Duck River Watershed Planning Partnership

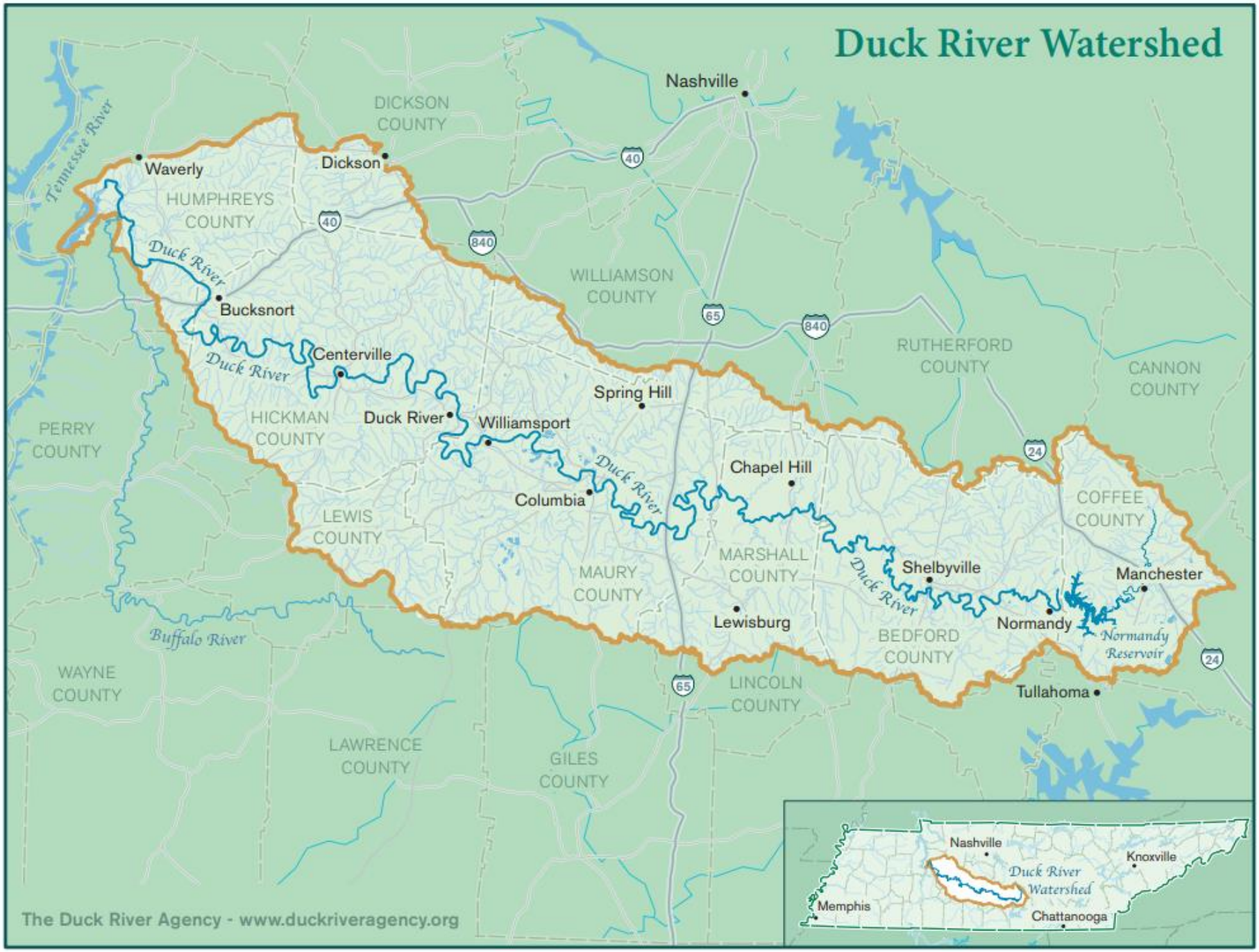
REGIONALIZATION WORKING GROUP

Status Report

September 18, 2025

Governor's Executive Order 108

- Recognizes the Duck River as a State natural treasure
- Affirms the State commitment to protect the Duck River
- Affirms the State commitment to support DRA's mission
- Establishes the DR Watershed Planning Partnership
- Challenges the DRWPP to develop a program that can be implemented in other watersheds


