



United States Department of the Interior

NATIONAL PARK SERVICE
Ozark National Scenic Riverways
404 Watercress Drive
P.O. Box 490
Van Buren, Missouri 63965

IN REPLY REFER TO:
H30

December 29, 2010

Ms. Judith Deel
Missouri Department of Natural Resources
Historic Preservation Program
Department of Natural Resources
P.O. Box 176
Jefferson City, Missouri 65102

RE: Initiation of Consultations under Section 106 of the National Historic Preservation Act for the Undertaking Rehabilitate and Upgrade Radio System to Narrowband Digital, Ozark National Scenic Riverways

Dear Ms. Deel,

At Ozark National Scenic Riverways (Park) the National Park Service (NPS) proposes to rehabilitate and upgrade the Park's radio system to narrowband digital. Two new repeater sites, at Cedargrove and Rymer Ridge, would be developed within park boundaries on NPS managed property as part of the proposed undertaking (see enclosed map for proposed locations).

Cedargrove Site

The proposed repeater site is approximately a half mile northwest of Cedargrove off County Road 651 (37-25-33.4 N, 91-36-38.3 W). The area site was once the location of a ranger station. The ranger station building (cabin) is no longer at the site, but a clearing remains. There is an access road leading to the clearing and it is accessible by vehicle. Overhead commercial electrical power is present with an electric meter on a power pole near the edge of the clearing.

An area approximately 75' x 75' would be cleared of trees, brush, and vegetation for the communications site compound. A portion of the site is currently free of trees. The new tower and equipment enclosure will be within the perimeter of the site compound. The proposed 199' tower would be a self-supporting type that does not require guy wires. The distance between each of the three legs of the tower at the base would be approximately 18'.

The new radio system would require installation of one microwave radio with an integrated antenna and a VHF repeater antenna on the new tower. The microwave radio/antenna would be mounted at the 195' level and the VHF vertical antenna would be side mounted on the tower at a center line level of 180'. A climate controlled outdoor equipment cabinet would house the new radio equipment. The cabinet would be installed on a 5' x 5' concrete pad near the base of the tower. Commercial power from the existing overhead power pole/meter would need to be run to the load center panel mounted on the side of the outdoor cabinet. The commercial power line would be below grade within the site compound.

A 6-foot high chain link security fence would be installed around the site perimeter. The fence would have a vehicle width gate at the compound entrance. The surface within the compound and extending a few feet beyond the security fence would have aggregate rock installed over a weed barrier mat.

Rymer Ridge Site

This is an undeveloped repeater site. The proposed site is southeast of Jacks Fork near the Rymer's facilities (37-02-55.2 N, 91-33-49.6 W). The site is located on a ridge near commercial power, and is accessible from 'M' Highway via an old logging trace. Because the old logging trace is curved, views of the proposed site would be obscured from the main road.

An area approximately 75' x 75' would be cleared of trees, brush, and vegetation for the communications site compound. The new tower and equipment enclosure would be within the perimeter of the site compound. The proposed 150' tower would be a self-supporting type that does not require guy wires. The distance between each of the three legs of the tower at the base would be approximately 15'. The new radio system would require the installation of a tower mounted microwave radio, 4' dish antenna, and a VHF repeater antenna on the new tower. The 4' dish antenna would be mounted at the 145' level and the VHF vertical antenna would be side mounted on the tower at a center line level of 130'.

A climate controlled outdoor equipment cabinet would house the new radio equipment. The cabinet would be installed on a 5' x 5' concrete pad near the base of the tower. Commercial power and an electric meter would be installed from the existing overhead power near the site to the load center panel mounted on the side of the outdoor cabinet. The commercial power line would be below grade within the site compound.

A 6-foot high chain link security fence would be installed around the site perimeter. The fence would have a vehicle width gate at the compound entrance. The surface within the compound and extending a few feet beyond the security fence would have aggregate rock installed over a weed barrier mat.

In addition to the development of the two new repeater sites, the undertaking also consists of replacing approximately 79 portable radios, 31 mobile units, 18 base stations, 12 wireline remote control units, 12 repeater(s), 1 communications dispatch console, and all associated infrastructure including, but not limited to, coaxial cables and antennae.

