

Life on the Lakes

Information about Lakes Hamilton & Catherine

Shoreline Non-Compliance Can Be Costly

Lakefront property owners are required to obtain a permit from Entergy Arkansas, Inc. prior to the placement or construction of all shoreline facilities or structures and before conducting any ground disturbance activities of any type on or along the shoreline of lakes Hamilton and Catherine. Entergy owns and operates these lakes under a license issued by the Federal Energy Regulatory Commission (FERC). The Commission requires Entergy to manage the shorelines in accordance to a FERC-approved permitting program and shoreline management plan.

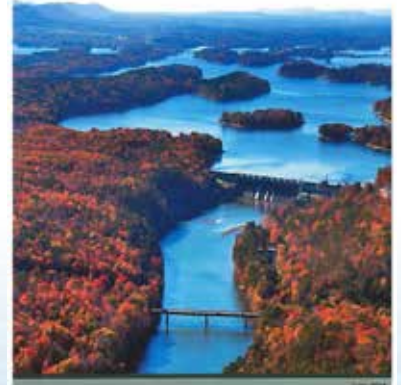
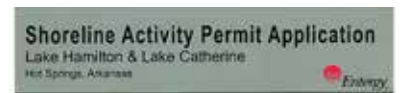
Entergy has chosen to allow lakefront property owners the opportunity to use and occupy Entergy's shoreline and lakebed. Entergy is required to manage all use and occupancy of project lands and waters to ensure that all facilities are properly permitted; meet current guidelines and requirements; are maintained in good repair; and comply with applicable state and local health and safety requirements. These requirements and specifications for shoreline facilities (boat docks, PWC ramps/lifts, piers, decks, ramps, retaining walls, etc.) have been developed to encourage fair division of shoreline space among adjacent property owners and the general public; and to minimize environmental and cultural impacts and navigation hazards along the shoreline and reservoirs.

Ensuring that the >6,000 plus facilities are properly permitted and in compliance is a challenge. We have for many years been using the newspaper, radio, social media and web to educate shoreline property owners of our permitting requirements.

In 2012, we began conducting a detail house-to-house audit of all shoreline facilities on the lakes. Using the pictures we take during field audits, yearly aerial photography and geographic information system technology; we are attempting to validate that all facilities are properly permitted in the current owner's name; and that the facility was constructed as approved.

If a non-compliance issue is found, the lakefront property owner is being sent a certified letter explaining the non-compliance and instructions on how to become compliant. Depending on the year the non-compliance occurred and the level of non-compliance, many lakefront property owners are being assessed increased processing fees for after-the-fact permits or are being required to remove that which is in non-compliance.

Entergy strongly encourages all lakefront property owners to ensure that their shoreline facilities and activities have a valid permit in their name and were constructed in accordance with the permit. Permits are not transferred automatically when lake property is sold. The reason is that the new property owner must sign to agree to Entergy's conditions to allow them to keep their facilities on Entergy's shoreline lands. Do not be afraid to ask if your facility was ever permitted.



You're Responsible...

To Obtain a Permit: For new construction or activity, relocation or significant alterations, changing the footprint, roof line or support structure of existing facilities requires the approval of Entergy Arkansas. These "facilities" must be brought into compliance with all current Entergy regulations, specifications and requirements before a permit is issued.

To Comply With Your Permit: Your facility must conform to the location, specifications and all other conditions of your permit, in addition to any specifications, requirements and/or conditions that Entergy Arkansas may determine to be appropriate subsequent to permitting of your facility.

To Secure Your Facilities: Loose flotation material and loose or derelict facilities present a serious hazard to water recreation. Flotation must be securely attached and the facility properly anchored and secured at all times.

To Maintain Your Facilities: It is the responsibility of the permit holder to ensure that the facility is properly maintained and when it is constructed, modified or replaced, that the waste material is disposed of in an environmentally acceptable manner, including ensuring that all electrical components of your facilities is in compliance with all applicable electrical codes as well as other federal, state and local codes.



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Shoreline Permitting

Who is the Best Shoreline Contractor?

