



Regional Resource Stewardship Council

April 26, 2016
Chattanooga, Tennessee

Safety First



Building Emergency Plan



Today's Meeting

Agenda – April 26, 2016

8:30	TVA Welcome	Joe Hoagland, Designated Federal Officer
	RRSC Welcome	Avis Kennedy, Council Chair
	Introductions and Agenda Review	Lee Matthews, Facilitator
8:45	FACA Briefing	Kendra Mansur, Office of the General Counsel
8:50	DFO Briefing	Hoagland
9:05	Natural Resources Update	Rebecca Tolene, Deputy General Counsel and Natural Resources
10:00	Break	
10:15	Public Comment Period	
11:15	Natural Resource Programmatic Agreements	Brenda Brickhouse, Vice President Environment and Energy Policy
11:45	Lunch Break	
12:45	Reservoir Release Improvement Program	Lana Bean, Manager, Water Quality Support
1:30	TVA Communications	Mike Bradley, Jessica Coleman, Travis Brickey
2:15	Wrap Up and Adjourn	Kennedy / Hoagland

Meeting Goals

- Provide an update on TVA Natural Resources and how TVA is using RRSC Advice
- Provide an overview of the Reservoir Release Improvement Program where TVA is proactively supporting biologic health of reservoirs
- Provide an overview on TVA Communication activities
- Provide information on TVA's approach to developing programmatic agreements related to Natural Resource issue areas.
- Thank Members for the 8th Term of service.



The Federal Advisory Committee Act and The Regional Resource Stewardship Council

FACA Briefing—Eighth Term
Final Meeting



Advisory Committees Today

- Play an important role in shaping programs and policies
- Approximately 1000 committees with more than 60,000 members
- Advise the President of the United States and the executive branch
- Subject to FACA and General Services Administration (GSA) Regulations



Key Elements of the Federal Advisory Committee Act

Public access

- Meetings (reasonably accessible and timely notice required—generally open to the public)
- Records (available for public inspection, subject to limitations)

Structured management

- Filed charters
- Expiration after two years
- Attendance of a federal officer



TVA's Regional Resource Stewardship Council

TVA's stewardship activities include:

- Operation of its dams and reservoirs
- Navigation and flood control
- Management of lands in TVA custody and control
- Water quality
- Wildlife
- Recreation
- 26a permitting



Thank you for your participation.



DFO Briefing

Joe Hoagland, Designated Federal Officer



TVA Natural Resources Update

Rebecca Tolene
Deputy General Counsel and Natural Resources



Agenda

- RRSC Guidance Put Into Practice
- Status Update on Lands Planning
- Introduction of the Permit Us to Help You Campaign
- Status Update on Floating Houses

Overview of TVA Natural Resource Programs

Wildlife
Mgmt. &
Enhancement

Public Land
Management

Cultural
Resource
Protection

Aquatic
Plant Mgmt.
Program

Education &
Public
Outreach

Eco-Tourism

Land
Planning &
Uses

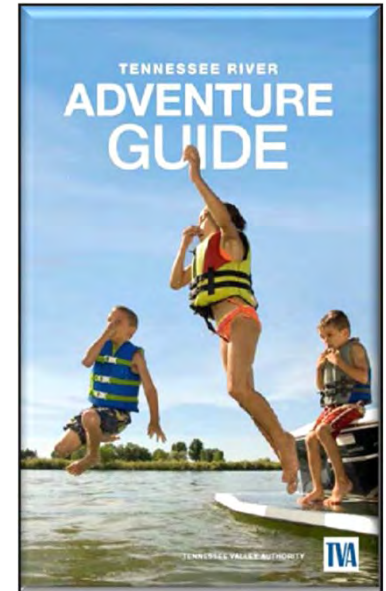
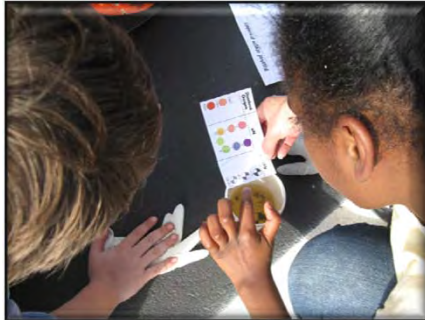
Recreation

Shoreline
Management

Water
Resources

Implemented RRSC Guidance Results for Outreach & Communications

- Increase outreach to schools, marinas, and community members
- Make information easy to find and understand
- Increase visibility of TVA's stewardship work by:
 - Participating in outreach events sponsored by others
 - Events and media at the local/county level
 - Maximizing web pages and social media
- Use interpretive signs to increase awareness of cultural and natural resources



Implemented RRSC Guidance Results for Stewardship Efforts

- Continue to protect nonrenewable resources
- Protect and improve wildlife habitat
- Keep water quality a priority
- Use erosion controls to preserve public lands and resources
- Consider concessionaire operator for campground management
- Increase tourism efforts with local communities and states

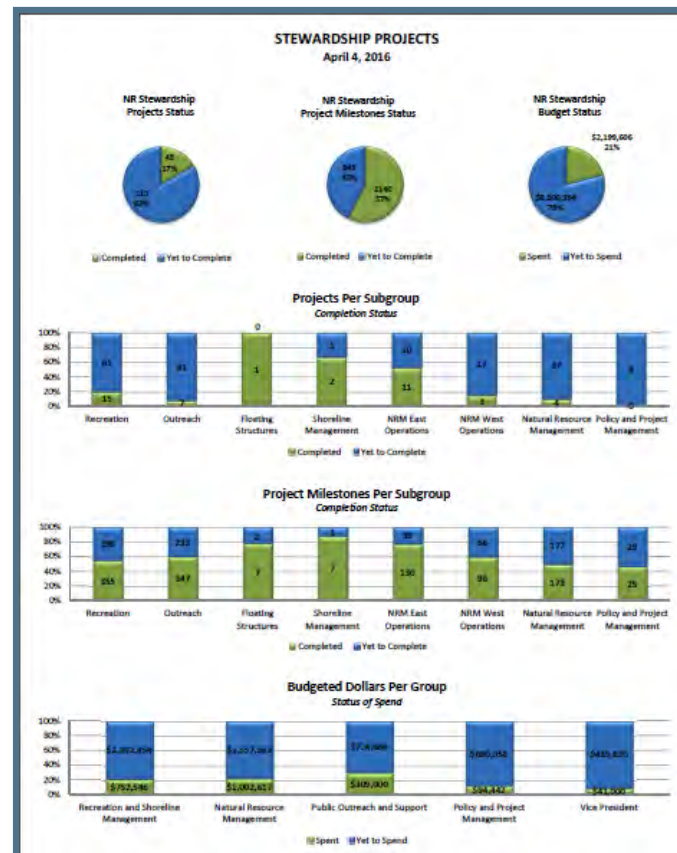




Implemented RRSC Guidance Results for Enhanced Productivity

- Establish metrics to gauge success and progress
- Increase internal collaboration
- Take care of and maintain existing assets first
- Consider partnership support for future maintenance of new projects
- Develop signature stewardship projects

Weekly Dashboard



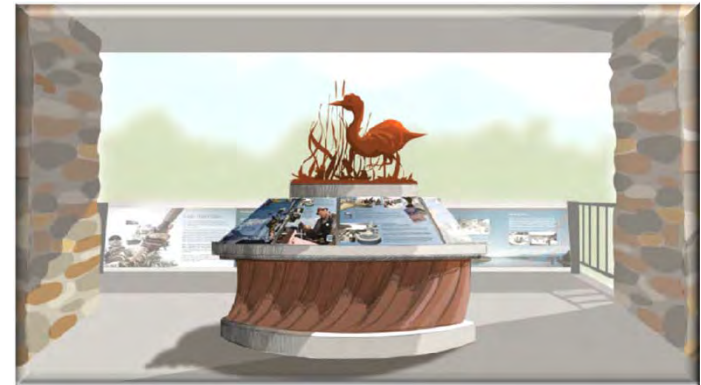
Implemented RRSC Guidance Results for Partnerships

- Make it easy to work with TVA
- Leverage partnership funds
- Build and enhance partnerships with recreation partners, local municipality, nongovernmental organizations, tourism organizations, realtors, universities, and colleges
- Explore public/private partnerships
- Engage local power companies to promote TVA stewardship

