

The logo for Columbia Power & Water Systems (CPWS) features the letters "CPWS" in a bold, black, sans-serif font. Below the letters is a stylized graphic of a blue wave with a green lightning bolt-like shape above it.

Columbia Power & Water Systems

Williamsport Downstream Intake Project Overview

**A cornerstone structural project for water security and
stewardship in the Duck River Watershed**

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Columbia Power & Water Systems

Duck River Watershed Planning Partnership
August 10, 2026 Workshop | Nashville

Key Questions and Topics



What about Other Alternatives?

Isn't there a cheaper, faster way to do the same thing?



Public Involvement

Has the public had an opportunity to provide input and comment?



Why the Rush?

Can't we just pause and study this some more?



Fit with Governor's Executive Order and DRWPP

Does this work conflict with efforts underway by the Governor's Partnership?

Agenda

01

History of the Downstream Intake (DSI) Project

History of watershed stakeholder planning and alternatives analysis

02

Benefit to Watershed

Cornerstone project brings environmental and source water reliability benefits to entire watershed

03

Stakeholder Engagement and Approvals

History of public outreach and input throughout planning, permitting, and design

04

Need for DSI Project

Demands and risks exist today and increase over time

05

Supporting Future Projects

Cornerstone project dovetails with future source water projects and policy planning

06

Conclusion

Next steps for the project, questions and further discussion

Duck River Agency Planning Timeline



1965

Regionalism begins:
Duck River
Development Agency
(DRA) is formed as a
comprehensive regional
development / planning
agency.

2000

TVA identifies
downstream intake
among four “action
alternatives” to meet
the region’s water
supply needs.



2011

DRA identifies
downstream intake as
“cornerstone” element
of the 50-year water
supply plan that should
be “implemented as
soon as possible.”



- › **Water Supply Reliability** – provides a highly reliable source of supply , which eliminates reliance on Normandy Reservoir as the sole source of water supply during drought
- › **River Constraint** – increases instream flow at Columbia gage to maintain minimum flow of 100 cfs for all designated uses
- › **Columbia Intake** – Avoids Columbia withdrawal from Columbia Pool, at least during low flows (existing Columbia intake could be used as a backup)

5.8, 5.9, 5.10, 5.11, and 5.12). Operation of the project would not be likely to cause any adverse effects on water quality or aquatic life at the intake site and the flow not withdrawn from the river would help maintain aquatic life and recreation downstream from the Columbia water intake during drought conditions (Sections 5.4, 5.5, and 5.11). If

Duck River Agency Planning Timeline

2014

DRA notes adequate drought flows at “highly reliable” downstream intake site (Maury County Regional Water Supply Feasibility Study).

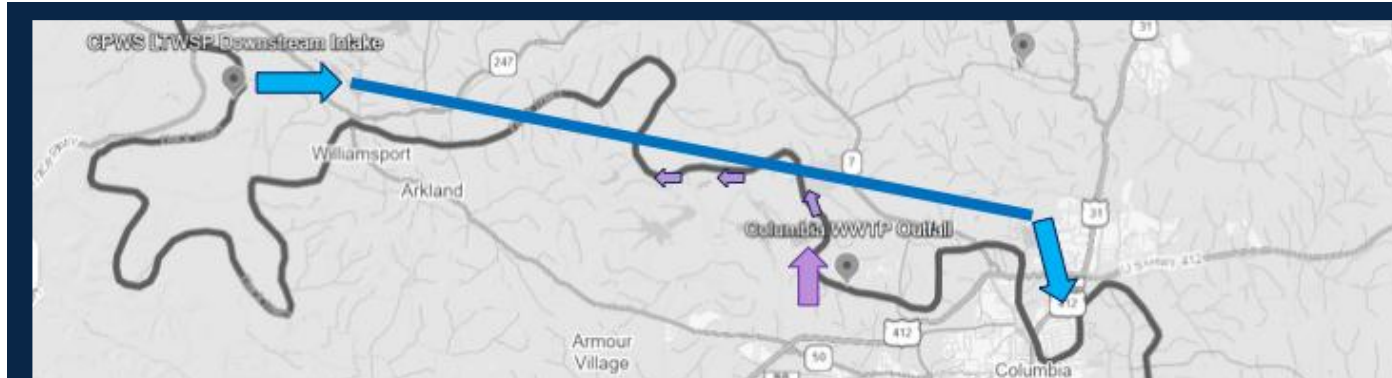
2016

Intake closer to Columbia would be “less effective to assimilate Columbia’s waste water before withdrawing ... for reuse” (Recommendations to the Maury County Commission from the Ad Hoc Water Committee).

