



SUMMER 2016

LAKE NEWS

and Shoreline Views



Visitors gather to see the open spill gates during the July 2, 2015 high water event.

2015 was certainly a year of extreme water levels and heavy rainfall for the Lake of the Ozarks. In July, the Lake level reached 662.5 feet, and in December, it rose to 663.8 feet. The December flood event caused the fifth-highest water level since the construction of Bagnell Dam in 1931. Though fluctuating water levels are part of the equation for any lake, river or stream, high water events cause challenges to everyone living in or near the flood zone. How are flood events and water levels managed at Bagnell Dam? Have water management and

operations changed over the past ten years? In order to address these questions, we have developed a special flood analysis on past and current Lake operations that can be found inside. We hope you find the information useful. For those of you who want more details, we have provided an expanded version of this analysis on our website at AmerenMissouri.com/lake.

FOCUSED ENERGY. *For life.*

Twenty-Five Years of the Best Volunteers

Twenty-five years ago, a volunteer effort began at the Lake of the Ozarks. Two concerned Lake area residents noticed the shoreline needed a major cleanup. At first, the task seemed monumental. How could two people organize a volunteer cleanup effort over such a large geographic area, an area that encompassed nearly 1,150 miles of shoreline?

To make the task more manageable, the Lake was divided into zones composed of smaller geographic areas that could be managed by volunteer coordinators. Zone coordinators could assist residents with organizing volunteers and disposal of the collected debris.

In 1992, the first spring cleanup was held on a single weekend, with hundreds of volunteers showing up to clean the shoreline. In some coves, debris was several feet thick and could only be removed with shovels. Volunteers quickly realized a one-time effort would not win the war on trash.

By 1994, it was decided a core group of volunteers was needed to keep the Lake's shoreline clean. The Adopt-the-Shoreline program was created, allowing groups and residents to "adopt" sections of the Lake's shoreline for litter control. Today, 690 miles of the Lake's shoreline has been adopted by 90 different community-minded groups and individuals.

The importance of 25 years of shoreline cleanup cannot be overstated when you consider that more than 13,000 volunteers have removed approximately 5.5 million pounds of trash and debris from the Lake of the Ozarks shoreline.

Ameren Missouri is proud to support these volunteer efforts, and invites you find out how you can get involved by visiting the Adopt-the-Shoreline webpage at AmerenMissouri.com/ats.

Early shoreline cleanup efforts. Volunteers from K&T Guttering and Siding and Rich's Dock Company with a barge full of trash. Photo courtesy of Zone 7 coordinator, Terry Cleary.



Photo courtesy of LakeShots Photography



Watch Your Wake!

The wake issue is getting a lot of airtime right now due to the size and number of large watercraft at the Lake of the Ozarks. Even lawmakers are exploring ways to enact laws to limit harmful wakes at the Lake. With or without new laws, as a boat operator, your wake is your responsibility. It is important for all boaters to understand their wake can negatively impact other boaters, swimmers, docks and property. Federal law states that regardless of size, all watercraft must be operated in a way that does not endanger life or property. Here are some tips to help prevent boat wake damage and possible injuries to your crew and other boaters:

Slow down early: Boat wakes travel long distances, so slow down before you reach a slow-speed zone, dock or other navigational hazard—don't wait until you have passed the no-wake buoy, marker or structure. Stay at least 100 feet from all docks and structures.

Slowing down a little isn't good enough: When entering a no-wake zone, some boaters react by slowing the vessel only slightly and then plowing through with the bow way up and stern dug down. Plowing through the water causes increased wake. Come completely off plane to idle speed.

Get level: A slowed or idle-speed vessel should be level in the water. A properly planed boat also should be level. Heavy plowing boats that tend to plow even on plane should stay in the center of the channel, and consider coming off plane to no-wake speed before entering smaller coves and tight navigation ways or nearing docks off the main channel.

Walls and wave breaks make it worse: Just as shallow water can increase wake size, seawalls and breakwaters can exacerbate wave action. Keep the proper distance between you and wave breaks, seawalls and natural bluffs during times of heavy boat traffic.