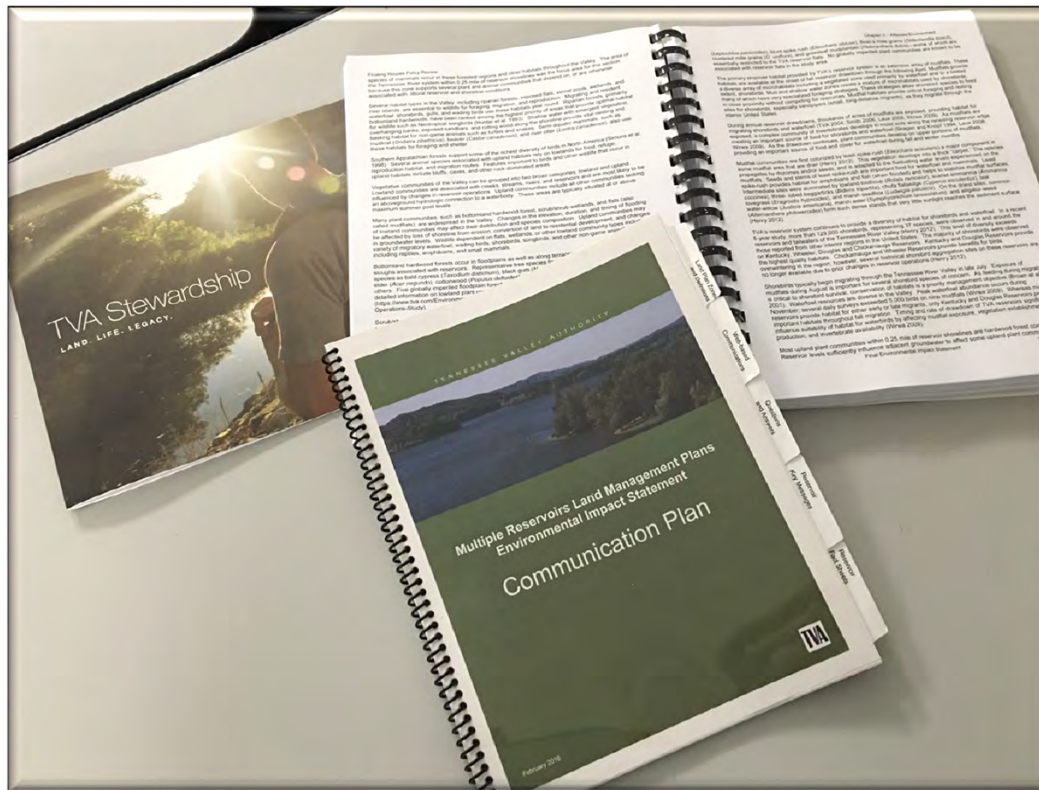


Success Stories

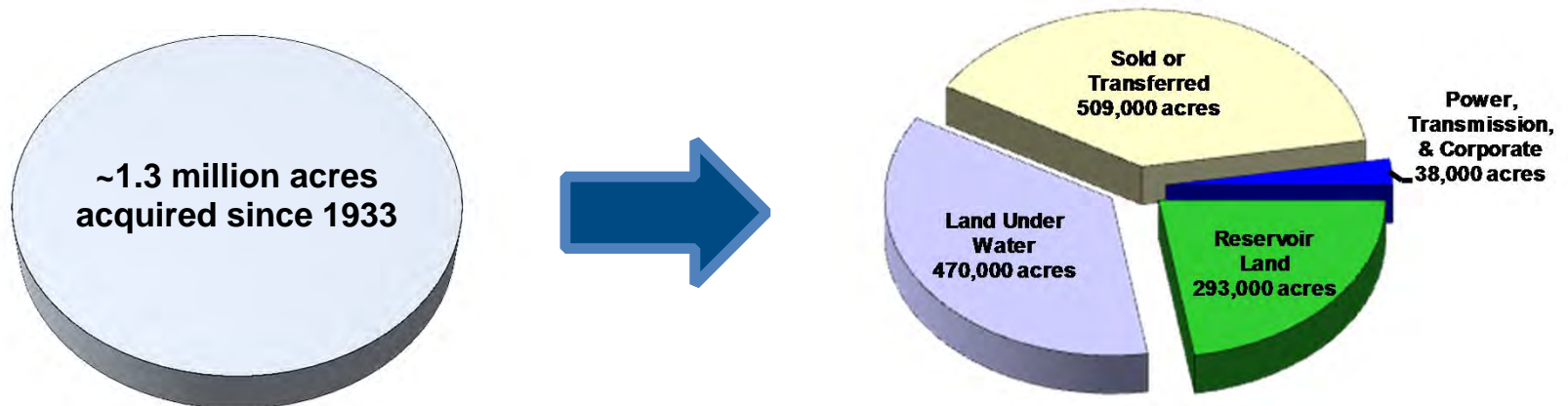
- Enhanced visitors' experiences at TVA Dam Reservations
 - TVA Visitor Centers
 - Recreation facilities
 - ADA
- Boosted local economy through Ecotourism in Dayton, TN
- Initiated research with university partners and others
- Engaged new volunteers through programming



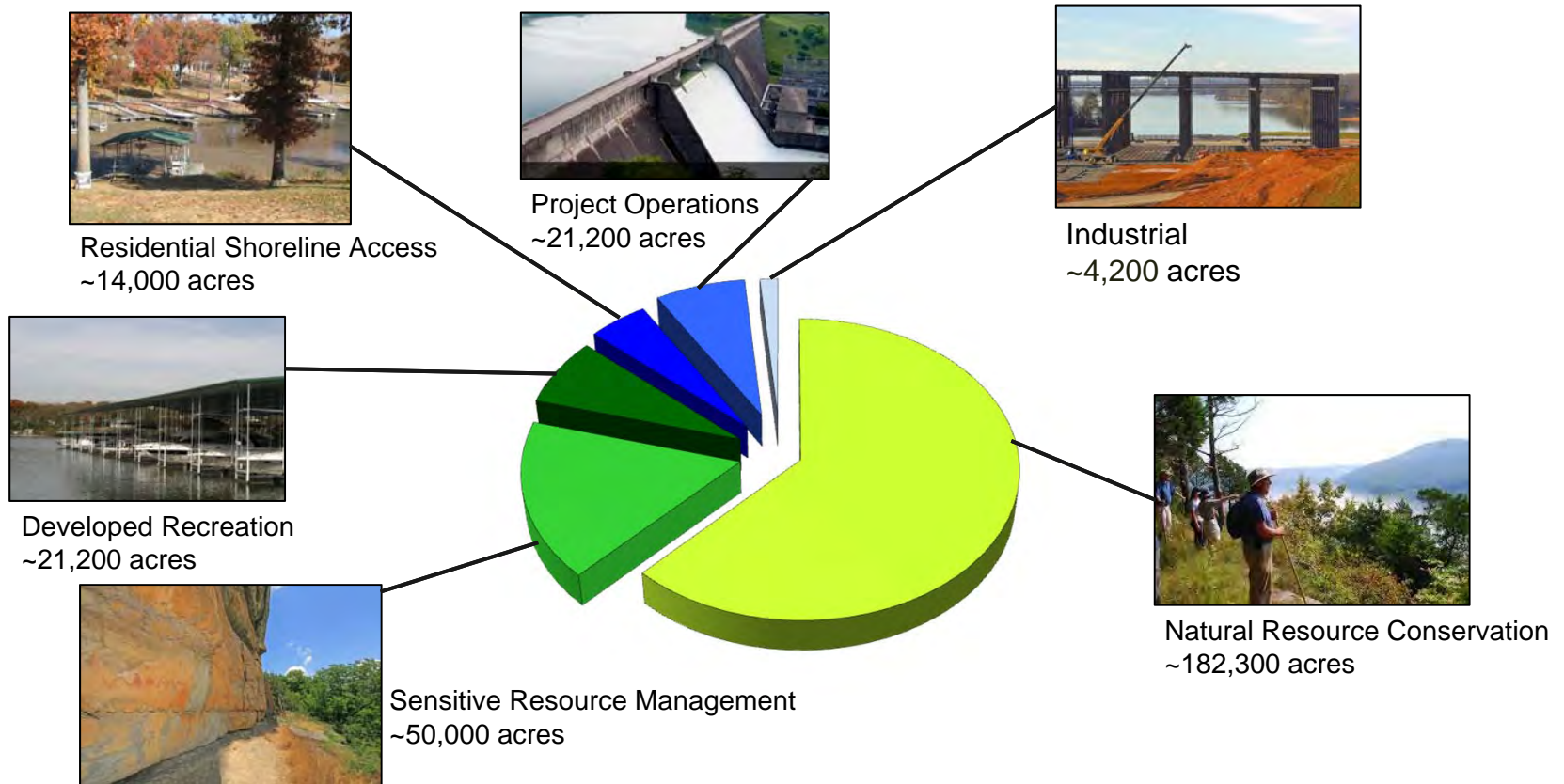
TVA Lands Planning



TVA Property Acquisition and Utilization



Land Planning Zones



TVA's Reservoir Land Planning Process

- Reservoir land management plans (RLMPs) guide TVA's management decisions on natural resources and property administration and provide a clear statement of how TVA intends to manage its public lands
- Public input is sought during the planning process and completed RLMPs are adopted as agency policy
- Demands on public lands will only increase into the future, and the planning process has demonstrated that it is a good tool to develop a balance between competing uses

