

Life on the Lakes

Information About Lakes Hamilton & Catherine

Show Your ID!

It Could save your life

Two forms of identification are required to be displayed on property along the lakefront: your street address and an Entergy permit tag for facilities.

Garland County Ordinance O-95-32 requires the street address number to be posted on the lakefront side of the property.



These help emergency responders on the lake. They should be reflective numbers at least three inches in height, facing the lake. According to Corporal Neil Parliament of the Marine Patrol, the best place to put the identification is on a boat dock.



The address numbers can also be attached to seawalls or in the yard near the shoreline visible from a boat.

An Entergy permit tag is issued with every new dock permit and should be attached to the dock. The permit tag indicates that the dock has been approved by Entergy and helps identify the dock when necessary, such as if it gets loose in a storm.

The tags we issue now are yellow tags, about 2x4 inches, that install to the dock by stick-on or screw-on attachments. If you sell your home, remember to remind the new owner that he or she must transfer the permit into their name. Contact Entergy Arkansas at 844-2148 to have your permit transferred into your name or to report a lost permit tag.



June 2009

Aging, But Still Going Strong

Rommel Dam was built in 1923, began producing electricity in early 1924, and has been in continuous service ever since. There are three generating units at Rommel, each with a Francis design water wheel turbine and generator.



Water wheel turbine

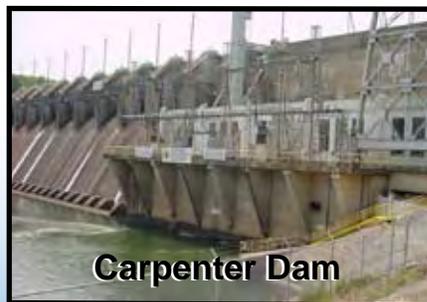
One unit still operates with the original generator windings, and we replaced the last original set of wooden turbine bearings just a few years ago. No doubt Rommel and its younger upstream brother, Carpenter Dam (built in 1932) are oldies, but goodies. Regardless of how well made, everything needs a little help now and then. Over the years we have added concrete ballast to Rommel, added some external reinforcing to some of the buttresses and installed some anchors

in Carpenter Dam. Numerous exhaustive engineering inspections and analysis have continued to tell us that the dams are good and strong.

The generating equipment is however, getting a bit old. It is typical for a water wheel turbine to last about 45 to 50 years. Rommel's are over 85 years old and are showing their age. As water passes through the turbine, it eventually wears and cracks the turbine blades to where they can no longer be repaired. We recently purchased a new turbine and installed it in 2008. The old turbine is sitting outside the gate, and you can go by Rommel and have a look at history if you wish. Take a close look and you'll see the cracks in the turbine buckets that forced its replacement. You may also observe some construction going on just inside the gate at Rommel. We are getting a new substation and station transformer which allows us to remove the old transformers on the powerhouse deck. This eliminates the potential of oil leaking into the Ouachita River.

Some of our repairs and upgrades are not so visible from the road. At Carpenter Dam we have replaced the generator windings in one unit and took out the old air wash system (cleans and cools the air that goes to the generator) with a new dry-filter design that we trust will work much better. We have installed new inclinometers to measure the gate openings at Rommel and hope to install the same devices at Carpenter very soon. You can see the improvements in our watershed gauging system by going to our website, www.entergy.com/hydro and clicking on the link to the Real Time Lake Level Data site. We also are taking advantage of technology to communicate with you through a list server that you can subscribe to.

These are just a few of the many ways that we keep something old working like new and producing the cheapest energy in Arkansas, today and every day.



Carpenter Dam



Rommel Dam

New Guidelines for PWC Docks

It is no secret that boating density is an issue here, especially on weekends and holidays. In the last few years, we have noticed a growing trend at multi-family developments (i.e. condos) towards adding new personal watercraft (a.k.a. PWC, Seadoo, or Jet-ski) docks or lifts to existing docks. Previously there was no written rule to limit the number of PWCs at a multi-family development. We had a rule for single-family residences that limited them to two PWC docks per home.

That rule and our other spacing requirements were often applied for multi-family locations requesting PWC docks.

This spring we put out new guidelines concerning PWC docks or lifts. They limit the number of PWC docks for multi-family developments to a maximum of two PWC docks for every 75 feet of frontage. Boat docks are still limited to one slip for every 75 feet of lake frontage.



Because so many condo developments already have docks with more than one boat slip per 75 feet, there is a need to further limit the number of additional PWC docks placed alongside these types of "grandfathered" facilities. For these situations, we intend to deduct two allowable PWC docks for every existing boat slip they have over the limit. We are adding additional verbiage to the guidelines to clarify this requirement.