CPWS conducts Strategic Water System Plan. DRA recommends “siting and permitting for the new intake” (MCRWS Strategic Plan).

2017

CPWS conducts Water Supply & Treatment Master Plan. DRA notes **“approximately 60 percent of the withdrawal would be returned to the Duck River upstream”** (MCRWS Intake and Pumping Station Siting Study).



Water Supply Options Discussed and Evaluated Over the Years by the Stakeholders

Alternatives Considered

- Raising Normandy Dam
- Fountain Creek Reservoir
- Tims Ford Lake
- Cumberland River
- Tennessee River

Planned Project

- Williamsport Intake (original TVA and DRA concept)
 - 32 MGD Intake
 - Water Harvesting with Storage Reservoir

Duck River Development Agency (DRDA) Comprehensive Regional Water Supply Plan

11/04/25

- Two Structural Elements (Raise Normandy and Downstream Intake Project)
- Identifies Risks to Existing Intake at Riverside Dam
 - Drought, Natural Disaster
 - “Key Constraint” for Maury County
- Downstream Intake Project by CPWS is Consistent with Prior Findings
- Downstream Intake Project is Listed as “First Leg” to TN River
- Meet Maury County Demands for Over 50-Years

Recommendation: Implement Downstream Intake Project
“As Soon as Possible”

Intended for:
The Duck River Development Agency
Shelbyville, Tennessee

Date:
November 4, 2025

Expedited Update of Structural
Elements from the 2011 Duck River
Comprehensive Regional Water
Supply Plan



RAMBOLL Bright ideas.
Sustainable change.

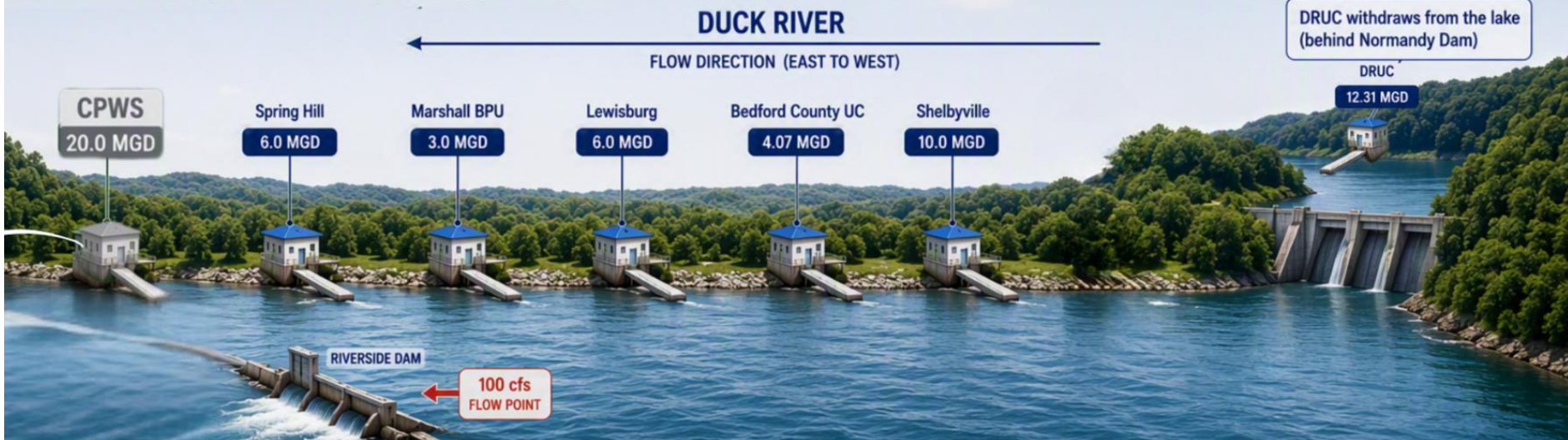
Confidential

Benefit to Watershed

The Downstream Intake Project Benefits all Other Surface Water Uses in the Duck River Watershed.

