

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River National Wildlife Refuge

Use: Forest Products Harvesting

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | X | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | X | |
| (c) Is the use consistent with applicable executive orders and Department and Service policies? | X | |
| (d) Is the use consistent with public safety? | X | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | X | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | X | |
| (g) Is the use manageable within available budget and staff? | X | |
| (h) Will this be manageable in the future within existing resources? | X | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | X | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | X | |

Where we do not have jurisdiction over the use ["no" to (a)], there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ["no" to (b), (c), or (d)] may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes X No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate Appropriate X

Refuge Manager: *Signed* Date: 12/1/09

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence. If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: *Signed* Date: 12/3/09

A compatibility determination is required before the use may be allowed.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River National Wildlife Refuge

Use: Commercial Fishing

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | X | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | X | |
| (c) Is the use consistent with applicable executive orders and Department and Service policies? | X | |
| (d) Is the use consistent with public safety? | X | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | X | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | X | |
| (g) Is the use manageable within available budget and staff? | X | |
| (h) Will this be manageable in the future within existing resources? | X | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | X | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | X | |

Where we do not have jurisdiction over the use ["no" to (a)], there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ["no" to (b), (c), or (d)] may not be found appropriate. If the answer is "no" to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes X No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate X

Refuge Manager:

Signed

Date: 12/1/09

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence. If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor:

Signed

Date: 12/3/09

A compatibility determination is required before the use may be allowed.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River National Wildlife Refuge

Use: Nuisance Animal Control

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | X | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | X | |
| (c) Is the use consistent with applicable executive orders and Department and Service policies? | X | |
| (d) Is the use consistent with public safety? | X | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | X | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | X | |
| (g) Is the use manageable within available budget and staff? | X | |
| (h) Will this be manageable in the future within existing resources? | X | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | X | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | X | |

Where we do not have jurisdiction over the use ["no" to (a)], there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ["no" to (b), (c), or (d)] may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes X No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate X

Refuge Manager: Signed : _____ Date: 12/1/09

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence. If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: Signed : _____ Date: 12/3/09

A compatibility determination is required before the use may be allowed.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River National Wildlife Refuge

Use: Camping and Houseboats

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | X | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | X | |
| (c) Is the use consistent with applicable executive orders and Department and Service policies? | X | |
| (d) Is the use consistent with public safety? | X | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | | X |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | | X |
| (g) Is the use manageable within available budget and staff? | | X |
| (h) Will this be manageable in the future within existing resources? | | X |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | | X |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | | X |

Where we do not have jurisdiction over the use ["no" to (a)], there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ["no" to (b), (c), or (d)] may not be found appropriate. If the answer is "no" to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes X No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate X Appropriate

Refuge Manager: **Signed** Date: 12/1/09

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence. If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: **Signed** Date: 12/3/09

A compatibility determination is required before the use may be allowed.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Wapanocca National Wildlife Refuge

Use: Commercial Fishing

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | X | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | X | |
| (c) Is the use consistent with applicable executive orders and Department and Service policies? | X | |
| (d) Is the use consistent with public safety? | X | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | X | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | X | |
| (g) Is the use manageable within available budget and staff? | X | |
| (h) Will this be manageable in the future within existing resources? | X | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | X | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | X | |

Where we do not have jurisdiction over the use ["no" to (a)], there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ["no" to (b), (c), or (d)] may not be found appropriate. If the answer is "no" to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes X No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate X

Refuge Manager: **Signed** Date: 12/1/09

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use. If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence. If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: **Signed** Date: 12/2/09

A compatibility determination is required before the use may be allowed.

Justifications for Findings of Appropriateness

NOTE: These justification statements apply to the respective Findings of Appropriateness for each refuge where that particular use is proposed.

1. Research and Monitoring

Justification: Sound research and monitoring programs provide a better understanding of species, habitats, and the environmental communities present on the refuge. Additional research and monitoring is needed to assess management programs used on the refuge and evaluate alternative options. The benefit of additional knowledge would greatly outweigh any short-term disturbance or loss of individual plants or animals that may occur. This activity would provide guidance to management for fulfilling refuge purposes and meeting established goals and objectives through adaptive management.

2. Forest Products Harvesting

Justification: This use would be conducted in accordance with the approved Forest Habitat Management Plan and Annual Habitat Work Plans. This use is a management economic activity that would facilitate the primary purposes of the refuge: to provide waterfowl and migratory habitat, and to conserve other migratory birds and wildlife. This use would meet the mission of the Refuge System by conserving fish, wildlife, and plant resources on these lands, and providing renewable resources for the benefit of the American public. Local economic benefits also would result from this use.

3. Commercial Guiding for Wildlife Observation and Photography

Justification: Commercial activities can be allowed on refuges when they do not conflict with the provisions of the Improvement Act and resulting policies and regulations. Special use permit conditions would provide adequate regulation of this specialized activity and quality wildlife observation and photography opportunities for all refuge visitors will be ensured. Commercial guiding for wildlife observation and photography would allow the visiting public additional opportunities to enjoy, experience, and learn about native wildlife and habitats in refuge environments.

4. Commercial Video and Photography

Justification: Commercial activities can be allowed on refuges when they do not conflict with the provisions of the Improvement Act and resulting policies and regulations. Commercial video and photography would result in products that may reach groups of people that do not normally know about or visit the refuge, such as elderly, handicapped, or urban youth groups. The services provided by commercial filmmakers would be beneficial to extend public appreciation and understanding of wildlife, natural habitats, and the mission of the Refuge System. Conditions imposed in the special use permit and issued to filmmakers would ensure that these wildlife-dependent activities can occur without adverse effects to refuge resources, or other visitors. The activity would be required to have a primary focus on education and information on refuge purposes and the Refuge System mission.

5. Cooperative Farming (Bald Knob/Cache River/Wapanocca NWRs)

Justification: The cooperative farming program is a management economic activity that is needed to provide productive and diverse habitat for wintering waterfowl, migrating shorebirds, wading birds, and other migrating birds in general. Without this program, the refuge could not meet high-priority management goals and objectives and would not adequately fulfill refuge purposes. The refuge lacks sufficient personnel, funds, and equipment required to farm the needed cropland by force account.

6. Nuisance Animal Control

Justification: This use is a management economic activity that would facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use would also meet the mission of the Refuge System by conserving fish, wildlife, and plant resources on these lands, and providing renewable resources for the benefit of the American public. One of the goals of the Refuge System and the refuge is to combat invasive, exotic, and injurious species for the benefit of trust resources. Some local economic benefit also would be derived from this use, which would be conducted under special use permit.

7. Commercial Fishing (Big Lake/Cache River/Wapanocca NWRs)

Justification: One of the primary objectives of the Refuge System is to remove exotics from refuges and to restore historic native populations. Removal of exotics and reducing native rough fish populations by commercial harvest is a long-utilized refuge management practice aimed at reducing the competition and adverse impacts to native species. Commercial fishing is a management economic activity utilized by refuge managers as a tool to achieve these objectives while additionally improving aquatic habitat and enhancing fishing opportunities for the enjoyment of the public. The use would be conducted under special use permit.

8. Furbearer Trapping (Cache River NWR only)

Justification: This use is a management economic activity that would aid the refuge in protecting valuable wildlife habitat and infrastructure, reducing risk of wildlife disease outbreaks, and reducing predation on trust species, particularly nesting migratory birds. Conducting this use in accordance with state trapping seasons and regulations and further restricting where necessary would ensure that no adverse impacts result from this activity. This use would be conducted under special use permit.

9. Replacement of Office Trailer and Expansion of Maintenance Shop (Bald Knob NWR only)

Justification: This project is not a new construction but a replacement of an existing structure utilizing an existing disturbed site. Expansion of the shop would occur on the existing building site. Work activities would have no or negligible environmental effects. This project would be completely funded through ARRA and would enable the refuge to better fulfill refuge purposes by facilitating habitat restoration, management, and conservation programs for trust species. Furthermore, the construction and operation of these facilities would promote compatible public uses, including environmental education and interpretation, that would serve to increase public awareness of the need for and value of Bald Knob NWR and the Refuge System, and garner support for refuge programs.

10. Replacement of Office/Shop Buildings (Big Lake and Wapanocca NWRs only)

Justification: This project is not new construction but a replacement of existing facilities utilizing existing disturbed sites. Work activities would have no or negligible environmental effects. This project is completely funded through ARRA and would enable the refuge to better fulfill refuge purposes by facilitating habitat restoration, management, and conservation programs for trust

species. Furthermore, the construction and operation of these facilities would promote compatible public uses, including environmental education and interpretation, that would serve to increase public awareness of the need for and value of the refuge and the Refuge System, and garner support for refuge programs.

11. Construction of an Environmental Education/Visitor Center (Cache River NWR only)

Justification: This use would enable the refuge to better achieve refuge purposes, vision, and goals by promoting compatible public uses, especially environmental education and interpretation, which would serve to increase public awareness of the need for and value of Cache River NWR, the Central Arkansas NWR Complex, the Refuge System, and the Service. Such awareness and appreciation by the public would promote support for refuge programs and the mission of the Refuge System and the Service.

The following Findings of Appropriateness were completed prior to the preparation of the CCP and are included herein for reference purposes only.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River NWR

Use: White River & Relief Strs. & Apprs. (AHTD Job # 110123)

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | ✓ | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | ✓ | |
| (c) Is the use consistent with applicable Executive orders and Department and Service policies? | ✓ | |
| (d) Is the use consistent with public safety? | ✓ | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | ✓ | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | ✓ | |
| (g) Is the use manageable within available budget and staff? | ✓ | |
| (h) Will this be manageable in the future within existing resources? | ✓ | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | ✓ | |
| (j) Can the use be accommodated without impairing existing wildlife dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | ✓ | |

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate

Refuge Manager: *Signed* Date: 03/10/08

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: *Signed* Date: 3/15/08

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

Appropriateness Justification – Cache River NWR

White River Relief Structures Approaches (AHTD Job # 1110123) – Clarendon, AR

The current Highway 79 corridor through White River and Cache River NWRs is functionally obsolete, unsafe, and in need of replacement. Arkansas Highway and Transportation Department (AHTD) will be applying to the Service for a ROW permit (easement) to reposition/realign the existing ROW and replace the existing bridges. No feasible alternative for re-routing the highway exists. Section 106 compliance and an EA/FONSI are complete. The AGFC has been consulted and supports the project. Execution of this use will be in compliance with 50 CFR 25, 26, and 29; and 340 FW 3 and 603 FW 2.

The project will benefit the refuges because the completed project will result in enhanced wildlife habitats and improved stream flow and overall hydrologic function resulting from habitat and site restoration work that is a stipulation of the project. The refuges will gain additional property at the project site due to property that will be acquired by AHTD from a private willing seller and deeded to the USA as part of the refuges. Additionally, the existing right-of-way (ROW) running through the refuges will be abandoned and habitat restoration will be accomplished by AHTD as part of this project. The ownership of the abandoned ROW will convert to the grantor, Monroe County, Arkansas, to then be deeded to the USA as part of the refuges. Additional property acquired by AHTD that will be necessary to properly effect habitat restoration at the project site will be managed by the Service via a memorandum of agreement (MOA) with AHTD. All these actions will ensure no net loss in function or value to the refuges as a result of this project. Furthermore, public access to the refuges will be enhanced due to improved highway safety, safer and more functional exits for vehicular access to refuge property, improved visitor parking, safer boat launches, and increased property on which to engage in priority public uses.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River NWR

Use: Bridge Replacement and minor expansion of existing ROW for safety

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | ✓ | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | ✓ | |
| (c) Is the use consistent with applicable Executive orders and Department and Service policies? | ✓ | |
| (d) Is the use consistent with public safety? | ✓ | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | ✓ | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | ✓ | |
| (g) Is the use manageable within available budget and staff? | ✓ | |
| (h) Will this be manageable in the future within existing resources? | ✓ | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | ✓ | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | ✓ | |

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will **generally** not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate

Refuge Manager: *Signed* Date: 03/03/08

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: *Signed* Date: 3/7/08

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

Appropriateness Justification – Cache River NWR

Bridge replacement and minor expansion of existing ROW for safety – Jackson County Road 51, near Amagon, Arkansas.

Existing wooden bridge spanning the Cache River on Jackson County Road 51 is in a deteriorated condition, constitutes a risk to public safety, and needs to be replaced. The existing roadway embankment floods on a regular basis and serves as a source of undesirable sediment input into the Cache River. Jackson County, Arkansas in conjunction with Arkansas Highway and Transportation Department (AHTD) will be applying for a ROW permit to replace the existing bridge and for minor expansion of existing ROW across Cache River NWR.

The proposed project would resolve critical safety concerns, would improve hydrologic conditions because it will double the elevated portion of roadway and provide more normal stream flows, restore about 0.25 acre of the Cache River floodplain, and divert agricultural runoff from the main channel of the Cache River. Additionally a by-product of the project will be the upgrading of an existing primitive dirt boat ramp at the site to a concrete high-water boat ramp (by the County) that will be used by Refuge visitors to conduct priority public uses. Approximately 1(+) acre of Cache River NWR will be required to accomplish this project. Provision of suitable replacement property would be one stipulation of a Compatibility Determination, the analysis for which will be undertaken should a Concurrence of Appropriateness be attained. The project will not result in increased burden on Refuge financial or staff resources and will be manageable given expected budget and staff levels.

Arkansas Game and Fish Commission has been consulted and has no objections to the project at this time. A clearance by Arkansas has been SHPO obtained by AHTD. The Federal Highway Administration is in the process of preparing a *de minimus* 4 (f) evaluation. Execution of this use will be in compliance with 50 *CFR* 25, 26, and 29; and 340 *FW* 3 and 603 *FW* 2.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Cache River NWR

Use: Relocation of 4" gas distribution pipeline under Cache River

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | ✓ | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | ✓ | |
| (c) Is the use consistent with applicable Executive orders and Department and Service policies? | ✓ | |
| (d) Is the use consistent with public safety? | ✓ | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | ✓ | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | ✓ | |
| (g) Is the use manageable within available budget and staff? | ✓ | |
| (h) Will this be manageable in the future within existing resources? | ✓ | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | ✓ | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | ✓ | |

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate

Refuge Manager: [Signature]

Signed

Date: 10/07/08

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: [Signature]

Signed

Date: 10/21/08

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

Appropriateness Justification

CenterPoint Energy gas pipeline relocation to accommodate the Arkansas Highway and Transportation Department Jackson County Road 51 bridge replacement near Amagon, Arkansas.

CenterPoint Energy proposes to relocate approximately 850 feet of 4-inch-diameter below ground, plastic natural gas distribution pipeline, which provides services to local residential and commercial clients, to accommodate the Arkansas Highway and Transportation Department's (AHTD) construction of a new bridge over the Cache River located on Jackson County Road 51. The existing bridge is considered functionally obsolete by the AHTD and represents a danger to public safety. CenterPoint Energy's pipeline relocation activities are necessary to accommodate construction of the new bridge. The proposed relocation is necessary because the existing gas pipeline is located where the new bridge's structure footing will be placed.

The existing pipeline will be abandoned in place and new pipe will be installed 24 feet east and installed under the Cache River by using a low-impact pipeline installation technique, the Horizontal Direction Drill (HDD) Method. This installation method minimizes disturbances at the surface and below-ground. The total project ground disturbance will be approximately 0.003 acre. All surface disturbances will be temporary in nature, the temporary workspace areas will be restored to pre-construction conditions, and no permanent surface impacts will occur as a result of the proposed project.

CenterPoint Energy is in the process of applying for a right-of-way permit from the U.S. Fish and Wildlife Service to relocate the existing natural gas distribution pipeline across Cache River NWR. An application fee will be assessed, a Compatibility Determination will be prepared, NEPA compliance will be satisfied, an Intra-Service Section 7 consultation will be conducted, and Arkansas Game and Fish Commission, State Historic Preservation Office, and Native-American tribes will be consulted and provided the opportunity for review and comment. Execution of this use will be in compliance with 50 *CFR* 25, 26, and 29; and 340 *FW* 3 and 603 *FW* 2. The proposed use will not result in increased burden on Refuge financial or staff resources and will be manageable given expected budget and staff levels.

FINDING OF APPROPRIATENESS OF A REFUGE USE

Refuge Name: Big Lake NWR

Use: Improvements to Highway 18

This form is not required for wildlife-dependent recreational uses, take regulated by the State, or uses already described in a refuge CCP or step-down management plan approved after October 9, 1997.

| Decision Criteria: | YES | NO |
|--|-----|----|
| (a) Do we have jurisdiction over the use? | ✓ | |
| (b) Does the use comply with applicable laws and regulations (Federal, State, tribal, and local)? | ✓ | |
| (c) Is the use consistent with applicable Executive orders and Department and Service policies? | ✓ | |
| (d) Is the use consistent with public safety? | ✓ | |
| (e) Is the use consistent with goals and objectives in an approved management plan or other document? | ✓ | |
| (f) Has an earlier documented analysis not denied the use or is this the first time the use has been proposed? | ✓ | |
| (g) Is the use manageable within available budget and staff? | ✓ | |
| (h) Will this be manageable in the future within existing resources? | ✓ | |
| (i) Does the use contribute to the public's understanding and appreciation of the refuge's natural or cultural resources, or is the use beneficial to the refuge's natural or cultural resources? | ✓ | |
| (j) Can the use be accommodated without impairing existing wildlife-dependent recreational uses or reducing the potential to provide quality (see section 1.6D, 603 FW 1, for description), compatible, wildlife-dependent recreation into the future? | ✓ | |

Where we do not have jurisdiction over the use ("no" to (a)), there is no need to evaluate it further as we cannot control the use. Uses that are illegal, inconsistent with existing policy, or unsafe ("no" to (b), (c), or (d)) may not be found appropriate. If the answer is "no" to any of the other questions above, we will generally not allow the use.

If indicated, the refuge manager has consulted with State fish and wildlife agencies. Yes No

When the refuge manager finds the use appropriate based on sound professional judgment, the refuge manager must justify the use in writing on an attached sheet and obtain the refuge supervisor's concurrence.

Based on an overall assessment of these factors, my summary conclusion is that the proposed use is:

Not Appropriate

Appropriate

Refuge Manager: *Signed* Date: 3/19/09

If found to be **Not Appropriate**, the refuge supervisor does not need to sign concurrence if the use is a new use.

If an existing use is found **Not Appropriate** outside the CCP process, the refuge supervisor must sign concurrence.

If found to be **Appropriate**, the refuge supervisor must sign concurrence.

Refuge Supervisor: *Signed* Date: 3/24/09

A compatibility determination is required before the use may be allowed.

FWS Form 3-2319
02/06

Justification - Appropriateness of the Proposed Improvements to Highway 18

The Arkansas State Highway and Transportation Department (AHTD), in cooperation with the Federal Highway Administration (FHWA), is proposing improvements to approximately 25 miles of Highway 18 between the St. Francis River and Highway 181. The proposed project also involves the approximately one-mile section of Highway 18 that lies within the southern boundary of Big Lake National Wildlife Refuge (Refuge).

The scope of work within the Refuge involves expansion and realignment of the existing ROW, widening the highway from two lanes to four lanes, replacing three two-lane bridges with four-lane bridges across Ditch 81, Big Lake Relief, and the Big Lake Floodway, and upgrading ingress/egress routes to public use areas on the Refuge on the north and south side of the highway.

Highway 18 is a major thoroughfare between Jonesboro and Blytheville. The proposed use of the Refuge is needed to ensure that the highway system will provide safety, continuity, and traffic capacity to meet the needs of future travel demand and economic development in the region. All motorized access to Big Lake NWR originates on Highway 18. The project will enhance safety of Refuge visitors and staff that use Highway 18 to access the Refuge by replacing structurally deficient bridge and roadway structures, improving the substandard roadway to enable safe travel, reducing traffic congestion, increasing sight distances, and improving safety of Refuge ingress/egress.

A study by FHWA and AHTD concluded that no prudent alternative route exists to bypass the Refuge with the improved Highway. The project will result in the conversion of approximately 6.6 acres of Refuge property from a wildlife use to transportation use.

Project planning/design has minimized impacts to Refuge environment, operations, and visitors. Replacement property of sufficient quantity, quality, and location will be purchased by AHTD and transferred in fee title to the USA to be added to the Refuge to ensure no net loss of habitat or function. Any public use facilities will be restored or upgraded. The FHWA is classifying this project as a *de minimus* impact to the Refuge through their Section 4(F) Evaluation. Appropriate ARPA, ESA, NEPA, Tribal Consultation, and Compatibility processes will be undertaken.

Appendix E. Compatibility Determinations

BALD KNOB NATIONAL WILDLIFE REFUGE COMPATIBILITY DETERMINATIONS

Uses: The following uses were found to be appropriate and evaluated to determine their compatibility with the mission of the National Wildlife Refuge System and the purposes of the refuge.

1. Hunting
2. Fishing
3. Wildlife Observation and Photography
4. Environmental Education and Interpretation
5. Research and Monitoring
6. Forest Products Harvesting
7. Commercial Guiding for Wildlife Observation/Photography
8. Commercial Video and Photography
9. Nuisance Animal Control
10. Cooperative Farming
11. Construction of Headquarters/Visitor Contact Station and Expansion of Maintenance Shop

Refuge Name: Bald Knob National Wildlife Refuge

Date Established: 1993

Establishing and Acquisition Authority(ies):

Emergency Wetlands Resources Act of 1986
Fish and Wildlife Act of 1956
Migratory Bird Conservation Act

Refuge Purpose:

“...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” 16 U.S.C. 3901(b) (Emergency Wetlands Resources Act of 1986)

“...for the development, advancement, management, conservation, and protection of fish and wildlife resources...” 16 U.S.C. 742f(a)(4) ...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude...” 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)

“...for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).

National Wildlife Refuge System Mission:

The mission of the National Wildlife Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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.

