

TVA River Neighbors

C E L E B R A T E
CLEAN BOATING!



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Special Events to be Held on TVA Lakes

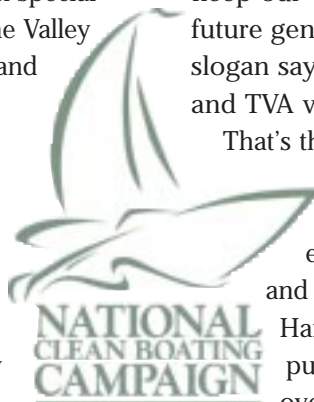
There's never been a better time to "clean up your act" when it comes to boating on TVA lakes. National Clean Boating Week is July 10-18, with special events to be held throughout the Valley in celebration of clean boating and clean water.

Linda Harris, the agency's National Clean Boating Campaign coordinator, says TVA is committed to working with the public and the boating industry to promote clean boating practices. Valley boaters are quick to see the connection between clean water and the sport they love, explains Harris. "They know that their enjoyment of boating is directly related to having access to a clean, beautiful lake. Here in the Valley,

we're fortunate to have so many great places to boat. Most people are really serious about doing whatever it takes to keep our waters in good condition for future generations. Like the campaign slogan says, 'boating is good clean fun,' and TVA wants to help keep it that way."

That's the reason TVA is a major sponsor of the 1999 National Campaign, supports local clean boating events, and participates in lake and river enhancement projects, says Harris. She's encouraged by the public reaction: "We were overwhelmed by the positive

response we received after our participation in last year's campaign. From boating families to marina operators, to boat dealers and manufacturers—people are excited about celebrating clean boating."



Clean Boating *continued*

This year, Clean Boating Campaign events will be held on 17 lakes and rivers. The activities vary by location—from exhibits on water quality to shoreline clean-ups and demonstrations of how to prevent and clean up oil/fuel spills and how to use sewage pump-out equipment. There will be plenty of giveaways at most locations, too, including T-shirts, caps, key chains, no-spill containers, spill pads, bilge socks, coloring books for kids, and educational materials on clean and safe boating.

Increasing awareness of clean boating issues is a continuing commitment for TVA. Plans are being made for Clean Boating Campaign activities for the year 2000. “With special initiatives to recognize clean marinas and an extensive public education campaign in the works for next year,” says Harris, “we’ll be pulling out all the stops in our efforts to build partnerships to support clean boating on TVA lakes.”

For Information on Clean Boating Events

Call the person listed below to find out what’s happening in your area during National Clean Boating Week.

Blue Ridge, Ocoee:

Charles Williams, 828-837-3527

Boone:

Jill Stephens, 423-538-6720

**Fort Loudoun, Melton Hill,
Tellico, Watts Bar:**

Melinda Andrews, 423-632-8803

Norris:

Debra Heck, 423-632-1624

Chickamauga, Nickajack:

Linda Harris, 423-954-3802

Guntersville:

Homer Gray, 423-751-4263

Wheeler:

Regina McCoy, 256-386-3550

Flint River:

Lee Hill, 256-386-4329

Pickwick, Wilson:

Doug Murphy, 256-386-2268

Tims Ford:

Pete Mangum, 256-386-2882

Kentucky West Shore:

Richard Starkey, 502-924-2202

Kentucky East Shore:

Billy Smith, 502-924-2203

Marine Pump-Out Stations: *Locate and Use Them*

Houseboats, cruisers, floating cottages, yachts, pontoon boats, fishing boats... Add them together and TVA lakes begin to resemble huge “floating cities” on a typical summer weekend—except these cities don’t have a sewer system.

The solution, of course, is proper disposal of marine wastes. Boaters can empty their port-a-johns or have their sewage pumped out for a small fee at marinas with pump-out facilities. Later, boats owned by private companies pump out the marina’s holding tank and take the sewage to a treatment plant.

Until recently, the problem was a shortage of pump-out facilities. Few marina operators could afford the installation cost. Plus, many boaters didn’t know where the facilities were located—or they were too far out of the way. The result? A lot of marine sewage went into the water.

To address this growing problem, Congress passed the Clean Vessel Act in 1992. The Act set standards for marine septic devices on boats 26 feet or longer, identified “discharge” and “non-discharge” reservoirs, and imposed a small excise tax on marine fuel. This tax is used to fund grants for installing marine pump-out facilities.

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Marina owners like Miles Davis of Mountain Lake Marina on Norris Lake are recognizing the importance of being able to offer pump-out services to their customers.