PROPOSED INTAKE RELOCATION

Increased Available Storage and Enhanced Long-Term Supply Reliability



The Downstream Intake Project Leaves More Water in Normandy.

An aerial photograph of a large concrete dam with multiple spillways. The reservoir is filled with dark blue water, and the surrounding landscape is a mix of dense green forest on the left and a grassy, sloping embankment on the right. The text is overlaid on the right side of the image.

Moving primary withdrawal to Williamsport removes up to 30 cfs of consumptive demand from Normandy release schedules.

This means Normandy can retain more water during periods of drought.

03 Stakeholder Engagement and Approvals

2024

- CPWS receives TDEC ARAP permit for downstream intake.
- Permit is contested by SELC during public comment period.

2025

- Concerns of TN Wildlife Federation resolved; CPWS welcomes additional environmental conditions; appeal of ARAP permit dropped.
- CPWS receives favorable BO from USFWS.
- CPWS receives remaining permits from State and Federal Jurisdictional Agencies as part of NEPA process.
- CPWS prepares Fiscal Model and Rate Study.

2026

- GMP received from CMAR for Downstream Intake Project.
- State and Federal Loan Agreements Finalized.

CPWS and Stakeholders Have Engaged the Public Throughout the Planning, Design, and Permitting Process.

Public Notice and Comment Period

- 4 Public Comment Periods from 2024 to 2025
- 4 Notices and Public Announcements from 2017 to 2026

Public Outreach Meetings and Workshops

- 9 Public Workshops by DRA from 2009 to 2010
- 23 CPWS Meetings and Work Sessions from 2019 to 2026
- LTWSP Joint Community Meeting in 2019
- CPWS Open House for Acquisition of American Legion Property in 2024
- Architectural Design Review for WTP (City Planning Commission) in 2024
- 3 Presentations at Community Meetings in 2026

Public Hearings

- 8 Public Hearings at Columbia City Council from 2025 to 2026
- 6 Public Hearings at CPWS from 2017 to 2023



The Downstream Intake Project Fits in the Maury County Water System Planning by Providing Additional Source Water for Eastern Maury County.

*“MCWS chose not to participate in the WIFIA loan application in 2019, but MCWS continued then and now to support CPWS in their pursuit of a drought-proof supply of high-quality drinking water, including the construction of a downstream intake. **Your ambitious project will benefit roughly 60 percent of MCWS’s current customers that will continue to be served by CPWS, even if MCWS secures a different source of water for its customers in eastern Maury County.** Further, we expect that your project will enable CPWS to continue to support MCWS’s growth in the western parts of Maury County.”*

— MCWS letter to CPWS, Sept. 23, 2022

04

The Need

Reliable Water for Our Community

The Downstream Intake Project and its Connection to Long-term Water Supply Program (CommunityH2O) addresses current reliability risk and near-term capacity pressure — not growth alone

Fixing a single-point exposure

A 100-year-old impoundment in downtown Columbia

Increasing capacity

Peak withdrawal has reached 18.293 MGD; permit capacity is 20 MGD

Protecting the Duck

Relocation to Williamsport — more flow, less ecological impact

Preserving options

Source-agnostic treatment capacity; 34 miles closer to the TN River; etc.

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CommunityH2O
Reliable, Sustainable, Resilient

Supporting Future Projects

The Downstream Intake Project Supports the Duck River Watershed Planning Partnership's Objectives

The Downstream Intake Project is consistent with Executive Order 108 because it balances the same priorities the Order established: **sustainable water supply, economic growth, drought resilience, regional coordination and protection of the Duck River's ecological integrity.**

It is part of the overall solution, and it is **foundational infrastructure that makes future regional solutions achievable.**

Executive Order 108 called for coordinated action. The Downstream Intake Project is coordinated action already permitted, designed and moving toward construction.

The program is not a substitute for the Partnership's long-term work.
It is the permitted foundation that makes that work more achievable.

