

Appendix F

Applicable Federal, State, and Local Laws and Regulations

Applicable Federal, State, and Local Laws and Regulations

INTRODUCTION

Federal, state, and local laws and regulations relevant to the alternatives are included below. As discussed in the Environmental Assessment, state and local laws and regulations apply to the property prior to acquisition into trust but are generally not applicable to land in trust.

LAND RESOURCES

Federal

Clean Water Act

The State Water Resources Control Board (SWRCB) requires a Construction General Permit if a project will disturb one or more acres of soil. A site-specific Storm Water Pollution Prevention Plan is required under this permit. For more information on the Clean Water Act (CWA) and the SWRCB, refer to **Water Resources** below.

WATER RESOURCES

Federal

Executive Order 11988

Executive Order (EO) 11988 requires federal agencies to limit adverse impacts associated with the occupancy or modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Specifically, EO 11988 states that agencies shall first determine whether the proposed action will occur in a floodplain. EO 11988 defines a floodplain as an area that has a one percent or greater chance of flooding in any given year. Second, if an agency proposes to allow an action to be located in a floodplain, “the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains.” If the only practicable alternative action requires siting in a floodplain, the agency is required to minimize potential harm to or within the floodplain.

Federal Emergency Management Agency

The Disaster Relief Act of 1974, as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, created the Federal Emergency Management Agency (FEMA), which is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies. FEMA is also responsible for distributing Flood Insurance Rate Maps, which are used in the National Flood Insurance Program. These maps identify the locations of special flood hazard areas, including 100-year floodplains.

Clean Water Act (CWA)

The CWA, 33 U.S. Code (USC) Section 1251(a)(2), sets forth national goals that waters shall be “fishable, swimmable” waters (CWA Section 101 [a][2]).

The CWA addresses both point and non-point sources of pollution (Sections 402 and 319, respectively), both of which are controlled through the National Pollution Discharge Elimination System (NPDES). An NPDES permit must be obtained in order to discharge policy pollutants into “Waters of the U.S.” In some states, the U.S. Environmental Protection Agency (USEPA) has delegated permitting authority to the regional water quality agency. On Tribal land, the USEPA retains authority to regulate discharges. Section 303(d) of the CWA requires states to periodically prepare a list of all surface waters in their respective jurisdictions for which beneficial uses of the water—such as for drinking, recreation, aquatic habitat, and industrial use—are impaired by pollutants. These include water bodies that do not meet state surface water quality standards and are not expected to improve within the next two years.

The CWA delegates to the states to establish a priority ranking of these impaired waters for purposes of developing water quality control plans that include Total Maximum Daily Loads (TMDL). A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards and includes an allocation for each of the pollutant’s sources. These water quality control plans describe how an impaired water body will meet water quality standards through the use of TMDLs.

Anti-Degradation Policy

Federal policy (Code of Federal Regulations [CFR], Title 40, Part 131.6) specifies that each state must develop, adopt, and retain an anti-degradation policy to protect the minimum level of surface water quality necessary to support existing uses. Each anti-degradation policy must include implementation methods consistent with provisions outlined in 40 CFR §131.12. On trust land, such issues are addressed by the USEPA.

Safe Drinking Water Act

Under the mandate of the Safe Drinking Water Act (SDWA), the USEPA sets legally enforceable National Primary Drinking Water Regulations (primary standards) that apply to public water systems. These standards are established to protect human health by limiting the levels of contaminants in drinking water. The USEPA does not oversee the construction and permitting of groundwater wells, but requires that public health standards, such as an effectively installed sanitary seal, are in place. The most direct oversight of water systems is conducted by state drinking water programs if the State has been granted “primacy” from the USEPA, the authority to implement SDWA within their jurisdictions. The USEPA will also primarily establish monitoring and operational requirements, which will typically be specific to the project area.

The USEPA also defines National Secondary Drinking Water Regulations (secondary standards) for contaminants that cause cosmetic and aesthetic effects, but not for health effects. The USEPA recommends that these secondary standards be met but does not require systems to comply with them. Both primary and secondary drinking water standards are expressed as either Maximum Contaminant Levels (MCL), which define the highest level of a contaminant allowed in drinking water, or Maximum Contaminant Level Goals, which define the level of a contaminant below which there is no known or expected risk to health.

State and Local

Missouri Water Resources Plan

The Missouri Water Resources Plan is the statewide guiding document related to water supply, quality, and water/wastewater infrastructure needs. In general, the water resources plan identified that the vast majority of surface waters were not removed and that water supply is generally abundant throughout the state under existing conditions. Aging infrastructure or lack of infrastructure was found to be the most common supply issue.

The Water Resources Plan projected future demands and found that surface water resources could undergo stress from withdrawal under drought scenarios with significant expansion of high surface water demand land uses. In general, projected conditions for groundwater supplies do not identify major groundwater level stress, with the exception of mild regional stress under high demand scenarios.

