Decision Notice and Finding of No Significant Impact

Forest Plan Amendment for Bat Conservation Environmental Assessment

U.S. Forest Service

Ozark-St. Francis National Forests

Baxter, Benton, Conway, Crawford, Franklin, Johnson, Lee, Logan, Madison, Marion, Newton, Phillips Pope, Searcy, Stone, Van Buren, Washington, and Yell, Arkansas

Decision

Based upon my review of the Forest Plan Amendment for Bat Conservation Environmental Assessment (EA), I have decided to authorize the following changes to the 2005 Ozark-St. Francis National Forests Revised Land and Resource Management Plan (Forest Plan):

Forest-wide Standards

FW48 Optimal overstory density within the secondary zone around Indiana bat hibernacula is a range of 50 to 70 percent canopy closure. Use timber harvest, non-commercial thinning, and prescribed fire as needed to regulate and maintain this optimal density.

During normal order of entry for compartments within Indiana bat secondary conservation zones, do landscape scale analysis of existing forest stand conditions. This analysis should be used to determine commercial and non-commercial treatments needed to shift percent canopy closure toward the optimal overstory density. The long-term goal of treatments is to adjust canopy closure so that 80 to 90 percent of the secondary conservation zone is within the 50 to 70 percent canopy closure range. This will not be fully accomplished during this planning period. Annually report canopy cover adjustments accomplished with commercial and non-commercial treatments within Indiana bat conservation zones to the Arkansas Field Office, U.S. Fish and Wildlife Service (USFWS).

When designating trees to be cut to regulate overstory density, two approaches are recommended for equating canopy density to target leave basal area. A simple rule of thumb is to use site index minus 10 as the target leave basal

area. Another option is the use of canopy density/basal area conversion charts defined by tree diameter classes.

FW52 Prescribed burn plans for areas containing caves or for areas near significant caves or mines will identify these sites as smoke sensitive targets. The prescribed burn plans will be written to minimize active combustion and smoldering phase smoke from entering these sites when bats are present.

FW64 All activities proposed within primary Indiana bat conservation zones will be coordinated with the USFWS and conservation and recovery of the Indiana bat will be the management priority for those actions.

FW66 Cutting of potential Indiana bat roost trees (trees three inches or greater diameter at breast height) is restricted from August 15 to November 30 in primary Indiana bat conservation zones and in Indiana bat priority roosting zones for caves with fall swarming Indiana bats. Cutting of potential Indiana bat roost trees as described above is also restricted from March 1 to April 30 in the primary Indiana bat conservation zones for caves with hibernating Indiana bats. Indiana bat priority roosting zones are mapped in coordination with USFWS based on habitat quality and bat use patterns around caves with the intent of protecting core use areas encompassing a minimum of 100 acres per Indiana bat hibernaculum. Management activities within the priority roosting zones would emphasize Indiana bat roosting habitat and ensure a continual supply of quality roosting trees.

FW67 Remove this standard.

FW69 Live trees, snags, buildings, and other structures known to have been used as roosts by Indiana bats and female northern long-eared bats are protected from cutting and/or intentional modification until they are no longer suitable as a roosting structure (trees no longer standing) unless their cutting or modification is needed to protect public or employee safety. Where roost tree cutting or modification is deemed necessary, it must be coordinated with the USFWS. Prescribed burns may proceed without special protection for roost trees except for active Indiana bat maternity trees.

FW71 Protections are established around gray bat maternity and hibernation colony sites and Ozark big-eared bat maternity sites, bachelor sites, and winter colony sites. Cutting of overstory vegetation is prohibited within a 200-foot buffer around these sites. Within ¼ mile of the sites, there will be no new permanent development, such as construction of roads, trails, wildlife openings, pastures or special use rights-of-way unless required to access private property.

Exceptions may be made where coordination with USFWS determines these activities to be compatible with recovery of these species.

FW163 *NEW added standard* If Indiana bat maternity trees are discovered within the Ozark-St. Francis National Forests (Forests), those trees and other trees used by the colony would be protected. No tree falling would occur within 150 feet of known maternity trees unless their cutting or modification is needed to protect public or employee safety. Where tree cutting or modification is deemed necessary within this area, it must be coordinated with the USFWS. Prior to prescribed fire, fuels would be removed from around known maternity trees to prevent damage during the burn. During the maternity period (April 1 to August 15), activities that may disturb the colonies, such as timber harvest, use of heavy equipment, and prescribed fire would be prohibited in an area approximately ¼ mile from known maternity roost trees. Variation in the buffer distance would be coordinated with USFWS and may include type of activity or topography that would shield the maternity site from the disturbance. Efforts would be made to determine the location of roost trees used by the colony prior to proceeding with forest management in the vicinity of the colony. If it is determined with USFWS that the colony has abandoned the site, the protections are no longer required except to maintain known roost trees, as per revised FW69.