Duck River Watershed Planning Partnership Initial Report

11/20/25

- Commissioned Based on Need to Protect the Duck River
- Report Assumes Downstream Intake Project is Underway and Completed by CPWS
 - Recommendations Build on that Premise
 - CPWS Permit at 32 MGD Listed as Existing
 - Downstream Intake Project is “First Step” Toward Pipeline to TN River
- Downstream Intake Project by CPWS is Consistent with Prior Findings
- Downstream Intake Project is Listed as “First Leg” to TN River

Recommendation: TN River Pipeline Feasibility Study

- Promotes Indirect Potable Reuse at Local Utility Level (Downstream Intake Project)



Duck River Watershed Planning Partnership Initial Report

November 20, 2025

Tennessee Department of Environment & Conservation

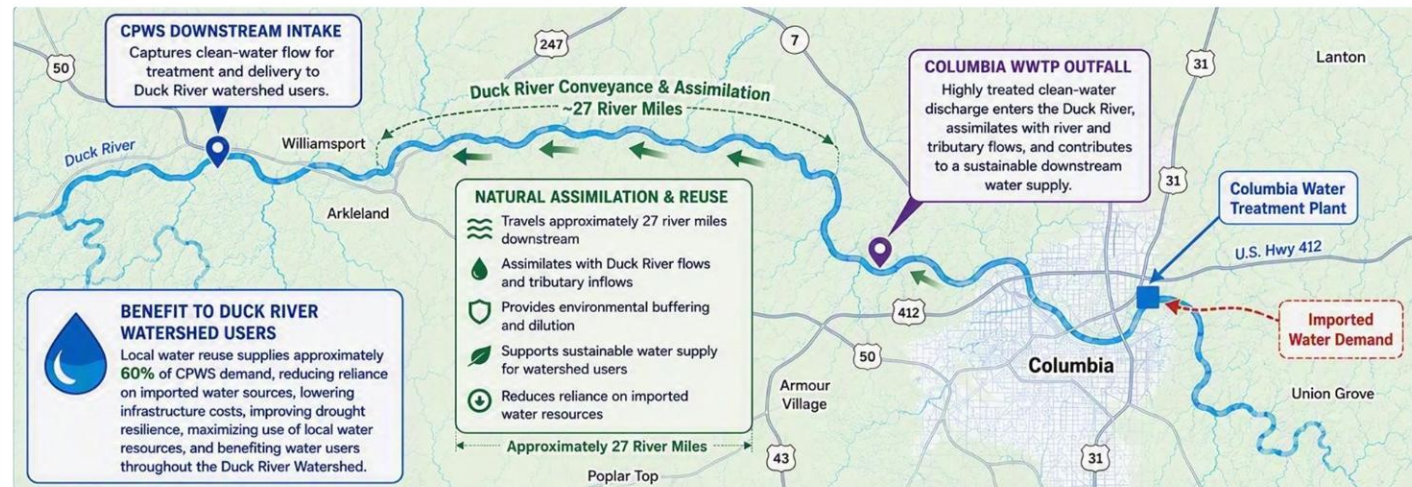


The Downstream Intake Provides a Huge Headstart to a Connection to the Tennessee River.

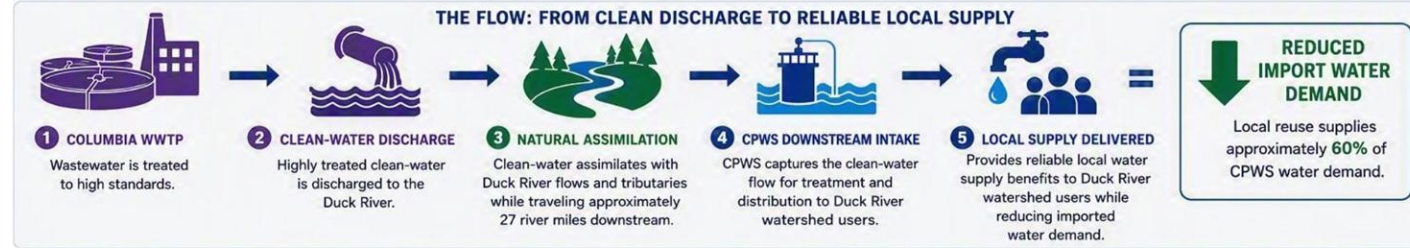


The Downstream Intake *reduces* future water import demand...

Re-Use of Clean Water Discharge from Columbia WWTP:



The ability to re-use the Clean-Water Discharge from Columbia WWTP via the DSI reduces the import water demand for Maury County.



