

TVA River Neighbors



Navigation • Flood Control • Power Supply • Land Use • Water Supply • Water Quality • Recreation

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You Don't Have to Travel Far to Explore an Island

They were home to Native Americans and pioneers. They've been the scene of horse racing, moonshining, and steamboat wrecks. They've provided the setting for Hollywood movies and scientific research. They feature barge-loading facilities, cemeteries, sand pits, aquatic plant nurseries, and state parks. They are used by wintering bald eagles and migratory sandhill cranes, as well as by deer hunters and hikers. They are listed on the National Register of Historic Places, and they are the stuff of legends.

They are islands in the Tennessee River system, and most people agree that they add a great deal to the overall appeal of Valley reservoirs.

The scenic qualities of reservoir islands are obvious. Their attractiveness as a visual resource and reference point makes them a welcome addition to the view from the shoreline. No matter how nice it is to look out across the water, it's even nicer when you have an island to provide a

scenic accent—to break up the otherwise broad expanse of “flat water.” Islands contribute a sense of mystery, richness, and scenic diversity to the reservoir landscape.

But reservoir islands aren't just to admire from afar. The vast majority are public lands—that is, they are available

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There are close to 23,000 acres of publicly-owned reservoir islands in the Tennessee River system.

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TVA Watershed Teams

Boone, Bristol Projects, Fort Patrick Henry, South Holston, Watauga, Wilbur:
423-239-2000

Cherokee, Douglas, Nolichucky:
865-632-3791

Norris:
865-632-1539

Melton Hill, Watts Bar, Great Falls:
865-988-2440

Fontana, Fort Loudoun, Tellico:
865-988-2420

Apalachia, Blue Ridge, Chatuge, Hiwassee, Nottely, Ocoee 1, 2, 3:
828-837-7395

Chickamauga, Nickajack:
423-697-6006

Guntersville:
256-571-4280

Wheeler:
256-386-2560

Pickwick, Wilson, Bear Creek Projects:
256-386-2228

Kentucky, Beech River Project:
731-641-2000

Tims Ford, Normandy:
256-386-3442



to the boating public for many types of informal recreation. Your local TVA Watershed Team can provide you with information regarding which reservoir islands are publicly owned and therefore available for recreational use.

Island diversity

Reservoir islands are amazingly diverse. Hiwassee Island on Chickamauga Reservoir has been studied by archaeologists from all over the world. Evidence of human history there dates back to prehistoric times and is judged to be extremely significant.

Bellefonte Island on Guntersville Reservoir is home to a naturally occurring tupelo gum stand—an uncommon forest type that renders this location ecologically important.

Many reservoir islands are homes and feeding areas for resident and migratory waterfowl. Four islands include tracts classified by TVA as Ecological Study Areas—land set aside for use by educational institutions as outdoor classrooms. Several islands have been designated as Habitat Protection Areas, due to the presence of threatened or endangered populations of animals or plants. And two islands contain Small Wild Areas—sites designated by TVA as having exceptional natural and scenic qualities which are suitable for low-impact public use.

The need for protection

Because they are such a special feature of reservoir landscapes, it's good to know that steps are being taken to preserve TVA islands. TVA Watershed Teams conduct shoreline stabilization work to help control erosion and protect the shoreline from wave action. Since TVA first undertook this



DAN HICKS, TWRA

The first of thousands of greater sandhill cranes begin arriving on Hiwassee Island on TVA's Chickamauga Reservoir in late November. The island is part of Tennessee's Hiwassee Wildlife Refuge—a primary stopover on the cranes' migratory route. Members of the public have a chance to learn about the area's natural and cultural history—and get a close look at the magnificent birds—during Cherokee Indian Heritage and Sandhill Crane Viewing Days, to be held February 2-3, 2002. For more information, call the Meigs County Department of Tourism at 423-334-5850.

effort, 3.6 miles of critically eroding island shoreline have been improved.