Missouri Clean Water Law

Chapter 640 outlines statewide regulations pertaining to drinking water, wastewater, and water use. The Water Safety and Security Act (640.141 through 160) specifically addresses mitigating human risk to potable water supply and inspection standards for community water systems. The Water Resource Law (640.400 through 435) outlines state requirements to inventory and monitor surface and groundwater. Requires the state to develop a state water plan and set forth procedures for municipal providers to adhere to policies contained within the plan. Gives the state authority to set aside special water protection areas.

City of Lake Ozark Municipal Code

Chapter 700 of the City's Municipal Code provides various regulations pertaining to water use and connection to municipal water and wastewater services. Conservation of water is encouraged and, in the case of industrial development, water use records must be maintained. Additionally, Chapter 700 requires that "the owner of any house, building, property or improvement which is used for human occupancy, employment, recreation or other purposes situated within the City and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a water main, or wastewater sewer main connected to the treatment facility of the City, is required at the owner's expense to connect to such utility systems." Minimum design standards for such connections, including proper installation of shut-offs, is also included within the municipal code.

City of Lake Ozark Comprehensive Plan

The City's Comprehensive Plan acknowledges the significance of surface and ground water within the City in providing scenic landscapes, recreational tourism, and potable water supply. The Comprehensive Plan goals include updating and expanding municipal services, requiring new development to address proper stormwater collection, implementing low-impact development stormwater systems as possible, and planting of appropriate landscape vegetation to minimize erosion and flood risks. The Plan also identified poor construction practices as a major cause of failed water quality tests in the past.

AIR QUALITY

Federal

Clean Air Act of 1970

The Federal Clean Air Act (CAA) was enacted in 1970 and last amended in 1990 (42 USC §7401 et seq.) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. The CAA establishes a framework for national, state, and local air pollution control efforts. Basic components of the CAA and its amendments include national ambient air quality standards (NAAQS) for criteria air pollutants, requirements for state implementation plans (SIPs) to meet the NAAQS, motor vehicle emissions standards, stationary source emissions standards and permits, and enforcement provisions. The EPA is the federal agency responsible for establishing the NAAQS, overseeing state air programs as they relate to the CAA, approving SIPs, and setting emissions standards for mobile sources under federal jurisdiction.

National Ambient Air Quality Standards

The EPA, under authority of the CAA, developed primary and secondary NAAQS in 1971. The primary NAAQS protect the public health with an adequate margin of safety, and the secondary standards protect the public welfare from known or anticipated adverse effects to aesthetics, crops, or architecture (42 USC §7409[b]). The EPA designated six pollutants of primary concern as criteria air pollutants (CAPs): carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone, lead (Pb), and particulate matter (PM). The NAAQS are time-averaged maximum ambient air concentrations. For various CAPs, more than one time-averaged maximum concentration has been established by the EPA in order to address the typical exposures to the population from natural and anthropogenic sources in the environment. Concentrations above these time-averaged maximum concentrations are anticipated to cause adverse health effects to sensitive receptors. The violation criteria established by the EPA are based upon these time-averaged maximum concentrations specific to each CAP. For example, the NAAQS for ozone must be exceeded on more than three days in three consecutive years in order to constitute a violation. On the other hand, if the NAAQS for CO are exceeded on more than one day in any given year, a violation has occurred. **Table 1** presents the violation criteria for the various averaging times of the NAAQS for each CAP.

Attainment Status

To determine conformance with the NAAQS, states are responsible for providing ambient air monitoring data to the EPA. The EPA then determines, using the violation criteria, if the results of the monitoring data indicate compliance with the NAAQS. The EPA classifies areas in compliance with the NAAQS as being in "attainment". Areas that do not meet the NAAQS are classified as being in "nonattainment" by the EPA.

TABLE 1: NAAQS AND ASSOCIATED VIOLATION CRITERIA

Pollutants	Times	Primary		Violation Criteria
		ppm	µg/m ³	
Ozone	8 hours	0.70		The 3-year average of the annual 4 th highest daily 8-hour maximum is not to be above 0.070 µg/m ³
Carbon Monoxide	8 hours	9	10,000	If exceeded on more than 1 day per year
	1 hour	35	40,000	If exceeded on more than 1 day per year
Nitrogen Dioxide	Annual average	0.053	-	Not to be above 0.053 ppm in a calendar year.
	1 hour	0.100	-	The 3-year average of the 98 th percentile of the daily maximum 1-hour average at each monitor is not above 0.100 ppm.
Sulfur Dioxide	1 hour	0.075	-	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
PM ₁₀	24 hours	-	150	Not to be above 150 µg/m ³ on more than three days over three years with daily sampling
PM _{2.5}	Annual arithmetic mean	N-	9 (see note)	The 3-year average from a community-oriented monitor is not above 9 µg/m ³ .
	24 hours	-	35	The 3-year average of the 98 th percentile for each population-oriented monitor within an area is not above 35 µg/m ³ .
Lead	Rolling –Month Average	-	0.15	Not to be above 0.15 µg/m ³ .
	Quarterly Average	-	1.5	-
Note: On February 7, 2024 the USEPA strengthened the NAAQS for the annual PM_{2.5} to 9.0 micrograms per cubic meter. New designations for this standard will be available within two years of issuing the revised NAAQS. It is anticipated that Miller County would meet the new standard. Source: USEPA, 2024b and USEPA, 2024c.				