Small boats aren't always innocent: Wakes are not just a big boat issue—small vessels in the stern-down position can throw surprisingly large wakes. Even if your boat is small, don't plow. Either reduce to no-wake speed or plane out to reduce your wake size.

When approaching a large wake, slow down: Motorboats are more stable when underway, so stopping could make things worse. Avoid taking a wake on the beam or side. The best approach is to slice the wake at a slight angle.

Be aware of your crew: Many wake-related boating injuries happen to those seated near the bow when the boat slams into a wake. Keep very young passengers closer to the stern or middle of the boat.

Warn your crew: A simple, "Hold on; boat wake" should do the trick, if you shout it loud enough and well before the wake arrives.

Submersible Pumps Are Not Permitted

Many Lakefront property owners use electric water pumps to irrigate lawns or for fish cleaning stations and water features. These Lake water pumps can provide an economical solution to meeting such needs. However, the pumps that supply the water can present an unseen hazard if the electrical system providing the power is improperly installed.

Moreover, certain types of pumps are not approved for open water bodies where swimming occurs. Currently, there are no submersible pumps that are rated for use when people are in the water. A submersible pump is defined as a pump with wires entering the water to supply electricity to the pump motor. In order to help ensure safety, Ameren Missouri will no longer permit submersible pumps at Lake of the Ozarks. The use of pumps that are mounted on a dock or the shoreline are still allowed, provided they are covered by a valid Ameren Missouri permit and the electrical system is properly installed—that is, if they include ground-fault circuit interrupter (GFCI) protection with proper grounding and bonding.



All non-submersible pumps must be GFCI protected and must be properly bonded and grounded. Submersible pumps are no longer allowed at the Lake of the Ozarks.

Decks, Patios, Sidewalks and Other Accessory Structures

In 2007, Ameren Missouri received a new license from the Federal Energy Regulatory Commission (FERC) for the Osage Hydro Electric Project that includes the Lake of the Ozarks. During relicensing, Ameren Missouri developed and submitted the Shoreline Management Plan (SMP) that governs how the Lake's shoreline can be developed. A key component of the SMP is the project boundary, which can be thought of as a continuous line around the Lake of the Ozarks. Any activities at or below this line must be in compliance with the SMP.

During the shoreline plan review, it was discovered that many structures had been built within the project boundary without a permit or authorization. The first step in correcting this issue was to lower the project boundary to the absolute minimum area necessary for Ameren Missouri to adequately manage the Lake's shoreline while meeting license obligations. Therefore the project boundary was lowered in 2012 to elevation 662 feet above mean sea level in most areas of the Lake. This step



✗ WRONG Sidewalk is NOT located 3' behind back of seawall.



✓ RIGHT! Sidewalk is located 3' behind back of seawall.

3 ft.

662' elevation on seawall

successfully removed many of the homes and businesses that were within the project boundary. However, it did not remove the thousands of accessory structures such as sidewalks, patios, decks and gazebos that had been built near the shoreline. Our license does not permit new structures to be constructed below the project boundary.

In order to ensure that the accessory structures within the project boundary were properly authorized, Ameren Missouri began documenting and requesting permits for those structures in 2012. This work is nearing completion and Ameren Missouri will be filing a report with the FERC by Sept. 30, 2016 that documents all of the structures found and the permits that have been issued. If you are a Lakefront property owner and are unsure if your structures are properly permitted, you should contact the Ameren Missouri Real Estate Representative that is responsible for your Lake mile. You will find contact information on the back page of this newsletter.

No discussion on this topic would be complete without reminding all Lakefront property owners that no new accessory structures may be built within the project boundary. Please contact the Shoreline Management Office at **573.365.9203** or the Lake Real Estate Representative assigned to your Lake mile if you have any questions about the project boundary at your location.



