

TVA River Neighbors



Navigation • Flood Reduction • Power Supply • Public Lands • Water Quality • Recreation

Contents

- 3 Reservoir Levels
Reservoir Operations Update
- 4 Going for the Green
- 5 Suggestions for Lakefront Property Owners
- 6 Regional Resource Stewardship Council
- 8 Lake Sturgeon

Take A Hike!

Enjoy Nature Up Close on a TVA Trail

Hike along bluffs overlooking the scenic Tennessee River Gorge, watch a beaver lodge under construction, take in panoramic views of the Great Smoky Mountains, or have a picnic next to a 75-foot waterfall. Every one of these outdoor adventures is available on TVA-managed public lands—easy to reach from just about anywhere in the Valley and never more beautiful than when autumn colors reach their peak.

TVA maintains close to two dozen trails in three states covering a total of about 40 miles—many of them bordering reservoirs. “Convenient access is really a big selling point for those who have discovered TVA hiking trails,” according to TVA Recreation Specialist Homer Gray. “You don’t have to drive a long way to a national park or hike for hours along a steep trail to experience the thrill of viewing wildlife or finding spring wildflowers. We’ve got a wide array of trails that can be enjoyed by persons of differing physical abilities—including several that are paved. These trails are particularly well-suited to those with limited mobility, such as senior citizens, persons in wheelchairs, or young families with children in strollers. By the same token, there are many TVA trails that provide challenges for experienced hikers. Each

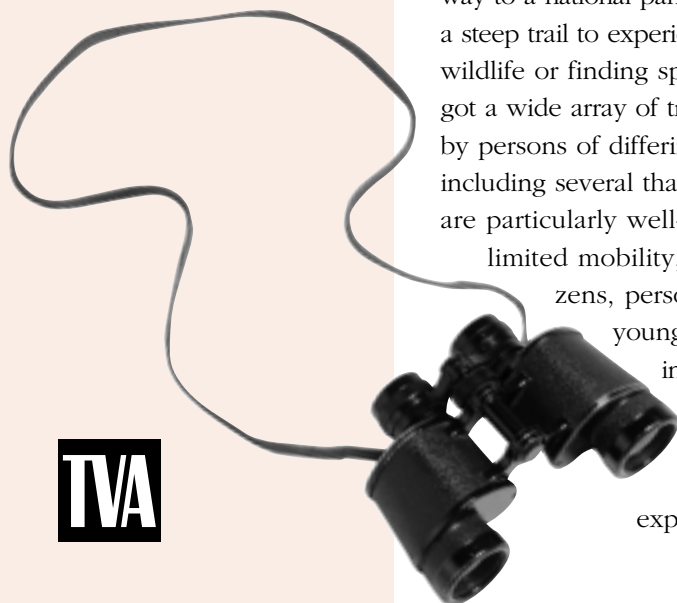


JACK ROSE

trail has its own special characteristics, but all of them offer the opportunity to ‘get away from it all’ without going too far from home.”

TVA hiking trails offer some distinct advantages over more popular hikes in the national parks and forests. Even though they’re still close to “civilization,” your chances of finding solitude in nature are increased, due to the fact that these trails aren’t as widely known. “In other words, you’re not as likely to encounter a crowd of people on the trail,” explains Gray. “Most of these trails are relatively short—from a half-mile to around three miles—and are moderately easy to traverse. And, unlike hikes in the national parks, you can even

continued on page 2



TVA

TVA Publishes New Environmental Report

TVA has published a new Environmental Report containing information on its environmental performance during 1999. It includes information on pollution prevention, environmental protection, reportable environmental events, research and technology, coal-plant emissions, and energy efficiency and renewables. Charts and graphs in the report document watershed health, waste generation, coal-plant emissions, and energy efficiency in TVA buildings.

Input from stakeholders shaped the report's content, according to Kate Jackson, TVA's Environmental Executive and Executive Vice President, River System Operations and Environment. "Our stakeholders asked us to be an honest broker—to describe the good things we did last year, but also to state where our performance needs improvement."

For a copy of the report, call 865-632-2333 or send an e-mail to tvainfo@tva.gov. The report also is available at TVA's website: www.tva.gov.



continued from page 1

bring your dog along on a TVA trail—as long as it's on a leash."