Duck River Watershed
Nashville
DICKSON COUNTY
Tennessee River
Waverly
Dickson
HUMPHREYS COUNTY
40
840
Duck River
Bucksnort
WILLIAMSON COUNTY
65
840
RUTHERFORD COUNTY
CANNON COUNTY
Centerville
Duck River
Spring Hill
PERRY COUNTY
HICKMAN COUNTY
Duck River
Williamsport
24
Chapel Hill
Columbia
Duck River
COFFEE COUNTY
LEWIS COUNTY
MARSHALL COUNTY
Shelbyville
Manchester
MAURY COUNTY
Duck River
Lewisburg
Normandy
Normandy Reservoir
Buffalo River
BEDFORD COUNTY
24
WAYNE COUNTY
65
LINCOLN COUNTY
Tullahoma
LAWRENCE COUNTY
GILES COUNTY
Nashville
Knoxville
Duck River Watershed
Memphis
Chattanooga
The Duck River Agency - www.duckriveragency.org

Regionalization Working Group

Working Group Progress Report

- ✓ Three working group meetings to date
- ✓ Two additional meetings planned in October
- ✓ Evaluating and prioritizing possible projects
- ✓ Project recommendations rising to the top
- ✓ Still reviewing additional recommendations
- ✓ Developing consensus on recommendations

