

## LAKE KEOWEE SOURCE WATER PROTECTION TEAM (LKSAPT)

### INITIAL REPORT - MARCH 2019

- I. Creation of Clean Water Group 501(c)3  
The LKSAPT received approval as a 501(c)3 non-profit organization (see Appendix A) that was formed to protect water quality throughout the entire Lake Keowee watershed. This includes the following 10-digit HUC Watersheds: Little River-Lake Keowee (0306010103), Keowee River-Lake Keowee (0306010102), and Headwaters Keowee River-Lake Jocassee (0306010101).
- II. Board of Directors  
The Board of Directors includes representatives of seven member organizations, with each encouraged to assign both a Primary and Substitute Representative. Current members are listed below including Primary and Substitute as assigned.
  - a. Friends of Lake Keowee Society (FOLKS): Ben Turetzky – Chairman
  - b. Seneca Light & Water (SLW): Bob Faires (Melisa Ramey)- Treasurer
  - c. Greenville Water (GW): Heather Nix (David Bereskin) – Secretary
  - d. Advocates for Quality Development (AQD): Robert Aulebach
  - e. Oconee County (OC): Adam Chapman
  - f. Pickens County (PC): Scottie Ferguson
  - g. Upstate Forever (UF): Erika Hollis (Katie Hottel)
- III. Board Committees  
Preliminary committees and members have been identified to focus on the following tasks:
  - a. Further Development of Water Quality Models: OC, PC, UF, FOLKS
  - b. Development of a Program to Find and Fix Failed Septic Systems: SLW, AQD, FOLKS
  - c. Establishment of Education Outreach: GW, PC
  - d. Storm Water Management: OC, UF
- IV. Use of Licensee (Duke Energy) Funds  
As required, the use of Licensee funding has been in accordance with the Keowee-Toxaway Hydroelectric Project (FERC No. 2503) Relicensing Agreement Appendix I. See Appendix B for the full financial report.
- V. Surface Water Modeling  
The LKSAPT contracted with Clemson University (Dr. Ashok Mishra, Dr. Anoop Valiya Veettil, and Dr. Earle Hayter) to develop a surface water modeling system for Lake Keowee utilizing the SWAT watershed loading model and EFDC three-dimensionally hydrodynamic and water quality model. The SWAT model provides input for the EFDC model and was developed utilizing a subset of the basins flowing into Lake Keowee. The sub-basins, Cane Creek and Little Cane Creek, were selected based on the data intensity for the streams. The EFDC is a public domain model of the entire lake that can simultaneously simulate the hydrodynamics of a water body, along with water quality, and the transport of heat (temperature), sediment, and toxic chemicals. This model will account for the discharge from Lake Keowee into Lake Hartwell and

the boundary conditions that feed into the lake model including the discharge of flows from Lakes Jocassee and Keowee. See Appendix C for the presentations given by Dr. Mishra, Dr. Veettil, and Dr. Hayter to the LKSWPT in August 2018.

#### VI. Watershed Plans

- a. Cane and Little Cane Creek – FOLKS used SCDHEC 319(h) funding to hire Clemson University's Center for Watershed Excellence to create a plan for reducing bacteria within the Cane and Little Cane Creek watersheds. These basins are entirely within Oconee County, have experienced significant land use change since 2005 – including loss of forested area, and have the most septic tanks of any subbasins. Katie Callahan presented an overview of their work to the LKSWPT (see Appendix D) and the completed plan is available online at:  
[https://scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Watershed/Approved Funded Watershed Based Plans/Cane and Little Cane Creek WBP 2018.pdf](https://scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Watershed/Approved%20Funded%20Watershed%20Based%20Plans/Cane%20and%20Little%20Cane%20Creek%20WBP%202018.pdf)
- b. Little River and Keowee River – The LKSWPT was recently awarded funding from SCDHEC for creation of a comprehensive, actionable Watershed Based Plan (WBP) for these watersheds, which collectively encompass the majority of the area draining to Lake Keowee. The WBP will include prioritization of specific parcels that would provide the most significant benefits from various Best Management Practices (BMPs), including land protection, wetland and stream enhancement, septic, and agricultural BMPs. Completion of this plan is anticipated by March 2020.

## **APPENDICES**

APPENDIX A: SC Secretary of State Charitable Organization Approval Letter

APPENDIX B: 2019 Financial Report

APPENDIX C: Development of Surface Water Modeling System for Lake Keowee (8/20/2018) and Modeling the water quantity and quality in Lake Keowee (8/20/2018)

APPENDIX D: Cane and Little Cane Creek Development of a Watershed Based Plan (4/26/2018) and Geospatial Analysis of Septic Tank and Land Cover Change (2/21/2018)