Hats Off To The Boone Lake Association

The pride that David Cumbow feels is obvious to anyone that talks to him about “his” lake. President of the Boone Lake Association, Cumbow and other members of his group are dedicated to looking after the welfare of Boone Lake.

Formed back in 1983 to combat problems with wastewater treatment plant discharge, the association has evolved into an active stewardship organization with several hundred members. Cumbow describes some of the impacts to the lake’s health: “Boone is a small lake, but it’s affected by four municipal wastewater treatment plants. Add to that 600 tributary streams, as well as run-off from industry and agriculture, and you’ve got a situation that bears watching.”

But the group does more than watch. They work constantly to keep the lake’s waters and shoreline clean. From membership dues, the association funds one full-time and one part-time worker who systematically focus on sections of the shoreline, picking up trash and debris. They’ve supported monitoring efforts, erosion control projects, environmentally responsible shoreline development, lake access, habitat enhancement, and removal of derelict structures.

Tim McKeehan, TVA’s Holston Watershed Team Manager, praises the Boone Lake Association for the work they do. “The lake is undoubtedly in better shape because of their hard work,” he says. “From their assistance in helping maintain our informal recreation sites to our partnership in a major lake-wide cleanup last winter, we’ve enjoyed a history of working together that’s been beneficial to both organizations.”

What advice does Cumbow have for others who might be interested in forming a lake user group? “Keep the lines of



communication open,” he suggests. “We try to stay in touch with every single group or agency that impacts Boone Lake. We emphasize the idea that we’re downstream neighbors, and acknowledge the fact that cleaning up the watershed is the key to a clean Boone Lake.” He also suggests forming a lake group that includes both property owners and lake users. “We stay in touch with our members through a newsletter, and we hold quarterly membership meetings with guest speakers. Raising awareness of issues is as important as any of the cleanup work we do.”

McKeehan says that citizen groups like the Boone Lake Association are performing a vital function all across the Valley. “Each lake needs its own advocacy group—somebody to identify local issues. Listening to the concerns of lake user groups keeps us heading in the right direction: namely, making sure that the public lands and waters are providing a full range of benefits for Valley citizens.”

Boone Lake Association President David Cumbow is pictured with one of the group’s clean-up vessels. Association members volunteered their labor to outfit a donated pontoon boat, “The Behemoth,” with a shredder, an electric generator, and a winch for removing large logs.

Join Your Local Lake User Group

Lake user groups are working hard to improve conditions on many TVA lakes. A few are listed below. If you want to help out on one of these lakes, please call the person listed. If we missed your group, call us at 423-632-8503, and we will let our readers know how to contact you in the next issue.

Blue Ridge:

Coe Hamling, 706-374-6944

Boone:

David Cumbow, 423-283-1023

Chatuge:

Marge Rudasill, 828-389-0138

Cherokee:

Pat Patton, 423-585-0822

Chickamauga:

Lynn Painter, 423-332-4512

Douglas:

Frank Dominick, 423-397-4744

Melton Hill:

John Croes, 423-463-8364

Nottely:

A.G. Sherman, 706-745-1087

Watts Bar:

Pete Williams, 423-365-6554

One Stroke At A Time **A Marathon Swim for the River**



Mimi Hughes stands on the banks of the Tennessee River just upstream from Ijams Nature Center in Knoxville where she'll begin the first leg of her 600-mile journey this summer.

Watershed Workshops Offered to East Tennessee Residents

A free workshop focusing on water quality sampling and watershed assessment will be held at Brookhaven Farm in Seymour from 9 a.m.-4 p.m. on Saturday, September 11. A session on strategic planning for watershed improvement will be held later in the year, and a workshop on funding will be held next spring. Space is limited and pre-registration is required. Call TVA's Tom McDonough at 423-632-1424 to sign up or to learn more about any of the workshops.

When you talk to her, you get the distinct feeling that Mimi Hughes can do this. Not just because of her rigid adherence to a grueling training program or her superb physical conditioning. Not because she has successfully completed swims across the San Francisco Bay and the Bering Strait. Not even because of her sheer determination to reach her goal. It occurs to you that Mimi Hughes will be able to swim the length of the Tennessee River because she cares so deeply about its future.

A 43-year-old instructor of developmental reading at Motlow College in Fayetteville, Tennessee, Hughes wants her swim to generate interest in the Tennessee River: "We are so blessed to have this magnificent river. We've built our cities around it, and we transport our goods on it. We drink it, and we water our crops with it. We derive power from it, we enjoy recreation on it, and we even dump our waste into it. I think it's time to stop and ask ourselves if we're taking too much from it and giving back too little in return."