Other Applicable Laws, Regulations, and Policies:

Antiquities Act of 1906 (34 Stat. 225)
Migratory Bird Treaty Act of 1918 (15 U.S.C. 703-711; 40 Stat. 755)
Migratory Bird Conservation Act of 1929 (16 U.S.C. 715r; 45 Stat. 1222)
Migratory Bird Hunting Stamp Act of 1934 (16 U.S.C. 718-178h; 48 Stat. 451)
Criminal Code Provisions of 1940 (18 U.S.C. 41)
Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; 54 Stat. 250)
Refuge Trespass Act of June 25, 1948 (18 U.S.C. 41; 62 Stat. 686)
Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j; 70 Stat. 1119)
Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4; 76 Stat. 653)
Land and Water Conservation Fund Act of 1965
National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.; 80 Stat. 915)
National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd, 668ee; 80 Stat. 927)
National Environmental Policy Act of 1969, NEPA (42 U.S.C. 4321, et seq; 83 Stat. 852)
Use of Off-Road Vehicles on Public Lands (Executive Order 11644, as amended by Executive Order 10989)
Endangered Species Act of 1973 (16 U.S.C. 1531 et seq; 87 Stat. 884)
Refuge Revenue Sharing Act of 1935, as amended in 1978 (16 U.S.C. 715s; 92 Stat. 1319)
National Wildlife Refuge Regulations for the Most Recent Fiscal Year (50 CFR Subchapter C; 43 CFR 3101.3-3)
Emergency Wetlands Resources Act of 1986 (S.B. 740)
North American Wetlands Conservation Act of 1990
Food Security Act (Farm Bill) of 1990 as amended (HR 2100)
The Property Clause of the U.S. Constitution Article IV 3, Clause 2
The Commerce Clause of the U.S. Constitution Article 1, Section 8
The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57, USC668dd)
Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System. March 25, 1996
Title 50, Code of Federal Regulations, Parts 25-33
Archaeological Resources Protection Act of 1979
Native American Graves Protection and Repatriation Act of 1990

NOTE: Compatibility determinations for each use listed were considered independently. However, for brevity within this Appendix, the preceding sections from "Uses" through "Other Applicable Laws, Regulations and Policies" and the succeeding sections, "Public Review" and "Approval of Compatibility Determinations" are not provided separately but only provided once for all refuges within the Complex. However, those sections omitted for brevity are applicable to each compatibility determination and should be included as part of any compatibility determination that may be printed separately from the CCP.

1) Description of Use: *Hunting*

Hunting opportunities on Bald Knob NWR include the take of squirrel, rabbit, quail, deer, raccoon, opossum, and turkey. Additionally, hunters may take beaver, muskrat, nutria, armadillo, coyote, and feral hog incidental to the hunting of game species listed above. Migratory bird hunting includes waterfowl, doves, snipe, and woodcock. All hunts fall within the framework of the Arkansas Game and Fish Commission (AGFC) open seasons and follow AGFC regulations. There are refuge-specific regulations that supplement and further restrict the AGFC regulations. Refuge-specific regulations are reviewed annually and incorporated into the refuge hunting brochure. All hunters are required to read the refuge brochure and adhere to all regulations contained therein. A hunting permit on the front cover of the brochure must be signed by the hunter and must be carried on his person while hunting on the refuge.

A waterfowl sanctuary established on the south end of the refuge, is closed to all public entry and use (including hunting) from November 15 to February 28. Retriever dogs are allowed for waterfowl hunting and dogs also are allowed for other migratory birds, small game, and raccoon/opossum hunting. Hunter access is by walking, motor vehicle, boat, bicycle, or all-terrain vehicle (ATV). All vehicles, including ATVs and bicycles, may only be used on designated roads, levee tops, and parking areas and are not allowed in fields or other areas. Mobility-impaired hunters may apply for a special use permit allowing specialized access by ATV.

To reduce disturbance to waterfowl in the Farm Unit waterfowl hunt area and adjacent areas of the waterfowl sanctuary, all public use and entry into a specified area (encompassing approximately 2,200 acres in the core of the waterfowl hunt area) will be prohibited after 1:00 p.m. from November 15 through February 28 on a trial basis. Waterfowl response to this practice will be monitored to determine continued necessity and feasibility to ensure compatibility. This regulation does not apply to the Mingo Creek Unit.

Availability of Resources: Adequate resources are available to ensure and administer the proposed activity at its current level of participation. Enforcement of refuge regulations to protect trust resources and provide for a safe, quality recreational opportunity will occur via regular patrols by refuge law enforcement officers. Currently, the refuge has one full-time officer and one collateral duty officer. Additionally, personnel from the AGFC and White County Sheriff's Department will patrol the refuge and assist refuge officers when needed.

Anticipated Impacts of Use: The incidental taking of other wildlife species, either intentionally or unintentionally, may occur with any consumptive use program. At current and anticipated public use levels for this program, this incidental take would be very small and would not directly or cumulatively impact population levels on the refuge or in the surrounding area. Implementation of a highly effective law enforcement program and continued development of special regulations for this use would eliminate most incidental take, other violations, or safety problems.

Currently, the refuge does not have any known threatened or endangered species. Impacts such as trampling small vertebrates or invertebrates, and crushing/trampling of vegetation would be minimal. Additionally, the activities of hunters traveling to and from hunt areas and their activities while hunting would disturb some non-target wildlife, but these disturbances are temporary, short-term, non-lethal, and not highly repetitive. As a consumptive use, hunting would have some minimal and short-term direct negative impacts on refuge resources. Numbers of resident, as well as migratory, species would be temporarily reduced as animals are harvested, but these individual and collective losses would be compensated by recruitment during the following reproductive season; therefore, no long-term cumulative losses in populations would result.

Determination (check one below):

Use is Not Compatible

X Use is Compatible with the Following Stipulations:

Stipulations Necessary to Ensure Compatibility: Hunting is permitted in accordance with the AGFC regulations and licensing requirements. Additional refuge-specific regulations further restrict the AGFC regulations. The waterfowl sanctuary is closed to all public entry and use, including hunting, from November 15 to February 28. To reduce disturbance to waterfowl in the Farm Unit waterfowl hunt area and adjacent areas of the waterfowl sanctuary, all public use and entry into a specified area (encompassing approximately 2,200 acres in the core of the waterfowl hunt area) will be prohibited after 1:00 p.m. from November 15 through February 28 on a trial basis. Waterfowl response to this practice will be monitored to determine if it will be necessary to continue this restricted access in order to maintain compatibility. This regulation does not apply to the Mingo Creek Unit. All vehicles, including ATVs and bicycles, may only be used on designated roads, parking areas, or levee tops and are not allowed in fields or other areas. Use of ATVs for hunting access will be permitted only from September 1 to February 28. ATV access will be monitored and modified as needed to mitigate any negative impacts to refuge habitats, infrastructure, and visitors in compliance with EO 11644 and EO 11989. Public access to hunt areas may be closed at any time necessary to protect refuge resources or visitors. Possession or use of alcoholic beverages while hunting is prohibited.

Refuge-specific regulations that pertain specifically to waterfowl hunters include but are not limited to:

- Morning hunting (until 12:00 noon) only.
- Shotgun shell possession limit of 25 daily including those located within vehicles.
- Hunting parties must stay a minimum of 100 yards apart.
- Only approved non-toxic shot may be possessed or used.
- Decoys, blinds, boats, and other equipment must be removed daily by 1:00 p.m.
- Cutting of holes or other manipulation of vegetation (i.e., cutting bushes, mowing, weed-eating) or hunting from manipulated areas is prohibited.
- All day hunting permitted for geese (all applicable species) after January closing of the regular duck season through the end of the AGFC conservation season.
- Waterfowl hunters may not enter the refuge earlier than 4:00 a.m. daily.
- Retriever dogs are allowed for waterfowl hunting.
- Commercial waterfowl guiding is not allowed on the refuge.

Refuge-specific regulations that pertain to small game hunting include:

- Spring squirrel season is closed.
- Dogs are allowed for quail hunting.
- Dogs are allowed beginning December 1 for squirrel and rabbit hunting.
- Dogs are required for night hunting of raccoons and opossums.
- Beaver, muskrat, nutria, armadillo, coyote, and feral hog may be taken incidental to any refuge hunt by the use of the device appropriate for that hunt and according to any applicable AGFC regulations.
- The Farm Unit is closed to all other entry and public use (including small game hunting) during the Quota Gun Deer Hunt.
- Only approved non-toxic shot or rimfire rifles may be possessed and used for all small game hunting.

Refuge-specific regulations that pertain to big game hunting include:

- Harvested deer and turkey taken must be recorded at one of the two self-check stations located on the refuge. During the Quota Gun Deer Hunt, all harvested deer must be checked at a manned check station on the refuge.
- Only portable stands capable of being carried by one person may be used and the owner's name and address must be permanently affixed to the stand.
- Stands may be erected 7 days prior to the refuge deer season and must be removed from the waterfowl sanctuary prior to November 15 and from the rest of the refuge by the last day of archery season.
- For all refuge hunts, the limit is one either-sex deer per hunt except for the archery season in which the statewide bag limit applies.
- Driving or screwing any metal object into a tree or hunting from a tree in which a metal object has been driven or screwed to support a hunter is prohibited.
- Building or hunting from permanent blinds or stands is prohibited.
- Hunting from a vehicle or use of a vehicle as a deer stand is prohibited.
- Baiting or hunting over bait, salt, grain, or other feed that could serve as a lure or attractant for wildlife is prohibited.
- Hunting from mowed or maintained roads is prohibited.
- Only shotguns with slugs, legal pistols, and muzzleloaders, shooting a single projectile, may be used or possessed during the Quota Gun Deer Hunt.
- Possession or use of buckshot is prohibited.
- The Mingo Creek Unit is closed to the Quota Gun Deer Hunt.
- The refuge is closed to all other public entry and use (including deer archery hunting) during the Quota Gun Deer Hunt.
- Turkey hunting is restricted to fall archery only and is permitted only on the Mingo Creek Unit.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, hunting is a priority public use activity that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

2) Description of Use: *Fishing*

Fishing and frogging are the most common public uses on Bald Knob National Wildlife Refuge. Bald Knob NWR contains over 100 miles of ditches, 14 miles of irrigation canals, and over 200 acres of sloughs and oxbow lakes. The refuge experiences various degrees of flooding from the White and Little Red River Systems that keep permanent water sources restocked with fish. Fishing is permitted year-round and anglers find plenty of opportunities to fish on the cypress/tupelo brakes,

ditches, and canals scattered throughout the refuge. There are 6 boat ramps which allow access to sloughs, creeks, and the Little Red River.

Fish creel and frog limits, boating safety, and license requirements are in accordance with the Arkansas Game and Fish Commission (AGFC) regulations. Fishing with rod and reel, pole and line, limb line, yo-yo, jug line, trotline, and bow and arrow (on line) is permitted. Fishermen are also permitted to collect crawfish with rakes and/or traps for personal use only. Commercial fishing and the harvesting of turtles and mussels is prohibited. A waterfowl sanctuary, established on the south end of the refuge, is closed to all public entry and use (including fishing) from November 15 to February 28. Access to fishing areas is by motor vehicle, boat, or walking. Vehicles may only be used on designated roads, parking areas, levee tops, and are not allowed in fields or other areas. All-terrain vehicles (ATVs) are not allowed for this use.

Availability of Resources: Refuge staff and resources are adequate to cover management of fishing at current levels. However, it is anticipated that an increase in this use may occur over the coming years. In order to provide safe and quality fishing, additional resources and staff will be needed to enhance or develop additional access areas and provide law enforcement. A portion of the refuge's budget is spent annually managing for the benefit of freshwater fisheries, maintaining boat launching ramps, improving access, conducting law enforcement patrols, and ensuring refuge visitors are in accordance with boater safety and following refuge regulations.

Anticipated Impacts of the Use: Fishing and frogging should not adversely affect the fisheries resource, wildlife resource, or any other natural resource of the refuge. Monitoring of frogs will be implemented to gauge trends in numbers and habitat use. The activities associated with fishing and frogging, including travel to and from fishing areas, may cause trampling of vegetation, small invertebrates, and vertebrates; however, these are short-term, relatively minor, and not highly repetitive. Most of the trampling occurs along road shoulders and along ditch banks where bushhogging takes place to control woody vegetation. A known heron/egret rookery occurs in Hackelton Lake on the Mingo Creek Unit, but any disturbances associated with fishing have not caused any apparent negative impacts. A Bald Eagle pair has successfully nested for 9 years over the Eagle Nest Brake, which is a favorite fishing area on the south end of the Farm Unit, apparently without any negative impacts.

Fishing is a wholesome, enjoyable, and wildlife-dependent public use opportunity; however, participation in this activity generally results in litter on the refuge (fishing line, food, bait containers, soda/beer cans, and other "trash") that must be removed numerous times per year in order to keep the refuge looking presentable. Trash is detrimental to the aesthetics of the refuge and can impact the digestive tracts of birds, turtles, fish, and other resident and migratory wildlife. The refuge would strive to reduce this problem by working with partners to pick up litter, educating anglers not to litter, and law enforcement. Information contained in the refuge brochure concerning rules and regulations also helps keep negative impacts to a minimum. Regulations are reviewed annually and modifications are made as necessary to maintain compatibility and ensure a safe and quality fishing program.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Fishing and frogging are permitted in accordance with AGFC regulations and licensing requirements. Conflicts between anglers and hunters or other visitors using the refuge for non-consumptive wildlife recreation have not been a problem and are not expected to be a problem in the future. Associated violations, such as taking under-sized fish, open fires, and littering can be minimized by public outreach and a continued law enforcement presence.

The following refuge-specific regulations help ensure the refuge fishing program is compatible with refuge purposes:

- All fishing tackle must be attended at all times.
- Crawfish may be collected for personal use only. All crawfish traps must have the owner's name and address permanently affixed.
- Taking or possessing turtles and mussels is prohibited.
- Commercial fishing is prohibited.
- Waterfowl sanctuaries are closed to all public entry and use (including fishing and frogging) from November 15-February 28.
- The refuge is closed to all other entry and public use (including fishing and frogging) during the Quota Gun Deer Hunt.
- Personal watercraft (e.g., jet-skis, hover craft, and airboats) are prohibited.
- All-terrain vehicles (ATVs) are not allowed for this use.
- Vehicles may only be used on designated roads or parking areas to provide access for fishing.
- Public access to fishing areas may be closed at any time necessary to protect refuge resources or visitor safety.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, fishing is a priority public use activity that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

3) Description of Use: *Wildlife Observation and Photography*

Wildlife observation and photography are important public uses at Bald Knob NWR. Abundant wildlife and convenient access make the refuge a destination for visitors hoping to observe and photograph a variety of wildlife and their habitats. Visitors are especially interested in viewing and photographing waterfowl; shorebirds; other migratory birds, including Bald Eagles; and resident wildlife, such as white-tailed deer, Eastern Wild Turkey, turtles, and raccoons. There are no developed facilities for this use, such as photo blinds or observation platforms, although these facilities are being planned. Access is by vehicle, boat, or walking. All-terrain vehicles (ATVs) are not allowed for this use. All vehicle use is restricted to designated roads, parking areas, and levee tops only, and is not allowed in fields or other areas.

Availability of Resources: Refuge staff and resources are adequate to administer the program at current levels. However, it is anticipated that an increase in these uses will occur over the coming years. In order to provide safe and quality wildlife observation and photography opportunities, additional resources and staff will be needed to enhance or develop additional viewing areas and provide improved facilities and programs.

Anticipated Impacts of Use: The activities of visitors engaging in wildlife observation and photography may result in some potential disturbance to wildlife. Minimal impacts in the form of trampling small vertebrates or invertebrates and vegetation and littering may also occur. Significant indirect or cumulative adverse impacts to refuge resources are not expected from these activities. The establishment of specified viewing areas and facilities, such as blinds, boardwalks, platforms, towers, and trails, would enhance observation and photography, as well as minimize associated visitor impacts or conflicts with other uses. Plans to provide such facilities are in progress.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Public access for specified wildlife observation and photography would be allowed in designated areas only. The waterfowl sanctuary will be seasonally (November 15-February 28) closed to all public entry and use. During the Quota Gun Deer Hunt, the refuge is closed to all public entry and use (including wildlife observation and photography) except by Quota Gun Deer Hunt permit holders. Regulations governing public use are reviewed annually and any necessary modifications are made to ensure refuge resources are protected and visitors can enjoy a safe and quality experience. Wildlife observation and photography uses will be monitored and appropriate management action will be taken to eliminate or reduce associated impacts. Public access to wildlife observation and photography areas or facilities may be closed at any time necessary to ensure protection of refuge resources and visitor safety. All vehicle use is restricted to designated roads, levee tops, and parking areas only.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, wildlife observation and photography are priority public use activities that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

4) Description of Use: *Environmental Education and Interpretation*

On Bald Knob NWR, environmental education and interpretation activities are conducted to inform and educate the public and provide an understanding of natural resource values and refuge purposes and the mission of the National Wildlife Refuge System. The environmental education and interpretation program facilities will include visitor contact areas, kiosks, platforms or towers, routes or trails, and other designated public use facilities or access areas. In addition, refuge staff provide off-site environmental education and interpretation services at local events such as festivals, fishing derbies, school classes, and civic or conservation group meetings. Access is by vehicle, boat, or walking. All vehicles may only be used on designated roads, parking areas, or levee tops and are not allowed in fields or other areas.

Availability of Resources: Refuge staff and resources are adequate to administer the program at current levels. However, it is anticipated that an increase in these uses will occur over the coming years. In order to provide safe and quality environmental education and interpretation opportunities, additional resources and staff will be needed to develop or provide enhanced programs and interpretive facilities (such as visitor contact stations, observation platforms, interpretive trails, kiosks, and other facilities). Plans are being developed to provide additional or improved facilities as described herein. Additionally, the utilization and development (training) of volunteers may supplement environmental education and interpretation programs.

Anticipated Impacts of Use: Outdoor environmental education and interpretation activities may result in minimal disturbance to wildlife from visitors. It is possible that some small vertebrates, invertebrates, and vegetation could be trampled. Littering may also occur. Significant indirect or direct cumulative adverse impacts to refuge resources are not expected from these activities. Environmental education and interpretation facilities, such as blinds, boardwalks, exhibits, kiosks, platforms, and towers, will be designed and established as feasible to minimize potential disturbance to wildlife and impacts to resources.

Determination (check one below):

Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Environmental education and interpretation activities conducted outdoors should be strategically located to minimize impacts and may need to be rotated or moved periodically. The waterfowl sanctuary will be seasonally (November 15-February 28) closed to all public entry and use. Public access to the refuge may be closed at any time necessary to ensure protection of refuge resources and visitor safety. The refuge is closed to all public entry and use (including environmental education and interpretation) during Quota Gun Deer Hunt, except for Quota Gun Deer Hunt permit holders. Regulations concerning public use are reviewed annually and any necessary modifications are incorporated into refuge brochures or otherwise conveyed to visitors. Environmental education and outreach can be taken into the classroom, incorporated into presentations, and will be used at other forums; these activities will have no deleterious affect on fish and wildlife at the refuge.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, environmental education and interpretation are priority public use activities that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

5) Description of Use: *Research and Monitoring*

Bald Knob NWR would allow university students and professors, as well as governmental or non-governmental employees and volunteers, to conduct short or long-term research and monitoring studies. Such research and monitoring would be conducted in various habitats throughout the refuge and with various species of migratory birds, resident wildlife, and fish. The information collected would provide a better understanding of ecosystem functions and responses to management actions. Research and monitoring results would help managers to evaluate prior management actions, identify adaptive management options, and develop "Best Management Practices" (BMPs). The knowledge gained through research and monitoring studies would allow more effective management decisions. All research and monitoring project requests would be evaluated on individual project merit and applicability to refuge programs on a project-by-project basis.

Availability of Resources: Resources are adequate to administer research and monitoring activity at the current level. The refuge will also seek to establish and/or expand partnerships for continued research and monitoring projects conducted by other organizations on refuge lands.

Anticipated Impacts of Use: There could be some negative impacts from scientific research and monitoring on the refuge. Impacts such as trampling vegetation, ATV and motor boat use, and temporary disturbance to wildlife would occur. A small number of individual plants or animals may be collected for further study. These collections would not likely adversely affect refuge plant and animal populations. Removal of plant and animal material from the refuge, as well as the potential to accidentally introduce exotic plants and animals, must be carefully monitored and controlled. Some other impacts from research include: (1) Noise disturbance from helicopter, airplane, motor boat, airboat, truck, car, or ATV that may temporarily disturb and/or displace wildlife; (2) physical presence of people or equipment that may temporarily disturb and/or displace wildlife; (3) ground disturbance from walking on site or the use of equipment; and (4) water disturbance by stirring sediments and causing temporary turbidity from equipment or walking. The federally endangered fat pocketbook mussel occurs in an isolated portion of the refuge; this use will not negatively impact this species. Despite these impacts, which are short-term, the knowledge gained from carefully considered and properly executed scientifically defensible research and monitoring would provide information and justification to improve management techniques and better meet the needs of trust species. Research/monitoring activities on the refuge are not expected to indirectly or cumulatively impact refuge resources negatively, even though some minimal short-term and direct impacts may occur.

Determination (check one below):

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: All researchers would be required to obtain and possess a refuge special use permit. Individual requests to use specialized equipment, all-terrain vehicles, etc., would be evaluated on a project-by-project basis and specified on each special use permit. Researchers would periodically be evaluated for compliance with requirements. Periodic progress reports would be required and final copies of all reports and publications would be provided to the refuge. The refuge would not directly supply personnel or equipment unless arrangements were made prior to issuance of the special use permit. The refuge manager would reserve the right to delegate a staff member to accompany permittee(s) at any time. All plants or animals sampled, collected, or released would be done in a scientifically accepted manner, such as those specified by scientific societies. Examples of these societies include the Society for the Study of Amphibians and Reptiles, the American Society of Mammologists, the American Ornithological Society, the Ichthyologists League, the

Entomological Society of America, and the Botanical Society of America. Incidental take and inadvertent trampling of vegetation or wildlife are expected to be minimal and will be addressed with each permit request. Given compliance with the restrictions set in each special use permit, research and monitoring conducted on the refuge is considered to be compatible with the purposes for which the refuge was established.

Justification: Sound research and monitoring programs provide a better understanding of species, habitats, and the environmental communities present on the refuge. Additional research and monitoring is needed to assess management programs used on the refuge and to evaluate alternative options. The benefit of additional knowledge will greatly outweigh any temporary or short-term disturbance or loss of individual plants or animals that may occur. This activity will provide guidance to management for fulfilling refuge purposes and meeting established goals and objectives through adaptive management.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

6) Description of Use: *Forest Products Harvesting*

Conduct a comprehensive forest management program on Bald Knob NWR in accordance with an approved forest management plan. Refuge forest habitats will be evaluated over a 3-year cycle. Prescriptions detailing needed actions will be developed, approved from the Service's Regional Office, and carried out on a yearly basis. It is proposed that select trees be sold, and then removed by commercial operations. The forest habitat may also be manipulated by permittees/staff when commercial sales are not feasible. Only trees needing to be removed in order to improve the forest habitat for wildlife or to restore the integrity of the forested wetlands ecosystem will be taken or manipulated. Special use permits may be issued for firewood cutting (personal use) when there is excess downed wood from silvicultural operations or when roads are widened. Seasonal special use permits may be issued for gathering seed, on a limited basis, when forest seed crops are abundant.