Appendix A – Definitions

Maternity tree – A live tree or snag used as a roost by a pregnant or lactating female bat or bat pups. Use by a female during the maternity season, even without evidence of reproductive status, will be assumed maternity use.

Roost tree – A live tree or snag used as a day roosting structure by one or more bats.

Appendix F – Silviculture Prescription Descriptions

110 Indiana Bat – The purpose of this prescription is to maintain or enhance habitat for Indiana bats. Follow guidelines set forth in Forest-Wide Standards 33, 47, 48, 68, 69, and 70 for Indiana Bat management. Manage the diverse landscapes within the Indiana bat conservation zones with Silviculture Prescriptions 103, 104, 106, 113, or 114. Thin to maintain target canopy closure and regenerate stands using harvest methods with leave tree reserves, retaining overstory trees to provide high-quality roost trees over time. If needed, girdle select leave trees to maintain sufficient high-quality roost trees. Manage prescribed burning intervals to reduce mid-story clutter and promote groundcover to improve bat foraging conditions; some longer intervals may be needed to promote natural regeneration to attain desired tree composition, spacing and canopy closure.

Management of rare habitats, such as glades and cane breaks within Indiana bat conservation zones, require specialized management strategies not described in the silvicultural prescriptions.

Appendix I – Monitoring: Table I-2 Monitoring Summary Table Mandatory Items

Resource Area	Monitoring Need	Measurement Frequency	Reporting Frequency	Precision and Reliability
Wildlife	Threatened, Endangered, and Sensitive bat populations and habitat utilization are monitored. Long-term population trends, species distributions and habitat use patterns are monitored to inform management strategies.	Annual	2 years	High

Decision Rationale

Monitoring data and results for threatened, endangered, and sensitive bats for the Forest Plan, in addition to new scientific literature concerning bats, indicated a need to amend the Forest Plan regarding bat conservation. The changes to the Forest Plan were identified through collaboration with U.S. Fish and Wildlife Service, Southern Research Station, and other partners. The amendment to the Forest-Wide Standards and Silvicultural Prescriptions in the Forest Plan will provide for better management of bat habitat and protection of bats across the Forests. The need for each change is as follows:

Forest-Wide Standards

FW48 This is a clerical correction. In the second paragraph, there is a reference to the primary Indiana bat conservation zone, which is addressed in detail in FW 47. FW 48 is intended to address the secondary Indiana bat conservation zone prescription.

FW52 This change in wording clarifies that some smoke could enter caves during prescribed burns, but those sites would be managed to prevent heavy smoke from entering caves. Prescribed fire has beneficial effects to Indiana bat habitat. Heavy smoke accumulation in the cave could have detrimental effects to bats, but Indiana bats typically roost in cold air traps, so air exchange is limited, and smoke accumulation risk is low. Sampling in sandstone crevices during

prescribed fires has found that some smoke can enter the caves, but heavy smoke accumulation has not been observed.

FW64 Triggers for consultation are established by the Endangered Species Act. In some cases, the risk of take is a consequence of management to improve habitat and species recovery actions, even when there is a net benefit to the population. However, it is important that the Forests are closely coordinating activities that are occurring within the designated primary conservation zones for Indiana bat with USFWS.

FW66 This standard was designed to ensure site-specific surveys for Indiana bats within the Indiana bat conservation zones. Occupied areas have been protected, however, monitoring has demonstrated that Indiana bats tend to change habitat locations both within seasons and between seasons, so the bats may often be outside of the protected areas. Monitoring efforts have found patterns of habitat use by Indiana bats, but it is also clear that it is not practical to know where individual bats will be during project implementation. There is a need to focus the protections on the areas and during the time periods that the bats are typically at higher densities. Data suggests that Indiana bat density is low in the Indiana bat conservation zones through the summer. Indiana bats use areas around the hibernacula during the spring emergence and fall swarming period at a higher density. Timing restrictions for prescribed fire within the primary and secondary Indiana bat conservation zones would be removed, because the risk of negative impacts to tree-roosting bats from prescribed fire is low, and there are numerous habitat benefits from prescribed burning. Timing restrictions for tree cutting within the primary and secondary Indiana bat zones are modified. Timing restrictions that cover the entire secondary Indiana bat conservation zone for the active season are lifted. Timing restrictions are maintained in the primary Indiana bat conservation zone during the spring emergence and fall swarming period and in the priority roosting zones during the fall swarming period. Priority roosting zones would be newly mapped areas that would be based on known bat use and high-quality habitat near hibernacula. The priority roosting zones could change over time based on new information or changed conditions when coordinated with USFWS.