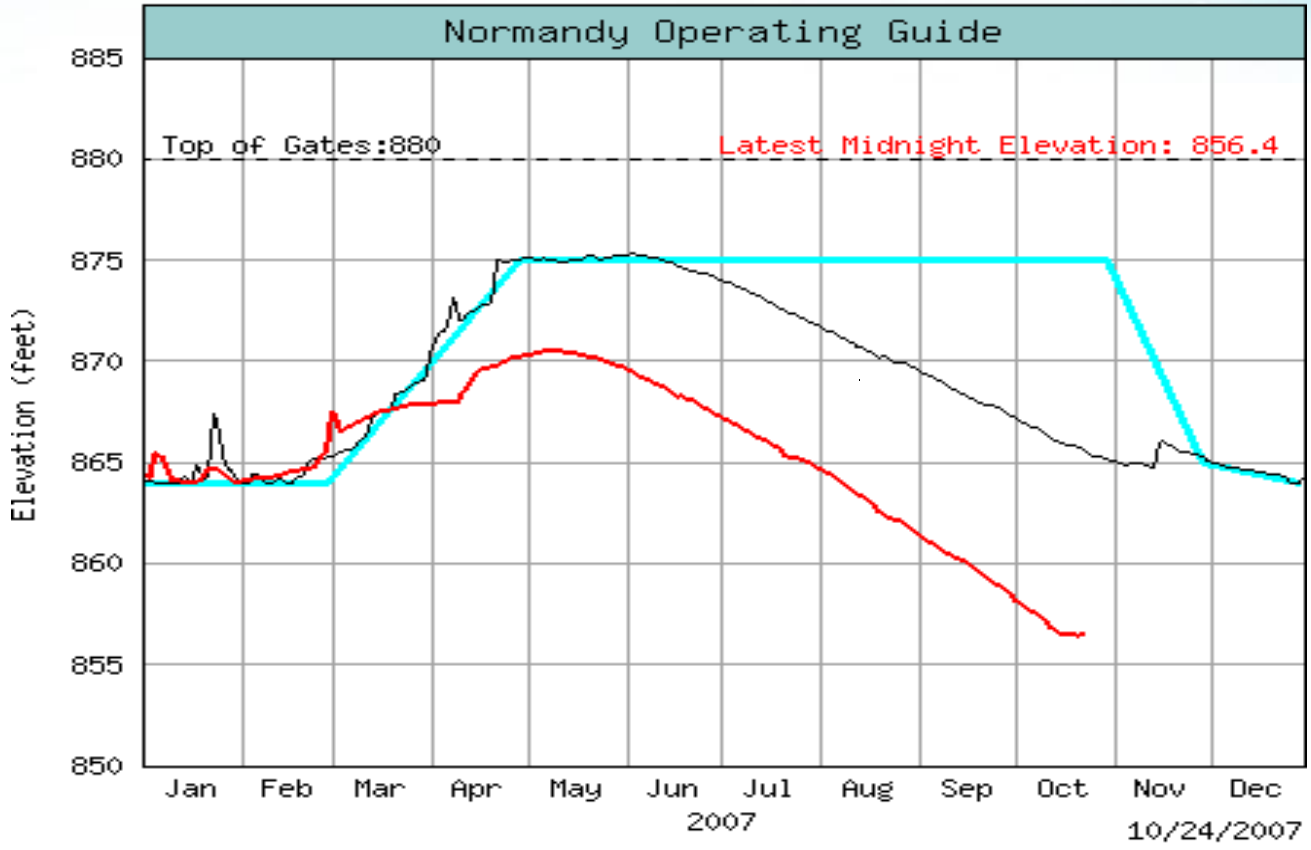
Regionalization Working Group

DRAFT Recommendations

- Normandy Reservoir Capacity Improvements

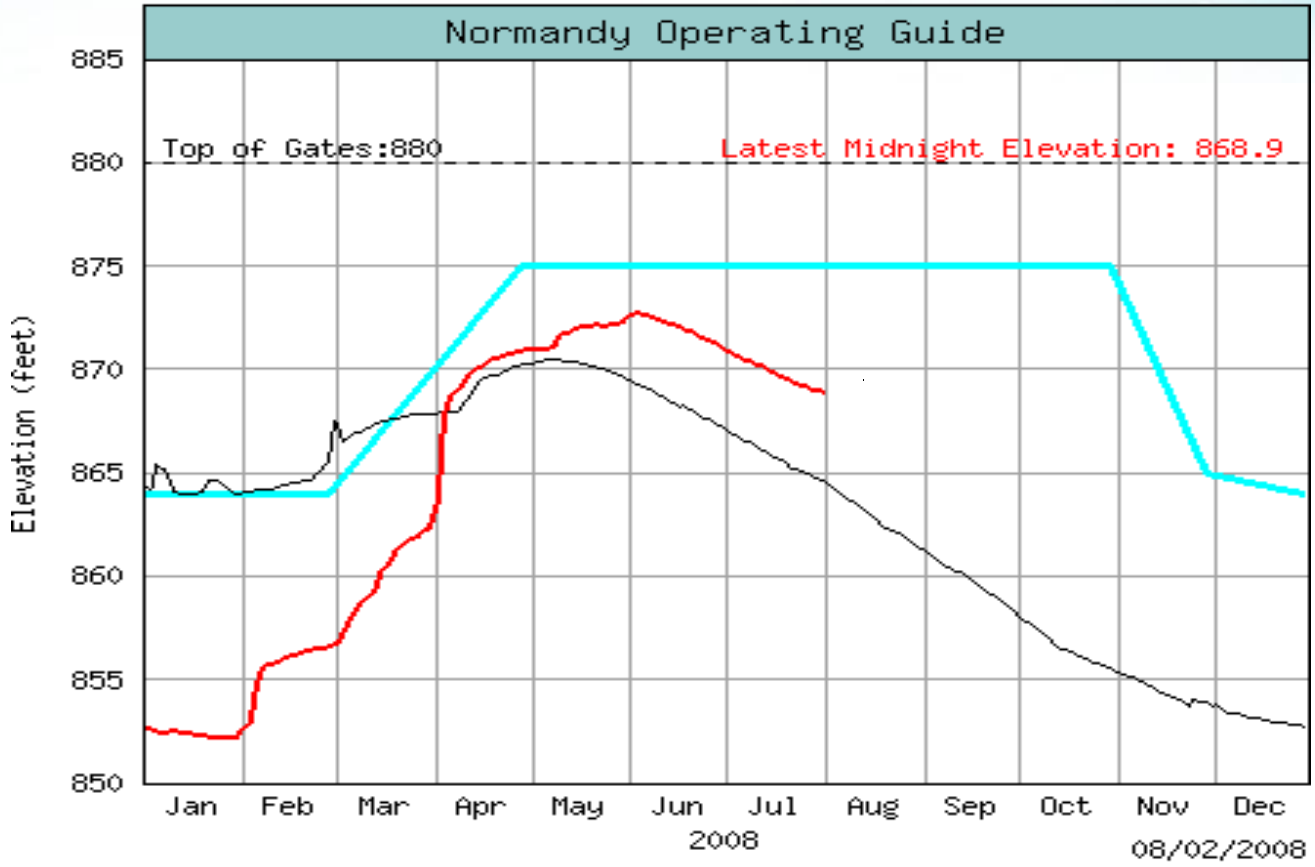
Normandy Dam