Who's #1

Many times we are asked at Entergy Hydro Operations if we can recommend a shoreline contractor. Unfortunately, we cannot. We can however provide you with a list of contractors with phone numbers of those who have attended our annual training classes.

For several years now, in the fall, we have conducted a training class with contractors who work on Entergy's shorelines. We go over our guidelines and application requirements and talk about different issues we see from permit requests that have been submitted and how they may affect our processing of them.

This helps us, and potential customers, know that the contractors on the list should understand our guidelines, Entergy Shoreline Management Plan and how to properly complete an application. Please note: It is still the lakefront property owner that is ultimately responsible to make sure that the facility built is not only permitted, but also built as permitted.

You can find the current shoreline contractor directory at www.entergy.com/hydro under the private facility permitting section.

Want the Latest Lake News?

Go to www.entergy.com/hydro and subscribe to our Email Listserv. 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.

www.entergy.com/hydro
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FAQ on Non-Compliance

Can we meet with you in person?

Yes, but you must call to make an appointment. Please note though, there are times during the year where we are not able to meet with the public at our office – calling ahead will let you know when that is. We will be able to then make other arrangements to meet you offsite.

What can I do without applying for a permit?

If you have a properly permitted facility, you can perform general maintenance activities. Entergy defines general maintenance as decking and roof repair so long as the footprint is not changed and the support structures are not replaced. Any modifications to an existing structure, including but not limited to: changes in its location, support structure (posts/joists/etc...), footprint or replacement of – will require a permit from our office and may require the facilities to be brought into compliance.

For floating docks only - we still have the 50% rule, so if you have to replace the majority of the floats on your dock and the decking/roof – you may need to file for a permit request.

Major roof repair - While it may not require a new permit, please contact us if you plan to replace your entire roof as roof guidelines have changed and they may affect the footprint of what you can replace.

What are the changes to the size of roof eaves?

Since 2013, roof eaves have been limited to 12 linear inches beyond the footprint of the permitted stall area and the associated fingers and head walkways.

How much of my dock can be roofed?

The permitted stall area and up to 6' of the fingers and head walkway associated with the stall area may be roofed. Please consider this in your dock design when you submit a permit request with our office. If your fingers are listed as 4' wide, your roof will be limited to five feet on that side (4' finger + 1' eave). PWC ramps and decks are not allowed to be covered with a roof.

Can I leave my dock in the same location and just turn it?

Maybe, but you will have to submit a modification request. Entergy requires a dock oriented parallel to the shoreline to be 1.5x the slip length away from your extended property line to allow you to utilize your shoreline frontage for ingress and egress of your dock facility. If it is located closer than that, you would be crossing your neighbor's property hindering their fair and equal use of their shoreline.

Why am I only now getting a letter about a noncompliance issue – my facility has been out here for years?

A permit is essentially permission that allows you to have facilities, or to conduct an activity (seawall construction for example), on Entergy property. Through the permit transfer process we found that over time many of the facilities on the lake have been modified and no longer match what was originally permitted. To tackle this issue, we started a noncompliance review and are going systematically along the shoreline reviewing files to ensure that the facilities and the current owners match what we have on file. It does take some time to cover all the shoreline.

Grandfathered

We hear this word a lot, there are a lot of rumors about it, and you may think you understand what grandfathered means. People think that just because their dock has been around for a while that they do not need a permit for it. We have even heard from a shoreline property owner that a contractor told them that as long as they keep one board from the original dock that they could rebuild it without a permit and that the facility would still be grandfathered.

Please let us explain Entergy's definition of what we consider a grandfathered facility – it does not just mean that the dock has been around for 20+ years. To be grandfathered, a facility must have a valid permit and is held to the guidelines and conditions that were in place at the time of the permit.

