

ADOPTION AND FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY DOUBLE-CRESTED CORMORANT DAMAGE MANAGEMENT IN MISSISSIPPI

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Mississippi's Wildlife Services (WS) program conducts programs to resolve or prevent damage to agricultural resources, natural resources, and property, including threats to human safety, associated with double-crested cormorant (*Phalacrocorax auritus*). The Tennessee Valley Authority (TVA) continues to experience damage or threats of damage associated with birds at facilities or properties they own in Mississippi and may request the assistance of WS to manage the damage or threats of damage at these properties.

WS prepared an Environmental Assessment (EA) to document alternative approaches to meeting the need for action and document the potential environmental effects associated with implementing those alternative approaches.

TVA continues to experience damage or threats of damage associated with double-crested cormorants at facilities or properties they own in Mississippi and may request the assistance of WS to manage the damage or threats of damage at these properties. TVA has independently reviewed the WS EA, provided comments on the document, and found it to be adequate. TVA is therefore adopting the WS EA.

Affected Environment

Double-crested cormorants feed on fish and other aquatic animals and generally occur in areas near bodies of water (coastal areas, rivers, ponds, lakes, estuaries, and artificial water impoundments). In Mississippi, double-crested cormorants can occur throughout the year where suitable habitat exists. Requests for assistance to manage damage or threats of damage could occur in these areas.

Alternatives

The WS EA evaluated the potential environmental consequences under four alternatives. Alternative 1 would continue implementation of an integrated methods approach utilizing non-lethal and lethal techniques, when requested, as deemed appropriate using the WS Decision Model, to reduce damage and threats caused by double-crested cormorants in Mississippi. Alternative 2 would implement an integrated methods approach to managing the species using only non-lethal methods. Alternative 3 would limit WS's involvement to providing recommendations on methods that people could use to manage damage through technical assistance. Under Alternative 4, the WS program in Mississippi would not provide any assistance with managing damage associated with double-crested cormorants in the State.

Impacts Assessment

WS and TVA developed six issues related to managing damage associated with double-crested cormorants in Mississippi. Each of the issues is discussed in the EA, as those issues relate to the possible implementation and environmental consequences of the four alternatives.

- Issue 1 - Effects of damage management activities on target double-crested cormorant populations;
- Issue 2 - Effects on non-target wildlife species populations, including threatened and endangered species;
- Issue 3 - Effects of damage management methods on human health and safety;
- Issue 4 - Humaneness and animal welfare concerns of methods;
- Issue 5 - Effects on waterfowl hunting activities to disperse double-crested cormorant roosts.

Issue 1 - Effects of Damage Management Activities on Target Double-crested Cormorant Populations

WS personnel could employ non-lethal and/or lethal methods to resolve a request for assistance. Non-lethal methods consist of capturing, dispersing, excluding, or making an area unattractive to double-crested cormorants causing damage. Lethal methods can remove specific double-crested cormorants that personnel of WS identify as causing damage or posing a threat to human safety. The USFWS currently authorizes WS to take up to 700 double-crested cormorants per permit year in Mississippi to alleviate damage and threats of damage. This makes up approximately 1.6% of the average number of the species counted per year during the mid-winter roost surveys. The method employed would not adversely affect the populations of the target species under any of the alternatives.

Issue 2 - Effects on Non-Target Wildlife Species Populations, Including Threatened and Endangered Species

To reduce the likelihood of dispersing, capturing, or removing non-target animals, WS would employ the use of attractants that were as specific to the targeted species as possible. WS would use standard operating procedures to reduce any potential adverse effects on non-target animals. Bald eagles and golden eagles use similar habitats as double-crested cormorants, and they may be present in areas where double crested cormorants occur. WS would only conduct limited activities near active eagle nests and Important Eagle Use Areas. WS would follow the National Bald Eagle Management Guidelines. These methods “*may affect, not likely to adversely affect*” threatened or endangered species or their designated critical habitats in the State. USFWS concurred with the effects determination made by WS during consultation. This applies to all alternatives.

