one region of the country are often carried long distances in the atmosphere, impacting air quality far from the source. That is generally seen to be the case in our area, for recent computer modeling has shown that much of Oconee County's ozone originates elsewhere. Therefore, only a coordinated, regional approach offers hope for a real solution. To this end, Oconee County has become a partner in the South Carolina Early Action Compact to reduce ozone-causing emissions. As a partner in this effort, Oconee County has been allowed to create its own plan of action in concert with other South Carolina counties. Because this is an ongoing effort with obligations extending at least into the next decade, county leaders need to remain cognizant that, if current efforts fail to achieve the needed reductions, additional actions may be necessary to avoid potentially burdensome federal and state mandates.

Another problematic issue related to Oconee County's natural resources involves development in steep terrain. Given proper engineering and best management practices, most projects in steep areas can be done safely. As these items are often expensive, however, safeguards are sometimes ignored, resulting in the loss of valuable topsoil and vegetation, sedimentation of streams and lakes, and increased downstream flooding. Additionally, the steep areas of Oconee County typically have thinner soils, a condition which makes the installation and proper operation of septic tanks more complicated. Yet, in some areas, public sewer service will likely not be available for decades- if ever- meaning that septic tanks are going to be a fact of life in

Oconee County for a long time into the future. Currently, regulation of such problems in Oconee County primarily falls on states authorities. As development increases, however, county leaders will be forced to weigh the Oconee County's options for increasing protections of our natural resources on the local level.

Agriculture has traditionally played a large role in the economy of Oconee County, and continues to be seen as an invaluable part of the area's lifestyle. In recent years, however, rapid development has led to the loss of many acres of the prime farmlands. While some such change is to be expected as the number of agricultural operations shrinks, unmanaged growth will likely result in an ever-increasing conflict between our remaining farmers and new residential development. The fact is, an increase in population density in farming areas increases the opportunity for incompatible land usage, for normal agricultural operations often result in smells, noise and dust that many people find offensive. Although it is not known if the solution will be found in working with individual communities to designate agricultural areas, or some other type of land use regulation, it is likely that unless local leaders take action, Oconee County will likely lose a cherished institution.

Natural resources are valuable to all Oconee citizens. Wise stewardship will be required in not only our generation but also in the generations that follow us. Conservation practices and policies will need to be look at often to ensure the best results. Conservation policies work best when all of the various stakeholders are present in the critiquing and establishing of the policies that protect our resources. Oconee County has a chance to take a leading role in protecting water quantity and quality by developing its own water plan and using this plan as a step toward developing a complete guide to conserving Oconee's natural resources. The goals established by the Comprehensive Plan when acted upon will help preserve what we have been given for years to come.

Natural Resource Objectives for the Future

- (1) Preserve, protect and enhance the quality and quantity of Oconee County's groundwater and surface water.
- (2) Preserve, protect and enhance Oconee County's environmentally sensitive lands, unique scenic views, agrarian landscapes, and topographic features.
- (3) Manage natural assets in a manner that ensures the resources continue to enhance Oconee County's lifestyle and provide increased economic opportunities.
- (4) Continue to ensure reasonable access to and use of Oconee County's natural amenities for both residents and visitors.
- (5) Work to expand the utilization of accepted best management practices in all agricultural and forestry activity in Oconee County.
- (6) Complete and properly maintain Oconee County's Geographic Information System (GIS).
- (7) Evaluate and address the threat of radon across Oconee County as necessary.
- (8) Evaluate the need for the county to begin a program to control storm water runoff and sediment.
- (9) Explore and evaluate the need for a program of development fees. This would involve the paying of upfront fees by developers to offset the impact of the new development on schools and infrastructure.
- (10) Continue as an active partner in the South Carolina Early Action Ozone Reduction Compact, adopting and maintaining ozone-causing emission reductions strategies as necessary.



Cultural Resources Element

Introduction

This element considers those resources that serve to develop the intellectual, moral, and physical lives of Oconee residents. Among the items considered is the area's unique past, historic buildings and structures, unique natural and scenic resources, and other activities that improve the mind and body, such as recreation, music and the arts. These resources will be noted and described as objectively as possible in order to both promote an awareness of various cultural assets, and to encourage protection and utilization of forgotten and endangered resources.

A Brief Overview of the Origin of Oconee County

Note: The following overview highlights some of the key events in the origin of Oconee County. It is in no way to be taken as a comprehensive history of the region. Therefore, a number of events and people having an arguably significant impact on the county's history are not included in these paragraphs, for to attempt a comprehensive history of the region is beyond the scope of this document.

There are various accounts of the derivation of the name "Oconee". It is generally agreed, however, that the word was adopted from the Cherokee Indians, the Native American tribe occupying the area at the time European explorers first visited the region. Early records show the name was associated with a village, located near present-day Tamasee, variously spelled in colonial records as "Wocunny", "Wacunny", "Ukwunu", and "Acconee". Early maps of the area also show the European settlers used the name to denote a range of hills called "Wocunny Mountain". The spelling of the word, over time, was standardized to "Oconee". Regardless of its derivation, however, the word was associated with the region long before the 1868 birth of Oconee County.

The land now comprising Oconee County had been visited and inhabited for centuries when the first Europeans arrived. While there is nothing to indicate the exact time that humans first saw the region, there is evidence that wandering bands of hunters roamed over much of South Carolina in search of animals as early as between 8,000 B.C. to 12,000 B.C. At some point during the ensuing centuries, as people began to live a more agrarian lifestyle, the Oconee area became home to native peoples attracted by an abundant water supply, plentiful game, and fertile soils.

Among the first known Europeans to explore upper South Carolina was the Spanish explorer, Hernando DeSoto, who passed through the region in the 1530's. Though he did not travel through the area comprising modern Oconee County, he did make contact with some members of the Cherokee nation, the Native American tribe occupying the Oconee region at the time. Just how long the Cherokees had been in the area, however, is a matter of debate, for some believe that the Cherokees were relatively recent arrivals, having driven out another people only within the previous century or so- yet others claim they had occupied their Southern Appalachian home for many generations. In either case, it is known that the Oconee area was occupied for centuries prior to the arrival of the Europeans, a fact testified to by countless arrowheads, stone axes, pottery shards, and other artifacts found throughout the county.

Although the French and Spanish had attempted to settle in South Carolina earlier, the English first established a permanent settlement in Charles Town (Charleston). Because the English venture to colonize the region was a commercial venture, trade with the native population was crucial. Soon, the English were venturing far into the upcountry to deal with various tribes, including the Cherokee in the Oconee area.

At the time the English arrived in South Carolina, the Cherokees living closest to the newcomers were part of what were known later as "Lower Town" Cherokees, those living in villages scattered across the eastern side of the southern Appalachian Mountains. The principle town during the early history of contact with the English was located at Tugalo Town. This village, which lay on the Tugalo River, was located on the present border between Oconee County and Stephens County, Georgia, and was the focus of many early trading and military missions from Charleston. A war between the Cherokees and the Creek Nation, however, eventually destroyed the village, and another village, Keowee Town, became the site of the principle town. This village, located on the western side of the Keowee River in modern Oconee County, served as the principle town of the Lower Town Cherokees until they were driven from the area in the late 1700's. The site of Keowee Town is today under the waters of Lake Keowee.