Operations may be conducted throughout the year, but only according to the guidelines detailed in the Forest Habitat Management Plan. Operations may involve numerous individuals using hand tools such as chain saws and heavy equipment such as feller-bunchers, skidders, bulldozers, and log trucks.

Availability of Resources: Some elements of needed resources are already in place, such as the forester's time and salary, and the small amount of time needed by other positions in maintenance, law enforcement, management, and administration. Additional expenses for equipment maintenance, operating expenses, and habitat restoration can be funded out of the refuge's budget. The Forest Habitat Management Plan allows that management will be carried out to the extent of available resources (see Section 3.2; Physical Plant and Equipment Use Requirements for a more detailed description).

Anticipated Impacts of the Use: Timber harvest operations will result in short-term disturbances and long-term benefits to forest habitats. Short-term impacts will include disturbance and displacement of wildlife, vegetation, and soils typical of any heavy equipment operation. Operation of heavy equipment

and removal of some vegetation will also result in a short-term increase in soil erosion. Additionally, wildlife species dependent on undisturbed forest habitat will be temporarily displaced. As vegetation is disturbed, other wildlife species may also be temporarily displaced. Over time, these short-term impacts will wane as the effects of improvement treatments develop and the benefits are realized. The refuge is divided into 6 forest compartments; therefore, short-term impacts will be minimized by implementing the proposed actions in only a small percentage of the refuge at any given time.

Firewood cutting and forest seed collection will result in only temporary disturbances. Seeds are gathered by hand and sold to local nurseries that, in turn, grow seedlings. The refuge has a need for seedlings to restore marginal cropland and other open fields. By allowing a limited forest seed harvest, the refuge is ensuring a continued supply of suitable seedlings of local origin for forest restoration. In the past, participation in refuge firewood cutting and hand collecting of forest seeds has been low, and future participation is also expected to be low. The quantity and frequency of firewood cutting and seed harvesting is not expected to result in significant disturbance, diminish wildlife food resources, or jeopardize wildlife survival. Short-term disturbance to wildlife may occur during these activities, but will be insignificant because of the small scale of the projects. Most of the use will occur in late summer or fall, after ground nesting birds have completed the nesting season. Firewood cutting or seed collection should not result in short- or long-term impacts that adversely affect the purpose of the refuge or the mission of the National Wildlife Refuge System.

Determination (check one below):

Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

See General and Specific Guidelines in the Forest Habitat Management Plan, Appendix 7.10 and 7.11.

7.10 General Conditions Applicable To Timber Harvesting Permits

Subcontractors: Subcontractors or agents may be employed with authorization from the refuge forester.

Safety Requirements: The contractor must perform this contract in a safe manner, observing any necessary safety precautions. The contractor will promptly correct any condition, which, in the opinion of the refuge manager or his authorized representative, endangers the safety of personnel, the public, and/or property during the performance of this contract. Failure to observe this requirement will result in contract termination, with the contractor liable for any such damages that may occur.

Liabilities of the Contractor: The contractor will hold the government and all its representatives harmless from all suits, actions, or claims of any character arising out of the injuries to any person or damage to any property resulting from any neglect in the performance of the services required by this contract, or from any claims arising or recovered under the Workman's Compensation laws or any other law, by law, ordinance, order or decree, or on account of any other act or omission by the contractor or his employees while carrying on operations under this contract. This responsibility will terminate when suits, actions, or claims have been satisfied.

Insurance Coverage: The contractor must be covered by adequate insurance, as the government will assume no liability whatsoever as a result of the contractor's operations under this contract.

Inspection of Work Site: Before submitting a bid, prospective bidders are urged to personally inspect the site. Arrangements to view may be made by contacting Cache River National Wildlife Refuge, Augusta, Arkansas. Telephone (870) 347-2614.

7.11 Special Conditions Applicable To Timber Harvesting Permits

- A pre-entry conference between the refuge forester and the designated permittee representative will be required before the permittee starts logging operations. The purpose of the pre-entry conference is to be sure that the permittee completely understands what is expected and thus minimizes conflicts.
- All refuge wildlife is protected. All reasonable efforts will be made by the permittee to protect wildlife from harm and harassment.
- All logging will be within the boundaries specified on the attached map.
- Trees will be cut so as to leave ground-level paint spots visible after the tree has been cut. All marked trees are to be cut, with the exception of marked leave trees in shelterwood, seed tree, or small open areas as described in the special use permit.
- Only marked or designated trees will be cut. Care will be taken to protect all other trees and vegetation from damage. Unmarked trees that are cut or injured through carelessness will result in a fine of \$5 per inch diameter at stump height or breast height if present.
- Trees and tops will not be left hanging or supported by any other tree and will be laid down immediately after felling.
- Tops and logging debris will be lopped to within 6 feet of the ground in all areas 100 feet or less from major roads.
- All roads, rights-of-way, active agricultural fields, designated openings, ditches, and streams must be kept clear of tops and debris. The permittee is required to repair all damage resulting from operations conducted under this permit.
- The skidding of logs greater than 20 feet in length may be prohibited in designated areas.
- The refuge manager or his authorized representative must approve the location of additional roads. Additional trees removed for roads or loading sites will be marked by the refuge forester and paid for at bid price.
- Loading of forest products on public roads or shoulders, or regeneration areas is prohibited.
- Logging will not be permitted when the ground is wet and subject to rutting and severe compaction. The permittee and his employees will do all in their power to prevent rutting and erosion.
- The permittee and his employees will do all within their power to prevent and suppress forest fires. Fires will be reported immediately to the refuge office.
- Ownership of all products remaining on a sale area will revert back to the government upon termination of the permit.
- Littering in any manner is a violation of the Code of Federal Regulations. The entire work area will be kept free of all litter at all times.
- The possession or use of firearms or other weapons on the refuge is prohibited outside of hunting seasons.
- The government accepts no responsibility to provide right-of-way over private lands for materials sold under this contract.
- The refuge manager or his authorized representative will have the authority to temporarily close down all or any part of the operation during a period of high fire danger, wet ground conditions, or for any other reason deemed necessary. Additional time, equal to the closing period, will be granted to the permittee.

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- The decision of the refuge manager will be final in the interpretation of the regulations and provisions governing the sale, cutting, and removal of the timber products covered by this permit.

Justification: This use has been determined compatible provided the above stipulations are implemented. This use will facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use will meet the mission of the National Wildlife Refuge System and enhances fish, wildlife, and plant resources on these lands by providing renewable resources for the benefit of the American public. This use will be administered in compliance with 50 CFR 29.1.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

7) Description of Use: *Commercial Guiding for Wildlife Observation/Photography*

Allow commercial guiding to facilitate Wildlife Observation/Photography on Bald Knob NWR. The objective is to provide the opportunity to experience wildlife observation and photography to the segment of the public lacking the knowledge or equipment required to view/photograph fish, wildlife, plants, or their habitats in compliance with the legal mandates of the National Wildlife Refuge System Improvement Act of 1997. The surrounding communities, including Bald Knob, Searcy, and Augusta, are dependent on supporting refuge visitors throughout the year. Within these communities, grocery stores, sporting goods stores, restaurants, lodges, and other businesses obtain a large proportion of their annual income from the influx of refuge visitors. Although wildlife observation and photography is involved on guided trips, the commercial nature of guiding activities associated with this use does not qualify as one of the six priority public uses (Federal Register/Vol.65, No.202/Wednesday, October 18, 2000/Rules and Regulations-Issue 13: Priority Uses, Pages 62471 and 62472). All commercial activities, including guiding of wildlife observers and photographers, are special type uses that may be authorized when they are appropriate and compatible with the purpose of the refuge, the mission of the National Wildlife Refuge System, and can be administered in a way that minimizes conflicts with priority uses and does not hinder the activities of visiting public not using guide services.

Guiding and equipment may involve the use of vehicles, buses, motor boats, paddle boats, canoes, and hiking. Guiding will be allowed only in designated areas and according to conditions specified by the refuge manager. Several miles of refuge roads are also used to access remote sloughs, bayous, and lakes where wildlife observers and photographers may conduct their activities.

Guides will be allowed to operate through issuance of a special use permit, which must be renewed annually. Special conditions are attached and part of the special use permit designed to meet the above objectives and provide liability protection to the government. The annual fee for the special use permit will be \$500.

Increased requests for special use permits to conduct wildlife observation and photography guiding on Bald Knob NWR are expected in the future. Special use permits will be issued on a first-come, first-serve basis. The refuge reserves the option to limit the number of permits issued as necessary to ensure compatibility. Future increased requests for commercial wildlife observation and photography guiding special use permits will be reviewed by management and additional steps, including limiting the number of guides, increasing annual permit fees, designating observation areas, or discontinuing this use entirely, as may be necessary to maintain safe and quality wildlife observation and photography opportunities for all refuge visitors.

Availability of Resources: Adequate resources and staff exist to administer refuge regulations and special use permit conditions at the current level of interest for this activity. An increase in permit issuance may not be possible with the current existing staff. Any increase will be reviewed by management to ensure compatibility.

Anticipated Impacts of the Use: Commercial guiding for wildlife observation/photography would increase opportunities for the public to experience wildlife and gain an added appreciation for the value of Bald Knob NWR and the National Wildlife Refuge System. This use would benefit a diverse set of participants from within and outside this local area. The use also would allow some economic benefit to local communities from refuge visitation. Minor impacts, such as short-term and temporary wildlife disturbance, could result. In addition, there could be minor trampling of vegetation and small vertebrates and invertebrates. These impacts are not expected to be significant.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: A special use permit is required.

- No special privileges are granted to the permittee other than those stated in the permit. Interfering with any other individual lawfully participating in any authorized activity on the refuge will be grounds for immediate revocation of the permit and for possible legal prosecution.
- The permittee and assistant each must comply with all applicable federal, state, and refuge laws, regulations, and policy.
- A copy of the permit must be in the possession of the permittee and assistant while engaged in commercial guiding activities.
- Guided parties are limited to fifteen (15) members and the permittee and his assistant who must all stay together as one (1) party on the refuge. Only one (1) party may be guided per day. The permittee must accompany all parties. Any exception to this requirement must be applied for and approved by the refuge manager prior to such event.
- Within one (1) week after the end of the calendar year, the permittee must furnish the refuge manager with a written report on the number of individuals taken onto the refuge and fees charged.
- The permit may be terminated or revoked at any time without refund to the permittee for non-compliance with any of the terms thereof. Any violation may be grounds for future permit denial.
- The permittee and his/her agents and guests shall save, hold harmless, defend, and indemnify the United States of America, its agents, and employees for loss, damages, or judgments and expenses on account of bodily injury, death or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomever made, arising out of the permittees, his/her employees, subcontractors, or agents with respect to conducting activities connected with the permit within the lands administered by Bald Knob NWR.

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- Permittee must provide proof of liability insurance (\$300,000 each occurrence, \$500,000 aggregate) with the U.S. Fish and Wildlife Service named as co-insured prior to issuance of the special use permit.
 - All equipment must be removed from the refuge daily.
 - The refuge may limit the number of special use permits issued or discontinue this use entirely in order to ensure appropriateness, compatibility, and safe, quality opportunities for visitors not using guide services.

Justification: Commercial activities can be allowed on refuges when they do not conflict with the provisions of the National Wildlife Refuge System Improvement Act of 1997 and resulting policies and regulations. The special use permit conditions provide adequate regulation of this specialized activity and quality wildlife observation and photography opportunities for all refuge visitors will be ensured. Commercially guided wildlife observation and photography is a public use that will allow the unskilled or inexperienced participants to enjoy, experience, and learn about native wildlife and habitats in this bottomland hardwood environment. This commercial wildlife observation/photography use is being implemented in compliance with the legal mandates of the National Wildlife Refuge System Improvement Act, including compatibility.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-Year Re-evaluation Date: 12/25/2019

8) Description of Use: *Commercial Video and Photography*

Allow commercial video and photography activities on Bald Knob NWR for the purpose of exposing the public to the Refuge and to promote recognition of the diverse wildlife and habitats found there. Over the past several years, Bald Knob NWR has been contacted as to the possibility of producing commercial audio-visual productions such as video and still photographs. The refuge provides a variety of natural habitats abundant with wildlife and is an ideal setting for filmmakers. As central Arkansas and Service programs for visitors are promoted, demand for commercial filming on the refuge may increase.

Availability of Resources: Adequate refuge staff and resources are available to administer this activity at the current level.

Anticipated Impacts of Use: Commercially produced video and photography could result in some disturbance to wildlife. Some minimal trampling of vegetation, invertebrates, and small vertebrates may also occur. However, it is anticipated that this disturbance would be minimal, short-term, localized, and not highly repetitive. Commercially produced video and photography activities are not expected to indirectly or cumulatively impact refuge resources negatively.

Determination (check one below):

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Access for commercially produced video and photography activities would be allowed in designated areas only under special use permit. Activities would be monitored to document any negative impacts to wildlife; if negative impacts are found, corrective action would be taken to reduce or eliminate these impacts. Access to key observation and photography areas may be closed during adverse weather conditions for protection of infrastructure (roads, levees, etc.), and visitor safety.

Public Law 106-206, signed by the President on May 26, 2000, directed the Secretary of the Interior to require a special use permit and establish a reasonable fee for commercial filming activities on federal lands administered by the Secretary. This law further stated that for still photography neither a special use permit nor a fee would be assessed if the activities take place on lands where members of the public are generally allowed. The Secretary may require a special use permit and fee if photographic activities take place at locations where the general public is not allowed or where additional administrative costs are likely.

The Secretary shall not permit any filming, still photography, or other related activity if the Secretary determines:

1. There is a likelihood of resource damage;
2. There would be an unreasonable disruption of the public's use and enjoyment of the site; or
3. That the activity poses health or safety risks to the public.

Further guidance is found in 43 CFR 5.1 and 50 CFR 27.71, which regulate the making of pictures, television productions, or sound tracks on national wildlife refuges.

- A special use permit is required of any party except amateur photographers or bona fide newsreel and news television photographers and soundmen. All other parties must obtain written permission from local officials having administrative responsibility for the area involved.
- However, the Secretary has determined that no fee will be charged for the making of such motion pictures, television productions, or sound tracks on areas administered by the U.S. Fish and Wildlife Service (Note: this provision is currently under Departmental review).
- A bond shall be furnished, or deposit made in cash or by certified check, in an amount to be set by the official in charge of the area to ensure full compliance with all conditions prescribed in the permit. Such bond may be refunded to the applicant if all permit requirements are met and no costs to the government are incurred.
- Permission to make a motion picture, television production, or sound track will be granted by the head of the Service or his/her authorized representative at his/her discretion and on acceptance by the applicant of conditions set forth in a special use permit. Applicants must describe the area where filming is requested and the scope of the filming or production or recording. Dependent upon weather conditions, applicants will state when filming or other production will begin and end.

Other stipulations include:

- Utmost care will be exercised to see that no natural features are injured, and after completion of the work, the area will, as required by the refuge manager, either be cleaned up and restored to its prior condition or left, after cleanup, in a condition satisfactory to the refuge manager.

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- Credit will be given to the Department of the Interior and the U.S. Fish and Wildlife Service through the use of an appropriate title or announcement, unless the refuge manager issues a written statement that no such courtesy credit is desired. A copy of the final product will be provided pro bono to the refuge staff.
 - Pictures will be taken of wildlife only when such wildlife will be shown in its natural state or under approved management conditions, if such wildlife is confined.
 - Any special instructions received from refuge manager will be complied with.
 - Any additional information relating to the privilege applied for by the applicant will be furnished upon request.
 - Other stipulations may be warranted depending upon the proposed location and season of the year the activity is conducted.

Further guidance on this activity is found in the Service Manual 650 FW 5.

The following stipulations apply to special use permits issued for commercially produced video and photography activities. To minimize impacts on refuge lands and resources, the refuge manager will ensure that filmmakers comply with policies, rules, and regulations, and will monitor and assess all activities of filmmakers.

- Failure to abide by any part of a special use permit: violation of any refuge-related provision in Titles 43 or 50, Code of Federal Regulations; or any pertinent state regulation (e.g., fish or game violation) will be considered grounds for immediate revocation of the permit and could result in denial of future permit requests for lands administered by the U.S. Fish and Wildlife Service. This provision applies to all persons working under the authority of this permit.
- The permittee is responsible for ensuring that all employees, party members, and any other persons working for the permittee and conducting activities allowed by the special use permit are familiar with and adhere to the conditions of the permit.
- The special use permit may be canceled or revised at any time by the refuge manager for noncompliance or in case of emergency (e.g., public safety, unusual resource problems). The permittee and permittee's clients do not have exclusive use of this site(s) or lands covered by the permit.
- Prior to beginning any activities allowed by the special use permit, the permittee shall provide the refuge with: (1) Copy of current business license; and (2) proof of comprehensive general liability insurance.
- Prior to conducting commercial filming activities, the permittee shall provide the refuge manager with the name and method of contact for the field party chief or supervisor.
- A valid copy of the special use permit, signed by the refuge manager or designee, must be in the party leader's possession at all times while exercising the privileges of the permit.
- Endorsement of the special use permit signifies the permittee's understanding and concurrence with all the conditions set forth in the General Conditions found on the reverse side of the permit and the above Special Conditions.

Under the stipulations described above, commercially produced filmmaking, production, or sound track recording is viewed as compatible with the purposes for which the refuge was established.

Justification: Commercial video and photography are economic uses that must contribute to the achievement of refuge purposes or the mission of the National Wildlife Refuge System. The products derived may educate groups of people that may not normally know about the refuge, such as the elderly, handicapped, or urban youth groups. The services provided by commercial filmmakers will be beneficial to extend public appreciation and understanding of wildlife, natural habitats, and the mission of the Refuge System. Conditions imposed in the permit of filmmakers ensure that these

wildlife-dependent activities can occur without adverse effects to refuge resources or other visitors. The activity will be required to have a primary focus on education and information about refuge purposes and the Refuge System mission.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

9) Description of Use: *Nuisance Animal Control*

This activity would allow a managed and highly targeted program for the take of nuisance animals on Bald Knob NWR that are harmful to refuge habitat and/or infrastructure critical to refuge habitat management and operations, and therefore a threat to the trust species that inhabit or utilize the refuge. Currently, this program will specifically address beaver, nutria, and feral hogs, but may be expanded to other species if necessary and in compliance with Arkansas Game and Fish Commission (AGFC) regulations, to address future harmful impacts caused by exotic or invasive species and prevent or control problems, such as disease outbreaks involving furbearers or excessive predation on trust species.

Semi-aquatic Component

The hydrology and habitat of the refuge is such that semi-aquatic animals, specifically, beaver (*Castor Canadensis*) and nutria (*Myocastor coypus*), have become prolific and their dense populations have degraded habitat for other wildlife usage. Beaver naturally impound water to enhance accessibility and extend usable habitat beyond the stream channel. Under normal hydrologic and population conditions, beavers are held in check by availability of water and natural predators, and under these conditions their impoundments may provide beneficial aquatic microhabitats containing scrub-shrub vegetation and trees. However, the amount of irrigated cropland on the refuge provides beavers with a “dry” season water supply from irrigation runoff. Beaver and nutria have little pressure from natural predators. Beaver populations have grown to the point that impoundments have been rebuilt for many years and impounded areas have grown in size. Over the long-term, these impoundments degrade the habitat both within and surrounding the area because the woody vegetation within the impoundments decreases in diversity and abundance, and trees eventually will be excluded altogether. The water table surrounding the impoundment is elevated, altering the forest species composition and degrading quality and health. The hydrology itself is impacted as sediment and organic material from decomposing aquatic vegetation accumulates in the impoundment and impedes the ability of the site to dewater. Additionally, water quality in impounded areas is negatively affected due to increased water temperature and turbidity, decreased dissolved oxygen, and reduced species diversity.

Nutria are non-native herbivores that cause negative impacts on wildlife habitat by consuming and destroying aquatic vegetation, and burrowing in levees of migratory bird impoundments. Their constant burrowing causes roads and levees to collapse, which ultimately poses major safety issues for refuge personnel and visitors. These activities degrade habitat managed for waterfowl, shorebirds, and other desired species. Their foraging activities also result in competition with waterfowl for food resources.

Refuge staff remove beaver impoundments annually and opportunistically, and conduct wintertime trapping and shooting, but do not have resources to consistently and effectively pursue sufficient control to protect the habitat resources from beaver and nutria impacts.

Terrestrial Component

The presence of feral hogs (*Sus scrofa*) has been documented on the refuge and observed on several occasions in the recent past. The animals are not native and have few natural predators. The hogs compete with resident wildlife for forage, which includes herbaceous vegetation, roots, acorns, invertebrates, and mammals. Additionally, the animals degrade habitat by rooting and digging wallows. Hardwood plantings used to restore marginal agricultural lands to productive, forested, wildlife habitat are threatened by these animals. Also, there is the potential for the feral hog to carry and transmit a number of infectious diseases to resident wildlife and humans. Currently, the refuge allows the take of feral hogs during any legal refuge hunt, but the staff has implemented no further control measures. Similar to the beaver and nutria problem, the refuge does not have the resources to pursue sufficient control to protect the habitat and wildlife from this threat.

Permit System

As necessary to protect refuge resources, the staff may issue special use permits to individuals for the take of nuisance beaver, nutria, and feral hogs. These permits may be issued refuge-wide, or permittees may be directed to certain areas with known overpopulation or habitat damage issues. The take may consist of trapping, shooting, or other methods approved by the AGFC, and the permittee will be allowed to retain the animals, pelts, tails, and any bounties from animals taken under the special use permit. Because there are advantages to trapping or shooting in virtually all seasons, permits will be valid year-round, unless otherwise specified in the permit, or specified later by the refuge manager. In the case of feral hogs, control measures will be limited to shooting and/or live trapping. Captured animals will be dispatched by gunshot.

Availability of Resources: Refuge staff and resources are adequate to administer this program. Refuge expenditures for issuing special use permits, oversight, and enforcement will be minimal. To closely monitor the program and to protect non-target animals, the refuge may issue only a small number of permits annually.

Anticipated Impacts of Use: The take of nuisance animals will involve the use of vehicles, boats, ATVs, or walking in approved areas, setting of traps or snares, and discharge of firearms, which will result in only normal short-term disturbances similar to those associated with other refuge-approved uses (e.g., hunting, fishing, birding).

