DECISION AND FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT: MANAGING BLACKBIRD DAMAGE TO SPROUTING RICE IN SOUTHWESTERN LOUISIANA

PURPOSE AND NEED FOR ACTION

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program prepared an Environmental Assessment (EA) to analyze the potential impacts to the quality of the human environment associated with alternative approaches to resolving damage and threats of damage to sprouting rice in southwestern Louisiana associated with mixed species flocks of blackbirds[1] (USDA 2015). The tendency of blackbirds to form large communal roosts in the rice-growing areas of southwestern Louisiana, and to travel and feed in large social flocks, often results in locally serious damage to rice crops, and monetary losses to individual farmers can be substantial. Red-winged blackbirds (*Agelaius phoeniceus*), brown-headed cowbirds (*Molothrus ater*), common grackles (*Quiscalus quiscula*), and boat-tailed grackles (*Quiscalus major*) are the primary blackbird species responsible for causing damage to sprouting rice (Meanley 1971, Cummings et al. 2005). In addition, Brewer's blackbirds (*Euphagus cyanocephalus*), great-tailed grackles (*Quiscalus mexicanus*), and European starlings (*Sturnus vulgaris*) could be present in those mixed species flocks found in the rice growing areas of southwestern Louisiana. The EA and this document will collectively refer to those bird species as blackbirds, including European starlings[2].

The EA evaluates the need for managing damage to sprouting rice caused by blackbirds in Acadia, Allen, Calcasieu, Cameron, Evangeline, Jefferson Davis, St. Landry, and Vermilion Parishes, wherever a property owner requests such assistance. The need for action identified in Section 1.2 of the new EA arises from requests for assistance that WS receives. The EA evaluates the need for action to manage damage associated with blackbirds, the potential issues associated with managing damage, and the environmental consequences of conducting different alternatives to meet the need for action while addressing the identified issues. WS defined the issues associated with meeting the need for action and identified preliminary alternatives through consultation with the United States Fish and Wildlife Service (USFWS) and the Louisiana Department of Wildlife and Fisheries (LDWF). The EA analyzes four alternatives in detail to meet the need for action and to address the issues analyzed in detail.

A discussion of WS' authority and the authority of other agencies, as those authorities relate to conducting activities to alleviate blackbird damage, occurs in Section 1.5 of the EA. In addition, several laws or statutes authorize, regulate, or otherwise would affect WS' activities. WS would comply with all applicable federal, state, and local laws and regulations in accordance with WS Directive 2.210. Section 1.7 of the EA identified several decisions to be made based on the scope of the EA.

The EA and this Decision ensures that WS complies with the National Environmental Policy Act (NEPA), with the Council on Environmental Quality guidelines (see 40 CFR 1500), and with the APHIS' NEPA implementing regulations (see 7 CFR 372). WS has previously developed an EA that analyzed the need for action to manage damage occurring to sprouting rice in southwestern Louisiana associated with blackbirds (USDA 2001). Since activities conducted under the previous EA were re-evaluated under the new EA to address the new need for action and the associated affected environment, the previous EA that

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[1] In North America, the term "*blackbird*" generally refers to about 10 species of birds in the subfamily Icterinae that share several common traits, including males that are predominately black in color or iridescent (Dolbeer 1994). However, only those blackbird species discussed in Section 1.1 of this EA will be included in the term "*blackbird*" used throughout this document.

[2] For ease of discussion, the term "*blackbird*" will include starlings, since starlings can also occur in mixed species flocks with other blackbirds.

addressed managing damage to sprouting rice caused by blackbirds will be superseded by the outcome of this Decision for the new EA.

AFFECTED ENVIRONMENT AND ISSUES

During the winter, blackbird species often form large mixed species flocks that roost and forage together in the southern United States, including areas of southwestern Louisiana where rice is grown. Some of the highest concentrations of wintering blackbirds in the southern United States occur in southwest Louisiana. The size of roosts can vary from a few hundred individuals to millions of blackbirds, with some roost counts reaching 25 million blackbirds in the rice growing regions of southwest Louisiana (Meanley 1976, Wilson 1985, Brugger 1988). During 2013, nearly 76% of the rice production in the State occurred in Acadia, Allen, Calcasieu, Cameron, Evangeline, Jefferson Davis, St. Landry, and Vermilion Parishes. Therefore, damage or threats of damage associated with blackbird species could occur in agricultural fields wherever those birds occur in Acadia, Allen, Calcasieu, Cameron, Evangeline, Jefferson Davis, St. Landry, and Vermilion Parishes. Pursuant to three of the four alternatives analyzed in the EA, WS could continue to provide assistance on private land in Acadia, Allen, Calcasieu, Cameron, Evangeline, Jefferson Davis, St. Landry, and Vermilion Parishes when the appropriate resource owner or manager requests assistance.

