

**PRESENTATION TO  
THE STATE WATER  
INFRASTRUCTURE AUTHORITY**

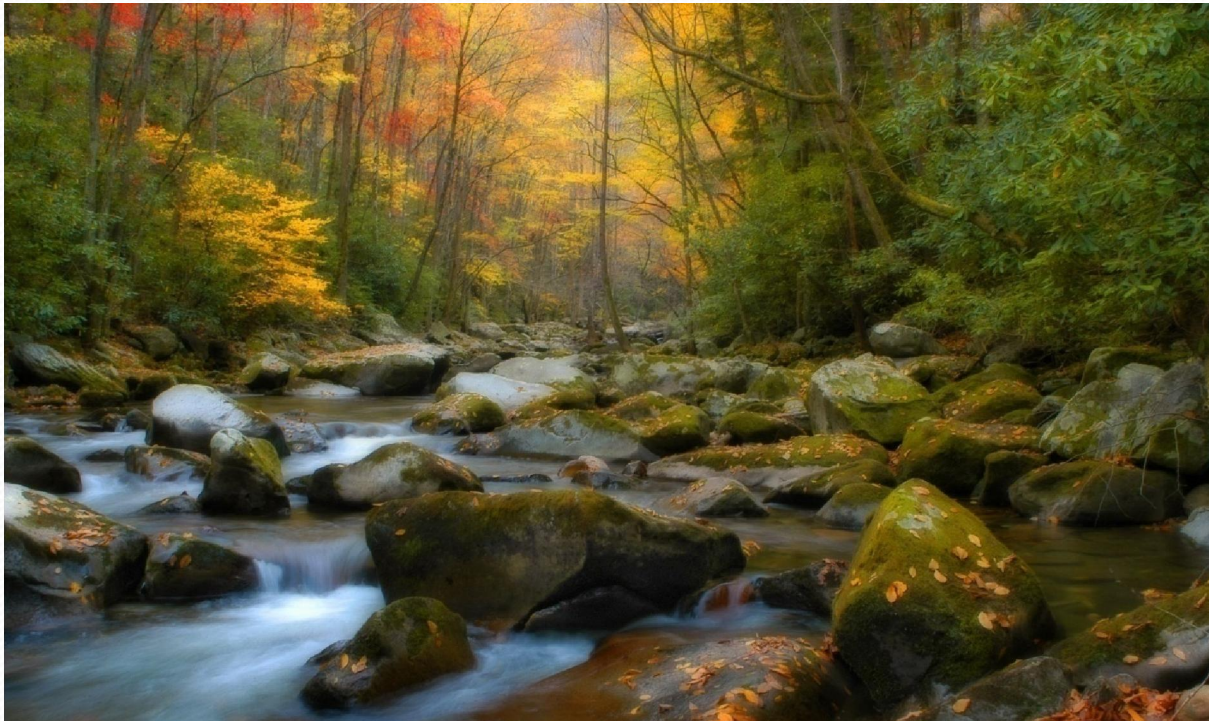
**Sept 21<sup>st</sup> ,2016**

# TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) WHERE WE ARE.





# TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) WHAT WE DO!



- WE ARE TO BE A GOOD STEWARD OF THE WATER RESOURCES OF JACKSON COUNTY !



## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) WHO WE ARE

- IN 1992- TWSA FORMED UNDER NC GS 162A – Article 1
- FORMING ENTITIES
  - DILLSBORO
  - SYLVA
  - WEBSTER
  - JACKSON COUNTY
  - WCU



# TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA)

## WHO WE ARE

- **GOVERNING BOARD**

- 1 SEAT-DILLSBORO
- 1 SEAT-WEBSTER
- 3 SEATS- SYLVA

MIKE FITZGERALD (C)  
TRACY RODES  
HAROLD HENSLEY  
BRENDA OLIVER (VC)  
DAVID NESTLER  
MARK JONES  
JOE WARD  
MIKE BYERS

- 2 SEATS- JACKSON COUNTY
- 1 SEAT-WCU

- **EMPLOYEES**

- 29 IN 4 DEPARTMENTS



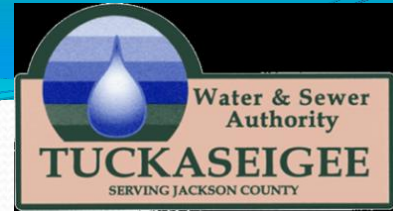
## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) WHO WE SERVE AND HOW WE SERVE THEM