FW67 There would not be a need for this standard with the proposed changes to FW66. Triggers for consultation are established by the Endangered Species Act.

FW69 Expands the protection of roosting structures, including trees and snags, from the secondary Indiana bat conservation zone to the entire Forest. Protects

roosts for female northern long-eared bats as well as Indiana bats. Clarifies that the protections apply to cutting or direct modification, but not to prescribed fire.

FW71 The existing 200-foot buffer is maintained for forest management activities that may improve habitat conditions or forest health, but permanent developments or conversion from forest in the vicinity surrounding maternity, bachelor, or hibernation sites may have long-term detrimental effects on the habitat for endangered bats. Prescribed fire may be applied within 200 feet, but the site would be managed as a smoke-sensitive target as described in revised FW52.

FW163 Although no maternity sites have been found on the Forests, they have been found to occur in Arkansas and evidence suggests that sites occur to the south, east, and west of the Forests. Establishing the protocol for protection in anticipation of discovering a maternity colony will assure that the proper protective measures are in place and will not delay project implementation if one is found.

Appendix A – Definitions

The two new definitions are needed to provide clarity and consistency.

Appendix F – Silviculture Prescription Definitions

110 Indiana Bat – Updates and clarifies the silviculture prescription used in the Indiana bat conservation zones to benefit habitat for Indiana bat. Changes the primary regeneration harvest method from shelterwood to regeneration harvest with leave tree reserves to help provide high-quality roost trees.

Appendix I – Monitoring: Table I-2 Monitoring Summary Table Mandatory Items

With three endangered, one threatened, and four Regional Forester's Sensitive listed bats, the health and recovery of bat populations is a key indicator of the success of the Forest Plan; thus, the need for the new proposed monitoring.

The Forest Plan Amendment for Bat Conservation EA documents the environmental analysis and conclusions upon which this decision is based.

Public Involvement

This project was first listed on the Ozark-St. Francis National Forests (Forests) Schedule of Proposed Actions on April 2, 2019 and updated periodically during the analysis. On April 15, 2019, a stakeholder notification letter was mailed to 1,171 individuals and 16 tribal members. The notification letter was also emailed to 365 individuals. In May 2019, two public meetings were held to discuss the need for this plan amendment, scientific information, and monitoring results from the Forests.

Attendees were given information on the draft proposed action, need for change, and the National Environmental Policy Act (NEPA) and National Forest Management Act (NFMA) processes. A legal notice was published in four newspapers across the Forests: the Russellville Courier on April 14, 2019, the Johnson County Graphic on April 17, 2019, the Southwest Times Record on April 14, 2019, and the Stone County Leader on April 17, 2019, initiating scoping. During this scoping period, the public was notified that the planning rule requirements relating to the diversity of plant and animal communities (36 CFR 219.9) are the rule requirements likely to be directly related to the plan direction being changed. A total of 26 comments were received. The proposed action was modified to incorporate relevant suggestions and concerns brought forward from internal and external scoping. A scoping summary report was posted to the project webpage on July 1, 2019.

On February 29, 2020, the legal notice initiating the 30-day notice and comment period was published in the newspaper of record – *The Courier,* Russellville, AR. A letter was mailed to 985 individuals, 61 organizations, and 16 tribes and emailed to 99 individuals notifying them of this opportunity to provide comments on the draft EA and plan amendment. Three comments were received during this period. The comments were reviewed and assessed for new scientific information and for effects that may have been missed during analysis. None of the comments resulted in a change in analysis but did result in some clarifications of information presented.

The EA lists agencies and people consulted on page 3.

Findings Required by Other Laws and Regulations

U.S. Forest Service regulations for implementing the NEPA and forest planning procedures under the NFMA require that decisions include "findings required by other laws and regulations applicable to the decision (36 CFR 220.7(c))" and that "plans must comply with all laws and regulations, including National Forest Management Act, Multiple Use and Sustainability Act, Clean Air Act, Clean Water Act, Wilderness Act, and Endangered Species Act (36 CFR 219.1(f))." In general, because existing plans already comply with these requirements, decisions for plan amendments must only demonstrate compliance related to the proposed changes to management direction.

A Finding of No Significant Impact (FONSI) and EA were considered. I determined these actions will not have a significant effect on the quality of the human environment, and an Environmental Impact Statement (EIS) will not be prepared.