Stabilization work has been successfully completed on Seven Mile Island on Pickwick Reservoir; on Bucky's Island on Boone; on Patterson Island on Kentucky; on Leuty, Huffine, Jackson Branch, Sand, and Gordon Branch Islands on Watts Bar; and on Skull Island and Hiwassee Island on Chickamauga. Additional restoration work is currently underway at two of these sites: Gordon Branch and Hiwassee Islands. Plans call for critically eroding shoreline on Loyston Island on Norris Reservoir to be stabilized in the coming year.

Part of reservoir land planning

If islands are important to you, there's a way for you to make your feelings known. "Islands seem to mean a great deal to those who live along and use TVA reservoirs," says TVA Land Use Policy Specialist Cathy Robinson. "We want citizens to know that they can have a voice in how these resources are managed.

"Whether reservoir islands are valued for their recreational opportunities, ecological

or archaeological significance, waterfowl and wildlife habitat, scenic interest, or other reasons—TVA wants to hear the opinions of Valley citizens on this issue,” says Robinson. The next opportunity for public input will be late this fall when the draft version of the Pickwick Reservoir Land Plan will be made available for comment. “By choosing to participate in the reservoir land planning process,” she says, “you can

have an influence on decisions regarding the management of islands and other public lands on your reservoir.”

For more information on the management of reservoir islands and upcoming opportunities for public comment, call your local TVA Watershed Team or contact them by e-mail through the TVA Web site at www.tva.gov.

TVA Small Wild Areas

No Better Time than Fall Color Season to Get Acquainted

They're a lot less crowded than many national parks and forests—and every bit as spectacular when it comes to fall color.

TVA Small Wild Areas (the designation refers to locations on TVA public lands with exceptional natural and scenic qualities) are suitable for low-impact uses such as hiking, bird-watching, or photography. Signs identify the trail's natural features such as concentrations of wildflowers, interesting geological features, waterfalls, or mature forests.

The three Small Wild Areas described below offer especially good opportunities for viewing fall colors, including exceptional vistas of the Tennessee River.

Lady's Bluff Small Wild Area

(located on Kentucky Reservoir near Linden, Tennessee): A 2.4-mile loop trail with a gentle-to-moderately-steep grade follows Lick Creek's northern shoreline. Hikers emerge on high bluffs offering magnificent views of the Tennessee River and the surrounding hardwood forests. The Tennessee State Migratory Wildlife Refuge is located along the opposite shoreline. The bluff itself is dotted with ancient cedars and limestone outcroppings.

Cave Mountain Small Wild Area

(located on Gunter'sville Reservoir on the south side of Gunter'sville Dam): A one-mile moderately steep loop trail offers hikers a wonderful opportunity to observe wildlife along a large beaver pond as well as breathtaking views of Gunter'sville Reservoir. The trail winds through a mixed hardwood forest with numerous colorful fall vistas.

White's Creek Small Wild Area (located on Watts Bar Reservoir in Rhea County): A scenic, moderately steep three-mile loop trail begins along the shoreline and continues along the ridgetops overlooking the reservoir. Hikers walk through mixed hardwood and pine forests that feature spring-fed streams and shallow bays.



For more information on these and other Small Wild Areas, contact Nancy Fraley at 865-632-1535.

Heightened Security

To ensure uninterrupted service to the people of the Valley during the recent terrorist attacks on New York and Washington, TVA heightened security at all of its facilities.

All TVA buildings were secured, and only employees with photo identification badges were allowed access. Emergency operations centers—designed to allow TVA personnel to respond to any type of emergency affecting TVA facilities, day or night—were activated. Extra precautions were taken at nuclear facilities, with perimeter boundaries being extended to further protection of the area. Recreation areas were closed and those camping or fishing on TVA reservations or around the tailwaters of dams were asked to leave.

In support of the rescue effort, TVA set up collection points at its offices in Knoxville and Chattanooga to allow employees to donate needed supplies, such as gloves, shovels, flashlights, and breathing masks. Various TVA organizations also collected surplus TVA equipment and supplies—including coveralls, respirators, gloves, and tools—for delivery to the Federal Emergency Management Agency.

On behalf of all employees, the TVA Board extends its heartfelt sympathies to the families of the victims of this horrific tragedy.

End of the Drought?

With all the wet weather we've had in most parts of the Valley since late July, doesn't that mean that the drought is over?

