



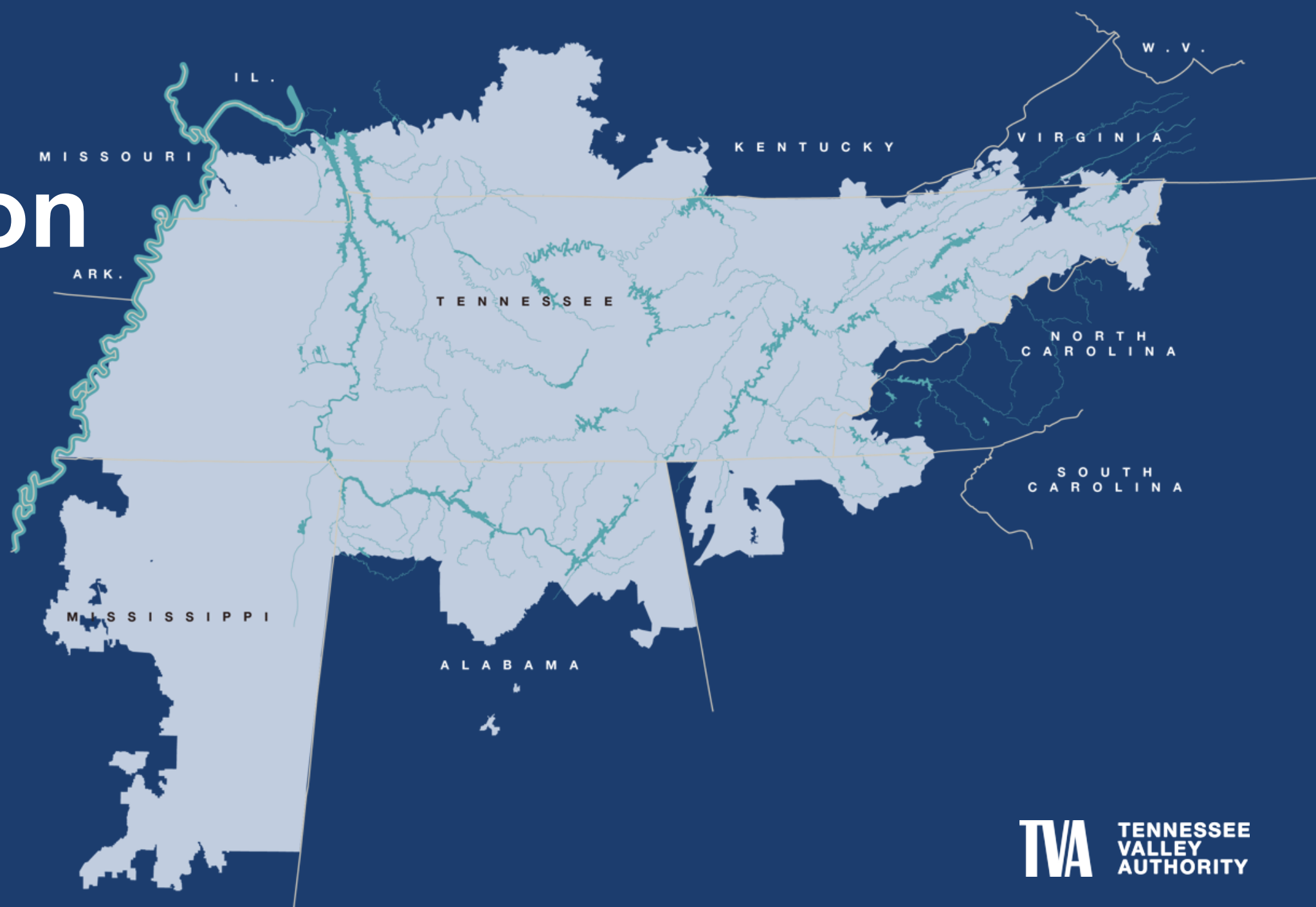
This is TVA

Mekong-Mississippi Sister Rivers Partnership

Dan Pratt, Senior VP,
Customer & Community Relations



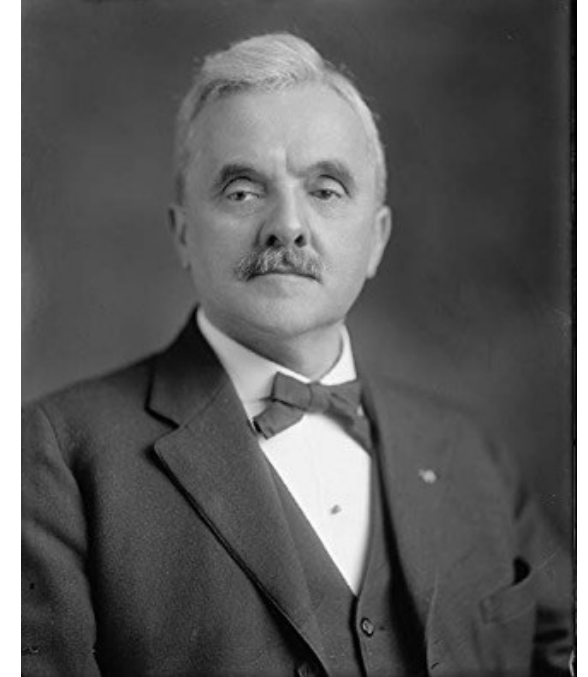
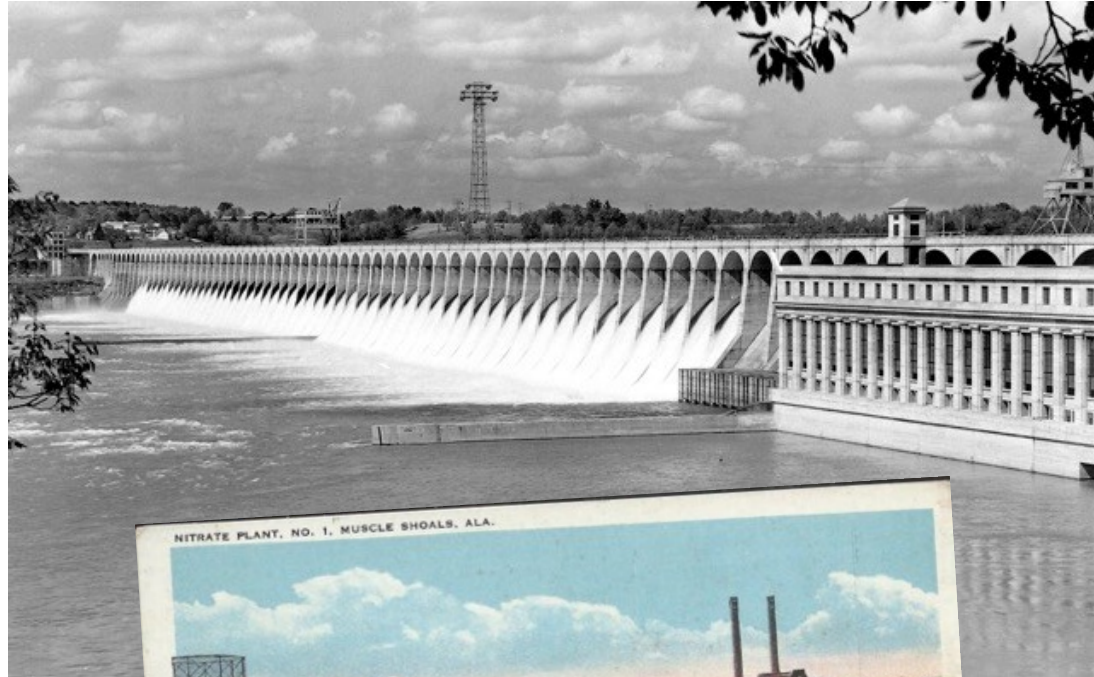
TVA Region



Muscle Shoals Controversy



Henry Ford,
Ford Motor Company



George Norris,
Senator

AN INTEGRATED PROGRAM OF THE TENN. RIVER WATERSHED FOR NAVIGATION, FLOOD CONTROL & NATIONAL DEFENSE.



Great Depression & 1932 Election



Hard Times in the Tennessee Valley



TVA Created to Make Life Better



May 18, 1933 the TVA Act was signed.