The plan amendment was focused on modifying components of the Forest Plan to implement management activities that ensure the conservation of threatened, endangered, and sensitive bats. Formal consultation with the U.S. Fish and Wildlife

Service satisfies procedural requirements under Endangered Species Act Section 7(a)(1) and 7(a)(2). Implementation of the Forest-Wide Standards and Silvicultural Prescription will be conducted following the non-discretionary terms and conditions provided by the U.S. Fish and Wildlife Service in their May 7, 2020, Biological Opinion.

Under the NFMA and its implementing regulations at 36 CFR 219 (2012 Planning Rule), a plan may be amended at any time. Plan amendments may be broad or narrow, depending on the need for the change. I have the discretion to determine whether and how to amend the 2005 Ozark-St. Francis National Forests Revised Land and Resource Management Plan (Forest Plan) and to determine the scope and scale of any amendment.

Amend Consistent with Forest Service NEPA Procedures (§ 219.13(b)(3))

The effects of the plan amendment are documented in the Forest Plan Amendment for Bat Conservation Environmental Assessment following Forest Service NEPA procedures at 36 CFR Part 220. Because the appropriate NEPA documentation for this amendment is an environmental assessment, it is not considered a significant change to the plan for purposes of the NFMA (36 CFR 219.13(b)(3)).

How the 2012 Planning Rule applies to the plan amendment

I prepared this forest plan amendment under the 2012 Planning Rule to the 2005 Ozark-St. Francis National Forests Revised Land and Resource Management Plan. The 2012 Planning Rule has different provisions than the 1982 Planning Rule procedures that the Forest Service used to develop the existing plan.

Compliance with the Rule's Procedural provisions

As explained below, this amendment complies with the procedural provisions of the 2012 Planning Rule (36 CFR Part 219.13(b)).

Plan monitoring (§ 219.12): This plan amendment resulted in an additional monitoring need to the monitoring plan. The component is an overarching mandatory item to aid in addressing the status the of a select set of the ecological conditions required under §219.9 to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern (36 CFR 219.12(a)(5)(iv). The element matches the current format of the Forest Plan as revised by the 1982 Planning Rule. A future update to the Forest Plan's monitoring plan is planned and will include specific questions and indicators for the entire monitoring plan, not just this one new component. The new monitoring component was developed through coordination with the Southern Research Station. When the Forest Plan's monitoring program is modified to include the specific monitoring questions and indicators as required by the 2012 Planning Rule, coordination will occur with the Regional Forester, Arkansas Department of Agriculture -

Forestry Division, and Southern Research Station. The cost to monitor this component is well within the Agency's financial and technical capabilities and is less costly than the previous monitoring required.

Using the best scientific information to inform the planning process (§ 219.3): In addition to the best available science regarding habitat and feeding requirements of the threatened, endangered, and sensitive (TE&S) bat species found on the Ozark-St. Francis National Forests, this amendment relied on information collected through mist-netting and radio-telemetry on the Forests. This monitoring data has provided more detailed information on the habitat utilization patterns compared to what was available during the consultation on the 2005 Forest Plan. The data indicated that TE&S bats are utilizing the habitat improved by the restoration management practices, such as thinning, regeneration harvest, and prescribed fire, conducted on the Forests.

Format for plan components (§ 219.13 (b)(4); § 219.7 (e)): The Plan components changed by this amendment are forest-wide standards, definitions within an appendix, a silvicultural prescription within an appendix, and the addition of a monitoring element within an appendix. The formatting for these changes were not changed to the 2012 plan components because the change is limited to existing plan direction (§ 219.13 (b)(4)).

The plan amendment process (§ 219.13): The plan amendment process was conducted concurrently with the environmental assessment process. These processes were initiated with scoping (FSH 1909.12_40, sec. 42). Information provided during scoping included the preliminary need to change the Plan (FSH 1909.12_20, sec. 21.43 and FSH 1909.12_40, sec. 42.12). Scoping consisted of mailing hard copy letters, emails, two open house meetings, press releases, newspaper advertisements, and a webpage. For objection purposes, the defined public participation portion of scoping was set at 30 days. Scoping resulted in refining the proposed action, determining cooperating agencies, initiating agency and tribal consultations, identifying preliminary issues, and confirming interested and affected persons (FSH 1909.15_10). A summary report of the scoping process was compiled and posted to the project webpage.

The plan amendment and environmental assessment were released to the public for review and comment during the 30-day notice and comment period. The 30-day notice and comment period consisted of mailing hard copy letters, emails, press releases, legal notices, and updating the webpage as described above under Public Involvement. Information received during this comment period was considered. The three comments received were posted to the project website. Detailed information was uploaded and provided to the public through the project website: https://www.fs.usda.gov/project/?project=55628.

Objection opportunity (36 CFR 219.50 through 219.62): This information is provided in the Objection Opportunities section on page 12.