It's a little more complicated than that, according to TVA River Forecasting Specialist Randy Kerr: "The rainfall we received certainly helped—no doubt about it. But it will take more than one or two months of above-normal precipitation to restore groundwater levels to what they were before the drought began back in July of 1998. And another couple of dry months could put us right back where we were before."

While most parts of the Valley received abundant rainfall, some locations weren't so lucky. The Hiwassee watershed, for example, was still in a drought condition at press time.

Still, the rainfall was welcome and very beneficial. Increased flows boosted dissolved oxygen levels and reduced river temperatures—good news for fish. The extra water also helped increase hydrogeneration without significantly affecting reservoir levels. "Definitely a step in the right direction," says Kerr. "We hope that the recent rainfall signals a return to more normal conditions, but only time will tell."



TVA Reservoir Levels¹

	Observed September 15 Levels		January 1 Flood Guide Levels	
	feet	meters	feet	meters
Tributary Reservoirs				
Blue Ridge	1673.9	510.2	1668	508.4
Boone	1378.5	420.2	1357	413.6
Chatuge	1917.9	584.6	1912	582.8
Cherokee	1056.5	322.0	1030	313.9
Douglas	983.0	299.6	940	286.5
Fontana	1679.6	511.9	1644	501.1
Hiwassee	1508.4	459.8	1465	446.5
Normandy	872.9	266.1	864	263.4
Norris	1008.1	307.3	985	300.2
Nottely	1758.9	536.1	1745	531.9
South Holston	1719.4	524.1	1702	518.8
Tims Ford	884.3	269.5	873	266.1
Watauga	1947.4	593.6	1940	591.3
Main-River Reservoirs				
Chickamauga	681.8	207.8	677	206.4
Fort Loudoun/Tellico	812.5	247.6	809	246.6
Guntersville	594.8	181.3	593	180.7
Kentucky	356.4	108.6	354	107.9
Nickajack	634.0	193.2	633	192.9
Pickwick	411.4	125.4	410	125.0
Watts Bar	740.6	225.7	737	224.6
Wheeler	554.3	169.0	552	168.3
Wilson	507.1	154.6	506.2	154.3

¹ Elevations above mean sea level.

Reservoir Operations Update

Boone Drawdown—Starting November 1, TVA will accelerate the drawdown on Boone Reservoir until the water level reaches elevation 1348 (about seven feet lower than normal) on December 10. This is necessary for repairs to one of the spillway gates. During this time, TVA will also replace the wire ropes used to lift the gates and retrofit the dam to accommodate a bulkhead—a steel barrier used to de-water the spillway gates for test operations and maintenance without releasing water or requiring a drawdown. This should reduce the need for future drawdowns below normal winter levels. The work is scheduled for completion by mid-January—in time for the reservoir to fill to normal levels by February 2002.

Nottely Drawdown—Starting November 1, TVA will accelerate the drawdown on Nottely Reservoir until the water level reaches elevation 1740 (about five feet lower than normal) on November 26 to accommodate work on a water intake by the Notla Water Authority. The project is scheduled for completion by late December—in time for the reservoir to fill to normal levels by February 2002.

River Information—For the latest information on current and predicted reservoir levels, stream flows, and expected water releases from TVA dams, visit www.tva.gov or call TVA's toll-free information line: 632-2264 in Knoxville, 751-2264 in Chattanooga, 386-2264 in Muscle Shoals, and 1-800-238-2264 from all other locations. If you are hearing-impaired, call 1-800-438-2264.



In Answer to Your Question...

Why does TVA have to draw down my reservoir to provide for flood storage space when we're in a drought?

Good question! Given how dry it's been the past few years, a lot of people are wondering why we still have to draw down reservoir levels to provide protection from flooding. For an answer, we went to Greg Lowe, manager of TVA's River Scheduling.

“Even in a drought situation, there is always the potential for a flood-producing rainfall event to occur. A major weather system can move in at any time, and we have to be sure there's enough room in nearby reservoirs to store that water.

“Usually during drought periods, most of the rain soaks into the soil before it can reach the reservoir. But, when severe storms occur and dump a lot of rain in a particular area in a short amount of time, only so much of the rainfall can be absorbed—leaving the rest to run off quickly and produce damaging flood flows.