By the time of the Revolutionary War, the Native American population in what is now Oconee County had suffered greatly from both disease and war. As the ever-increasing European population moved closer to the suffering Cherokee population, depredations, initiated by both sides, led to a number of conflicts. And though peace would eventually return, treaties proved to be, at best, only temporary arrangements, soon violated by one side or the other. Finally, in 1776, a year marked by open conflict between the Cherokees and the Carolinians, Colonel Andrew Williamson led a large force of militia into the Oconee area, destroying all of the Cherokee villages that they could find. Among the leaders of the Williamson Campaign was future war hero and Oconee area resident Andrew Pickens, who, during one of the battles near present-day Tamassee, led a small group of militia in driving off a much larger Cherokee force near Tamassee in what has become known as the "Ring Fight". In the end, only names remained to denote the presence of the area's native population; among these, Essenecca (Seneca), Tamassee, Jocassee, Tugalo, Chehohee (Cheohee), Toxaway, and Oconee.

In 1785, the Cherokees ceded most of their South Carolina lands in the Treaty of Hopewell, signed near what is today the Oconee-Pickens border, on the Seneca River plantation of Andrew Pickens. The newly ceded lands, which were designated part of the Ninety-Six District of South Carolina, soon attracted large numbers of white settlers. Some

parcels of land were awarded by land grant to Revolutionary War veterans and their widows, while other lands were offered in lieu of payment for services in the conflict. Among the first group of settlers in the area was Revolutionary War hero Colonel Benjamin Cleveland, who settled near the confluence of the Tugalo and Chauga Rivers. A border disagreement between the new states of South Carolina and Georgia, however, threatened to disrupt settlement of the new lands. South Carolina, which claimed a vast amount of land running all the way to the Mississippi River, filed suit before Congress against its southern neighbor, who claimed lands west of the Seneca River for its own. In 1787, a convention was held in the city of Beaufort, South Carolina, to negotiate a treaty settling the issue. The Treaty of Beaufort, signed by representatives from South Carolina and Georgia, established the northwestern South Carolina border along the most western course of the Tugalo River, permanently delineating the southern and western boundaries of the region that is Oconee County.

The early settlers of the Oconee area included both recent immigrants and those whose families had lived for generations in other parts of America. Among those moving into the area in the 1780's and 90's, the majority traced their lineages to the British Isles, which included, of course, England, Ireland, Scotland and Wales. Other Europeans, including Germans, Swiss, and French were also represented among the settlers. In addition, some white settlers brought African slaves into the area. It should be noted, however, that the number of slaves in the region never approached that of the lowcountry.

Over time, as the population of the region grew, the Oconee area underwent several governmental reorganizations. In 1789, for example, the region was designated as part of the newly created Pendleton County of the Ninety-Six District. In 1791, Pendleton County was annexed into the new Washington District. The courthouse and seat of government for the Washington District was located at Pickensville, which lay in the current-day town of Easley, in Pickens County (the town of Pickensville was destroyed by fire in 1817). In 1798, Pendleton County became the Pendleton District, with the courthouse and seat of government at the town of Pendleton, which had been established in 1790.

In the late 1820's, the area was reorganized once again, and the Pendleton District was divided into Pickens and Anderson Counties. The area comprising modern Oconee County was designated as the Western District of Pickens County, with the modern Pickens area comprising the Eastern District. To serve the governmental needs of Pickens County, a courthouse was constructed on the west bank of the Keowee River. The courthouse soon attracted businesses, churches, and other institutions to the area, and a town, naturally named Pickens Courthouse (today called "Old Pickens"), was established. Pickens Courthouse served the county for the next 40 years, growing at one time, according to some sources, to a population of approximately 1800 inhabitants, a relatively large community for the era.

During the mid-1800's, two new groups of people entered the Oconee area. In 1849, the German Colonization Society of Charleston purchased the land for what is now the town of Walhalla from Col. Joseph Grisham, one of the region's leading citizens (and father-in-law of Georgia's Civil War Era Governor, Joseph E. Brown). Soon thereafter, a growing community of German immigrants was established at the base of the Blue Ridge Mountains. At about the same time, in 1852, the South Carolina Legislature chartered the Blue Ridge Railroad with the purpose of constructing a railroad through the Blue Ridge Mountains. With plans to reach Knoxville, Tennessee, the project, if completed, would have directly

connected the region to the Tennessee Valley and beyond, greatly impacting the Oconee area's future.

The railroad project required the construction of several tunnels in the hills above the new town of Walhalla. This brought in a large number of workers, predominantly Irish immigrants, who established the town of Tunnel Hill. In spite of initial progress, however, the mountains were not breached when, in the period immediately preceding the Civil War, work on the project ceased. Without work for its residents, Tunnel Hill was abandoned, with most of the Irish leaving the area. Although some later efforts were made to revive the project, the railway through the mountains was never completed, leaving today's Stumphouse Tunnel as a public reminder of what could have been a major change in direction for Oconee County's history.

During the Civil War, hundreds of men from both the Eastern and Western Districts of Pickens County left their homes to fight. Like so many other areas of the South, many of the soldiers never returned, with wounds or disease claiming a heavy toll. The Oconee area, however, having no major industry or transportation artery to attract the attention of the Union army, escaped the devastation of battle that was visited on so many other areas of the South. Escaping the direct physical destruction of the conflict, however, did not mean that the region shirked its share of the load, for many area residents returned home with physical and emotional scars that remained with them for the rest of their lives.

In 1868, just three years after the end of the Civil War, the region underwent its final governmental reorganization, with the Eastern and Western Districts of Pickens County being separated along the established district lines into new counties. While the Eastern District maintained the name honoring Revolutionary War hero Andrew Pickens, the Western District was named Oconee, with its seat of government and courthouse being established in the town of Walhalla. The town of Pickens Courthouse, no longer a center of political and economic activity, gradually withered away and was abandoned. Today, only the Old Pickens Presbyterian Church, standing surrounded by dozens of graves on a tree-covered hillside above the Keowee River, remains to denote the existence of the once-thriving community.

In the years following the Civil War, Oconee County's agrarian economy was, as in much of the rest of the South, tied to one or two cash crops. In Oconee, these crops were cotton, the king of southern crops, and timber. Unlike many other areas, however, Oconee was blessed with assets not available to all. A railroad, the Airline Railroad, was built through Oconee County in the 1870's, leading to the establishment of the towns of Seneca and Westminster. By the turn of the century, the availability of rail transport, combined with an abundant water supply, access to raw materials, and a plentiful supply of labor began to attract the attention of the textile industry. Soon, Oconee County was home to a number of textile operations, providing jobs for thousands of area residents and dominating the area's economy until the latter part of the twentieth century.

The twentieth century saw many changes in Oconee County, with an economy based largely on agriculture and textiles evolving into one focused on high-tech industry, service businesses, nature-based recreation, and tourism. Development spurred on by the creation of the county's major lakes and energy projects permanently altered the county's landscape. Also, a dramatic increase in population occurred during the last several decades of the era, with thousands of people from other regions moving to the region. Farmland located throughout the county, sometimes belonging to the same family for close to two centuries,

suddenly became the site of residential and commercial developments. New businesses cropped up along the sides of the county's main transportation arteries, creating commercial corridors that likely will someday link the majority of the county's municipalities into a single urban area. And, of course, with these changes came new attitudes, values, and lifestyles that influenced all aspects of life in the county. By the end of the twentieth century, the formerly rural, agrarian county that many in South Carolina have so often called the "wild west" was no longer so wild, having joined other fast developing, increasingly urbanized areas of the state; yet retaining many of the assets that have made it special for so many centuries.