Here is an example: The lake frontage at XYZ Condos limits them to five boat slips and 10 PWC docks under the current guidelines, but they already have an existing six-slip dock permitted under past guidelines. That is one slip over the limit, so we will deduct two PWC docks from the maximum. Thus, they can still add eight PWC docks to the existing six-slip dock.

Our Federal Entergy Regulatory Commission license allows Entergy Arkansas to permit docking facilities for single-family use only. Multi-family or commercial uses for docking require various state and federal agencies and FERC review. PWC docks are no different, so they require a \$1,000 processing fee like any other multi-family or commercial permit, and a six-month processing period.

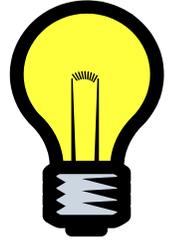


Rule Interpretation

We recently revised a permitting guideline for dock lighting to improve boating safety that states:

"Only low-watt yellow-colored lighting that does not create a hazard to boaters is allowed on any type of "facilities" (this includes boardwalks, decks, piers, swim docks and boat docks). All lights are to be pointed downward and shielded to prevent visibility of the bulb within 50' of the lake side of the facility. Motion activated lighting is preferred. Two-inch diameter blue reflectors placed at 10-foot intervals along the docks sides are recommended. Red, green or white lights shall not be used as they could be confused as navigational lights."

Last year, there were several night-time boating accidents and there have already been some this season too. The goal of this specification is to reduce some of the "light pollution" along the shoreline, especially in the highly developed areas. We hope that this will help make the navigaton lights on boats more visible at night. When you are out at night, take a look at your dock and shoreline for lights that could be shielded or pointed away from the lake. As your lights burn out on docks and around the shoreline, please replace them with bulbs that meet this standard. Just remember to buy only yellow bulbs of the lowest wattage you can find, and your lighting should be fine.



A brand new program to help you save energy, save money, and save the planet is coming to Hot Springs area this summer!

Concerns about climate change and rising energy costs have prompted many Entergy employees, customers and community members to ask how they can take action. In response, Entergy Corporation and the Pew Center on Global Climate Change have partnered to create a unique, community-focused project. This program will provide you and your family with the tools and resources to help you reduce your personal energy use.

The program features:

- an interactive, easy-to-use Web site with tips, tools and resources on how to reduce energy bills and live more sustainably;
- a customized carbon calculator that will help you analyze your personal energy use and provide personalized tips to help you to lower energy bills;
- educational workshops and hands-on activities to support local action and encourage change.

There are many simple and inexpensive steps you can take at home to start saving energy, money and the environment. Bookmark www.entergy.com/makeanimpact today and remember to visit the new website in July.

Individually we can make a difference, but together we can "Make an Impact"

Just Put it In the Lake?

Did you know...it is illegal to put yard waste in the lake or on the shoreline? Arkansas solid waste codes prohibit depositing waste on someone else's property. This includes leaves and grass clippings. Air pollution control codes further restrict open burning of yard waste. It may



only be burned on the same property where it grew. Therefore, burning in the dry lake bed during drawdowns is also restricted. For questions you can visit www.adeq.state.ar.us or call Garland County Department of Environmental Control at (501) 760-5918.

Don't Forget

**Application
Deadline**
for facilities to
be constructed
during the
drawdown



Boating Density Study Results

Last summer Hydro Operations conducted a boating density study over our three peak Holiday weekends (Memorial Day, 4th of July, and Labor Day). This study is a follow-up to ones done in 1996 and 2002. We are able to monitor use of the lakes and study trends in usage by visually counting boats on the lake and recording their activities.

The results of the study significantly affect management decisions on the placement of public boat ramps and multi-family/commercial development. The shape of our lakes tends to cluster boats in particular areas, and we do not want to add to the congestion. We hope that you enjoy your summer on the lakes this year and remember to respect "the rules of the road" while out on the water.

RESULTS: For this study, we break Lake Hamilton into 19 areas and Lake Catherine is organized into six. The results turned out to be quite positive! On Lake Hamilton, 13 areas went unchanged in the amount of use since 2002, five showed a reduction in the number of boats, and only one area showing an increase in the number of watercraft usage.