“Here's an example. In early April of this year, we were closely monitoring a weather system advancing toward the southwest portion of the Tennessee Valley. As this weather system passed through the Bear Creek watershed, it dumped about eight inches of rain, causing the reservoir to rise a full 30 feet in 24 hours. Fortunately, downstream flooding was minimal—but only because the reservoir space was there to contain the runoff.

“Weather-forecasting technology has improved tremendously over the last several years. Doppler radar allows us to watch weather systems as they form and move across the region. But it just isn't capable of providing reliable precipitation forecasts. When it comes to predicting when and where a front may stall—and how many inches of rain it will produce before it starts moving again—it's basically guesswork.

“The bottom line? We can't afford to take chances with the lives and property of Valley citizens. If we aren't prepared to deal with a flood before it occurs, we won't be able to provide the flood reduction benefits that TVA's system of dams and reservoirs was designed to provide.”



On average, TVA's system of dams and reservoirs prevents about \$173 million in flood damage in the Tennessee Valley annually. Flood-storage reservoirs on tributary rivers do the bulk of the work in controlling floods. TVA's Fontana Reservoir, for example, can store more than 1,400,000 acre/feet of water (enough to cover 1,400,000 acres of land with a foot of water).

Construction Update: Kentucky Lock

You might not notice some of the other signs of progress on the new lock at TVA's Kentucky Dam, but you can hardly miss the trucks. About 600 travel across the dam each day, loaded with dirt to be used in relocating the existing highway and railway. The old power lines at the dam are also being replaced with transmission towers tall enough to allow the use of cranes for moving equipment and material onto the construction site.

Construction of the piers for the new highway and railway bridges—to be built about a half-mile downstream from the dam—is expected to begin soon. Work on a temporary dam to facilitate lock construction is scheduled to begin next year.

The U.S. Army Corps of Engineers is designing, funding, and constructing the new lock, which will be owned by TVA upon completion. TVA assisted in the environmental reviews conducted for the project and is providing technical assistance, including oversight to ensure that the design of the lock does not compromise dam safety. Depending on funding, the lock should be open in 10-15 years.



Annual Black Bass Survey Nets Varied Results

Volunteer Anglers Play An Important Role

TVA's annual black bass survey just wouldn't be the same without volunteer participation, according to the TVA crews who conduct the study on Valley reservoirs.

Volunteer anglers fish for one hour in selected coves that have been blocked off with a net. Then TVA biologists use equipment that sends an electric current into the water to temporarily stun the remaining fish. The fish are then collected, counted, weighed, measured, and released unharmed outside the cove.

Most of the volunteers are amazed at the number of bass actually in the cove, and the experience provides an opportunity for TVA fisheries biologists to interact with others who enjoy sportfishing.

"It gives us a chance to talk informally with anglers," says TVA's Donny Lowery. "They can ask us questions and we listen to their concerns about everything from water quality to fish health. Plus, we just get to have a good time out on the water with other folks who like to fish as much as we do."

The schedule for the 2002 survey will be available online at www.tva.gov beginning in February. To participate, call TVA at 256-386-2729 (Alabama) or 865-632-1721 (Tennessee).



Volunteer anglers join TVA crews on the electrofishing boat to get a good look at what they missed while "pre-fishing" a cove on Gunterville Reservoir.

Sort of a mixed bag. That's how TVA Fisheries Biologist Donny Lowery describes the results of TVA's 2001 black bass population survey—an annual study which helps determine the number, age, and general health of black bass in reservoirs throughout the Tennessee Valley.

Data collected this spring reveal a slightly higher catch rate than last year on mainstem reservoirs: 59.5 fish per hour. Or, as Lowery puts it, "almost a fish a minute." But catch rates on tributary reservoirs declined drastically compared to the 2000 sampling. "We got an average of only 26.2 fish per hour this year, as compared to 53 fish per hour last year. And, at this point, we still can't figure out what to attribute it to."