Effective date (§ 219.17(a)(2): The plan amendment will be effective the day the decision is signed.

Documenting Compliance with the Rule's Applicable Substantive Provisions

The Planning Rule requires that those substantive rule provisions within 36 CFR 219.8 through 219.11 that are directly related to the amendment are addressed. The applicable substantive provisions apply only within the scope and scale of the amendment (36 CFR 219.13(b)(5)).

As explained in the discussion that follows, both the purpose and the effects of the amendment are such that provisions in § 219.9, Diversity of plant and animal communities, are directly related to the amendment. I have applied those provisions within the scope and scale of the amendment.

Scope and scale of the amendment

The scope and scale of the amendment are defined by the purpose for the amendment. The Ozark-St. Francis National Forests identified a need to update the Forest Plan forest-wide standards regarding protections for threatened, endangered and sensitive (TE&S) bat species, specifically the Indiana bat, and their habitats based on the best scientific data available. Information collected since the Forest Plan was finalized in 2005 indicated a need for more targeted conservation measures. So, the scope of the amendment included both administrative and actionable elements specific to amending plan components regarding the TE&S bat species. The administrative elements provided clarity, as well as new definitions relating to TE&S bat species on the Forests. The actionable elements included updating, adding, and deleting Forest-Wide Standards, updating the Silvicultural Prescription for the Indiana Bat conservation zones, and adding a bat monitoring requirement to the Forest Plan monitoring strategy. Due to the range of the threatened, endangered, and sensitive bat species, the scale of the amendment covered the entire Ozark-St. Francis National Forests.

Rule provisions that are directly related to the amendment

The rule requires that substantive rule provisions (§ 219.8 through 219.11) that are directly related to the amendment must be applied to the amendment. A determination that a rule provision is directly related to the amendment is based on any one or more of the following criteria:

1. The purpose of the amendment (§ 219.13(b)(5)(i));

2. Beneficial effects of the amendment (§ 219.13(b)(5)(i));

3. Substantial adverse effects associated with a rule requirement (§ 219.13(b)(5)(ii)(A)); when an EA or CE is the NEPA documentation for the amendment, there is a rebuttable presumption that there is no substantial adverse effect, and thus no direct relationship between the rule and the amendment based on adverse effects (§ 219.13(b)(5)(ii)(B)).

4. Substantial lessening of protections for a specific resource or use (§ 219.13(b)(5)(ii)(A)).

5. Substantial impacts to a species or substantially lessening protections for a species (36 CFR 219.13(b)(6).

Applying these criteria, I have made the following determination.

The NEPA analysis indicated that the amendment would have beneficial effects on terrestrial and aquatic species resources and habitat across the landscape would be generally improved for wildlife species. There may be short-term changes to bat species habitat availability; however, given the extent of available habitat across the Ozark-St. Francis National Forests, coupled with balancing age classes, the ecological conditions necessary to contribute to the recovery of the threatened and endangered bat species are still being provided. The amended plan components would also provide the habitat needed for the conservation of the proposed and candidate species and would provide the habitat needed to maintain a viable population of the remaining species of concern.

Because the amendment scope focuses on only threatened, endangered and sensitive (TE&S) bat species and their habitats, the directly related rule provisions are applied only for those TE&S bat species and their habitats.

Because the amendment scale focuses on the Ozark-St. Francis National Forests, the directly related rule provisions are applied to the Ozark-St. Francis National Forests.

Having applied those rule provisions within the scope and scale of the amendment, I found that the TE&S bat species and their habitats will benefit from the plan amendment.

Applying the rule requirements to the proposed amendments, I find that the proposed amendment would meet those requirements and therefore no changes were made to it.

Project and activity consistency with the plan

All future projects and activities must be consistent with the amended plan. The 2012 Planning Rule consistency provisions at 36 CFR 219.15(d) apply only to the plan components added or modified under the 2012 Planning Rule. With respect to determinations of project consistency with other plan provisions, the Forest Service's prior interpretation of consistency (that the consistency requirement applies only to plan standards and guidelines) applies. (FSH 1909.12, ch. 20, sec. 21.33.) The implementation of the proposed changes to the Forest-Wide Standards And Silvicultural

Prescription for Indiana bat conservation zones in the Forest Plan would be carried forward into all planned future projects and activities (including those that are covered by existing NEPA decisions, but not yet implemented on the ground or contracted for implementation) to protect bat species on the Forests. The proposed changes to the Forest-Wide Standards and Silvicultural Prescription would not apply to any project or activity that has a previous commitment, documented in an agreement or contract, at the time the NEPA process for this amendment is completed and a decision document is signed unless the agreement or contract is modified through mutual agreement by both parties to fully meet the proposed changes.