Federal Conformity

The federal General Conformity Rule implements Section 176(c) of the CAA, and establishes minimum thresholds for reactive organic compounds (ROGs) and nitrogen oxides (NOx) (ozone precursors), particulate matter (PM), and other regulated constituents for non-attainment and maintenance areas. Under the General Conformity Rule, the lead agency with respect to a federal action is required to demonstrate that the proposed federal action conforms to the applicable SIP before the action is taken. There are two phases to a demonstration of general conformity:

1. The Conformity Review process, which entails an initial review of the federal action to assess whether a full conformity determination is necessary, and
2. The Conformity Determination process, which requires that a proposed federal action be demonstrated to conform to the applicable SIP.

The Conformity Review requires the lead agency to compare estimated emissions to the applicable general conformity *de minimis* threshold(s). If the emission estimates from step one is below the applicable threshold(s), then a general conformity determination is not necessary and the full Conformity Determination is not required. If emission estimates are greater than *de minimis* levels, the lead agency must conduct a formal Conformity Determination. Miller County is in attainment or unclassifiable for all national ambient air quality standards.

Federal Class I Area

Title 1, Part C of the CAA was established, in part, to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value. The CAA designates all international parks, national wilderness areas, and memorial parks larger than 5,000 acres and national parks larger than 6,000 acres as "Class I areas." The CAA prevents significant deterioration of air quality in Class I areas under the Prevention of Significant Deterioration (PSD) program. Any major source of emissions within 100 kilometers (km; 62.1 miles) from a federal Class I area is required to conduct a pre-construction review of air quality impacts on the area(s). There are no Class I areas within 100 km (62.1 miles) of the Project Site.

Tribal New Source Review

The Tribal Minor New Source Review (NSR) permitting program was established by the USEPA under the CAA. The minor NSR program applies to both new minor sources and minor modifications to both major and minor projects in attainment and nonattainment areas. NSR programs must comply with the standards and control strategies of the Tribal Implementation Plan (TIP) or SIP. If there is not an applicable SIP or TIP, the USEPA issues permits and implements the program. A General Permit under the minor NSR program would be required on tribal trust land if stationary source allowable emissions of regulated pollutants would exceed the thresholds presented in 40 CFR 49.153, Table 1 (**Table 2**). This General Permit serves as a preconstruction permit containing limitations and other restrictions specifying the construction, modification, and operation of a minor source. The applicability of Tribal NSR is made on a source's potential to emit (PTE). For emergency generators, the USEPA has determined that 500 hours per year should be assumed as a reasonable and realistic "worst-case" estimate on a PTE basis (USEPA, 1995).

TABLE 2: TRIBAL MINOR NEW SOURCE REVIEW THRESHOLDS

Pollutant	Emissions Thresholds for Nonattainment Areas (tpy)	Emissions Thresholds for Attainment Areas (tpy)
NOx	5	10
ROG	2	5
PM	5	10
PM ₁₀	1	5
PM _{2.5}	0.6	3
CO	5	10
SO ₂	5	10
Pb	0.1	0.1
Source: 40 CFR 49.153.		

BIOLOGICAL RESOURCES

Federal

Federal Endangered Species Act

The U.S. Fish & Wildlife Service (USFWS) enforces the provisions of the federal Endangered Species Act (FESA) for all terrestrial species. Section 9 (§ 1538) prohibits the "take" of a listed species by anyone, including private individuals and state and local agencies. Threatened and endangered species on the federal list (50 CFR Sections 17.11 and 17.12) are protected from take, which is defined as direct or indirect harm. If "take" of a listed species is incidental to an otherwise lawful activity, this triggers the need for consultation under Section 7 of the FESA for federal agencies, including tribes. Pursuant to the requirements of the FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed species may be present on a project site and whether the project will have a potentially significant impact upon such species. A discussion of regionally listed species is provided in consideration of potential impacts associated with project implementation. Under the FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species that is proposed for listing under the FESA or to result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536[3], [4]). Therefore, project-related impacts to these species, or their habitats, would be considered significant.