Comprehensive Valleywide Land Plan (CVLP) & Reservoir Land Management Plans

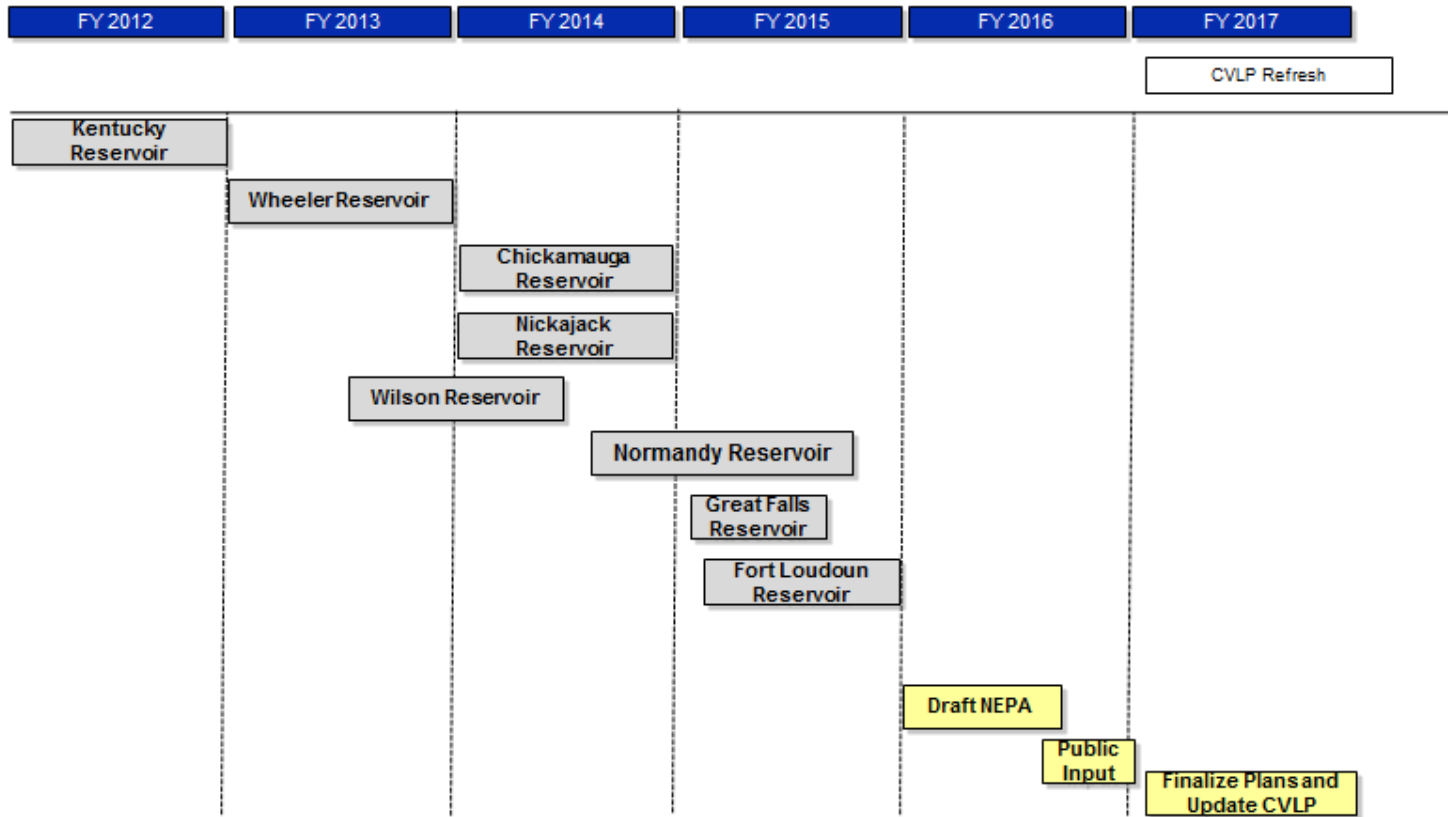
- CVLP allocates a certain percentage of land for each of the seven zones (with the exception of Zone 1, easement land) across the entire Valley
- RLMPs allocate public land use percentages by reservoir based on staff expertise, resource data, computer analyses, agency input, and public comments
 - Information included in these eight RLMPs will be used to revise its CVLP

Proposed CVLP Allocation Range

Allocation Designation		Range of Allocations in 2011 CVLP	Proposed CVLP Allocation Range (2017)
Zone 2	Project Operations	5% to 7%	7% to 10%
Zone 3	Sensitive Resource Management	16% to 18%	14% to 18%
Zone 4	Natural Resource Conservation	58% to 65%	56% to 63%
Zone 5	Industrial	1% to 2%	1% to 3%
Zone 6	Developed Recreation	8% to 10%	8% to 10%
Zone 7	Shoreline Access	5%	5% to 6%*

*TVA allocates land to Zone 7 (Shoreline Access) in accordance with TVA's Shoreline Management Policy.

Lands Planning Schedule



- Yellow coloring represents suggested time frames
- Gray coloring reflects a drafted RLMP

CVLP Implemented RRSC Guidance

- **Outreach and Communications**
 - Communication with the public focusing on explaining each land use zone
 - Scoping for the CVLP kicked-off with paid ads in the communities where RLMPs would be implemented
- **Maximize Web Site and Social Media**
 - Developed a land planning review Web site (www.tva.gov/landplanreview)
 - Redesigned the external lands planning Web page so it is easy to access existing RLMPs
<https://www.tva.com/Environment/Environmental-Stewardship/Land-Management/Reservoir-Land-Management-Plans>

Permit Us to help you

Shoreline Construction Permitting

For more information call
1-800-882-5263 or visit
www.tva.com/river/26apermits



Section 26a Permitting Outreach

The objective of the campaign is to raise awareness that Section 26a permits are required before any construction can begin.

Target Audiences

- Primary: Those in the market to purchase lakefront property in the TVA Valley
- Secondary: Realtors
- Tertiary: Existing owners of lakefront property in the Valley



Permit Us to Help You - RRSC Guidance

- Better communication
- Easy to find and understand information
- Streamline process

Permitting Outreach Tools

- Permit Us To Help You Campaign
 - Digital banners
 - Print media, including newspapers, magazines, and TVA River Neighbors
 - Realtor direct mailers
 - Realtor outreach
 - Billboards
- Web page updates
- Outreach event participation

Print Media

Focus Areas

- Pickwick and Tellico Reservoirs
- North Alabama communities of Florence, Tuscumbia, Sheffield, and Muscle Shoals
- North Georgia/southern North Carolina communities, including Blue Ridge, Chatuge, Nottely, Hiawassee, and Apalachia



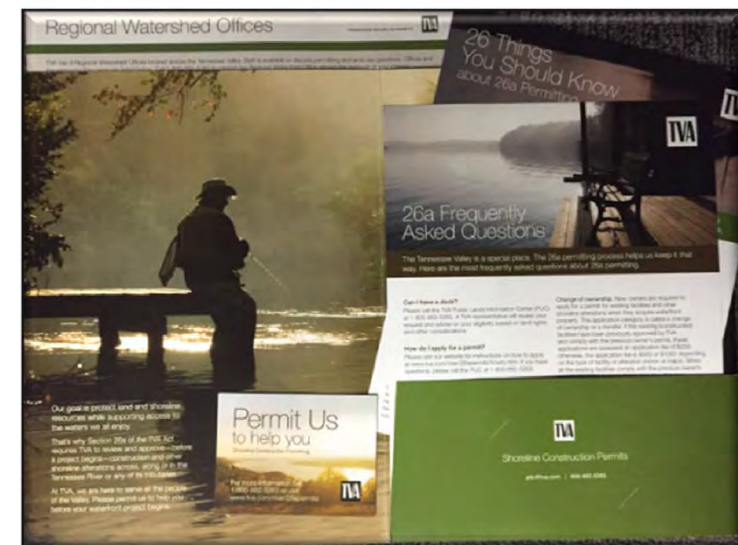
Direct Mail

- Deliver key messages to those in the selling and buying marketplace who have influence and direct contact with homebuyers
- Focus on realtors and home inspectors working in areas adjacent to the Tennessee River and major tributaries



Realtor Outreach

- Hosted realtor workshops
- Sent direct mail and email blasts to waterfront realtors
- Presence in Tennessee Association of Realtors' newsletter

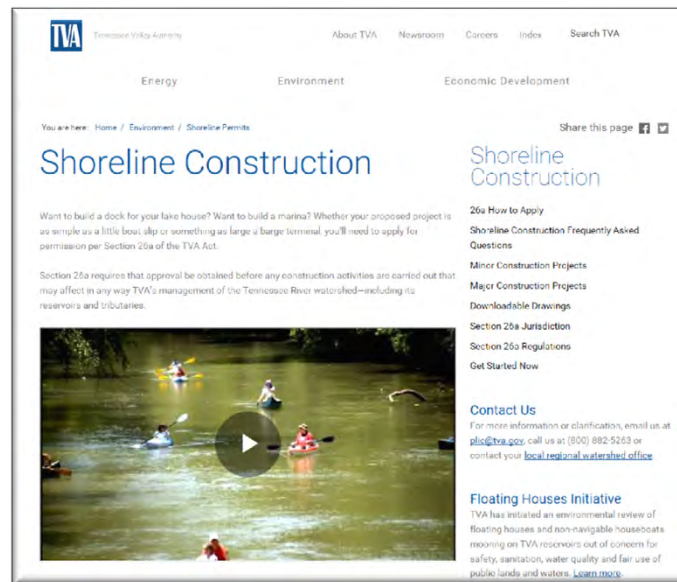


Billboards



Web Page Updates and Event Participation

- Increasing visibility of Section 26a permitting information
- Increasing staff face-to-face public interactions



