Regional Water Security & Financial Sustainability

CPWA

The Opportunity

The Cumberland Plateau faces a defining moment in regional water infrastructure. Population growth, aging infrastructure, long-term raw water supply concerns, and increasing capital costs require a coordinated regional strategy.

Joining the Cumberland Plateau Water Authority provides the City of Crossville with:

- Regional ownership and governance
- Shared infrastructure costs
- Stronger long-term borrowing capacity
- Operational efficiencies and economies of scale
- Greater water security for future generations
- Lower long-term rate pressure on customers
- Access to regional planning and infrastructure development
- Unified strategy for drought resilience and raw water expansion

Regional Water Challenges Are Increasing

Aging Infrastructure

Water and sewer infrastructure replacement costs continue to rise annually

Deferred maintenance compounds future liabilities

Systems struggle to fund major upgrades

Water Supply Risk

Regulatory Pressure

Increasing compliance requirements

Emerging water treatment regulations

More expensive treatment technologies needed over time

Growth Pressure

Cumberland County continues to attract residential development

Industrial and commercial recruitment requires reliable long-term water capacity

Economic development depends on water certainty

CPWA Was Created for This Purpose

- The Tennessee General Assembly authorized the creation of the Cumberland Plateau Water Authority in 2022 specifically to create a regional framework for water infrastructure planning, financing, and long-term sustainability across Cumberland County and surrounding utilities.

<u>The Vision</u>

A unified regional water authority designed to:

- Protect water resources for future generations
- Create financial sustainability through scale
- Coordinate capital improvements
- Improve operational efficiency
- Strengthen emergency redundancy and resiliency
- Support regional economic growth
- Reduce duplication

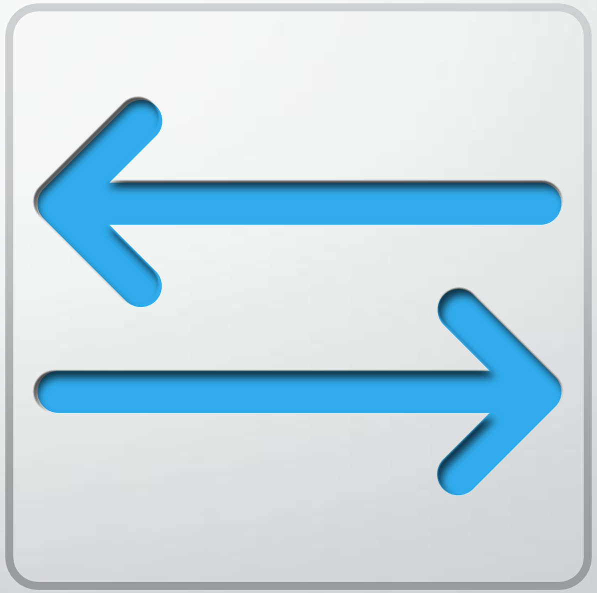
What Regionalization Means

Regionalization does NOT mean:

- Loss of local representation
- Loss of service identity
- Immediate operational disruption

Regionalization DOES mean:

- Shared strength
- Shared planning
- Shared financial capacity
- Shared future success



Why Crossville Is Critical

Crossville is uniquely positioned because:

- It is the economic center of Cumberland County
- It already serves as the regional population hub
- It has critical infrastructure assets
- It has the technical and operational experience necessary for regional leadership

Without Regionalization

Crossville risks:

- Bearing disproportionate future infrastructure costs
- Increasing debt burdens
- Limited access to economies of scale
- Greater future customer rate pressure
- Fragmented long-term planning across the region

With Regionalization

Crossville gains:

- Expanded customer base supporting future projects
- Stronger balance sheet through consolidation
- Shared debt capacity
- Stable rate structure
- Greater leverage for state and federal funding
- Long-term operational resilience

Key Strengths of CPWA

- Growing customer base
- Operational integration experience
- Existing regional governance structure
- Regional mission already underway
- Proven ability to combine systems and reduce duplication

Strategic Position

- CPWA was designed to become the long-term regional water platform for the Cumberland Plateau.

Current Challenges:

- Long-term raw water supply
- Wastewater expansion
- Future treatment expansion
- Infrastructure replacement
- Increasing costs
- Independent debt burden
- Need for larger-scale capital planning

Strategic Reality:

- Crossville can continue independently, but future projects will become more expensive and more difficult to finance without regional participation.

Immediate Financial Advantages

Greater Borrowing Power

- Larger regional systems are typically viewed more favorably by lenders and state revolving fund programs.