Lake of the Ozarks Flood Levels

Two significant floods in 2015 have caused many people to question whether there has been a change in the way Lake of the Ozarks (LOZ or Lake) water levels are managed, and if that is causing more flooding at the Lake. The fact is, Lake level controls have changed, and they can contribute to higher Lake levels during flood events. This article will try to explain how Lake levels and floods are managed at the Lake of the Ozarks. The key points we will address include:

- Average Lake water levels have increased over time, leaving less storage for significant floods.
- Lake of the Ozarks was not designed for significant flood control.
- Both Harry S. Truman (HST) Dam and Bagnell Dam must follow operational rules established by the federal government when flood-triggering thresholds are met.
- Major operational decisions during floods are not based on weather forecasting and inflow forecasting.

Changes to Average Lake Water Levels Over Time

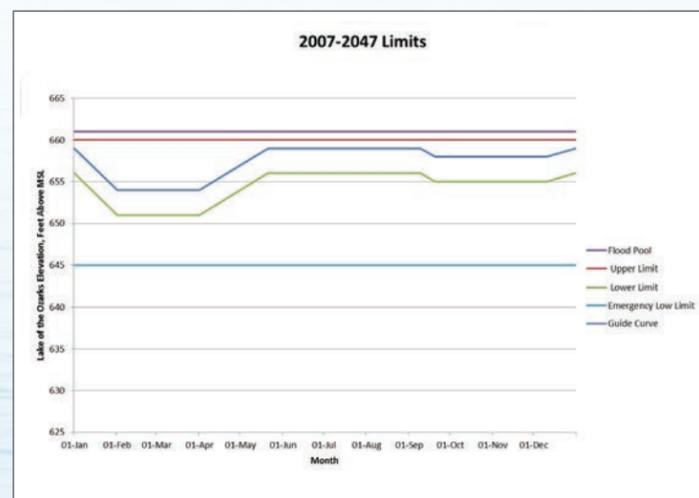
Water level limits for the Lake of the Ozarks have always been included in the Federal Energy Regulatory Commission (FERC) license for the operation of the Osage Power Plant at Bagnell Dam. The Bagnell Dam upper and lower limits are based on input from many stakeholders. These limits have increased Lake levels since the 1930s. Changes to the limits and guide curves have increased Lake levels under the current license by an average of nearly 2.5 feet, as compared to levels during the 50 years of the first FERC license.

The Federal Power Commission—FERC’s predecessor—first issued a license to operate Bagnell Dam in 1925. This license included a low-level limit of 630 feet. At the upper-level limit of 660 feet, spill gates had to be opened. The earliest plans for flood management called for opening spill gates at 660 feet to match discharge to inflow, thus stopping further increases in LOZ water levels. But that did not take into consideration the loss of the Osage River valley’s natural floodwater storage capability when the Lake was formed. As a result, floods on the Osage River below the dam during the 1930s and 1940s were much more frequent and more severe than natural floods. That led the Federal Power Commission (FPC) to step in and hold several public hearings on Lake levels and flood management. Based on those hearings and considerable input from the Osage River Flood Control Association, the FPC issued a new order in 1947. This FPC Order made two significant changes: The upper limit was lowered to 657 feet during the spring months of March, April and May, with the limit not rising to 660 feet until the first of July. The second added restrictions based on a “natural flow,” which calculates what the flow in the river downstream would be if Bagnell Dam did not exist. Natural flow calculations took effect when discharge from Bagnell Dam exceeded 50,000 cubic feet per second (CFS) while the Lake continued to rise. Under the FPC Order, the dam could discharge more than this natural flow only when the Lake rose above 665 feet. At that point, Bagnell could release as much water as necessary to protect the integrity of the dam. These limits remained in effect until 1981.