Normandy Reservoir Operating Guideline
As of October 24, 2007



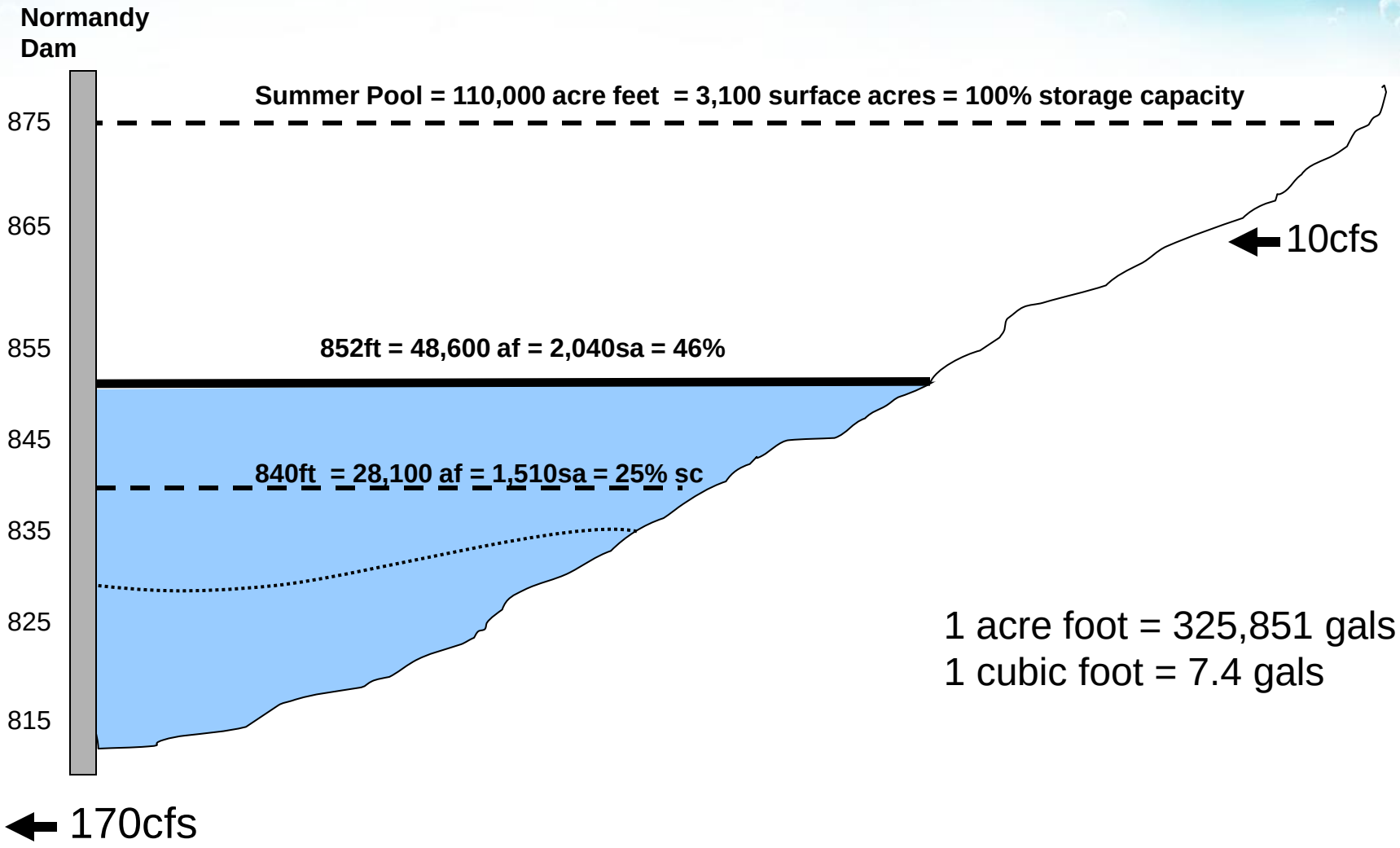
Guide Curve 2006 Observed Midnight Elevations 2007 Observed Midnight Elevations