The sampling process provides a snapshot view of a single location on a particular day, so the information gathered has some limitations. But the annual survey nevertheless furnishes fisheries biologists with extremely valuable data, explains Lowery. "TVA has been conducting these surveys for seven years now, so we've

been able to establish a pretty good database. The longer you do something like this—consistently, within regular time frames—the more useful that information becomes. We're now in a good position to be able to observe trends in black bass populations."

One of those trends is a gradual decline in "lunker" bass—those that weigh more than four pounds. On the positive side, the 2001 survey revealed two locations where that pattern seems to be reversing itself. "Gunterville and Fort Loudoun seem to be bouncing back," says Lowery. "Those reservoirs have a tremendous bait fish population. Our crews observed huge schools of shad. It was encouraging to see some good numbers for lunker bass in those two reservoirs."

The biggest fish in this year's survey didn't come from either Gunterville or Fort Loudoun, however. It was collected on Watts Bar Reservoir and weighed in at a whopping 6.2 pounds. Wilson had the highest density (number of fish per acre) of any reservoir sampled and also the

highest catch rate: 94.5 fish per hour. “That’s a lot of dipping,” notes Lowery, referring to the method by which the temporarily stunned fish are removed from the water.

If you were awarding a blue ribbon for a black bass fishery on a TVA reservoir, it would probably go to Guntersville, which earned several key superlatives in the 2001 survey. Guntersville had the highest biomass—more pounds of fish per acre—and also topped all other TVA reservoirs in perhaps the most significant category: the greatest percentage of fish measuring over 10 inches in length. “Guntersville’s rate of catchable-size fish was 79 percent, which is a sign of a really good bass fishery,” observes Lowery.

In terms of fish health, the 2001 survey revealed a 3-5 percent increase in the numbers of fish exhibiting signs of disease (mostly fungal and/or bacterial infections) and parasites (such as leeches)—a statistic that Lowery found a little surprising. “Still,” he reasons, “the fish we sampled had really good length-to-weight ratios, which wouldn’t be the case if the population was



Captured fish are kept in live wells and then carried in tubs to the bank, where they are weighed, measured, checked for disease and parasites, fin-clipped to identify any recaptures, and then released—alive and unharmed—outside the cove.

under the kind of stress that makes the fish particularly susceptible to illness. Overall, the picture for black bass on TVA reservoirs is very favorable.”

Key findings from the 2001 survey are summarized in the table below. For more detailed information, visit TVA’s Web site at www.tva.gov or call 865-632-1721.

2001 BLACK BASS SURVEY RESULTS

RESERVOIR	NO. OF FISH PER ACRE*	POUNDS PER ACRE	AVERAGE WEIGHT (LBS)
Boone	7	6.24	1.3
Chickamauga	5	2.3	0.81
Douglas	5.1	2.9	0.92
Fort Loudoun	17.3	12.6	1.1
Guntersville	16.1	21.4	1.7
Kentucky	3.8	2	1.6
Melton Hill	1.4	0.54	0.85
Normandy	4.6	2.7	1.1
Pickwick	10.4	5.8	1
Tims Ford	1.1	1	1.3
Watts Bar	12.4	7.31	1.5
Wheeler	16.3	9.7	1.2
Wilson	18.2	11.9	1.2

*This number reflects harvestable-size bass (10 inches or more in length).

In Mississippi and Tennessee

Call 1-800-ASK-FISH

All the latest boating and fishing information is as close as your telephone. A toll-free number, 1-800-ASK-FISH, offers regularly updated information to help callers from Tennessee and Mississippi get the latest fishing reports, locate public boat ramps or vessel pump-out stations, and even purchase a fishing license or reservoir maps. Callers can also learn about state fishing regulations and other types of information that can contribute to a memorable angling experience.

The 1-800-ASK-FISH program is a cooperative effort between state resource management agencies, the American Sportfishing Association, and Bass Pro Shops.



TVA Land Transfer Ensures Protection of Public Land

It certainly wasn't part of the original plan, but it was a good outcome.

When TVA made the decision not to proceed with building the Columbia Dam and Reservoir, much discussion arose about what to do with the land that had been acquired for the project along the Duck River in south central Tennessee—an area rich in natural resources, with exceptional river habitat and ecologically distinctive communities such as cedar glades.