“Power is really a secondary matter...TVA is primarily intended to *change* and to *improve* the standards of living of the people...”

- President Franklin D. Roosevelt

An aerial photograph of a vast valley filled with a thick layer of white clouds, creating a 'sea of clouds' effect. The sun is rising in the upper right corner, casting a bright glow and long, wispy rays across the sky and the clouds. The foreground shows dark, silhouetted hills and valleys, with some clouds catching the low light of the sun.

Our Mission

To serve the people of
the Tennessee Valley
to make life better.

Delivering on Our Mission to You

Energy | Environment | Economic Development



**Provide affordable,
reliable power.**



**Steward the Valley's
natural resources.**



**Partner for economic
growth.**

Global Destination

“To study ways in which the lessons it has learned in the Tennessee Valley may be exported abroad and applied to our great objective of human enhancement.”

- President John F. Kennedy

100+

Foreign Countries

6

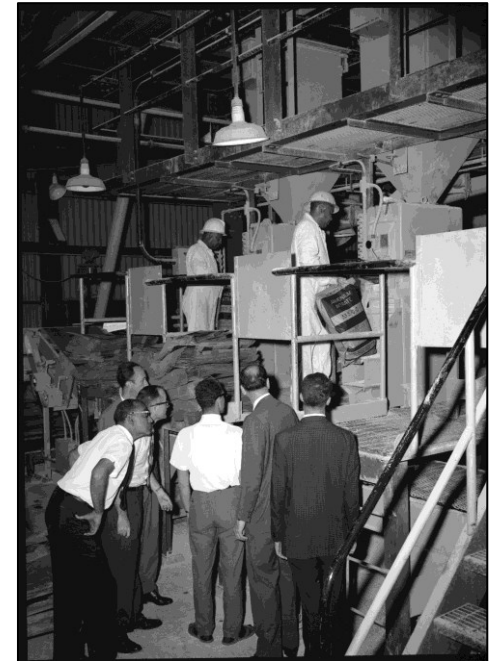
Continents

30,000+

World Leaders



Romania Visit, 1965



Delegation from Mexico, 1951



Greece, 1959



Peru Visit, 1972



Ivory Coast Visit, 1966

Building Tomorrow Together

We cannot meet the energy needs of tomorrow by making small changes today. It will require innovation, collaboration and pushing TVA, the industry and the nation to make our vision for tomorrow a reality.