Hughes tentatively plans to begin the first leg of a five-year, 600-mile journey on August 2nd. Her goal is to swim to Watts Bar Dam—a distance of 125 miles. She figures she can make two miles per hour at the very least; more if there's a current to help her.

Working around her kids' busy schedule, Hughes is doing everything she can to get ready for the challenge. She swims for 2-1/2 hours every weekday morning and runs an average of 40 miles a week—plus some biking. She did a "test swim" from Wheeler to Wilson in early May and swam back and forth across the Elk River to get used to swimming across current.

But perhaps more important than physical conditioning are mental preparations: "It takes a certain type of mindset: you keep saying over and over 'I know I can do this.' And you don't let yourself think for a minute that you can't."

Her biggest concern related to the swim isn't the limits of her physical endurance or the logistical challenges she'll face in navigating a major river system. It's whether people really care about the river: "It bothers me to think that maybe I won't be able to motivate others to make changes in time to protect it."

It won't be for lack of trying. Even though it's impossible to make definite plans given the uncertain nature of her progress down the river, Hughes is trying to line up opportunities to speak with local residents about the river and what they can do to protect it. She's especially interested in talking to school groups. "If we can reach the kids, we can change attitudes...and then we can change the river."

Lest she come off sounding entirely too virtuous, Hughes laughingly reveals her celebratory ritual for reaching the end-point of a swim: "I head straight for a huge plate of extra-crisp french-fries with lots of salt and ketchup!"

TVA is sponsoring the first leg of Hughes' swim and will be providing a support boat. For more information about her itinerary or to hear her speak, please call Melinda Andrews of TVA's Melton Hill Watershed Team at 423-632-8803.

Lake Operations Update

Fontana Drawdown — TVA will begin lowering Fontana Lake to elevation 1575 beginning August 1, 2000 for a formal dam safety inspection (required every five years). The inspection work will begin in mid- to late-November and should be completed by January 2001—in time for the lake to re-fill to normal levels by spring.

Boone Drawdown — TVA will lower Boone Lake to elevation 1348 (about six feet below normal) from January 3-14, 2000 to help the City of Johnson City and the Tennessee Wildlife Resources Agency construct a low-water boat ramp at Winged Deer Park. Levels will be drawn down at a normal rate until November 1, when the drawdown will accelerate slightly. The new boat ramp will improve access to the lake for winter anglers.

TVA Lake Levels¹

Tributary Lakes	Observed June 14 Levels		Minimum Summer Target Elevations	
	feet	meters	feet	meters
Blue Ridge	1686.1	513.9	1682	512.7
Boone	1380.7	420.8	1381	420.9
Chatuge	1924.6	586.6	1923	586.1
Cherokee	1059.1	322.8	1060	323.1
Douglas	992.9	302.7	990	301.8
Fontana	1699.9	518.1	1693	516.0
Hiwassee	1519.7	463.2	1515	461.8
Normandy	875.5	266.9	873	266.1
Norris	1012.0	308.5	1010	307.9
Nottely	1768.7	539.1	1770	539.5
South Holston	1724.7	525.7	1721	524.6
Tims Ford	887.5	270.5	886	270.1
Watauga	1954.3	595.7	1949	594.1
Main River Lakes				
Chickamauga	682.6	208.0	681.5	207.7
Fort Loudoun/Tellico	812.2	247.6	812.5	247.7
Guntersville	594.2	181.1	594.0	181.1
Kentucky	358.8	109.3	357.5	109.0
Nickajack	633.6	193.1	633.0	192.9
Pickwick	413.0	125.9	413.0	125.9
Watts Bar	740.3	225.6	740.5	225.7
Wheeler	556.0	169.5	555.5	169.3
Wilson	507.4	154.7	507.0	154.5

¹ Elevations above mean sea level.

Marine Pump-Out Stations *continued from page 2*

By all accounts, the program is succeeding. Pump-out stations have been installed at marinas on TVA lakes across the Valley, including 27 in Tennessee, 11 in Alabama, four in Mississippi, and two in Kentucky since 1995. North Carolina's program is just getting started.

However, increasing the number of pump-out facilities is only half the battle. Boaters need to understand the importance of proper marine sewage disposal and know where pump-out facilities are located. For more information, contact the boating authorities listed at right.