With respect to beavers and nutria, the short-term benefits of this program should result in decreased nuisance animal populations and reduced inundation of refuge habitats and damage to infrastructure. As nuisance animal populations decrease, the number, size, and frequency of rebuilt beaver impoundments should also decrease. The refuge will spend less time and expense on the removal of impoundments and can redirect these resources to other habitat restoration and management activities. Damage to infrastructure and habitat should be reduced. In the long term, degraded habitats will return to a more normal hydrologic regime and will be reclaimed by native hardwoods and natural riparian vegetation, which will result in increased benefits to trust resources and associated wildlife-dependent recreation.

With respect to feral hogs, the short-term benefits of this program should be realized in re-growth and/or recovery of hardwood plantations, and other young plant communities and soils that were formerly disturbed. In addition, local wildlife populations will have relief from this non-native competitor/predator. In the long-term, a reduction in feral hog numbers and associated damage

and disease potential will result in enhanced conditions for trust resources and associated wildlife-dependent recreation.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

- The use will be administered under conditions of a special use permit issued by the refuge manager that will enable control efforts to be directed to problem areas and specify methods and procedures to ensure protection of staff, visitors, and refuge resources.
- Use will be conducted to minimize risk of injury or take of non-target species and disturbance to refuge habitats.
- Use will be conducted to avoid any conflicts with refuge visitors.
- Permittee will comply with all applicable state and federal regulations.
- Activities under the permit will not be conducted in waterfowl sanctuaries during annual closure periods.
- Permittee will provide locations of beaver dams and lodges and other problem areas, as well as number and location of species taken.
- All target animals will be immediately dispatched by gunshot.
- The permittee and his/her agents and guests shall save, hold harmless, defend, and indemnify the United States of America, its agents, and employees for loss, damages, or judgments and expenses on account of bodily injury, death, or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomever made, arising out of the permittees, his/her employees, subcontractors, or agents with respect to conducting activities connected with the special use permit within the lands administered by the refuge.
- The special use permit may be revoked at any time by the refuge manager.
- The refuge manager may discontinue this use at any time.

Justification: This use has been determined compatible provided the above stipulations are implemented. This use will facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use will meet the mission of the National Wildlife Refuge System by conserving fish, wildlife, and plant resources on these lands and providing renewable resources for the benefit of the American public. This use will be administered in compliance with 50 CFR 29.1 and EO 13112.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

10) Description of Use: *Cooperative Farming*

Continue the existing cooperative farming program which includes the production of approximately 4,500 acres of primarily rice, soybean, grain, and moist-soil habitats on this 15,020-acre refuge. The farming program is necessary for meeting refuge purposes, goals, and objectives by providing supplemental food resources and/or habitat for waterfowl, shorebirds, other migratory birds, and other native wildlife. Farming would be conducted on a crop-share basis with the farmer providing all equipment, seed, fertilizer, labor, and other costs associated with growing and selling a crop(s). The refuge would not be required to provide any costs associated with growing the crop(s) and only provide the land base and oversight for the program.

Availability of Resources: The refuge does not have the staff or the funds to accomplish this critical habitat management program internally. Wildlife food production goals are accomplished through a cooperative agreement with a local farmer. Refuge staffing levels are adequate to administer the program through this cooperative agreement.

Anticipated Impacts of Use:

- Food is produced to help meet refuge purposes and goals (high-energy foods to maintain body condition and health of migrating and wintering waterfowl, wading birds, and shorebirds).
- Hydrology is partially restored on a portion of cropland acres.
- Increased diversity of habitats and forage for waterfowl and other migratory birds.
- Numbers and diversity of waterfowl and other migratory birds using refuge habitats for wintering, staging, and migration will increase.
- Soil erosion will occur, but impacts will be minor due to soil conservation measures.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

- Implement cropland management only on areas vital to meet objectives identified in Migratory Bird Biological Review.
- Reforest isolated fields to reduce forest fragmentation and provide forested corridors.
- Comply with provisions contained in the Cooperative Farming Agreement.
- Fall tillage will not be permitted without refuge manager approval.
- Only Service approved chemicals (insecticides and pesticides) may be used on the refuge.
- Use approved pesticides only when pest occurrence is at the economic threshold as determined by crop scouting.
- Incorporate crop rotation to minimize fertilizer and chemical use.
- Annual monitoring will be performed by refuge staff to assess suitability of crop production and habitat use by wildlife to enable necessary adjustments in annual programs.

Justification: The Migratory Bird Biological Review completed on Bald Knob NWR determined that farming was required to meet habitat objectives and dietary requirements of wintering waterfowl and fulfill the purposes of the refuge. The cooperative farming program is required to meet the identified management objectives for waterfowl, especially pintail, which are very dependent on open feeding areas provided in rice fields and moist-soil plant habitat. Without this program, the refuge could not meet management objective capabilities necessary to meet high-priority management goals. All migratory shorebird unit management is provided through the cooperative farming program under the management of the refuge. Shore and wading bird habitat is also created throughout the refuge as rice fields are irrigated. The Biological Review Team, which was composed of biologists,

academicians, researchers, and experienced refuge managers from other locations, recognized that the diverse habitat objectives for wintering waterfowl on Bald Knob NWR could not be accomplished without this program, and that rice and other crops are very important for feeding wintering waterfowl. It was the recommendation of this team that the cooperative farming program be continued due to the need for productive and diverse habitat for wintering waterfowl, migrating shorebirds, wading birds, and other migrating birds. This use will be administered in compliance with 50 CFR 29.1.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

11) Description of Use: Construction of Headquarters/Visitor Contact Station and expansion of Maintenance Shop at Bald Knob NWR

The current refuge office at Bald Knob NWR, located approximately 2 miles south of Bald Knob, Arkansas, in White County, is a single-wide government surplus trailer that has been in use since 1997. It is substandard and grossly inadequate to meet administrative and visitor services needs. Entry points, interior workspaces, and restroom are not fully accessible. The trailer does not contain actual office spaces, the exterior and interior walls are deteriorating and failing, the roof needs to be replaced, the HVAC system is inefficient, rooms are not sufficiently lighted or ventilated, health and safety issues exist, and it is infested with rodents and insects. Furthermore, there are no suitable spaces for staff/partners meetings, visitor reception, exhibit areas for education/interpretation, or secure storage. Rehabilitation or renovations are not cost effective or desirable.

Funding has been obtained through the American Reinvestment and Recovery Act (ARRA) for replacement of the existing office with a suitable facility. The proposed headquarters/visitor contact station would be 1-story, approximately 2,500 square feet in size, and would include 4 staff offices, conference room, break room, unisex staff restroom, law enforcement storage, utility/storage closets, fax/photocopy/file room, mudroom, separate male/female public restrooms, an exhibit area, and volunteer/receptionist area. This facility would be fully ADA-compliant, would provide adequate administrative function, and would enable suitable opportunities for visitor reception and interpretation. The building design would incorporate greening features, including energy-conserving lighting, HVAC and insulation, water-conserving systems, and options for alternate energy. These features would reduce carbon footprint compared to traditional buildings and would lessen environmental impacts. It also would provide a safe and comfortable environment for staff and visitors. The current office would be removed and the new headquarters/visitor contact station would be sited within close proximity to the current building within the existing office/maintenance shop grounds, which are already disturbed; therefore, new construction would necessitate minimal site disturbance and no wildlife habitat would be destroyed.

The current maintenance shop/equipment storage facility at Bald Knob NWR is inadequately sized and lacks the critical components to support maximum work capacity and capability. The existing structure consists of a 40x40-foot shop building, with an attached 60x40-foot 3-bay open pole shed. This facility does not provide enclosed workspace for heavy equipment repair and maintenance, contains no equipment lift, and is energy-inefficient. The exterior attached pole shed is not large enough to accommodate the refuge's heavy equipment fleet, thus causing millions of dollars of equipment to sit exposed to the elements. Due to these inadequacies, the shop building would be expanded by enclosing one of the existing pole shed bays; pouring a concrete floor; installing 2 overhead bay doors (to allow drive-through bay); adding energy efficient lighting, insulation, and HVAC system; and installing a hydraulic vehicle lift and adequate shelving and work table space. The pole shed expansion would include adding three, 20-foot open bays, installing a metal roof, gutter system, gravel floor, and expanding the shop yard and security fence enclosing the compound. This project would enable the refuge to conserve energy, create a safer workplace, and facilitate implementation of habitat and wildlife management projects.

The visitor contact station would be open to the public during regular business hours. More than 60,000 visitors would use this facility annually. The maintenance shop would provide work area and storage for most of the heavy equipment of the station and would be used by staff, volunteers, YCC, interns, and other authorized persons.

Availability of Resources: The planning/design, engineering, and construction of the headquarters/visitor contact station would be funded through the ARRA. The shop expansion would be funded through the Deferred Maintenance Program. The new facilities would incorporate energy-conserving features and low maintenance design and components. Annual maintenance and operations needs are expected to remain within the capabilities of the staff and funding levels.

Anticipated Impacts of the Use: Minor, temporary surface disturbance would occur around the construction site. Proper erosion control measures would be implemented and disturbed surfaces would be revegetated following construction. The new buildings would replace the existing ones and would be located within the existing office-shop complex; therefore, no wildlife habitat would be destroyed. Noise and activity around the construction site may temporarily displace some wildlife such as birds, small mammals, reptiles, and amphibians. Some trampling of vegetation and perhaps small vertebrates and invertebrates may occur, but these losses would be minor. The impacts of these activities would be temporary and not cumulative over the long-term. The new buildings would incorporate green-building design and features that would lessen the environmental effects of the operation and use of the facilities.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Energy-conserving features would be incorporated into building design, construction activities would be conducted in such a manner that disturbance to the site and wildlife would be minimized, and safety precautions would be implemented to prevent risk of injury to visitors and staff. The new facilities would be used to enable better fulfillment of refuge purposes and facilitate management programs for the benefit of trust species.

Justification: This project is not a new construction but a replacement of an existing structure utilizing an existing disturbed site. Expansion of the shop would occur on the existing building site. Work activities would have no or negligible environmental effects. This project is completely funded through ARRA and will enable the refuge to better fulfill refuge purposes by facilitating habitat restoration, management, and conservation programs for trust species. Furthermore, the construction and operation of these facilities would promote compatible public uses, including environmental education and interpretation, that would serve to increase public awareness of the need for and value of Bald Knob NWR and the Refuge System, and garner support for refuge programs.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date:__ 12/25/2019

BIG LAKE NATIONAL WILDLIFE REFUGE COMPATIBILITY DETERMINATIONS

Uses: The following uses were found to be appropriate and evaluated to determine their compatibility with the mission of the National Wildlife Refuge System and the purposes of the refuge.

1. Hunting
2. Fishing
3. Wildlife Observation and Photography
4. Environmental Education and Interpretation
5. Research and Monitoring
6. Forest Products Harvesting
7. Commercial Guiding for Wildlife Observation/Photography
8. Commercial Video and Photography
9. Nuisance Animal Control
10. Commercial Fishing
11. Construction of Headquarters/Visitor Contact Station and Maintenance Shop

Refuge Name: Big Lake National Wildlife Refuge

Date Established: August, 1915

Establishing and Acquisition Authority(ies):

Executive Order 2230, dated August 2, 1915
Migratory Bird Conservation Act

Refuge Purpose:

“...as a refuge, reserve and breeding ground for native birds” (Executive Order 2230, dated August 2, 1915.)

“...for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).

To manage the Big Lake Wilderness as part of the National Wilderness Preservation System according to the Wilderness Act of 1964, as compatible with the purposes for which Big Lake NWR was established.

National Wildlife Refuge System Mission:

The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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.

Other Applicable Laws, Regulations, and Policies:

Antiquities Act of 1906 (34 Stat. 225)

Migratory Bird Treaty Act of 1918 (15 U.S.C. 703-711; 40 Stat. 755)

Migratory Bird Conservation Act of 1929 (16 U.S.C. 715r; 45 Stat. 1222)

Migratory Bird Hunting Stamp Act of 1934 (16 U.S.C. 718-178h; 48 Stat. 451)

Criminal Code Provisions of 1940 (18 U.S.C. 41)

Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; 54 Stat. 250)

Refuge Trespass Act of June 25, 1948 (18 U.S.C. 41; 62 Stat. 686)

Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j; 70 Stat. 1119)

Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4; 76 Stat. 653)

Wilderness Act (16 U.S.C. 1131; 78 Stat. 890)

Land and Water Conservation Fund Act of 1965

National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.; 80 Stat. 915)

National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd, 668ee; 80 Stat. 927)

National Environmental Policy Act of 1969, NEPA (42 U.S.C. 4321, et seq; 83 Stat. 852)

Use of Off-Road Vehicles on Public Lands (Executive Order 11644, as amended by Executive Order 10989)

Endangered Species Act of 1973 (16 U.S.C. 1531 et seq; 87 Stat. 884)

Refuge Revenue Sharing Act of 1935, as amended in 1978 (16 U.S.C. 715s; 92 Stat. 1319)

National Wildlife Refuge Regulations for the Most Recent Fiscal Year (50 CFR Subchapter C; 43 CFR 3101.3-3)

Emergency Wetlands Resources Act of 1986 (S.B. 740)

North American Wetlands Conservation Act of 1990

Food Security Act (Farm Bill) of 1990 as amended (HR 2100)

The Property Clause of the U.S. Constitution Article IV 3, Clause 2

The Commerce Clause of the U.S. Constitution Article 1, Section 8

The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57, USC668dd)

Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System. March 25, 1996

Title 50, Code of Federal Regulations, Parts 25-33

Archaeological Resources Protection Act of 1979

Native American Graves Protection and Repatriation Act of 1990

NOTE: Compatibility determinations for each use listed were considered independently. However, for brevity within this Appendix, the preceding sections from “Uses” through “Other Applicable Laws, Regulations and Policies” and the succeeding sections, “Public Review” and “Approval of Compatibility Determinations” are not provided separately but only provided once for all refuges within the Complex. However, those sections omitted for brevity are applicable to each compatibility determination and should be included as part of any compatibility determination that may be printed separately from the CCP.

1) Description of Use: *Hunting*

Hunting opportunities on Big Lake NWR include the take of squirrel, rabbit, deer, raccoon, and opossum. Additionally, hunters may take beaver, muskrat, nutria, armadillo, coyote, and feral hog incidental to the hunting of game species listed above. The refuge is closed to all migratory bird hunting. All hunts fall within the framework of the Arkansas Game and Fish Commission (AGFC) open seasons and follow AGFC regulations. There are refuge-specific regulations that supplement and further restrict the AGFC regulations. Refuge-specific regulations are reviewed annually and incorporated into the refuge hunting brochure. All hunters are required to read the refuge brochure and adhere to all regulations contained therein. A hunting permit on the front cover of the brochure must be signed by the hunter and must be carried on his person while hunting on the refuge.

A large portion of the refuge is seasonally closed as a waterfowl sanctuary. That portion of the refuge, designated as the waterfowl sanctuary, is closed to all public entry and use (including hunting) from November 1 to February 28. Dogs are allowed for squirrel, rabbit, raccoon, and opossum hunting. Hunter access to hunt areas is by motor vehicle, boat, bicycle, or foot. All vehicles, including bicycles, may only be used on designated roads, parking areas, or levee tops and are not allowed in fields or other areas. Mobility-impaired hunters may apply for a special use permit, allowing specialized use by ATV on Oak Island Trail only.

Availability of Resources: Adequate resources are available to ensure and administer the proposed activity at its current level of participation. Enforcement of refuge regulations to protect trust resources and provide for a safe, quality recreational opportunity will occur via patrols by refuge law enforcement officers. Additionally, personnel from the AGFC and Mississippi County Sheriff’s Department will patrol the refuge and assist refuge officers when needed.

Anticipated Impacts of Use: The incidental taking of other wildlife species, either intentionally or unintentionally, may occur with any consumptive use program. At current and anticipated public use levels for this program, this incidental take would be very small and would not directly or cumulatively impact population levels on the refuge or in the surrounding area. Implementation of a highly effective law enforcement program and continued development of special regulations for this use would eliminate most incidental take, other violations, or safety problems.

Currently, the refuge has an eagle nest sanctuary; however, it falls entirely within the seasonally closed area and therefore no access is allowed during the hunting season. The federally endangered fat pocketbook mussel occurs in an isolated area of the refuge, but this use will have no effect on that species. Impacts such as trampling small vertebrates or invertebrates and

crushing/trampling of vegetation would be minimal. Additionally, the activities of hunters traveling to and from hunt areas and their activities while hunting would disturb some non-target wildlife, but these disturbances are temporary, short-term, non-lethal, and not highly repetitive. As a consumptive use, hunting would have some minimal and short-term direct negative impacts on refuge resources. Numbers of resident game animals would be temporarily reduced as animals are harvested, but these individual and collective losses would be compensated by recruitment during the following reproductive season; therefore, no long-term cumulative losses in populations would result.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Hunting is permitted in accordance with the AGFC regulations and licensing requirements. The refuge is closed to all migratory bird hunting. Additional refuge-specific regulations further restrict the AGFC regulations. The waterfowl sanctuary is closed to all public entry and use, including hunting, from November 1 to February 28. Hunters must sign out after completion of the hunt and provide harvest information at the Hunter Check Station. Boats will be monitored in flooded areas and activities modified if warranted to ensure compatibility. Public access to hunting areas may be closed at any time necessary to protect refuge resources or visitors. Possession or use of alcoholic beverages while hunting is prohibited.

Refuge-specific regulations that pertain to small game hunting include:

- Spring squirrel season closed.
- Only approved non-toxic shot or rimfire rifles may be possessed and used for all small game hunting. The possession or use of buckshot is prohibited.
- Dogs are allowed north of Timm's Point for squirrel and rabbit hunting.
- Dogs are required for night hunting of raccoons and opossums.
- Beaver, muskrat, nutria, armadillo, coyote, and feral hog may be taken incidental to any refuge hunt by the use of the device appropriate for that hunt and according to any applicable AGFC regulations.

Refuge-specific regulations that pertain to big game hunting include:

- Deer (Archery/Crossbow): November 1 – December 31.
- Harvested deer must be recorded at the self-checking station located at the refuge entrance near the office.
- Only portable stands capable of being carried by one person may be used and the owner's name and address must be permanently affixed to the stand.
- Stands may be erected seven days prior to the refuge archery deer season and must be removed by the last day of archery season.
- For the refuge archery hunt, the statewide bag limit of three deer applies.
- The maximum number of bucks that can be harvested is two. A legal buck on the refuge is defined as any male deer (no antler restriction).

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, hunting is a priority public use activity that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

2) Description of Use: *Fishing*

Fishing and frogging are the most common public uses on Big Lake NWR. Big Lake encompasses 4,600 acres of open water for boating and ample areas exist around ditches and water control structures for bank fishermen. Fishing is permitted from March 1 through October 31 on all refuge waters. Fish creel and frog limits, boating safety, and license requirements are in accordance with the Arkansas Game and Fish Commission (AGFC) regulations. Access to fishing areas is by motor vehicle, boat, bicycle, or foot. All vehicles, including bicycles, are restricted to designated roads, levee tops, and parking areas. Fishing is permitted with the use of rod and reel, pole and line, limb line, yo-yo, jug line, trotline, and bow and arrow (on line). Fishermen are also permitted to collect crawfish with rakes and/or traps for personal use only. Harvesting of turtles and mussels is prohibited. A waterfowl sanctuary, established on the refuge north of Sand Slough Dam, is closed to all public entry and use (including fishing) from November 1 to February 28. The area below Sand Slough Dam is open to winter fishing; however, it is limited to electric trolling motors only. Fishing from electronically operated water control structures is prohibited. Possession of largemouth bass less than 15 inches is prohibited.

Commercial fishing is authorized only by special use permit and is covered under a separate compatibility determination.

Availability of Resources: Refuge staff and resources are adequate to cover management of fishing at current levels. However, it is anticipated that an increase in this use may occur over the coming years. In order to provide safe and quality fishing, additional resources and staff will be needed to enhance or develop additional access areas and provide law enforcement. A portion of the refuge's budget is spent annually managing for the benefit of freshwater fisheries, maintaining boat launching ramps, improving access, conducting law enforcement patrols, and ensuring refuge visitors are in compliance with boater safety and refuge regulations.

Anticipated Impacts of the Use: Fishing and frogging should not adversely affect the fisheries resource, wildlife resource, or any other natural resource of the refuge. Monitoring of frogs will be implemented to gauge trends in numbers and habitat use. The activities associated with fishing and frogging, including travel to and from fishing areas, may cause trampling of vegetation, small invertebrates, and vertebrates; however, these are short-term, relatively minor, and not highly repetitive. Most of the trampling occurs along road shoulders and along ditch banks where bushhogging takes place to control woody vegetation. The federally endangered fat pocketbook mussel occurs in an isolated area of the refuge, but is not affected by fishing and frogging activities. A Bald Eagle pair has successfully nested since 1993 in the lake and the nest area is protected as an eagle sanctuary (closed area) during the nesting season. Apparently there have been no negative effects from public use on the lake.

Fishing is a wholesome, enjoyable, and wildlife-dependent public use opportunity; however, participation in this activity generally results in litter on the refuge (fishing line, food, bait containers, soda/beer cans, and other “trash”) that must be removed numerous times per year in order to keep the refuge looking presentable. Trash is detrimental to the aesthetics of the refuge and can impact the digestive tracts of birds, turtles, fish, and other resident and migratory wildlife. The refuge would strive to reduce this problem by working with partners to pick up litter, educating anglers not to litter, and through law enforcement. Information contained in the refuge brochure concerning rules and regulations also helps keep negative impacts to a minimum. Regulations are reviewed annually and modifications are made as necessary to maintain compatibility and ensure a safe and quality fishing program.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Fishing and frogging are permitted in accordance with AGFC regulations and licensing requirements with additional refuge-specific requirements. Conflicts between anglers and hunters or other visitors using the refuge for non-consumptive wildlife recreation have not been a problem and are not expected to be a problem in the future. Associated violations, such as taking under-sized fish, open fires, and littering, can be minimized by public outreach and a continued law enforcement presence.

The following refuge-specific regulations help ensure the refuge fishing program is compatible with refuge purposes.