Rate Stabilization

- A broader customer base distributes future infrastructure costs across more customers.

Shared Administrative Costs

Potential savings in:

- Insurance
- Billing systems
- Service contracts
- Compliance administration
- Procurement costs
- Fleet and equipment redundancy

Operational Efficiency

- Shared staffing ability
- Coordinated maintenance planning
- Unified emergency response
- Consolidated purchasing power

Future Regional Project Needs

<u>The Plateau's Long-Term Water Needs</u>

Historical regional studies repeatedly found future raw water supply expansion as essential to long-term sustainability in Cumberland County.

Anticipated Future Projects:

- Raw Water Expansion
- Treatment Capacity
- Distribution System Investments
- Technology & Security
- Long-Term Capital Needs

Combined Future Position with Regionalization

Metric	Independent Approach	Regional CPWA Approach
Future Capital Cost Burden	Higher	Shared
Rate Increase Pressure	Higher	Lower
Debt Capacity	Limited	Expanded
Reserve Stability	Moderate	Stronger
Grant Competitiveness	Moderate	Stronger
Emergency Redundancy	Limited	Improved
Long-Term Water Security	Uncertain	Strengthened

Economic Development Impact

Water and Sewer Infrastructure Drives Economic Growth

- Economic development is directly tied to water reliability and long-term capacity.

- **Site Selection Reality**

Industrial and commercial prospects evaluate:

- Water availability
- Infrastructure redundancy
- Long-term capacity
- Rate stability
- Regional resiliency

Competitive Advantage

- A unified regional authority positions Cumberland County more competitively against peer communities across Tennessee.

Regional Water = Regional Growth

Governance & Representation

Regional Governance Model

- Crossville would keep representation and influence within the Authority structure.

Principles of Governance

- Local representation stays critical
- Shared decision-making
- Transparent financial reporting
- Regional accountability
- Long-term planning focus

Goal

- Create a structure where every participating community benefits from regional strength while supporting local voice and accountability.

What Happens If We Do Nothing?

Financial Risk

- Rising debt costs
- Higher future rate increases
- Reduced reserve flexibility

Infrastructure Risk

- Deferred maintenance escalation
- Emergency repair exposure
- Limited redundancy

Water Supply Risk

- Long-term drought vulnerability
- Limited regional coordination
- Reduced infrastructure resiliency

Strategic Risk

- Missed funding opportunities
- Fragmented regional planning
- Reactive instead of proactive infrastructure investment

Merger Analysis

CPWA

Merger Analysis

City of Crossville Merging Into Cumberland Plateau Water Authority

$23.3M/yr	31,387	$109.5M	$0 Debt
Combined Revenue	Combined Customers	Combined Equity	CPWA Brings

Financial Impact Analysis | 6-Year CIP & Debt Plan | FY2026–FY2031

Prepared for City Council Discussion | Daniel E. Peterson, CPA

Background & The Core Question

CPWA (Surviving Entity)

- Revenue: $9.3M/yr
- Customers: 16,978 water
- Long-Term Debt: $0 — Debt Free ★
- Equity: $39.2M
- Merger of WCUD, SCUD & COUD

+

City of Crossville (Joining)

- Revenue: $14.0M/yr
- Customers: 14,409 water + 5,582 sewer
- Long-Term Debt: $29.4M
- Equity: $70.3M
- $131.2M capital program FY2026–2031

The Core Question

Can Crossville execute its $131M capital program independently — and at what cost? Or does merging with CPWA offer a materially better path?

Four Scenarios Modeled — FY2026 to FY2031

S1 — AVOID

No Merger / Full CIP

City Standalone

CIP Scope:

$131.2M — All Projects

Worst Case — Maximum Rate Pressure

S2 — ★ RECOMMENDED

Merger / Deferred CIP

CPWA Merged

CIP Scope:

$71.2M — Dam/Res Deferred

RECOMMENDED — Best Outcomes Across All Metrics

S3 — VIABLE

No Merger / No Dam+Res

City Standalone

CIP Scope:

$71.2M — Dam/Res Deferred

Middle Ground — No Merger Benefit

S4 — VIABLE

Merger / Full CIP

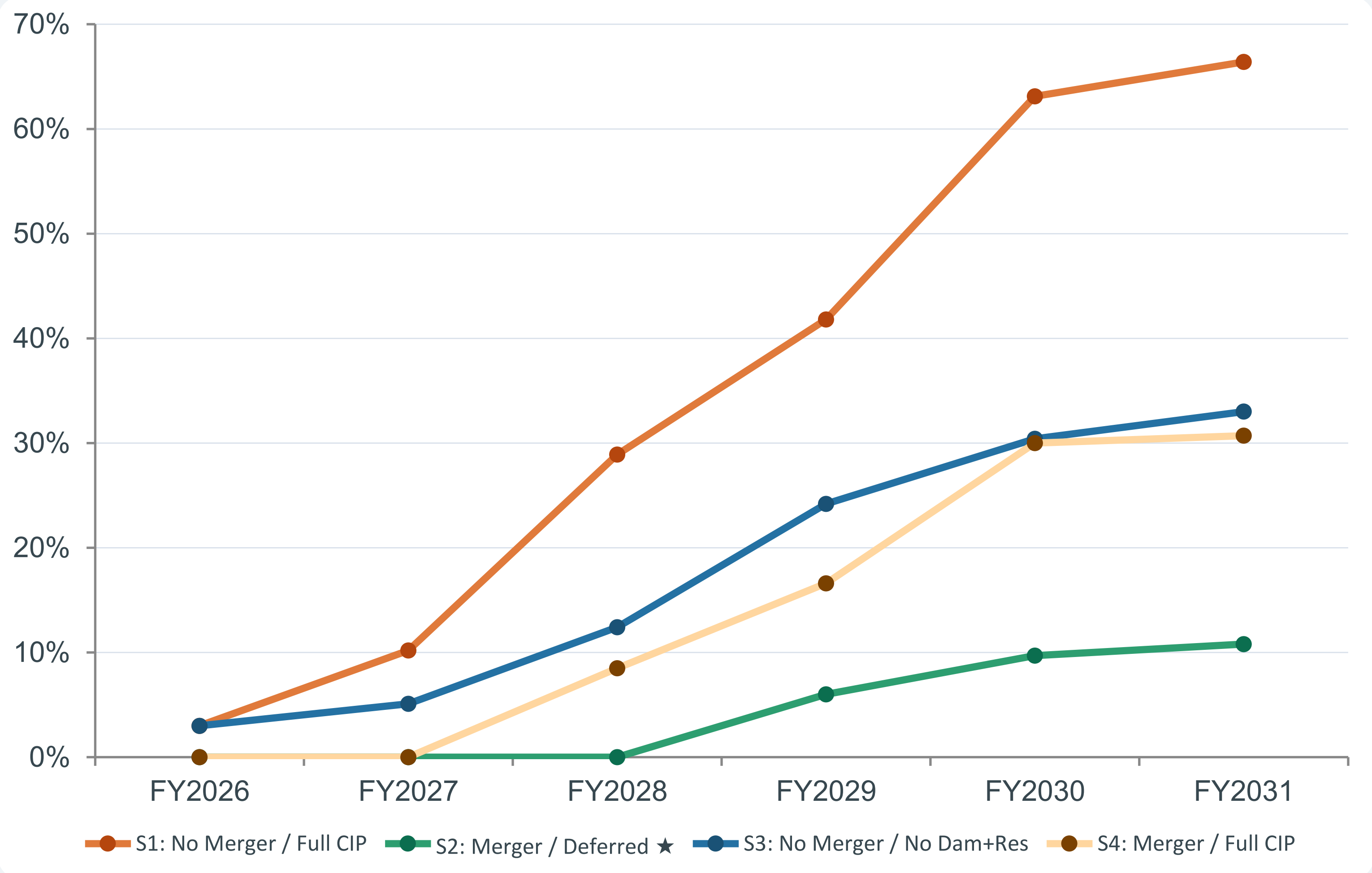
CPWA Merged

CIP Scope:

$131.2M — All Projects

Full CIP Affordable Via Merger

Customer Rate Impact — Cumulative Burden FY2026–FY2031



S2 Cumulative Burden

9.7%

vs 63.1% for S1

Impact on $50/mo Bill (YR5)

