

DEFINING THE WATER CHALLENGE

EPA WATER FINANCE FORUM

JUNE 15, 2016

Mountain Empire Community College  
Big Stone Gap, Virginia



# THE CHALLENGE

Rural Region

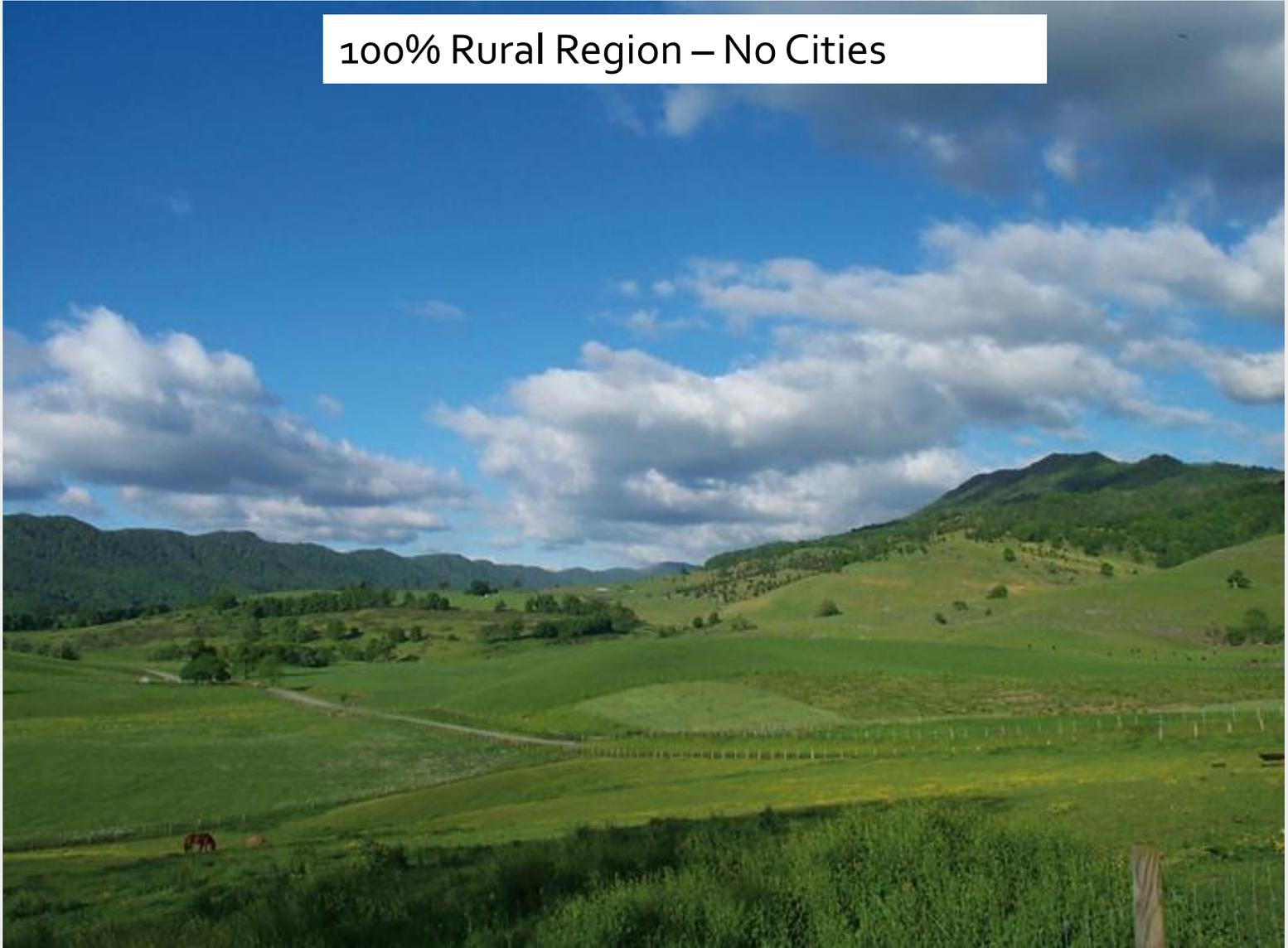
Low Population Density

Mountainous Terrain