The second license to operate Bagnell Dam was issued in 1981. Truman Dam (and five other smaller dams upstream) had just been

completed to provide the first major flood control for the Osage River basin. Truman Dam also included power generation capability and the ability to pump water back upstream from the Lake of the Ozarks to Truman Reservoir—making the U.S. Army Corps of Engineers (USACE) a major stakeholder in the second license. Based primarily on USACE input, the LOZ limits underwent a significant change. Now that Truman provided major flood protection, the upper limit for LOZ was increased to 660 feet year-round. The lower limit was raised from 630 feet to 650 feet in order to support Truman’s pump-back capability. A new emergency low limit was added at the request of Union Electric to cover any significant drought periods. The natural flow requirement from the 1947 FPC Order was carried forward, and a license requirement for coordination between the USACE and Union Electric in managing the flood flows on the Osage River was added.

The third and current FERC license for the Bagnell Dam was issued in 2007. Lake tourism and shoreline property owners were significant stakeholders in this licensing process, with over 100 meetings held with stakeholders during a five-year period. The current license retains the natural flow requirement, the 645-foot emergency low limit and the 660-foot upper limit. However, this license changes the lower limit from 650 feet to 3 feet below the guide curve. This restricts the amount of fluctuation allowed in Lake levels throughout the year. The guide curve was added to the license for the first time, but it was made very clear that it is not a rule curve. LOZ levels can be anywhere between the upper and lower limits, but the guide curve gives the public and plant operators a target for normal operations. The guide curve dips to 654 feet in the spring months of March and April, but rises to 659 feet by Memorial Day to essentially fill the Lake. Current FERC license limits are depicted in the figure below:



By restricting the amount of water level fluctuation on the lower end, there has been an increase in the average Lake level throughout the years. The average Lake level increased by about 2 feet from the first to the second license, and it has increased by about another half foot with the current license. With the average Lake level 2.5 feet higher than in the past, significant rainfall below Truman Dam will result in slightly higher Lake levels.

Bagnell Dam Not Designed to Provide Significant Flood Control

When Bagnell Dam was designed and built in 1929, the primary project purpose was electrical power generation. Recreation and flood control were not major considerations. While the Lake could fluctuate from 630 feet to 660 feet, water levels were changed for electric generation purposes and not flood protection.

Truman Dam was built to provide flood control. From its normal full-pool level to its maximum level, Truman is capable of storing two times the volume of LOZ. In 1981, the guide curves and upper and lower limits for Lake of the Ozarks were revised to rebalance recreation, flood control, power production and environmental concerns on the Lake. Together, the construction of Truman Dam and changes to the LOZ limits significantly enhanced flood protection for both LOZ and the Osage River. However, these changes reduced Bagnell Dam’s ability to provide flood control for rains occurring in the basin below Truman Dam.

Truman and Bagnell Dams Follow Operational Rules Established by Federal Government When Flood-Triggering Thresholds Are Met

Ameren Missouri operates the Lake of the Ozarks according to the rules set out in its FERC license. Those rules say that when Lake levels are above 660 feet but below 665 feet, Ameren Missouri must discharge the natural flow that would exist in the river if Bagnell Dam were not there. The natural flow calculation is based on Truman and Bagnell discharge rates and Lake of the Ozarks level changes over time.

Both the USACE and Ameren Missouri rules are intended to balance flood impacts between upstream and downstream property owners and stakeholders. In both cases, the rules were established after many years of studies and input from all stakeholders. Under the established rules, neither the USACE nor Ameren Missouri have the authority to deviate from the prescribed releases. Flows cannot be reduced to protect the lower river and flows cannot be increased to protect the reservoirs. Only if the reservoirs reach a level that could challenge the integrity of their dams—739.6 feet for Truman and 665 feet for Lake of the Ozarks—are there exceptions. At these levels, both entities can go to maximum discharge to keep the lakes from rising any further.

Major Operational Decisions Not Based on Weather Forecasting and Inflow Forecasting

Ameren Missouri and the USACE coordinate with the National Weather Service (NWS). During routine operations, when neither LOZ nor Truman are above flood levels, weather forecasts are used to make adjustments to discharges as appropriate. However, once either lake goes above flood level—LOZ at more than 660 feet and Truman at above 706 feet—flood waters must be managed per the operating manuals.

