

Life on the Lakes

Information About Lakes Hamilton & Catherine

Recent Storms

The effects of this year's storms were not only devastating but widespread. Throughout the state people's homes were destroyed and their lives forever changed. Our hearts go out to all who are enduring the aftermath of these terrible events.

The weather is something we focus on daily. It influences and changes the plans we make. Though science can predict the weather with some degree of accuracy, it doesn't always predict its effects on our lives. We listen to weather alerts and prepare the best we know how. Past weather events like the storms that hit our area this year teach us that preparation is the key, but things can change.

We began 2011 in a severe drought condition. Lakes Ouachita and DeGray were at record low levels for this time of the year. Entergy Arkansas Inc. was in the process of obtaining approval from the FERC to implement our drought contingency plan that would allow us to reduce our flows out of Lake Catherine through Remmel Dam to mitigate the low levels of Lake Ouachita. Then things changed. The rains began to fall. Unfortunately, they fell fast and the winds blew hard, creating not only flash flooding, but also storm damages throughout the area.

Because of the steep topography of the Ouachita Mountains, heavy rain events cause the river, lakes and especially the tributaries that flow into the lakes to rise quickly. During high water events, the first action is to shut off flow from Blakely Dam. Unlike the concrete dams that Entergy Arkansas owns, Blakely, an earthen dam installed by the U. S. Army Corps of Engineers, was built much taller than the typical summer level of Lake Ouachita. This allows the excess height to hold water and act as a storage basin, temporarily restraining this additional water from the local watershed from flowing into lakes Hamilton and Catherine, thereby reducing some of the impacts from flash flooding. Entergy Arkansas is required to operate Lake Hamilton within a one-foot band and Lake Catherine within a two-foot band. Lakes Hamilton and Catherine were created by dams built solely for the production of hydroelectric power and have no room to store extra water. It is a balancing act to maintain lake levels and mitigate high water conditions on the lakes and river.



Water entering lakes Hamilton and Catherine from their direct tributaries have to be passed through the generators and spillway gates and down the Ouachita River system.

Prior to known storm events, it is Entergy Arkansas' practice to lower the lake levels toward the bottom of their operating band to prepare for incoming water. When significant rainfall is certain, as with hurricanes or multiple back-to-back rain events, The Company may take further precautionary actions to lower the lakes below their normal operating band in extreme cases. We know that these short-term drawdowns may create minor impacts to some lakefront

property owners and we appreciate your cooperation and apologize for any inconvenience. We will continue to strive to look out for the best interest of our customers, whether it relates to providing reliable electricity or protecting their waterfront property and areas downstream.

www.entergy.com/hydro



Summer, 2011

2011 Trash Bash



Schedule Saturday, **Sept. 17** on your calendar and join us for **Trash Bash**, a public cleanup of lakes Hamilton and Catherine and the Ouachita River, as well as area roads. The annual litter clean-up day will be

followed by a luncheon and activities at Garvan Woodland Gardens for everyone picking up litter.

There will be free food, drinks and prizes worth more than \$2,000. All participants will also receive free admission to Garvan Woodland Gardens.

The clean-up will begin at 8 am. The luncheon will be from 11 am. to 1 pm.

All groups and individuals must register at a check station to participate and be eligible for the awards and prizes.

Check Stations

Lake Hamilton

*Sunny Brook Landing
Hill Wheatley Park
Power Boats (Central Ave.)
Hulsey Fish Hatchery*

Lake Catherine

*Lake Catherine State Park
Carpenter Dam Park
Rommel Dam Park
Shoe Factory Boat Ramp*

Ouachita River

Whitewater Park - Malvern

Come and make a difference and enjoy great barbeque at the Gardens.

Want the Latest Hydro News?

Go to www.entergy.com/hydro and subscribe to our Email service. We use this service to share important information concerning lake related information such as: safety related issues, permitting information, drawdown and refill schedules, generation plans, emergency weather related drawdowns, policy changes and other time sensitive information.