Dry Weather Continues

Rainfall across the Tennessee Valley has been below normal since last summer, so it wasn't easy to fill TVA lakes on schedule this year. We were able to reach minimum summer target levels on June 1 on all but two lakes by only releasing enough water to protect downstream water quality. (At press time, Cherokee and Nottely were still below target levels due to especially dry local weather.) We will try to have all the lakes near the summer minimum levels on August 1. If dry conditions continue, however, we might have to release more water to maintain minimum flows for aquatic life or to generate electricity in the event of a power system emergency.

For the latest information on lake levels, check our web site at www.lakeinfo.tva.gov or call our toll-free lake 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.

Clean Vessel Act Coordinators

Tennessee:
Betsy Woods, 1-800-830-0608

Mississippi:
Rhonda Price, 1-800-275-3474

Kentucky:
Jim Axon, 1-800-858-1549

Alabama:
Ed Poolis, 1-800-533-2336

North Carolina:
Don Tobaben, 1-919-733-3633

Weather Extremes Boost Chlorophyll Levels in TVA Lakes 1998 Water Quality Update

“When it comes to weather, we’re used to extremes in the Tennessee Valley,” says Don Dycus, a member of TVA’s Reservoir and River Quality group, “but in 1998, we had more than our share.”

Dycus should know. He’s been involved in water quality studies on TVA lakes since he came to TVA more than 25 years ago.

“Just look at the record,” he says. “The period from January to June 1998 was one of the wettest we’ve had in the last 100 years—especially in the eastern end of the Valley above Chattanooga. In fact, April 1998 was the wettest April for the 108-year period of record. But the summer/autumn

period was one of the driest. There was a 32-day period from August to September when it hardly rained at all anywhere in the region.”

To make matters worse, 1998 also was unusually warm—ranking eighth out of 104 years of record. Five months—January, February, May, September, and December—were more than 4° F above normal.

These weather extremes set the stage for some unusual conditions in TVA lakes, according to Dycus. “The heavy rains and resulting runoff in the spring washed large amounts of nutrients into the water, ‘feeding’ the growth of algae. Then lower flows and clearer water—caused by hot, dry weather in May, June, August, September,

The Outlook for 1999

This could be a difficult year for the Tennessee River system, based on preliminary monitoring results. In order to raise lake levels under continued dry conditions, TVA restricted releases from most of its dams beginning in March, providing only enough flow to protect downstream water quality. Low flows, in turn, may have caused some lakes to stratify earlier than normal, which would help to explain the low dissolved oxygen levels already observed in some lakes—most notably, Boone, Melton Hill, and Fort Loudoun. TVA stepped up its monitoring efforts to deal with these problems, providing special releases of water and operating aeration equipment to minimize stress on aquatic life in affected areas. The region finally received much-needed rain in May, but locally-heavy thunderstorms typically produce nutrient-rich runoff. This is likely to result in another record year for chlorophyll levels on some lakes, especially in the eastern half of the Valley. TVA is monitoring the situation closely to determine appropriate action. Check future issues of River Neighbors for water quality updates.

1998 Ecological Health Summary¹

□ - Good ◻ - Fair ◻ - Poor

Lake	Overall Rating ²	Algae	Oxygen	Fish	Bottom Life	Sediment
Run-of-River Reservoirs						
Fort Loudoun	◻	◻	■	■	◻	◻
Guntersville	■	■	■	◻	■	■
Melton Hill	◻	■	■	■	◻	◻
Pickwick	■	◻	■	◻	■	◻
Watts Bar	◻	◻	■	■	◻	◻
Wilson	■	■	◻	■	◻	◻
Ridge and Valley Ecoregion Reservoirs						
Cherokee	◻	◻	◻	◻	◻	◻
South Holston	◻	■	◻	◻	◻	◻
Watauga	◻	■	◻	◻	◻	◻
Blue Ridge Ecoregion Reservoirs						
Apalachia	◻	■	◻	◻	◻	◻
Chatuge	◻	◻	◻	◻	◻	◻
Fontana	◻	■	◻	■	◻	◻
Hiwassee	◻	◻	◻	■	◻	◻
Interior Plateau Ecoregion Reservoirs						
Beech	◻	◻	◻	◻	■	◻
Normandy	◻	◻	◻	■	◻	■
Tims Ford	◻	◻	◻	■	◻	◻

¹ TVA monitors lakes on a rotational basis, sampling about half each year. If your lake isn't listed here, it will be sampled next year.