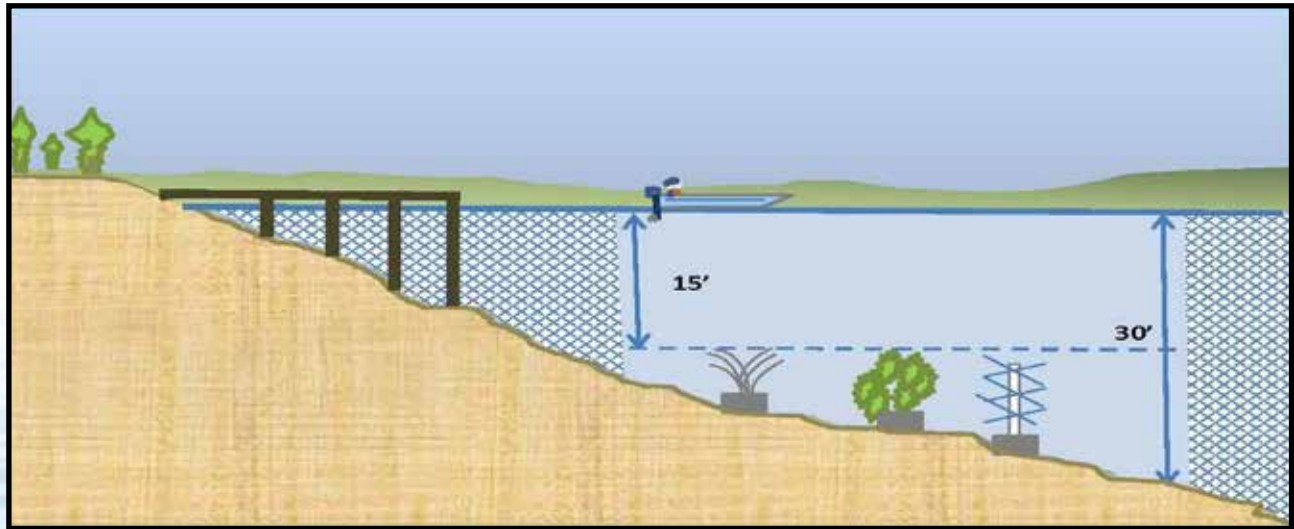
Fish Structures - Here Fishy!

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 structure where fish can hang around. Cover is important in providing security and surface that organisms fish feed on can attach themselves to.

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. Most fishermen will debate which trees work the best. 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 fish cover added to a lake will allow for the growth of "periphyton" which in turn attracts small bream, minnows, and shiners. These small fishes provide a food supply for most preferred sport species which anglers are pursuing. Bream is a collective term for the Genus *Lepomis* which includes bluegill, longear sunfish, redear sunfish, green sunfish, and warmouth. Thus, the cover added to the lake's fishery serves as a holding area for sport species to congregate around and also their food supply may be attracted to the same cover. Black bass (largemouth & spotted bass) and crappie 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 bass 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.



WHEN PLACING FISH STRUCTURES...

The shoreline of lakes Hamilton and Catherine are extremely developed and are drawn down each winter to depths of up to 9 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 the 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.

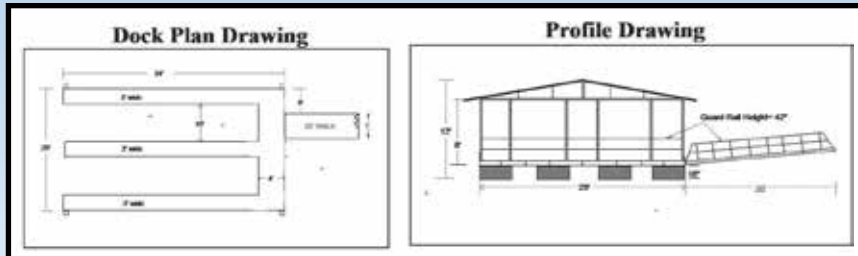
Some of the best locations for "artificial cover" will be on "natural structure" which is already present such as: at the end of a long sloping point; on the top of an underwater hump; on the edge of a creek channel drop; in the deepest portion of a large flat void of natural cover or in the middle of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

Fishermen in general are becoming more adept at utilization of GPS units for returning to preferred cover or habitat regardless if they have placed it or someone else has. Once placed within public waters, like lakes Hamilton & Catherine, there is no ownership of fish habitat. Everyone can access and use it. In fact AGFC now utilizes an interactive map on their website which serves as a clearinghouse for all AGFC fish cover work statewide. You can visit their website at www.aqfc.com/resources/pages/resourcesmaps.aspx.