An environmental impact study was conducted, public meetings were held, and over 5,000 individuals shared their views on what should be done. Based on the results, TVA recently transferred ownership of 12,800 acres of this public land to the State of Tennessee for recreation and natural and cultural preservation. Deed restrictions set aside the vast majority of the acreage for protection in perpetuity. The plan calls for both resource management and conservation, for recreational enjoyment of the Duck River corridor, and for the protection of ecologically sensitive areas.



Understanding the Fall Turnover

The effects only last a couple of weeks, but if you like to fish, it's something you might want to take into account. With the onset of cool weather comes an interesting and little-understood natural phenomenon: the annual “turnover” of TVA's tributary reservoirs.

To understand this process, it helps to understand its cause: thermal stratification—a technical term for the vertical separation of water layers due to temperature differences. Beginning in spring, as the days get hotter and the sun's rays beat down on the reservoir's



surface, the temperature difference between the top and bottom waters increases—especially in deep tributary reservoirs. (Stratification has less effect on main-river reservoirs because they aren't as deep and have higher flows, which helps to keep the water column mixed.)

By late summer, most tributary reservoirs are divided into two distinct layers based on the different densities of warm and cold

water: a warmer, lighter top layer and a colder, heavier bottom layer. These layers are separated by a transition zone, called the “thermocline,” in which temperatures—and often oxygen levels—decline quickly with each meter of increased depth.

The thermocline, which develops at different depths on each reservoir, is usually several feet thick. It is well-known to serious anglers because sport fish tend to congregate there except for short periods when they move into shallow water to feed. Most fish are caught near the top of the thermocline during the summer months—and no wonder. This area offers comfortable water temperatures and plenty of oxygen.

Then, in late October or early November, things begin to change. As air temperatures cool, so do surface water temperatures. The layers effectively disappear as the temperature difference between the top and bottom waters decreases and more mixing occurs. When this process is complete—when the entire water column is mixed—the reservoir is said to have “turned over.”

For anglers, this can signal the need for a slight adjustment in fishing strategy. Fish that were previously fairly easy to find in the thermocline are suddenly dispersed throughout the entire water column. Fishing may be “off” for a few days, but anglers can still find fish in parts of the reservoir that aren't affected by the turnover—for example, at the back end of coves or up the river where there's enough current to prevent stratification.

If you want to fish the main body of the reservoir, TVA's Al Brown, a reservoir monitoring crew chief and an avid fisherman, offers this advice: “Look for shad. Where the bait fish go, the species that prey upon them will follow.”

GOOD IDEAS FROM RESERVOIRS ACROSS THE VALLEY

Christmas Trees for Fish

Long after Christmas is over and the New Year is past, members of the Tennessee Sportsmen Association (TSA) are still in a holiday mood. Knee-deep in mud and bundled up against the February cold, they are struggling to place recycled Christmas trees in strategic locations in the drawdown zone of Norris reservoir—all with the goal of improved fishing later in the year.

For the past five years, the TSA has made good use of discarded Christmas trees from residents of the cities of Oak Ridge, Clinton, Lake City, and Norris—hundreds of trees that otherwise would have ended up in the wood chipper. Group members (mostly families and retired persons from the five counties that border Norris Reservoir) have worked as volunteers in cooperation with the Tennessee Wildlife Resources Agency (TWRA) to improve aquatic habitat. They secure the trees to donated concrete blocks and position them so that they will be covered when the reservoir fills later in the spring.

In an older reservoir like Norris (which is basically devoid of natural cover) these brushy structures provide shelter for young fish, spawning habitat, and a gathering place for bait fish—which, in turn, attract cover-oriented sport fish species.

Last spring, TSA members placed over 1,000 Christmas trees in both Norris and Melton Hill Reservoirs. Has their hard work paid off? Just ask Jack Rains, the group's chairman. "I've been catching crappie off these trees every year since we first started putting them out," he says. "And that's what the Tennessee Sportsmen Association is all about: better fishing." The nonprofit organization has been grateful for the assistance of the TWRA. The agency has furnished the truck used to haul the trees, as well as additional labor and materials.