Migratory Bird Treaty Act

Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under the MBTA. As such, project-related disturbances must be reduced or eliminated during the nesting season. The general nesting season extends from February 15 to September 15.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act was originally enacted in 1940 to protect bald eagles and was later amended to include golden eagles (16 USC Subsection 668-668). This act prohibits take, possession, and commerce of bald and golden eagles and associated parts, feathers, nests, or eggs with limited exceptions. The definition of take is the same as the definition under the FESA. The USFWS established five recovery programs in the mid-1970s based on geographical distribution of the species. Critical Habitat was not designated by regulation under FESA. In 1995, the USFWS reclassified the bald eagle from endangered to threatened under FESA in the contiguous 48 states, excluding Michigan, Minnesota, Wisconsin, Oregon, and Washington where it had already been listed as threatened. In 2007, the bald eagle was federally delisted under FESA. However, the provisions of the act remain in place for protection of bald and golden eagles.

CWA – 404 and 401 Wetlands and Waters of the U.S.

A project that involves discharge of dredged or fill material in navigable Waters of the U.S. must first obtain authorization from the USACE, under Section 404 of the CWA. USACE maintains the final authority for determining whether an aquatic habitat qualifies as a Water of the U.S. Projects requiring a 404 permit under the CWA also require a Section 401 certification from either USEPA for trust land, or the RWQCB for non-trust land. These two agencies also administer the NPDES general permits for construction activities disturbing one acre or more.

State and Local

Missouri Department of Conservation

The Missouri Department of Conservation manages a variety of biological concerns within the state, including hunting, fishing, biological permits, maintenance of habitat and species conservations plans, and community education. The department also maintains a list of species that are endangered within the state. This includes aquatic and terrestrial invertebrates, birds, fish, mammals, reptiles, amphibians, and plants.

City of Lake Ozark Municipal Code

The City's municipal code has limited regulations related to the maintenance or conservation of biological resources. However, Section 215.050 of the municipal code outlines City requirements for vegetation control within the City. This includes removal of noxious or weedy vegetation.

City of Lake Ozark Comprehensive Plan

The City's Comprehensive Plan identifies City planning goals and guidance in anticipation of City growth. Although the plan is scheduled to be updated, the existing plan identifies existing open space as a valuable land use to be reserved for recreation, scenic value, and preservation of natural resources.

CULTURAL RESOURCES

Federal

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA), as amended, and its implementing regulations found in 36 CFR Part 800 require federal agencies to identify cultural resources that may be affected by actions involving federal lands, funds, or permitting. The Bureau of Indian Affairs must comply with Section 106 for the proposed trust acquisition.

The significance of the resources must be evaluated using established criteria outlined in 36 CFR 60.4, as described below. If a resource is determined to be a historic property, Section 106 of the NHPA requires that effects of the federal undertaking on the resource be determined. A historic property is defined as:

...any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property...(NHPA Sec. 301[5])

Section 106 of the NHPA prescribes specific criteria for determining whether a project would adversely affect a historic property, as defined in 36 CFR 800.5. An impact is considered adverse when prehistoric or historic archaeological sites, structures, or objects that are listed on or eligible for listing in the National Register of Historic Places (NRHP) are subjected to the following.

- physical destruction of or damage to all or part of the property
- alteration of a property
- removal of the property from its historic location
- change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance
- introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features
- neglect of a property that causes its deterioration
- transfer, lease, or sale of the property out of federal control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

If the historic property will be adversely affected by the undertaking, then prudent and feasible measures to resolve adverse impacts must be taken. The State Historic Preservation Office must be provided an opportunity to review and comment on these measures prior to project implementation.

National Register of Historic Places

The eligibility of a resource for listing in the NRHP is determined by evaluating the resource using criteria defined in 36 CFR § 60.4 as follows. The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and

1. that are associated with events that have made a significant contribution to the broad patterns of our history;
2. that are associated with the lives of persons significant in our past;
3. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. that have yielded, or may be likely to yield, information important to prehistory or history.

Sites younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP. In addition to meeting at least one of the criteria listed above, the property must also retain enough integrity to enable it to convey its historic significance. The NRHP recognizes seven aspects or qualities that, in various combinations, define integrity.

These seven elements of integrity are location, design, setting, materials, workmanship, feeling, and association. To retain integrity a property will always possess several, and usually most, of these aspects. While most historic buildings and many historic archaeological properties are significant because of their association with important events, people, or styles (Criteria A, B, and C), the significance of most prehistoric and some historic-period archaeological properties is usually assessed under Criterion D. Criterion D stresses the importance of the information contained in an archaeological site rather than its intrinsic value as a surviving example of a type or its historical association with an important person or event. It places importance not on physical appearance but rather on information potential.

