

Ameren Missouri

Shoreline Management 3 Willmore Lane P. O. Box 993 Lake Ozark, Missouri 65049 573.365.9208 or 573.365.9212

AmerenMissouri.com Facebook.com/AmerenMissouri Twitter.com/AmerenMissouri



Lake of the Ozarks Developer Information

The Lake of the Ozarks is one of the nation's largest reservoirs and a thriving tourist spot with over four million visitors annually. Ameren Missouri owns and operates Bagnell Dam and the surrounding reservoir under the Federal Energy Regulatory Commission (FERC) License P-459. As a multi-use facility, the Lake provides hydro-electric power and access to fishing, boating and other water sports to an increasing number of residents, visitors and second homeowners. Ameren Missouri is committed to being a good steward of the Lake.

This packet will help provide answers to common questions about development at the Lake of the Ozarks.



Project Boundary
Waterway Protection
Public Access
Permits
Permit Numbers and Posting Requirements
Electrical Connections and Lighting
Wastewater Systems
Land Disturbance
Shoreline Vegetation
Permitting Policies
Rare, Threatened, and Endangered Species 6
Historic Properties
Lake Fluctuation Policy 6
Heads of Coves
Docks6
Dock Storage and Uses
Wetlands 7
Woody Debris
Dredging, Excavation and Fill Guidelines
Bank Stabilization
Accessory Structures
Pier Guidelines
Commercial and Individual Breakwater Structures
Water Withdrawals and Private Irrigation Systems 9
Fish Attractors (Habitat).
Heat Exchange Coils for Heat Pumps
Expiration of Permits
Transfer of Ownership
Buoy Permits
Certified Dock Builders Program
Shoreline Management Plan Enforcement
Permitting Fees 10





Project Boundary

Ameren Missouri's license to operate Bagnell Dam requires certain shoreline management activities which include regulating docks, bank stabilization, boat ramps, pumps and other structures on the Lake and within the project boundary. The project boundary encompasses the lands over which Ameren Missouri has license requirements to ensure orderly and environmentally appropriate shoreline management. Verification of the location of the project boundary with Ameren Missouri is the first step in planning a shoreline development activity.

Waterway Protection

Care shall be taken to keep machinery out of the Lake and waterways leading to the Lake. Fuel, oil, other petroleum products, equipment and any solid waste shall not be stored lakeward of the ordinary high-water mark as defined by the United States Army Corp of Engineers (658.5 feet). All precautions shall be taken to avoid the release of wastes, fuel or any toxic or harmful material to streams and other adjacent water bodies as a result of this operation. Petroleum products spilled into any water body or on the banks where the material may enter waters of the state shall be immediately cleaned up and disposed of properly. Spill of petroleum must be reported as soon as possible to the Missouri Department of Natural Resources' 24-Hour Environmental Emergency Response (573.634.2436) in accordance with federal and state laws and rules regarding petroleum products.

Public Access

To the greatest extent possible, shoreline property owners must strive not to prohibit public access to shoreline areas. The public has the right to access the shoreline within the project boundary on lands owned or controlled by Ameren Missouri. Fences upon or within the project boundary are prohibited. This is not to be construed as allowing or encouraging public access to project lands through private properties outside of Ameren Missouri's control. Properly permitted docks are private property and unauthorized use or mooring without the permission of the owner constitutes trespass.



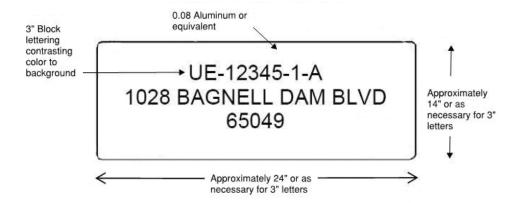


Permits

Any activity within the project boundary requires a permit issued by Ameren Missouri. Depending on the size and scope of the project, resource agency consultation and approval by FERC may be required. Applications and forms may be found at **AmerenMissouri.com/lake**. All activities must be permitted and have approval from Ameren Missouri before installing the structure or beginning work.