The Downstream Water Intake Project Supports the Overall Objectives of the Duck River Watershed Planning Partnership.

- 1) A robust analysis of alternatives has been completed, finding no viable alternatives to our problem.
- 2) Extensive public outreach and workshops have indicated community buy in and surfaced risks that have been thoroughly mitigated in program design.
- 3) CPWS must act urgently to address current needs. Planning, design, and permitting is complete and delaying action will only increase costs of the final project.
- 4) The Downstream Intake Project supports future projects to increase the sustainability of the Duck River (including a pipeline to the Tennessee River.)
- 4) The Downstream Intake Project Plan aligns with Governor's executive order and supports long term water planning.

Key Questions and Topics

What about Other Alternatives?

Robust alternatives analysis was performed.

This is the only available structural improvement in the watershed which accomplishes the established goals.

Public Involvement

Long history of Public Outreach, Workshops, Public Comment Periods, and Hearings.

Why the Rush?

Needs exist today.

All planning, design, and permitting steps complete.

Construction costs and risks continue to escalate with time.

Fit with Governor's Executive Order and DRWPP

Downstream Intake Project is a cornerstone project for DRA and DRWPP long range planning.

Downstream Intake is complimentary with and foundational for future source water planning and efficiency.

CPWS



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Thank You

Community **H2O**
Reliable, Sustainable, Resilient

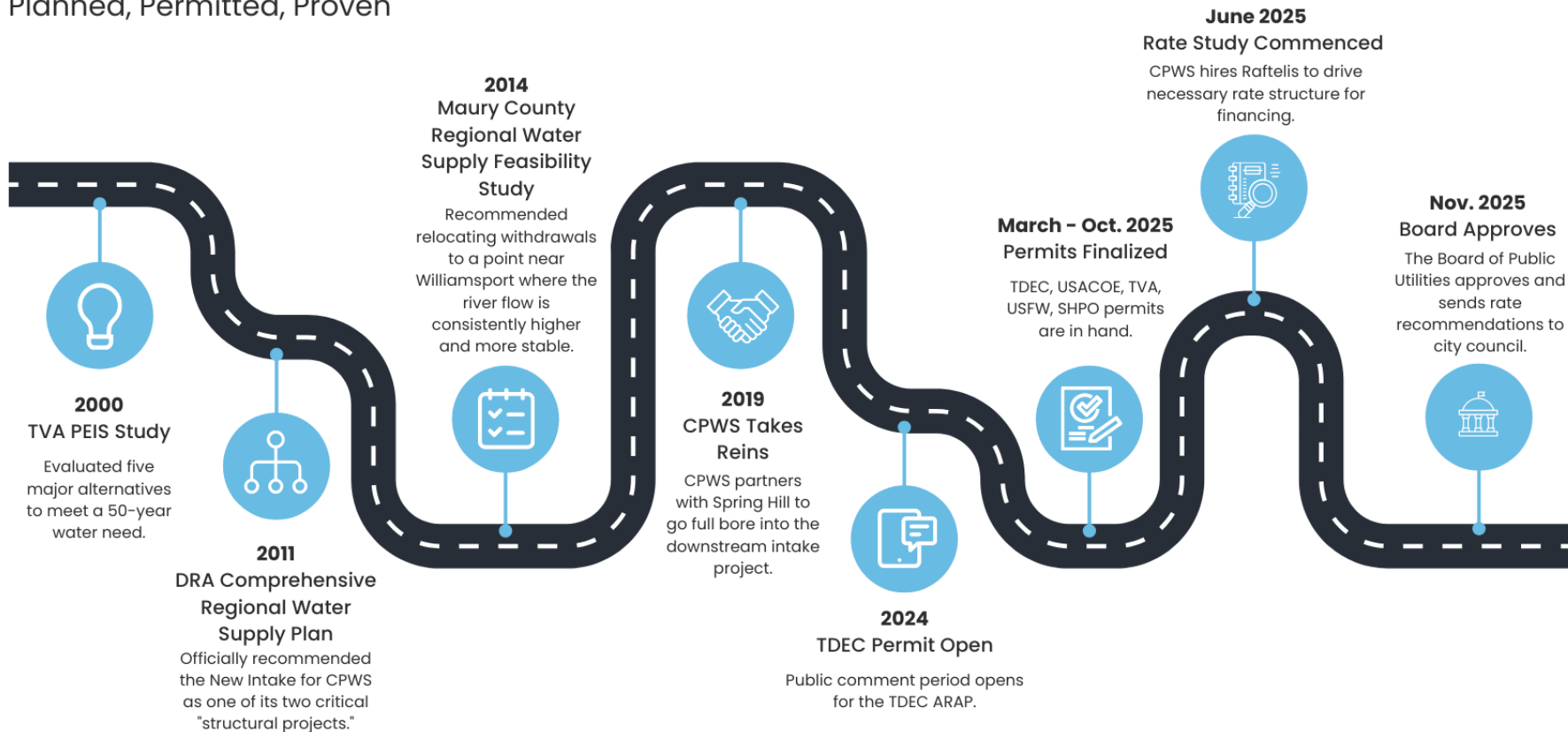
cpws.com | (931) 388-4833 | 201 Pickens Lane, Columbia, TN 38401 | CommunityH2O.org