Objection Opportunities

This decision was subject to the objection process pursuant to 36 CFR 218 Subparts A and B and the Forest Plan amendment was subject to the objection process pursuant to 36 CFR 219 Subparts A and B. On October 16, 2020, legal notice initiating the opportunity to object was published in the newspaper of record – *The Courier,* Russellville, AR. In addition, letters were mailed to those who provided comments during the project's development to notify them the Draft Decision Notice/FONSI and Final Environmental Assessment for this project were available on the Ozark-St. Francis National Forests' planning website.

Three objections were filed during the 45-day objection filing period. Two of the objections received met the requirements of 36 CFR 218.5. Both of these objectors attended a resolution meeting on February 10, 2021. No resolutions were offered. The reviewing officer sent both objectors a written response letter on February 26, 2021.

Implementation Date

As per 36 CFR 218.12, if an objection is filed, the Forest Supervisor may sign the decision following written response by the reviewing officer to all pending objections.

This decision may be implemented any time after the date of signature.

Finding of No Significant Impact

The significance of environmental impacts must be considered in terms of context and intensity. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human and national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. In the case of a site-specific action, significance usually depends upon the effects in the locale rather than in the world as a whole. Intensity refers to the severity or degree of impact. (40 CFR 1508.27)

Context

The scope of this amendment is a programmatic change to the Forest Plan. Because it is a change to the Plan, there would be no direct effects. The changes, however, would affect some aspects of project implementation. The amendment is limited to standards, definitions, a silvicultural prescription and monitoring specific to bat conservation and bat population management and monitoring. Vegetation, transportation, recreation, and ecosystem management elements described in the plan would largely remain unchanged. In limited circumstances, such as near Indiana bat hibernacula, the timing of activities may be altered, but the types and extent of activities conducted under the Forest Plan would not change. Because of the limited scope of this amendment, there would be very limited effects when considered at the forest scale to resources, other than wildlife resources. Except for the largely beneficial effects of the proposed changes for bat habitat, implementing this plan amendment would not result in environmental consequences beyond those already considered in the Forest Plan's Final Environmental Impact Statement or previous plan amendments.

Intensity

The intensity of effects was considered in terms of the following:

1. **Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that, on balance, the effect will be beneficial.** Consideration of the intensity of environmental effects is not biased by beneficial effects of the action. The analysis in the EA recognizes and discusses potential adverse effects of implementing the proposed changes. Potential adverse effects were shown to be possible but rare for the most likely to be affected species, the Indiana bat. The level of risk of injury or death to individual Indiana bats would increase, but the proposed changes would benefit the population as a whole (EA pages 20-24 and 26).
2. **The degree to which the proposed action affects public health or safety**. There will be no significant effects on public health and safety because the amendment is limited in scope to forest-wide standards, definitions, silvicultural prescription, and monitoring specific to bat conservation, population management, and monitoring (EA page 12).
3. **Unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** There will be no significant effects on unique characteristics of the area because the amendment is limited in scope to forest-wide standards, definitions, silvicultural prescription, and monitoring

specific to bat conservation, population management, and monitoring (EA pages 12-13).

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** The effects on the quality of the human environment are not likely to be highly controversial. There is no known credible scientific controversy over the impacts of the proposed action. The best available scientific literature was used to establish range, foraging habits and needs, habitat needs, known reasons for decline for Indiana bats, gray bats, Ozark big-eared bats, Northern long-eared bats, and other tree-roosting bats that occur on the Forests. In addition to scientific research, data collected directly from monitoring for bats over the past 20+ years was used to inform the proposed action and effects from the proposed action (EA pages 15-25).

5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The Agency has considerable experience with actions like the one proposed. The analysis shows the effects are not uncertain, and do not involve unique or unknown risks. The changes to the forest-wide standards, definitions, silvicultural prescription, and monitoring do not change the type and extent of current management activities being implemented from site-specific projects implementing the Forest Plan's direction. The only change for management activities will be to timing. Thus, there are no unknown risks associated with these changes (EA page 12).

6. **The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** The action is not likely to establish a precedent for future actions with significant effects, because all future projects proposing forest management actions to implement the amendment would undergo effects analysis and public involvement (EA page 12).

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** The cumulative impacts are not significant. This project does not authorize any particular, site-specific land management activity. The expected effects of reasonably foreseeable activities are generally beneficial or within the scope of previous analysis that have not found significant effects. Projects proposing implementation of the amended Forest Plan direction would be subject to site-specific analysis (EA pages 12, 14, 15, and 24).

