

Draft Compatibility Determination

Title

Draft Compatibility Determination for Research, Little River National Wildlife Refuge.

Refuge Use Category

Research and Surveys

Refuge Use Type(s)

Research, Scientific Collecting, Surveys

Refuge

Little River National Wildlife Refuge

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

Little River National Wildlife Refuge was established to preserve the bottomland hardwood forests for migratory birds and waterfowl on the Central Flyway. The 14,216-acre refuge was established in 1987 as the nation's 438th refuge and protects one of the largest remaining areas of bottomland hardwood forests found in Oklahoma.

Little River NWR's purposes include:

- " ... an inviolate sanctuary, or any other management purpose, for migratory birds" (16 USC 715d)
- " ... the conservation of ... wetlands ... and to help fulfill international obligations contained in various migratory bird treaties and conventions."(16 USC 3901 (b))
- " .. for the development, advancement, management, conservation, and protection of fish and wildlife resources ... " (16 USC 742 (b)(1))

Oklahoma House Joint Resolution #1046, which approved the establishment of the refuge, further indicated that the purpose of the refuge was for:

- " ... preservation of bottom/and hardwood habitat for migratory waterfowl, particularly mallards and wood ducks." (House Joint Resolution #1046, signed by Oklahoma's Governor George Nigh, March 31, 1986)

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as the Refuge System, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant

resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

No.

What is the use?

Research. Planned, organized, and systematic investigation of a scientific nature conducted by non-FWS (Fish and Wildlife Service) personnel or authorized agent.

Scientific collecting. Gathering of refuge natural resources or cultural artifacts for scientific purposes conducted by non-FWS personnel or authorized agent.

Surveys. Scientific inventory or monitoring conducted by non-FWS personnel or authorized agent.

Scientific research is an appropriate use when found to benefit the refuge. Scientific research includes collecting, surveys and inventories and is conducted by outside entities, other than the Service, throughout the year in accordance with refuge regulations, goals, and objectives. The use involves collection of information that is used for analysis and reporting, and often entails collection of plant, animal, soil, rock, water, or air samples from the refuge. All proposed scientific research is evaluated on a case-by-case basis before approval is granted to ensure compatibility. This activity is not a priority public use of the Refuge System, so it requires a Special Use Permit (SUP) and, depending upon the project, other appropriate permits (e.g. Endangered Species Act compliance, state and federal collection permits, Wilderness Act compliance, etc.) may be necessary.

Requests for SUPs for research will be considered on a case-by-case basis, as staff availability allows. In accordance with 16 U.S.C. 668dd(d) and 50 C.F.R. Part 25, Subpart D, the refuge manager, or their designee is responsible for reviewing applications for SUPs and determining whether to authorize a permit.

The refuge manager will base the decision to issue a SUP for research on their professional judgment and the value of the proposed research. The decision to allow a particular research project will also be consistent with Service regulations and policy, including the Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the Refuge System (601 FW 3). The results of the research should result in better knowledge of our natural resources and improve methods to manage, monitor, and protect the refuge's biological resources and public uses.

Is the use a priority public use?

No

Where would the use be conducted?

The location of the research will vary depending on the individual research project that is being conducted. The entire refuge may be considered in a permit request for scientific research; however, biological research projects are usually focused on a particular habitat type, plant species, or wildlife species. Occasionally, research projects will encompass an assemblage of habitat types, plants, or wildlife, or may span more than one refuge or include lands outside the Refuge System. The research location will also be limited only to those areas of the refuge that are necessary to conduct the research project and access the research location. The refuge may limit areas available to research as necessary to ensure the protection of trust resources or reduce conflict with other compatible refuge uses. Access to study locations will be identified by refuge staff.

When would the use be conducted?

The timing of the research will depend on the individual research project's approved design. Research may occur on the refuge throughout the year when there are no conflicts with protection of trust resources or primary public use activities. Special precautions will be required and enforced to ensure the researchers' health and safety and to minimize or eliminate potential conflicts with a priority public use. An individual research project could be short term in design, requiring one or two visits over the course of a few days. Other research projects could be multiple year studies that require daily visits to the study site. The timing of each individual research project will be limited to the minimum required to complete the project.

How would the use be conducted?

Research methods will depend entirely on the individual research project that is conducted. The methods of each research project will be reviewed and scrutinized before it will be allowed to occur on the refuge.