I invite your participation in the initial scoping for the proposed project, to assist us in defining the area of potential effects and to ensure that any concerns your office has regarding potential impacts to historic properties are raised and addressed early in the planning process. Scoping has also been initiated with other federal and state agencies, the general public, and the eight American Indian tribes traditionally associated with Park lands:

- | | |
|---|-----------------------------------|
| Absentee-Shawnee Tribe of Indians of Oklahoma | Cherokee Nation, Oklahoma |
| Delaware Nation, Oklahoma | Eastern Shawnee Tribe of Oklahoma |
| Osage Tribe, Oklahoma | Shawnee Tribe |
| United Keetoowah Band of Cherokee Indians, Oklahoma | Delaware Tribe of Indians |

My staff will continue to keep you informed as the planning effort progresses, and we would appreciate receiving any preliminary comments you may have by January 17, 2011. If you have any questions, or if you would like to schedule a meeting to further discuss the proposed undertaking, please contact Joe Strenfel, Environmental Protection Specialist, at 573-323-4933. I look forward to continued consultations with your office and believe that it will help ensure that historic properties are adequately considered and protected throughout the planning and implementation of the proposed undertaking.

Sincerely,

Reed Detring
fo/ Reed Detring
Superintendent

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

January 7, 2011

RECEIVED

Reed Detring
Superintendent
Ozark National Scenic Riverways
P.O. Box 490
Van Buren, Missouri 63965

JAN 18 2011
Ozark National
Scenic Riverways

Re: Rehabilitate & Upgrade Radio System to Narrowband Digital (NPS) Dent & Shannon Counties, Missouri

Dear Mr. Detring:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

Thank you for the notification that the National Park Service will be undertaking a project to upgrade the radio system at the Ozark National Scenic Riverways. We will be interested in information relating to the potential for historic and prehistoric archaeological sites at the Cedargrove Site and the Rymer Ridge Site. We would also appreciate information on the possible effects on the viewshed that the construction of a 199 foot and a 150 foot tower might have. We look forward to working with you on this project.

If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862. Please be sure to include the SHPO Log Number (021-MLT-11) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE



Mark A. Miles
Director and Deputy
State Historic Preservation Officer

MAM:jd

c Jim Price, ONSR



United States Department of the Interior

NATIONAL PARK SERVICE
Ozark National Scenic Riverways
404 Watercress Drive
P.O. Box 490
Van Buren, Missouri 63965

IN REPLY REFER TO:

N16

December 28, 2010

Charles Scott
Field Supervisor
U.S. Fish and Wildlife Service
101 Park Deville Drive, Suite A
Columbia, Missouri 65203-0057

RE: Rehabilitate and Upgrade Radio System to Narrowband Digital, Ozark National Scenic Riverways

Dear Mr. Scott:

The National Park Service (NPS) is initiating planning activities on a proposal to rehabilitate and upgrade the Park's radio system to narrowband digital. The purpose of the EA is to evaluate ways to enhance park communications and visitor safety while protecting the park's cultural and natural resources, and to increase park operational efficiency and safety.

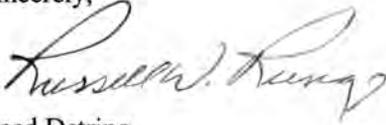
Two new repeater sites, at Cedargrove and Rymer Ridge, would be developed within Ozark National Scenic Riverways (Park). The proposed Cedargrove repeater site is approximately a half mile northwest of Cedargrove off County Road 651 (37-25-33.4 N, 91-36-38.3 W). The proposed site was once the location of a ranger station. The ranger station building (cabin) is no longer at the site, but a clearing remains. There is an access road leading to the clearing and it is accessible by vehicle. Overhead commercial electrical power is present at the site with an electric meter on a power pole near the edge of the clearing. The Rymer Ridge repeater site is an undeveloped area southeast of Jacks Fork near the Rymer's facilities (37-02-55.2 N, 91-33-49.6 W). The site is located on a ridge near commercial power, and is accessible from 'M' Highway via an old logging trace. Because the old logging trace is curved, views of the proposed site would be obscured from the main road.

This letter serves as notification that the NPS has begun the National Environmental Policy Act (NEPA) process and is proposing to have an Environmental Assessment (EA) available for public and regulatory review in the near future. In addition, this letter serves as a record that the NPS is initiating informal Section 7 consultation with your agency pursuant to the requirements of the 1973 Endangered Species Act, as amended and NPS Management Policies. As part of the scoping for this project, the NPS requests any information regarding listed or proposed threatened or endangered species or critical habitats that might occur in the project vicinity, and any special management considerations for such species.