Archaeological Resources Protection Act of 1979

The Archaeological Resources Protection Act of 1979 (ARPA; Public Law 96-95; 16 USC 470aa-mm) provides for the protection of archaeological resources and sites that are on public and Indian lands, and fosters increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979. ARPA also provides for penalties for noncompliance and illegal trafficking.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA), 25 USC 3001 et seq., provides a process for museums and federal agencies to return Native American cultural items – human remains, funerary objects, sacred objects, or objects of cultural patrimony – to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and Tribal lands, and penalties for noncompliance and illegal trafficking.

Paleontological Resources Preservation Act

Paleontological resources are defined as the traces or remains of prehistoric plants and animals. Such remains often appear as fossilized or petrified skeletal matter, imprints, or endocasts, and reside in sedimentary rock layers. Paleontological resources are considered important for their scientific and educational value. Fossil remains of vertebrates are considered significant. Invertebrate fossils are considered significant if they function as index fossils. Index fossils are those that appear in the fossil record for a relatively short and known period of time. This allows geologists to interpret the age range of the geological formations in which they are found. The Paleontological Resources Preservation subtitle of the Omnibus Public Land Management Act, 16 USC 470aaa to aaa-11 requires the U.S. Department of Agriculture (USDA) and the U.S. Department of the Interior to issue implementation regulations to provide for the preservation, management, and protection of paleontological resources on federal lands and ensure that these resources are available for current and future generations to enjoy as part of America's national heritage.

Osage Nation and State

Osage Nation Historic Preservation Office (ONHPO) National Historic Preservation Act Section 106 Protocol and Standards

The ONHPA standards set forth the minimum professional qualifications that are required in order to lead archaeological survey efforts. Per the ONHPO standards, the fieldwork supervisor must generally carry a minimum Bachelor of Arts or Science in anthropology, with an emphasis in archaeology. Additionally, individuals that interpret survey findings must hold a Master of art or science in anthropology, with an emphasis in archaeology.

ONHPO Archaeological Survey Standards

In addition to the standards set by the ONHPA National Historic Preservation Act Section 106 Protocol and Standards, the ONHPO standards also require the archaeological investigations be carried out by an individual who meets the U.S. Secretary of the Interior's Professional Qualification Standards for Archeology (36 CFR Part 61; 48 FR 44716). Standards are set for background research, deeply buried cultural deposits, survey reports, and fieldwork.

Missouri Department of Natural Resources Division of State Parks State Historic Preservation Office Section 106 Project Information Form

The Missouri Department of Natural Resources Division of State Parks State Historic Preservation Office has provided the Section 106 Project Information Form in order to facilitate collection of comprehensive information to satisfy the National Historic Preservation Act Section 106. Submission of the form is considered a request for review pursuant to Section 106.

Missouri Department of Natural Resources' Guidelines for Phase I Archaeological Surveys and Reports

This information form provides standards on methodologies and persons performing surveys and survey reports. This includes information on pedestrian surveys, shovel testing, deep testing, photographic requirements for structures, and collection strategy/curation.

TRANSPORTATION AND CIRCULATION

Federal

Federal Transportation Improvement Program

The Federal Transportation Improvement Program (FTIP) is a plan for the implementation of the long-range Regional Transportation Plan. The FTIP presents manageable components to federal funding agencies for the funding of long-term plans and establishes a systematic approach to programming capital improvement projects over a five-year term, and is subject to continual modifications.

State

Missouri Department of Transportation

The Missouri Department of Transportation (MoDOT) is a state government organization in charge of maintaining public roadways of Missouri under the guidance of the Missouri Highways and Transportation Commission. MoDOT designs, builds and maintains roads and bridges, improves airports, river ports, railroads, public transit systems and pedestrian and bicycle travel. On March 22, 1913, the Missouri Legislature created the Missouri Highway Department. Almost immediately afterwards, construction began across the state to link adjoining county seats with paved and maintained roadways. There are 4,800 miles of railroad tracks, 1,379 miles of Interstates, 125 public-use airports, and 15 public ports under MoDOT jurisdiction.

LAND USE

Federal

Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that federal programs are administered in a matter that is compatible with state and local units of government, and private programs and policies to protect farmland (7 USC § 4201). The Natural Resource Conservation Service (NRCS) is responsible for the implementation of the FPPA and categorizes farmland in a number of ways. These categories include: prime farmland, farmland of statewide importance, and unique farmland. Prime farmland is considered to have the best possible features to sustain long-term productivity. Farmland of statewide importance includes farmland similar to prime farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique farmland is characterized by inferior soils and, depending on climate, generally needs irrigation. The NRCS fulfills the directives of the Soil and Water Conservation Act (16 USC § 2001-2009) by identifying significant areas of concern for the protection of national resources. NRCS uses a land evaluation and site assessment (LESA) system to establish a Farmland Conversion Impact Rating (FCIR) score. The FCIR is completed on form AD-1006. The FCIR form has two components: land evaluation, which rates soil quality up to 100 points, and the site assessment, which measures other factors that affect the property's viability up to 160 points. The total FCIR score is used as an indicator for the project's sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the allowable level; however, the FPPA does not require federal agencies to alter projects to avoid or minimize farmland conversion. Sites receiving a combined score of less than 160 (out of 260 possible points) do not require further evaluation. For sites with a combined score greater than 160 points, at least two other alternatives are required to be considered and the alternative with the lowest number of points selected unless there are other overriding considerations.