With Storms comes Debris



It is normal in most bodies of waters that after the spring rains, there is an increased amount of floating debris. Those who have been around this area for a few seasons have come to expect a springtime increase in the amount of both natural and manmade items floating in lakes Hamilton and Catherine. This year's spring storms have brought more than the normal amount and size of debris. When boating, please take extra care to watch

out for logs, trees, and even pieces of docks floating in the lake or lodged in shallow areas as a result of the damage caused by the recent spring storms.

The increased debris is the result of a combination of two things. First, the flash flood-type rains we have experienced this spring have washed trees and such from the tributaries into the lakes. Second, with the annual refilling of the lakes, some items that had been resting on the temporarily exposed shoreline in winter have become floating obstacles in the water instead.

So, the bad news is there is more debris in the lakes as a result of the spring storms than there usually is in the spring. The good news is: for the most part, this is a problem that generally takes care of itself as floating natural debris either sinks or flows downstream into the river system.

Still, there's a valid question that needs to be discussed: Some of the debris needs to be disposed of by people. Whose job is it to do that? The short answer is: It's everybody's job. But there is also a longer answer.

First, Entergy Arkansas, Inc., owns and operates Carpenter and Rommel dams and the related shorelines and lakebeds, though not the water itself. The state of Arkansas owns the water. So, it's reasonable to ask what Entergy Arkansas' responsibilities are for debris removal.

The Federal Energy Regulatory Commission, by whose authority Entergy Arkansas operates the hydroelectric project, says, essentially, that the company's responsibility is limited to hazards associated with the hydroelectric generation facilities themselves, and that hazards elsewhere in the lakes would be better left to "local entities and law enforcement agencies." Arkansas law regarding recreational land, similarly, absolves Entergy Arkansas and other owners of property available to the public for recreational purposes from responsibility for removing naturally occurring potential safety hazards from the property.

That said, Entergy Arkansas does oversee dock construction and maintenance. We also take responsibility for helping clean up the mess when a dock breaks apart and makes the sad transformation from recreational facility to floating hazardous debris. The responsibility lies first with the owner of the dock, but we will step in and remove the obstacle if necessary.

On the other hand, naturally occurring debris – logs, trees, mats of tangled sticks, dead animals, etc. – are part of the cycle of nature, and Entergy Arkansas hasn't the resources to take on the enormous task of keeping the lakes completely free of all these things. We encourage all individual landowners to help in cleaning up the area around their property.

Due to the increased amount of large woody debris that has resulted from this spring's storms, Entergy Arkansas will assist lakefront property owners in disposing of large floating logs from the lake that are at least 10 inches in diameter and at least 20 feet long. The logs must be located along shoreline that we can get access to so our large wheeled equipment can load it onto a truck. For more information on debris removal, contact Entergy Arkansas at 501-844-2148.



The New Faces of Entergy Hydro Operations

There are some new guys in town. Some familiar faces have left and some new faces have arrived. You may not know it yet, but some well-known members have left our hydro operations team. Bruce Bryan and Blake Hogue have transferred to one of Entergy's plants in Mississippi. We are going to miss their day-to-day presence and the wisdom they hold.



Eugene Knighten

Now, let us introduce those who have recently joined our team. Eugene Knighten is the new manager of hydro operations, as of August, 2010. Eugene is responsible for not only hydro plants but also several other gas-fired electric plants in Arkansas. He moved here from Batesville where he was production superintendent of Independence Plant.

Another recent addition to our team is David Batson, who joined our team in April. He is the new lakes and property coordinator, filling the vacancy left by Blake. David is responsible for the overall shoreline management of lakes Hamilton and Catherine to meet our Federal Energy Regulatory Commission license requirements. He also moved from Batesville where he was a planner and scheduler at the Independence Plant.



David Batson

Entergy Arkansas Inc. hydro operations team is fortunate to have both of these new members and the talents they bring. Both Eugene and David will be of great value to the team.