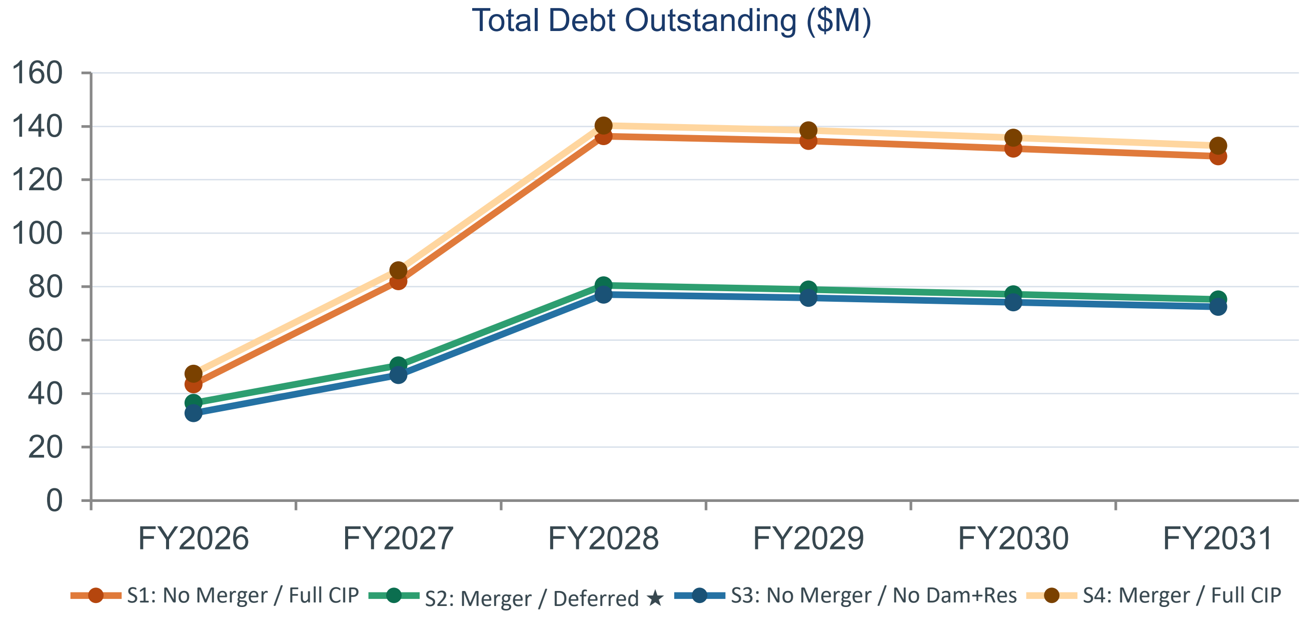
S1 No Merger	**+$31.56/mo**
S2 Merger ★	**+$4.86/mo**

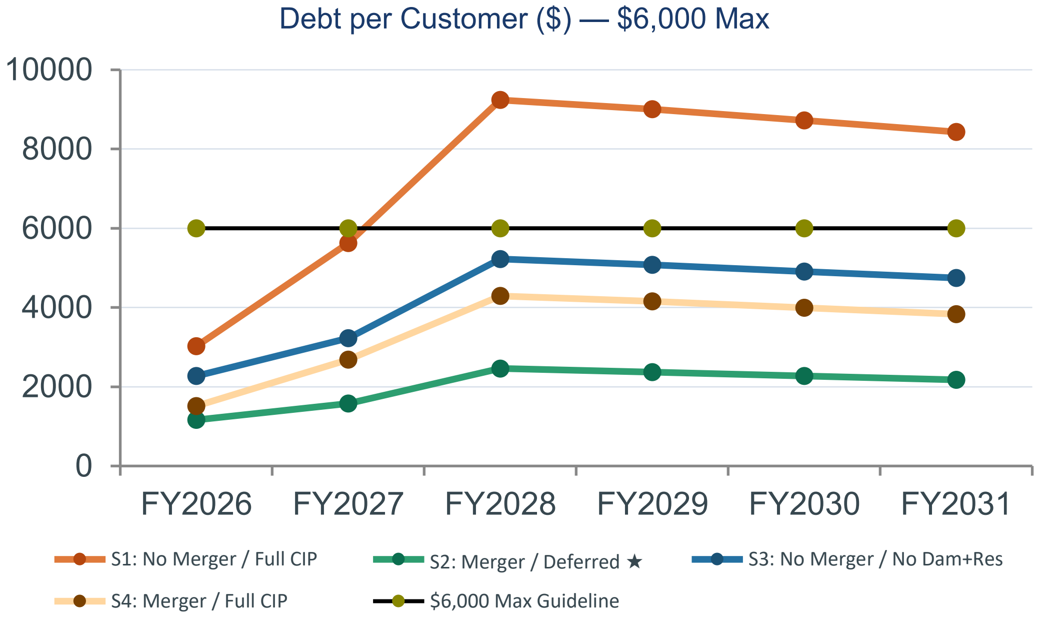
Worst Single-Year Increase

S1: +17% (YR3)

S2: +6% (YR4)