State and Local

City of Lake Ozark Comprehensive Plan 2006

The City of Lake Ozark Comprehensive Plan (Plan) is a statement of existing environments and provides a guide to the future development of the community. The plan acknowledges the importance of land use and zoning to influence future growth. It discusses the importance of different land use zoning types. It also examines how much of the land in each land use category will be developed, assuming around 25 percent based on existing constraints. It provides a Future Land Use map for the Planning Commission to use and keep zoning up-to-date. While the City of Lake Ozark Comprehensive Plan 2006 is currently in effect, it is noted that the City is currently working to complete and update to this plan.

City of Lake Ozark Municipal Code

The City of Lake Ozark Municipal Code Chapter 405 establishes basic regulations for the development of land and uses within the city. Regulatory components include allowable uses, yard requirements, and use limitations. Section 405.170 classifies "commercial amusement and recreation" as a Special Use and permits any use in a C-2 district. Section 405.160 classifies hotels and restaurants as permitted uses. Design limitations in the C-2 district include a structure height maximum of 126 feet, and exterior lighting limited to downcast and shielded lights that do not create off-property glare. Height limitations may be exceeded in coordination with fire protection service providers, provided that a developer can demonstrate that fire protection services of a structure exceeding 126 feet in height can be reasonably addressed in case of fire.

PUBLIC SERVICES AND UTILITIES

FEDERAL

Safe Drinking Water Act

Minimum national drinking water standards and guidelines for groundwater protection are established through the 1974 Safe Drinking Water Act (amended in 1986 and 1996). Contaminants of concern relevant to domestic water supply are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. The USEPA regulates contaminants through the development of national primary and secondary Maximum Contaminant Levels for drinking water.

State and Local

Missouri Clean Water Law

Chapter 640 outlines statewide regulations pertaining to water, ensuring state water quality meets federal requirements. 640.415 requires the development of a “State Water Resources Plan” to address the long-range management of both surface and groundwater in Missouri.

Missouri Water Resources Plan

The Missouri Water Resources Plan is the statewide guiding document related to water supply, quality, and water/wastewater infrastructure needs. In general, the water resources plan identified that water supply is generally abundant throughout the state under existing conditions. Aging infrastructure or lack of infrastructure was found to be the most common supply issue and that future droughts may stress the water supply. The plan findings stress promoting programs to utilities and leveraging resources and funding to maintain and repair aging infrastructure. It also encourages data collection to better support future water planning. The plan also notes that users of groundwater are less likely to experience stress in drought conditions due to the high amount of groundwater available. The plan also identifies particular issues identified in the Southwestern Missouri Region such projected demands through 2060 may decrease aquifer levels. Recommendations include improving data collection, supporting integrated planning and encouraging and promoting water conservation as an option where needed to meet water supply needs.

City of Lake Ozark Comprehensive Plan 2006

The City of Lake Ozark Comprehensive Plan (Plan) is a statement of existing environments and provides a guide to the future development of the community. The plan discusses the existing wastewater, water, and stormwater systems as part of a wider examination into land use and Infrastructure throughout the city.

City of Lake Ozark Municipal Code

The City of Lake Ozark Municipal Code Chapter 200 relates to Police and Fire Departments and outlines some basic regulations relating to false alarms from private alarm systems and interfering with police dogs or firefighting personnel. The City of Lake Ozark Municipal Code Chapter 700-710 relates to utilities, for example including regulations relating to when connection to systems is required, design requirements and permits.

NOISE

Federal

FHWA Construction Noise Thresholds

The Federal Highway Administration (FHWA) provides construction noise level thresholds in its Construction Noise Handbook, 2006. These are provided in **Table 3**.

Noise Abatement Criteria

The FHWA establishes Noise Abatement Criteria (NAC) for various land uses that have been categorized based upon activity. Land uses are categorized on the basis of their sensitivity to noise as indicated in **Table 4**. The FHWA NAC is based on peak traffic hour noise levels.