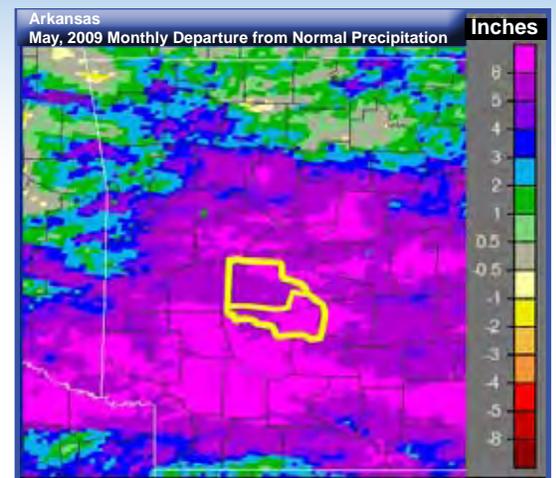
On Lake Catherine, four areas went unchanged and the other two have had an improvement in a reduction in the number of boats per acre. Of the 25 total lake areas analyzed for this study, only eight were considered to have an undesirable number of boats per acre. This in itself is an improvement over 2002 where we had 11 areas identified as being too congested.

WOW - What a Wet Spring!

Boy did we get some RAIN! After a drier-than-normal winter, Mother Nature must have thought she needed to make up for it! Like the spring of 2008, we were receiving more than the expected rainfall for the season. But, unlike last year when the rain was spread out over a couple of months – it was off the charts for May when we received more than eight inches over the expected amount of rainfall for the month. Here in Hydro Operations we have had two official high-water events and many close calls already this year. All spring long we have been closely watching the weather predictions to help anticipate potential inflow from the watershed. We have been slightly lowering the water levels of the lakes ahead of storms to allow us additional room to pass any water we receive.

Fortunately, it appears that some of the problems we faced with large logs after last years draw-down were somewhat mitigated this year with our new debris management policy, as well as with the gracious assistance of the US Coast Guard Auxiliary in the removal of floating trees.

Unfortunately, this spring is no stranger to accidents on the Lakes. Remember that there is never a time to relax your outlook on safety. Pay attention to shallow spots, floating debris on the lakes and other watercraft. Anytime you go on or near the water, make sure you have proper gear for your activity, and keep in mind that life jackets don't work if you don't wear them.



New Hydro Support Office Hours

To improve plant security and the safety of everyone on-site, including our customers, only persons with appointments will be allowed to enter the Lake Catherine Plant site. We will be open for appointments Monday through Thursday from 8 a.m. – 4 p.m. The office will be closed to visitors and deliveries on Fridays. We have an information kiosk and a drop box at our security gate for pickup and delivery of permit information.

If a meeting is necessary, an appointment can be arranged by calling the Hydro Support office at (501) 844-2148.

Life on the Lake's Quick Bits

Did you know...

That Lakes Hamilton and Catherine have a combined watershed of 1,516 square miles (that's more than 2x the size of Garland County). Any water that falls within that watershed has the chance of eventually ending up in one or both of the lakes. That means that more than just the empty soda bottles on the side of the road can end up polluting our local waters.

Luckily there are several simple steps you can take to help protect them.

- **Practice Lake Friendly Lawn Care** - Minimize fertilization and pesticide applications on your yards, and NEVER apply just before a rainfall. Excess nutrients and chemicals will eventually run off into the lakes potentially causing increases in nuisance aquatic vegetation growth and/or harm the fish, their food sources and oxygen supply. TIP: get your soil tested to determine the most efficient fertilization needed or use organic compost – like that found at the city compost pile.
- **Remember “Only Rain in the Drain”** - Storm drains are an essential water control device that empty directly into the lakes – so please remember to protect these water-flow superhighways from chemicals.
- **Properly Dispose of Grease, Dirt and Soap** – You wouldn't pour these directly into the lake would you? But you are if you wash your car where the water will run off into a storm drain. TIP: Wash it on the lawn where grass will be able to soak up the soapy, dirty water, preventing it from directly entering the lakes.
- **Create a Buffer Zone** - Plant a native vegetation buffer between your yard and the shoreline to filter out chemicals and slow water run off.
- **Plant Green** - Choose earth-friendly landscaping with hardy native plants that require less water and chemicals. TIP: Plant a rain garden to utilize natural water sources. (www.gardeners.com).
- **Build Green** - Install wood decking or bricks/stones instead of impervious cement to allow water to filter into the ground. TIP: Gravel trenches along driveways and patios also help to collect water and filter it into the ground.
- **Stop Erosion** – Make sure to use filtering structures like silt fences during construction to stop erosion and silting.



Information was collected and used from the following sources - www.eps.gov, www.macomb-mi.gov, www.plslwd.org/what_you_can_do.htm.

Want the Latest Lake 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.

Cash for Trash Bash, another Success

Problem: How do you get nine volunteer civic organizations to pick up four tons of garbage from littered areas of lakebed and shoreline?