8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed, or eligible for listing, in the National Register of Historic Places or may cause loss or destruction of significant**

scientific, cultural, or historical resources. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. The action will also not cause loss or destruction of significant scientific, cultural, or historical resources (EA page 12-13).

9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** The plan amendment is considered to have a "may affect, likely to adversely affect" determination for the Indiana bat under the Endangered Species Act of 1973, and consultation was reinitiated on the Forest Plan with this amendment. The potential effects of implementing the proposed changes on threatened and endangered species, including the Indiana bat, were analyzed in the EA and Biological Assessment. The analysis provided to the U.S. Fish and Wildlife Service in the Biological Assessment recognized potential adverse effects on Indiana bat individuals, while generally benefiting their overall populations through higher quality habitat and more targeted protections. The U.S. Fish and Wildlife Service concluded in a Biological Opinion that the potential effects would not jeopardize the continued existence of listed species, including the Indiana bat. The Biological Opinion also authorized unintentional take of individual Indiana bats through forest management activities.

10. **Whether the action threatens to violate Federal, State, or local law or requirements imposed for the protection of the environment**. The changes to the Forest Plan will not violate Federal, State, and local laws or requirements for the protection of the environment (DN pages 7-12).

After considering the effects of the actions analyzed, in terms of context and intensity, I have determined that these actions will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

CONTACT

For additional information concerning this decision, contact: Janine Book, Environmental Coordinator, Supervisor's Office, 605 W. Main St., Russellville, AR, 72801, janine.book@usda.gov, (479) 964-7282.

Lori D Wood 3/17/2021

LORI D. WOOD Date

Forest Supervisor, Ozark-St. Francis National Forests

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Ozark-St. Francis National Forests
Revised Land and Resource Management Plan

Amendment #5
Forest Plan Amendment for Bat Conservation

Amendment #5 amends the Ozark-St. Francis National Forests' Revised Land and Resource Management Plan (RLRMP) to address needs related to bat conservation. Monitoring data and results for threatened, endangered, and sensitive bats for the RLRMP, in addition to new scientific literature concerning bats, indicated a need to amend the RLRMP. The changes to the RLRMP were identified through collaboration with U.S. Fish and Wildlife Service, Southern Research Station, and other partners. The amendment to the Forest-Wide Standards and Silvicultural Prescriptions in the RLRMP will provide for better management of bat habitat and protection of bats across the Forests. The RLRMP is amended as follows:

Forest-Wide Standards

On page 3-8 replace the text for FW48 with:

FW48 Optimal overstory density within the secondary zone around Indiana bat hibernacula is a range of 50 to 70 percent canopy closure. Use timber harvest, non-commercial thinning, and prescribed fire as needed to regulate and maintain this optimal density.

During normal order of entry for compartments within Indiana bat secondary conservation zones, do landscape scale analysis of existing forest stand conditions. This analysis should be used to determine commercial and non-commercial treatments needed to shift percent canopy closure toward the optimal overstory density. The long-term goal of treatments is to adjust canopy closure so that 80 to 90 percent of the secondary conservation zone is within the 50 to 70 percent canopy closure range. This will not be fully accomplished during this planning period. Annually report canopy cover adjustments accomplished with commercial and non-commercial treatments within Indiana bat conservation zones to the Arkansas Field Office, U.S. Fish and Wildlife Service (USFWS).

When designating trees to be cut to regulate overstory density, two approaches are recommended for equating canopy density to target leave basal area. A simple rule of thumb is to use site index minus 10 as the target leave basal area. Another option is the use of canopy density/basal area conversion charts defined by tree diameter classes.

On page 3-9 replace the text for FW52 with:

FW52 Prescribed burn plans for areas containing caves or for areas near significant caves or mines will identify these sites as smoke sensitive targets. The

prescribed burn plans will be written to minimize active combustion and smoldering phase smoke from entering these sites when bats are present.

On page 3-10 replace the text for FW64, FW66, FW67, and FW69 with:

FW64 All activities proposed within primary Indiana bat conservation zones will be coordinated with the USFWS and conservation and recovery of the Indiana bat will be the management priority for those actions.

FW66 Cutting of potential Indiana bat roost trees (trees three inches or greater diameter at breast height) is restricted from August 15 to November 30 in primary Indiana bat conservation zones and in Indiana bat priority roosting zones for caves with fall swarming Indiana bats. Cutting of potential Indiana bat roost trees as described above is also restricted from March 1 to April 30 in the primary Indiana bat conservation zones for caves with hibernating Indiana bats. Indiana bat priority roosting zones are mapped in coordination with USFWS based on habitat quality and bat use patterns around caves with the intent of protecting core use areas encompassing a minimum of 100 acres per Indiana bat hibernaculum. Management activities within the priority roosting zones would emphasize Indiana bat roosting habitat and ensure a continual supply of quality roosting trees.