Areas of Historical Significance

Many sites of historical significance have survived from the early years of European settlement in the Oconee area. While some of these sites are special because they reflect the unique character and attitudes of those peoples that established them, all are irreplaceable historic treasures that have become an invaluable part of Oconee County's heritage.

There are currently **twenty** sites on the National Register of Historical Places in Oconee County:
(Figure CR-1 shows the approximate location of each listing.)

- **Ellicott Rock**

Ellicott's Rock Wilderness Area, located in northern Oconee County, was designated in 1975 as South Carolina's first wilderness area. Included within the boundaries of the 9,012-acre area is Ellicott's Rock, which was delineated in 1811 by surveyor Andrew Ellicott as the point where the boundaries of North Carolina, South Carolina and Georgia join.



- **Alexander-Hill House**

Located at High Falls County Park, about 10 miles north of Seneca, off Highway 183.



- **Keil Farm**

Located at 178 Keil Farm Road, Walhalla, this site is privately owned property.

- **Long Creek Academy**



Located on Academy Road, in the Long Creek Community. Established in 1914 as a school for underprivileged children in the mountainous regions of Oconee.

- **Newry Historic District**

Located off Highway 130, north of Seneca, Newry retains the architectural elements of a southern textile mill village of a bygone era. Established in 1893, this self-contained community was constructed to house workers of the then Courtney Manufacturing Company.



- **Oconee County Cage**

This iron-caged wagon was used as a jail in the early years of the county's history. Currently, the cage is designated to be part of the Oconee County Heritage Museum's displays.

- **Oconee Station and William Richards House**

Located at 500 Oconee Station Road, north of Walhalla, Oconee Station was built in 1792 as one in a series of blockhouse forts established to protect the growing



population of the area, and was used as an outpost for troops until 1799. The structure, which also served as an Indian trading post, lies adjacent to the William Richards House, which was built in 1805, and is believed to be the first brick building in northwest South Carolina. William Richards ran a prosperous Indian trading post on the site until his death in 1809.

- **Old Pickens Presbyterian Church**

Located off Highway 183 near the Pickens County line, the Old Pickens Presbyterian Church is the only structure still standing from what was once the town of Pickens

Courthouse, the county seat of Pickens County before the Western District of the county was designated as Oconee County in 1868. Lying near the Oconee Nuclear Station at the base of the Lake Keowee Dam, the church stands as a reminder of a once progressive and thriving town along the Keowee



River. The church was chosen as the site for relocated graves moved from the valleys near the Keowee River before the impoundment of Lake Keowee. The churchyard is now the final resting place of dozens of early settlers, including Revolutionary War veterans John Craig and John Grisham (Grissom), prominent landowners, and ancestors of some of the leading citizens of the region.

- **Ram Cat Alley and Seneca Historic District**

Located in downtown Seneca, Ram Cat Alley lies at the heart of the original town, and retains turn-of-the-century architecture. The Seneca Historic District, roughly bounded by South First, South Third, and Poplar Streets, contains a wide variety of houses and churches dating from 1876 to 1926. Seneca, which was

established when the Airline Railroad (now Norfolk Southern Railroad) was completed in 1873, grew to be Oconee County's largest commercial center by the 1930's. As a result of the growth and development, many differing architectural styles were utilized. This variety is represented by such structures as the Seneca Baptist Church and Seneca Presbyterian Church, which exhibit brick facades and neo-classical design; while many houses in the area feature bungalow-style architecture, with the majority of their rooms situated on the ground floor fronted by a large porch.

- **Southern Railway Passenger Station**

Located at the Westminster Depot, 129 Main St., Westminster. According to tradition, the Westminster Depot was built ca. 1885. The railroad was one of the principle reason for the growth and development of the town of Westminster (incorporated in 1875), and as a result, the railroad station is one of the town's oldest buildings and has long been considered a local landmark. The station served as a gathering place and as a center of activity for this small community.



- **St. John's Lutheran Church**

Located at 301 W. Main St., Walhalla, this structure was constructed in 1853. With its bell tower and bright red door, St. John's serves as one of the main landmarks in the town of Walhalla. While necessary modernization and upgrades have occurred, the church retains much of its original architecture, including its pews, pulpit, and stained glass windows. The church is also notable for having the highest steeple of any church in the area. The cemetery is home to many Confederate and Revolutionary War soldiers.



- **Stumphouse Tunnel Complex**

Located approximately 5 miles west of Walhalla on Highway 28, Stumphouse Mountain Tunnel, which is currently managed by the Town of Walhalla, gets its name from a 1600-foot railroad tunnel begun as a result of an 1852 South Carolina Legislature charter to the Blue Ridge Railroad Company to build a connection between Charleston, South Carolina and Knoxville, Tennessee. The railroad was designed to connect existing tracks in Anderson, South Carolina, and Knoxville, Tennessee, via the Blue Ridge Mountains. One of the major obstacles to this was Stumphouse Mountain, which



required the construction of a tunnel through 5,863 feet of solid granite. By late 1858, track had been laid as far west as Pendleton, and plans were in the works to complete the track on to Walhalla. Due to the impending Civil War, however, construction on the tunnel ceased. After some poorly managed attempts to restart the project in the years following the war, the tunnel was abandoned. Besides being a locally well-known tourist attraction, the tunnel lays claim to being the location of the first successful site in the South for making blue mold cheese.

- **Walhalla Graded School**

Located at 101 E North Broad St., Walhalla.



- **McPhail Angus Farm**

Located off of Pine Grove Road, this site is privately owned property.

- **Oconee State Park**

Located near Mountain Rest in the Blue Ridge foothills, this 1,200 acre park serves as the southern trailhead for the Foothills Trail, an 80 mile wilderness hike on the Blue Ridge Escarpment. The park was developed by the Civilian

Conservation Corps (CCC) through a New Deal program created by President Franklin D. Roosevelt. The CCC program was designed to create jobs during the Great Depression and helped develop many of the parks across the country. Several of the buildings located in the park were built by the CCC during the 1930's and are still in use.



- **Russell House**

This site served as a late nineteenth and early twentieth century stage stop and inn for travelers between Walhalla and Highlands, N.C. The farmstead included 10 agricultural outbuildings, including a log barn, spring house, outhouse, garage, corn crib, and potato cellar, and a main house which served as the inn. The site was listed on the National Register on

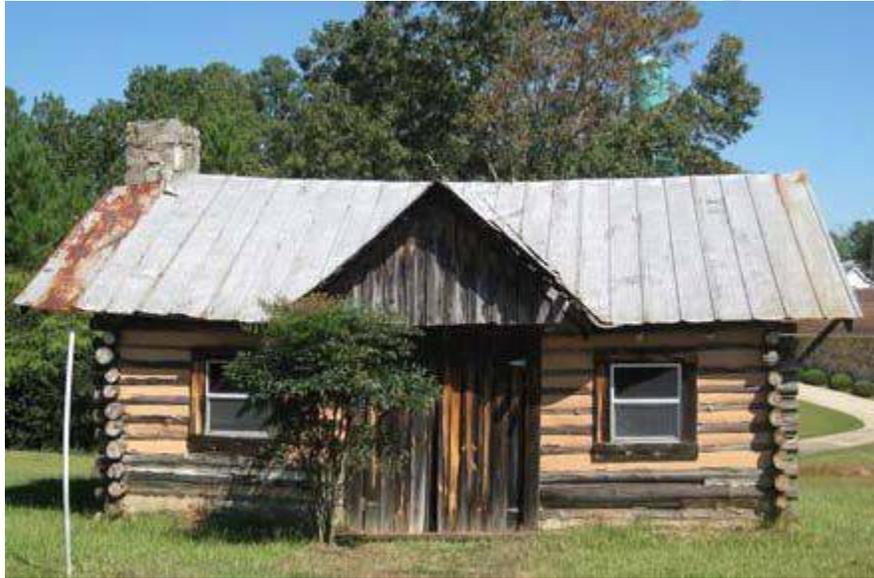


February 29, 1988 but the main house, two storage buildings, and a privy were destroyed by fire on May 14, 1988.