For those who are new to life on the lakes, the rest of the hydro operations staff includes Bobby Pharr, process superintendent; Tammy Afeld, administrative assistant; Ted Smethers, senior technical support specialist; Kimberly Bogart, technical support specialist II and Ray Golden, hydro plant supervisor. Bobby is responsible for overall management

of lakes Hamilton and Catherine. Tammy is responsible for all administrative duties associated with hydro. Ted Smethers is responsible for license compliance, lake level management and generation planning. Kimberly is responsible for permit transfers, database management and emergency planning for the dams. Ray is over maintenance at both Remmel and Carpenter dams. Together Entergy Arkansas has a solid and very competent team available to assist you as you enjoy the lakes.



Hydro Operations Team

Ted Smethers, Ray Golden, Bobby Pharr, Kimberly Boagart, Eugene Knighten, David Batson & Tammy Afeld

Lake Hamilton & Catherine Walleyes

Although walleye may not be the most sought-after sport fish in this area, there are a good number of anglers that recognize the walleye as a fun fish to catch as well as a superb eating fish. To have continued good future walleye fishing in area lakes like Hamilton and Catherine, the Arkansas Game and Fish Commission conducts an annual spawning project at the Andrew Hulse State Fish Hatchery, located off Highway 290 south of Hot Springs. This is a project where adult walleye are collected from the waters below the dams and brought back to the hatchery for spawning, egg hatching, and fingerling production. Once the eggs are taken from the brood fish, the fish are returned to the lake.

The walleye spawning project at Andrew Hulse Fish Hatchery begins in mid-March and lasts approximately one week. Adult walleye are collected with electrofishing boats at night during the annual walleye spawning run below Blakely and Carpenter dams.

Approximately 20 adult female walleye are successfully spawned each year, resulting in the taking of 1.5-2 million eggs. Approximately 1-1.5 million fry hatch successfully after incubation and are stocked into rearing ponds on the hatchery. Survival from fry to fingerling size is approximately 20 percent (yes, there is a lot of natural mortality at this stage of their life because fry-sized walleye are about the size of the head of a straight pin when hatched). In about 45-60 days, the walleye grow to the required 2-inch stocking size, the ponds are harvested, and the walleye fingerlings are stocked into public lakes around the state. Approximately 200,000 fingerlings total are reared each year. Lake Hamilton and Lake Catherine receive some of these fingerling walleye as directed by our local biologists to insure a good walleye population is maintained for anglers. So if you have never caught a walleye, do a little research on catching them and go give it a try!

Here, Fishy!

When going fishing, we all want to know where the fish are. Habitat, cover and structure are places commonly looked for in deciding where to cast that bait. Many freshwater bodies of water have been cleared of their natural cover and don't have enough places where fish can hang around. Cover is important in providing security and as an attachment surface for many fish food organisms.

Adding artificial fish habitat or cover can attract many game fish for the angler. Some common types of artificial covers are brush piles, PVC assemblages, wooden stake beds, wood pallets, bamboo clusters, etc. Most any tree or shrub will serve as fish cover. Hickory, cedar, and elm are common in this area of the state. Pines or mimosa trees will work but tend to decay more quickly as the wood is softer. Most fishermen will debate which trees work the best.

Most fish cover added to a lake will allow for the growth of "periphyton" which in turn attracts small bream, minnows, and shiners. These small fish provide a food supply for most preferred sport species that anglers are pursuing. The cover added to the fishery serves as a holding area for sport species to congregate around. Black basses (largemouth and spotted bass) and crappies are ambush predators. It is their natural tendency to try to remain hidden and ambush passing shad or other forage fishes. However, during certain times of the year, black basses will forsake cover and move in schools, chasing congregations of shad.

It is common each winter during the drawdowns of lakes Hamilton and Catherine for many to install artificial cover in the lakes. This can be good, but it should not be done indiscriminately. There are many things to consider so they are not only successful but safe to the general recreational users of our lakes.

The shoreline of lakes Hamilton and Catherine are extremely developed and are drawn down each winter by up to nine feet. Artificial cover should not be placed around areas used for swimming. They should be firmly anchored to the lake bed in water where there will be at least 15 feet of water over the cover so not to pose a boating hazard. Fish cover placed in this depth will typically provide best results in winter and summer when thermal stratification of the lake pushes the fish deeper. Fish cover placed below the thermocline will largely be ineffective as the water is too cold and poorly oxygenated. For Hot Springs area lakes this means placing fish cover below about 30 feet will not be effective.