Issues are concerns regarding potential effects that might occur from a proposed activity. Federal agencies must consider such issues during the NEPA decision-making process. Section 2.2 of the EA describes the issues considered and evaluated in detail by WS as part of the decision-making process. In addition to those issues analyzed in detail, several issues were identified during the development of the EA but were not considered in detail. The rationale for the decision not to analyze those issues in detail is discussed in Section 2.3 of the EA. To identify additional issues and alternatives, WS made the EA available to the public for review and comment through notices published in local media and through direct notification of interested parties. WS made the EA available to the public for review and comment by a legal notice published in *The Advocate* newspaper from September 4, 2015 through September 6, 2015. WS also made the EA available to the public for review and comment on the APHIS website and on the regulations.gov website beginning on August 31, 2015. WS also sent a notice of availability directly to agencies, organizations, and individuals with probable interest in managing blackbird damage in the State. The public involvement process ended on October 16, 2015. During the public comment period, WS received 11 comment letters. Appendix A of this decision summarizes the comments received and provides response to the comments.

Based on the comments received and further review of the draft EA, minor editorial changes were incorporated into the final EA. Those minor changes enhanced the understanding of the EA, but did not change the analysis provided in the EA. In addition, while the draft EA was available for public comment, WS discovered the number of red-winged blackbirds lethally removed by the WS program in Louisiana during federal fiscal year (FY) 2012 was actually lower due to a data entry error that occurred during FY 2012. WS' personnel enter data relating to work activities into a Management Information System. During the development of the draft EA, the WS program used data from the Management Information System for the analyses. After correcting the data entry error that occurred in FY 2012, the number of red-winged blackbirds that the WS program in Louisiana lethally removed during FY 2012 decreased from 211,443 red-winged blackbirds to 155,643 red-winged blackbirds. To accurately reflect the annual removal of red-winged blackbirds and the cumulative removal of blackbirds, the data for FY 2012 relating to red-winged blackbird removal by the WS program in Louisiana was updated in the final EA. After updating the analyses in the final EA, WS' cumulative removal of red-winged blackbirds during FY 2012 was actually of lower magnitude than originally analyzed in the draft EA.

ALTERNATIVES

The EA evaluated four alternatives in detail to respond to the issues identified in Chapter 2 of the EA. Section 3.1 of the EA provides a description of the alternatives evaluated in detail. A detailed discussion of the effects of the alternatives on the issues occurs in Chapter 4 of the EA. Additional alternatives were also considered, but were not evaluated in detail with rationale for not evaluating those alternatives in detail provided in Section 3.2 of the EA. WS would incorporate those standard operating procedures discussed in Section 3.3 and Section 3.4 of the EA into activities if the decision-maker selected the proposed action/no action alternative (Alternative 1) and when applicable, under the non-lethal methods only alternative (Alternative 2) and the technical assistance alternative (Alternative 3), if selected. If the decision-maker selected the no involvement by WS alternative (Alternative 4), the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures addressed in the EA.

ENVIRONMENTAL CONSEQUENCES

Section 4.1 of the EA analyzes the environmental consequences of each alternative as that alternative related to the issues identified to provide information needed for making informed decisions in selecting the appropriate alternative to address the need for action. Section 4.1 of the EA analyzes the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on those major issues identified in the EA. The proposed action/no action alternative (Alternative 1) served as the baseline for the analysis and the comparison of expected impacts among the alternatives.

The following resource values in Louisiana are not expected to be significantly impacted by any of the alternatives analyzed in the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas designated for threatened and endangered (T&E) species), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. The activities proposed in the alternatives would have a negligible effect on atmospheric conditions including the global climate. Meaningful direct or indirect emissions of greenhouse gases would not occur as a result of any of the alternatives. Those alternatives would meet the requirements of applicable laws, regulations, and Executive Orders, including the Clean Air Act and Executive Order 13514. The discussion below is a summary of the environmental consequences of the alternatives for each of the issues analyzed in detail.

Issue 1 - Effects of Damage Management Activities on Target Blackbird Populations

Under the proposed action, WS would incorporate non-lethal and lethal methods described in Appendix B of the EA into an integrated approach in which WS' personnel could employ all or a combination of methods to resolve a request for assistance. Non-lethal methods can disperse, exclude, or otherwise make an area unattractive to blackbirds that are causing damage; thereby, potentially reducing the presence of those birds at the site and potentially the immediate area around the site. Non-lethal methods generally have minimal impacts on overall populations of wildlife since those species are unharmed.

A common issue is whether damage management actions would adversely affect the populations of target species when WS' employees employ lethal methods. Lethal methods can remove specific blackbirds identified as causing damage or posing a threat to human safety. Lethal methods that would be available to address blackbird damage include live-capture followed by euthanasia, the avicide DRC-1339, and shooting. Currently, WS is the only entity that could use the avicide DRC-1339; therefore, DRC-1339 would only be available for use to manage damage when WS was providing direct operational assistance under Alternative 1.

The number of blackbirds removed from a population by WS using lethal methods under Alternative 1 would be dependent on the number of requests for assistance received, the number of blackbirds involved with the associated damage or threat, the efficacy of methods employed, and the number of individual birds the USFWS and the LDWF authorizes WS to remove, when required. Based on those quantitative and qualitative parameters addressed in the EA, the anticipated number of blackbirds that WS' employees could lethally remove annually to address requests for assistance under the proposed action/no action alternative (Alternative 1) would be of low magnitude when compared to population trend data and/or population estimates. Although available trend data for some target blackbird species has shown declining populations, the International Union for Conservation of Nature and Natural Resources has ranked those blackbird species as species of "*least concern*" based on the "*species…extremely large range…*", "*…the population size is extremely large…*", and "*the decline is not believed to be sufficiently rapid*".