During flood conditions, major operational decisions are based on actual Lake levels, not forecasts. We use the forecasts to help prepare and plan for what is coming, but not to make major adjustments to discharge flows during floods.

While five-day forecasts are fairly accurate, they do not accurately depict how fast the rain will come on any given day or exactly where the rain will fall. As an example, during the heavy rains of December 2015, the area below Truman Dam was expected to receive 4-7 inches of rain. The actual observed amounts were 7-9 inches. The 48-hour forecast for the July 2015 flood estimated that the area

below Truman would receive 1.5-3 inches of rain, but some areas actually received over 9 inches of rain in this two-day period.

If we adjusted Lake levels significantly in response to 5- or 7-day forecasts, we would be lowering the LOZ levels by 3 or 4 feet rather than limiting that variation to plus or minus about 1.5 feet, as we typically do. Dropping water levels by as much as 3 or 4 feet in response to forecasts could set up a worst-case scenario in which an anticipated storm never materializes, leaving the Lake low for several weeks—or even months—and significantly impacting both power generation and the Lake’s tourism industry.

One other point to highlight is the significance of the amount of rain we actually received in the July 2015 and December 2015 floods. Both events were preceded by several weeks of heavy rains, which saturated the soil and raised Lake levels. Truman and Osage Plant had heavy discharges throughout June and December in an attempt to evacuate the already-stored flood waters as rapidly as possible to prepare for additional rains to come, as required by the federal rules for each dam.

In particular, the December flood reflected record rainfall for the month throughout the entire region—setting new records in Springfield, Joplin, Vichy and St. Louis. Both Dec. 26 and Dec. 28 set new records for rainfall for those days in St. Louis, as well as for the highest rainfall for any December day in St. Louis. In fact, Dec. 26 was the third-wettest day ever recorded in St. Louis, for any time of the year. This was unprecedented rainfall for December in Missouri.

Many Factors Influence How Lake Levels Are Managed

In conclusion, Lake of the Ozarks was initially designed for power generation and not flood control. Over the years, stakeholders have requested changes to the operating limits to minimize Lake fluctuations, raising the average Lake level by 2.5 feet. Increasing the Lake level and modifying operating limits provides less storage capacity for significant rainfalls downstream of Truman Dam.

Although Truman was built to help reduce flooding, rainfall on the Niangua River and the Lake of the Ozarks is not captured by Truman Dam. Weather forecasts are used to estimate how much rain will fall in the basin below Truman Dam. However, once either lake is above its flood level, their discharges must follow federal rules for flood conditions. Once flood conditions exist, neither the USACE nor Ameren Missouri have the authority to deviate from the prescribed releases. The only exception to that rule is if the water level is going to threaten either dam.

Flood events in July and December were preceded by several weeks of heavy rains. This increased the Lake levels to full pool. Truman was in its flood pool preceding the major flood events, and was required to discharge to Lake of the Ozarks. Both Truman and Bagnell dams were attempting to evacuate the floodwaters to prepare for the next storm system. However, rainfall totals for both July 1 and Dec. 26 were well over 5 inches of rain in a 24-hour period. There was nowhere for all the water to go; therefore, unfortunately, floodwaters were experienced both above and below Bagnell Dam.

For more indepth information concerning lake levels and operation, please visit our web page at AmerenMissouri.com/lake.



ELECTRICAL SAFETY RULES:

All docks need continual inspections by their owners. Water movement can cause wear on your dock's electrical equipment. Monthly ground fault circuit interrupter (GFCI) testing of electrical equipment and bonding wires is recommended.

During the winter, wires and electrical outlets can deteriorate due to freezing and thawing. Electrical equipment that worked well the prior season will need to be inspected before using the dock again.

Have both the dock and the power supply to the dock regularly inspected by a qualified electrician.

Electrical problems in or near the house and lines feeding the dock can cause life-threatening problems, even with docks that meet code and have been inspected.

Never swim around a dock where breakers or GFCIs are tripping. HEED THE WARNING SIGNS! If in doubt, swim away from the dock and get out! If a breaker or GFCI trips, something is wrong and the dock should be considered unsafe until a qualified electrician inspects and fixes the problem.