- **Faith Cabin Library**

The Faith Cabin Library at Seneca Junior College is significant for its role in African American education and social history in South Carolina between 1937 and 1939. This building, constructed in 1937 and known as the Oberlin Unit because it was largely the result of the interest and efforts of students at Oberlin College in Ohio, is important on a local level for its impact on the African American community in Oconee County, and on the state level as one of only two remaining free-standing Faith Cabin Libraries extant of the thirty built in South Carolina between 1932 and 1943.



- **Retreat Rosenwald School**

The Retreat Rosenwald School, built in 1924, is significant for its association with African American public education during the first half of the twentieth century and as an extant example of an architectural design typically associated with the schools funded in part by Julius Rosenwald. The Julius Rosenwald Fund sought to improve schools for African Americans in the rural South. In addition to their architectural significance, extant Rosenwald Schools reflect the struggle of black communities to give their children better educational opportunities. Rosenwald schools also reflect the strong bonds of community: the public space became an important social center for rural blacks.

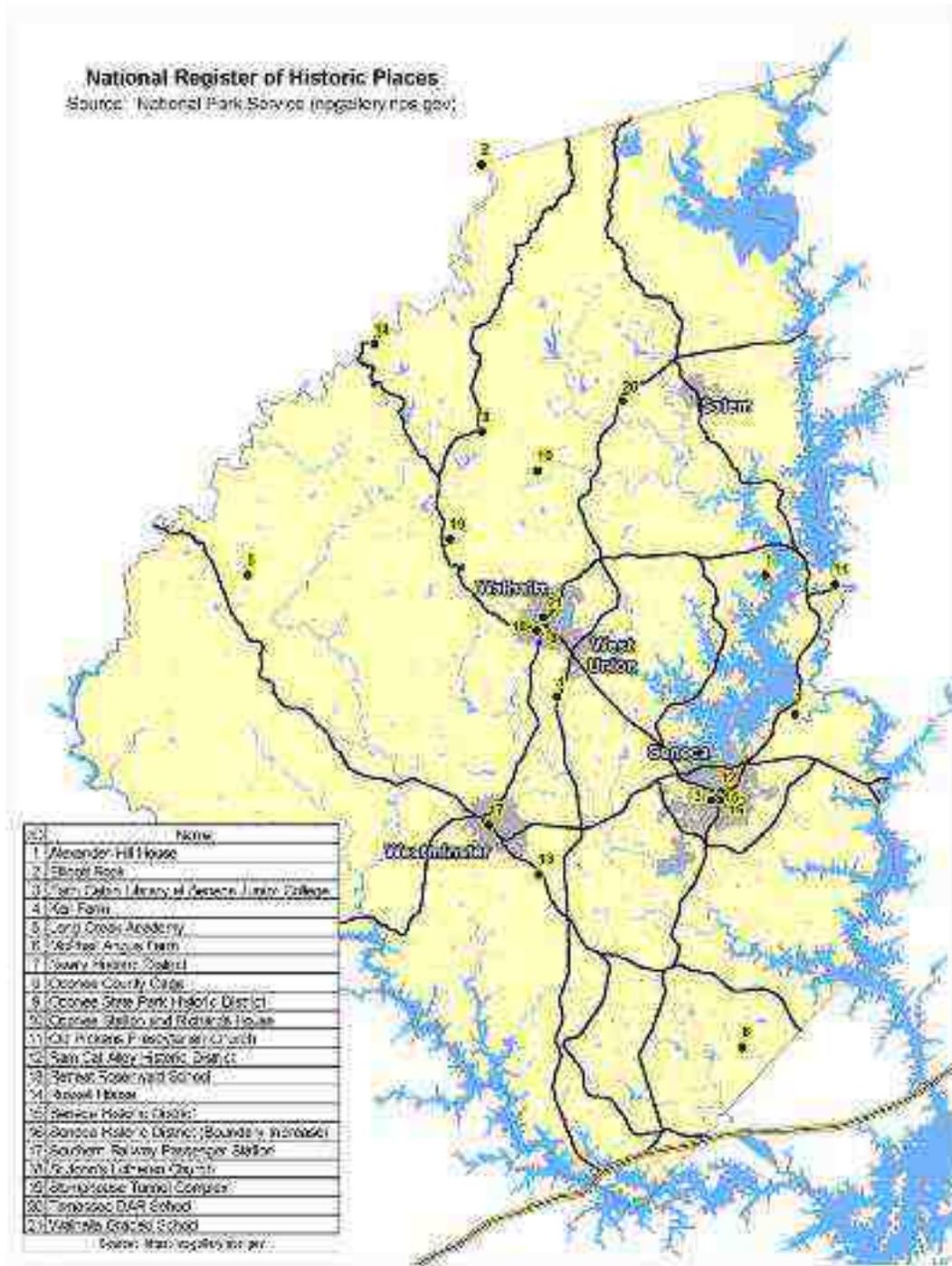


- **The Tamassee DAR School**

The Tamassee DAR School is significant at the state level for its association with the history of education in the rural northwestern corner of South Carolina and as a unique example of a school in South Carolina sponsored by a national patriotic organization for the purpose of helping poor children in a rural area have better access to education. The school is one of only two in the United States created by the Daughters of the American Revolution (DAR). Funding for the School was provided primarily by state chapters of the DAR from all across the country.



Figure CR-1



Source: Oconee County GIS Department

Other Oconee County Locations of Cultural and Historical Significance

Though not formally designated as a location of significance, many locations throughout Oconee County are notable for cultural, historical or architectural attributes. These include:

- Fort Madison Village: Located near Walton's Ford and the site of the Tugalo Town Village of the Cherokees, modern Fort Madison is situated on the banks of the Tugalo River, and emerged following the completion of the Airline Railroad in 1873.
- Ramey's Mill: A water-powered gristmill located on Cobb's Bridge Road, west of Westminster. The mill is currently inoperable.



- Horseshoe Robinson House: Privately owned, the home of Revolutionary War hero 'Horseshoe' Robinson is located a few miles from Westminster on Horseshoe Bridge Road.
- Pleasant Grove (Block) Church and School: This church and school, located at the intersection of Dr. Johns Road and Blackjack Road, near Westminster, takes its name from the "blockhouse" fort that served the congregation in its early history. Though the original blockhouse is long gone, the existing structures, particularly the adjacent one-room schoolhouse, are excellent examples of turn-of-the-century design.



- Retreat Presbyterian Church: Established about 1851, the church is located on South Retreat Road, near Westminster. This wooden structure contains original brickwork and stained glass windows.



- Center Church: One of the earliest churches in the area, Center Church is located on Highway 24 between the Oakway and Tokeena communities.



- Westminster's Abby/Retreat Streets area is home to many structures exhibiting 19th Century architecture, including the Westminster Presbyterian Church, and the Ballenger, Grubbs, and McCormick houses. The town, incorporated in 1875, is the westernmost municipality in Oconee County.