Issue 3 - Effects of Damage Management Methods on Human Health and Safety

WS’ employees would consider risks to human safety when conducting available methods of managing damage cause by double-crested cormorants. The type of wildlife species responsible for causing damage or threats and WS’ directives would also be considered. The threats to human safety from the use of methods would be similar across the alternatives. No adverse effects to human health or safety occurred from the use of methods by WS to alleviate double-crested cormorant damage in the state from FY2013 through FY2017.

Issue 4 - Effects on the Aesthetic Values of Double-crested Cormorants

Double-crested cormorants may provide aesthetic enjoyment to some people in the State, such as through observations, photographing, and knowing they exist as part of the natural environment. Methods available WS could use under each alternative could result in the dispersal, exclusion, live-capture, or lethal removal of individuals or small groups of double-crested cormorants to resolve damage and threats. However, these methods would not reach a magnitude that would prevent ability to view double-crested cormorants outside the area where damage was occurring. The aesthetic values of double-crested cormorants would be minimal across the alternatives.

Issue 5 – Effects on Waterfowl Hunting from Activities to Disperse Double-crested Cormorant Roosts

Implementation of Alternative 1 or Alternative 2 would not adversely affect the ability of people to harvest waterfowl in the state because the property owner and/or manager would maintain the ability to restrict WS’ activities on their property. A Memorandum of Understanding, work initiation document, or another similar document would be implemented under Alternatives 1 or 2 to determine when and where activities could occur on their property they own and/or manage. WS could restrict activities to certain times of the day or could use dispersal methods that do not produce noise, such as lights and/or lasers. WS would have no direct effect on the ability to harvest waterfowl if WS implemented Alternative 3 or 4.

Cumulative Impacts of the Proposed Action

No significant cumulative environmental impacts are expected from any of the four alternatives, including TVA and WS’s preferred alternative (Alternative 1). The analysis in the EA adequately addressed the identified issues, which reasonably confirmed that an integrated methods approach would not result in significant cumulative adverse effects on the quality of the human environment.

WS determine the proposed activities “*may affect*” those species but “not likely to adversely affect.” Based on these findings, WS initiated informal consultation with the US Fish and Wildlife Service, who concurred with their determination. To ensure activities would not likely adversely affect double-crested cormorants in the state, WS would conduct activities more than 1,000 feet from active roost sites and more than 750 feet from feeding cormorants in Mississippi. Because TVA is adopting this EA, TVA will commit to the same precautions.

The preferred alternative contemplates that, for any request for assistance, WS will apply the Decision Model which assesses the problem, evaluates management methods available, and then formulates a management strategy and continues to monitor that strategy. Any decision made using the Decision Model would be in accordance with WS’ directives and standard operating procedures as well as relevant laws and regulations. The WS EA states, “The monitoring of activities by WS would ensure the EA remained appropriate to the scope of activities conducted by WS in Mississippi and damage management activities that WS could conduct on property owned or managed by the TVA under the selected alternative.”

Public Involvement

WS made the EA available to the public for review and comment through notices published in the *Clarion Ledger* newspaper from April 15, 2019, through April 17, 2019. WS made the EA available to the public for review and comment on the APHIS website beginning on April 22, 2019, and on the federal e-rulemaking portal at regulations.gov beginning on April 9, 2019. WS also sent a notice of availability to agencies, organizations, and individuals with probable interest in managing double-crested cormorant damage in the State. The public involvement process ended on May 24, 2019. During the public comment period, WS received four comment responses on the draft EA resulting in minor changes, but did not change the analysis provided in the EA.

Conclusion and Findings

Due to TVA’s involvement with WS concerning double-crested cormorant damage control and management in Mississippi, TVA independently reviewed the current WS EA and found it to be adequate. Based on the analyses in the EA and the findings documented above, TVA concludes that contracting with WS for double-crest cormorant damage management services on TVA facilities and properties in Mississippi as described under Alternative 1 above would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.

If needed, TVA may request the assistance of WS to manage damage or threats of damage at those facilities and properties as assessed under the 2019 Managing Damage Caused by Double-Crested Cormorant in the State of Mississippi Environmental Assessment.



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Date Signed