Many TVA trails pass through "Small Wild Areas"—a designation given to areas with exceptional natural, scenic, or aesthetic qualities. Efforts are made to encourage low-impact public use and to interpret the natural features of these areas for visitors. Some TVA trails are listed as "Tennessee State Scenic Trails," and others have received the "National Recreation Trail" designation, which recognizes "exemplary trails of local and regional significance."

The Cave Mountain Trail is a good choice for first-time hikers. This easy 1.25-mile loop trail begins at a parking area on the south side of Guntersville Dam and features rich and diverse forest habitats. Hikers will be rewarded with the opportunity to observe wetland wildlife (including ducks and beavers) in a Tupelo gum swamp close to the trail. Soon after, the woodlands open up to reveal picturesque views of Guntersville and Wheeler Reservoirs.

At 2.5 miles round-trip, the Lady Finger Bluff Trail is perfect for those interested in spending a whole morning or afternoon hiking. The trail follows the shoreline of the Lick Creek embayment to emerge on high bluffs that offer a spectacular view of Kentucky Reservoir. Features include ancient cedar trees, limestone outcroppings, streams, upland hardwood forests, and a fine vantage point from which to observe migrating waterfowl at the Tennessee National Wildlife Refuge on the opposite shore.

Somewhat more demanding is the Hemlock Bluff Trail—a full-day trek suitable for more experienced hikers. This moderately difficult seven-mile loop offers wildlife viewing opportunities and varied terrain, skirting steep ridges and bluffs along Norris



Scout troops, service clubs, church groups, and other volunteers help maintain TVA trails—cutting and clearing trees, as well as helping to prevent erosion. Their efforts ensure that trails stay open and safe. To adopt a trail, call TVA at 865-632-1601.

Reservoir. The trail begins at the Loyston Point Recreation Area and climbs through a hardwood forest. It provides impressive ridgetop views, passes through a hemlock grove from which it takes its name, and descends through a pine forest featuring remnants of old homesites.

Even if you've hiked on TVA-managed public lands before, there are always new trails to explore. Trotter Bluff, located on the Douglas Dam reservation, is a recent addition to the Small Wild Area program. The one-mile loop trail begins dramatically, with breath-taking views of the Great Smoky Mountains from the parking area. Winding through the hardwood forest, the trail features many American Chestnut stumps and limestone sinkholes. Wild turkeys are frequently sighted in the area, and hikers can spot core samples from the construction of the dam.

With ever-expanding opportunities to observe nature up close, you'll find that hiking a TVA trail is the perfect way to spend a day—in autumn, or any time of year.



Many TVA trails are open to multiple uses, including horseback riding, hunting, and mountain biking. For more information about specific trails, or questions regarding hiking on TVA public lands, please call 1-800-TVA-LAND. Additional information on recreational opportunities in and around TVA reservoirs can be found in *Tennessee River Country: A Glovebox Guide to TVA Places for Family Fun*. This new guidebook can be purchased for \$10 from bookstores throughout the Valley and can be ordered through the mail from TVA by calling 865-632-4220 in Knoxville or 423-751-7904 in Chattanooga.

TVA Reservoir Levels¹

	Observed September 1 Levels		January 1 Flood Guide Levels	
	feet	meters	feet	meters
Tributary Reservoirs				
Blue Ridge	1674.2	510.3	1668	508.4
Boone	1381.1	421.0	1357	413.6
Chatuge	1919.2	585.0	1912	582.8
Cherokee	1050.5	320.2	1030	313.9
Douglas	976.5	297.6	940	286.5
Fontana	1662.7	506.8	1644	501.1
Hiwassee	1505.3	458.8	1465	446.5
Normandy	872.8	266.0	864	263.4
Norris	1002.5	305.6	985	300.2
Nottely	1762.8	537.3	1745	531.9
South Holston	1713.6	522.3	1702	518.8
Tims Ford	884.7	269.7	873	266.1
Watauga	1944.4	592.7	1940	591.3
Main-River Reservoirs				
Chickamauga	682.0	207.9	677	206.4
Fort Loudoun/Tellico	812.5	247.6	809	246.6
Guntersville	593.9	181.0	593	180.7
Kentucky	356.0	108.5	354	107.9
Nickajack	634.0	193.2	633	192.9
Pickwick	411.3	125.4	410	125.0
Watts Bar	740.6	225.7	737	224.6
Wheeler	554.5	169.0	552	168.3
Wilson	506.9	154.5	506.2	154.3

¹ Elevations above mean sea level.