TABLE 3: FEDERAL CONSTRUCTION NOISE THRESHOLDS

Noise Receptor Locations and Land Uses	Daytime (7 am - 6 pm)	Evening (6 pm - 10 pm)	Nighttime (10 pm - 7 am)
	dBA, Leq ¹		
Noise-Sensitive Locations (residences, hotels, etc.)	72 or Baseline + 5 (whichever is louder)	Baseline + 5	Baseline + 5 (if Baseline < 70) or Baseline + 3 (if Baseline > 70)
Commercial Areas (businesses, offices, stores, etc.)	77 or Baseline + 5	None	None
Industrial Areas (factories, plants, etc.)	82 or Baseline + 5	None	None

Notes: ¹ Leq thresholds were empirically determined (FHWA, 2006). Source: FHWA, 2006.

TABLE 4. FEDERAL NOISE ABATEMENT CRITERIA HOURLY A-WEIGHTED SOUND LEVEL DECIBELS¹

Activity Category	Activity Criteria Leq (h), dBA	Evaluation Location	Activity Category Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential
C	67	Exterior	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52	Interior	Auditoriums, daycare centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, schools, and television studios.
E ¹	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, shipyards, utilities (water resources, water treatment, electricity), and warehousing.
G	--	--	Undeveloped lands that are not permitted.

Notes: ¹ Includes undeveloped lands permitted for this activity category. Source: FHWA, 2018.

Vibration Standards

The effects of groundborne vibrations typically cause only a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although groundborne vibration can be felt outdoors, it is typically an annoyance only indoors, where the associated effects of the building shaking can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may consist of the rattling of windows or dishes on shelves.

Peak particle velocity (PPV) is often used to measure vibration. PPV is the maximum instantaneous peak (inches per second) of the vibration signal. The PPV levels are used to estimate L_v or VdB levels (vibration decibels with a reference velocity of one micro-inch per second). Human responses to vibration vary by the source of vibration, which is either continuous or transient. Continuous sources of vibration include construction while transient sources include truck movements. Generally, the thresholds of perception and annoyance are higher for transient sources than for continuous sources.

Table 5 summarizes the Federal Transportation Administration's (FTA) guideline vibration damage criteria for various structural categories. As shown therein, buildings extremely susceptible to vibration damage could be damaged if vibration levels exceed 90 VdB. Additionally, although humans have a perceptibility threshold of 65 VdB, human response to vibration is not usually significant unless the vibration exceeds 70 VdB (FTA, 2006). Background vibration velocity in residential areas is usually 50 VdB or lower.

TABLE 5: CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	Approximate PPV (in/sec)	Approximate L_v (VdB)
Reinforced-concrete, steel, or timber (no plaster)	0.5	102
Engineered concrete and masonry (no plaster)	0.3	98
Non-engineered timber and masonry buildings	0.2	94
Buildings extremely susceptible to vibration damage	0.12	90
Source: FTA, 2006		

Local

City of Lake Ozark Municipal Code Section 510.330

Intends to minimize the exposure of citizens to the harmful effects of excessive noise related to construction. Requires construction activities to reduce noise to the fullest extent practicable. Specifically, it prohibits use of any pile driver, bulldozer, backhoe, power shovel, hammer, derrick, hoist, tractor, roller or any other mechanical apparatus during the nighttime hours (10 PM and 7 AM) and all day Sunday.

HAZARDOUS MATERIALS

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) regulates the land disposal of hazardous materials from cradle-to-grave. This means establishing a regulatory framework for the generation, transport, treatment, storage and disposal of hazardous waste. Specifically, Subtitle D of RCRA pertains to non-hazardous solid waste and Subtitle C focuses on hazardous solid waste. A solid waste can consist of solids, liquids and gases, but these must be discarded in order to be considered waste.

Additionally, the USEPA has developed regulations to set minimum national technical standards for how disposal facilities should be designed and operated. States issue permits to ensure compliance with USEPA and state regulations. The regulated community is comprised of a diverse group that must comprehend and adhere to RCRA regulations. These groups can consist of hazardous waste generators, government agencies, small businesses, and gas stations with underground petroleum tanks.

Food, Drug, and Cosmetic Act

Under the federal Food, Drug, and Cosmetic Act, the USEPA sets maximum residue limits, or tolerances, for pesticides residues on food. When the USEPA sets a tolerance level for a food, this is the level deemed safe. In defining safe, this means that, “reasonable certainty that no harm will result from aggregate exposure to the pesticide residue.” When determining a safety finding for a tolerance level, the USEPA considers the toxicity of the pesticide and its break-down products, aggregate exposure to the pesticide in foods and from other sources of exposure if applicable, and any special risks specific to infants and children. If a tolerance is not set for a pesticide residue, a food containing that pesticide residue will be subject to government seizure if deemed appropriate. However, once a tolerance has been established for a pesticide residue, then residue levels below the tolerance will not trigger enforcement actions. If the residue level is detected above that tolerance, then the commodity will be subject to seizure. Some pesticides do not have a set tolerance level as the USEPA may grant exemptions in the cases where the pesticide residue does not pose, under foreseeable situations, a significant dietary risk.