Next Steps

- Continue current Permit Us to Help You campaign
- Increase internal communication
- Place story in TVA's River Neighbors
 - Sign up on TVA's web page
<https://tva.com/Environment>





Public Land Protection Program

TVA staff has begun preparations to develop a Public Land Protection Program which will incorporate:

- Encroachment prevention
- Pursuit of citation authority
- Development of regulations to govern the use of public lands
- Identification of encroachments
- Expansion of the toolset available to resolve encroachments

Floating Houses



Examples of Floating Houses



TVA Concerns



- Need to clarify or update regulations with changing times
- Owner/public/investor expectations

- Residential-type proposals on water
- Structures presented as houseboats but designed and used primarily for habitation at a fixed location





Prevalent Public Comments and Issues

- Safety of electrical, mooring, and anchoring systems
- Water quality: proper management of black and gray water
- Need stronger regulation, policing, and enforcement
- Need minimum safety and environmental standards with regular inspection
- Economic, financial, and personal loss if prohibit/remove floating houses
- Grandfather floating houses and continue to allow nonnavigable houseboats
- Consider an annual fee to fund future management and oversight

Next Steps

RRSC Guidance

- In their April 2015 advice statement the RRSC stated the proposed floating houses policy (B2) with a sunset provision is the most realistic approach to achieve stewardship goals. Also, it was recommended that floating houses be removed in less than 30 years.
- Develop criteria for nonnavigable houseboats and floating houses

Recommendations for Board Consideration

- The proposed floating houses policy to be presented at the May 5, 2016, Board meeting is alternative B2. That requires minimum safety and environmental standards to be met, and for all floating houses and non-navigable houseboats to be removed in 20 years.
- Criteria will be part of the final guidelines

Next Steps

- Release the proposed rules and publish a Notice of Proposed Rule Making in the Federal Register seeking public comments for a 30-day comment period
- May 5, 2016, TVA Board recommendation
- Upon Board approval, complete and publish final rule amendments to Section 26a Regulations and Administrative Cost Recovery Regulations
- Implement the Floating Houses Policy



BREAK TIME



Public Comment Period

- **Public participation is appreciated**
- **This is a listening session; responses are typically not provided**





Programmatic Agreements: Natural and Cultural Resources

Brenda Brickhouse
Vice President Environment and Energy Policy

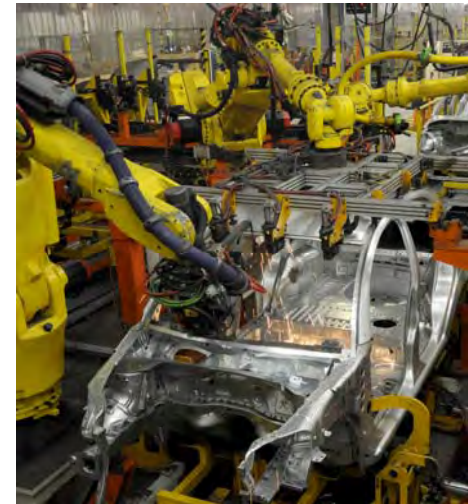
Alignment with TVA's Mission of Service



Energy



Environment



Economic
Development

Alignment

- National Environmental Policy Act
- Clean Water Act
- Executive Order for Wetlands
- Endangered Species Act
- Executive Order for Migratory Birds
- National Historic Preservation Act
- Archaeological Resources Protection Act

for Landscape and Program Benefits



Common Actions Across Resources

- Natural resources impacts and opportunities managed on individual projects in isolation
- Interpretations, requirements and expectations vary significantly across regulatory offices
- Project-specific consultations increasing yet yielding only incremental mitigation



Programmatic Agreements (PA) Can Provide a Solution

Multi-Pronged Programmatic Approach

- Streamline review processes for a comprehensive array of activities
- Determine impacts of actions on front end programmatically
- Standardize protocols and consultation across federal and state jurisdictions
- Improve outreach and stakeholder engagement
- **Address conservation needs at landscape level and focus resources where most effective!**



Bat Programmatic Consultation

DRIVERS AND APPROACH

- Four federally-listed bats in TVA's Power Service Area
- Concern heightened due to white-nose syndrome's fatal impacts to bats
- TVA routinely removes trees for projects, public safety and reliability
- Consultation increasing across environment, energy, and economic development activities
- Project-specific outcomes are increasingly unpredictable



Bat Programmatic Consultation

TIMELINE

Jan 2014: Convened TVA Bat Strategy Team

Nov 2014: Began Consultation w/USFWS R4

Dec 2014: TN USFWS office designated lead

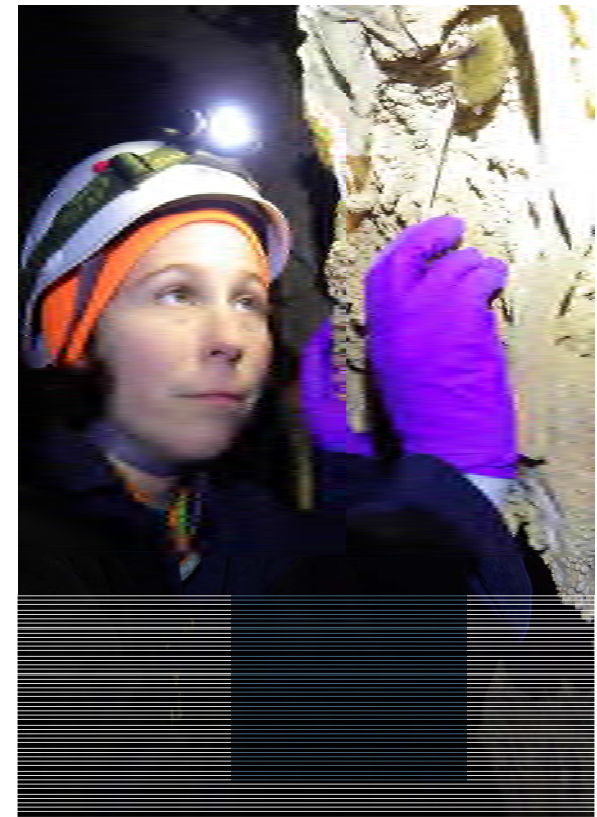
2015: Developed footprint and actions spanning 20 years

Dec 2015-Mar 2016: Visited FWS offices

Remaining Steps:

- Workshops with FWS offices to review actions
- TVA-FWS discussions on effects determinations
- Completion of Biological Assessment

Spring 2017: Executed Programmatic Documents



Cultural Resources PA



- TVA actively manages and considers effects on historic resources
- Soliciting participation from:
 - Advisory Council on Historic Preservation (ACHP)
 - 18 federally recognized Tribes
 - Seven State Historic Preservation Officers
- PA will establish process and criteria streamlining routine compliance activities and for focusing conservation for significant resources
- Kicking off this summer and plan to complete in 2017

Wetland Mitigation Feasibility Study

- Wetland and stream mitigation requirements, procedures, expectations, costs and credit availability varies across the region
- Evaluate feasibility or pilot study to identify strategic approaches to wetland and stream enhancement and mitigation
- Identify opportunities, benefits, and challenges among a suite of options
- Develop a more comprehensive wetland mitigation framework



Anticipated Outcomes

- Ability to address conservation needs at landscape level and focus resources where most effective
- Greater predictability and consistency in project planning
- More efficient project-specific consultations
- **More meaningful work aligning with regional resource priorities!**



Potential Future Programmatic Endeavors

- Pollinators
- Avian Resources



Questions?







Break for Lunch

Meeting will reconvene at 12:45PM



Non-navigable houseboat



Floating houses

- In recent years, a substantial number of floating houses have been moored on TVA reservoirs
- Floating houses pose growing risks to navigation, safety, and the environment and have not been allowable under Section 26a of the TVA Act since 1978
- Floating houses are not in any real sense watercraft, but instead are used primarily for habitation rather than navigation and convert public waters to private use



Increased Floating House Volume and Concerns

There are now approximately 1,800 floating houses and nonnavigable houseboats on the reservoir system. Only the pre-1978 nonnavigable houseboats, approximately 900, have TVA permits.