Reservoir Operations Update

Fontana Drawdown—Fontana Reservoir will continue to drop in the next few weeks until it reaches elevation 1570 just after Thanksgiving. The low water level will allow TVA to conduct a dam safety inspection, required every five years to meet federal guidelines. The inspection should be completed by early December—in time for the reservoir to fill to normal levels by late spring. The drawdown also will facilitate work on the new Lemons Branch Boat Ramp, which will provide boat access for much of future deep drawdowns.

Hydroelectric Generation—Power production at TVA's 29 hydroelectric plants was far below normal for almost every month in fiscal year 2000 due to unusually dry conditions across the Tennessee Valley. From February to May, TVA stored as much water as possible to fill tributary reservoirs towards minimum summer target levels. This stored water was carefully rationed during June and July to protect water quality, to ensure environmental compliance at TVA's thermal plants and, where reservoir levels permitted, to generate limited hydroelectric power during the highest demand hours. Then in August, hydroelectric production was increased with the start of the annual unrestricted drawdown. This increase was extremely beneficial in helping meet all-time high power demands on August 9 and August 17—once again demonstrating hydropower's importance in ensuring a reliable power supply to the region at the lowest possible cost.

Special Operations—TVA will provide special flows and/or reservoir elevations to benefit a variety of events in the coming months. These include the 12th Annual Tennessee River Rescue and a Christmas boat parade on Chickamauga Reservoir; the fall color cruise on Nickajack; and a "Nautical Mile" benefit for Baptist Hospital, the annual Tennessee Regatta, and a Christmas boat parade on Fort Loudoun.

Construction Continues: Kentucky Lock Update

If you've visited TVA's Kentucky Dam recently, you probably noticed a lot of construction activity in the area. TVA transmission towers and lines are being relocated in preparation for construction of a new 1,200-foot navigation lock. The existing towers will be replaced with taller towers to ensure adequate clearance for the transmission lines which will cross over the downstream portion of the new lock and approach channel. The Paducah and Louisville Railway and U.S. Highway 62/641 also will be moved to connect with new river bridges, which will be constructed about a half-mile downstream from the dam. Public access to the left river bank, just below the dam's earthen embankment, will be restricted for several years due to safety reasons associated with bridge and roadway construction.

Construction of the new lock is expected to take up to ten years and cost about \$500 million. The work is being performed under a Memorandum of Agreement between TVA and the U.S. Army Corps of Engineers. The Corps is designing, funding, and constructing the lock with technical support from TVA.



Going for the Green

This continues our series profiling good watershed neighbors—folks from all across the Valley who are doing things to protect downstream reservoir water quality.

Emerging Issue:

Conserving Water On Golf Courses

Even in a water-rich region such as the Tennessee Valley, water supply issues are fast coming to the forefront of public consciousness. Golf courses are major water users: a course in the southeastern U.S., for example, can use close to 400,000 gallons of water per day during the height of the midsummer growing season.

In many parts of the country, water is rapidly becoming a limiting factor in the development and management of golf courses. Consequently, water conservation and recycling is a growing trend, especially in arid/semi-arid regions and in highly-populated metropolitan areas. The use of recycled water for golf course irrigation is not new; it's been used for years in other parts of the country and in some regions it's a requirement on new golf course projects.



You may not know the difference between a driver and a sand wedge, but the way golf courses are managed affects you. The health of our streams, rivers, and reservoirs is directly linked to this rapidly-growing form of recreational land use. According to recent estimates, there are around 300 golf courses in Tennessee alone—with many more in other parts of the Valley. Since the average 18-hole course covers about 130 acres, that adds up to a significant total land area.

When you consider the fact that most courses incorporate streams or ponds as part of their design and many are located next to a river or reservoir, the connection to water quality becomes even clearer. The chemicals used to keep those fairways and greens looking so nice—often just different combinations of the same fertilizers and pesticides we use to keep our lawns green and weed-free—contain nutrients such as phosphorus, nitrogen, and potassium that can be carried through run-off into nearby waterways. In extreme cases, nutrient over-enrichment can lead to potentially harmful “blooms” of algae—which, in turn, can result in oxygen declines, imbalance of aquatic species, and higher water treatment costs.

Woodlake Golf Club: Safeguarding the Environment

Needless to say, when a golf course is managed with the environment in mind, it can add up to real benefits for the surrounding water bodies. That's certainly the case at Woodlake Golf Club in Tazewell, Tennessee. This 190-acre championship par 72 public course features bent grass greens, bermuda fairways, and several picturesque holes along TVA's Norris Reservoir. Woodlake President Billy Muncy and his son Travis—Superintendent and PGA Professional—are dedicated to doing everything they can to ensure a quality

golfing experience for their patrons while taking steps to protect the environment.