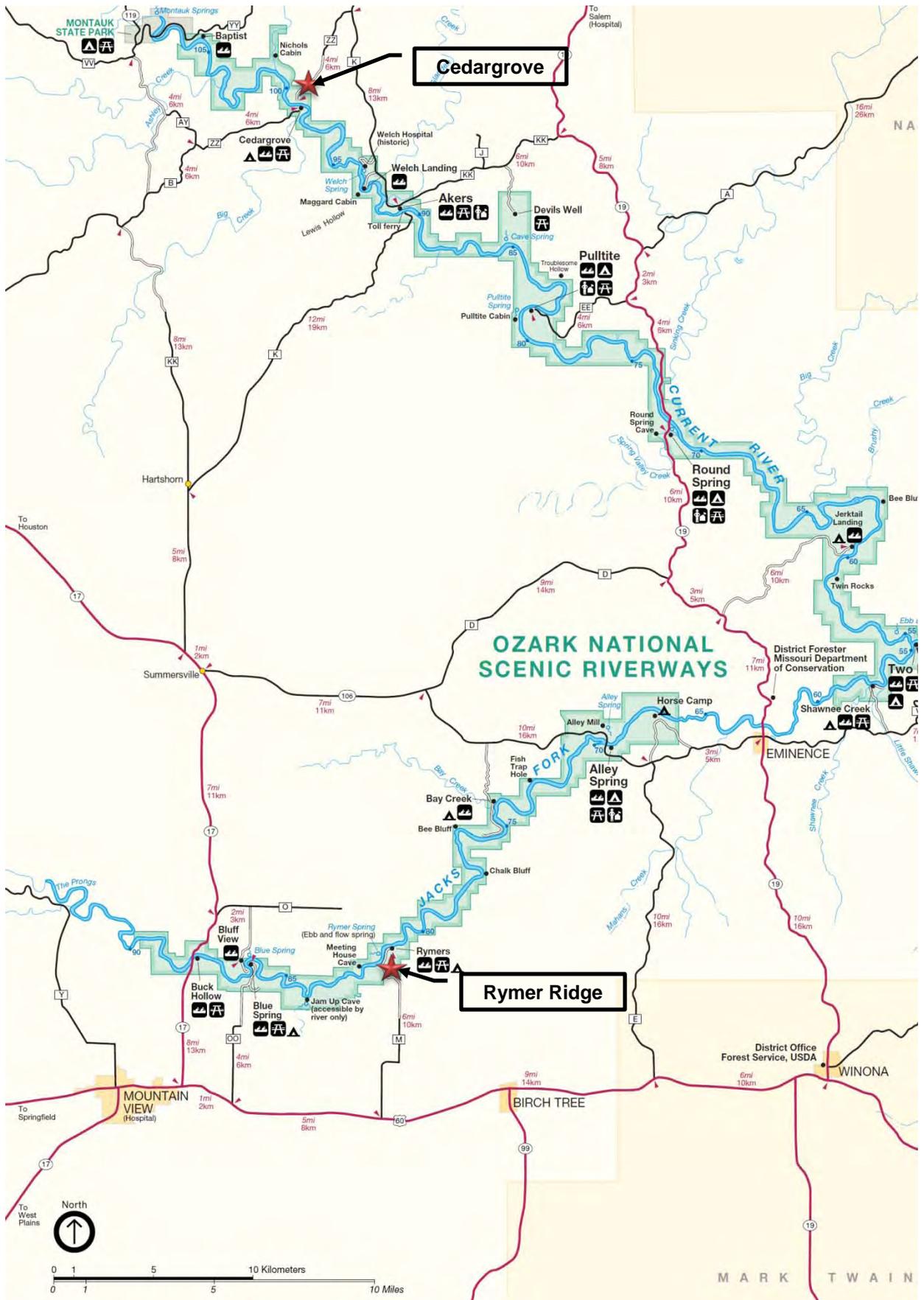
In keeping with the requirements of Section 7 consultation and National Park Service policy, upon completion of the environmental assessment, the NPS will forward it to your office for review and comment. Should you know of or come across any other resource constraint that should be considered in planning for this project, please do not hesitate to contact us. We look forward to receiving any guidance or comments you may have regarding the process or the project itself.