TVA River Management

Mekong-Mississippi Sister Rivers Partnership

Tom Barnett

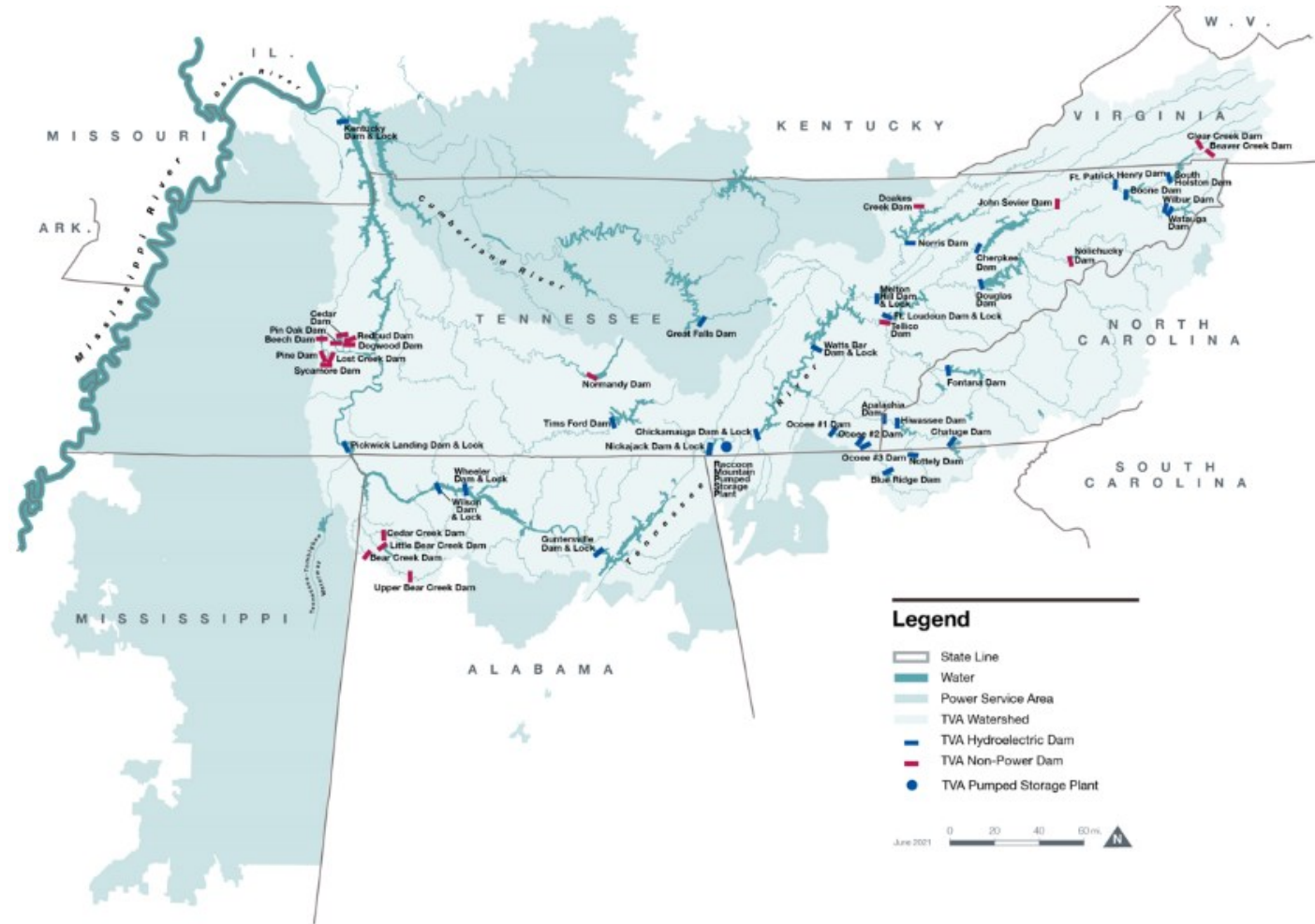
Vice President, River & Resource Stewardship

December 9, 2024

Purpose and Background

Purpose: Update the Sister Rivers Partners on TVA's river management mission and highlight our internal and external collaboration and partnerships.

Background: River Management is responsible for the integrated operation of the Tennessee River system and balancing the competing demands on the system and the overall value to the public. River Management has been integral to TVA's mission of service since its inception.



Integrated Tennessee River System Overview



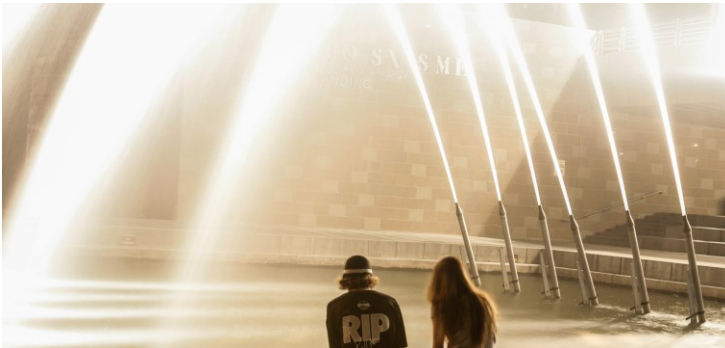
Flood Control



Navigation



Power Generation



Water Supply



Water Quality



Recreation

Tennessee River at Chattanooga



Tennessee River at Chattanooga – 1867 Flood of Record



Flood Control & Helene

Our integrated reservoir operations helps reduce flood damages and minimize downstream flooding

- Utilize real-time modeling and forecasting tools to operate system
- Store water in large tributary reservoirs to reduce downstream flood damage
- \$309M in annual average damages averted (\$400M during Helene)

Extensive partner and agency communication and coordination, and outreach to the public and stakeholders