- All fishing tackle must be attended at all times.
- Crawfish may be collected for personal use only. All crawfish traps must have the owner’s name and address permanently affixed.
- Taking or possessing turtles and mussels is prohibited.
- Only fishing with rod and reel, pole and line, limb line, yo-yo, jug and line, trotline and bow and arrow (on line) will be allowed; no other methods or tackle will be permitted unless issued under a refuge special use permit.
- The waterfowl sanctuary is closed to all public entry and use (including fishing and frogging) from November 1 – February 28.
- Personal watercraft (e.g., jet-skis, hovercraft, and airboats) are prohibited.
- Public access to fishing areas may be closed at any time necessary to protect refuge resources or visitor safety.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, fishing is a priority public use activity that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

3) Description of Use: *Wildlife Observation and Photography*

Wildlife observation (viewing) and photography are important public uses at Big Lake NWR. Abundant wildlife and convenient access make Big Lake NWR a destination for visitors hoping to observe and photograph a variety of wildlife and their habitats. Visitors are especially interested in viewing waterfowl, white-tailed deer, bald eagles, and songbirds. Access to the refuge is by vehicle, boat, bicycle, or foot. All vehicle use, including bicycles, is restricted to designated roads and parking areas only, and is not allowed on hiking trails, fields, or other areas. A wheelchair-accessible observation pier, complete with a fixed focus permanent spotting scope, is available to view the southern lake area and the 32-acre wildlife observation area. Parking lots are available along levees on the 10-mile Bald Cypress Wildlife Drive. The public is allowed use of these facilities during daylight hours. A visitor contact station is located in the headquarters building and is open to the public during normal staff working hours to provide visitors with maps and directions for photography and observation. There is a small wildflower planting adjacent to the office that attracts butterflies. Timm's Point provides the visitor an excellent opportunity for year-round use to view and photograph wildlife.

Availability of Resources: Refuge staff and resources are adequate to administer the program at current levels. However, it is anticipated that an increase in these uses will occur over the coming years. In order to provide safe and quality wildlife observation and photography opportunities, additional resources and staff will be needed to enhance or develop additional viewing areas and provide improved facilities and programs.

Anticipated Impacts of Use: The use will be allowed in designated areas only. The refuge has ample sites where wildlife disturbance will be minimal and still provide the user with excellent wildlife viewing opportunities. Plans for additional facilities, such as observation decks, boardwalks, and trails, will minimize visitor impacts or conflicts with other uses. These low-level impacts may include trampling of vegetation, invertebrates, and small mammals, and temporary disturbance to wildlife species in the immediate area during the activity. Littering also may occur.

Determination (check one below):

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: The users must adhere to all applicable refuge regulations and the use is allowed only during daylight hours. The waterfowl sanctuary is closed to all public entry and use from November 1 – February 28. Regulations governing public use are reviewed annually and any necessary modifications are made to ensure refuge resources are protected and visitors can enjoy a safe and quality experience. Wildlife observation and photography uses will be monitored and appropriate management action will be taken to eliminate or reduce associated impacts. Public access to wildlife observations and photography areas and facilities may be closed periodically for appropriate visitor and/or resource protection.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, wildlife observation and photography are priority public use activities that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

4) Description of Use: *Environmental Education and Interpretation*

On Big Lake NWR, environmental education and interpretation activities are conducted to inform and educate the public and provide an understanding of natural resource values and refuge purposes and the mission of the National Wildlife Refuge System. The environmental education and interpretation program facilities will include visitor contact areas, kiosks, platforms or towers, routes, or trails, and other designated public use facilities or access areas. In addition, refuge staff provide off-site environmental education and interpretation services at local events, such as festivals, fishing derbies, school classes, and civic or conservation group meetings. Access to the refuge is by vehicle, boat, bicycle, or foot. All vehicle use, including bicycles, is restricted to designated roads and parking areas only, and is not allowed on hiking trails, fields, or other areas.

Availability of Resources: Refuge staff and resources are adequate to administer the program at current levels. However, it is anticipated that an increase in these uses will occur over the coming years. In order to provide safe and quality environmental education and interpretation opportunities, additional resources and staff will be needed to develop or provide enhanced programs and interpretive facilities (such as visitor contact stations, observation platforms, interpretive trails, kiosks, and other facilities). Plans are being developed to provide additional or improved facilities as described herein. Additionally, the utilization and development (training) of volunteers may supplement environmental education and interpretation programs.

Anticipated Impacts of Use: Outdoor environmental education and interpretation activities may result in minimal and temporary disturbance to wildlife from visitors. It is possible that some small vertebrates, invertebrates, and vegetation could be trampled. Littering may also occur. Significant indirect or direct, cumulative adverse impacts to refuge resources are not expected from these activities. Environmental education and interpretation facilities, such as blinds, boardwalks, exhibits, kiosks, platforms, and towers, will be designed and established to minimize potential disturbance to wildlife and impacts to resources. The federally endangered fat pocketbook mussel occurs in an isolated area of the refuge; this use will not have any impacts to the mussel or its habitats.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Environmental education and interpretation activities conducted outdoors should be appropriately located to minimize impacts and may need to be rotated or moved periodically. The waterfowl sanctuary will be seasonally (November 1 - February 28) closed to all public entry and use, including environmental education and interpretation. Regulations concerning public use are reviewed annually and any necessary modifications are incorporated into refuge brochures or otherwise conveyed to visitors. Environmental education and

outreach can be taken into the classroom, incorporated into presentations, and will be used at other forums; these activities will have no deleterious affect on fish and wildlife at the refuge.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, environmental education and interpretation are priority public use activities that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

5) Description of Use: *Research and Monitoring*

Big Lake NWR would allow university students and professors, as well as governmental or non-governmental employees and volunteers, to conduct short- or long-term research and monitoring studies. Such research and monitoring would be conducted in various habitats throughout the refuge and with various species of migratory birds, resident wildlife, and fish. The information collected would provide a better understanding of ecosystem functions and responses to management actions. Research and monitoring results would help managers to evaluate prior management actions, identify adaptive management options, and develop “Best Management Practices.” The knowledge gained through research and monitoring studies would allow more effective management decisions. All research and monitoring project requests would be evaluated on individual project merit and applicability to refuge programs on a project-by-project basis.

Availability of Resources: Resources are adequate to administer research and monitoring activity at the current level. The refuge will also seek to establish and/or expand partnerships for continued research and monitoring projects conducted by other organizations on refuge lands.

Anticipated Impacts of Use: There could be some negative impacts from scientific research and monitoring on the refuge. Impacts such as trampling vegetation, ATV and motor boat use, and temporary disturbance to wildlife could occur. A small number of individual plants or animals may be collected for further study. These collections would not likely adversely affect refuge plant and animal populations. Removal of plant and animal material from the refuge, as well as the potential to accidentally introduce exotic plants and animals, must be carefully monitored and controlled. Some other impacts from research include: (1) Noise disturbance from helicopter, airplane, motor boat, airboat, truck, car, or ATV that may temporarily disturb and/or displace wildlife; (2) physical presence of people or equipment that may temporarily disturb and/or displace wildlife; (3) ground disturbance from walking on site or the use of equipment; and (4) water disturbance by stirring sediments and causing temporary turbidity from equipment or walking. The federally endangered fat pocketbook mussel occurs in an isolated portion of the refuge, but this use will not negatively impact this species. Despite these impacts, which are short-term, the knowledge gained from carefully considered and properly executed scientifically defensible research and monitoring would provide information and justification to improve management techniques and better meet the needs of trust species.

Research/monitoring activities on the refuge are not expected to indirectly or cumulatively impact refuge resources negatively, even though some minimal short-term and direct impacts may occur.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: All researchers would be required to obtain and possess a special use permit. Individual requests to use specialized equipment, all-terrain vehicles, etc., would be evaluated on a project-by-project basis and specified on each permit. Researchers would periodically be evaluated for compliance with requirements. Periodic progress reports would be required and final copies of all reports and publications would be provided to the refuge. The refuge would not directly supply personnel or equipment unless arrangements were made prior to issuance of the special use permit. The refuge manager would reserve the right to delegate a staff member to accompany permittee(s) at any time. All plants or animals sampled, collected, or released would be done in a scientifically accepted manner, such as those specified by scientific societies. Examples of these societies include the Society for the Study of Amphibians and Reptiles, the American Society of Mammalogists, the American Ornithological Society, the Ichthyologists League, the Entomological Society of America, and the Botanical Society of America. Incidental take and inadvertent trampling of vegetation or wildlife are expected to be minimal and will be addressed with each special use permit. Given compliance with the restrictions set in each permit, research and monitoring conducted on the refuge is considered to be compatible with the purposes for which the refuge was established.

Justification: Sound research and monitoring programs provide a better understanding of species, habitats, and the environmental communities present on the refuge. Additional research and monitoring is needed to assess management programs used on the refuge and evaluate alternative options. The benefit of additional knowledge will greatly outweigh any temporary or short-term disturbance or loss of individual plants or animals that may occur. This activity will provide guidance to management for fulfilling refuge purposes and meeting established goals and objectives through adaptive management.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

6) Description of Use: *Forest Products Harvesting*

Conduct a comprehensive forest management program on Big Lake NWR in accordance with an approved forest management plan. Refuge forest habitats will be evaluated over a 3-year cycle. Prescriptions detailing needed actions will then be drawn up, approved from the Service's Regional Office, and carried out on a yearly basis. It is proposed that select trees be sold, and then removed by commercial operations. The forest habitat may also be manipulated by permittees/staff when commercial sales are not feasible. Only trees needing to be removed in order to improve the forest habitat for wildlife or to restore the integrity of the forested wetlands ecosystem will be taken or manipulated. Special use permits may be issued for firewood cutting (personal use) when there is

excess downed wood from silvicultural operations or when roads are widened. Seasonal special use permits may be issued for gathering seed, on a limited basis, when forest seed crops are abundant.

Operations may be conducted throughout the year, but only according to the guidelines detailed in the Forest Habitat Management Plan. Operations may involve numerous individuals using hand tools such as chain saws and heavy equipment such as feller-bunchers, skidders, bulldozers, and log trucks.

Availability of Resources: Some elements of needed resources are already in place, such as the forester's time and salary, and the small amount of time needed by other positions in maintenance, law enforcement, management, and administration. Additional expenses for equipment maintenance, operating expenses, and habitat restoration can be funded out of the refuge's budget. The Forest Habitat Management Plan allows that management will be carried out to the extent of available resources (see Section 3.2; Physical Plant and Equipment Use Requirements for a more detailed description).

Anticipated Impacts of the Use: Timber harvest operations will result in short-term disturbances and long-term benefits to forest habitats. Short-term impacts will include disturbance and displacement of wildlife, vegetation, and soils typical of any heavy equipment operation. Operation of heavy equipment and removal of some vegetation will also result in a short-term increase in soil erosion. Additionally, wildlife species dependent on undisturbed forest habitat will be temporarily displaced. As vegetation is disturbed, other wildlife species may also be temporarily displaced. Over time, these short-term impacts will wane as the effects of improvement treatments develop and the benefits are realized. The refuge is divided into four forest compartments; therefore, short-term impacts will be minimized by implementing the proposed actions in only a small percentage of the refuge at any given time.

Firewood cutting and forest seed collection will result in temporary disturbances. Seeds are gathered by hand and sold to local nurseries that, in turn, grow seedlings. The refuge has a need for seedlings to restore marginal cropland and other open fields. By allowing a limited forest seed harvest, the refuge is ensuring a continued supply of suitable seedlings of local origin for forest restoration. In the past, participation in refuge firewood cutting and hand collection of forest seeds has been low, and future participation is also expected to be low. The quantity and frequency of firewood cutting and seed harvesting is not expected to result in significant disturbance, diminish wildlife food resources, or jeopardize wildlife survival. Short-term disturbance to wildlife may occur during these activities, but will be insignificant because of the small scale of the projects. Most of the use will occur in late summer or fall, after ground nesting birds have completed the nesting season. Firewood cutting or seed collection should not result in short- or long-term impacts that adversely affect the purpose of the refuge or the mission of the National Wildlife Refuge System.

Determination (check one below):

Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

See General and Specific Guidelines in the Forest Habitat Management Plan, Appendix 7.10 and 7.11.

7.10 General Conditions Applicable To Timber Harvesting Permits

Subcontractors: Subcontractors or agents may be employed with authorization from the refuge forester.

Safety Requirements: The contractor must perform this contract in a safe manner, observing any necessary safety precautions. The contractor will promptly correct any condition, which, in the opinion of the refuge manager or his authorized representative, endangers the safety of personnel, the public, and/or property during the performance of this contract. Failure to observe this requirement will result in contract termination, with the contractor liable for any such damages that may occur.

Liabilities of the Contractor: The contractor will hold the government and all its representatives harmless from all suits, actions, or claims of any character arising out of the injuries to any person or damage to any property resulting from any neglect in the performance of the services required by this contract, or from any claims arising or recovered under the Workman's Compensation laws or any other law, by law, ordinance, order or decree, or on account of any other act or omission by the contractor or his employees while carrying on operations under this contract. This responsibility will terminate when suits, actions, or claims have been satisfied.

Insurance Coverage: The contractor must be covered by adequate insurance, as the government will assume no liability whatsoever as a result of the contractor's operations under this contract.

Inspection of Work Site: Before submitting a bid, prospective bidders are urged to personally inspect the site. Arrangements to view may be made by contacting Cache River National Wildlife Refuge, Augusta, Arkansas. Telephone (870) 347-2614.

7.11 Special Conditions Applicable To Timber Harvesting Permits

- A pre-entry conference between the refuge forester and the designated permittee representative will be required before the permittee starts logging operations. The purpose of the pre-entry conference is to be sure that the permittee completely understands what is expected and thus minimizes conflicts.
- All refuge wildlife is protected. All reasonable efforts will be made by the permittee to protect wildlife from harm and harassment.
- All logging will be within the boundaries specified on the attached map.
- Trees will be cut so as to leave ground-level paint spots visible after the tree has been cut. All marked trees are to be cut, with the exception of marked leave trees in shelterwood, seed tree, or small open areas as described in the special use permit.
- Only marked or designated trees will be cut. Care will be taken to protect all other trees and vegetation from damage. Unmarked trees that are cut or injured through carelessness will result in a fine of \$5 per inch diameter at stump height or breast height if present.
- Trees and tops will not be left hanging or supported by any other tree and will be laid down immediately after felling.
- Tops and logging debris will be lopped to within 6 feet of the ground in all areas 100 feet or less from major roads.
- All roads, rights-of-way, active agricultural fields, designated openings, ditches, and streams must be kept clear of tops and debris. The permittee is required to repair all damage resulting from operations conducted under this permit.
- The skidding of logs greater than 20 feet in length may be prohibited in designated areas.
- The refuge manager or his authorized representative must approve the location of additional roads. Additional trees removed for roads or loading sites will be marked by the refuge forester and paid for at bid price.
- Loading of forest products on public roads or shoulders or regeneration areas is prohibited.

- Logging will not be permitted when the ground is wet and subject to rutting and severe compaction. The permittee and his employees will do all in their power to prevent rutting and erosion.
- The permittee and his employees will do all within their power to prevent and suppress forest fires. Fires will be reported immediately to the refuge office.
- Ownership of all products remaining on a sale area will revert back to the government upon termination of the permit.
- Littering in any manner is a violation of the Code of Federal Regulations. The entire work area will be kept free of all litter at all times.
- The possession or use of firearms or other weapons on the refuge is prohibited outside of hunting seasons.
- The government accepts no responsibility to provide right-of-way over private lands for materials sold under this contract.
- The refuge manager or his authorized representative will have the authority to temporarily close down all or any part of the operation during a period of high fire danger, wet ground conditions, or for any other reason deemed necessary. Additional time, equal to the closing period, will be granted to the permittee.
- The decision of the refuge manager will be final in the interpretation of the regulations and provisions governing the sale, cutting, and removal of the timber products covered by this permit.

Justification: This use has been determined compatible provided the above stipulations are implemented. This use will facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use will meet the mission of the National Wildlife Refuge System and enhances fish, wildlife, and plant resources on these lands by providing renewable resources for the benefit of the American public. This use will be administered in compliance with 50 CFR 29.1.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

7) Description of Use: *Commercial Guiding for Wildlife Observation/Photography*

Allow commercial guiding to facilitate Wildlife Observation/Photography on Big Lake NWR. The objective is to provide the opportunity to experience wildlife observation and photography to the segment of the public lacking the knowledge or equipment required to view/photograph fish, wildlife, plants, or their habitats in compliance with the legal mandates of the National Wildlife Refuge System Improvement Act of 1997 concerning compatibility and priority public use. The surrounding communities, including Manila, Blytheville and Leachville, are dependent on supporting refuge visitors throughout the year. Within these communities, grocery stores, sporting goods stores, restaurants, lodges, and other businesses obtain a large proportion of their annual income from the influx of refuge visitors. Although wildlife observation and photography are involved on guided trips,

the commercial nature of guiding activities associated with these uses does not qualify as one of the six priority public uses (Federal Register/Vol.65, No.202/Wednesday, October 18, 2000/Rules and Regulations-Issue 13: Priority Uses, Pages 62471 and 62472). All commercial activities, including guiding of wildlife observers and photographers, are special type uses that may be authorized when they are appropriate and compatible with the purpose of the refuge, the mission of the National Wildlife Refuge System, and can be administered in a way that minimizes conflicts with priority uses and does not hinder the activities of visiting public not using guide services.

Guiding and equipment may involve the use of vehicles, buses, motor boats, paddle boats, canoes, and hiking. Guiding will be allowed only in designated areas and according to conditions specified by the refuge manager. Several miles of refuge roads are also used to access remote sloughs, bayous, and lakes where wildlife observers and photographers may conduct their activities.

Guides will be allowed to operate through issuance of a special use permit, which must be renewed annually. Special conditions are attached and part of the special use permit designed to meet the above objectives and provide liability protection to the government. The annual fee for the special use permit will be \$500.

Increased requests for special use permits to conduct wildlife observation and photography guiding on Big Lake NWR are expected in the future. The permits will be issued on a first-come, first-serve basis. The refuge reserves the option to limit the number of permits issued as necessary to ensure compatibility. Future requests for commercial wildlife observation and photography guiding special use permits will be reviewed by management and additional steps including limiting the number of guides, increasing annual special use permit fees, designating observation areas, or discontinuing this use entirely, as may be necessary to maintain safe and quality wildlife observation and photography opportunities for all refuge visitors.

Availability of Resources: Adequate resources and staff exist to administer refuge regulations and special use permit conditions at the current level of interest for this activity. An increase in special use permits may not be possible with the current existing staff. Any increase will be reviewed by management to ensure compatibility.

Anticipated Impacts of the Use: Commercial guiding for wildlife observation/photography would increase opportunities for the public to experience wildlife and gain an added appreciation for the value of Big Lake NWR and the National Wildlife Refuge System. This use would benefit a diverse set of participants from within and outside this local area. The use also would allow some economic benefit to local communities from refuge visitation. Minor impacts, such as short-term and temporary wildlife disturbance, could result. In addition, there could be minor trampling of vegetation and small vertebrates and invertebrates. These impacts are not expected to be significant.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: A special use permit is required.

- No special privileges are granted to the permittee other than those stated in the permit. Interfering with any other individual lawfully participating in any authorized activity on the refuge will be grounds for immediate revocation of the permit and for possible legal prosecution.
- The permittee and assistant each must comply with all applicable federal, state, and refuge laws, regulations, and policy.

- A copy of the special use permit must be in the possession of the permittee and assistant while engaged in commercial guiding activities.
- Guided parties are limited to fifteen (15) members and the permittee and his assistant who must all stay together as one (1) party on the refuge. Only one (1) party may be guided per day. The permittee must accompany all parties. Any exception to this requirement must be applied for and approved by the refuge manager prior to such event.
- Within one (1) week after the end of the calendar year, the permittee must furnish the refuge manager a written report on the number of individuals taken onto the refuge and fees charged.
- The special use permit may be terminated or revoked at any time without refund to the permittee for non-compliance with any of the terms thereof. Any violation may be grounds for future permit denial.
- The permittee and his/her agents and guests shall save, hold harmless, defend, and indemnify the United States of America, its agents, and employees for loss, damages, or judgments and expenses on account of bodily injury, death or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomever made, arising out of the permittees, his employees, subcontractors, or agents with respect to conducting activities connected with the permit within the lands administered by Big Lake NWR.
- Permittee must provide proof of liability insurance (\$300,000 each occurrence, \$500,000 aggregate) with the U.S. Fish and Wildlife Service named as co-insured prior to issuance of the special use permit.
- ALL equipment must be removed from the refuge daily.
- The refuge may limit the number of special use permits issued or discontinue this use entirely in order to ensure appropriateness, compatibility, and safe, quality opportunities for visitors not using guide services.

Justification: Commercial activities can be allowed on refuges when they do not conflict with the provisions of the National Wildlife Refuge System Improvement Act of 1997 and resulting policies and regulations. The special use permit conditions provide adequate regulation of this specialized activity and quality wildlife observation and photography opportunities for all refuge visitors will be ensured. Commercially guided wildlife observation and photography is a public use that will allow the unskilled or inexperienced participants to enjoy, experience, and learn about native wildlife and habitats in this bottomland hardwood environment. This commercial wildlife observation/photography use is being implemented in compliance with the legal mandates of the National Wildlife Refuge System Improvement Act, including compatibility.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-Year Re-evaluation Date: 12/25/2019

8) Description of Use: *Commercial Video and Photography*

Allow commercial video and photography activities on Big Lake NWR for the purpose of exposing the public to the refuge and to promote recognition of the diverse wildlife and habitats found there. Over the past several years, Big Lake NWR has been contacted as to the possibility of producing

commercial audio-visual productions such as video and still photographs. The refuge provides a variety of natural habitats abundant with wildlife and is an ideal setting for filmmakers. As central Arkansas and Service programs for visitors are promoted, demand for commercial filming on the refuge may increase.

Availability of Resources: Adequate refuge staff and resources are available to administer this activity at the current level.

Anticipated Impacts of Use: Commercially produced video and photography could result in some disturbance to wildlife. Some minimal trampling of vegetation, invertebrates, and small vertebrates may also occur. However, it is anticipated that this disturbance would be minimal, short-term, localized, and not highly repetitive. Commercially produced video and photography activities are not expected to indirectly or cumulatively impact refuge resources negatively.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Access for commercially produced video and photography activities would be allowed in designated areas only under special use permit. Activities would be monitored to document any negative impacts to wildlife; if negative impacts are found, corrective action would be taken to reduce or eliminate these impacts. Access to key observation and photography areas may be closed during adverse weather conditions for protection of infrastructure (roads, levees, etc.), and visitor safety.