My staff will continue to keep you informed as the planning effort progresses and we would appreciate receiving any preliminary comments you may have by January 17, 2011. If you have any questions, or if you would like to schedule a meeting to further discuss the proposed undertaking, please contact Joe Strenfel, Environmental Protection Specialist, at 573-323-4933.

Sincerely,



For Reed Dering
Superintendent





United States Department of the Interior



FISH AND WILDLIFE SERVICE
Columbia Ecological Services Field Office
101 Park DeVille Drive, Suite A
Columbia, Missouri 65203-0057
Phone: (573) 234-2132 Fax: (573) 234-2181

March 22, 2011

Re: N16

Reed Detring, Superintendent
National Park Service
404 Watercress Drive
P.O. Box 490
Van Buren, Missouri 63965

Dear Mr. Detring:

This letter is in response to your December 28, 2010, inquiry regarding any threatened or endangered species or critical habitat that may occur in the vicinity of the proposed radio repeater sites, located in Dent and Shannon counties, Missouri. This response is provided by the U.S. Fish and Wildlife Service (Service) under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347), Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Endangered Species Act of 1973, as amended (16 U.S.C. 1531-1544).

Federally Listed Species

Two federally endangered species, the Gray bat (*Myotis grisescens*) and Indiana bat (*Myotis sodalis*); and one threatened species, Virginia sneezeweed (*Helenium virginicum*); are known to occur in Dent and Shannon counties and may be present in or near the Cedar Grove or Rymer Ridge project areas.

Gray bat (*Myotis grisescens*) – Several gray bat caves occur within the vicinity of both Cedar Grove and Rymer Ridge project sites. We recommend that tree clearing associated with the project be avoided within a 100 foot buffer of streams, rivers, and reservoirs to protect water quality so the aquatic insect prey base of the gray bat remains healthy. The Service also recommends implementation of the enclosed Best Management Practices developed by the Missouri Department of Conservation to avoid any potential adverse effects to the species and the karst habitat. Because bat collisions with towers are rare, it is unlikely that any direct mortality of gray bats would occur.

Indiana bat (*Myotis sodalis*) – During spring through fall, Indiana bats utilize living, injured (e.g., split trunks and broken limbs from lightning strikes or wind), dead or dying trees for roosting throughout the state. Indiana bat roost trees tend to be greater than 9 inches diameter at breast height (dbh) (optimally greater than 20 inches dbh) with loose or exfoliating bark. Most

important are structural characteristics that provide adequate space for bats to roost. Preferred roost sites are located in forest openings, at the forest edge, or where the overstory canopy allows some sunlight exposure to the roost tree, which is usually within 1 km (0.6 mi.) of water.

In your letter dated December 28, 2010, you stated that a clearing already exists for the Cedar Grove site; while the Rymer Ridge site is within an undeveloped area. Should the proposed project areas contain trees or associated habitats exhibiting any of the characteristics listed above, we recommend that these trees be removed between November 1 and April 1 to avoid direct mortality of roosting Indiana bats. If it is not possible to remove potential roosting trees during this window, please contact our office for further coordination. As with gray bats, it is unlikely that any direct mortality would occur as a result of collisions with the towers.

Based on the limited amount of potential roosting habitat at the project sites, and your agency's willingness to remove trees solely during the hibernation season, we would concur that actions associated with these projects are not likely to adversely affect the Indiana bat.

Virginia sneezeweed (*Helenium virginicum*) – Virginia sneezeweed is known to occur at several locations in Shannon county and within two miles of the Rymer Ridge project area. As per a February 22, 2011 telephone conversation between Service biologist Trisha Crabill and National Park Service biologists Joe Strenfel and Kimberley Houf, it is our understanding that no habitat suitable for Virginia sneezeweed exists at either project site. Based on this information, the Service would concur with a determination that the project will have no effect on Virginia sneezeweed.

Fish and Wildlife Comments

To minimize mortality of migratory birds, the Service strongly encourages communication towers be constructed no more than 199 feet above ground level (AGL) and using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Migratory birds frequently hit guy wires during their migration, especially during periods of inclement weather.