Residential living on the water marketed by developers



Scoping and Environmental Review

Environmental Review- Alternatives

1. No Action Alternative – Current Management
2. Alternative A – Allow Existing and New Floating Houses
3. Alternative B1 – Grandfather Existing and Prohibit New
4. Alternative B2 – Grandfather but Sunset Existing and Prohibit New¹
5. Alternative C – Prohibit New and Remove Unpermitted
6. Alternative D – Enforce Current Regulations and Manage through Marinas and Permits

¹Alternative B2 is TVA's "preferred" alternative and is the proposed policy

Concerns Expressed in Public Comments



Wastewater Discharge



Need for Stronger Regulations



Electrical Safety



Mooring Safety



Private Use of a
Public Resource



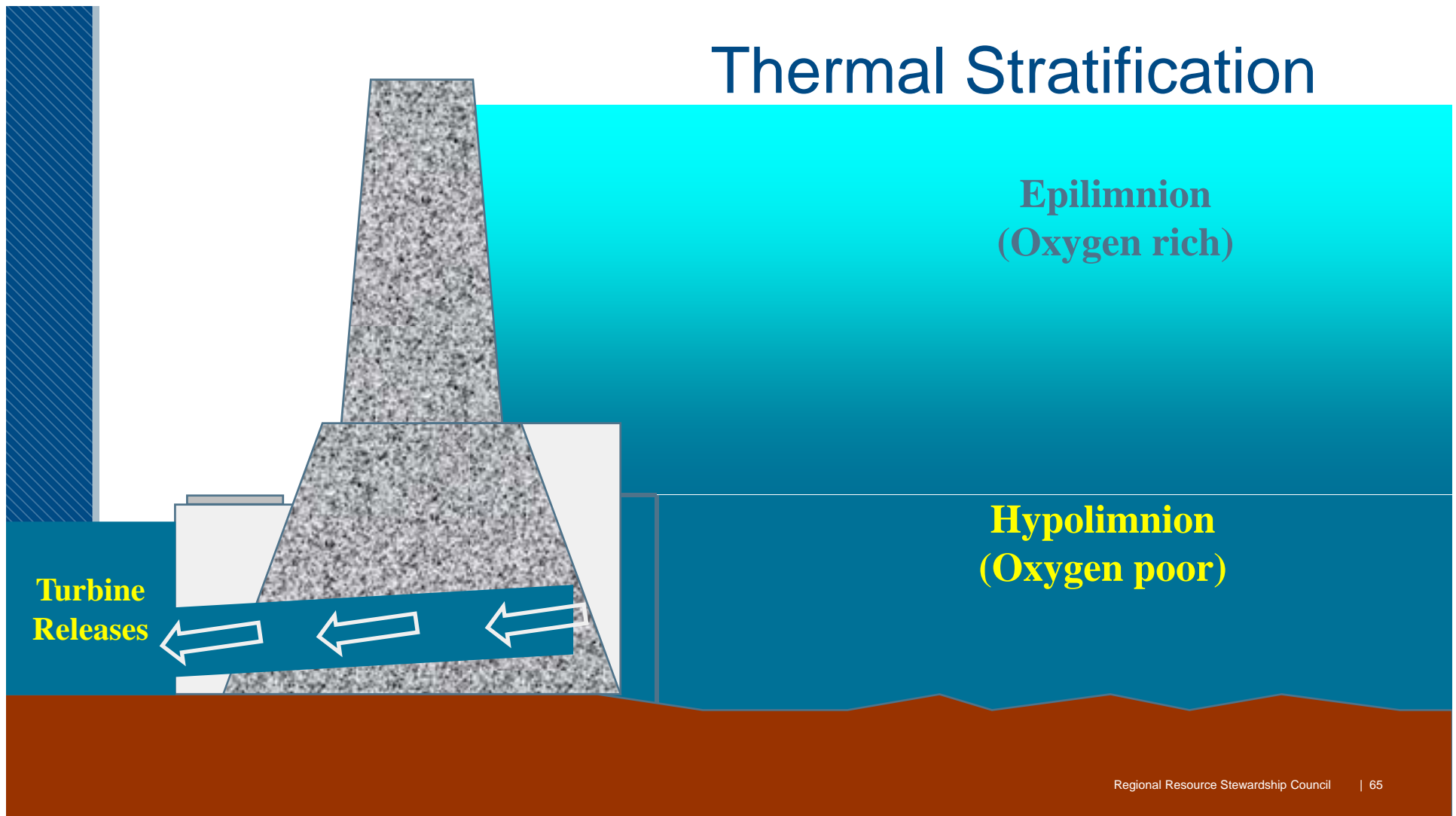
Reservoir Release Improvements

Lana D. Bean,
Manager, Water Quality Support

RRI Objectives

- Meet dissolved oxygen targets to protect aquatic habitats
- Maintain a wetted riverbed

Thermal Stratification

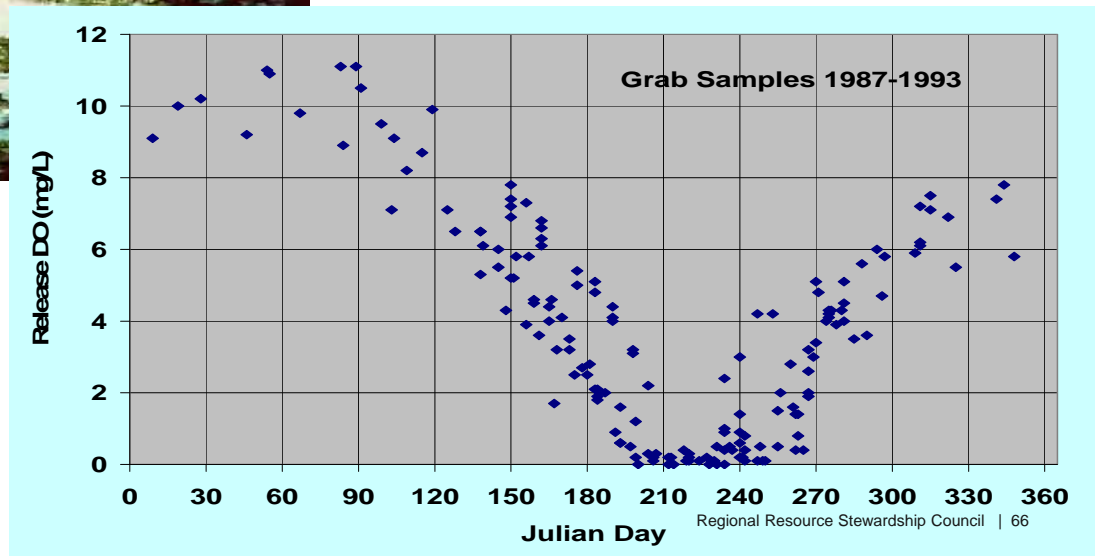


Impoundment impacts



**Dry river channels
when turbines are not
operating**

**Low dissolved
oxygen in dam
releases**



1991 Lake Improvement Plan

- Committed to improve the quality of releases at 16 TVA dams within a five-year period.
 - Installed aeration equipment to improve dissolved oxygen levels below 16 dams.
 - Implemented minimum flow systems at 13 dams.
- Completed construction of all systems in September 1996.
- Cost: \$44 million

2004—Reservoir Operations Study (ROS)

- Initiated in 2001 with study results implemented in summer 2004.
- Enabled TVA to determine whether changes to its operations policy would produce greater public value.
- Modified the balance among the operating objectives for the system resulting in a different mix of benefits that would be more responsive to public values.

Minimum Flow Below Hydro Projects

before



- Turbine pulsing
- Small Units
- Weirs



after



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Habitat Benefits of In-stream Flow

- More wetted channel area (35%-85% increase in minimum flows)
- Release DO: was 0-3 mg/L now 4-6 mg/L
- Improved attraction water for fish spawning runs
- Continuous flushing of deep natural pools
- Reduced thermal shock



Current Aeration systems

- Turbine venting
- Surface-water pumps
- Oxygen-injection
- Aeration weirs
- Air compressors