Public Law 106-206, signed by the President on May 26, 2000, directed the Secretary of the Interior to require a special use permit and establish a reasonable fee for commercial filming activities on federal lands administered by the Secretary. This law further stated that for still photography neither a special use permit nor a fee is assessed if the activities take place on lands where members of the public are generally allowed. The Secretary may require a special use permit and fee if photographic activities take place at locations where the general public is not allowed or where additional administrative costs are likely.

The Secretary shall not permit any filming, still photography, or other related activity if the Secretary determines:

1. There is a likelihood of resource damage;
2. There would be an unreasonable disruption of the public's use and enjoyment of the site; or
3. That the activity poses health or safety risks to the public.

Further guidance is found in 43 CFR 5.1 and 50 CFR 27.71, which regulate the making of pictures, television productions, or sound tracks on national wildlife refuges.

- A special use permit is required of any party except amateur photographers or bona fide newsreel and news television photographers and soundmen. All other parties must obtain written permission from local officials having administrative responsibility for the area involved.
- However, the Secretary has determined that no fee will be charged for the making of such motion pictures, television productions, or sound tracks on areas administered by the U.S. Fish and Wildlife Service (Note: this provision is currently under Departmental review).

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- A bond shall be furnished, or deposit made in cash or by certified check, in an amount to be set by the official in charge of the area to ensure full compliance with all conditions prescribed in the special use permit. Such bond may be refunded to the applicant if all special use permit requirements are met and no costs to the government are incurred.
 - Permission to make a motion picture, television production, or sound track will be granted by the head of the Service or his/her authorized representative at his/her discretion and on acceptance by the applicant of conditions set forth in a special use permit. Applicants must describe the area where filming is requested and the scope of the filming or production or recording. Dependent upon weather conditions, applicants will state when filming or other production will begin and end.

Other stipulations include:

- Utmost care will be exercised to see that no natural features are injured, and after completion of the work, the area will, as required by the refuge manager, either be cleaned up and restored to its prior condition or left, after cleanup, in a condition satisfactory to the refuge manager.
- Credit will be given to the Department of the Interior and the U.S. Fish and Wildlife Service through the use of an appropriate title or announcement, unless the refuge manager issues a written statement that no such courtesy credit is desired. A copy of the final product will be provided pro bono to the refuge staff.
- Pictures will be taken of wildlife only when such wildlife will be shown in its natural state or under approved management conditions if such wildlife is confined.
- Any special instructions received from refuge manager will be complied with.
- Any additional information relating to the privilege applied for by the applicant will be furnished upon request.
- Other stipulations may be warranted depending upon the proposed location and season of the year the activity is conducted.

Further guidance on this activity is found in the Service Manual 650 FW 5.

The following stipulations apply to special use permits issued for commercially produced video and photography activities. To minimize impacts on refuge lands and resources, the refuge manager will ensure that filmmakers comply with policies, rules, and regulations, and will monitor and assess all activities of filmmakers.

- Failure to abide by any part of a special use permit: violation of any refuge-related provision in Titles 43 or 50, Code of Federal Regulations; or any pertinent state regulation (e.g., fish or game violation) will be considered grounds for immediate revocation of the permit and could result in denial of future permit requests for lands administered by the U.S. Fish and Wildlife Service. This provision applies to all persons working under the authority of this permit.
- The permittee is responsible for ensuring that all employees, party members, and any other persons working for the permittee and conducting activities allowed by the special use permit are familiar with and adhere to the conditions of the permit.
- The special use permit may be canceled or revised at any time by the refuge manager for noncompliance or in case of emergency (e.g., public safety, unusual resource problems). The permittee and permittee's clients do not have exclusive use of this site(s) or lands covered by the special use permit.
- Prior to beginning any activities allowed by the special use permit, the permittee shall provide the refuge with (1) a copy of current business license; and (2) proof of comprehensive general liability insurance.

- Prior to conducting commercial filming activities, the permittee shall provide the refuge manager with the name and method of contact for the field party chief or supervisor.
- A valid copy of the special use permit, signed by the refuge manager or designee, must be in the party leader's possession at all times while exercising the privileges of the permit.
- Endorsement of the special use permit signifies the permittee's understanding and concurrence with all the conditions set forth in the General Conditions found on the reverse side of the permit and the above special conditions.

Under the stipulations described above, commercially produced filmmaking, production, or sound track recording is viewed as compatible with the purposes for which the refuge was established.

Justification: Commercial video and photography are economic uses that must contribute to the achievement of refuge purposes or the mission of the National Wildlife Refuge System. The products derived may educate groups of people that may not normally know about the refuge, such as the elderly, handicapped, or urban youth groups. The services provided by commercial filmmakers will be beneficial to extend public appreciation and understanding of wildlife, natural habitats, and the mission of the Refuge System. Conditions imposed in the special use permit of filmmakers ensure that these wildlife-dependent activities can occur without adverse effects to refuge resources or other visitors. The activity will be required to have a primary focus on education and information about refuge purposes and the Refuge System mission.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

9) Description of Use: *Nuisance Animal Control*

This activity would allow a managed and highly targeted program for the take of nuisance animals on Big Lake NWR that are harmful to refuge habitat and/or infrastructure critical to refuge habitat management and operations, and therefore a threat to the trust species that inhabit or utilize the refuge. Currently, this program will specifically address beaver, nutria, and feral hogs, but may be expanded to other species if necessary and in compliance with Arkansas Game and Fish Commission (AGFC) regulations, to address future harmful impacts caused by exotic or invasive species and prevent or control problems such as disease outbreaks involving furbearers or excessive predation on trust species.

Semi-aquatic Component

The hydrology and habitat of the refuge is such that semi-aquatic animals, specifically, beaver (*Castor Canadensis*) and nutria (*Myocastor coypus*), have become prolific and their dense populations have degraded habitat for other wildlife usage. Beaver naturally impound water to enhance accessibility and extend usable habitat beyond the stream channel. Under normal hydrologic and population conditions, beavers are held in check by availability of water and natural predators, and under these conditions their impoundments may provide beneficial aquatic microhabitats containing scrub-shrub vegetation and trees. Beaver and nutria have little pressure

from natural predators. Beaver populations have grown to the point that impoundments have been rebuilt for many years and impounded areas have grown in size. Over the long-term, these impoundments degrade the habitat both within and surrounding the area because the woody vegetation within the impoundments decreases in diversity and abundance, and trees eventually will be excluded altogether. The water table surrounding the impoundment is elevated, altering the forest species composition and degrading quality and health. The hydrology itself is impacted as sediment and organic material from decomposing aquatic vegetation accumulates in the impoundment and impedes the ability of the site to dewater. Additionally, water quality in impounded areas is negatively affected due to increased water temperature and turbidity and decreased dissolved oxygen, and reduced species diversity.

Nutria are non-native herbivores that cause negative impacts on wildlife habitat by consuming and destroying aquatic vegetation, and burrowing in levees of migratory bird impoundments. Their constant burrowing causes roads and levees to collapse, which ultimately poses a major safety issues for refuge personnel and visitors. These activities degrade habitat managed for waterfowl, shorebirds, and other desired species. Their foraging activities also result in competition with waterfowl for food resources.

Refuge staff remove beaver impoundments annually and opportunistically, and conduct wintertime trapping and shooting, but do not have resources to consistently and effectively pursue sufficient control to protect the habitat resources from beaver and nutria impacts.

Terrestrial Component

The presence of feral hogs (*Sus scrofa*) has been documented on the refuge and observed on several occasions in the recent past. The animals are not native and have few natural predators. The hogs compete with resident wildlife for forage, which includes herbaceous vegetation, roots, acorns, invertebrates, and mammals. Additionally, the animals degrade habitat by rooting and digging wallows. Hardwood plantings used to restore marginal agricultural lands to productive, forested, wildlife habitat are threatened by these animals. Also, there is the potential for the feral hog to carry and transmit a number of infectious diseases to resident wildlife and humans. Currently, the refuge allows the take of feral hogs during any legal refuge hunt, but the staff has implemented no further control measures. Similar to the beaver and nutria problem, the refuge does not have the resources to pursue sufficient control to protect the habitat and wildlife from this threat.

Permit System

As necessary to protect refuge resources, the staff may issue special use permits to individuals for the take of nuisance beaver, nutria, and feral hogs. Special use permits may be issued refuge-wide, or permittees may be directed to certain areas with known overpopulation or habitat damage issues. The take may consist of trapping, shooting, or other methods approved by the AGFC, and the permittee will be allowed to retain the animals, pelts, tails, and any bounties from animals taken under the special use permit. Because there are advantages to trapping or shooting in virtually all seasons, permits will be valid year-round, unless otherwise specified in the permit, or specified later by the refuge manager. In the case of feral hogs, control measures will be limited to shooting and/or live trapping. Captured animals will be dispatched by gunshot.

Availability of Resources: Refuge staff and resources are adequate to administer this program. Refuge expenditures for issuing special use permits, oversight, and enforcement will be minimal. To closely monitor the program and to protect non-target animals, the refuge may issue only a small number of permits annually.

Anticipated Impacts of Use: The take of nuisance animals will involve the use of vehicles, boats, ATVs, or walking in approved areas, setting of traps or snares, and discharge of firearms, which will result in only normal short-term disturbances similar to those associated with other refuge approved uses (e.g., hunting, fishing, birding).

With respect to beavers and nutria, the short-term benefits of this program should result in decreased nuisance animal populations and reduced inundation of refuge habitats and damage to infrastructure. As nuisance animal populations decrease, the number, size, and frequency of rebuilt beaver impoundments should also decrease. The refuge will spend less time and expense on the removal of impoundments and can redirect these resources to other habitat restoration and management activities. Damage to infrastructure and habitat should be reduced. In the long-term, degraded habitats will return to a more normal hydrologic regime and will be reclaimed by native hardwoods and natural riparian vegetation, which will result in increased benefits to trust resources and associated wildlife-dependent recreation.

With respect to feral hogs, the short-term benefits of this program should be realized in re-growth and/or recovery of hardwood plantations, and other young plant communities and soils that were formerly disturbed. In addition, local wildlife populations will have relief from this non-native competitor/predator. In the long-term, a reduction in feral hog numbers and associated damage and disease potential will result in enhanced conditions for trust resources and associated wildlife-dependent recreation.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

- The use will be administered under conditions of a special use permit issued by the refuge manager that will enable control efforts to be directed to problem areas and specify methods and procedures to ensure protection of staff, visitors, and refuge resources.
- Use will be conducted to minimize risk of injury or take of non-target species and disturbance to refuge habitats.
- Use will be conducted to avoid any conflicts with refuge visitors.
- Permittee will comply with all applicable state and federal regulations.
- Activities under the special use permit will not be conducted in waterfowl sanctuaries during annual closure periods.
- Permittee will provide locations of beaver dams and lodges and other problem areas, as well as number and location of species taken.
- All target animals will be immediately dispatched by gunshot.
- The permittee and his/her agents and guests shall save, hold harmless, defend, and indemnify the United States of America, its agents, and employees for loss, damages, or judgments and expenses on account of bodily injury, death, or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomever made, arising out of the permittee, his/her employees, subcontractors, or agents with respect to conducting activities connected with the special use permit within the lands administered by the refuge.
- Special use permits may be revoked at any time by the refuge manager.
- The refuge manager may discontinue this use at any time.

Justification: This use has been determined compatible provided the above stipulations are implemented. This use will facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use will meet the mission of the

National Wildlife Refuge System by conserving fish, wildlife, and plant resources on these lands and providing renewable resources for the benefit of the American public. This use will be administered in compliance with 50 CFR 29.1 and EO 13112.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

10) Description of Use: *Commercial Fishing*

Allow commercial fishing by special use permit on specific areas of Big Lake NWR, primarily for removing exotic and non-game fish for the benefit of priority fish species and their habitats. Commercial fishing would occur in the lake and associated waters within refuge boundaries; access is by vehicle and boat, via existing boat launches. The habitat involved includes shallow lakes, streams, and associated wetlands and swamp. Key fish and wildlife species that occur in the proposed area include warm water game fish, waterfowl, and an active bald eagle nest. Commercial fishing opportunities are available to permit holders from March 1 through October 31, north of Sand Slough Dam. The lake closes November 1 through February 28 to adhere to waterfowl sanctuary status. From November 1 through February 28, fishing is restricted to the lake area below Sand Slough Dam with electric trolling motors only. Typically a small number of permits (three or four) are issued annually. Similar opportunities do not exist nearby.

Commercial fishing is utilized to remove fish commonly known as rough fish from refuge waters. The species permitted for commercial harvest include German carp, silver carp, big head carp, grass carp, black carp, buffalo, and catfish. The five carp species are exotics, which as a group, compete with and negatively impact habitat of native fisheries within the refuge and ecosystem. The overly abundant native buffalo, and to a lesser degree, catfish, also compete with other native fisheries.

Availability of Resources: Current facilities, equipment and staff are adequate to properly and safely administer this use.

Anticipated Impacts of Use: The primary impact is the removal of exotic, non-game fish. The program involves reducing numbers of these fishes (because eradication is not feasible) and reducing negative impacts to aquatic habitats and certain sport fishes. Incidental take of sport fish may occur in association with this use, but is not expected to result in any long-term or cumulative negative impacts. There is no long-term adverse impact to habitat or native fish and wildlife. Commercial harvest of non-game fish should enhance water quality and survival of other fish species, and provide local economic benefit.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Law enforcement officers would ensure compatibility through routine law enforcement patrols enforcing state and refuge-specific regulations. Arkansas Game and Fish Commission (AGFC) officers also occasionally patrol refuge waters and monitor the access areas. Specific refuge regulations ensure minimal disturbance of waterfowl and nesting bald eagles (closed areas). Refuge-specific regulations: only trolling motors and paddles are permitted in winter fishing areas November 1 – February 28; tackle must be registered at the refuge office; all tackle must be set in such a manner that is safe for the public and must be properly marked with permittee information; all tackle must be removed at the end of the season; monthly catch reports are required; maximum of two live boxes or nets allowed; entry into closed area is not permitted; turtle trapping is not permitted; and a special use permit is required.

Justification: One of the primary objectives of the National Wildlife Refuge System is to remove exotics from refuges and to restore historic native populations. Removal of exotics and a reduction in rough fish population by commercial harvest is a management practice aimed at reducing adverse impacts to water quality and aquatic habitats. Bottom feeders, such as carp and buffalo, stir up sediments, which exacerbate turbidity and impact nesting and spawning habitat for other fishes. Fishery biologists with the Service have long recommended commercial harvest of these species to refuge managers as a management tool, with the objective to increase/restore native fish populations on refuges. Commercial harvest of these species is considered a management economic activity that will result in removing exotics, improving quality of aquatic habitats, favorably impacting recreational fishing opportunities, and providing economic benefits to the local community. This use will be administered in compliance with 50 CFR 29.1.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

11) Description of Use: Construction of Headquarters/Visitor Contact Station and Maintenance Shop at Big Lake NWR

The current office and maintenance shop/equipment storage shed for Big Lake NWR, located approximately 3 miles east of Manila, Arkansas, in Mississippi County, were constructed in the mid-1970s and have deteriorated to the point where renovation and rehabilitation to correct deficiencies and inadequacies in structural integrity, accessibility features, HVAC and water systems, lighting, insulation, and health/safety aspects are neither advisable nor cost effective. The building elevations are improperly established and both buildings flood during heavy rains, placing employees at risk of electrocution and injury from slipping and falling. Funding has been obtained through the American Reinvestment and Recovery Act (ARRA) for replacement of the existing office building with a headquarters/visitor contact station to allow for efficient administrative function for fish and wildlife habitat and population management programs and a visitor services program, including opportunities for environmental education and interpretation. Funding also has been approved through ARRA for replacement of the shop building to enable the refuge to have safe and efficient work space to accomplish service and repairs of equipment, other maintenance operations, and also allow suitable storage of valuable equipment to protect these assets from the elements.

The proposed headquarters/visitor contact station would be 1-story, approximately 2,500 square feet in size, would be fully ADA-compliant, and would include a volunteer/receptionist area, exhibit area, conference room, break room, law enforcement storage, public restrooms, staff offices, and public parking. The proposed maintenance shop/equipment storage shed would be an approximately 3,000 square feet structure that would include two enclosed drive-through bays, concrete floors, adequate storage for materials and supplies, vehicle lift, environmentally sound vehicle wash pad, and outdoor equipment storage with an insulated roof.

The existing buildings would be removed and the new structures would be constructed in approximately the same locations within the existing office-shop grounds, thereby minimizing site disturbance and habitat loss. Building design and construction would incorporate energy-conserving features, such as efficient HVAC, lighting, and water systems, and potential alternate energy sources. The existing entrance drives, shop yard, vehicle approaches, and parking areas would be utilized for the replacement facilities.

The visitor contact station would be open to the public during regular business hours. More than 40,000 visitors would use this facility annually. The maintenance shop would provide work area and storage for most of the heavy equipment of the station and would be used by staff, volunteers, YCC, interns, and other authorized persons.

Availability of Resources: The planning/design, engineering, and construction would be funded through ARRA. The new facilities would incorporate energy-conserving features and low maintenance design and components. Annual maintenance and operation needs are expected to remain within the capabilities of the staff and funding levels.

Anticipated Impacts of the Use: Minor, temporary surface disturbance would occur around the construction site. Proper erosion control measures would be implemented and disturbed surfaces would be revegetated following construction. The new buildings would replace the existing ones and would be located within the existing office-shop complex; therefore, no wildlife habitat would be destroyed. Noise and activity around the construction site may temporarily displace some wildlife, such as birds, small mammals, reptiles, and amphibians. Some trampling of vegetation and perhaps small vertebrates and invertebrates may occur, but these losses would be minor. The impacts of these activities would be temporary and not cumulative over the long term. The new buildings would incorporate green-building design and features that would lessen the environmental effects of the operation and use of the facilities.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility: Energy-conserving features would be incorporated into building design, construction activities would be conducted in such a manner that disturbance to the site and wildlife would be minimized, and safety precautions would be implemented to prevent risk of injury to visitors and staff. The new facilities would be used to enable achievement of refuge purposes and facilitate management programs for the benefit of trust species.

Justification: This project is not new construction but a replacement of existing facilities utilizing existing disturbed sites. Work activities would negligible environmental effects, if any. This project would be completely funded through ARRA and would enable the refuge to better fulfill refuge purposes by facilitating habitat restoration, management, and conservation programs for trust species. Furthermore, the construction and operation of these facilities would promote compatible public uses, including environmental education and interpretation, that would serve to increase public awareness of the need for and value of Big Lake NWR and the Refuge System, and garner support for refuge programs.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

CACHE RIVER NATIONAL WILDLIFE REFUGE COMPATIBILITY DETERMINATIONS

Uses: The following uses were found to be appropriate and evaluated to determine their compatibility with the mission of the National Wildlife Refuge System and the purposes of the refuge.

1. Hunting
2. Fishing
3. Wildlife Observation and Photography
4. Environmental Education and Interpretation
5. Research and Monitoring
6. Forest Products Harvesting
7. Commercial Guiding for Wildlife Observation/Photography
8. Commercial Video and Photography
9. Nuisance Animal Control
10. Cooperative Farming
11. Commercial Fishing
12. Furbearer Trapping
13. Construction of an Environmental Education/Visitor Center

Refuge Name: Cache River National Wildlife Refuge

Date Established: June 16, 1986

Establishing and Acquisition Authority(ies):

Emergency Wetlands Resources Act of 1986
Fish and Wildlife Act of 1956
Migratory Bird Conservation Act

Refuge Purpose:

“...the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions...” 16 U.S.C. 3901(b) (Emergency Wetlands Resources Act of 1986)

“...for the development, advancement, management, conservation, and protection of fish and wildlife resources...” 16 U.S.C. 742f(a)(4) ...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude...” 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)

“...for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act).

National Wildlife Refuge System Mission:

The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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.

Other Applicable Laws, Regulations, and Policies:

Antiquities Act of 1906 (34 Stat. 225)

Migratory Bird Treaty Act of 1918 (15 U.S.C. 703-711; 40 Stat. 755)

Migratory Bird Conservation Act of 1929 (16 U.S.C. 715r; 45 Stat. 1222)

Migratory Bird Hunting Stamp Act of 1934 (16 U.S.C. 718-178h; 48 Stat. 451)

Criminal Code Provisions of 1940 (18 U.S.C. 41)

Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d; 54 Stat. 250)

Refuge Trespass Act of June 25, 1948 (18 U.S.C. 41; 62 Stat. 686)

Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j; 70 Stat. 1119)

Refuge Recreation Act of 1962 (16 U.S.C. 460k-460k-4; 76 Stat. 653)

Land and Water Conservation Fund Act of 1965

National Historic Preservation Act of 1966, as amended (16 U.S.C. 470, et seq.; 80 Stat. 915)

National Wildlife Refuge System Administration Act of 1966 (16 U.S.C. 668dd, 668ee; 80 Stat. 927)

National Environmental Policy Act of 1969, NEPA (42 U.S.C. 4321, et seq; 83 Stat. 852)

Use of Off-Road Vehicles on Public Lands (Executive Order 11644, as amended by Executive Order 10989)

Endangered Species Act of 1973 (16 U.S.C. 1531 et seq; 87 Stat. 884)

Refuge Revenue Sharing Act of 1935, as amended in 1978 (16 U.S.C. 715s; 92 Stat. 1319)

National Wildlife Refuge Regulations for the Most Recent Fiscal Year (50 CFR Subchapter C; 43 CFR 3101.3-3)

Emergency Wetlands Resources Act of 1986 (S.B. 740)

North American Wetlands Conservation Act of 1990

Food Security Act (Farm Bill) of 1990 as amended (HR 2100)

The Property Clause of the U.S. Constitution Article IV 3, Clause 2

The Commerce Clause of the U.S. Constitution Article 1, Section 8

The National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57, USC668dd)

Executive Order 12996, Management and General Public Use of the National Wildlife Refuge System. March 25, 1996
Title 50, Code of Federal Regulations, Parts 25-33
Archaeological Resources Protection Act of 1979
Native American Graves Protection and Repatriation Act of 1990

NOTE: Compatibility determinations for each use listed were considered independently. However, for brevity within this Appendix, the preceding sections from “Uses” through “Other Applicable Laws, Regulations and Policies” and the succeeding sections, “Public Review” and “Approval of Compatibility Determinations” are not provided separately but only provided once for all refuges within the Complex. However, those sections omitted for brevity are applicable to each compatibility determination and should be included as part of any compatibility determination that may be printed separately from the CCP.