Because lighting on towers can disorient nocturnally migrating birds, such towers should be unlighted if Federal Aviation Administration regulations permit. If taller towers (>199 feet AGL) requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white (preferable) or red strobe lights should be used at night, and these should be the minimum number, minimum intensity, and minimum number of flashes per minute (longest duration between flashes) allowable by the FAA. The use of solid red or pulsating red warning lights at night should be avoided. Current research indicates that solid or pulsating (beacon) red lights attract night-migrating birds at a much higher rate than white strobe lights. Red strobe lights have not yet been studied. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

During the telephone conversation on February 23, 2011, you indicated that the proposed towers would be less than 199 feet AGL, be self-supported, and require no lighting. Because sites for

the proposed radio repeater towers are within contiguous forest and high quality migratory bird habitat, implementation of these conservation measures is particularly important to minimize mortalities. With implementation of these measures and the aforementioned recommendations for gray and Indiana bats, we would concur with a determination that the proposed radio repeater towers are not likely to affect threatened or endangered species or adversely modify critical habitat.

If project plans change, coordination with this office should be reinitiated. We appreciate the opportunity to review your project and provide comments during the planning process. Should you have questions, or if we can be of further assistance, please contact Trisha Crabill at 573-234-2132, extension 121.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles M. Scott", with a long horizontal flourish extending to the right.

Charles M. Scott
Field Supervisor

Enclosure

O:\STAFF Folders\Crabill\FY11 Letters\NPS repeater sites - with PM edits.doc.doc

Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



Gray bat

Myotis grisescens

Common name • Gray bat

Scientific name • *Myotis grisescens*

Federal status • Endangered

State status • Endangered

Ecology

Gray bats inhabit caves throughout the year. Most of Missouri's winter population hibernates in three caves, all of which are in the southern part of the state. In the spring, usually in April and May, these bats migrate to over 50 other caves scattered throughout the Ozarks. Migration from summer caves to winter hibernacula is more drawn out, beginning in August and going through early November. Adults mate in the fall prior to hibernating. Hibernation lasts from October through April. Gray bats hibernate in deep, vertical caves that trap cold air. Bats have the ability to lower their metabolism during hibernation, thereby reducing the amount of energy and food they use. However, they enter hibernation with only enough fat reserves to last until spring. Any disturbance to bats while they are hibernating can arouse them and possibly result in death by starvation if fat reserves are depleted.

In summer, pregnant females form maternity colonies in caves that have domed ceilings where the mothers can cluster together to keep their babies warm. Females produce only one offspring per year, usually in June. Males and first-year females (which do not bear young) form bachelor colonies in separate caves or, sometimes, in cooler portions of maternity caves. Gray bats forage up to 12.4 miles (20 km) from their summer roosts and feed on aquatic and terrestrial flying insects. They generally feed over water or in adjacent riparian vegetation.

Reasons for Decline

Gray bats are sensitive to human disturbance of their roosts. In hibernacula, human disturbance causes the bats to use up vital fat reserves, their only source of energy throughout winter. In maternity caves, pregnant females may abort unborn young or panicked mothers may drop babies to their deaths if forced to flee from intruders. Severe or repeated disturbance may

cause reproductive failure of an entire colony. Other reasons for the decline in gray bat populations include a decrease in the number of suitable caves because of climate changes in caves due to nearby deforestation. Deforestation between caves and rivers or reservoirs along migration and foraging routes also may increase the risk of predation on bats. Use of pesticides and insecticides may not only reduce food supply for bats but also will introduce poisons into the food chain.

Specific Recommendations

It is important to protect caves and riparian corridors because gray bats use these areas for roosting and foraging.

- Avoid human entry into gray bat caves during the season in which the bats are present. This is dependent upon whether the cave is a maternity or hibernation cave. Maternity and bachelor caves should be closed to human entry April 1 through October 1. Winter hibernacula should be closed to human entry October 1 through March 31.
- Retain corridors of mature trees between bat caves and waterways to provide protection from avian predators between roosts and foraging areas.
- Minimize logging and other deforestation activities, especially within a 100 foot buffer of the river or reservoir, to protect stream quality so the aquatic insect community remains healthy.
- Avoid or minimize pesticide use where gray bats forage.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Karst Habitat and Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

Information Contacts

For further information regarding regulations for development near caves, streams and rivers, contact:

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
101 Park DeVille Drive, Suite A
Columbia, MO 65203
Telephone: 573-234-2132

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.