Natural Resources

Dozens of scenic views can be found throughout Oconee County, many of which may be enjoyed from one of several Scenic Highways. The Cherokee Foothills Scenic Highway (Hwy. 11); the Savannah River Scenic Highway (Hwy. 24), part of the South Carolina Heritage Corridor; and National Scenic Highway 107 all serve as main routes through the county.

Oconee County hosts part of the South Carolina National Heritage Corridor, which extends 320 miles across South Carolina from the mountains of Oconee to the port of Charleston. The Heritage Corridor offers a cross-section of the state's history, culture, and natural landscapes by showcasing the evolution of regional life, from plantations and farms to mill villages and urban centers.

A large portion of Oconee County's forested land lies within the boundaries of the Andrew Pickens Ranger District of the Sumter National Forest. This 85,000-acre district encompasses mountains, waterfalls, and a multitude of other scenic features.

The Chattooga River is one of a handful of free-flowing streams of its size found in the Southeast. The survival of the Chattooga's dense forest and undeveloped shorelines are due in large part to its May 10, 1974, congressional designation as a Wild and Scenic River. The designation, reserved for rivers possessing not only spectacular scenery, but also recreation, wildlife, geologic, and cultural values, restricts all motorized vehicles and development within a corridor of about ¼-



mile on either side of the river. The stream itself is regarded as a whitewater paddler's paradise, with spectacular mountain scenery and elevation changes averaging 49.3 feet per mile. Beginning in the Appalachian Mountains and concluding at Lake Tugaloo, the Chattooga River is widely recognized as one of the premier rivers in the nation.

The Chauga River Wild and Scenic Area is comprised of 3,274 acres of rugged terrain and beautiful scenery. With approximately 10 miles of the river flowing through public lands, many opportunities exist for a wide variety of recreational usage. The Chauga, a tributary of the Tugaloo River that generally flows parallel to the larger Chattooga River, enters the backwaters of Lake Hartwell west of Westminster.

The Jocassee Gorges, a 33,000-acre wilderness area, was created by a South Carolina Department of Natural Resources (DNR) purchase of pristine mountain land around Lake Jocassee, which lies in northern Oconee County. The result of collaboration between public agencies and private organizations, the DNR purchase of the Gorges preserved the region's unique ecological systems by permanently protecting the lands from development. This protected area harbors a great diversity of plant and animal species, including the rare Oconee Bell flower, a significant Black Bear population, and Peregrine Falcons. The area, part of approximately 30,000 square miles of protected wilderness lands in the Southern Appalachians, is available for some limited recreational usage, such as hiking, fishing, camping and hunting. The Foothills Trail, one of the upcountry's most popular natural attractions, also winds through the area.



Lake Jocassee, a 7,500-acre reservoir of cold, clear water lying primarily in northern Oconee County, was formed when the Duke Power Company dammed the Toxaway and Horse Pasture Rivers in 1973. The 385-foot dam not only provides water for hydroelectric power generation, but also

creates an exceptionally scenic reservoir that provides visitors with a number of outdoor recreational opportunities, such as swimming, water skiing, sailing, scuba diving and fishing. Several waterfalls are also accessible from the lake, including the Laurel Fork, Lower Whitewater, and Thompson River Falls.

Lake Keowee, sister lake of Jocassee, was the first of the Duke Power Company lakes developed as part of the Keowee-Toxaway complex, and serves both the Oconee Nuclear Station and the Keowee hydroelectric station. Lake Keowee's 300-mile shoreline sports a wide variety of fish, including white, smallmouth and largemouth bass, black crappie, bluegill and threadfin shad. Lake Keowee is also renowned for its exclusive lake communities, with large numbers of new residents from other regions, many retirees, having made the shores of the lake their home.

Lake Hartwell's 56,000 acres were created by the U.S. Army Corps of Engineers between 1955 and 1963, and serves as part of the Georgia-South Carolina border on the Savannah, Tugaloo and Seneca Rivers. The Corps maintains over 20 recreation areas on the lake's 962-mile shoreline, with many featuring launching ramps, comfort stations, picnic areas and shelters, swimming beaches, and playgrounds. Lake Hartwell is consistently ranked as one of the most popular Corps lakes in the nation.

Waterfalls

Oconee County's abundant water supply, combined with the areas's hilly topography, results in a large number of streams that drastically change elevation over a short distance. Rapids and waterfalls, therefore, are quite common throughout the county. In fact, Oconee County possesses approximately 1/3 of the named waterfalls found in upstate South Carolina. These include:

- *Issaqueena Falls
- *Brasstown Falls
- *Opossum Creek Falls



- *Long Creek Falls
- *Fall Creek Falls
- *Riley Moore Falls
- *Blue Hole Falls
- *The Chauga Narrows
- *Yellow Branch Falls
- *Station Cove Falls
- *King Creek Falls
- *Lee Falls
- *Licklog & Pigpen Falls
- *Big Bend Falls
- *Miuka Falls
- *King Creek Falls
- *Spoonauger Falls
- *Bee Cove Falls
- *Lower Whitewater Falls



Parks



County Parks:

Oconee County manages three parks: High Falls County Park, South Cove County Park and Chau Ram County Park. The oldest of these, High Falls, which is located on the shores of Lake Keowee near Highway 183, was established in 1972, and takes its name from a waterfall on the Little River (now an arm of the lake). Included within the park's 60 acres are a number of attractions, including 100 campsites; facilities for tennis, volleyball, and carpet golf; a swimming area; and picnic tables. In addition, High Falls is also the site of the historic Alexander Cannon-Hill House (circa 1814), which originally stood on the banks of the Keowee River, but was relocated to the park upon completion of the lake.

South Cove County Park, which opened in 1974, is located on Lake Keowee near Seneca. The park possesses a wide range of recreational opportunities, including 88 campsites, facilities for tennis, volleyball, and carpet golf; and picnic areas and a swimming beach. In addition, there is an easily accessible boat launch with plentiful parking, and a fishing pier. South Cove is often utilized for hosting festivals, fishing tournaments, and other public events.

Chau Ram County Park, located at the confluence of the Chauga River and Ramsey Creek, opened in 1974, and Located at the confluence of the Chauga River and Ramsay Creek, Chau Ram Park **is Oconee County's "Best Kept Secrets". With a 40 foot waterfall and Oconee's longest suspension bridge, Chau Ram has something to offer for everyone. Visitors can enjoy hiking and biking trails or go tubing and fishing on the river. Many of our campers use the park as a base when going rafting on the nearby Chattooga River. Attractions include 28 camping sites with 30 amp power and water, bath house, 4 shelters, 1 recreational building, hiking trails, waterfall**

State Parks:

Oconee County is the only county in the state to have four state parks. These include Devils Fork State Park, Lake Hartwell State Park, Oconee State Park, and Oconee Station State Park.

Devils Fork State Park, named for a nearby stream, was created in 1990, making it one of the newest parks in the system. The 622-acre park lies on the shores of Lake Jocassee, and boasts a number of waterfalls located throughout its area. Like most state parks, it offers



camping, fishing, swimming, and other traditional outdoor recreational opportunities. In addition, Devil's Fork offers a number of rental villas, as well as offering scuba diving facilities for those individuals desiring to explore the exceptionally clear waters of Lake Jocassee. Devil's Fork is special for many reasons, but perhaps the greatest reason is the fact that 95% of the world's population of Oconee Bells, a very rare, delicate wildflower, exists within the park's boundaries.

Lake Hartwell State Park, located near I-85 on Scenic Highway 11, contains 680 acres stretching along 14 miles of Lake Hartwell's shoreline. With 148 campsites and 2 boat ramps, this park is very popular with 56,000-acre Lake Hartwell's anglers. In addition, the park offers opportunities for picnicking, hiking, and swimming.