1) Description of Use: Hunting

Hunting opportunities on Cache River NWR include the take of squirrel, rabbit, quail, deer, raccoon, opossum, and turkey. Additionally, hunters may take beaver, muskrat, nutria, armadillo, coyote, and feral hog incidental to the hunting of game species listed above. Migratory bird hunting includes waterfowl, doves, snipe, and woodcock. All hunts fall within the framework of the Arkansas Game and Fish Commission (AGFC) open seasons and follow AGFC regulations. There are refuge-specific regulations that supplement and further restrict the AGFC regulations. Refuge-specific regulations are reviewed annually and incorporated into the refuge hunting brochure. All hunters are required to read the refuge brochure and adhere to all regulations contained therein. A hunting permit on the front cover of the brochure must be signed by the hunter and must be carried on his person while hunting on the refuge.

Waterfowl sanctuaries are closed to all public entry and use (including hunting) from November 15 to February 28. Retriever dogs are allowed for waterfowl hunting and dogs also are allowed for hunting other migratory birds, small game, and raccoon/opossum. Hunter access is by foot, motor vehicle, boat, bicycle, or all-terrain vehicle (ATV). All vehicles, including ATVs and bicycles, may only be used on designated roads, trails, and parking areas and are not allowed in fields or other areas. ATV access will be permitted only from September 1 to February 28. Mobility-impaired hunters may apply for a special use permit, allowing specialized access by ATV. Horses/mules are prohibited. Public access to hunt areas may be closed at any time necessary to protect refuge resources or visitors. Possession or use of alcoholic beverages while hunting is prohibited.

Availability of Resources: Adequate resources are available to ensure and administer the proposed activity at its current level of participation. Enforcement of refuge regulations to protect trust resources and provide for a safe, quality recreational opportunity will occur via regular patrols by refuge law enforcement officers. Currently, the refuge has one full-time officer and one collateral duty officer. Additionally, personnel from the AGFC and various sheriffs’ departments will patrol the refuge and assist refuge officers when needed.

Anticipated Impacts of the Use: The incidental taking of other wildlife species, either illegally or unintentionally, may occur with any consumptive use program. At current and anticipated public use levels for this program, this incidental take would be minor and would not directly or cumulatively impact population levels on the refuge or in the surrounding area. Implementation of a highly effective law enforcement program and continued development of special regulations for this use would eliminate most incidental take or other violations or safety problems.

Based on available information, it is anticipated that the current levels and expected future levels of hunting or other wildlife-dependent recreation activities would not directly, indirectly, or cumulatively impact any listed, proposed, or candidate species. Current known federally endangered species occurring on Cache River NWR are ivory-billed woodpecker, interior least tern, and pink mucket and fat pocketbook mussels. Data gathered from future biological surveys regarding the importance or potential importance of the refuge to threatened or endangered species or critical habitat (or proposed threatened, endangered, or critical habitat) could result in changes to public use activities over time; however, these changes would have no effect on listed species.

Impacts, such as trampling small vertebrates or invertebrates and crushing/trampling of vegetation, would be minimal. Additionally, the activities of hunters traveling to and from hunt areas and their activities while hunting would disturb some non-target wildlife, but these disturbances are temporary, short-term, non-lethal, and not highly repetitive. As a consumptive use, hunting would have some minimal and short-term direct negative impacts on refuge resources. Numbers of resident, as well as migratory, species would be temporarily reduced as animals are harvested, but these individual and collective losses would be compensated by recruitment during the following reproductive season; therefore, no long-term cumulative losses in populations would result.

Determination (check one below):

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Hunting is permitted in accordance with AGFC regulations and licensing requirements. Additional refuge-specific regulations further restrict the AGFC regulations. The waterfowl sanctuary is closed to all public entry and use, including hunting, from November 15 to February 28. All vehicle use, including ATVs and bicycles, is restricted to designated roads and parking areas only. Monitor ATV access and modify as needed to mitigate any negative impacts to refuge habitats, infrastructure, and visitors in compliance with EO 11644 and EO 11989. Monitor use of boats in flooded areas and modify activities if warranted to ensure compatibility. Public access to hunting areas may be closed at any time necessary to protect refuge resources or visitors. Possession or use of alcoholic beverages while hunting is prohibited.

Refuge-specific regulations that pertain specifically to waterfowl hunters include but are not limited to:

- Morning hunting (until 12:00 noon) only.
- Only approved non-toxic shot may be possessed or used.
- Decoys, blinds, boats, and other equipment must be removed daily by 1:00 p.m.
- Cutting of holes or other manipulation of vegetation (i.e., cutting bushes, mowing, weed-eating) or hunting from manipulated areas is prohibited.
- All day hunting permitted for geese (all applicable species) after January closing of the regular duck season through the end of the AGFC conservation season.
- Waterfowl hunters may not enter the refuge earlier than 4:00 a.m. daily.
- Retriever dogs are allowed for waterfowl hunting.
- Commercial waterfowl guiding is not allowed on the refuge.

Refuge-specific regulations that pertain to small game hunting include:

- Spring squirrel season is closed.
- Only approved non-toxic shot or rimfire rifles may be possessed and used for all small game hunting.
- Dogs are allowed for quail hunting.
- Dogs are allowed beginning December 1 for squirrel and rabbit hunting.

- Dogs are required for night hunting of raccoons and opossums.
- Beaver, muskrat, nutria, armadillo, coyote, and feral hog may be taken incidental to any refuge hunt by the use of the device appropriate for that hunt and according to any applicable AGFC regulations.
- The refuge is closed to all other public entry and use (including small game hunting) during the Quota Gun Deer Hunt.

Refuge-specific regulations that pertain to big game hunting include:

- Only portable stands capable of being carried by one person may be used and the owner's name and address must be permanently affixed to the stand.
- Stands may be erected 7 days prior to the refuge deer season and must be removed from the waterfowl sanctuary prior to November 15, and from the rest of the refuge by the last day of archery season.
- For all refuge hunts, the limit is one either-sex deer per hunt except for the archery season in which the statewide bag limit applies.
- Only shotguns with slugs, legal pistols, and muzzleloaders, shooting a single projectile, may be used or possessed during the Quota Gun Deer Hunt on the Dixie Farm Unit Waterfowl Sanctuary and adjacent waterfowl hunting area and the Plunkett Farm Unit Waterfowl Sanctuary.
- The possession or use of buckshot is prohibited.
- The refuge is closed to all other public entry and use, including the hunting of other species, during the Quota Gun Deer Hunt.
- Harvested deer should be checked at a manned refuge check station during the Quota Gun Deer Hunt to allow collection of biological data.
- Spring turkey hunting in Units I and III are same as state season. Unit II is closed with the exception of those refuge lands included in the combined Black Swamp WMA/Cache River NWR quota permit hunts administered by AGFC.
- Fall turkey hunting is restricted to archery hunting only.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, hunting is a priority public use activity that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

2) Description of Use: *Fishing*

Cache River NWR is open to the public for fishing and frogging, and permitted year-round in accordance with Arkansas Game and Fish Commission (AGFC) regulations. Fishing with rod and reel, pole and line, limb line, yo-yo, jug line, trotline, and bow and arrow (on line) is permitted.

Fishermen are also permitted to collect crawfish with rakes and/or traps for personal use only. Harvesting of turtles and mussels is prohibited. Access to fishing areas is by motor vehicle, motor boat, canoe, kayak, or walking. All-terrain vehicles (ATVs) are not allowed for this use. Vehicles may only be used on designated roads and parking areas. Waterfowl sanctuaries are closed to all public entry and use (including fishing) from November 15 to February 28.

Commercial fishing is authorized only by special use permit and is covered under a separate compatibility determination.

Availability of Resources: Refuge staff and resources are adequate to cover management of fishing at current levels. However, it is anticipated that an increase in this use may occur over the coming years. In order to provide safe and quality fishing, additional resources and staff will be needed to enhance or develop additional access areas and provide law enforcement. A portion of the refuge's budget is spent annually managing for the benefit of freshwater fisheries, maintaining boat launching ramps, improving access, conducting law enforcement patrols, and ensuring refuge visitors are in accordance with boater safety, and following refuge regulations.

Anticipated Impacts of Use: Fishing and frogging is not expected to have substantial, long-term adverse impacts on fisheries or other wildlife resources at Cache River NWR, including wildlife habitat. Monitoring of frogs will be implemented to gauge trends in numbers and habitat use. The activities associated with fishing and frogging, including travel to and from fishing areas, may cause trampling of vegetation, small invertebrates, and vertebrates; however, these are short-term, relatively minor, and not highly repetitive. Also, fishing is not expected to result in negative indirect or cumulative impacts to refuge resources. As a consumptive use, fishing would have some minimal and short-term direct, localized impacts on refuge resources, including populations of target sport fish.

Fishing is a wholesome, enjoyable, and wildlife-dependent public use opportunity; however, participation in this activity generally results in litter on the refuge (fishing line, food, bait containers, soda/beer cans, and other "trash") that must be removed numerous times per year in order to keep the refuge looking presentable. Trash is detrimental to the aesthetics of the refuge and can impact the digestive tracts of birds, turtles, fish, and other resident and migratory wildlife. The refuge would strive to reduce this problem by working with partners to pick up litter, educating anglers not to litter, and through law enforcement. Information contained in the refuge brochure concerning rules and regulations also helps keep negative impacts to a minimum. Regulations are reviewed annually and modifications are made as necessary to maintain compatibility and to ensure a safe and quality fishing program.

Determination (check one below):

Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Fishing and frogging are permitted in accordance with AGFC regulations and licensing requirements. Conflicts between fisherman and hunters or other visitors using the refuge for non-consumptive wildlife recreation have not been a problem and are not expected to be a problem in the future. Associated violations, such as taking under-sized fish, open fires, and littering, can be minimized by public outreach and a continued law enforcement presence.

The following stipulations would help ensure the refuge fishing program is compatible with refuge purposes.

- All fishing tackle must be attended at all times.

- Crawfish may be collected for personal use only. All crawfish traps must have the owner's name and address permanently affixed.
- Taking or possessing turtles and mussels is prohibited.
- Only fishing with rod and reel, pole and line, limb line, yo-yo, jug and line, trotline, and bow and arrow (on line) will be allowed; no other methods or tackle will be permitted unless issued under a special use permit.
- Waterfowl sanctuaries are closed to all public entry and use (including fishing and frogging) from November 15 to February 28.
- The refuge is closed to all other entry and public use (including fishing) during the Quota Gun Deer Hunt.
- Personal watercraft (e.g., jet-skis, hover craft, and airboats) is prohibited.
- All-terrain vehicles (ATVs) are not allowed for this use.
- Vehicles may only be used on designated roads or parking areas to provide access for fishing.
- Boats with the owners name and address permanently displayed or valid registration may be left on the refuge from March 1 – October 31.
- Public access to fishing areas may be closed at any time necessary to protect refuge resources or visitor safety.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, fishing is a priority public use activity that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

3) Description of Use: *Wildlife Observation and Photography*

Wildlife observation (viewing) and photography are important public uses at Cache River NWR. Abundant wildlife and convenient access make Cache River NWR a destination for visitors hoping to observe and photograph a variety of wildlife and their habitats. Visitors are especially interested in viewing and photographing waterfowl, shorebirds, other migratory birds, including bald eagles, and resident wildlife such as white-tailed deer, eastern wild turkey, turtles, and raccoons. There are no developed facilities for this use, such as photo blinds or observation platforms, although such facilities are planned for future installment. Access to the refuge is by vehicle, boat, or foot. ATVs are not permitted for this use. All vehicle use is restricted to designated roads and parking areas only, and is not allowed in fields or other areas.

Availability of Resources: Refuge staff and resources are adequate to administer the program at current levels. However, it is anticipated that an increase in these uses will occur over the coming years. In order to provide safe and quality wildlife observation and photography opportunities, additional resources and staff will be needed to enhance or develop additional viewing areas and provide improved facilities and programs.

Anticipated Impacts of Use: The activities of visitors engaging in wildlife observation and photography may result in some potential disturbance to wildlife. Minimal impacts in the form of trampling small vertebrates or invertebrates and vegetation, and littering may also occur. Significant indirect or cumulative adverse impacts to refuge resources are not expected from these activities. The establishment of specified viewing areas and facilities, such as blinds, boardwalks, platforms, towers, and trails, would enhance observation and photography, as well as minimize associated visitor impacts or conflicts with other uses. Plans to provide such facilities are in progress.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Public access for specified wildlife observation and photography would be allowed in designated areas only. The waterfowl sanctuary will be seasonally (November 15-February 28) closed to all public entry and use. During the Quota Gun Deer Hunt, the refuge is closed to all public entry and use (including wildlife observation and photography) except by Quota Gun Deer Hunt permit holders. Regulations governing public use are reviewed annually and any necessary modifications are made to ensure refuge resources are protected and visitors can enjoy a safe and quality experience. Wildlife observation and photography uses will be monitored and appropriate management action will be taken to eliminate or reduce associated impacts. Public access to wildlife observation and photography areas or facilities may be closed at any time necessary to ensure protection of refuge resources and visitor safety. All vehicle use is restricted to designated roads and parking areas only.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, wildlife observation and photography are priority public use activities that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

4) Description of Use: *Environmental Education and Interpretation*

On Cache River NWR, environmental education and interpretation activities are conducted to inform and educate the public and provide an understanding of natural resource values and refuge purposes and the mission of the National Wildlife Refuge System. The environmental education and

interpretation program facilities will include visitor contact areas, kiosks, platforms or towers, routes or trails, and other designated public use facilities or access areas. In addition, refuge staff provide off-site environmental education and interpretation services at local events, such as festivals, fishing derbies, school classes, and civic or conservation group meetings. Access is by vehicle, boat, bicycle, or walking. ATVs are not permitted for this use. All vehicles, including bicycles, may only be used on designated roads and parking areas and are not allowed in fields or other areas.

Availability of Resources: Refuge staff and resources are adequate to administer the program at current levels. However, it is anticipated that an increase in these uses will occur over the coming years. In order to provide safe and quality environmental education and interpretation opportunities, additional resources and staff will be needed to develop or provide enhanced programs and interpretive facilities (such as visitor contact stations, observation platforms, interpretive trails, kiosks, and other facilities). Plans are being developed to provide additional or improved facilities as described herein. Additionally, the utilization and development (training) of volunteers may supplement environmental education and interpretation programs.

Anticipated Impacts of Use: Outdoor environmental education and interpretation activities may result in minimal disturbance to wildlife from visitors. It is possible that some small vertebrates, invertebrates, and vegetation could be trampled. Littering may also occur. Significant indirect or direct cumulative adverse impacts to refuge resources are not expected from these activities. Environmental education and interpretation facilities, such as blinds, boardwalks, exhibits, kiosks, platforms, and towers, will be designed and established to minimize potential disturbance to wildlife and impacts to resources.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Environmental education and interpretation activities conducted outdoors should be strategically located to minimize impacts and may need to be rotated or moved periodically. The waterfowl sanctuary will be seasonally (November 15-February 28) closed to all public entry and use. Public access to the refuge may be closed at any time necessary to ensure protection of refuge resources and visitor safety. The refuge is closed to all public entry and use (including environmental education and interpretation) during Quota Gun Deer Hunt, except for Quota Gun Deer Hunt permit holders. Regulations concerning public use are reviewed annually and any necessary modifications are incorporated into refuge brochures or otherwise conveyed to visitors. Environmental education and outreach can be taken into the classroom, incorporated into presentations, and will be used at other forums; these activities will have no deleterious affect on fish and wildlife at the refuge.

Justification: According to the National Wildlife Refuge System Improvement Act of 1997, environmental education and interpretation are priority public use activities that should be encouraged and expanded where possible. It is through compatible wildlife-dependent public uses such as this that the public becomes aware of and provides support for national wildlife refuges.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

Categorical Exclusion without Environmental Action Statement

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

Mandatory 15-year Re-evaluation Date: 12/25/2024

5) Description of Use: *Research and Monitoring*

Cache River NWR would allow university students and professors, as well as governmental or non-governmental employees and volunteers, to conduct short- or long-term research and monitoring studies. Such research and monitoring would be conducted in various habitats throughout the refuge and with various species of migratory birds, resident wildlife, and fish. The information collected would provide a better understanding of ecosystem functions and responses to management actions. Research and monitoring results would help managers to evaluate prior management actions, identify adaptive management options, and develop “Best Management Practices.” The knowledge gained through research and monitoring studies would allow more effective management decisions. All research and monitoring project requests would be evaluated on individual project merit and applicability to refuge programs on a project-by-project basis.

Availability of Resources: Resources are adequate to administer research and monitoring activities at the current level. The refuge will seek to establish and/or expand partnerships for continued research and monitoring projects conducted by other organizations on refuge lands.

Anticipated Impacts of Use: There could be some negative impacts from scientific research and monitoring on the refuge. Impacts, such as trampling vegetation, ATV and motorboat use, and temporary disturbance to wildlife, could occur. A small number of individual plants or animals may be collected for further study. These collections would not likely adversely affect refuge plant and animal populations. Removal of plant and animal material from the refuge, as well as the potential to accidentally introduce exotic plants and animals, must be carefully monitored and controlled. Some other impacts from research include: (1) Noise disturbance from helicopter, airplane, motorboat, airboat, truck, car, or ATV that may temporarily disturb and/or displace wildlife; (2) physical presence of people or equipment that may temporarily disturb and/or displace wildlife; (3) ground disturbance from walking on site or the use of equipment; and (4) water disturbance by stirring sediments and causing temporary turbidity from equipment or walking. Despite these impacts, which are short-term, the knowledge gained from carefully considered and properly executed scientifically defensible research and monitoring would provide information and justification to improve management techniques and better meet the needs of trust species, and enable the refuge to better achieve its purposes and the mission of the Refuge System. Research and monitoring activities on the refuge are not expected to indirectly or cumulatively impact refuge resources negatively, even though some minimal short-term and direct impacts may occur.

Determination (check one below):

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: All researchers would be required to obtain and possess a special use permit. Individual requests to use specialized equipment, all-terrain vehicles, etc., would be evaluated on a project-by-project basis and specified on each permit. Researchers would periodically be evaluated for compliance with requirements. Periodic progress reports would be required and final copies of all reports and publications would be provided to the refuge. The refuge would not directly supply personnel or equipment unless arrangements were made prior to issuance of the permit. The refuge manager would reserve the right to delegate a staff member to accompany permittee(s) at any time. All plants or animals sampled, collected, or released would be done in a scientifically accepted manner, such as those specified by scientific societies. Examples of these societies include the Society for the Study of Amphibians and Reptiles, the American Society of Mammologists, the American Ornithological Society, the Ichthyologists League, the Entomological Society of America, and the Botanical Society of America. Incidental take and inadvertent trampling of vegetation or wildlife are expected to be minimal and will be addressed with each special use permit request. Given compliance with the restrictions set in each permit, research and monitoring conducted on the refuge is considered to be compatible with the purposes for which the refuge was established.

Justification: Sound research and monitoring programs provide a better understanding of species, habitats, and the environmental communities present on the refuge. Additional research and monitoring is needed to assess management programs used on the refuge and evaluate alternative options. The benefit of additional knowledge will greatly outweigh any short-term disturbance or loss of individual plants or animals that may occur. This activity will provide guidance to management for meeting established purposes, goals, and objectives of the refuge.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

6) Description of Use: *Forest Products Harvesting*

Carry out a comprehensive forest management program on Cache River NWR in accordance with an approved forest management plan. Refuge forest habitats will be evaluated over a 3-year cycle. Prescriptions detailing needed actions will then be drawn up, approved from the Service's Regional Office, and carried out on a yearly basis. It is proposed that select trees be sold, and then removed by commercial operations. The forest habitat may also be manipulated by permittees/staff when commercial sales are not feasible. Only trees needing to be removed in order to improve the forest habitat for wildlife or to restore the integrity of the forested wetlands ecosystem will be taken or manipulated. Special use permits may be issued for firewood cutting (personal use) when there is excess downed wood from silvicultural operations or when roads are widened. Seasonal special use permits may be issued for gathering seed, on a limited basis, when forest seed crops are abundant.

Operations may be conducted throughout the year, but only according to the guidelines detailed in the Forest Habitat Management Plan. Operations may involve numerous individuals using hand tools such as chain saws and heavy equipment such as feller-bunchers, skidders, bulldozers, and log trucks.

Availability of Resources: Some elements of needed resources are already in place, such as the forester's time and salary, and the small amount of time needed by other positions in maintenance, law enforcement, management, and administration. Additional expenses for equipment maintenance, operations, and habitat restoration can be funded out of the refuge's budget. The Forest Habitat Management Plan allows that management will be carried out to the extent of available resources (see Section 3.2; Physical Plant and Equipment Use Requirements for a more detailed description).

Anticipated Impacts of the Use: Timber harvest operations will result in short-term disturbances and long-term benefits to forest habitats. Short-term impacts will include disturbance and displacement of wildlife, vegetation, and soils typical of any heavy equipment operation. Operation of heavy equipment and removal of some vegetation will also result in a short-term increase in soil erosion. Additionally, wildlife species dependent on undisturbed forest habitat will be temporarily displaced. As vegetation is disturbed, other wildlife species may also be temporarily displaced. Over time, these short-term impacts will wane as the effects of improvement treatments develop and the benefits are realized. The refuge is divided into 20 forest compartments; therefore, short-term impacts will be minimized by implementing the proposed actions in only a small percentage of the refuge at any given time.

Firewood cutting and forest seed collecting will result in temporary disturbances. Seeds are gathered by hand and sold to local nurseries that, in turn, grow seedlings. The refuge has a need for seedlings to restore marginal cropland and other open fields. By allowing a limited forest seed harvest, the refuge is ensuring a continued supply of suitable seedlings of local origin for forest restoration. In the past, participation in refuge firewood cutting and hand collecting of forest seeds has been low, and future participation is also expected to be low. The quantity and frequency of firewood cutting and seed harvesting is not expected to result in significant disturbance, diminish wildlife food resources, or jeopardize wildlife survival. Short-term disturbance to wildlife may occur during these activities, but will be insignificant because of the small scale of the projects. Most of the use will occur in late summer or fall, after ground nesting birds have completed the nesting season. Firewood cutting or seed collecting should not result in short- or long-term impacts that adversely affect the purpose of the refuge or the mission of the National Wildlife Refuge System.

Determination (check one below):

Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

See General and Specific Guidelines in the Forest Habitat Management Plan, Appendix 7.10 and 7.11.

7.10 General Conditions Applicable To Timber Harvesting Permits

Subcontractors: Subcontractors or agents may be employed with authorization from the refuge forester.