According to Rains, it's really been a "win-win" situation for all parties involved: the county doesn't incur the cost of disposing of the trees and the reservoir's fish habitat is enhanced. But make no mistake: he's not giving away any secrets when it comes to specific locations. "Come on out and help us work," he laughs, "then you'll know exactly where they are!"

For more information on how you can improve fishing on your reservoir through the use of Christmas trees and other habitat enhancements, as well as information on TVA permitting requirements, call your local TVA Watershed Team or contact them by e-mail through the TVA Web site (www.tva.gov).

*A Reminder:***Ask TVA First**

If you're planning to do some work along the shoreline this winter while the water level is low, be sure to apply for a TVA permit first.

You need written approval from TVA before altering the shoreline in any way—from building a dock, pier, boathouse, or launching ramp to installing fish attractors, irrigation pumps, or other utilities. TVA approval is also required before removing trees and other vegetation or beginning a landscaping or shoreline stabilization project.

To obtain a permit application, call your local TVA Watershed Team or contact them by e-mail through the TVA Web site at www.tva.gov. They can provide information about permit requirements and can even meet with you on site to discuss your project. Most permits are processed and approved in less than 30 days.



Members of the Tennessee Sportsmen Association volunteer their time to improve fish habitat. To learn more about the group or to participate in one of their projects, call Jack Rains at 865-457-6665.



TVA Installs Warning Systems

Because river operations for power generation, flood control, and other purposes can create hazardous conditions both upstream and downstream of dams, TVA has installed automated warning systems at several of its projects. Visual and audible warning devices—including signs, flashing strobe lights, and sirens—are in place at Great Falls, Kentucky, Norris, and Tims Ford Dams. Systems are scheduled for installation next year at Fort Loudoun and Nickajack.

Did You Know?

Hydropower contributes between 8 and 12 percent of U.S. electrical generation and accounts for 81 percent of the nation's total renewable electricity generation—making it the nation's leading renewable energy source.



Students on the Shoreline

Conservation Learning Through Project ECHO

Who knows? They may turn out to be foresters, wildlife management specialists, or fisheries biologists. But, even if they don't, the lessons they will learn are bound to stay with them for a lifetime.

Approximately 50 West Tennessee high school students at Henry County High School in Paris and at McKenzie High School in Carroll County are preparing to embark upon an innovative educational program—a hands-on experience that will leave them with a greater awareness of the need to conserve the state's natural resources. It will also leave portions of the shoreline on Kentucky Reservoir in considerably better shape than they were before.

Project ECHO (the acronym stands for "Educational Cooperative Habitat Opportunities") is a joint effort of the Tennessee Wildlife Resources Agency (TWRA) and TVA's Kentucky Watershed Team. The agencies—along with an impressive list of almost three dozen partners—are teaming up to provide support to school groups who will work to enhance fish and wildlife habitat along the specifically designated areas of shoreline they "adopt."

As part of the 2001-2002 pilot program, students from McKenzie High School will be working along the shorelines of the Eagle Creek Embayment, while those from Henry County High School—along with

some freshmen from E.W. Grove School—will restore habitat in the West Sandy Creek Embayment.

In exchange for technical guidance, basic equipment, and project supervision by the sponsoring agencies, the students will be expected to develop and implement



High school students participating in Project ECHO demonstrated shoreline protection and habitat enhancement techniques to TWRA commissioners at a recent event on Kentucky Reservoir. This group is working to establish grass on the reservoir bank using a process called "hydroseeding."

work plans for their adopted areas. Along with other activities such as picking up litter, they will plant native vegetation, install fish attractors, and erect wildlife nesting structures. The students will evaluate the effectiveness of their habitat enhancement efforts and provide the sponsoring agencies with a report summarizing the results.

"We're really excited about the potential for Project ECHO participants to become 'hooked' on this kind of work," says TVA's Kentucky Watershed Team Manager Don Allsbrooks. "Exposure to practical field work and conservation ethics may result

in some of these young people choosing to pursue careers in natural resource management. Regardless, I can just about guarantee you that—before their school year is over—they *will* know the difference between a baldcypress and a button bush!”