- Provide flood crest forecasts through partner agencies
- Utilize system approach to reduce flood impacts along the Ohio and Mississippi Rivers
- Provide emergency warnings and notifications during significant and extreme flood events

Significant damage occurred in communities in East Tennessee and Western North Carolina

- Flood of record was approached or exceeded in many areas
- Some isolated areas in the Eastern portion of the service territory received 19 inches or more of rain

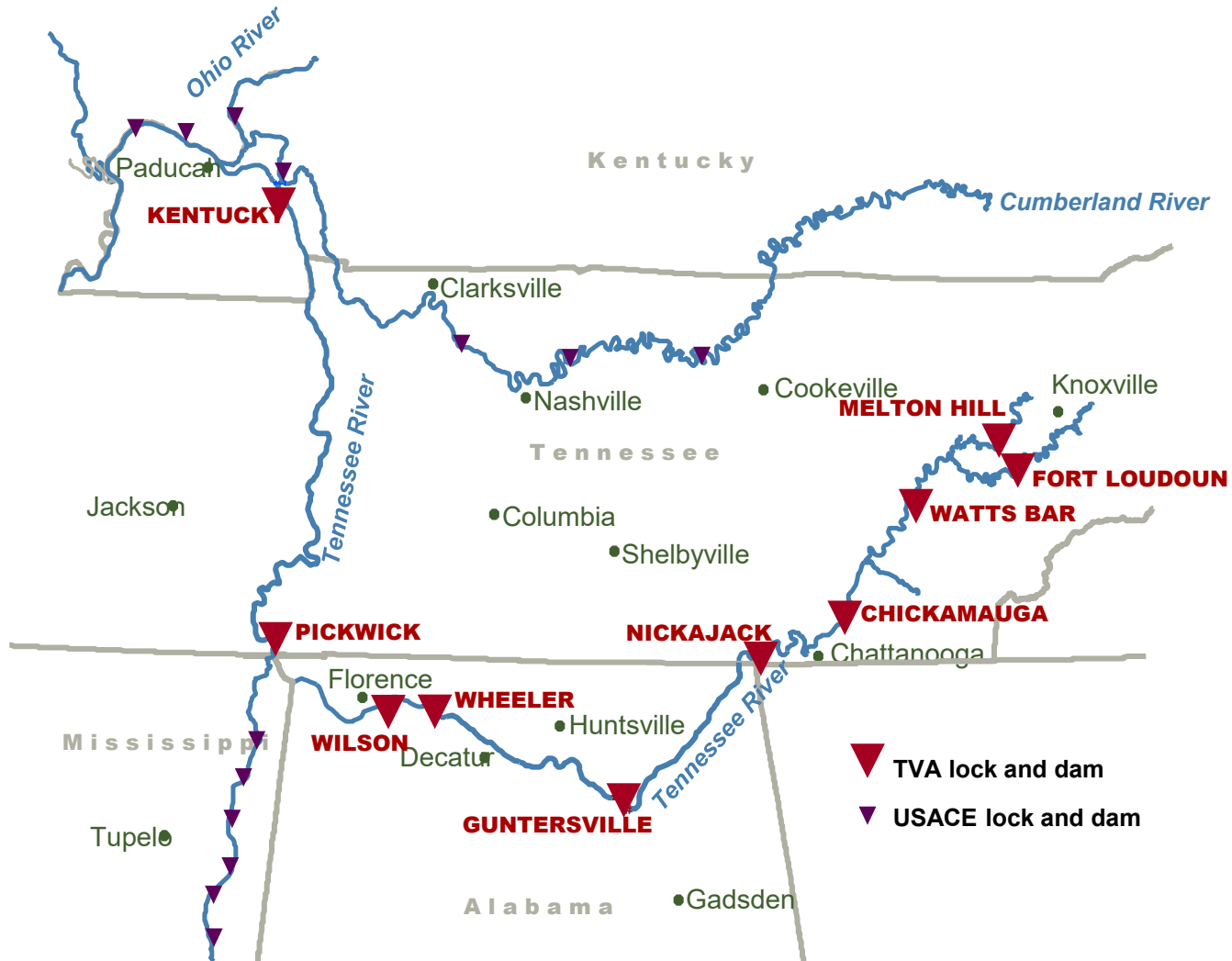


Nolichucky Dam & Powerhouse



Watauga Dam Morning Glory Spillway

Navigation



Aerial photo of Kentucky Lock (October 14, 2024)