² Overall ratings are not simple averages of ratings for individual indicators, which may carry either more or less weight—depending on the amount of information collected.

and October—provided ideal growing conditions. The result was some of the highest chlorophyll levels we've seen since we began monitoring in 1990."

Chlorophyll levels have increased in many of the lakes monitored by TVA during the past few years. "This is a trend that bears watching," says Dycus. "It could be an early warning that these lakes are vulnerable to nutrient over-enrichment."

According to state water quality reports, nutrient over-enrichment is the major problem affecting our nation's waters. In extreme cases, it can cause potentially harmful blooms of algae, which in turn can lead to oxygen declines, imbalance of aquatic species, and higher water treatment costs. The biggest source of nutrients is agriculture, followed by municipal sewage treatment plants, and urban runoff and storm sewers.

Dycus is quick to point out that, except for chlorophyll, the overall picture in 1998 was generally good. The other four



indicators used to evaluate lake health—dissolved oxygen, fish, sediment quality, and bottom life—either stayed the same or improved compared to past years in 12 out of the 16 lakes monitored. As in previous years, lakes on the main Tennessee River scored the highest.

TVA monitoring crews check dissolved oxygen, fish, sediment quality, bottom life, and chlorophyll to determine the health of TVA lakes.

TVA Board Approves Shoreline Management Policy

After extensive public involvement, the TVA Board recently approved a new shoreline management policy. "The thrust of the new policy," according to TVA Chairman Craven Crowell, "is protection of public shorelines because the conservation and recreation benefits of the lake shores are so highly valued by the public."

Under the new policy, residential access on TVA property will be limited to areas where private access rights currently exist (about 38 percent of Valley shorelines).

A "maintain and gain" strategy allows landowners to request approval to trade access rights—to give them up at one location in order to gain them at another. The goal is no net loss (and preferably a net gain) of public shoreline.

Fees for structure registration, performance deposit, and vegetation management that were included in the original proposal were eliminated as a result of public input. A "grandfathering" approach—also shaped by public participation in the decision-making process—means that if you already own property with access rights along a TVA lake, you can continue using it as you do now. The policy includes new standards for docks, erosion control, and vegetation to ensure that new development is compatible with environmental protection.

The new policy becomes effective November 1, 1999. To find out more about the new standards for shoreline uses, contact your local Watershed Team.

TVA Watershed Teams

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

Cherokee, Douglas, Nolichucky: 423-632-2753

Norris, Clinch, Powell: 423-632-1542

Melton Hill, Watts Bar: 423-988-2440

Fontana, Fort Loudoun, Tellico, Little Tennessee: 423-988-2420

Apalachia, Blue Ridge, Chatuge, Hiwassee, Nottely, Ocoees: 828-837-0237

Chickamauga, Nickajack: 423-954-3811

Guntersville, Sequatchie: 256-571-4280

Elk, Great Falls, Normandy, Tims Ford, Wheeler: 256-386-2560

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

Beech River Project, Columbia, Duck, Kentucky: 901-641-2013

Hazardous Waters

No matter how familiar you are with the lake, no matter how well you can swim, no matter how long you've been boating: the risks are still there.

TVA is urging people who enjoy recreation in the headwaters and tailwaters of dams to be especially careful. Upstream of dams, swirling water and strong currents can create dangerous conditions near the powerhouse intake, spillway gates, and sluice gates. Below dams, sudden discharges from turbines, locks, and gates can occur at any time, creating turbulence and rapidly rising water levels.

TVA Installs Warning Systems

TVA is installing automated warning systems at several of its hydroelectric projects. Visual and audible warning devices, including signs, flashing strobe lights, and sirens, are in place and operational at Great Falls. Systems are scheduled to be installed soon at Kentucky Dam.



Even if you're an experienced boater or angler, it pays to follow these rules:

- Obey all warning devices and signs. Never enter or cross restricted zones marked by buoys, booms, cables, or signs. Move to safer areas when sirens sound and/or strobe lights flash at dams that are equipped with these devices.
- Never anchor your boat in tailwaters; a sudden surge of water can pull a boat under and sink it before you have a chance to move to safety.
- Always leave the motor running on your boat—even when drift fishing. A stalled or hard-to-start motor can result in disaster.
- When wade fishing in tailwaters, watch for slippery rocks and hidden holes. Fish during low-flow periods and plan a quick exit to the nearest bank in case of an emergency.
- Never fish, swim, raft, or canoe alone and always wear a personal flotation device.

TVA River Neighbors

Tennessee Valley Authority
River Operations
400 West Summit Hill Drive
Knoxville, Tennessee 37902-1499