Shoreline Permitting

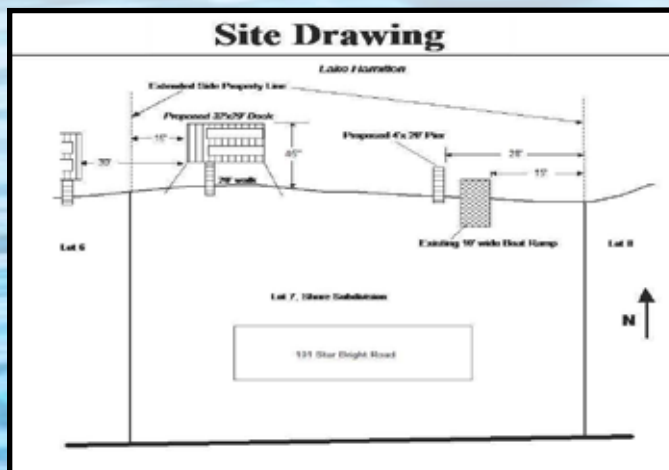
Tips on Dimensioned Drawings

Are you having trouble with your permit drawings? Don't worry, you are not alone. The drawings that we get in our office come in all shape and sizes – from scaled architectural renderings to pencil sketches on a piece of note paper. The good thing is that we will accept a wide variety of drawings so long as they have a few basic components:



1. A general shape of your proposed or existing dock – it does not have to be to scale;
2. What it does need is dimensions for every component of the facility or activity because we take your drawing, and using those dimensions, we scale it into our digital mapping system;
3. If you plan to build a roof you will need to include its overall size as well – please see the FAQ article to learn more about restrictions on roofs;
4. Remember to include **EVERYTHING** that you plan to build – this includes steps into the water, boardwalks, dock extensions to attach a PWC ramp/lift, the ramp to the dock, etc. . . .;
5. For site drawings include overall footprint dimensions for **EVERY** facility you have along your shoreline not just the proposed addition. If an existing facility is not included in your site drawing, we will assume that it is no longer there and it will be removed from your permit.
6. Your lake address.

One way we have tried to help is to provide templates for single and double stall dock plan drawings on our website. What needs to be measured and how to complete the drawing is included all on the one page sheet. You can find them here: www.entergy.com/hydro under the Private Facility Permitting link.



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



Dock Lighting Reminder

Not all lights are good. Some can give boaters and other lakefront property owners a headache or, worse, cause a deadly boating accident.

To improve boating safety, our permitting guideline for dock lighting 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 dock's sides are recommended. Red, green or white lights shall not be used as they could be confused as navigational lights."



Preparedness - Dam Safety



Floods



Flooding happens during heavy rains, when rivers overflow, when ocean waves come onshore, when snow melts too fast, or when dams or levees break. This is the most common natural-weather event. Flooding may be only a few inches of water, or it may cover a house to the rooftop. Floods that happen very quickly are called flash floods.

Am I at risk?

Floods can occur in every single U.S. state. Some floods develop slowly, and some can build in just a few minutes. People who live in low-lying areas - near water or behind a levee or dam - are at even greater risk.

Did you know?

Flooding can change familiar places, like walkways, roads and fields. Avoid walking through water. It might be deeper than you think!



FACT CHECK

- Which of the following does NOT cause a flood?
 - Tropical storms and hurricanes
 - Spring thaw and melting snow
 - New construction
 - None - they can all cause floods
- True or False? 1 foot of water is enough to make most cars float.
- True or False? 6 inches of moving water can sweep you off your feet.

ANSWERS
(1) b. (2) True (3) True
[2] True. Stay away from moving water!



For more facts and info on floods visit
<http://www.ready.gov/kids/know-the-facts/floods>
<http://emergency.cdc.gov/disasters/floods/>

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 Inc. 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.

FLOODING? BE SAFE!

Turn Around Don't Drown





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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.

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 activity. Some of the most common types of facilities, structures and activities that require a permit include:

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



PWC Ramps



Steps

Any changes to the footprint, roof line, support structure or change in the size of an existing facility requires a new application/permit.

To learn more about Entergy Arkansas' shoreline facility permit program and the requirements and specifications 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 & emails to:

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