# Compatibility Determination for Research and Surveys, Lacreek National Wildlife Refuge

### Refuge Use Category

Research and Surveys

# Refuge Use Type(s)

Research, Scientific Collecting and Surveys

### Refuge

Lacreek National Wildlife Refuge

### Refuge Purposes and Establishing and Acquisition Authorities

"....as a refuge and breeding ground for migratory birds and other wildlife." (Executive Order No. 7160, dated 1935)

"...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." (Migratory Bird Conservation Act, February 18, 1929)

"...for any other management purposes, for migratory birds." (Migratory Bird Conservation Act 16 U.S.C. 715d)

"... for conservation purposes." (Consolidated Farm and Rural Development Act 7 U.S.C. 1924)

### National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as 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?

Yes. This compatibility determination reviews and replaces the 2006 compatibility determination for the Lacreek National Wildlife Refuge CCP signed February 23, 2006.

#### What is the use?

The Refuge allows scientific research on a variety of biological, physical, and social issues to inform Refuge management and address broader conservation related questions. Studies are conducted by federal, state, and private entities, including the U.S. Geological Survey, universities, and non-governmental organizations. Research study sites may be located throughout the Refuge, and research may be conducted throughout the year. Access to study sites is by foot, truck, UTV/ATV, boat, and canoe as deemed appropriate by Refuge management. Research may also include aerial activities to assess vegetation or wildlife. Research may include limited collection of plant materials and capture/handling of animals.

Is the use a priority public use?

No

Where would the use be conducted?

No area of the Refuge is presently closed to the public or to this use. Refuge management reserves the right to limit access for this use based on professional judgment.

Habitat types may include wetlands, wetland meadows, uplands and sandhills. Key wildlife species include sandhill cranes, trumpeter swans, Bald eagles, black-tailed prairie dogs and burrowing owls. Plant species include bulrushes, wild rice, smartweed, arrowhead, Maximillian and Nuttall's sunflowers, goldenrods, cordgrass, Canada bluejoint, and big bluestem, Nebraska sedge, several species of willows and indigo bush.

#### When would the use be conducted?

The Refuge is open to this public use dawn to dusk, every day, unless otherwise posted or restricted. Refuge management reserves the right to limit access for this use based on professional judgment.

#### How would the use be conducted?

Research study sites may be located throughout the Refuge, and research may be conducted throughout the year. Access to study sites is by foot, truck, UTV/ATV,

boat, and canoe as deemed appropriate by Refuge management. Research may also include aerial activities to assess vegetation or wildlife. Research may include limited collection of plant materials and capture/handling of animals.

A bunkhouse for lodging may be open contingent upon availability. There are four vault toilets, camp sites and one boat ramp located at the Little White River Recreation Area. Camping is primitive and allowed throughout the entire LWRRA. No reservations or costs are needed for any of these uses. There are no trash receptacles, and all trash is to be packed out with the users. Manual powered boats may be pulled to open bodies of water from vehicle-accessible roads and parking lots. There are restrooms open 24 hours a day at the Visitor Center on Bird Road.

A special use permit is required.

#### Why is this use being proposed or reevaluated?

Research is not a priority public use under the National Wildlife Refuge System Improvement Act, however, this activity could contribute to the priority public uses of the Refuge and the public's understanding of America's wildlife, wildlife conservation, and the Service's role in managing and protecting natural resources.

Research involving partners is a listed goal in the Refuge's 2006 CCP: "Engage a wide range of partners, including nongovernmental organizations and federal, state, tribal, and local entities to join with Lacreek NWR Complex to support research and management, promote awareness, and foster appreciation for the Lake Creek Valley, Nebraska Sandhills, and surrounding grasslands."

The Refuge provides unique research opportunities on public land with varied landscapes, habitats and wildlife that is not found in the greater local area. The greater local area is a rural and agricultural region that is largely privately owned.