Hazard Communication Standard

The hazard communications standard requires that chemical manufacturers evaluate the potential risks that may be posed by use of such chemicals. In turn, employers utilizing such chemicals must inform employees of the chemical analysis and associated risks of use. The Occupational Health and Safety Administration is the governing body in charge of defining the Hazard Communication Standards.

Federal Hazardous Substances Act

The Consumer Product Safety Commission has a limited role in regulating hazardous substances; it primarily deals with the labeling of consumer products through the federal Hazardous Substances Act (FHSA). FHSA only requires products that may at some point be in the presence of people’s dwellings to be labeled, including during purchase, storage, or use. These labels must alert consumers of the potential hazards that the product may pose. However, in order for a product to be required for labelling, the product must be toxic, corrosive, flammable/combustible, an irritant, a strong sensitizer, or have the ability to generate pressure through decomposition, heat, or other means. Furthermore, the product must possess the ability to cause severe personal injury or substantial illness during or as a result of any customary or reasonably predictable handling or use, including reasonably foreseeable ingestion by children.

Federal Insecticide, Fungicide, and Rodenticide Act

The federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) addresses the sale, distribution, and labeling of pesticides, as well as the certification and training of pesticide applicators. FIFRA establishes recordkeeping and reporting requirements on certified applicators of restricted use pesticides. Furthermore, FIFRA imposes storage, disposal, and transportation requirements on registrants and applicants for the registration of pesticides. Pesticide use is regulated through requirements to apply pesticides in a manner consistent with the label. The labeling requirement includes directions for use, warnings, and cautions along with the uses for which the pesticide is registered (e.g., pests and appropriate applications). This includes the specific conditions for the application, mixture, and storage of the pesticide.

Additionally, the label must specify a time period for re-entry into an area after the pesticide has been applied, and when crops may be harvested after the application of the pesticide. If a pesticide is used in a manner contrary to specifics on its label, then the use constitutes a violation of the FIFRA.

Toxic Substances Control Act

The federal Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, permits the USEPA to evaluate the potential risk from novel and existing chemicals and address unacceptable risks chemicals may have on human health and the environment. The USEPA oversees the production, importation, use, and disposal of certain chemicals. This includes the USEPA having the authority to require record keeping, reporting, and test requirements and restrictions associated with certain chemical substances and/or mixtures. However, certain groups of chemicals are excluded from TSCA consideration, including—but not limited to—food, drugs, cosmetics and pesticides. Examples of chemicals included in TSCA consideration are lead paint, asbestos, mercury, formaldehyde, and polychlorinated biphenyls.

Emergency Planning and Community Right-to-Know Act

The federal Emergency Planning and Community Right-to-Know Act (EPCRA) is designed to assist local communities protect public health, safety, and the environment from chemical hazards. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. The EPCRA also requires industry to report on the storage, usage, and releases of hazardous substances to federal, state, and local governments, and states and communities can use the information gained to improve chemical safety and protect public health and the environment.

State and Local

10 CSR 25-18.010 Risk-Based Corrective Action Process

The Missouri Risk-Based Corrective Action (MRBCA) became effective in 2009. It sets out a framework of requirements for the Department of Natural Resources to make cleanup decisions of contaminated or potentially contaminated sites, excluding petroleum storage tanks. It is similar to risk-based remediation systems used in other states and uses a tier system to evaluate sites. Risk-Based Target Levels are used when evaluating a site, determining whether contaminants at a site need treatment or when the amount of cleanup is sufficient.

VISUAL RESOURCES

Federal

National Scenic Byway Program

The National Scenic Byway Program was established by Congress in 1991 as the Intermodal Surface Transportation Efficiency Act. The Program is administered by the Federal Highway Administration and was established to preserve scenic but less-traveled roadways. A national scenic byway is a road recognized by the U.S. Department of Transportation for one or more of six intrinsic qualities. Intrinsic qualities include archeological, cultural, historic, natural, recreational, and scenic. National scenic byways must already be designated as state scenic byways or must possess all six intrinsic qualities to be nominated.

State and Local

City of Lake Ozark Municipal Code

The City of Lake Ozark Land Use Zoning Regulations, codified under Title IV, Art. VII, Sec. 405.500(A)(3) of the municipal code, establishes sign regulations. The zoning ordinance outlines details and regulations pertaining to façade signs, specifications pertaining to lighting, size, and limiting glare. The City of Lake Ozark Land Use Zoning Regulations, codified under Title IV, Art. X, Sec. 405.812(A) of the municipal code, establishes physical characteristics and visual resource zone regulations. The zoning ordinance states that the line of sight offered by highway corridors and local street corridors can be considered Visual Resource Zones when the viewshed captures the characteristic identity of the City.