~~FW67 Tree cutting and salvage operations can occur between December 1 and March 15 without a site-specific inventory. Additional coordination with USFWS is not required.~~ – this standard is deleted.

FW69 Live trees, snags, buildings, and other structures known to have been used as roosts by Indiana bats and female northern long-eared bats are protected from cutting and/or intentional modification until they are no longer suitable as a roosting structure (trees no longer standing) unless their cutting or modification is needed to protect public or employee safety. Where roost tree cutting or modification is deemed necessary, it must be coordinated with the USFWS. Prescribed burns may proceed without special protection for roost trees except for active Indiana bat maternity trees.

On page 3-11 replace the text for FW71 with:

FW71 Protections are established around gray bat maternity and hibernation colony sites and Ozark big-eared bat maternity sites, bachelor sites, and winter colony sites. Cutting of overstory vegetation is prohibited within a 200-foot buffer around these sites. Within ¼ mile of the sites, there will be no new permanent development, such as construction of roads, trails, wildlife openings, pastures or special use right of ways unless required to access private property. Exceptions may be made where coordination with USFWS determines these activities to be compatible with recovery of these species.

On page 3-11 add FW163 under FW71:

FW163 If Indiana bat maternity trees are discovered within the Forests, those trees and other trees used by the colony would be protected. No tree falling would occur within 150 feet of known maternity trees unless their cutting or modification is needed to protect public or employee safety. Where tree cutting or modification

is deemed necessary within this area, it must be coordinated with the USFWS. Prior to prescribed fire, fuels would be removed from around known maternity trees to prevent damage during the burn. During the maternity period (April 1 to August 15), activities that may disturb the colonies, such as timber harvest, use of heavy equipment, and prescribed fire would be prohibited in an area approximately ¼ mile from known maternity roost trees. Variation in the buffer distance would be coordinated with USFWS and may include type of activity or topography that would shield the maternity site from the disturbance. Efforts would be made to determine the location of roost trees used by the colony prior to proceeding with forest management in the vicinity of the colony. If it is determined with USFWS that the colony has abandoned the site, the protections are no longer required except to maintain known roost trees, as per revised FW69.

Appendix A – Definitions

On page A-14, add the following definition between mast tree and mechanical site preparation:

Maternity tree – A live tree or snag used as a roost by a pregnant or lactating female bat or bat pups. Use by a female during the maternity season, even without evidence of reproductive status, will be assumed maternity use.

On page A-23, add the following definition between rollover and rotation:

Roost tree – A live tree or snag used as a day roosting structure by one or more bats.

Appendix F – Silviculture Prescription Descriptions

On pages F-8 to F-9, replace the description for 110 Indiana Bat with:

110 Indiana Bat – The purpose of this prescription is to maintain or enhance habitat for Indiana bats. Follow guidelines set forth in Forest-Wide Standards 33, 47, 48, 68, 69, and 70 for Indiana Bat management. Manage the diverse landscapes within the Indiana bat conservation zones with Silviculture Prescriptions 103, 104, 106, 113, or 114. Thin to maintain target canopy closure and regenerate stands using harvest methods with leave tree reserves, retaining overstory trees to provide high-quality roost trees over time. If needed, girdle select leave trees to maintain sufficient high-quality roost trees. Manage prescribed burning intervals to reduce mid-story clutter and promote groundcover to improve bat foraging conditions; some longer intervals may be needed to promote natural regeneration to attain desired tree composition, spacing and canopy closure. Management of rare habitats, such as glades and cane breaks within Indiana bat conservation zones, require specialized management strategies not described in the silvicultural prescriptions.

Appendix I – Monitoring: Table I-2 Monitoring Summary Table Mandatory Items

On page I-3, add this to Table 1-2: Monitoring Summary Table Mandatory Items:

Resource Area	Monitoring Need	Measurement Frequency	Reporting Frequency	Precision and Reliability
Wildlife	Threatened, Endangered, and Sensitive bat populations and habitat utilization are monitored. Long-term population trends, species distributions and habitat use patterns are monitored to inform management strategies.	Annual	2 years	High

The documentation for this amendment to the RLRMP is in the Decision Notice and Environmental Assessment for the Forest Plan Amendment for Bat Conservation project. This amendment to the RLRMP becomes effective upon the signature below accompanied by posting on the Forests' website. This amendment to the RLRMP will remain in effect until a revision of the 2005 RLRMP is made.

Lori D Wood 3/17/2021

LORI D. WOOD Date

Forest Supervisor, Ozark-St. Francis National Forests