Appendices



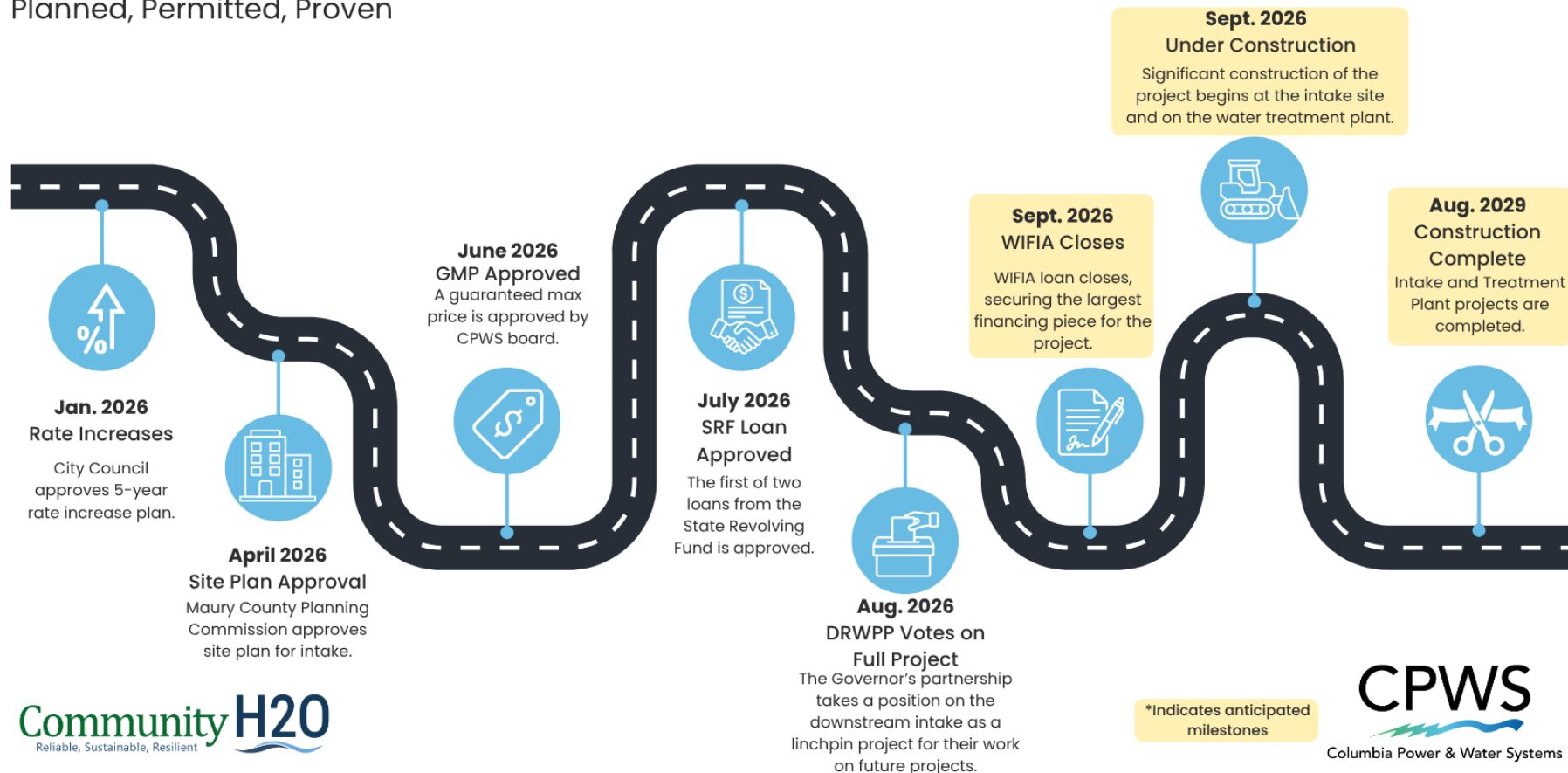
Project Roadmap Downstream Intake

Planned, Permitted, Proven



Project Roadmap **Downstream Intake**

Planned, Permitted, Proven



Aligned benefits of the Downstream Intake Project include:

Balances water supply and river protection by shifting CPWS' primary withdrawal to a downstream location with greater flows and fewer environmental constraints.

Strengthens drought resilience by reducing single-source vulnerability, adding redundancy and reducing CPWS' dependence on upstream Normandy Reservoir — a benefit to all upstream users and utilities.

Supports regionalization by building the core supply and treatment infrastructure needed today while preserving compatibility with future regional options, including eventual Tennessee River connectivity if pursued.

Aligned benefits of the Downstream Intake Project include (continued):

Advances habitat conservation by relocating the primary withdrawal away from more sensitive upstream reaches and into a location vetted through state and federal environmental review.