Conservation measures in place at Woodlake include a state-of-the-art stormwater management system, the preservation and enhancement of stream-side and shoreline riparian zones, and a modern pesticide/fertilizer storage facility which will serve as a model site demonstration. “We made these improvements because we feel a strong responsibility to protect the environment,” says Travis Muncy. “Our hope is that other golf courses will follow our example.”



MARTHA HESTER

Turfgrass management at Woodlake Golf Club in Tazewell, Tennessee, is carried out with an eye toward the environment.

Woodlake is the very first golf course to complete all the requirements of Tennessee's Cooperative Pollution Prevention Program—a partnership effort to design and promote viable, low-cost environmental technologies and best management practices to reduce the amount of nutrients and pesticides entering the Tennessee River watershed. Cooperating agencies include the Tennessee Departments of Agriculture and Environment & Conservation, TVA, the University of Tennessee Agricultural Extension Service, and the U.S. Environmental Protection Agency.

Of course, Woodlake isn't the only facility doing things the right way. Environmental stewardship is part of the daily operations of many golf courses

throughout the Valley. And even if you never take a swing, you enjoy the water quality benefits that result from their decision to incorporate environmental safeguards in the management of these facilities. The actions they're taking are helping to protect the Valley's water resources for all of us.

IT'S THAT TIME AGAIN...

Suggestions for Lakefront Property Owners

Autumn officially began on September 22nd and, if you didn't notice it on the calendar, you've undoubtedly noticed the many signs. The leaves are falling, temperatures are dropping, and TVA reservoir levels are getting lower. Most people are familiar with the annual drawdown cycle. TVA begins releasing water at a much more rapid rate on August 1 to make room to store the rainfall and runoff from the large storm systems that often occur in the Tennessee Valley in the winter and spring. This same water is used to generate low-cost power during the long hot days of August. It's a perfect time to get some work done if you own lakefront property—before the water starts coming up again next spring and your thoughts turn to summer fun.

TVA Watershed Teams are working with many golf courses to promote environmentally-responsible management. For more information on steps your favorite course can take to protect water resources, call Richie Ruth at 865-632-1460.



Late autumn and winter are good times to install stake beds, brush piles, and other fish attractors in coves and along the shoreline. These structures improve spawning success, provide shelter for young fish, and concentrate fish populations for anglers. TVA and your state's fish and wildlife agency can help you obtain a permit and provide assistance.

Weird Stuff In the Water!

If the answer is "bryozoans," what on earth was the question?

According to TVA staff members, who frequently receive such inquiries from reservoir users, it usually goes something like, "What's that big glob of slimy stuff stuck under my dock?" or "What's that jelly-like blob I saw attached to some twigs under the water?"

Bryozoans are tiny, harmless aquatic animals. They don't bite or sting. The gelatinous, often-translucent mass sometimes spotted in TVA reservoirs is the external skeleton of a bryozoan colony. Sort of like hornets attach their nests to tree branches, bryozoans attach themselves to whatever is handy underwater to build their colony. Colonies can range from the size of a marble with a few dozen inhabitants up to a mass the size of a honeydew melon that contains many thousand individuals.

If you spot a bryozoan colony clinging to your dock, don't remove it. These little-known and harmless creatures are an important part of the Valley's diverse aquatic ecosystem.



Take advantage of lower water levels by:

- Landscaping along your shoreline. New plants will have plenty of time to establish a good root system to support above-ground growth next spring. (Just remember to water them if there's a long dry spell.) Consider using native plants—trees, shrubs, wildflowers, and grasses that grow in your area naturally.
- Removing trash and other debris from the shoreline.
- Inspecting your dock to make sure the flotation is secured. Replace old boards and make other needed repairs. If you've been thinking about building a dock, now is the time to call TVA for a permit application.
- Checking with your local marina or boat dealer regarding proper boat winter care. Clean your boat with phosphate-free, biodegradable soaps and detergents or natural cleansers like vinegar, borax, and baking soda.
- Doing some exploring. You can learn more about your reservoir's bottom terrain, scout for fishing spots, and locate potential boating hazards which may be hidden at higher water levels.