Navigation

- Daily Lock Operations
- Major Capital Projects
- Regulatory Reviews and Permitting (Section 404b, Section 10)

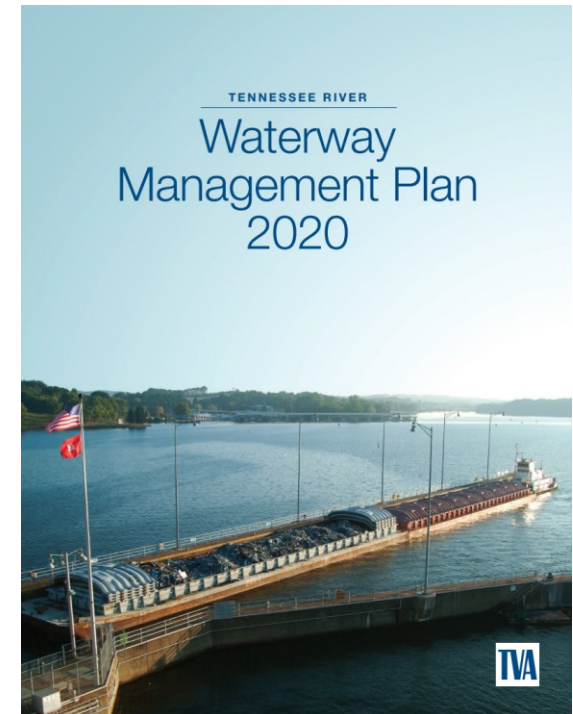


- Lock and Dam Ownership
- Regulatory Reviews and Permitting (Section 26a, EAs, EISs)
- Maintain 374 Miles of Navigation Aids
- Develop and Implement the Waterway Management Plan

TVA

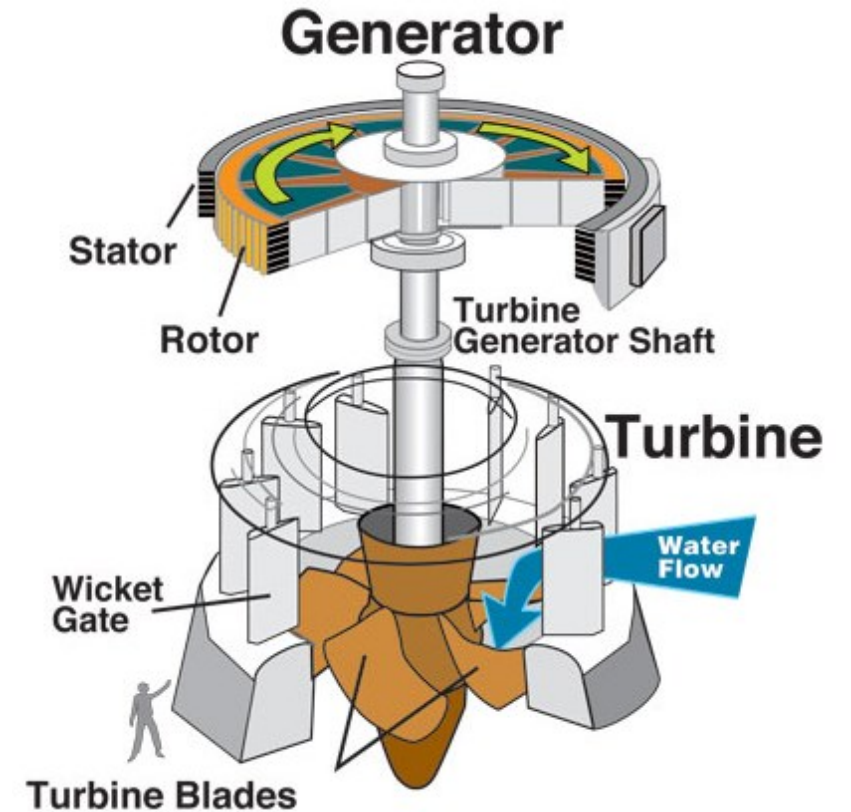
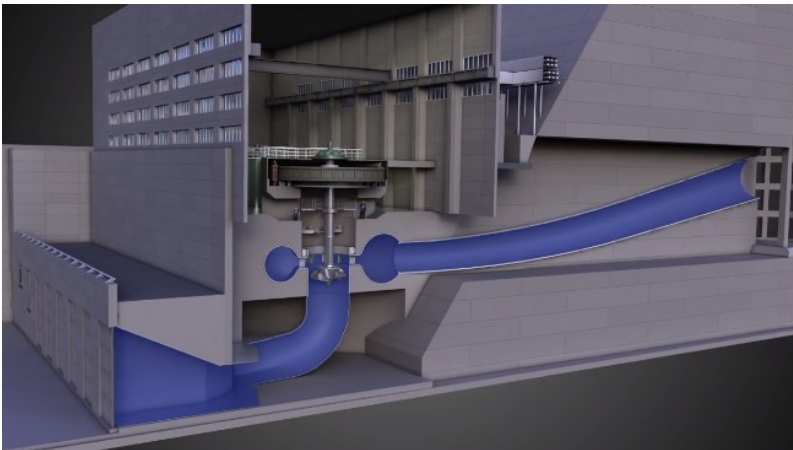
Each Year:
\$8 Billion in development
\$1 Billion in shipper savings
20,000 recreational vessels
28,000 barges
50 million tons of cargo