Normandy Reservoir Operating Guideline
As of August 2, 2008



Guide Curve 2007 Observed Midnight Elevations 2008 Observed Midnight Elevations

Normandy Reservoir Storage Capacity



Optimizing Normandy Reservoir Releases (ONRR)

- 2008 - Drought exposes issue with instantaneous target
- 2013 - Developed ONRR Program
- 2014 to 2023 - Environmental Assessment with DMP
- 2024 - ONRR EA separated
  - TVA held Public Meeting for ONRR EA
  - EA Team compiled comments and responses
  - Draft EA completed
- 2025 - USFWS review, and BO completed
  - Implementation begins Summer 2025

Optimizing Normandy Reservoir Releases (ONRR)

Current Operating Flow Constraints

- Minimum **instantaneous** flow of 155 cfs for the period of June 1 through November 30
- Minimum **instantaneous** flow of 120 cfs for the period of December 1 through May 31

Proposed Operating Flow Constraints

- 7-day rolling **average** flow of 155 cfs for the period of June 1 through November 30 with a minimum flow of 145 cfs
- 7-day rolling **average** flow of 120 cfs for the period of December 1 through May 31 with a minimum flow of 110 cfs

Normandy Reservoir Capacity Improvement Efforts

- 2010 - DRA approached TVA with the NRCI project for implementation
- 2011 - Completed the Normandy Dam Pre-Preliminary Stability Analysis Calculations
- 2013 - Completed the Preliminary Stability Analysis Report
- 2015 - Completed the NRCI report
- 2016 - TVA recommended a hold on the project

- 2023 - TVA's Net Water Demand Analysis indicated need for available water below the DRUC pumping capacity
  - DRUC began engineering of intake improvements
- 2024 - DRUC received ARPA grant from TDEC
  - DRUC signed agreement with DRA for $3 million
- 2025 - DRUC begins construction of improvements

Normandy Reservoir Capacity Improvement Efforts

- Optimization and DRUC Intake Modifications provide enhanced drought resilience
- But do not provide additional storage capacity to support future growth
- Increasing the height of the dam provides over one billion gallons of water per foot
- Raising the dam five feet could add as much as six billion gallons of additional water

Regionalization Working Group

DRAFT Recommendations

- Normandy Reservoir Capacity Improvements
- Downstream Intake / Pipelines

New Downstream Intake

- Downstream of the 100cfs flow-by constraint
- Near Maury/Hickman County Line
- Approximately 35 river miles, 20 land miles
- First phase of pipeline to TN River
- Removes reliance for water released from Normandy Reservoir - Which would improve drought resilience
- Supports projected future water supply needs
- CPWS has received permit for the withdrawal
- Increases indirect potable water reuse by up to 17 MGD