Some of the best locations for "artificial cover" will be on "natural structure" which is already present such as: at the end of a long sloping point; on the top of an underwater hump; on the edge of a creek channel drop; in the deepest portion of a large flat void of natural cover or in the middle of a cove.

Once placed within the water of a public fishery there is no ownership of fish habitat all can access and use it. Fishermen in general are becoming more adept at using GPS units for returning to preferred cover or habitat regardless if they have placed it or someone else has. In fact, the Arkansas Game and Fish Commission now uses an interactive map on their website that serves as a clearinghouse for all AGFC fish cover work statewide. You can visit their website at www.agfc.com.



Boater's Education is Not Just for Kids...

Anyone born on or after Jan. 1, 1986, and of legal age to operate a motorboat or sailboat must have successfully completed an approved Arkansas Game and Fish Commission Boating Education Course and carry a certificate saying so while operating a motorboat or sailboat on Arkansas water. However, requirement or not, it's a good idea for anyone operating a boat to take the course too.

You can take an approved course online at <http://www.boat-ed.com/Arkansas/index.html> or attend one in person in Hot Springs. You can find a list of all the available classes across the state on the AGFC website www.agfc.com.

Locally, classes are held this time of the year on lakes Hamilton and Ouachita. The courses offered on Lake Hamilton also include the opportunity for women to attend a hands-on practice session.

Lake Hamilton

The Lake Hamilton Safe Boating Association and Entergy Arkansas join with Power Boats Inc., to offer boating education classes. These one-day classes are held at Power Boats on Central Avenue on July 16 and August 20. The class is from 9 a.m. to 3 p.m. with lunch being served compliments of Power Boats.

On July 17 and August 21, women that have successfully completed the boaters safety education class can attend a women-only hands-on training from 1-3 p.m. Power Boats will furnish the boat for hands-on lessons in handling, docking and properly securing your boat. Refreshments will be served compliments of Power Boats. Space is limited to 10 per class. For more information, call 501-525-1166 or register at www.powerboatsinc.com.

Lake Ouachita

Lake Ouachita State Park is hosting two opportunities to attend a one-day boating safety course at their site. July 20 and August 17 from 9 a.m. to 4 p.m. Registration is required and you can contact James Wilborn at 501-767-8148 ext 227.

Online

Boat Arkansas is the official online course of the AGFC. Take the Arkansas boating safety course by studying at home online, then take the in-person (proctored) exam at an AGFC testing site to receive your Arkansas boater education certificate. Go to <http://www.boat-ed.com/Arkansas/index.html> to begin today!



Alligators?

We don't have alligators, but it looks like we now have Alligatorweed (*Alternanthera philoxeroides*), a non-native nuisance aquatic vegetation originating from South America. Although it is not an uncommon vegetation in Arkansas lakes, it surfaced on lakes Hamilton and Catherine only about four years ago and just recently started being a problem for some lakefront property owners.

Aquatic vegetation, of which there are many types in lakes Hamilton and Catherine, is important to the ecosystem of a lake. However, some types of aquatic vegetation can be a nuisance to boaters and swimmers. In years past, Lake Hamilton has experienced several outbreaks of Southern Naiad, Eurasian Watermilfoil and Brazilian Elodea, all of which have been brought under control by deeper and alternating drawdown depths.

Alligatorweed is found mainly in shallow water and on shore and can spread through fragmentation. It is a vine-like plant whose leaves and ends of stems are generally on top of the water, forming dense interwoven mats. The lower portions of the plant stem are under the water where they root extensively in the lake bed.

Research indicates that eradication is difficult. Management practices in Arkansas consist mainly of mechanical control and the repeated use of specific aquatic herbicides. The disadvantage of mechanically removing the plant is that it increases the risk of spreading it through fragmentation. Although Entergy Arkansas Inc. does not endorse the use of aquatic herbicide to control nuisance vegetation, it is recognized as one of the options available. There are many laws and liabilities associated with the use of chemicals in public waters and all product labels and instructions must be carefully followed. Extreme caution is urged when using herbicides in public waters. We recommend anyone who is experiencing nuisance aquatic vegetation along their shoreline to contact the Arkansas State Plant Board to obtain a list of licensed aquatic applicators, who they can hire to properly apply an aquatic herbicide on the nuisance vegetation.