Solution: You pay their organizations \$5 for every bag of trash they collect.

The non-profit organization Trash Bash Council, Inc., in conjunction with Hot Springs/Garland County Beautification Commission organized the 3rd annual “Cash for Trash Bash” event to do some spring cleaning of the exposed lakebed and shoreline. On Feb. 21 - before the lakes were refilled and the heavy spring rains came - about four tons of litter and trash were collected from the lakes by local volunteer organizations.

The funding for this event came, in part, from an environmental grant program sponsored by Entergy Arkansas, Inc and other local organizations. Cash for Trash Bash is an efficient way to do a volunteer lake cleanup. Trash Bash Council, Inc. found nine local organizations looking for fundraising opportunities, and assigned them areas of the lake that were exceptionally littered.

This year the organizations collecting trash and cash were: Spa City Junior Bass Club, Hot Springs Wizards, Lakeside Basketball Team, Arkansas Diamond Hogs, Lakeside Environmental, Arkansas School for Math & Science, Lake Hamilton Dance Team, Hillcrest Children's Home and Lakeside Baseball Team. These groups did a great job! For their efforts they received donations up to \$200 from Trash Bash, Inc. to help support their organizations. Some of the groups also solicited additional donations from other sponsors who wanted to show appreciation for the cleanup.

The next great clean-up event will be TRASH BASH, on the morning of Saturday, September 12. This is the largest single day clean-up operation in Arkansas. It involves lake and road clean-up operations throughout the area and brings together over 700 volunteers to pitch in. Following the morning cleanup, participants enjoy a free appreciation picnic with music and prizes at Garvan Woodland Gardens.

If you would like to support Trash Bash, Inc. or you belong to an organization that might be interested in participating in a similar program next year or just want more information, call Adam Roberts at (501) 623-7871 or visit www.hsgcbc.com.



Applications Due November 30th!

While you are enjoying the lake this summer, you may be thinking of replacing that old boat dock with a new stationary dock or installing a seawall. If you want to accomplish any of that during the next drawdown, you should send in your applications now before the rush starts. We have several other obligations to work around during the drawdown periods besides seawall and dock permits, and late permit requests put an unpredictable strain on our workload.

We have set an application deadline of November 30 for construction activities to be worked during the winter drawdown. Applications received after the deadline will be set aside to process after the refill, unless the applicant is willing to pay an "expedited processing fee" of twice the normal fee to have it evaluated before the end of the drawdown. So a typical dock or seawall permit that costs \$250 now will be \$500 to expedite.

It generally takes us a few weeks to process a typical permit application. However, some applications will require additional reviews by state and federal agencies before they can be approved. Applications for bank stabilization and boat ramps may require a minimum 60-day processing period. Dredging and excavation and commercial dock applications may take up to four months. These should be submitted as early as possible if the proposed construction activities are to be performed during the winter drawdown.



• **Plan Ahead and Avoid a Delay** •

Slow It Down; You're Creating a Monster!

"Open it up and let's go." Ever heard this while boating? Today's boats are faster than yesterday's, and bigger boats and personal watercraft are becoming more popular. A boat's wake can be dangerous to other boats, swimmers and personal property such as boat docks.

Arkansas state boating law states that "no person ...

1. Shall operate a motor boat upon the waters of this state within one hundred feet (100') of a designated recreation area, dock, pier, raft, float, anchored boat, dam, intake structure, or other obstruction (bridges, bank, etc.) at a speed exceeding five (5) miles per hour, unless a contrary speed limit shall have been established in the designated area.
2. Shall operate a boat upon the waters of this state at a rate of speed that creates a hazardous wash or wake upon approaching or passing vessels.
3. Shall operate any motor-boat or vessel or manipulate any water skis, aquaplane, or similar device in a reckless or negligent manner that endangers the life, limb, or property of any person."



**When boating,
have fun, but be safe
and
be courteous!**





Entergy Arkansas, Inc.
 Hydro Operations
 141 West County Line Road
 Malvern, Arkansas 72104

Help Us With Our Mailing List

Please contact Entergy Arkansas, at 844-2148 or send an e-mail to kbogar1@entergy.com 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's 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:

Entergy Arkansas, Inc.
 Hydro Operations
 141 W. County Line Road
 Malvern, Arkansas 72104

Editors:

Bobby Pharr
bpharr@entergy.com

Blake Hogue
bhogue@entergy.com

Kimberly Bogart
kbogar1@entergy.com

Flow Release Information
www.entergy.com/hydro
 (501) 844-2125