Aeration technologies: turbine venting

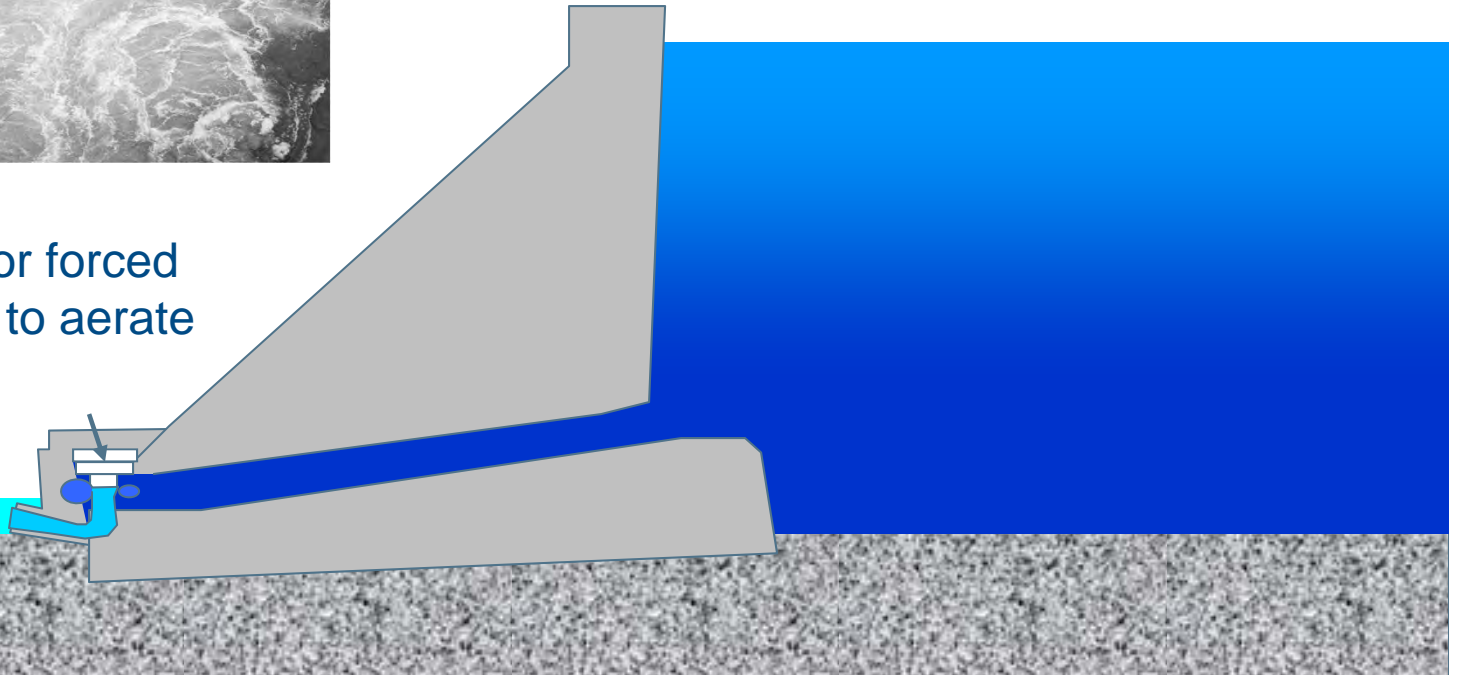


Capital Costs ~ \$150K

Roughly 0.3% of efficiency

loss per 1 mg/L of DO uptake

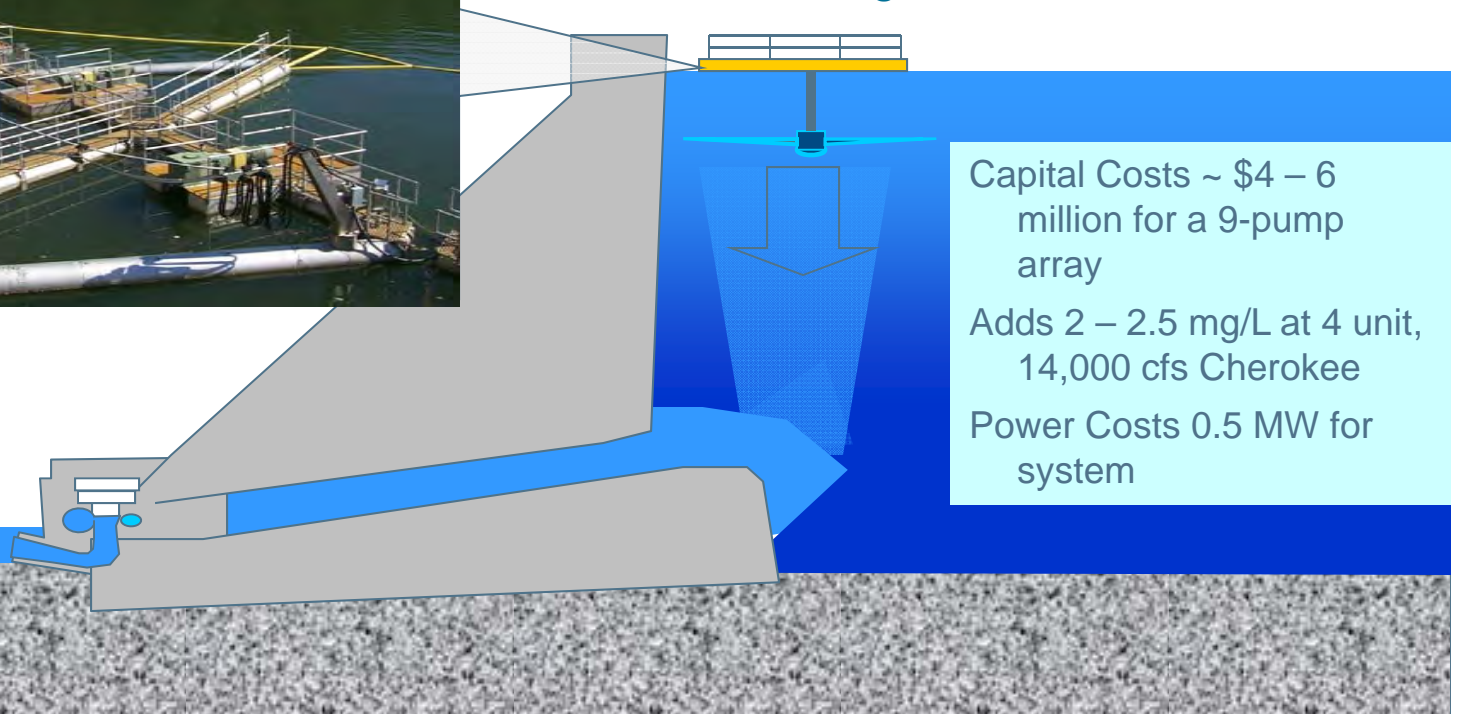
Air is drawn in or forced into the turbine to aerate the releases



Aeration technologies: surface-water pumps



Impeller forces higher DO water at the surface down to the turbine intake, increasing the release DO



Capital Costs ~ \$4 – 6 million for a 9-pump array

Adds 2 – 2.5 mg/L at 4 unit, 14,000 cfs Cherokee

Power Costs 0.5 MW for system

Oxygen-injection



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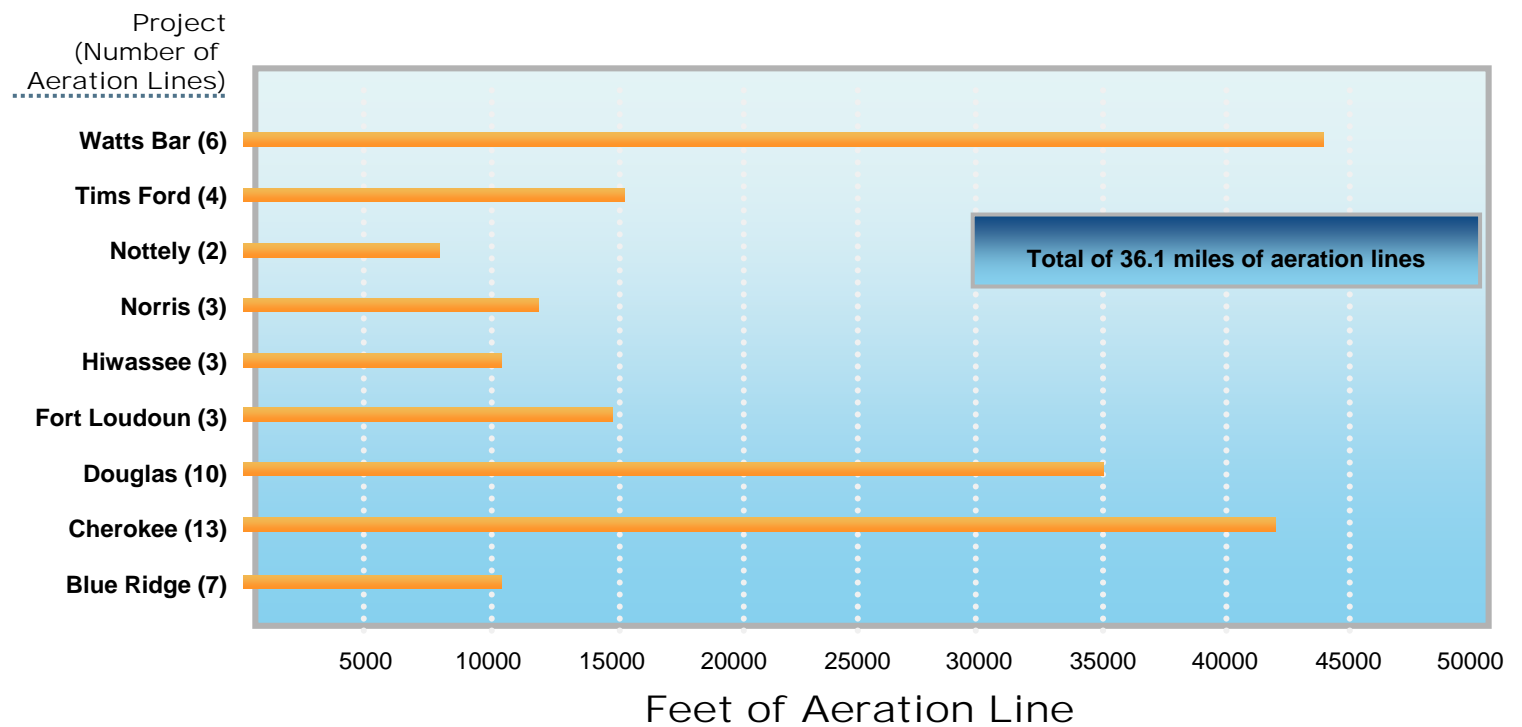
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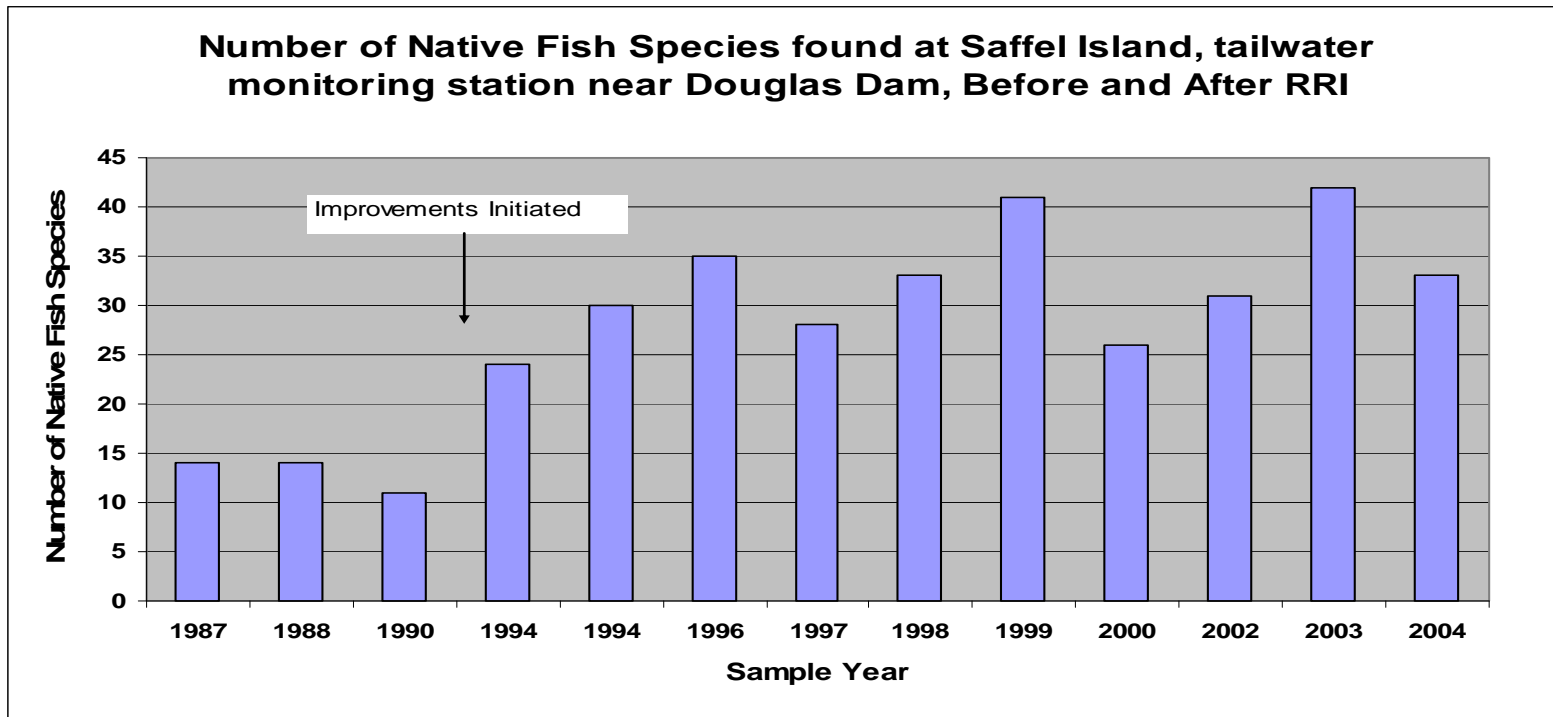
Building diffuser lines