- **WATER SYSTEM** – 1.5 MGD CAPACITY; +/- 79 MILES OF MAINLINES, 9 TANKS STORING 2.16 MG
  - CUSTOMERS USED +/- 0.900 MGD AVG DAILY-2015
    - CUSTOMERS ON TWSA OWNED LINES- 2625
    - CUSTOMERS ON OTHER LINES- 10
- **SEWER SYSTEM-** 4.2 MGD CAPACITY- +/- 40.0 MILES OF MAINLINES, 24 PUMP STATIONS .
  - CUSTOMERS USED +/- 1.02 MGD AVG DAILY-2015
    - CUSTOMERS ON TWSA OWNED LINES- 266 + 2330
    - CUSTOMERS ON OTHER LINES- 37



# TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) BUDGET- FY 2016-17

- **REVENUES-** **\$ 4.350 M**
  - FROM SALES \$ 3,822
  - OTHER REVENUES \$ 0.187
  - FROM RESERVES \$ 0.341
  
- **EXPENSES-** **\$ 4.350 M**
  - ADMINISTRATION \$ 1.504 M (\$0.643 DEBT SERVICE)
  - MAINTENANCE \$ 0.983
  - WASTEWATER \$ 1.107
  - WATER \$ 0.756



CONTRACT  
OPER. WHITTIER  
S.D. SEWER-0.1  
MGD

WWTP 2- 0.5 MGD

WWTP 1- 3.5 MGD

WWTP 3-  
CASHIERS, 0.2  
MGD



1.5 MGD WTP  
IN  
CULLOWHEE

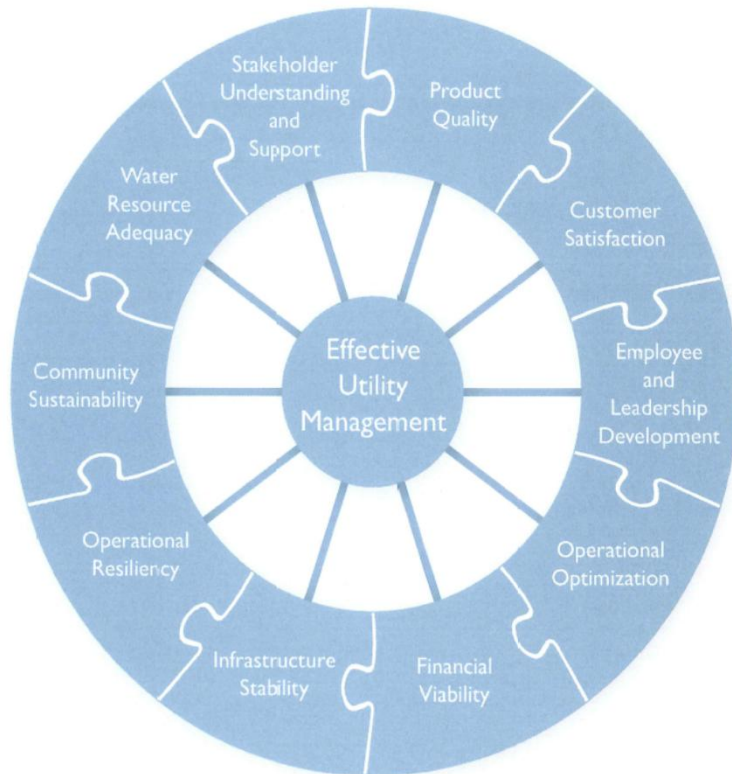
HORSEPASTURE  
RIVER NPDES  
PERMIT, 3 PAGE

**TWSA TREATMENT FACILITIES**



# TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA)

## GOAL: “EFFECTIVE UTILITY MANAGEMENT”



### **TEN ATTRIBUTES IN EUM PRIMER**

- PRODUCT QUALITY
  - CUSTOMER SATISFACTION
  - EMPLOYEE / LEADERSHIP DEV.
  - OPERATIONAL OPTIMIZATION
  - FINANCIAL VIABILITY
  - INFRASTRUCTURE STABILITY
  - OPERATIONAL RESILIENCY
  - COMMUNITY SUSTAINABILITY
  - WATER RESOURCE ADEQUACY
  - STAKEHOLDER UNDERSTANDING & SUPPORT
- ( 2011; EPA, WEF, AWWA, APWA, AMWA, NACWA, NAWC)



## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) CHALLENGES

- BLENDED SYSTEM
  - PORTION OF AREA IS RURAL (73%)
  - PORTION OF AREA IS URBAN (27%)
- AGING INFRASTRUCTURE
- GEOGRAPHY AND GEOLOGY
- COMPETITION FOR RESOURCES
  - SUSTAINMENT OF EXISTING ASSETS
  - EXPANSION OF SYSTEM
- COMPETITION FOR FUNDING





## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) AREAS OF FOCUS

- ASSET MANAGEMENT & GIS SYSTEM IMPROV.
- PROJECT PLANNING & SYNCRONIZATION
  - COMMUNITY PLANNING EFFORTS DRIVE NEEDS FOR WATER / SEWER SERVICES
- WATER SUPPLY PLANNING INC. SOURCE WATER PROTECTION, UNACCOUNTED FOR WATER AND METER REPLACEMENTS
- CASHIERS WWTP– DESIGN & CONSTRUCTION
- WHITTIER WW SYSTEM OWNERSHIP & OPS.
- CASHIERS WATER SYSTEM OWNERSHIP (CONSOLIDATION)



## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) AREAS OF FOCUS

- “ECONOMIC DEVELOPMENT” AND HOW TO BE RESPONSIVE TO EXISTING AND NEW CUSTOMERS.
  - SEWER TRANSFER POLICY
  - ECON. DEVELOPMENT & OUTREACH POLICY
  - CAPACITY RENTAL POLICY
- CORRECT MIX OF “SUSTAINMENT” OF EXISTING ASSETS VERSUS “EXPANSION” OF SYSTEM THROUGH NEW CONSTRUCTION.
- ABILITY TO SERVICE DEBT AND CONTROL RATES.





## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) AREAS OF FOCUS

- INCREASED FOCUS ON ADMINISTRATIVE FUNCTIONS AT TWSA.
  - EMERGING TECHNOLOGY
  - SUCCESSION PLANNING
- CONTINUE EFFORTS TO ESTABLISH AND MAINTAIN RELATIONSHIPS WITH COMMUNITY.
  - EDUCATION AND OUTREACH
  - PARTNERING



## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA) RECENT PROJECTS FUNDED THROUGH NCDEQ SUPPORT

- DILLARDTOWN WATER SYSTEM  
CONSOLIDATION \$0.832M
- DILLARDTOWN SEWER SYSTEM EXTENSION  
\$0.560M
- UNIVERSITY HEIGHTS AND RIVERPARK MHP  
WATER SYSTEM CONSOLIDATION \$2.696M
- ASSET INVENTORY AND ASSESSMENT- WATER  
\$0.0748M
- ASSET INVENTORY AND ASSESSMENT-  
WASTEWATER \$0.0752M



## TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA)

- WE WANT TO EXPRESS APPRECIATION TO THE STATE WATER INFRASTRUCTURE AUTHORITY AND THE STAFF IN THE DIV. OF WATER INFRASTRUCTURE **FOR LISTENING!**
- IT IS OBVIOUS THERE IS A DELIBERATE PLAN TO ADDRESS EMERGING NEEDS IN THE WATER AND SEWER COMMUNITY. EXAMPLES-
  - ASSET INVENTORY AND ASSESSMENT GRANTS
  - MERGER / REGIONALIZATION FEASIBILITY GRANTS
  - REGIONAL TRAINING AND MEETINGS
  - STANDARDIZATION OF PROCESSES AND DOCUMENTS



TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA)

WE ENCOURAGE YOU TO BUILD ON THESE  
RECENT PROGRAM CHANGES AND HELP THE  
LOCAL SYSTEMS ACHIEVE THE INDUSTRY GOAL,

.....**“EFFECTIVE UTILITY  
MANAGEMENT”**





TUCKASEIGEE WATER AND SEWER AUTHORITY (TWSA)

QUESTIONS  
OR  
DISCUSSION?