TVA Watershed Teams can recommend native plant species for your landscaping project; help with habitat enhancement projects; assist with shoreline clean-ups; and help you obtain a permit to build a boat dock, remove vegetation, or make other shoreline alterations. Call 1-800-TVA-LAND for the phone number of the Watershed Team nearest you.

Conference To Spotlight Southeastern Lakes

If you're interested in the management and protection of southeastern lakes and their watersheds, here's a date to mark on your calendar. The 10th Annual Southeastern Lakes Management Conference will be held March 21-23 at the Hyatt Regency Hotel in Knoxville, Tennessee.

Conference organizers promise sessions of interest to everyone—from lakefront property owners to teachers and students, agency staff, and scientists and engineers. The theme is "Sustainable Watersheds—Balancing Multiple Needs."

The conference is being organized by the North American Lake Management Society and the Southeast Watershed Forum, with TVA serving as host. Registration information is available by calling TVA's Sue Robertson at 423-751-3747.



REGIONAL RESOURCE STEWARDSHIP COUNCIL REPORT:

Subcommittees Go To Work

The Regional Resource Stewardship Council, created to advise TVA on the management of natural resources in the Tennessee Valley, met in Knoxville on July 28th and in Chattanooga on September 21st. Both meetings included progress reports by the Council's four subcommittees. These subcommittees reflect the priorities established at the Council's initial organizational meetings. Their purposes and members—including non-Council members invited to ensure representation of all stakeholder interests on each subcommittee—are shown below.

Most subcommittees have met several

times. Some are still adding new members; others have already hosted meetings to seek input from the public. To provide comments, please contact one of the Council members listed below by calling TVA at 865-632-2333 or by visiting TVA's website at www.tva.gov. Written comments can be mailed to the Regional Resource Stewardship Council, TVA, 400 West Summit Hill Dr., Knoxville, TN 37902-1499.

The next meeting of the full Stewardship Council is set for November 1 in Knoxville. Meeting agendas and transcripts are available at www.tva.gov.

Public Lands Management Subcommittee

Purpose: To study issues relative to TVA's management of public lands and related activities including: recreation, management of shorelines, and multipurpose use of public lands, including the management of natural resources and protection of critical habitats; and economic development. To explore and address past and current management practices. To develop recommendations for consideration of the RRSC and submittal to TVA that would improve or otherwise enhance the management of these resources for the benefit of stakeholders in the Tennessee Valley and driven by input from these stakeholders.

Subcommittee Chair:

Ann Coulter, RiverValley Partners, *Chattanooga, TN*

Council Members:

Roger Bedford, Alabama State Senator, *Russellville, AL*

Julie Hardin, Foothills Land Conservancy, *Knoxville, TN*

Bob Matheny, Sequatchie Valley Electric Cooperative, *South Pittsburg, TN*

Paul Teague, retired physician, *Parsons, TN*

Navigation Infrastructure Subcommittee

Purpose: To advise TVA in performing its mission to develop and maintain a safe and efficient navigable waterway from Paducah to Knoxville including related navigable tributaries. To develop recommendations for consideration of the RRSC and submittal to TVA that would help ensure the structural integrity and economic efficiency of the Tennessee River navigation system.

Subcommittee Chair:

Elaine Patterson, Olin Corporation, *Chattanooga, TN*

Council Members:

Ann Coulter, RiverValley Partners, *Chattanooga, TN*

Al Mann, *Benton, KY*

Miles Mennell, Association of Tennessee Valley Governments, *Nashville, TN*

Other Members:

Jan Jones, Tennessee River Valley Association, *Decatur, AL*

Bill Kinzeler, American Commercial Barge Line, *Jeffersonville, IN*

Water Quality Subcommittee

Purpose: To study issues relative to TVA's efforts to improve water quality in the Tennessee River watershed. To develop recommendations for the RRSC and submittal to TVA that would improve or otherwise enhance these efforts for the benefit of stakeholders in the Tennessee Valley.