Aeration line distribution



Fish community response—Douglas



Results

- Increased dissolved-oxygen concentrations in more than 300 miles of river downstream from TVA dams.
- Improved water flows in 180 miles of river.

Outcomes

- Improvements in tailwater macro invertebrate and fish communities
- Mussel recovery in tailwaters
- Reintroduction of some threatened and endangered species



Lake Sturgeon Makes Comeback

TVA water work done

Quality boosted below dam sites

TVA program breathes life into aquatic habitat downstream

'Big Water' Angling

TVA Tailwater Improvements Provide New Opportunities

Aquatic life rebounds in French Broad

TVA fights low oxygen levels

Future

- In an ongoing effort to conserve resources and money, it has been a challenge to replace RRI components in a timely matter.
- The life cycle is about 10 years for some RRI equipment, such as the diffuser lines that carry the LOx out into the reservoirs.
- On average, each year there should be at least one project site overhauled to keep the RRI program viable.

Future

- The TVA Board continues to make water quality below our dams a priority.
- There is an ongoing commitment to the cost of operations and the level of effort required to maintain the RRI program.
- TVA spends approximately \$2.2M a year to operate and maintain the RRI program.
- The pro-active business decision to continue to look for ways of improving the RRI program's efficiencies shows the TVA commitment to the welfare of the water quality below the dams in the Tennessee Valley.



Questions?





Regional Resource Stewardship Council TVA Communications Briefing

Mike Bradley, Jessica Coleman, Travis Brickey
TVA Communications



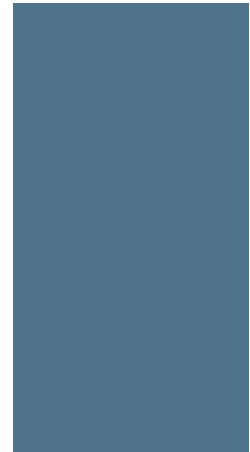
Communication Platform

- Planning based on business needs and TVA Mission
- Proactive vs. reactive communications
- Develop strategies, new tactics, improved use of communication vehicles

Boone Dam Communications Overview



Proactive public communication since sinkhole and seepage discovery in 2014



October 30, 2014
*TVA Announces Early
Drawdown*



November 12, 2014
*Boone Lake to be lowered below winter
pool ; Media/Stakeholder briefings*



November 24, 2014
*Water level to be held about 12
feet below normal*

December 2015 – January 2016



Sluicing rumors...

“TVA’s response at Boone Dam is world class...”

-- *Independent Review Board*



- February 26, 2015-Carnegie Hotel, Johnson City, Tenn.
- March 10, 2015-Daniel Boone High School, Gray, Tenn.
- July 30, 2015-Millennium Centre, Johnson City, Tenn.
- November 5, 2015-Draft EA Public Comment Session, Daniel Boone High School



Public Meetings and Stakeholder Briefings

Communications Objectives for Natural Resources

- Strengthen TVA's reputation as an environmental steward and valuable partner
- Build awareness internally and externally about the value of the region's natural, cultural and recreational resources and promote engagement in protection and enhancement activities.
- Focus communications efforts, when appropriate, to align with agency focus areas



Proactive Communication



TVA Today

INSIDENET NEWS POWER SERVICE GRAPH SPILLING REPORT ARCHIVE

me » News »

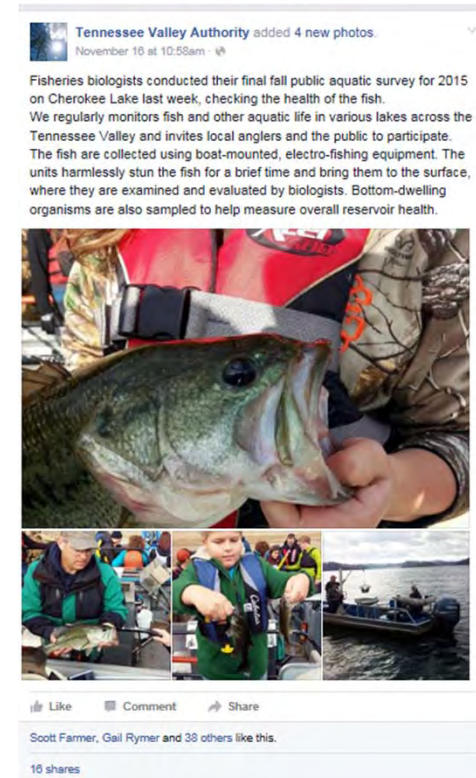
TVA to conduct aquatic health surveys

Posted on October 5, 2015

Print This Post

TVA biologists are conducting a fall aquatic survey to assess the overall health of fish and other aquatic life on four TVA reservoirs in Alabama, Tennessee and Kentucky.

Using boat-mounted electro-fishing equipment to harmlessly stun and surface the fish for a brief time, TVA biologists will collect, weigh, measure and count the fish before releasing them back into the water. Crews also will collect and observe benthic macroinvertebrates, which are small, bottom-dwelling animals that live in or near the water.