Remember, not all aquatic plants are considered nuisance vegetation. "Good plants" should not be removed because of their importance to the lake's ecosystem. You can obtain additional information by visiting the U. S. Army Corps of Engineer's website at <http://el.erdc.usace.army.mil/aqua/apis/homepage.aspx>. If you have questions about certain vegetation along your shoreline you can contact the Arkansas Game and Fish Commission at 501-525-8606.



Emergency Preparedness What to do...

...if you notice a problem at a dam – call 911. Local authorities know who to contact when there are concerns with the local dams on the Ouachita River.

...if you notice a river/lake is unexpectedly high and rising on a clear day – immediately head for higher ground and call 911 to report the situation.

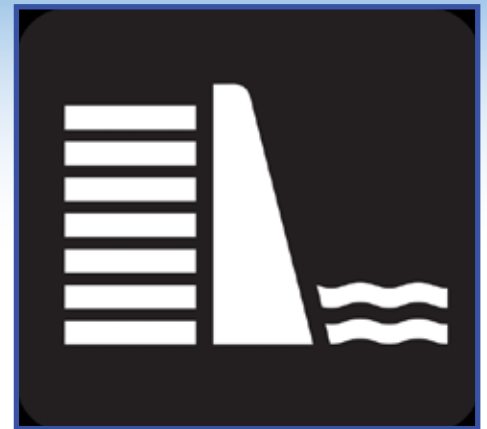
...if a road is covered with water – remember that floodwaters are deceptive. As the old saying goes – Turn Around, Don't Drown. Roadways can become compromised by floods and these weak spots are not always visible. Avoid flooded areas if you can.

...if your car stalls in a flooded area – abandon it as soon as possible. Floodwaters can rise rapidly and sweep a car - and its occupants, away.

...if a flood traps you in your house – move to the second floor and, if necessary, to the roof. Take warm clothing, a flashlight, and portable radio with you. Then wait for help...don't try to swim to safety. Rescue teams will be looking for you.

...if you receive a reverse 911 call – First, take it seriously. Next, listen carefully and follow all of the instructions from the phone call. If it is to warn you of a flood, it may tell you to stay in your home or head to higher ground immediately. Do so as quickly as possible.

Entergy Arkansas monitors Carpenter and Remmel dams 24/7, but, if you notice an unusual situation concerning the lake levels or the dams, call 911 to report it. Thanks to FEMA publication 593-237B (9/90) for information used in this article.





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Help Us With Our Mailing List

Please contact Entergy Arkansas, at
 844-2148 or send an e-mail to
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 with any corrections.

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What Requires a Permit?

All shoreline facilities, structures and ground-disturbing activities on Entergy Arkansas, Inc. Project 271 lands or water require a permit from Entergy Arkansas prior to installation or placement. Some of the most common types of facilities, structures and activities that require a permit include:

- ✓ Boat docks
- ✓ Piers
- ✓ Landings
- ✓ PWC ramps
- ✓ Decks
- ✓ Walkways
- ✓ Boardwalks
- ✓ Bridges
- ✓ Boat Ramps
- ✓ Steps
- ✓ Seawalls
- ✓ Riprap
- ✓ Fill/dredge
- ✓ Excavation
- ✓ Roads
- ✓ Waterlines
- ✓ Buoys
- ✓ Utility facilities
- ✓ Water withdrawal
- ✓ Heat/Air exchange piping
- ✓ Inflatable platforms/trampolines
- ✓ Boat lifts (when outside the slip)



To learn more about Entergy Arkansas' shoreline facility permit program and the requirements and specification for private facilities on Entergy Arkansas' property, visit our web site at www.entergy.com/hydro or contact us at (501) 844-2148.

Do you know of lakefront property owners who are not receiving this publication?

Send their names and addresses to:

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