Debt Trajectory — Total Debt & Debt per Customer





S1 Peak Debt/Customer

$9,237

EXCEEDS $6K guideline

S2 Peak Debt/Customer

$2,462

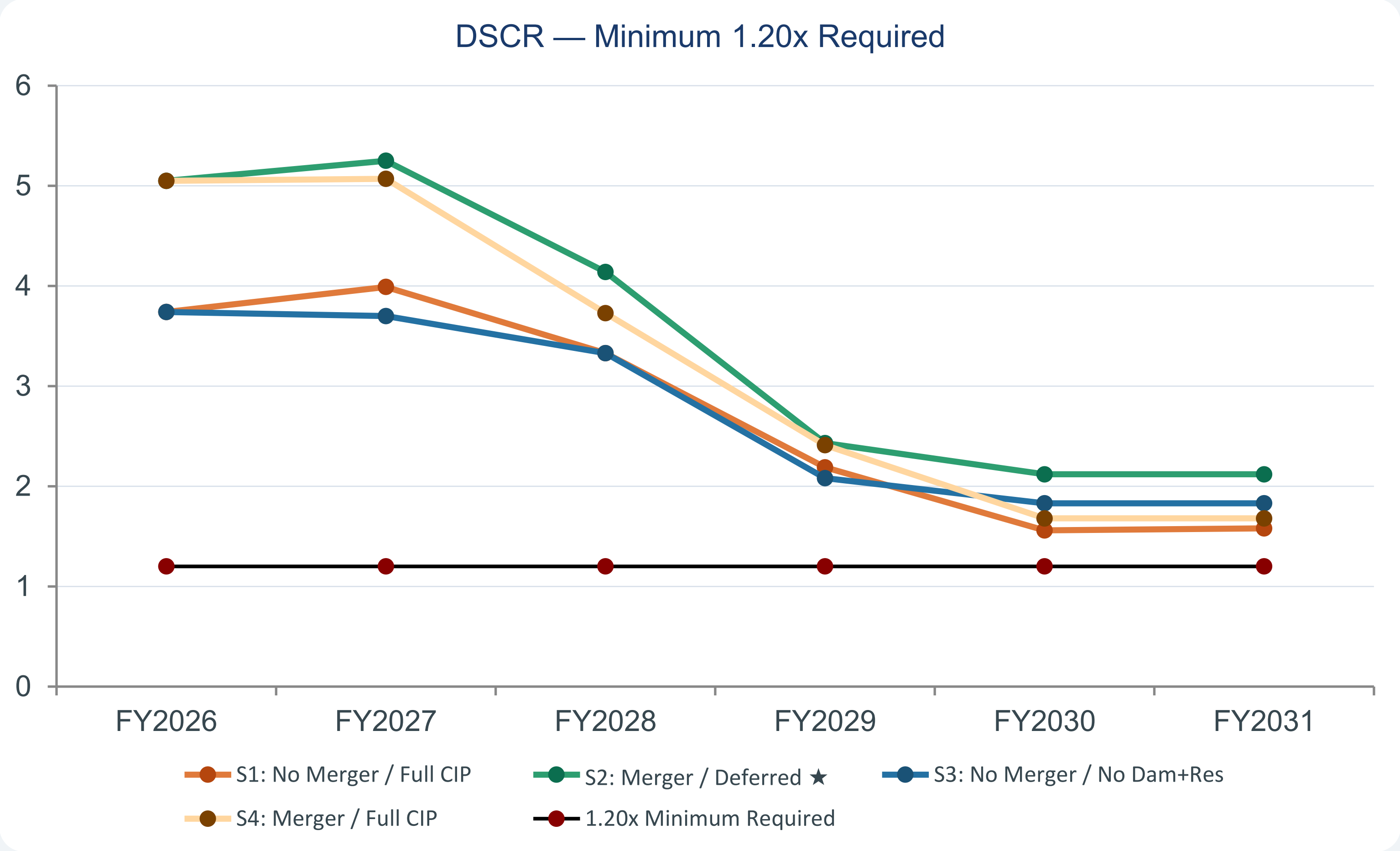
Well under $6K guideline

Merger Debt Reduction

$55.8M

S2 vs S1 at peak (YR3)

Debt Service Coverage Ratio (DSCR) & Financial Ratios



S2 Peak DSCR

5.25x

YR2 — strongest coverage

S2 Worst DSCR

2.12x

Well above 1.20x minimum

S1 Worst DSCR

1.56x

Near minimum — high risk

All four scenarios remain above the 1.20x minimum throughout the planning period.