Oconee State Park, built by the Civilian Conservation Corps in the 1930's, draws users from a wide area. Located near the Wild and Scenic Chattooga River, the park's 150 campsites often serve as a base camp for whitewater enthusiasts. In addition, the park is connected to the Foothills Trail, one of the major hiking trails in the Southeast. For those with a less-adventurous nature, the park offers a museum, archery range, carpet golf, playground, cabins, and two private lakes for swimming, fishing, and paddling rental boats. Oconee State Park has consistently proven to be one of the premier state parks in the system.

Oconee Station State Park is located in northern Oconee County on the grounds of the Oconee Station, a frontier blockhouse constructed in the 1790's, and the Richards House, one of the oldest brick structures in the area. This relatively isolated park is ideal for those individuals wishing to get away from some of the more crowded public facilities and enjoy a more natural setting. With its 1.5-mile nature trail (one way) and fishing pond, this park is an excellent picnic spot that can be enjoyed by the whole family.

Municipal Parks:

In addition to county and state parks located in Oconee County, the various municipalities operate a number of city parks and recreation areas. These include, among others, Seneca's Shaver Recreation Complex, Walhalla's Sertoma Recreation Field, and Westminster's Hall Street Ball Fields.

Cultural Facilities

Although Oconee County remains a largely rural area, it possesses a number of cultural resources that serve to both educate and enrich the lives of its residents. These include:

- Lunney Museum- Located at 211 W. South First St. in Seneca, the museum is an early 1900's style bungalow that displays Victorian furniture, period costumes, and other items of Oconee memorabilia.



- England's General Merchandise Museum- Located at 103 W. Main St. in Westminster, this former retail store contains over 2,000 items from a bygone era, including antique toys, clothes, glassware, medical equipment, photos and other items unique to the area.
- Blue Ridge Art Center- Located at 111 E. South 2nd St. in Seneca, The art center is maintained by the Blue Ridge Arts Council, a volunteer-run, 501(c)(3) non-profit organization. We are a membership-based organization offering shows, events, education and promotional opportunities to our members - a diverse group of artists from all walks of life and skill levels.
- Duke Power's World of Energy- Located near Seneca at 7812 Rochester Hwy on the banks of Lake Keowee, the World of Energy is a hands-on, self-guided facility that illustrates how electricity is generated using water, coal and uranium. The facility is also a popular venue for meetings and public activities.
- ~~Tamassee DAR School~~— Founded by the South Carolina Daughters of the American Revolution in 1919, this school, located off Scenic Highway 11 in Tamassee, was established to provide a facility for educating children living in the isolation of northwestern SC. **Now located in National Register of Historic Places sections.**
- Oconee Cultural Heritage Center- Located in downtown Walhalla near the Oconee County Courthouse, this recent addition to the county's cultural landscape is a historical museum focused on presenting the story of the lives of all groups of people that helped to shape Oconee County.

Libraries

The Oconee County Public Library system currently operates four libraries in the county. These include the main branch in Walhalla, and satellite branches in Salem, Seneca and Westminster. The system also provides a bookmobile service to outlying rural areas.

Churches

As in many areas of the South, the Judeo-Christian tradition has always played a large role in the lives of the residents of Oconee County. This continues to be true today, with approximately 200 churches of various denominations located in the county. While the vast majority is Protestant, a growing number of individuals, particularly among those individuals relocating to Oconee County from other regions, adhere to other beliefs.

Festivals

Oconee County celebrates its rich culture and history in a number of festivals each year. These include:

- **Oktoberfest-** Held each autumn in Walhalla, the Oktoberfest celebrates the town's German heritage with traditional food, music, and recreation.
- **The South Carolina Apple Festival-** Established in 1961, the Apple Festival celebrates the beginning of apple season in Oconee County, the largest apple producing area in the state. Beginning on Labor Day, and continuing through the following weekend, this Westminster festival celebrates the importance of the apple crop to Oconee County's agricultural economy.
- **The Spring Heritage Festival-** Held annually in Seneca in and around historic Ram Cat Alley, this festival's events include the Miss Oconee and Palmetto Princess pageants.
- **Native American Day Festival-** This annual festival, held at Oconee Station State Park, celebrates the strong ties the area has to its Native American past.
- **Mountain Rest Hillbilly Day-** This Independence Day event has been held in the Mountain Rest community for many years, focusing on traditional mountain music, food, and fun.

Arts & Humanities

The Oconee County School District supports a countywide arts education program, which was awarded the Elizabeth O'Neil Verner Award for Excellence in Arts Education in 1993. In addition to the public school system, a number of other agencies and organizations promote art appreciation and education throughout the county. These include:

- The Oconee County Arts & Historical Commission- A county supported, non-profit agency that funds numerous cultural and art events throughout the year.
- The Oconee Community Theatre- Located at 8001 Utica St. in Seneca, the theatre showcases local actors in several productions each year.
- The Blue Ridge Art Council- The council works to expand understanding, awareness and participation in the arts in Oconee County.
- The Oconee County Historical Society- The Historical Society is an organization involved in ongoing research about Oconee and neighboring counties.

Analysis

Life in modern Oconee County is unique. The influence of the area's inhabitants' wide-ranging beliefs and traditions, combined with an abundance of natural resources, has created a lifestyle not found in many other regions.

The Oconee County area has played many roles over the centuries: a home to various native peoples, a key link in the economic health of colonial Carolina, a battleground in the Cherokee Wars, a frontier settlement area for a young South Carolina, home to a number of

regional and national leaders, and a player in the textile industry. Today, Oconee is increasingly a region of natural resource-based recreation, retirement communities, and high-tech industry. These changes have all left their marks, combining to create what is undoubtedly a unique cultural tradition.

Evidence of the area's cultural wealth can be found in the variety of Oconee's listings on the National Register of Historic Places. The differing types and styles of buildings, a tunnel complex, a prison wagon, and a rock marking the intersection of three states testify to a diversity not found in many other places. It must be recognized, however, that many historical and cultural landmarks have been lost forever in recent decades. Prather's Covered Bridge on the Tugalo River was lost to arson, as was the Russell House on the Highlands Highway, and dozens of farmsteads now under the area's lakes are treasures that can never be reclaimed.

The large number of people moving into the county from other regions is increasing Oconee's cultural diversity. Of these new residents, perhaps the most obvious group is composed of immigrants from Mexico and Central America, who bring with them ideas and traditions formerly unknown in the area. These differences, often compounded by a language barrier, sometimes lead the newcomers to be seen negatively by established residents. This negative attitude increases the possibility that the newcomers, denied acceptance by a significant portion of the county's population, will become isolated on the margins of the social structure. As a result, it is possible that a very talented people with a tremendously rich cultural heritage will be excluded from taking a full part in life in Oconee County, thereby negating many of the potential benefits that might otherwise be enjoyed by all.

Although Oconee is blessed with a large number of natural and man-made resources of cultural and historical value, the area has traditionally been under-marketed. While widely recognized for its rivers and mountains by outdoor enthusiasts, other groups are less informed about the many resources available within the county. The result is that many resources are oftentimes ignored.

One valuable resource that has not received its due attention in past years is the county's scenic highways. The Cherokee Foothills Scenic Highway, in particular, is in need of better management policies to maintain its scenic designation.