Complements water-loss reduction and conservation strategies by creating a more reliable infrastructure backbone that can be paired with efficiency, reuse and future interconnection. In conjunction with the Downstream Intake Project, CPWS has committed to conservation measures including maintaining its water loss ratio at less than 15 percent

Reflects broad coordination with regulators, utilities, local stakeholders and the public to balance reliable water service, environmental stewardship and responsible growth.

Preserves future flexibility by maintaining capacity in the easement for a second pipeline if needed.

CPWS LONG-TERM WATER SUPPLY PROGRAM

Timeline

BEFORE FIRST DRWPP MEETING

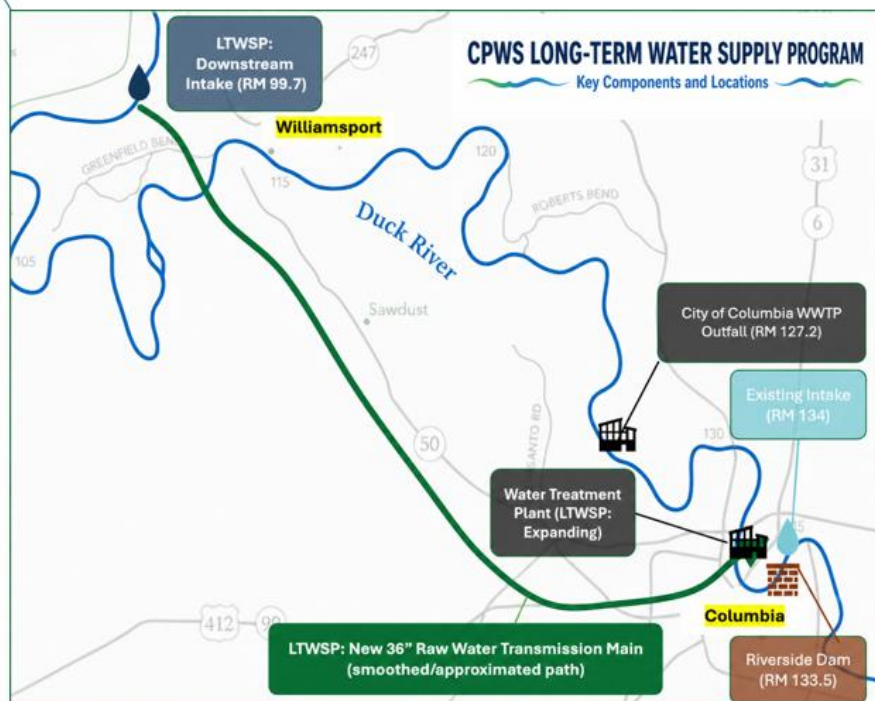
2015	Design & Permitting	Duck River Agency recommends siting and permitting for the new intake.
2016	Design & Permitting	Field studies and investigations begin to select a new intake site; CPWS conducts its Strategic Water System Plan.
Jul. 2018	Financing	Initial WIFIA loan application.
Jun. 2019	Financing	WIFIA reapplication accepted as a regional project.
2019	Design & Permitting	Permitting process begins.
2020	Design & Permitting	Design process begins.
Feb. 2021	Financing	State Revolving Fund loan application process begins.
2022	Design & Permitting	Preliminary design completed.
Dec. 2023	Financing	First revenue anticipation note approved.