Subcommittee Chair:

Jimmy Barnett, Sheffield Utilities, *Sheffield, AL*

Council Members:

Elaine Patterson, Olin Corporation, *Chattanooga, TN*

Bruce Shupp, B.A.S.S., Inc., *Montgomery, AL*

Stephen Smith, Southern Alliance for Clean Energy, *Knoxville, TN*

Other Members:

Steve Alexander, U.S. Fish & Wildlife Service, *Cookeville, TN*

Larry Bowers, Tennessee Conservation League, *Soddy Daisy, TN*

Paul Davis, Tennessee Department of Environment and Conservation, *Nashville, TN*

Charles Horn, *Montgomery, AL*

Brad McLane, Alabama Rivers Alliance, *Birmingham, AL*

John Poole, Alabama Department of Environmental Management, *Montgomery, AL*

Axel Ringe, Tennessee Clean Water Network, *New Market, TN*

Frank Russell, Intertrade Holdings, Inc., *Copperhill, TN*

Susan Weber, *Huntsville, AL*

Tim Weisenberger, BP Amoco, *Decatur, AL*

Tom Welborn, U.S. Environmental Protection Agency, *Atlanta, GA*

Integrated River Management Subcommittee

Purpose: To study issues relative to TVA's management of the Tennessee River system and related activities for multiple public benefits, including navigation, flood damage reduction, power generation, regional development, lake/reservoir issues, water supply, recreation, and aquatic habitat. To consider the balances and tradeoffs of different river system management strategies. To determine what compromises are necessary for the RRSC to make recommendations to TVA about follow-on analysis of uses and related impacts. To develop recommendations for consideration by the RRSC and submittal to TVA that would provide greater public benefits from TVA's management of the Tennessee River system.

Subcommittee Chair:

Roger Bedford, Alabama State Senator, *Russellville, AL*

Council Members:

Austin Carroll, Hopkinsville Electric System, *Hopkinsville, KY*

Phil Comer, retired CEO of Foote Mining Co., *Dandridge, TN*

Bill Forsyth, Murphy Electric Power Board, *Murphy, NC*

Thomas Griffith, Mayor, *Amory, MS*

Miles Mennell, Association of Tennessee Valley Governments, *Nashville, TN*

W. C. Nelson, Nelson Tractor Company, *Blairsville, GA*

Other Members:

Darrell Corpening, Eastman Chemical Company, *Kingsport, TN*

Jack Marcellis, Department of Public Works, *Chattanooga, TN*

Thomas Vorholt, Ingram Barge Company, *Nashville, TN*



Now Available:

New Fundraising Guide

The *Directory of Funding Sources for Grassroots River and Watershed Conservation Groups 2000-2001* is now available from River Network, a national non-profit group that supports river conservation organizations. The new directory focuses on foundations, corporations, state and federal agencies, and other funding sources known to support small non-profit watershed groups.

Special features include an index of funders by geographic focus, a brief tutorial on grant proposal writing, a section on training opportunities, a list of research tools and directories, and a special index of emergency funders. Listings include contact information, deadlines, grant sizes, and a brief description of each source's particular interests.

The cost of the directory is \$35, plus shipping/handling. To place an order, send a check or money order to River Network, 520 SW Sixth Avenue, Suite 1130, Portland, OR 97204-1535. Visa or MasterCard orders may be placed at 503- 241-3506.

Ancient Fish Return to Area Waters

About 800 young lake sturgeon were released into the French Broad River below TVA's Douglas Dam this summer—the first step in a long-term effort to restore this once-plentiful fish to Tennessee Valley waters.

Scientists believe lake sturgeon first appeared more than 350 million years ago, before the dinosaurs. They thrived throughout the Tennessee River system until water pollution, over-fishing, and changes in habitat resulted in near extinction.

Female sturgeon can take 15 to 20 years to mature. Once mature, they spawn only every four to six years, but they can produce up to three million eggs per spawning. Their typical life span is thought to be 50-100 years, although some sturgeon may live more than 150 years. One of the largest lake sturgeon ever recorded

weighed 310 pounds and was a little over eight feet long.

Agencies involved in the restoration effort include TVA, the Southeast Aquatic Research Institute, the Tennessee Aquarium, the Tennessee Wildlife Resources Agency, the U.S. Fish and Wildlife Services, the U.S. Geological Survey, the World Wildlife Fund, and Conservation Fisheries. Project supporters credit TVA's improvement of water quality—by ensuring a minimum flow of water through its dams and installing equipment to add oxygen—with making the reintroduction of the fish possible.

More young fish will be released over the next 8-10 years in hopes of re-establishing a self-sustaining sturgeon population in the upper Tennessee River system. The long-term goal is a population that can support limited sport-fishing.



JOHN BARBARINO

Local residents were on hand to celebrate the release of the first lake sturgeon into the French Broad River on July 19.

If you have a new address or no longer want to receive this newsletter, please contact:

TVA River Neighbors

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Post Office Box 1589
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