What CPWA Brings to the Merger

01

Clean Balance Sheet — $0 Debt

CPWA has fully retired all long-term debt from WCUD, SCUD & COUD. Annual interest savings ~$224K/yr. Brings $39.2M equity and zero liabilities.

02

Revenue Base Expansion

Adds $9.3M in annual revenue immediately. YR1 combined: $23.7M — 63% larger than standalone. Combined customer base 2.2× larger to share debt burden.

03

$60M Capital Deferral

CPWA is advancing alternative regional water supply solutions, alleviating near-term need for $60M Dam Mitigation and Reservoir Expansion projects.

04

Regionalization & Grants

Regionalization is a Tennessee Comptroller priority. Any grants received directly reduce debt requirements. Admin cost savings not yet modeled.

Complete Scenario Scorecard — All Key Metrics

Metric	S1: No Merger Full CIP	S2: Merger Deferred CIP ★	S3: No Merger No Dam+Res	S4: Merger Full CIP
Peak Annual Rate	+17%	+6%	+10.5%	+11.5%
Cumulative Rate YR5	+63.1%	+9.7%	+30.4%	+30.1%
Peak Total Debt	$136.3M	$80.5M	$77.1M	$140.3M
Peak Debt/Customer	$9,237 ⚠OVER	$2,462	$5,225	$4,291
Worst DSCR	1.56x	2.12x	1.83x	1.68x
Debt/Assets Peak	64.9%	36.9%	45.0%	50.8%
YR1 Revenue Base	$14.35M	$20.39M	$14.35M	$20.39M
Customer Base YR1	14,409	31,387	14,409	31,387
Verdict	**AVOID**	**★ RECOMMENDED**	**VIABLE**	**VIABLE**

Conclusion & Recommendation

- ★ S2 (Merger / Deferred CIP) is the best financial outcome under every metric tested — lower debt, lower rates, strongest coverage, and no debt from CPWA.
- ★ Customers save a cumulative 53.4 percentage points in rate increases over 5 years versus the no-merger / full CIP path (9.7% vs 63.1%).
- ★ Merger peak debt per customer: $2,462 — vs $9,237 standalone, which exceeds the $6,000 per-customer guideline.
- ★ CPWA brings $39.2M equity, $0 debt, and 17,000+ customers to immediately strengthen the combined entity's financial position.
- ★ DSCR remains above 2.1x at worst in S2, providing substantial cushion above the 1.20x minimum covenant requirement.

RECOMMENDED ACTION

Vote to authorize a public referendum on the merger of City of Crossville water and wastewater operations into Cumberland Plateau Water Authority — for placement on the City Council agenda, June 9, 2026.

Appendix — Annual Rate Increase Detail

Scenario	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	Cumul. YR5
S1: No Merger / Full CIP	+3.0%	+7.0%	+17.0%	+10.0%	+15.0%	+2.0%	+63.1%
S2: Merger / Deferred CIP ★	+0.0%	+0.0%	+0.0%	+6.0%	+3.5%	+1.0%	+9.7%
S3: No Merger / No Dam+Res	+3.0%	+2.0%	+7.0%	+10.5%	+5.0%	+2.0%	+30.4%
S4: Merger / Full CIP	+0.0%	+0.0%	+8.5%	+7.5%	+11.5%	+0.5%	+30.1%

★ S2 requires zero rate increases in FY2026–FY2028. Cumulative 5-year burden 9.7% vs 63.1% for S1 — a savings of 53.4 percentage points.

Bottom Line

Doing nothing is still a choice, and likely the most expensive long-term decision.

The question is no longer whether regionalization is necessary.

The Cumberland Plateau Has One Water Future

- The infrastructure challenges ahead are too large and too expensive for fragmented systems to solve independently.

The utilities that collaborate now will:

- Build stronger financial systems
- Protect ratepayers long-term
- Secure future water supply
- Improve regional competitiveness
- Leave future generations with sustainable infrastructure

The City of Crossville has an opportunity to be part of a team designed to lead the next generation of regional water strategy in Tennessee.

By joining CPWA, the City is not giving something up. It is helping build something larger, stronger, and more sustainable for the future of the Cumberland Plateau.

Timeline

January 2025
Started Discussions with all Cumberland County Utilities

May 2025
Crab Orchard Utility Joins CPWA

January 2026
South Cumberland Utility Joins CPWA

February 2026
West Cumberland Utility Joins CPWA

June 2026
City Of Crossville…..

Questions