Social/Digital Media

Facebook – facebook.com/TVA

Twitter - @TVAnews

Instagram - @TVA

LinkedIn – linkedin.com/companies/TVA

YouTube – youtube.com/tvanewsvideo

@BooneRepair

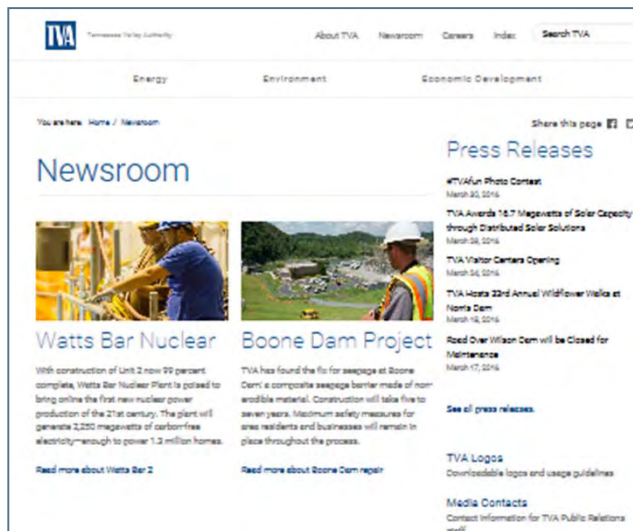
@TVAed

@TVAGPS

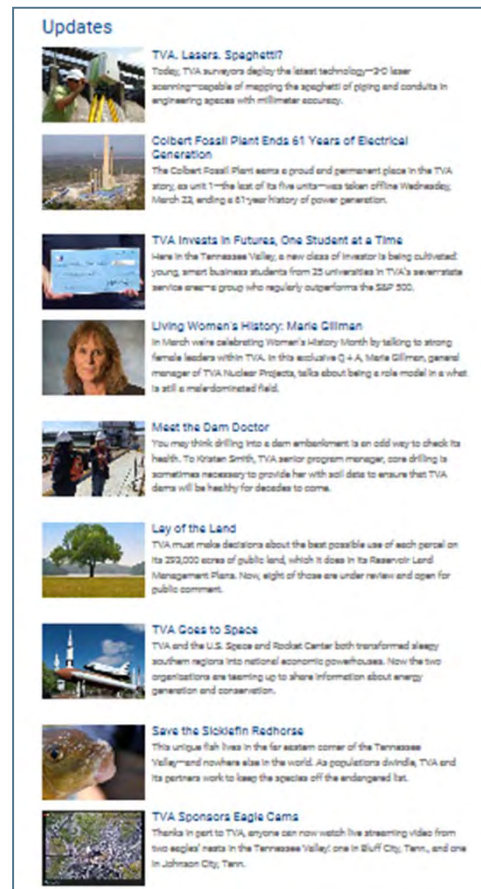
facebook.com/TVAGreenPowerSwitch



News Source



“With a strategy integrating owned media and social media, a brand’s own content can readily be found, consumed and shared by online audiences, creating the type of credibility associated with earned media and triggering additional visibility across social networks and search engines as a result.”
-Modern PR: the art & science of integrated media influence PR Newswire



Case Study: Christmas 2015

A rain-deluged Tennessee Valley turned to TVA for critical information.

Tennessee Valley Authority
Published by Travis Brickley [?] · January 1 at 4:06pm · 🌐

Rare sight! To recover flood storage in Fontana Lake, we're now releasing approximately 7,900 cubic feet of water using sluice gates and spillway tube #2 along with generating at full turbine capacity. Fontana is the highest dam east of the Rocky Mountains standing 480 feet high and stretches 2,365 feet across the Little Tennessee River in Western North Carolina next to the Great Smoky Mountains National Park.




364,339 people reached

Boost Post

Tennessee Valley Authority
Published by Travis Brickley [?] · December 28, 2015 at 11:27am · 🌐

River Update: All nine Tennessee River dams are releasing excess water using both generating turbines and spillway gates. High rainfall totals over most of the Valley has resulted in areas along the river at or above flood stage. Because of anticipated rainfall over the next few days, river conditions are expected to change. Our River Forecast Center is monitoring river conditions around the clock and is providing real-time updates: Savannah, TN: <http://tva.me/WkFDv> Pickwick ... [See More](#)



191,800 people reached

Boost Post



TVA **TN Valley Authority** @TVAnews · Dec 28
Whitesburg, AL crested yesterday at about 22.3', a little more than 5' above Flood Stage. This will be the highest crest since May 2003.
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 28
Commercial navigation closed at Chickamauga lock and the TN River Gorge below Chattanooga.
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 28
All areas upstream of Pickwick Dam have crested. Savannah, downstream of Pickwick, continues to rise but should crest tomorrow.
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 28
If not for the dams river level at Chatt. would be 14' higher from Christmas rain event. TVA operations averted \$130 million in damages.
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 28
Spillway gates now closed at Ft. Loudoun Dam on the Tenn. River near Knoxville to store water due to more rain.
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 28
All nine dams on the Tennessee River are releasing water using their generating turbines and spillway gates.
pic.twitter.com/W4xXnJRwGI
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 27
Crews replace 161-kilovolt tower near Selmer Tenn. Strong storms and tornados destroyed the original tower.
[linemen pic.twitter.com/l8nezKkNCK](http://linemen.pic.twitter.com/l8nezKkNCK)
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 27
Releases from tributary lakes will increase today and tomorrow to begin recovering flood storage. Be aware of swift moving water below dams.
[View Tweet activity](#)

TVA **TN Valley Authority** @TVAnews · Dec 27
We continue to store water in the tributary lakes to lessen downstream impacts. Levels will continue to rise over the next few days.

Case Study: By the Numbers



- 31 posts
- Total Reach: 3.5 million
- Page Likes increased by 7,230
(Over 52,000 total)
- Engagement: 295,000
(likes, comments shares, etc.)
- Total Impressions: 6.3 million
(number of impressions seen of any content associated with Page.)
- Total Video Views: 676,810
- Total Shares for Dec.: 64,010
(The number of people sharing stories about your page)

- 89 Tweets
- Total Impressions: 199,525
- Engagement: 8,731 (likes, retweets, etc.)



- 27 posts
- Total Impressions: 437,828
- Engagement: 6,134



Engaging Content



Reach: 750,000



Tennessee Valley Authority
WARNING – Don't watch if you are afraid of heights! Our linemen constantly train to ensure we can provide safe, reliable electricity. Helicopter transfers are a quick, safe way to deploy linemen when you can't drive to a tower. If you're lucky, you may catch a glimpse of this team installing equipment on top of our towers later this spring in Tupelo, Miss.

Reach: 62,000



Tennessee Valley Authority
 Cool video of water being released from the low-level outlets or sluice gates at Norris Dam. We're releasing about 5,100 cubic feet per second because Norris Lake is over six feet above flood guide for this time of year. Even though we're close to the time the tributary reservoirs are allowed to begin refilling for the summer recreation season, it's important to have enough flood storage for spring rains.

Reach: 99,000



Tennessee Valley Authority
 Construction on the 1,100 megawatt Paradise Combined Cycle Gas Plant near Drakesboro, Ky., is past the half way point. Once completed in 2017, the \$1 billion investment will provide cleaner power generation for about 640,000 homes and businesses. The new plant has three gas turbines and a large steam turbine that uses steam created from the hot exhaust to spin a large generator. Watch Project General Manager, Roger Waltrip and Project Manager, Jamie Cook describe this massive project.

Reach: 226,000



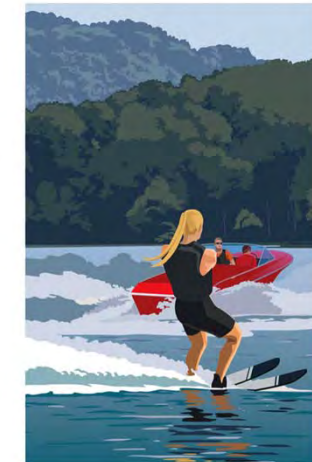
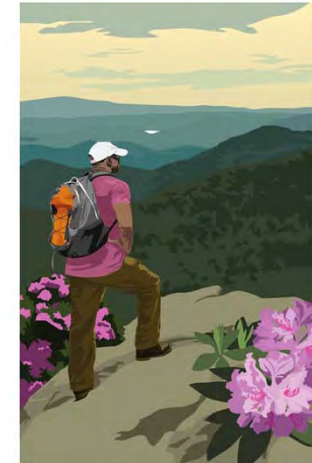
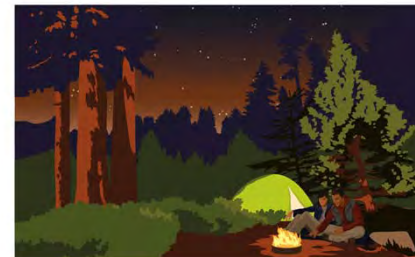
Tennessee Valley Authority
 This is cool! Time-lapse video of the heavy snowfall at the Paradise Combined Cycle Gas Plant construction project near Drakesboro, Ky.

Reach: 30,000

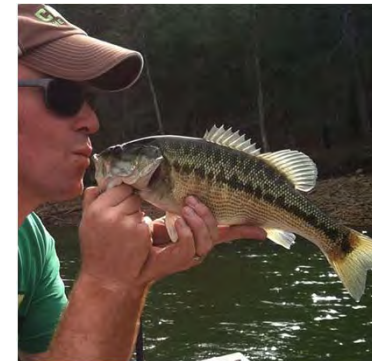
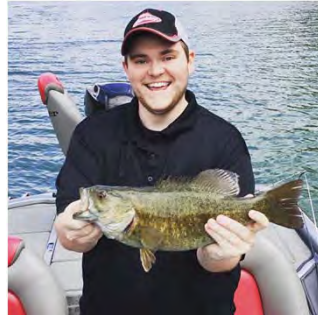


Tennessee Valley Authority
 Bill McElvain is a mechanical maintenance foreman at Watts Bar Nuclear Plant. He is an employee resources group leader and is doing his part to keep the plant operating safely. Learn more about Bill's story at www.tva.com/ourstory #OurTVAStory #TVAreliable

Get ready for some *#TVAfun*



Get ready for some **#TVAfun**





Questions?





Wrap Up and Adjourn



Thank you and please travel safely!