Oconee finds itself in a unique position. With upstate South Carolina currently undergoing steady and above average growth, the cultural and natural resources that Oconee possesses provides the county with the potential to be marketed as a historical and natural resources paradise. Proper protection and management of these resources, combined with a professional approach to spreading the word, should allow Oconee to set itself apart from the rest of the region as a magnet for new industry, residential development, and additional investment. If this is to become a reality, however, it must be a priority to discover and document all aspects of Oconee County's historical and cultural treasures in order that these valuable assets may be protected and utilized in the best manner possible.

As Oconee's resources are brought to the attention of a wider audience, it should be understood that many of Oconee County's cultural resources require special attention to avoid damage from some of the very changes being sought. Increased development and growth within the county, for example, may threaten areas of value as historical or natural resources. As a result, many treasures may be encroached upon and have some of their attributes diminished due to unwise or poorly planned development. Any efforts at

marketing the county's resources need to be carefully managed to insure that the resources are well protected, thereby improving life for all residents, and not just benefiting investors.

Some specific areas of concern include, as previously stated, Oconee County's scenic highways, which, if appropriate management policies are not enacted to preserve their natural beauty, may possibly be in danger of losing their official designation. Other areas as well, such as the county and state parks, and the areas near the Sumter National Forest, need increased attention to manage properly the pressures of growth. Such areas play a pivotal role for the county by not only providing recreation for Oconee's residents and visitors, but also provide an economic boost for the county. Finally, if the county's population continues to grow as is predicted, then the county's parks system will need to be upgraded and expanded, with the development of new parks becoming necessary.

Overall, Oconee County has a tremendous potential to utilize its existing cultural and historical resources to enhance the area's industrial recruitment and residential development. If not properly managed, however, these cultural treasures may be negatively impacted by the efforts. In addition, a decision must be made regarding what cultural treasures are too valuable to lose to forces of neglect and time. Progressive action, not reaction, should drive the preservation of our cultural heritage. In doing so, the unique culture of Oconee County will be insured far into the future.

Cultural Objectives for the Future

The following objectives are intended to address those needs and desires established within the Cultural Resources Element. See the 'Goals' section of this plan for specific strategies and timelines for implementation.

1. Continue support of a comprehensive planning process so as to insure that the citizens of Oconee County possess accurate inventories and analyses of existing county conditions, and the opportunity to better manage anticipated future conditions.
2. Create and/or update plans for specific priorities.
3. Complete and properly maintain Oconee County's Geographic Information System (GIS).
4. Encourage development in a way that protects and preserves our natural resources.
5. Manage development in a manner that ensures our natural resources and lifestyle enhance sustainable economic growth and job opportunities.
6. Promote a countywide arts program to facilitate an appreciation for the arts and other cultural facilities found within Oconee.
7. Conserve and protect features of significant local, regional and national interest, such as scenic highways, state parks, and historic sites and expand efforts to promote them for tourism.

Sec. 38-11.1. - Lake overlay district.

- (a) *Title:* Lake overlay district.
- (b) *Definition:* The lake overlay is not intended to be a separate zoning district, but shall be assigned to the shoreline areas of Oconee County lakes that are considered by county council to be vital to the economic prosperity and general well-being of all county citizens.
- (c) *Intent:* This overlay is intended to protect water quality, maintain natural beauty, and limit secondary impacts of new development that may negatively affect the lifestyles of those living near the lakeshore and the general enjoyment of the lakes by all citizens.
- (d) *Boundary:* The boundaries of the lake overlay district are shown on the Official Oconee County Zoning Map, and are divided into the following sub-districts:
 - (1) Keowee/Jocassee Overlay (Lakes Keowee and Jocassee). The following standards shall apply within 750 feet of the full pond contour of Lake Keowee and Lake Jocassee, to be measured along a perpendicular line from the full-pond contour.
 - a. *Standards.*
 - 1. No single-family or multi-family development shall have a net density greater than two dwelling units per acre within the boundary of the overlay.
 - 2. No structure constructed in the overlay shall have a building height greater than 65 feet above finished grade. In no circumstance shall the grade elevation be altered beyond that necessary to provide for structural soundness. For the purposes of this section, unless otherwise stated, all dimensions, heights, elevations and other specifications related to structures shall be measured in accordance with adopted building codes.
 - 3. Marinas and commercial boat storage shall comply with Duke Energy's regulations and shall not be located within a mile radius of an existing platted and properly recorded subdivision.
 - 4. All non-residential projects that have a proposed developed area fully or partially located within the boundaries of the Lake Keowee/Jocassee Overlay shall be subject to a special exception hearing by the board of zoning appeals. The board of zoning appeals shall use Appendix A as a guide and for good cause shown they may waive the strict application of any standard therein.
 - 5. Natural vegetative buffer.
 - (i) A natural vegetative buffer shall be established on all waterfront parcels whose property line is located within 25 feet from the full pond contour. Those parcels not meeting this criteria shall be exempt from this standard.
 - (ii) The buffer shall extend to a depth of 25 feet measured along a perpendicular line from the full-pond contour; in the event permanent shoreline stabilization, such as rip-rap, retaining walls, is located at the full-pond contour, the buffer may begin at the back of the stabilization, provided the minimum required area is achieved. Right-of-way maintenance activities by all utilities shall be exempt.
 - (iii) All structures and landscaping existing at the time of adoption of this chapter shall be considered as permitted and shall not be considered impediments to the buffer. Any new structures or any other new objects that are impediments to the establishment of the required buffer shall be placed outside the natural buffer areas unless the total square footage occupied by the structure, not to exceed 20 percent of the required buffer area, is added to the buffer at another location on the same parcel, provided the resulting buffer area is equal to the required buffer area, and the effectiveness of the buffer is not compromised.

- (iv) In order to ensure that the natural buffer is maintained during the development of property a properly installed and maintained silt fence shall be installed 25 feet from the full pond elevation, separating the buffer from the developed area, until the completion of construction. No construction or disturbance shall occur below the silt fence unless it is deemed necessary by a certified arborist to remove diseased trees. Dead trees may be removed with the approval of the zoning administrator. No trees larger than six-inch caliber at four feet from the ground shall be removed unless certified to be a hazard by a registered forester or arborist. Trees may be limbed up to 50 percent of their height. A removal plan shall be submitted for approval.
- (v) No development activity or soil disturbance shall occur in the buffer area, unless permitted by the zoning administrator.
- (vi) Shoreline stabilization shall be permitted provided any soil disturbance or other stabilization activities are supervised and approved by the appropriate licensed design professional and submitted to the zoning administrator.
- (vii) A map indicating those parcels to which the standards of this section apply, as well as the status of the establishment of the required buffer, shall be created and maintained as a layer in the county's Geographic Information System (GIS), and shall be available to the public.
- (viii) Natural, existing vegetation is encouraged; however, the following mix of plants shall be required for every 2,500 square feet of vegetative buffer area that is established by planting:
 - (1) The following mixture of plants for every 2,500 square feet of natural vegetative buffer shall be required when existing:
 - a. Three large maturing shade trees, equally spaced, four-inch or greater caliper at four feet.
 - b. Three understory trees, equally spaced, two-inch or greater caliper at four feet.
 - c. Six small evergreen trees.
 - d. Twenty shrubs; or
 - (2) A diverse mix of native plants and unmanaged (uncut below 12 inches and untreated) native grasses where available and suited to the site.
- (ix) A view lane of no more than 15 percent of the buffer area shall be permitted in the natural buffer area. Impervious surface no greater than 20 percent of the allowed view lane area is permitted. All impervious surfaces shall be considered part of the view lane. Other structures must be temporary.
- (x) No new manicured lawns or other managed grasses shall be established within the buffer area. Additionally, no clear cutting or mowing, cultivation activities, fertilization, use of herbicides, fungicides, or pesticides shall occur within the buffer area.
- (xi) In the event that a property owner is unable to establish the said buffer they may request a variance, to be considered at a hearing before the board of zoning appeals, stating the reasons why a buffer cannot be established. The board of zoning appeals of zoning appeals may, in its sole discretion, grant or not grant such variance, for good cause shown.