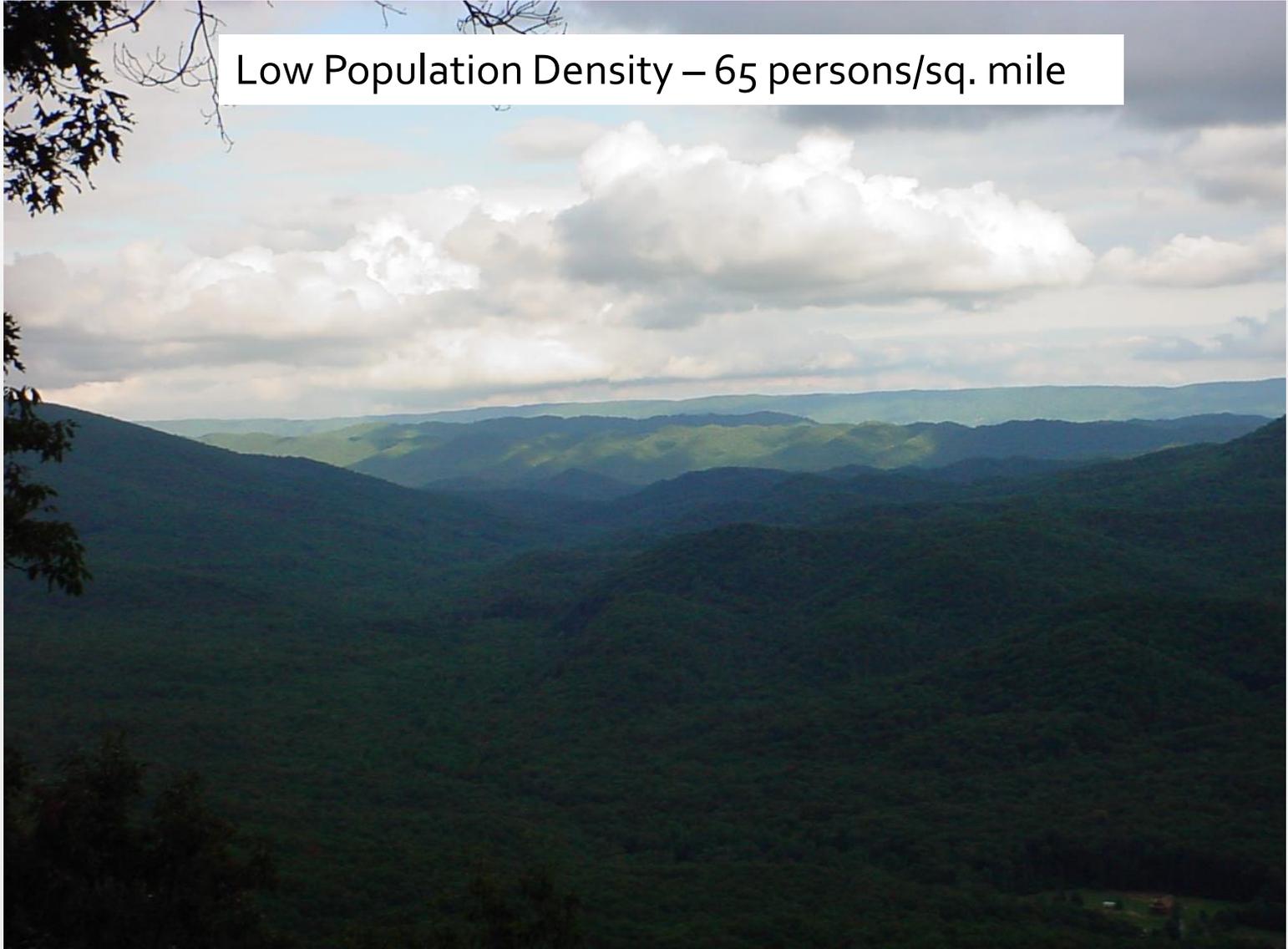
Geological Conditions

Limited Water Resources

100% Rural Region – No Cities



Low Population Density – 65 persons/sq. mile

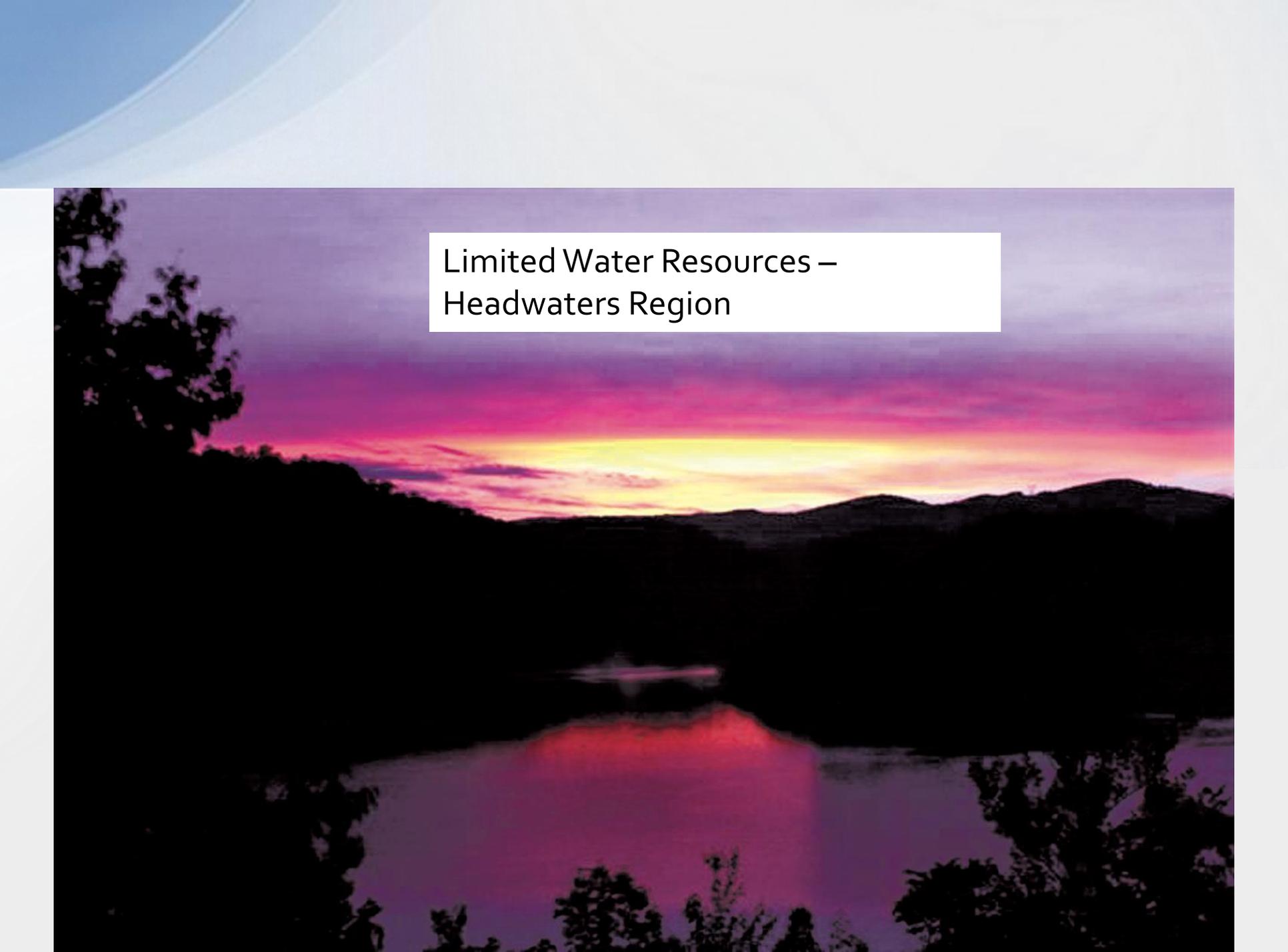


Mountainous Terrain – 70% of Land  
Area Above 20 Degree Slope



## Geology – Limestone & Sandstone





Limited Water Resources –  
Headwaters Region

**THE REALITY**

**EXPENSIVE**

**Typical Costs: \$42/L.F. \$20,760/HH**

## THE CHALLENGE (Continued)

Distressed Area:

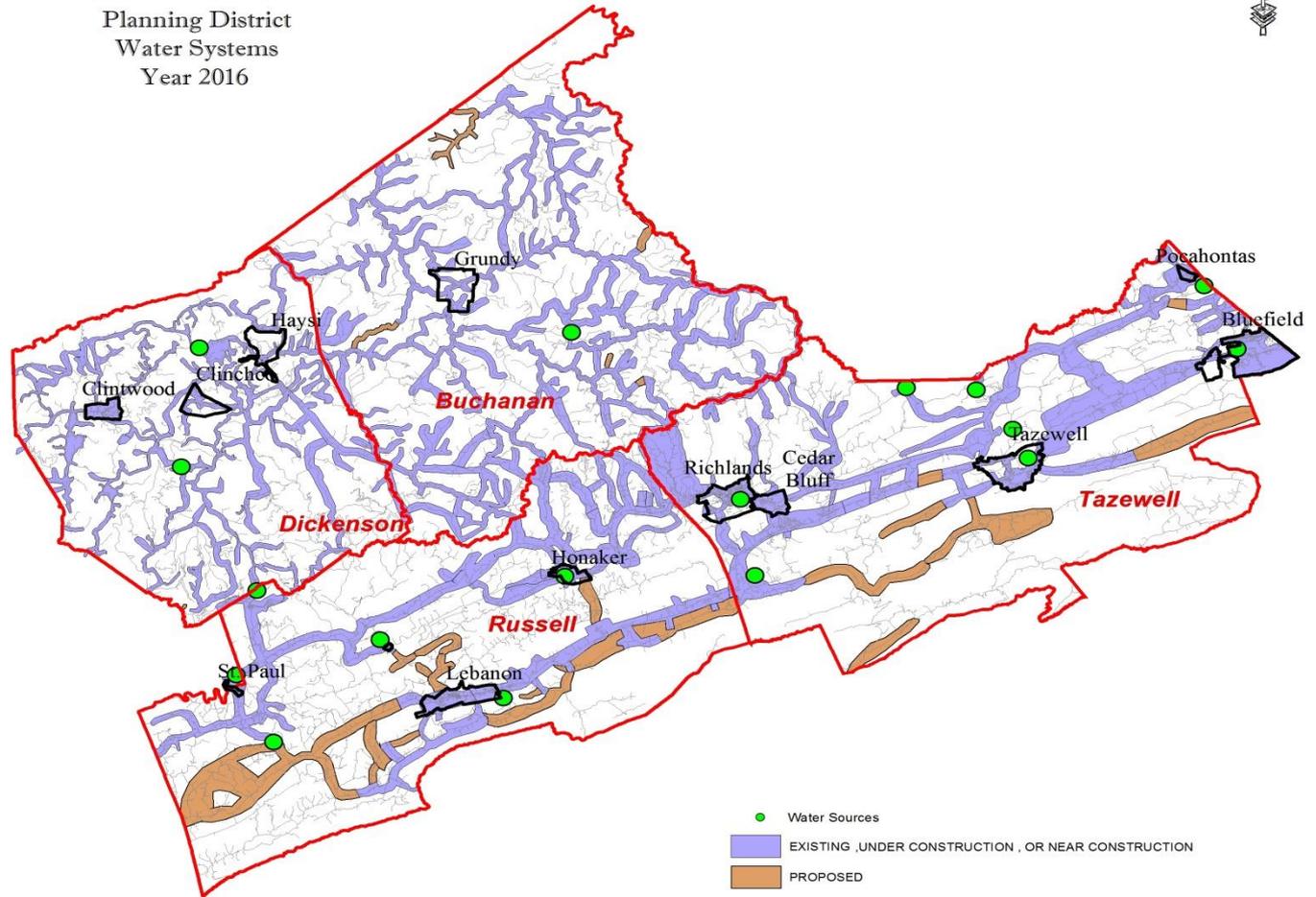
Resource Based Economy – Coal, Timber, Ag