FIRST DRWPP MEETING TO PRESENT DAY

Mar. 4, 2025	DRWPP	First meeting of the Duck River Watershed Planning Partnership.
Nov. 2025	Design & Permitting	All permitting complete.
Dec. 2025	Financing	Second revenue anticipation note approved.
Jan. 2026	Financing	Approved rate action (per SRF requirement).
Jan. 2026	Construction – Water Plant	Backwash recycle phase begins.
Jul. 2026	Construction – Transmission Line	62 of 81 easements closed/closing.
Jul. 2026	Construction – Water Plant	New plant construction.

PROJECTED

Jul. 2026	Financing	SRF loan approval.
Jul. 2026	Construction – Intake	Site work.
Sep. 2026	Financing	WIFIA loan closing.
Fall 2026	Construction – Intake	Raw water pump station construction begins.
Fall 2026	Construction – Transmission Line	All easements obtained.
Fall 2026	Construction – Transmission Line	Pipeline construction begins.
Summer 2027	Construction – Water Plant	Backwash recycle phase completed (provides 500,000 gallons per day).
Summer 2029	Construction Complete	Capacity Expanded to 32 MGD.



Source: Adapted from Duck River Agency's Duck River Watershed map for Maury and Marshall counties: <https://www.duckriveragency.org/maps>. Not to scale.

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Community H2O
Reliable, Sustainable, Resilient

Downstream Intake Project

Investing in Maury County's shared future through reliable infrastructure and community partnerships



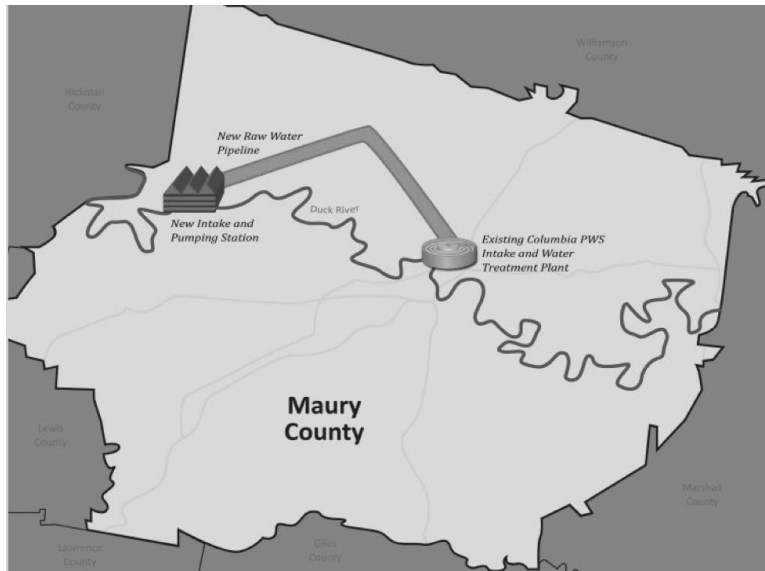
Need

Reliability, redundancy and capacity risk are present now.



Approvals

Critical federal, state and local approvals are in hand.



Plan

The LTWSP reflects decades of partnership and planning.



Fit

Complements longer-term regional solutions and aligns with Gov. Lee's priorities for the Duck River.

Approval Timeline for Downstream Intake Project

2019

- CPWS, City of Spring Hill co-host Maury County Community Water Supply Planning Informational Session with broad regional representation.
- CPWS accepted by WIFIA to submit a loan application.

2020

- CPWS begins detailed Downstream Intake Project design work.

2021

- CPWS submits ARAP permit application for new intake to TDEC.

2022

- CPWS conducts mussel survey with USFWS endorsement.