A Research and Monitoring Special Use Application and detailed research proposal will be required from parties interested in conducting research on the refuge. Each request for this use will be considered, and if appropriate, will be issued a SUP by the refuge manager. Each request will be evaluated on its own merit. The refuge manager will use sound professional judgment and ensure that the request will have no considerable negative impacts to natural resources, cultural resources, or visitor services and does not violate refuge regulations. Special needs will be considered on a case-by-case basis and are subject to the refuge manager's approval. Any approved SUP will outline the framework in which the use can be conducted, and refuge staff

will ensure compliance with the permit.

The SUP will provide any needed protection to individual refuge policies, mission, wildlife populations and natural habitats. In addition, all research projects require the primary investigator to submit written summary reports of all findings and acknowledge the refuge's participation.

Once approved, projects will be reviewed annually to ensure that they are meeting their intended purposes, reporting and communicating with refuge staff, and are fulfilling the mission of the Refuge System and purposes for which the refuge was established. If the refuge manager decides to deny, modify, or halt a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The denial or modification of an existing study will generally be based on evidence that the details of a particular research project may:

- Negatively affect native fish, wildlife, and habitats or cultural, archaeological, or historical resources,
- Detract from fulfilling the refuge's purposes or conflict with refuge goals and objectives,
- Raise public health or safety concerns,
- Conflict with other compatible refuge uses,
- Not be manageable within the refuge's available staff or budget time,
- Deviate from the approved study proposal such that impacts to refuge resources are more severe or extensive than originally anticipated.

Why is this use being proposed or reevaluated?

FWS encourages research that enhances scientific innovation, planning, coordination, communication and the effective use of science for management decisions. The following criteria are used to assess research proposals:

- The information gained from the research must aid in the enhancement of species, habitat, or population management and increase understanding of refuge resources.
- The purpose of the research must align with refuge goals and objectives and be compatible with Service policy.
- Research methods, techniques, tools, and equipment must be appropriate and adhere to a high standard of ethics.

A research SUP application consists of a letter of request, a study proposal, and the SUP application which can be accessed at:

<http://www.fws.gov/refuges/visitors/permits.html>. These should be submitted to the Refuge Manager at least 30 days prior to the beginning of proposed fieldwork. Proposals will be reviewed by refuge staff, and, if needed, other experts on the specific subject. The SUP outlines deliverables (e.g. annual report) and specific conditions on the allowable timing, location, and methods of scientific research. They are valid for up to one calendar year, renewable for up to three years.

The refuge will also consider research for other purposes which may not be directly related to refuge-specific objectives, but contribute to the broader enhancement, protection, use, preservation, and management of native populations of fish, wildlife, and plants, and their natural diversity within the region or flyway. Prospective researchers or organizations can talk to the refuge manager or biologist about specific research needs.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Refuge support of research directly related to refuge objectives may take the form of funding, direct staff assistance with the project in the form of data collection, provision of historical records, conducting management treatments, or other assistance as appropriate. There is currently enough funding and staff available to allow limited research opportunities. Capacity would need to be re-evaluated if research requests increase.

One-time costs: 12 hours of staff time

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. Maintenance costs: Maintenance costs are expected to be negligible from this use on the refuge. There are no expected increased costs to maintaining refuge infrastructure outside normal use of roads and other developed areas.

2. Annual Operations: The bulk of the cost for research is incurred in staff time to review research proposals, coordinate with researchers, and write special use permits. In some cases, a research project may only require 1 day of staff time to write a special use permit. In other cases, a research project may take an accumulation of weeks, as the refuge staff must coordinate with the principal researcher and accompany them during site visits. Because research conducted on the refuge is not constant, there may be fiscal years when little if any refuge staff time is spent on managing outside research projects.

3. Monitoring costs: Determined by size and scope of research requested.

Anticipated Impacts of the Use

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This CD includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an “affected resource.”

Short-term impacts

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause birds to flush from resting and feeding areas, cause disruption of birds on nests or breeding territories, or increase predation on nests and individual animals as predators follow human scent or trails. Efforts to capture animals, such as for migratory bird banding, can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance.

Sampling activities associated with many types of research activities can cause compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment in open water may present a hazard if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

The potential for research conducted on the refuge to conflict with refuge management activities and visitor use on the refuge is minimal. Research would be scheduled to minimize conflict with refuge management activities. Visitors may encounter researchers in the field or observe monitoring plots or other research infrastructure. However, these encounters will be infrequent.