Low Per Capita Incomes – 60% of State

Large Percentages of Elderly & Disabled

Persons Need To Keep Water Rates Reasonable

Cumberland Plateau  
Planning District  
Water Systems  
Year 2016



# Be Innovative in Approach

## Federal Partnerships

- \* Coalfield Water Development Fund
- \* AML Water Project Program

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# *AML*

## *Water Project*

### *Review Manual*

*Prepared By*



**Division of Mined Land Reclamation  
Abandoned Mine Land Section**

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# Be Innovative in Approach

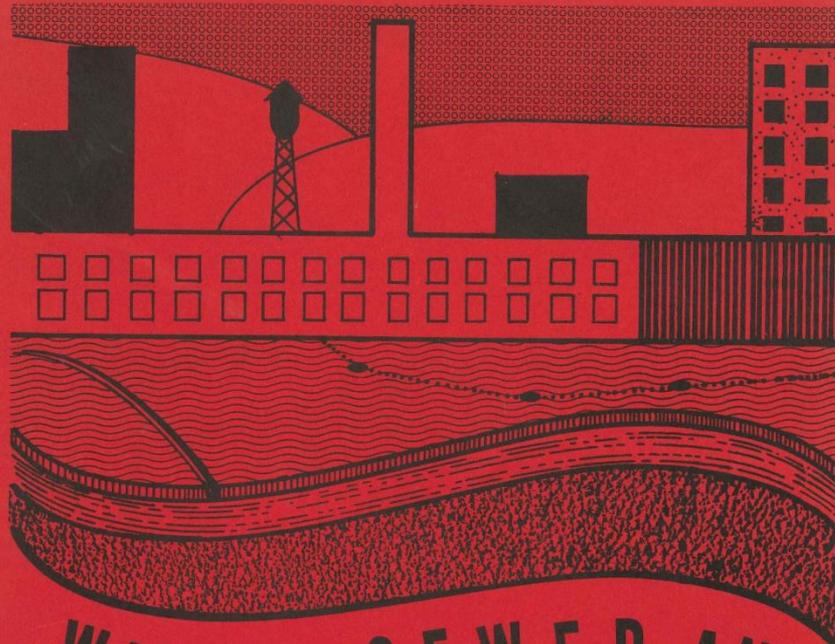
## State Partnerships

- \* Southwest Virginia Water/Wastewater Construction Fund

# Be Innovative in Approach

## Regional Partnerships

- \* Bi – County Efforts
- \* Regional Water Roundtable
- \* Bi – or Tri – Regional Efforts



# WATER, SEWER AND STORM DRAINAGE PLAN

FOR THE  
CUMBERLAND PLATEAU  
PLANNING DISTRICT

MAY & JUNE, 1974

# PLATEAU PLANNER

*Bi-Monthly Publication of the Cumberland Plateau Planning District Commission*

Dickenson, Buchanan, Russell and Tazewell Counties, Virginia

Number 21

## *FHA Approves \$2,095,000 Flannagan Project*

"A major victory for regional cooperation" were the words of Les Ballard, chairman of the Cumberland Plateau Planning District Commission, following the recent approval of \$2,095,000 in federal loans and grants by the Farmers Home Administration for the John Flannagan Water Project. The funding will allow the transmission of water from Flannagan Lake in Dickenson County into Buchanan County for eventual distribution throughout major portions of the county.

The four local governments participating in the project are the counties of Buchanan and Dickenson and the towns of Grundy and Clintwood.

The John Flannagan Water Authority, chaired by Buchanan County Supervisor Willard W. Owens, will receive FHA loans and grants totaling \$1,025,000 for the construction of a 2,000,000 GPD water filtration plant at Flannagan Reservoir in addition to a 1,000,000 gallon storage facility.

Additional FHA money totaling \$1,070,000 was approved for the Buchanan County Public Service Authority, headed by S. Charles Ratliff. These funds will finance construction of 12 miles of 16" water transmission lines from the filtration plant to Prater in Buchanan County.

There is also an additional \$460,000 grant expected from the Appalachian Regional Commission and \$250,000 is being contributed by Buchanan County which will bring the total for the two projects to \$2,805,000 of which \$920,000 will be grant and \$2,635,000 will be loan.

Chairman Ballard said the Commission has been involved in the development of the John Flannagan water project from the very beginning and had monitored the project through four years. Charles S. Yates, Deputy Director of the Cumberland Plateau who heads the Commission's water and sewer planning activities, estimated that the planning district had spent about \$20,000 in seeing the project through. Yates stated that the Planning District had held numerous

meetings with FHA, ARC, the John Flannagan Water Authority, the Buchanan County Public Service Authority, and Thompson and Litton Consulting Engineers. The Commission constantly monitored the project, submitted additional information as required by FHA and attempted to keep local officials abreast of the progress being made.

The approval of the filtration plant on the Flannagan Reservoir and the trunk line to Prater were the second and third steps of the total bi-county water project as planned for development. The first phase was the development of a water distribution line from Clintwood to an area near the proposed filtration plant at the Flannagan Reservoir. This water line is presently under construction and was financed by a \$350,000 Appalachian Regional Commission and Farmers Home Administration grant and a \$400,000 Farmers Home Administration loan.

The development of the next three steps of the proposed plan are presently underway with the submission of applications for the construction of a distribution system for the Town of Haysi and the areas along Prater Creek in Dickenson County and two applications for the Buchanan County Public Service Authority to construct truck lines and distribution systems on to Vansant, Grundy and Oakwood. Officials of the planning district indicate that chances are good that funds will be available in FY75 for the development of these three proposed steps of the projects. It should be noted that the development of the water system for Haysi and Vansant and Oakwood will permit the construction of much-needed sewer facilities to serve these three communities which would otherwise be impossible without public water systems being constructed prior to the construction of the sewer facilities.