Regionalization Working Group

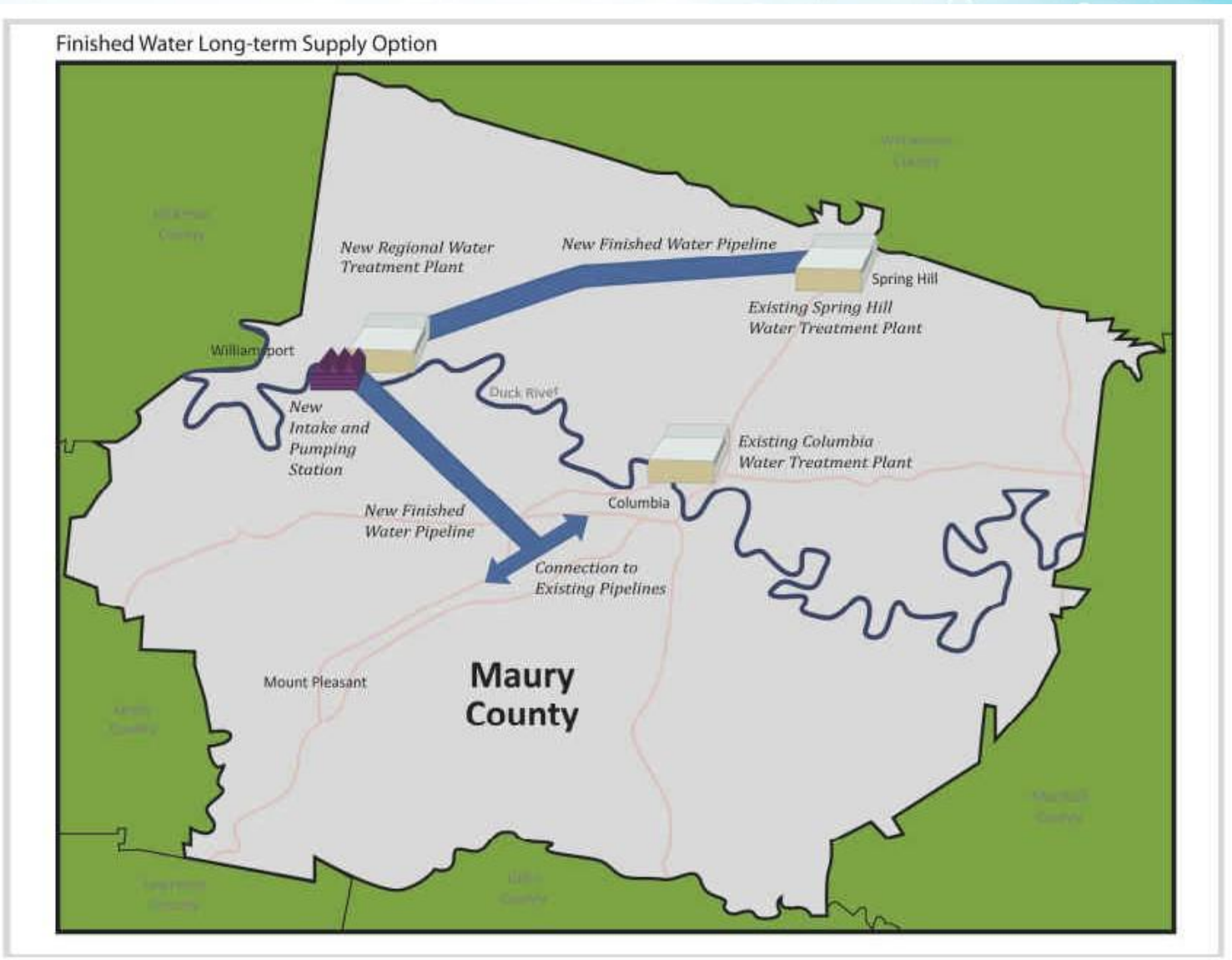
DRAFT Recommendations

- Normandy Reservoir Capacity Improvements
- Downstream Intake / Pipelines
- Regionalization / Consolidation of Utilities

What opportunities exist to improve utility efficiency through mergers or cooperation?

The utilities in the Duck River Basin already have a long history of mutual support and cooperation.

Example Regional Water Supply



Regionalization Working Group

DRAFT Recommendations

- Normandy Reservoir Capacity Improvements
- Downstream Intake / Pipelines
- Regionalization / Consolidation of Utilities
- Improve Utility Interconnections

How could utilities in the basin increase interconnections to improve efficiency, emergency support, and drought resilience?

Regionalization Working Group

DRAFT Recommendations

- Normandy Reservoir Capacity Improvements
- Downstream Intake / Pipelines
- Regionalization / Consolidation of Utilities
- Improve Utility Interconnections
- Enhancements to the Duck River Agency

The DRA has been a model of utility and community cooperation for over 50 years. What steps could be taken to enhance the Agency and provide even better regional cooperation?

Regionalization Working Group

DRAFT Recommendations

- Normandy Reservoir Capacity Improvements
- Downstream Intake / Pipelines
- Regionalization / Consolidation of Utilities
- Improve Utility Interconnections
- Enhancements to the Duck River Agency
- Evaluate Longer Term Solutions
  - Cumberland Pipeline
  - Columbia Dam
  - Water Harvesting Options

Cumberland Pipeline

Mallory Valley Utility District
Water Transmission Main
Feasibility Study

Final Report
August 28, 2025

QUESTIONS?