What makes this effort especially valuable is the fact that it will be a continuing project, with successive high school classes picking up the work where the previous classes ended. According to Allsbrooks, “These restoration sites will really be used as outdoor laboratories. And if our pilot program succeeds as I think it will, TWRA would like to eventually expand this effort to high schools across the state of Tennessee.”

The students’ work on the reservoir shoreline will be supplemented by classroom instruction. The academic curricula follows the State of Tennessee’s Core

Competencies guidelines “to a T,” says Henry County High School teacher Richie Ruehl. “From the first time I heard about Project ECHO, I loved the idea of what it could bring to our students,” says Ruehl. “The juniors and seniors in my Wildlife Management course are really excited about the opportunity to get outdoors and put some conservation principles into practice. And I’m glad to have the opportunity to expose them to some of the science involved in resource management.”

Ruehl also is looking forward to the long-term impact Project ECHO will have: “I can’t wait for the day when I’ll be able to walk out to the shoreline and see the difference that these students will have made.”

For more information about Project ECHO, contact TVA’s Kentucky Watershed Team at 731-641-2000 or call TWRA at 1-800-372-3928.

TVA Managers Benefit From Field Experience



TVA Board members and senior managers regularly travel to different parts of the Valley for a firsthand view of TVA operations. Such experiences help give TVA leaders the perspective they need for sound planning and decision making. This summer, TVA Board Member Skila Harris and Retirement Services Vice President Randy Snyder (photo center) helped collect fish to evaluate water quality conditions at this site on Bluewater Creek in North Alabama. Also pictured are TVA Aquatic Biologists Damien Simbeck and Charlie Saylor.

It's Not Too Late To Go Camping

If you like to camp but prefer to avoid the crowds, autumn is a good time to take advantage of one of TVA's 11 scenic campgrounds.

Melton Hill Dam Campground, Pickwick Dam Tailwater Campground, and Lower Rockpile Campground on Wilson Reservoir are open year-round.

Here are closing dates for other TVA-operated campgrounds:

Cherokee Dam Campground—
October 1

Barton Springs Campground on Normandy Reservoir—
October 15

Watauga Dam Tailwater Campground—
October 15

Loyston Point Campground on Norris Reservoir—
October 29

Mallard Creek Campground on Wheeler Reservoir—
November 12

Foster Falls Campground on the Cumberland Plateau—
November 15

Douglas Dam Headwater and Tailwater Campgrounds—
November 30

A good resource for campers is *Tennessee River Country: A Glovebox Guide to TVA Places for Family Fun*. To order a copy, call TVA at 865-632-4220 in Knoxville or 423-751-7904 in Chattanooga or check your local bookstore.

TVA to Perform Reservoir Operations Study

TVA River Neighbors is published three times a year for people who care about the Tennessee River and TVA's stewardship programs.

TVA River Neighbors is available on TVA's Web site at <http://www.tva.gov/river/neighbors/>.

Send comments and suggestions to Editor, TVA River Neighbors, 400 West Summit Hill Drive, WT 10D, Knoxville TN 37902.

For alternate formats of this document, call 865-632-6824 and allow five working days for processing.

The TVA Board has accepted the recommendation from the Regional Resource Stewardship Council (RRSC) to perform a review and study of its daily reservoir operations across the Tennessee Valley.

The decision was announced by Board Director Skila Harris at the RRSC's August meeting in Guntersville, Alabama.

"TVA agrees that we should review our reservoir management practices through an in-depth analysis to be performed in this two-year study," said Harris.

"As we conduct the study we are committed to building on the stakeholder input already received by TVA and the Council through extensive public involvement."

The Council recommended that water-quality analyses be performed in the

early stages of the review. This will establish an understanding of how changes to current operations would impact water quality.

The Board also accepted the Public Lands Subcommittee recommendations that TVA continue to manage public lands

while balancing the multiple benefits of conservation, economic development, and recreation, with water quality being the number-one consideration.

The recommendations by the Water Quality Subcommittee on aquatic plant management were also accepted. However, the Board requested additional help in defining what "sharing equitable portions of aquatic plant management costs" means to stakeholders and TVA.



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

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