Never attempt to energize or re-energize, engage a breaker, or reset a GFCI while someone is swimming near the dock. Get the dock inspected and fixed before using or swimming nearby.

Do not touch any part of the dock or adjacent docks if a tingle or shock is felt. Swim or get away from the dock, cables and attachments. Exit the water away from the source of the shock. If possible, swim to the shoreline and exit there.

For additional information on dock electrical safety, visit your local fire district website or SafeAtTheLake.com.

The Big Niangua River Trail

A new recreational opportunity was created at the Lake of the Ozarks in August 2015 with the opening of the Big Niangua River Trail at Ha Ha Tonka State Park. This river trail is accessible by kayak or canoe, and allows visitors to paddle a 13-mile stretch of the river and lake. Access points include the Whistle Bridge, Mother Nature's campground, Casa de Loco Winery, Sugarloaf Vineyard and the Ha Ha Tonka State Park kayak steps.

The Big Niangua River Trail highlights an under-explored section of the Niangua River. Located a short drive from Camdenton, the trail provides a unique opportunity to learn about historical river uses ranging from onyx mining to timber harvesting and hydro power. The river trail also provides great fishing spots and bird-watching opportunities as well as the chance to spot various wetland species.

The trail was a true collaborative effort, three years in the making. The Missouri Department of Natural Resources' Division of State Parks provided the vision. Volunteers from Lake of the Ozarks Watershed Alliance, Ameren Missouri, Missouri Department of Conservation and Missouri Master Naturalists worked to identify points of interest, install signs and create a brochure. Local involvement from Sugarloaf Vineyard, Casa da Loco Winery, Mother Nature's campground and landowners along the river and Lakeshore provided access to the river and sign locations.

Discover the Big Niangua River Trail, and introduce a new generation to the pastimes of fishing, swimming and exploring our Missouri natural heritage. We know you are going to enjoy it as much as we do.

To learn more about the trail or the Missouri Master Naturalists, visit their website at LakeOzarkMasterNaturalist.com.



Tunnel dam power house on the Big Niangua River Trail.

Lake of the Ozarks Crappie Limits: Is It Time for a Change?

By Greg Stoner,
Fisheries Management Biologist, Lake of the Ozarks

History of the Lake of the Ozarks crappie length limit

In 1989, a somewhat novel and controversial regulation was put into effect at Lake of the Ozarks: a 9-inch minimum length limit on crappie. Prior to that, complaints from anglers regarding the generally small average size of the crappie being caught led to a multiyear study reviewing the dynamics of the crappie population. The study's major conclusions were:

- Crappie averaged 7, 9.2 and 10.2 inches at ages 2, 3 and 4, respectively.
- From 1980 to 1989, the average length of harvested crappie was 8.3 inches, which included a high percentage of 2- and even 1-year-old fish.
- Between 50 and 60 percent of the adult crappie population was being harvested annually.

In summary, high angler harvest of young crappie was preventing a quality fishery from developing. By protecting these fast-growing young fish for an additional year or two, we have developed the quality crappie fishery that we all enjoy today.

9-inch vs. 10-inch minimum length limit

I generally take the "If it's not broke, don't fix it" approach. We already have a quality crappie fishery at Lake of the Ozarks due to the 9-inch minimum length limit. The question is whether we want to try to enhance it further with a more restrictive length limit.

In recent years, the *only* complaint I've heard from anglers regarding the crappie fishery (other than those occasional spells when they just seem to vanish) is, "Why didn't you make the length limit 10 inches?" At the time, 9 inches was selected based upon the growth rates of the fish and expected longevity. Several of the southern reservoirs in the state produce faster-growing crappie due to a longer growing season or the presence of threadfin shad. As a result, those reservoirs have been managed under a 10-inch minimum length limit for several years.