(Ord. No. 2012-14, § 1, 5-15-2012)

Sec. 38-11.1. - Lake overlay district.

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a. *Standards.*

- 1. No single-family or multi-family development shall have a net density greater than two dwelling units per acre within the boundary of the overlay.
- 2. No structure constructed in the overlay shall have a building height greater than 65 feet above finished grade. In no circumstance shall the grade elevation be altered beyond that necessary to provide for structural soundness. For the purposes of this section, unless otherwise stated, all dimensions, heights, elevations and other specifications related to structures shall be measured in accordance with adopted building codes.
- 3. Marinas and commercial boat storage shall comply with Duke Energy's regulations and shall not be located within a mile radius of an existing platted and properly recorded subdivision.
- 4. All non-residential projects that have a proposed developed area fully or partially located within the boundaries of the Lake Keowee/Jocassee Overlay shall be subject to a special exception hearing by the board of zoning appeals. The board of zoning appeals shall use Appendix A as a guide and for good cause shown they may waive the strict application of any standard therein.

5. Natural Vegetative Buffer.

- (i) The Natural Vegetative buffer shall be established on all waterfront parcels whose property line is located within 25 feet from the full pond contour. Those parcels not meeting these criteria shall be exempt from this standard. A map indicating those parcels to which the standards of this section apply, as well as the status of the establishment of the required buffer, shall be created and maintained as a layer in the county's Geographic Information System (GIS), and shall be available to the public.
- (ii) The Buffer shall extend to a depth of 25 feet measured along a perpendicular line from the full-pond contour; in the event permanent shoreline stabilization, such as rip-rap and/or retaining walls, is located at the full-pond contour, the buffer shall begin at the back of the stabilization. Shoreline stabilization shall be permitted provided any soil disturbance or

other stabilization activities are supervised and approved by the appropriate licensed design professional and submitted to the zoning administrator. Right-of-way maintenance activities by all utilities shall be exempt.

- (iii) No development activity, vegetation removal or soil disturbance shall occur in the buffer area, unless an additional zoning permit is issued by the Zoning Administrator. Invasive species may be removed as of right and without needing a permit.
- (iv) During construction the 25 foot vegetative buffer line must be clearly marked at regular intervals across the property. Motorized equipment will not be permitted inside the Vegetative Buffer unless required to remove dead or dying trees, as confirmed by a certified arborist or forester, or if required for remediation purposes, as permitted by the Zoning Administrator. Duke Power, SCDHEC, and SCDNR will be notified if any development causes or contributes to silt or debris entering the Lake.
- (v) All structures and landscaping existing at the time of adoption of this chapter shall be considered as permitted and shall not be considered impediments to the buffer.
- (vi) **Silt Fences:** In order to ensure that the natural buffer is maintained during the development of property, properly installed and maintained silt fences are required, before a Zoning inspection will take place. The silt fences must begin at or above the Vegetative Buffer line. Wire backed silt fences are highly recommended and J-hooks, hay bales, grass mats and seeding shall be installed, as needed, at least 25 feet from the full pond elevation, separating the Buffer from the developed area, until the completion of construction. The Zoning Official or Building Official and Inspectors may mandate additions of any or all of these options at any point during construction.

Any silt or debris entering the Vegetative Buffer from approved or unapproved development will be removed by the property owner before a Certificate of Occupancy will be issued. Any vegetation that has been impacted by any silt flows must be replaced consistent with section ix of this ordinance before additional permits or Certificates of Occupancy are issued. Additionally, see "Penalties" section below.
- (vii) **View Lanes:** View Lane means the portion of a natural buffer utilized and maintained by the property owner to enhance observation and access of the lake and surrounding landscapes. Typically, the vegetation in the view lane is lower in height and/or smaller in diameter than that found in the rest of the buffer. The View Lane may be up to 15% of the Vegetative Buffer either as one contiguous lane or multiple smaller lanes.
- (viii) **Allowed Development within the Vegetative Buffer:** A zoning permit is required for work within the Vegetative Buffer, which requires an approved site plan of the work within the Vegetative Buffer, and any applicable building permits are necessary before any work may begin within the Vegetative Buffer. Paths of permeable or impermeable

construction are permitted within the vegetative buffer provided they are no wider than six (6) feet. Any path is considered a part of the allowed 15% View Lane. Patios or decks, without permanent vertical features other than those required for safety or building code standards, are permitted but may not be more than 100 square feet and must be part of a contiguous View Lane. Electrical and Water lines may be installed through the Vegetative Buffer provided they run within the permitted View Lane and meet all applicable building codes.

- (ix) **Vegetation Removal:** No trees larger than six-inch caliber at four feet from the ground shall be removed unless certified to be a hazard by a registered forester or arborist. Trees may be limbed up to 50 percent of their height. A removal plan shall be submitted for approval. Invasive species may be removed in such a manner that does minimal damage to surrounding native vegetation. Trees that are clearly dead or dying may be removed with the permission of the Zoning Administrator. Existing native vegetation, outside of the allowed 15% View Lane, may be trimmed, pruned or otherwise maintained. This maintenance may not utilize herbicides, fertilizers or other chemicals. This maintenance may not increase run-off throughout the Vegetative Buffer. Vegetation within the allowed 15% View Lane may be maintained to the property owner's standards provided it does not create or contribute to runoff entering the Lake or adjacent properties and the maintenance does not utilize herbicides, fertilizers or other chemicals.

Only native species are permitted within the Vegetative Buffer. The following mixture of plants for every 2500 square feet of the Vegetative Buffer shall be required if reestablishing the native vegetation or for mitigation purposes:

- a. Three large maturing shade trees, equally spaced, four-inch or greater caliper at four feet.
 - b. Three understory trees, equally spaced, two-inch or greater caliper at four feet.
 - c. Six small evergreen trees.
 - d. Twenty shrubs or a diverse mix of native plants and unmanaged (uncut below 12 inches and untreated) native grasses where available and suited to the site.
- (x) No new manicured lawns or other managed grasses shall be established within the buffer area. Additionally, no clear cutting or mowing, cultivation activities, fertilization, use of herbicides, fungicides, or pesticides shall occur within the buffer area.
- (xi) In the event that a property owner is unable to establish the said buffer they may request a variance, to be considered at a hearing before the board of zoning appeals, stating the reasons why a buffer cannot be established. The board of zoning appeals ~~of zoning appeals~~ may, in its sole discretion, grant or not grant such variance, for good cause shown.

- (xii) Mitigation: Any unauthorized removal of vegetation by faulty silt fencing, unauthorized clearing or any other means requires replanting consistent with section ix. Additional penalties may apply.

(e) PENALTIES:

A violation of this Article is punishable by fine and/or imprisonment in an amount not to exceed the jurisdictional limits granted to a magistrate's court in Oconee County under South Carolina law. Additionally, building and zoning permits may be revoked, stop work orders issued, and civil fines levied as appropriate under the circumstances. Further, the provisions, including prescriptions, proscriptions, and penalties contained within the International Property Maintenance Code may apply.

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