Permit Numbers and Posting Requirements

Each structure or activity within the project boundary must have a permit. Permit numbers don't move or change location by relocating the structure. When purchasing a used dock, any permit number displayed on the dock must be removed before moving the dock to its new location. Once the dock is installed in its new location, the new permit number must be displayed along with the 911 address for the property where the dock is attached. During an emergency, this information will help shorten the response time for law enforcement and emergency personnel. The displaying of a dock permit number and the 911 address is a Missouri state law. The sign should be mounted on the lake side of the dock in a location most visible from the cove or channel.







Electrical Connections and Lighting

Electrical safety around water is very important. Dock owners must ensure that the electrical services and the electrical systems on their docks are in proper working order and there is no safety hazard.

All electrical power connections and protective measures must comply with local, state, and national electrical standards. Within participating fire districts, Ameren Missouri will not issue a permit for a new or modified dock until the appropriate fire district permit is submitted. Permit applications submitted to Ameren Missouri must include this information to be considered complete. The following fire districts and Village of Four Seasons have active permitting programs:

Lake Ozark Fire Protection District	573.365.3380
Osage Beach Fire Protection District	573.348.1221
Mid-County Fire Protection District	573.346.2049
Sunrise Beach Fire Protection District	573.374.4411
Rocky Mountain Fire Protection District	573.392.4301
Northwest Fire Protection District	573.347.3110
Village of Four Seasons.	573.365.3833

If your property does not fall within one of these participating districts, you should seek the services of a qualified and insured electrician to ensure that the electrical system located on your dock is safe and up to standards.

Dock lighting is not required on docks unless the permit conditions set specific lighting requirements. It is important for those choosing to install dock lights to illuminate only what they wish to see. Poorly designed or poorly installed lighting can cause glare that hampers the night vision of boaters. It is recommended that a shielded fixture be installed with the minimum wattage bulb necessary to illuminate the facility.











Wastewater Systems

Individual wastewater systems are not permitted on project lands unless Ameren Missouri has a written recommendation from the city or county health department or the Missouri Department of Natural Resources (MDNR). After receiving this recommendation Ameren Missouri will require an environmental assessment and FERC approval for any systems located on project property. City or county health departments and the MDNR must approve all other marina effluent removal systems facilities within the project boundary. Unauthorized systems within the project boundary shall be removed at the owner's expense.

More information on wastewater systems and permitting requirements may be found by contacting the appropriate agency in the city or county where the system will be installed.

In Benton County:

Missouri Department of Natural Resources Kansas City Regional Office 500 NE Colbern Road, Lee's Summit, MO 64086 816.251.0700 • 816.622.7044 fax

In Camden, Miller and Morgan Counties:

Missouri Department of Natural Resources
Central Field Operations
1101 Riverside Drive, Jefferson City, MO 65101
PO Box 176, Jefferson City, MO 65102
573.522.3322 • 573.522.3522 fax
DNRCFO.WPC@dnr.mo.gov





Land Disturbance

Environmental agencies have labeled sediment as the most common pollutant in rivers, streams, lakes and reservoirs. Any construction activity which disturbs an acre or more of the land by grubbing, grading, excavating or otherwise destroying or disturbing the root zone must have a Land Disturbance Permit from the MDNR before construction activities begin. In order to obtain a permit, you must submit the necessary forms, plans and fees to the MDNR Southwest Regional Office in Springfield, MO if you are in Camden, Miller or Morgan counties. Benton County requests should be made to the MDNR Truman Satellite office in Warsaw. A complete listing of required items can be found at dnr.mo.gov.

Each application must include a copy of the Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMP's) that will be used to mitigate the effects of the construction activity. Information concerning proper design and effective BMP's can be found in the Protecting Water Quality - A Construction Site Water Quality Field Guide available at the MDNR website.