Long-term impacts

Long-term effects should generally be beneficial by gaining information valuable to refuge management. No long-term negative impacts are expected from the research activities described. The refuge manager can reduce the likelihood of long-term impacts by denying special use permits for research that is likely to cause long-term, adverse impacts. Project-specific stipulations outlined in each special use permit will act to minimize anticipated impacts of research projects. These stipulations will prevent impacts to refuge wetlands, water quality, soils, hydrology, fish, wildlife, habitat, or cultural resources.

Permits for multi-year research projects are renewed annually, providing the opportunity for an analysis of any impacts before renewing the special use permit.

Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time or if the duration of the research was excessive. In particular, the refuge must consider the potential impacts of non-Service research, in conjunction with any Service-sponsored research or management activity also taking place. However, no cumulative impacts are expected because the refuge manager can control the potential for cumulative impacts through SUPs, prohibiting multiple research projects from affecting any given area or species at one time.

Public Review and Comment

This compatibility determination was available for public review and comment from October 6 to 20, 2023. A public notice was distributed through local media outlets and the refuge website. Concerns expressed during the public comment period will be addressed in the final.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

Refuge staff will monitor all research being conducted on the refuge. Findings from these monitoring efforts will be used to determine what additional management actions, if any, are needed to ensure that research activities remain compatible with refuge purposes. Monitoring of all authorized research activities will continue to ensure compliance with specific terms and conditions tailored for each research project permit as well as with the following general conditions that are incorporated into all research SUPs to minimize impacts on refuge lands and resources.

- The permittee is responsible for obtaining appropriate state and federal permits.
- The permittee will conduct scientific and scholarly activities as defined in Department of the Interior policy 305 DM 3, Integrity of Scientific and Scholarly Activities that are intended for use in Service decision-making processes and/or publications. Acceptance of a SUP carries with it the responsibility to be aware of and follow the Code of Scientific and Scholarly Conduct described in 305 DM 3, Section 3.7 to the best of your ability.
- The permittee is responsible for ensuring that all employees, party members, and any other persons working for the permittee and conducting activities allowed by this permit are familiar with and adhere to the conditions of this

permit.

- A copy of this permit must be in the permittee's or field party chief's possession at all times while exercising the privileges of this permit.
- Any problems with wildlife and/or animals taken in defense of life or property must be reported immediately to the Refuge Manager. Animals taken in defense of life or property must be salvaged in accordance with state regulations.
- The permittee does not have the exclusive use of the site(s) or lands covered by the SUP.
- The SUP may be canceled or revised at any time by the Refuge Manager in case of emergency (e.g., high fire danger, flooding, unusual resource problems etc.).
- Off-road vehicles must be licensed for road use and are not permitted to be driven off designated, public roads.
- Prior to beginning any activities allowed by the SUP, the permittee shall provide the Refuge Manager with the following: (1) name and method of contact for the field party chief or supervisor; vehicle types to be used, identification information for these vehicles; and names of assistants; (2) any changes in information provided in the original permit application.
- Failure to abide by any part of a SUP; violation of any refuge-related provision in Titles 43 (Part 36) or 50(sub-chapters B and C), Code of Federal Regulations; or violation of any pertinent state regulation (e.g., fish or game violation) will, with due process, be considered grounds for revocation of this permit and could result in denial of future permit requests for lands administered by the Service. This provision applies to all persons working under the authority of this permit. Appeals of decisions relative to permits are handled in accordance with Title 50 Code of Federal Regulations Part 36.41.

Current and future research will be evaluated on a case-by-case basis to determine if the project supports refuge and Service goals and if the project will be beneficial to refuge purposes. Project-specific stipulations (Special Conditions) will be defined in individual SUPs.

Justification

Use of the refuge to conduct research, scientific collecting, and surveys will generally provide information that would benefit fish, wildlife, plants and their habitats because they will expand scientific information available for resource management decisions. Scientific findings gained through these projects provide important information regarding life-history needs of species and species groups as well as identify or refine management actions to achieve resource management objectives in refuge management plans. Reducing uncertainty regarding wildlife and habitat responses to

refuge management actions to achieve desired outcomes reflected in resource management objectives is essential for adaptive management in accordance with 522 DM 1.

We have determined that the benefit received from information gathered from scientific research outweighs minor short-term adverse impacts. This activity will not conflict with any of the priority public uses or adversely affect biological resources. Therefore, through the compatibility determination process, the Little River NWR has determined that scientific research, in accordance with the stipulations provided above will not materially interfere with or detract from the fulfillment of the mission of the Refuge System or the purposes of the refuge.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

2033