Since 1989, we have come to realize that crappie can and do live to 6, 7 or even up to 9 years of age. At age 3 and approximately 9-plus inches, crappie are still relatively young and will likely have several years before mortality due to old age becomes a significant factor. Also since that time, we have seen a decline in the density of white crappie in portions of Lake of the Ozarks. There are likely a number of reasons for this, from an increase in angler harvest to a decline in nutrient input, primarily phosphorus. However, along with this decrease in the number of crappie has come a slight increase in growth rates.



Juvenile black and white crappie...can you tell them apart?

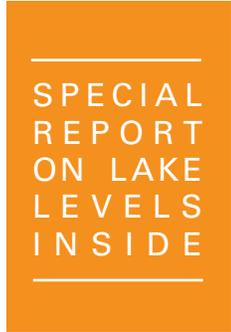
Points to consider:

- Under a 10-inch minimum, angler harvest will decrease, especially during the first year of the regulation change, until those fish that are 9 to 9.9 inches have time to grow above 10 inches. The initial decrease in harvest could be as much as 50 percent. Ask yourself, "Am I willing to possibly harvest fewer crappie in exchange for the opportunity to catch larger crappie?"
- On average, the filets of a 10-inch crappie weigh 44 percent more than those of a 9-inch crappie. In other words, 10 or 11 10-inch crappie produce the same amount of "filets in the fryer" as 15 9-inch crappie. At the present growth rate, this size increase takes about one year.
- As with any regulation change, there are some drawbacks. Some of the fish that would have been harvested by anglers—those between 9 and 10 inches—will die from either natural causes or hooking mortality before they can be legally harvested under a 10-inch minimum length limit. As a result, overall angler harvest under a 10-inch limit would decline as compared to a 9-inch limit. Although the daily limit would remain at 15 crappie per day, it may take anglers longer to catch a limit of legal fish which, depending on how you look at it, may not be a bad thing.
- Delaying harvest by one year will give many crappie an additional chance to spawn.

From talking to many crappie anglers over the past few years, it appears there may be widespread support for an increased length limit. Still, we need to know if the majority of anglers will support a change, or if they consider the present fishery good enough. I'd really like to hear your thoughts on the issue, pro or con. Please feel free to contact me at greg.stoner@mdc.mo.gov or by calling 1.573. 346.2210, extension 235.



P.O. Box 993
Lake Ozark, MO 65049



Website:
AmerenMissouri.com/Lake

Important Phone Numbers:

Lake Protection Hot Line
1.573.365.9203

Lake Level
1.573.365.9205

Adopt-the-Shoreline
1.573.365.9252

Missouri State Highway Patrol
1.573.751.3313

Water Patrol Division (Non-Emergency)
1.573.751.3313

Benton County (Emergency Management)
1.660.438.8412

Camden County (Planning & Zoning)
1.573.346.4440

Miller County (County Commission)
1.573.369.1900

Morgan County (County Commission)
1.573.378.4643

Shoreline Management Staff is here to assist you with your next Lakeside project and to help answer your questions about Ameren Missouri's role at the Lake:

Osage Arm – Bagnell Dam to 16-mile marker and Gravois Arm

Josh Friedrich 1.573.365.9247
Chris Korsmeyer 1.573.365.9209

Osage Arm – 16-mile marker to 32-mile marker, and the Niangua's and Glaize Arms

Chuck Van Bebber 1.573.365.9215

Osage Arm – 32-mile marker to Truman Dam

Joe Daly 1.573.365.9207

Commercial docks and docks larger than 3,000 square feet

Heidi Shewmaker 1.573.365.9216

Dredging, wetlands, shoreline vegetation or other environmental questions

Bryan Vance 1.573.365.9252
Georganne Bowman 1.573.365.9217



EVERY STRUCTURE ALONG THE LAKE SHORELINE MUST BE COVERED BY A VALID PERMIT. Do you have copies of yours?

The shoreline management office can help you get copies if you need them. Permit records are cataloged by name and county parcel identification numbers (PID) rather than street addresses. Contact our office with name and county parcel information and we will help you.