Contact information:

Missouri Department of Natural Resources Central Field Operations 1101 Riverside Drive, Jefferson City, MO 65101 PO Box 176, Jefferson City, MO 65102 573.522.3322 • 573.522.3522 fax DNRCFO.WPC@dnr.mo.gov

Shoreline Vegetation

As properties develop and urbanize, the underlying land is transformed into a series of impervious surfaces such as roofs, streets and parking lots. Impervious surfaces increase the amount of stormwater runoff. This runoff often contains pollutants that can impair water quality. A vegetative buffer along the Lake's shoreline is effective to eliminate some of the pollutants in this runoff. Ecologists, environmental agencies and Lake managers all agree that a naturally vegetated, undisturbed buffer strip around a lake is the best type of buffer zone.

Unfortunately, past development at the Lake has destroyed or removed much of the natural vegetation in many places. It is important to minimize the removal of the remaining shoreline vegetation and to restore the buffer strip where practical. Vegetation within the project boundary must be preserved, or replaced if disturbed, in accordance with Ameren Missouri's Shoreline Management Plan as outlined in our brochure titled, "Lake of the Ozarks Shoreline Vegetation Cover Policy."





Permitting Policies

• Rare, Threatened and Endangered Species

Limitations may be imposed upon shoreline development in the vicinity of known locations of rare, threatened and endangered species. Prior to issuing a permit in these areas, the owner or Ameren Missouri must solicit input and recommendation from the Missouri Department of Conservation and the U.S. Fish and Wildlife Service.

Historic Properties

There are areas around the Lake where historic sites have been identified. Ameren Missouri has the responsibility to preserve these sites. In these areas, a permit will be issued only after the Missouri State Historic Preservation Office has reviewed and approved the plans. Other agencies may be consulted as appropriate.

However, if after receiving a permit, when site work uncovers any human remains or historical artifact, the developer must immediately stop all activity and contact the Ameren Shoreline Management Office.

Lake Fluctuation Policy

Ameren Missouri operates Bagnell Dam under the operating license granted by FERC. The operating license permits fluctuations down to 654 feet under normal operating conditions. Under emergency conditions the level may be drawn down to 645 feet.

The developer should factor into the facility design annual Lake fluctuations down to 654 feet. The annual drawdown period is February 1 to April 1. All construction within the Lake should be completed within this period.

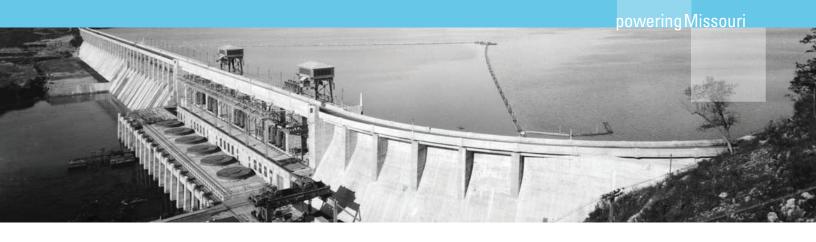
Heads of Coves

Heads of coves (where a natural stream enters the Lake) provide vegetative cover and shallow water habitat. These transitional areas impact water quality, vegetative cover and fish populations. Therefore, Ameren Missouri has special permitting requirements for development in these areas along with the responsibility to protect the natural resources. For more information on the permitting requirements, refer to Ameren Missouri's Permitting Guidelines.

Docks

All docks are required to have permit approval before they are installed or modified. The process for applying for a dock permit or permit modification can be found at **AmerenMissouri.com/lake**. All applications are required to be submitted along with an electrical permit from one of the participating fire districts.





Dock storage and uses

For a residential use dock, the maximum amount of enclosed storage cannot exceed 80 square feet (outside dimensions) and for a commercial dock, cannot exceed 200 square feet. The following items are not allowed on docks or in dock storages; dishwashers, toilets, garbage disposals, hot water heaters, sleeping quarters, gasoline or oil storage, batteries or any other items that have a potential to discharge waste water or pollution are strictly prohibited.