Other steps of the bi-county water project are proposed to take water service into the Harman and Big Rock areas of Buchanan County as well as Hurley and Whitewood areas over the next few years. Planning district officials have indicated that the availability of funds will determine the amount of time that it will take to expand the system into these areas.

# REGIONAL WATER ROUNDTABLE



# VIRGINIA COALFIELDS REGIONAL WATER STUDY FOR



NOVEMBER 1998

Prepared by:



In Association With:

Dewberry & Davis - Lane Engineering - Kendrick Engineering & Surveying Co.

**SOUTHWESTERN VIRGINIA REGIONAL  
WATER SUPPLY PLAN  
FOR  
CUMBERLAND PLATEAU PLANNING DISTRICT COMMISSION  
LENOWISCO PLANNING DISTRICT COMMISSION  
MOUNT ROGERS PLANNING DISTRICT COMMISSION**

Prepared For:  
Mount Rogers Planning District Commission  
Toby Boian, Deputy Director  
1021 Terrace Drive  
Marion, Virginia 24354

**November 2, 2011**

Prepared By:



**THOMPSON & LITTON**  
CONSULTANTS • ENGINEERS • PLANNERS  
*Over fifty years of integrity, insight and innovation.*



DAA Project Number: B06226-03

## Be Innovative in Construction

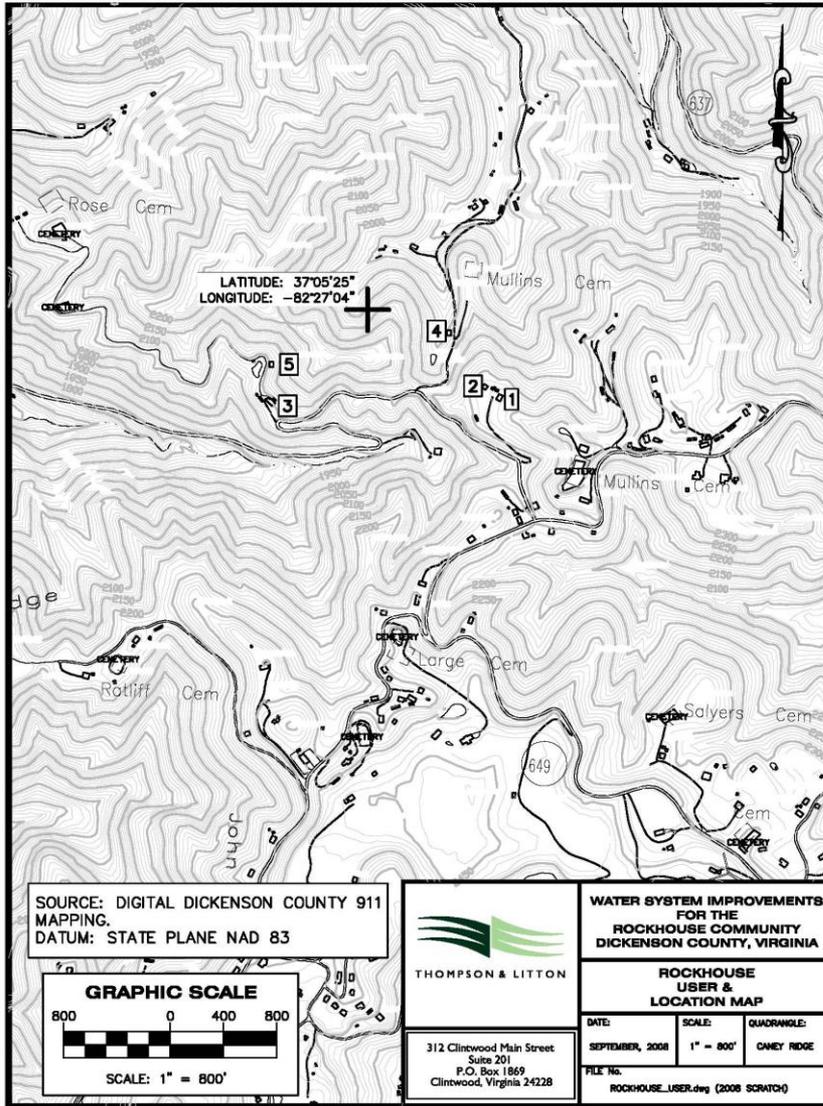
- \* Force Account
- \* Self – Help
- \* Small Water Project Demonstration

# FORCE ACCOUNT



# SELF HELP





# SMALL WATER DEMONSTRATION PROGRAM

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**Executive Director**

**Cumberland Plateau Planning District Commission**

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