- Enforce Maritime Law
- Ensure Commercial Marine Safety
- Maintain Commercial Navigation Aids



Hydroelectric Generation

- Approximately 9% of TVA's annual power production portfolio
- 3,538 MW Conventional generating capacity (109 Units)
- 1,653 MW Pump-storage capacity (4 units)
- Load peaking demand and quick system response
- Clean, renewable, low-cost energy source



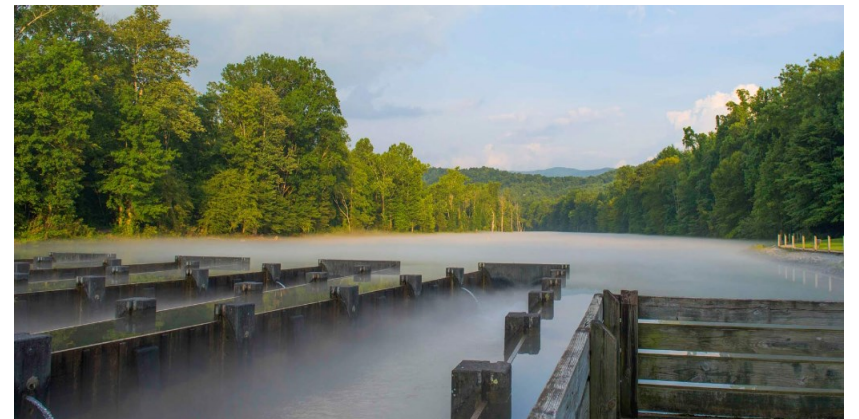
Industrial, Municipal, and Agricultural Water Supply

- There are approximately 700 surface water intakes in the Tennessee Valley.
- Over 5.2 million people rely on the Tennessee River and its tributaries for their source of drinking water.
- Dependable water is as fundamental to the economic growth of the Valley as is dependable, low-cost electricity.
- Ensure adequate, sustainable supplies of water for the region's continued growth, while protecting the integrity of TVA's integrated operation of the river system.



Minimum Flows, Oxygen Improvements, and Water Quality

- Increased dissolved-oxygen concentrations in more than 300 miles of river downstream from TVA dams
- Improved water flows in 180 miles of river
- Improvements in tailwater macro-invertebrate and fish communities
- Reintroduction and recovery of some threatened and endangered species
- Snail Darter delisted as Federally Endangered Species
- Protect water quality through thermal compliance at TVA Nuclear and Coal sites



Recreation

- Manage lake levels to enhance areas for public benefit (marinas, campgrounds, private and public shorelines)
- Restrict releases June 1 – Labor Day to conserve water in lakes while also meeting downstream flow needs
- Provide hundreds of tailwater releases to support trout fishing, whitewater rafting, and drift-boating
- Boost local and regional economies by about \$11.9 billion per year
- Engage stakeholders
- Provide hundreds of special flows and elevation requests to support community events



River Forecast Center and Stakeholder Outreach

River Forecast Center

Staffed 24x7 365 days a year – around the clock monitoring of the river system to respond to changing river conditions and weather as well as flooding and emergencies across the system.