Wetlands

Wetland areas occur at the Lake around shallow waters, heads of coves and low marshy places. Wetlands are typically identified by the presence of certain species of vegetation. Disturbance of defined wetland areas may be limited or prohibited without the review and approval of the U.S. Army Corps of Engineers and, in some cases, the MDNR.

Woody Debris

Ameren Missouri prohibits the removal of existing submerged woody debris from the Lake, unless it constitutes a navigational or public safety hazard. Ameren Missouri must approve in advance the removal of any significant woody debris.

Woody debris that falls into the Lake as a result of storms or natural occurrence should be left in place.

Woody debris floating in the Lake that creates a safety hazard can be removed.

For the placement of docks, removal of woody debris should be minimized. For removal of large amounts of woody debris, owners may be required to mitigate their removal at a 2:1 ratio to improve fish habitat.

Dredging, Excavation and Fill Guidelines

Dredging is the removal of any earthen material below elevation 658.5 feet. Excavation is the removal of any earthen material within the project boundary above 658.5 feet. Fill is placing earthen material within the project boundary.

All of these activities require a permit. Property owners planning one of these activities must contact the Environmental Compliance Specialist at Ameren Missouri prior to submitting an application for a permit.





Bank Stabilization

Bank stabilization projects are permitted to stop or reduce the effects of erosion on the shoreline. Riprap, stacked stone and seawall are the currently available bank stabilization options. All bank stabilization must be contained within the applicant's property lines extended into the lake and must follow the contour of the shoreline. The placement of riprap is the preferred method for bank stabilization. A minimum of 24 inches of vertical erosion must be evident before a seawall will be considered for bank stabilization. Where a seawall or stacked stone are permitted, the applicant will be required to place five horizontal feet of riprap at the toe of the seawall to protect the footing and provide habitat. Seawalls cannot be constructed to gain or reclaim usable property.

Accessory Structures

Installation of a deck or patio are allowed after a permit has been issued and the following criteria have been met. The structure must be set back five feet or more from the extended property lines, the structure cannot exceed 150 square feet of total size within the project boundary, the maximum width may not exceed 15 percent of the total lot width or 15 linear feet, whichever is more limiting and the entire structure must be placed landward of the 660-foot elevation. No portion of the structure is allowed to cantilever over the 660-foot elevation. The structure cannot be supported by a seawall or placed directly over a seawall where the seawall footing is at or below the 658.5-foot elevation. No portion of the structure is allowed to be roofed. If the property already has an accessory structure installed, an additional structure cannot be installed if the total width of the existing structure is already 15 percent of the lot width.

Pier Guidelines

All piers must be located within the owner's property lines extended lakeward. Piers must have a minimum setback of five feet from the extended property line and must be constructed with environmentally safe materials. Wood treated with creosote or penta is prohibited. Piers may have a roof but cannot be enclosed.

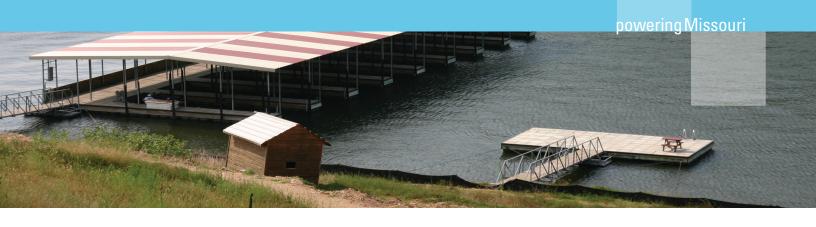
Piers must be six feet or less in width, must not extend more than 30-feet lakeward from the water line at Lake elevation 658.5 feet, and the bottom surface of the structure must be constructed above 660 feet elevation.

Piers cannot be constructed from March 15 to June 15 if construction requires excavation below the waterline at the time of construction. This is to minimize the disruption of fish spawning.

Commercial and Individual Breakwater Structures

Ameren Missouri and the Missouri State Highway Patrol, Water Patrol Division have accepted a policy which sets certain limits on location size and setback of the breakwater structures. Specific standards are outlined at **Ameren Missouri.com/lake**.