### Availability of Resources

Currently, existing staff resources are adequate to manage this use at anticipated levels. Staff time primarily involves phone conversations, written correspondence, proposal review, and interaction with researchers and potentially affected public uses. Field work associated with administering the program primarily involves monitoring researchers' compliance with the terms of the permit. Additional facilities (e.g., boat ramps, storage areas) or additional maintenance activities will not be necessary to support the use. Access points, boats, other vehicles, miscellaneous equipment, and limited logistical support may be made available at the discretion of the Refuge Manager.

# Anticipated Impacts of the Use

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

Impacts to the public will be minimal due to the low volume of research requests and number of Refuge visitors. Areas may be restricted as necessary to avoid impacting public uses such as hunting.

### Short-term impacts

Scientific research may temporarily disturb fish, wildlife, and habitats. Sampling activities may cause temporary compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment may present a hazard to visitors if such items are not adequately marked and/or removed. Overall impacts to habitat and wildlife are anticipated to be minor and temporary in nature. These impacts are not anticipated to be cumulative over time.

### Long-term impacts

No long-term impacts are anticipated in accordance with specific stipulations.

# **Public Review and Comment**

# Determination

### Is the use compatible?

Yes

# Stipulations Necessary to Ensure Compatibility

- 1. Research applicants will submit proposals that outline the following: objectives of the study; justification for the study; detailed methodology and schedule; potential effects on refuge wildlife and habitat, including short-and long-term disturbance, injury, or mortality; personnel required; costs to the refuge, if any; end products such as reports and publications
- 2. Priority will be given to research proposals that support a refuge's purposes, goals, and objectives. This includes, for example, studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitats.
- 3. Refuge staff and others will review research proposals as appropriate.

Evaluation criteria include, but are not limited to the following:

- Research that will contribute to priority management activities may have higher priority than other requests.
- The Refuge may not grant research permits that will conflict with higher priority research, monitoring, or management.
- The Refuge will be less likely to approve research projects that can be done off-site.
- The Refuge will likely not grant research that causes undue disturbance or is intrusive; the Service will weigh the level and type of disturbance when evaluating a request.
- The Refuge will determine if any effort has been made to minimize disturbance through study design, including considering adjusting location, timing, scope, number of permittees, study methods, and number of study sites.
- The Refuge may deny a proposal when it is impossible for Refuge staff to monitor researcher activity.
- The Refuge will consider and agree with the length of the project before approval. Projects will not be open-ended.
- 4. Prior to conducting investigations, researchers will obtain a special use permit from the Refuge that contains specific stipulations related to the research activity.
- 5. The permittee is responsible for ensuring all persons working under the authority of the special use permit are familiar with and adhere to the conditions of the special use permit
- 6. The permittee must possess all necessary state, federal and local permits
- 7. The use of off-road vehicles is prohibited unless specifically authorized in the special use permit.
- In accordance with the Archaeological Resources Protection Act (16 U.S.C. 470aa), the removal or disturbance of archaeological or historical artifacts is prohibited. The excavation, disturbance, collection, or purchase of historical, ethnological, or archaeological specimens or artifacts is prohibited.
- 9. Researchers must clearly mark posts, equipment platforms, fencing material, and other equipment left unattended to reduce the hazard. Such items shall be removed promptly upon completion of the research.
- 10. Research involving collection of plant material or capture of animals will require

approval by the Refuge Manager.

#### Justification

Investigations into the biological, physical, archaeological, and social components of the Refuge provide a means to analyze management actions and gain a better understanding of the Refuge environment. Adverse impacts of research that cause localized vegetation trampling or disruption of upland or wetland soils and bottom sediments are generally short-term and will be minimized through stipulations in a special use permit. When conducted as outlined in this compatibility determination, research and investigations contribute to meeting Refuge purposes and the mission of the National Wildlife Refuge System. The stipulations outlined above would help ensure that the use is compatible at Lacreek National Wildlife Refuge. Research, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that Research at Lacreek National Wildlife Refuge, in accordance with the stipulations provided here, would not materially interfere with, or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the Lacreek National Wildlife Refuge. Rather, the appropriate and compatible use of Research would be the use of the Lacreek National Wildlife Refuge through which the public can develop an appreciation for wildlife and wild lands.