Stakeholder Outreach

Conduct numerous public and stakeholder briefings throughout the year including virtual and in-person River Forecast Center (RFC) tours

Strong presence and engagement on TVA's social media platforms, with millions of people reached

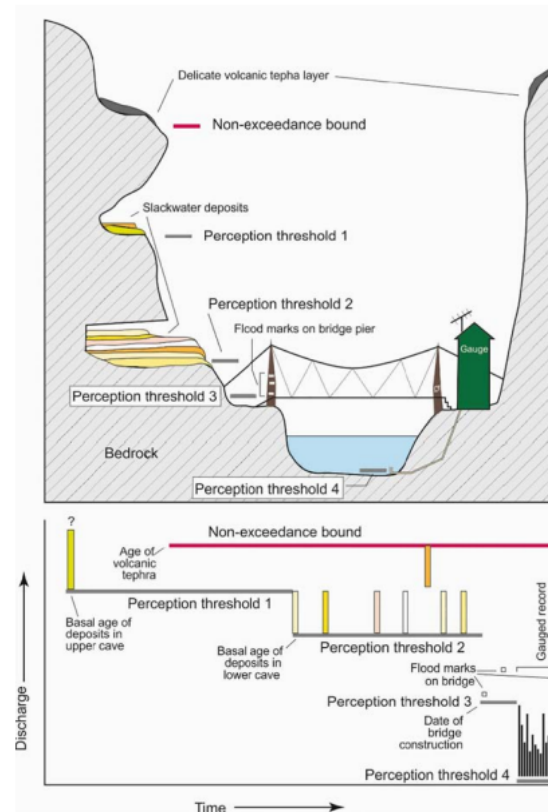
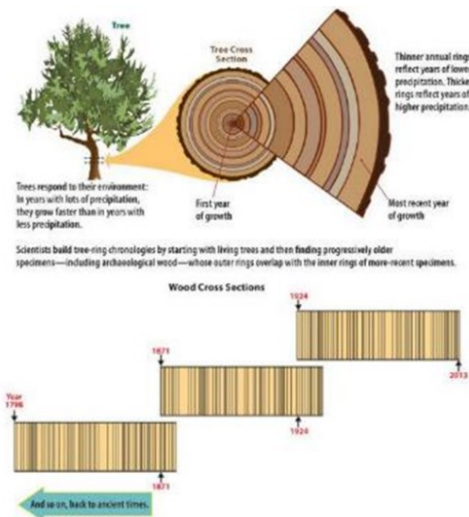
Thus far in 2024, hosted 66 tours and briefings, reaching over 1,500 stakeholders



Innovation and Partnerships

Innovation

- Dendrochronology – looking for the rarest historical droughts in tree-rings
- Paleoflood Hydrology – looking for the rarest historical floods in terrace sedimentation
- Climate Change Study – analyzing the potential impacts of climate change on our operations



Partnerships

- International Partnerships
- Federal, State, and Local Agencies
- Universities and Research Institutions
- Communities



Summary

Management of the Tennessee River for the benefit of Valley stakeholders is a statutory obligation set forth in the TVA Act and an integral component of TVA's enduring Mission.

Despite challenging weather and hydrologic conditions in 2024, we have seen success in key operating objectives while promoting navigation, drought management, historic flooding, water quality and supply, and hydroelectric generation.

In addition to operational success, we have focused on key assets that promote benefits to our stakeholders such as Wilson Lock wall and main chamber outage and asset recovery from Helene.

Stakeholder outreach and engagement, as well as leading efforts in climate resiliency through partnerships, has been another 2024 highlight.





**TENNESSEE
VALLEY
AUTHORITY**