Water Withdrawals and Private Irrigation Systems

Installation of water pumps that are not submersible or are above the water's surface are permissible with permit approval. Pumps greater than two horsepower are required to submit additional information. Refer to **AmerenMissouri.com/lake** for permitting specifics.

If it is determined that the system will exceed the one million gallons per day limit, the request must be approved by the FERC before Ameren Missouri can issue a permit. Owners with approved systems greater than one million gallons per day must also pay an annual fee and have the system inspected on an annual basis to ensure the system is performing as approved. Systems found not to be adhering to flow limits or permit conditions are subject to enforcement fees, permit revocation and ordered removal of the system.

• Fish Attractors (Habitat)

Ameren Missouri allows the placing of fish attractors and habitat made of natural woody debris (brush, natural evergreen trees, etc.) that are securely tied together and **properly anchored to not float** away. No materials that are environmentally unacceptable, as determined by the Missouri Department of Conservation may be used in the placing of attractors.

Heat Exchange Coils for Heat Pumps

Ameren Missouri permits heat exchange coils for heat pumps provided they do not cause a navigation hazard. Coils must be securely anchored below elevation 649 feet within the Lake area immediately adjacent to the applicant's property. In addition to Ameren Missouri approval, the U.S. Army Corps of Engineers must provide approval.

Expiration of Permits

Construction of docks and breakwaters or approved modifications to existing permitted docks must be completed within one year from the date the permit is issued.

If the work is not completed, the owner may apply for a single six-month extension. The extension will be granted provided there have not been any changes in the information that was submitted with the original application and the dock complies with current permitting guidelines.

All other activities such as bank stabilization, excavation, etc. must be completed within two years from the date the permit is issued.

If the permit expires, the permit is null and void. Prior to any construction, a new application must be submitted and a new permit issued.





Transfer of Ownership

New property owners are responsible to apply for permit transfers. Existing permit numbers stay with the property and do not move once assigned. To transfer a permit, Ameren Missouri requires a copy of the warranty deed, a processing fee (check or money order), and a signed and completed application. In addition, an approved electrical inspection is required in these fire districts; Lake Ozark, Osage Beach, Mid-County, Sunrise Beach, Rocky Mountain, Northwest, and Village of Four Seasons Fire Protection Districts. For additional information, visit **AmerenMissouri.com/lake**.

Buoy Permits

Navigation buoys are permitted by the Missouri State Highway Patrol Water Division. Their phone number is 573.751.3313, extension 1036.

Certified Dock Builders Program

Ameren Missouri implemented a Certified Dock Builders Program in 2004 to encourage that all docks constructed meet a standard of craftsmanship that prevents substandard docks from appearing on the Lake. The program's goal is to minimize poor construction techniques and use of materials that could fall apart, float away and become hazardous.

Ameren Missouri also prohibits the use of all non-encapsulated foam in dock construction.

Shoreline Management Plan Enforcement

Under its FERC license, Ameren Missouri has the authority to permit and ensure compliance for permitted activities around the shoreline. Ameren Missouri performs annual shoreline inspections and random permit audits to enforce proper development and permitted activities within the project boundary. Unauthorized improvements will not be tolerated and may evoke enforcement fees, legal action and permanent revocation of permits.

Permitting Fees

All permitting activities are required to pay a permitting fee with the submittal of the application. The submittal of a permit application fee or the depositing of those fees does not constitute approval for the proposed activity, nor guarantee the issuance of a permit. Failure to provide any of the required information may result in denial of the application or delay the processing of the application.

The current fee schedule is available at AmerenMissouri.com/Lake.

Construction may not begin until a permit has been issued. Ameren Missouri has the right to direct the removal of docks or other structures and evoke enforcement fees if construction begins without a permit.

For more information regarding any of the information or policies contained in this booklet, please contact the Ameren Missouri Shoreline Management Office at 573.365.9212.