Safety Requirements: The contractor must perform this contract in a safe manner, observing any necessary safety precautions. The contractor will promptly correct any condition, which, in the opinion of the refuge manager or his authorized representative, endangers the safety of personnel, the public, and/or property during the performance of this contract. Failure to observe this requirement will result in contract termination, with the contractor liable for any such damages that may occur.

Liabilities of the Contractor: The contractor will hold the government and all its representatives harmless from all suits, actions, or claims of any character arising out of the injuries to any person or damage to any property resulting from any neglect in the performance of the services required by this contract, or from any claims arising or recovered under the Workman's Compensation laws or any other law, by-law, ordinance, order or decree, or on account of any other act or omission by the contractor or his employees while carrying on operations under this contract. This responsibility will terminate when suits, actions, or claims have been satisfied.

Insurance Coverage: The contractor must be covered by adequate insurance, as the government will assume no liability whatsoever as a result of the contractor's operations under this contract.

Inspection of Work Site: Before submitting a bid, prospective bidders are urged to personally inspect the site. Arrangements to view may be made by contacting Cache River National Wildlife Refuge, Augusta, Arkansas. Telephone (870) 347-2614.

7.11 Special Conditions Applicable To Timber Harvesting Permits

- A pre-entry conference between the refuge forester and the designated permittee representative will be required before the permittee starts logging operations. The purpose of the pre-entry conference is to be sure that the permittee completely understands what is expected and thus minimizes conflicts.
- All refuge wildlife is protected. All reasonable efforts will be made by the permittee to protect wildlife from harm and harassment.
- All logging will be within the boundaries specified on the attached map.
- Trees will be cut so as to leave ground-level paint spots visible after the tree has been cut. All marked trees are to be cut, with the exception of marked leave trees in shelterwood, seed tree, or small open areas as described in the special use permit.
- Only marked or designated trees will be cut. Care will be taken to protect all other trees and vegetation from damage. Unmarked trees that are cut or injured through carelessness will result in a fine of \$5 per inch diameter at stump height or breast height if present.
- Trees and tops will not be left hanging or supported by any other tree and will be laid down immediately after felling.
- Tops and logging debris will be lopped to within 6 feet of the ground in all areas 100 feet or less from major roads.
- All roads, rights-of-way, active agricultural fields, designated openings, ditches, and streams must be kept clear of tops and debris. The permittee is required to repair all damage resulting from operations conducted under this permit.
- The skidding of logs greater than 20 feet in length may be prohibited in designated areas.
- The refuge manager or his authorized representative must approve the location of additional roads. Additional trees removed for roads or loading sites will be marked by the refuge forester and paid for at bid price.
- Loading of forest products on public roads or shoulders or on regeneration areas is prohibited.
- Logging will not be permitted when the ground is wet and subject to rutting and severe compaction. The permittee and his employees will do all in their power to prevent rutting and erosion.
- The permittee and his employees will do all within their power to prevent and suppress forest fires. Fires will be reported immediately to the refuge office.
- Ownership of all products remaining on a sale area will revert back to the government upon termination of the permit.
- Littering in any manner is a violation of the Code of Federal Regulations. The entire work area will be kept free of all litter at all times.

- The possession or use of firearms or other weapons on the refuge is prohibited outside of hunting seasons.
- The government accepts no responsibility to provide rights-of-way over private lands for materials sold under this contract.
- The refuge manager or his authorized representative will have the authority to temporarily close down all or any part of the operation during a period of high fire danger, wet ground conditions, or for any other reason deemed necessary. Additional time, equal to the closing period, will be granted to the permittee.
- The decision of the refuge manager will be final in the interpretation of the regulations and provisions governing the sale, cutting, and removal of the timber products covered by this permit.

Justification: This use has been determined compatible provided the above stipulations are implemented. This use will facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use will meet the mission of the National Wildlife Refuge System and enhances fish, wildlife, and plant resources on these lands by providing renewable resources for the benefit of the American public. This use will be administered in compliance with 50 CFR 29.1.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

7) Description of Use: *Commercial Guiding for Wildlife Observation/Photography*

Allow commercial guiding to facilitate wildlife observation/photography on Cache River NWR. The objective is to provide the opportunity to experience wildlife observation and photography to the segment of the public lacking the knowledge or equipment required to view/photograph fish, wildlife, plants, or their habitats in compliance with the legal mandates of the National Wildlife Refuge System Improvement Act of 1997 concerning compatibility and priority public use. The surrounding communities, including Augusta, McCrory, Brinkley, Des Arc, and Cotton Plant, are dependent on supporting refuge visitors throughout the year. Within these communities, grocery stores, sporting goods stores, restaurants, lodges, and other businesses obtain a large proportion of their annual income from the influx of refuge visitors. Although wildlife observation and photography are involved on guided trips, the commercial nature of guiding activities associated with these uses does not qualify as priority public uses of refuges (Federal Register/Vol.65, No.202/Wednesday, October 18, 2000/Rules and Regulations-Issue 13: Priority Uses, Pages 62471 and 62472). All commercial activities, including guiding of wildlife observers and photographers, are special type uses that may be authorized when they are appropriate and compatible with the purpose of the refuge, the mission of the National Wildlife Refuge System, and can be administered in a way that minimizes conflicts with priority uses and does not hinder the activities of visiting public not using guide services.

Guiding and equipment may involve the use of vehicles, buses, motor boats, paddle boats, canoes, and hiking. Guiding will be allowed only in designated areas and according to conditions specified by the refuge manager. Several miles of refuge roads are also used to access remote sloughs, bayous, and lakes where wildlife observers and photographers may conduct their activities.

Guides will be allowed to operate through issuance of a special use permit, which must be renewed annually. Special conditions are attached and part of the special use permit designed to meet the above objectives and provide liability protection to the government. The annual fee for the special use permit will be \$500.

Increased requests for special use permits to conduct wildlife observation and photography guiding on Cache River NWR are expected in the future. These permits will be issued on a first-come, first-serve basis. The refuge reserves the option to limit the number of permits issued as necessary to ensure compatibility. Future special use permit requests for commercial wildlife observation and photography guiding will be reviewed by management and additional steps will be taken, including limiting the number of guides, increasing annual permit fees, designating observation areas, or discontinuing this use entirely, as may be necessary to maintain safe and quality wildlife observation and photography opportunities for all refuge visitors.

Availability of Resources: Adequate resources and staff exist to administer refuge regulations and special use permit conditions at the current level of interest in this activity. An increase in special use permits may not be possible with the current existing staff. Any increase will be reviewed by management to ensure compatibility.

Anticipated Impacts of the Use: Commercial guiding for wildlife observation/photography would increase opportunities for the public to experience wildlife and gain an added appreciation for the value of Cache River NWR and the National Wildlife Refuge System. This use would benefit a diverse set of participants from within and outside this local area. The use also would allow some economic benefit to local communities from refuge visitation. Minor impacts such as short-term and temporary wildlife disturbance could result. In addition, there could be minor trampling of vegetation and small vertebrates and invertebrates. These impacts are not expected to be significant.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: A special use permit is required.

- No special privileges are granted to the permittee other than those stated in the permit. Interfering with any other individual lawfully participating in any authorized activity on the refuge will be grounds for immediate revocation of the permit and for possible legal prosecution.
- The permittee and assistant each must comply with all applicable federal, state, and refuge laws, regulations, and policy.
- A copy of the special use permit must be in the possession of the permittee and assistant while engaged in commercial guiding activities.
- Guided parties are limited to fifteen (15) members and the permittee and his assistant must all stay together as one (1) party on the refuge. Only one (1) party may be guided per day. The permittee must accompany all parties. Any exception to this requirement must be applied for and approved by the refuge manager prior to such event.

- Within one (1) week after the end of the calendar year, the permittee must furnish the refuge manager a written report on the number of individuals taken onto the refuge and fees charged.
- The special use permit may be terminated or revoked at any time without refund to the permittee for non-compliance with any of the terms thereof. Any violation may be grounds for future permit denial.
- The permittee and his/her agents and guests shall save, hold harmless, defend, and indemnify the United States of America, its agents, and employees for loss, damages, or judgments and expenses on account of bodily injury, death or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomever made, arising out of the permittee, his/her employees, subcontractors, or agents with respect to conducting activities connected with the special use permit within the lands administered by Cache River NWR.
- Permittee must provide proof of liability insurance (\$300,000 each occurrence, \$500,000 aggregate) with the U.S. Fish and Wildlife Service named as co-insured prior to issuance of the special use permit.
- All equipment must be removed from the refuge daily.
- The refuge may limit the number of special use permits issued or discontinue issuance entirely in order to ensure appropriateness, compatibility, and safe, quality opportunities for visitors not using guide services.

Justification: Commercial activities can be allowed on refuges when they do not conflict with the provisions of the National Wildlife Refuge System Improvement Act of 1997 and resulting policies and regulations. The special use permit conditions provide adequate regulation of this specialized activity and ensure quality wildlife observation and photography opportunities for all refuge visitors. Commercially guided wildlife observation and photography is a public use that will allow the unskilled or inexperienced participants to enjoy, experience, and learn about native wildlife and habitats in this bottomland hardwood environment. This commercial wildlife observation/photography use is being implemented in compliance with the legal mandates of the National Wildlife Refuge System Improvement Act, including compatibility.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion and Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

Mandatory 10-Year Re-evaluation Date: 12/25/2019

8) Description of Use: *Commercial Video and Photography*

Allow commercial video and photography activities on Cache River NWR for the purpose of exposing the public to the refuge and to promote recognition of the diverse wildlife and habitats found there. Over the past several years, the refuge has been contacted as to the possibility of producing commercial audio-visual productions, such as video and still photographs. The refuge provides a variety of natural habitats abundant with wildlife and is an ideal setting for filmmakers. As programs for visitors are promoted, demand for commercial filming on the refuge may increase.

Availability of Resources: Adequate refuge staff and resources are available to administer this activity at the current level.

Anticipated Impacts of Use: Commercially produced video and photography could result in some disturbance to wildlife. Some minimal trampling of vegetation, invertebrates, and small vertebrates may also occur. However, it is anticipated that this disturbance would be minimal, short-term, localized, and not highly repetitive. Commercially produced video and photography activities are not expected to indirectly or cumulatively impact refuge resources negatively.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: Access for commercially produced video and photography activities would be allowed in designated areas only under a special use permit. Activities would be monitored to document any negative impacts to wildlife; if negative impacts are found, corrective action would be taken to reduce or eliminate these impacts. Access to key observation and photography areas may be closed during adverse weather conditions for protection of infrastructure (e.g., roads and levees) and visitor safety.

Public Law 106-206, signed by the President on May 26, 2000, directed the Secretary of the Interior to require a special use permit and establish a reasonable fee for commercial filming activities on federal lands administered by the Secretary. This law further stated that for still photography neither a special use permit nor a fee is assessed if the activities take place on lands where members of the public are generally allowed. The Secretary may require a special use permit and fee if photographic activities take place at locations where the general public is not allowed or where additional administrative costs are likely.

The Secretary shall not permit any filming, still photography, or other related activity if the Secretary determines:

- There is a likelihood of resource damage;
- There would be an unreasonable disruption of the public's use and enjoyment of the site; or
- That the activity poses health or safety risks to the public.

Further guidance is found in 43 CFR 5.1 and 50 CFR 27.71, which regulate the making of pictures, television productions, or sound tracks on national wildlife refuges.

- A special use permit is required of any party except amateur photographers or bona fide newsreel and news television photographers and soundmen. All other parties must obtain written permission from local officials having administrative responsibility for the area involved.
- The Secretary has determined that no fee will be charged for the making of such motion pictures, television productions, or sound tracks on areas administered by the U.S. Fish and Wildlife Service (Note: this provision is currently under Departmental review).
- A bond shall be furnished, or deposit made in cash or by certified check, in an amount to be set by the official in charge of the area to ensure full compliance with all conditions of the special use permit. Such bond may be refunded to the applicant if all permit requirements are met and no costs to the government are incurred.

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- Permission to make a motion picture, television production, or sound track will be granted by the head of the Service or his/her authorized representative at his/her discretion and on acceptance by the applicant of conditions set forth in a special use permit. Applicants must describe the area where filming is requested and the scope of the filming or recording. Dependent upon weather conditions, applicants will state when filming or other production will begin and end.

Other stipulations include:

- Utmost care will be exercised to see that no natural features are injured, and after completion of the work, the area will, as required by the refuge manager, either be cleaned up and restored to its prior condition or left, after cleanup, in a condition satisfactory to the refuge manager.
- Credit will be given to the Department of the Interior and the U.S. Fish and Wildlife Service through the use of an appropriate title or announcement, unless the refuge manager issues a written statement that no such courtesy credit is desired. A copy of the final product will be provided pro bono to the refuge staff.
- Pictures will be taken of wildlife only when such wildlife will be shown in its natural state or under approved management conditions if such wildlife is confined.
- Any special instructions received from refuge manager will be complied with.
- Any additional information relating to the privilege applied for by the applicant will be furnished upon request.
- Other stipulations may be warranted depending upon the proposed location and season of the year the activity is conducted.
- Further guidance on this activity is found in Service Manual 650 FW 5.

The following stipulations apply to special use permits issued for commercially produced video and photography activities. To minimize impacts on refuge lands and resources, the refuge manager will ensure that filmmakers comply with policies, rules, and regulations and will monitor and assess all activities of filmmakers.

- Failure to abide by any part of a special use permit: violation of any refuge-related provision in Titles 43 or 50, Code of Federal Regulations; or any pertinent state regulation (e.g., fish or game violation) will be considered grounds for immediate revocation of the permit and could result in denial of future permit requests for lands administered by the U.S. Fish and Wildlife Service. This provision applies to all persons working under the authority of the permit.
- The permittee is responsible for ensuring that all employees, party members, and any other persons working for the permittee and conducting activities allowed by the special use permit are familiar with and adhere to the conditions of the permit.
- The special use permit may be canceled or revised at any time by the refuge manager for noncompliance or in case of emergency (e.g. public safety, unusual resource problems). The permittee and permittee's clients do not have exclusive use of the site(s) or lands covered by the permit.
- Prior to beginning any activities allowed by the special use permit, the permittee shall provide the refuge with: (1) A copy of current business license; and (2) proof of comprehensive general liability insurance.
- Prior to conducting commercial filming activities, the permittee shall provide the refuge manager with the name and method of contact for the field party chief or supervisor.
- A valid copy of the special use permit, signed by the refuge manager or designee, must be in the party leader's possession at all times while exercising the privileges of the permit.

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- Endorsement of the special use permit signifies the permittee's understanding and concurrence with all the conditions set forth in the General Conditions found on the reverse side of the special use permit and the above Special Conditions.

Under the stipulations described above, commercially produced filmmaking, production, or sound track recording is viewed as compatible with the purposes for which the refuge was established.

Justification: Commercial video and photography are economic uses that must contribute to the achievement of refuge purposes or the mission of the National Wildlife Refuge System. The products derived may educate groups of people that may not normally know about the refuge, such as the elderly, handicapped, or urban youth groups. The services provided by commercial filmmakers will be beneficial to extend public appreciation and understanding of wildlife, natural habitats, and the mission of the Refuge System. Conditions imposed in the special use permit of filmmakers ensure that these wildlife-dependent activities can occur without adverse effects to refuge resources or other visitors. The activity will be required to have a primary focus on education and information about refuge purposes and the Refuge System mission.

NEPA Compliance for Refuge Use Decision: *Place an X in appropriate space.*

- Categorical Exclusion without Environmental Action Statement
 Categorical Exclusion and Environmental Action Statement
 Environmental Assessment and Finding of No Significant Impact
 Environmental Impact Statement and Record of Decision

Mandatory 10-year Re-evaluation Date: 12/25/2019

9) Description of Use: *Nuisance Animal Control*

This activity would allow a managed and highly targeted program for the take of nuisance animals on Cache River NWR that are harmful to refuge habitat and/or infrastructure critical to refuge habitat management and operations, and therefore a threat to the trust species that inhabit or utilize the refuge. Currently, this program will specifically address beaver, nutria, and feral hogs, but may be expanded to other species, if necessary, and in compliance with Arkansas Game and Fish Commission (AGFC) regulations, to address future harmful impacts caused by exotic or invasive species and prevent or control problems, such as disease outbreaks involving furbearers or excessive predation on trust species.

Semi-aquatic Component

The hydrology and habitat of the refuge is such that semi-aquatic animals, specifically, beaver (*Castor canadensis*) and nutria (*Myocastor coypus*), have become prolific and their dense populations have degraded habitat for other wildlife usage.

Beaver naturally impound water to enhance accessibility and extend usable habitat beyond the stream channel. Under normal hydrologic and population conditions, beavers are held in check by availability of water and natural predators, and under these conditions their impoundments may provide beneficial aquatic microhabitats containing scrub-shrub vegetation and trees. However, the amount of irrigated cropland on the refuge provides beavers with a "dry" season water supply from irrigation runoff. Beaver and nutria have little pressure from natural predators. Beaver populations have grown to the point that impoundments have been rebuilt for many years and impounded areas

have grown in size. Over the long-term, these impoundments degrade the habitat both within and surrounding the area, because the woody vegetation within the impoundments decreases in diversity and abundance, and trees eventually will be excluded altogether. The water table surrounding the impoundment is elevated, altering the forest species composition and degrading quality and health. The hydrology itself is impacted as sediment and organic material from decomposing aquatic vegetation accumulates in the impoundment and impedes the ability of the site to dewater. Additionally, water quality in impounded areas is negatively affected due to increased water temperature and turbidity and decreased dissolved oxygen, and reduced species diversity.

Nutria are non-native herbivores that cause negative impacts on wildlife habitat by consuming and destroying aquatic vegetation, and burrowing in levees of migratory bird impoundments. Their constant burrowing causes roads and levees to collapse, which ultimately poses a major safety issue for refuge personnel and visitors. These activities degrade habitat managed for waterfowl, shorebirds, and other desired species. Their foraging activities also result in competition with waterfowl for food resources.

Refuge staff remove beaver impoundments annually and opportunistically, and conduct wintertime trapping and shooting, but do not have resources to consistently and effectively pursue sufficient control to protect the habitat resources from beaver and nutria impacts.

Terrestrial Component

The presence of feral hogs (*Sus scrofa*) has been documented on the refuge and observed on several occasions in the recent past. The animals are not native and have few natural predators. The hogs compete with resident wildlife for forage, which includes herbaceous vegetation, roots, acorns, invertebrates, and mammals. Additionally, the animals degrade habitat by rooting and digging wallows. Hardwood plantings used to restore marginal agricultural lands to productive, forested wildlife habitat are threatened by these animals. Also, there is the potential for the feral hog to carry and transmit a number of infectious diseases to resident wildlife and humans. Currently, the refuge allows the take of feral hogs during any legal refuge hunt, but the staff has implemented no further control measures. Similar to the beaver and nutria problem, the refuge does not have the resources to pursue sufficient control to protect the habitat and wildlife from this threat.

Permit System

As necessary to protect refuge resources, the staff may issue special use permits to individuals for the take of nuisance beaver, nutria, and feral hogs. Special use permits may be issued refuge-wide, or permittees may be directed to certain areas with known overpopulation or habitat damage issues. The take may consist of trapping, shooting, or other methods approved by the AGFC, and the permittee will be allowed to retain the animals, pelts, tails, and any bounties from animals taken under the special use permit. Because there are advantages to trapping or shooting in virtually all seasons, permits will be valid year-round, unless otherwise specified in the permit, or specified later by the refuge manager. In the case of feral hogs, control measures will be limited to shooting and/or live trapping. Captured animals will be dispatched by gunshot.

Availability of Resources: Refuge staff and resources are adequate to administer this program. The expenditures for issuing special use permits, oversight, and enforcement will be minimal. To closely monitor the program and to protect non-target animals, the refuge may issue only a small number of permits annually.

Anticipated Impacts of Use: The take of nuisance animals will involve the use of vehicles, boats, ATVs, walking in approved areas, setting of traps or snares, and discharge of firearms, which will result in only normal short-term disturbances similar to those associated with other refuge approved uses (e.g., hunting, fishing, birding).

With respect to beavers and nutria, the short-term benefits of this program should result in decreased nuisance animal populations and reduced inundation of refuge habitats and damage to infrastructure. As nuisance animal populations decrease, the number, size, and frequency of rebuilt beaver impoundments should also decrease. The refuge will spend less time and expense on the removal of impoundments and can redirect these resources to other habitat restoration and management activities. Damage to infrastructure and habitat should be reduced. In the long-term, degraded habitats will return to a more normal hydrologic regime and will be reclaimed by native hardwoods and natural riparian vegetation, which will result in increased benefits to trust resources and associated wildlife-dependent recreation.

With respect to feral hogs, the short-term benefits of this program should be realized in re-growth and/or recovery of hardwood plantations, and other young plant communities and soils that were formerly disturbed. In addition, local wildlife populations will have relief from this non-native competitor/predator. In the long-term, a reduction in feral hog numbers and associated damage and disease potential will result in enhanced conditions for trust resources and associated wildlife-dependent recreation.

Determination (check one below):

- Use is Not Compatible
 Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

- The use will be administered under conditions of a special use permit issued by the refuge manager that will enable control efforts to be directed to problem areas and specify methods and procedures to ensure protection of staff, visitors, and refuge resources.
- Use will be conducted to minimize risk of injury or take of non-target species and disturbance to refuge habitats.
- Use will be conducted to avoid any conflicts with refuge visitors.
- Permittee will comply with all applicable state and federal regulations.
- Activities under this special use permit will not be conducted in waterfowl sanctuaries during annual closure periods.
- Permittee will provide locations of beaver dams and lodges and other problem areas, as well as number and location of species taken.
- All target animals will be immediately dispatched by gunshot.
- The permittee and his/her agents and guests shall save, hold harmless, defend, and indemnify the United States of America, its agents and employees, for loss, damages, judgments, and expenses on account of bodily injury, death, or property damage, or claims for bodily injury, death, or property damage of any nature whatsoever, and by whomever made, arising out of the permittee, his/her employees, subcontractors, or agents, with respect to conducting activities connected with the special use permit within the lands administered by the refuge.
- The special use permit may be revoked at any time by the refuge manager.
- The refuge manager may discontinue the use at any time.

Justification: This use has been determined compatible provided the above stipulations are implemented. This use will facilitate the primary purpose of the refuge, which is to provide waterfowl habitat and to conserve other migratory birds and wildlife. This use will meet the mission of the National Wildlife Refuge System by conserving fish, wildlife, and plant resources on these lands and by providing renewable resources for the benefit of the American public. This use will be administered in compliance with 50 CFR 29.1 and EO 13112.