Those people experiencing damage or threats could remove blackbirds themselves under any of the alternatives when the USFWS and the LDWF authorizes the removal, when authorization is required. For example, landowners or their designees can remove many blackbird species that are causing damage without the need for a permit from the USFWS or LDWF under the blackbird depredation order (see 50 CFR 21.43). Therefore, other entities could remove those blackbirds WS lethally removes annually to alleviate damage in the absence of involvement by WS. In addition, a resource owner could seek assistance from private businesses to remove blackbirds causing damage. Currently, the avicide DRC-1339 is not available to entities other than WS. However, in the absence of WS' involvement with the use of DRC-1339, other entities could pursue registration of DRC-1339 for use in the State.

WS would monitor activities conducted under the selected alternative (except the no involvement by WS alternative) to ensure the WS program could identify and address any potential impacts. WS would work closely with the USFWS and the LDWF to ensure the activities conducted by WS would not adversely affect blackbird populations, which ensures those agencies have the opportunity to consider WS' activities as part of management goals established by those agencies. Historically, WS' activities to manage damage caused by blackbirds in rice growing areas of southwestern Louisiana have been a small component of the annual mortality of blackbirds. Section 4.1 of the EA discusses the cumulative effects of known mortality on the populations of blackbirds, including cumulative mortality occurring across the Mississippi Flyway. Dolbeer et al. (1997) indicated that lethal removal of blackbirds in the winter is likely a substitute for natural mortality and does not add to the mortality that occurs annually. In addition, other density dependent factors may regulate populations (Risser 1975, Nephew and Romero 2003), which also provides an indication that limited lethal removal is not likely additive to natural mortality but is a substitute for mortality that would have occurred otherwise. Density-dependent factors as regulatory mechanisms often influence bird populations (*e.g.*, see Newton 1998), and are likely factors in the regulation of blackbird populations. Based on current information, the mortality associated with the lethal removal of blackbirds by WS to alleviate damage is likely compensatory and not additive to annual mortality. Therefore, the number of blackbirds lethally removed by WS would likely die annually from predation, starvation, disease, weather, or other mortality events in the absence of WS' removal.

Issue 2 - Effects of Damage Management Activities on Non-target Wildlife Species, Including Threatened or Endangered Species

Personnel from WS have experience with managing animal damage and receive training in the employment of methods. WS' employees would use the WS Decision Model to select the most appropriate methods to address damage caused by targeted blackbirds and to exclude non-target species. To reduce the likelihood of dispersing, capturing, or removing non-target animals, WS would employ the most selective methods for the target species, would employ the use of attractants that were as specific to

target species as possible, and determine placement of methods to avoid exposure to non-targets. Section 3.3 and Section 3.4 in the EA discuss the standard operating procedures that WS' personnel would follow to prevent and reduce any potential adverse effects on non-targets when conducting activities under Alternative 1 and if applicable, under Alternative 2 and Alternative 3. Despite the best efforts to minimize non-target exposure to methods during program activities, the potential for WS' personnel to disperse, live-capture, or lethally remove non-target animals exists when applying both non-lethal and lethal methods to manage damage or reduce threats to safety.

The unintentional removal or capture of animals during damage management activities conducted under the proposed action alternative would primarily be associated with the use of the avicide DRC-1339. WS' employees would follow all label requirements of DRC-1339 to minimize non-target risks. As required by the label, WS' employees would pre-bait and monitor all potential bait sites for non-target use as outlined in the pre-treatment observations section of the label. If personnel observe non-targets feeding on the pre-bait, they would abandon those plots and no baiting would occur at those locations. If WS' personnel baited sites after observing for non-target animals, they would continue to monitor the sites daily to observe for non-target feeding activity. If personnel observed non-targets feeding on bait, personnel would abandon those sites. WS would retrieve all dead birds to the extent possible following treatment with DRC-1339 to minimize secondary hazards associated with scavengers feeding on bird carcasses.

The methods described in Appendix B of the EA have a high level of selectivity and WS' personnel can employ methods using SOPs to ensure minimal effects to non-target species. Between FY 2009 and FY 2015, no non-target bird mortality was observed and no non-target wildlife species were known to have been killed from WS' activities. WS would monitor the take of non-target species to ensure program activities or methodologies used in blackbird damage management do not adversely affect non-targets. Methods available to alleviate and prevent blackbird damage or threats when employed by trained, knowledgeable personnel are selective for target species. WS would annually report to the USFWS and/or the LDWF any non-target take to ensure those agencies have the opportunity to consider any take by WS as part of management objectives.

The ability of people to reduce damage and threats caused by blackbirds would be variable under Alternative 2, Alternative 3, and Alternative 4, since the skills and abilities of the person implementing damage management actions or the availability of other entities capable of providing assistance could determine the level of success in resolving damage or the threat of damage. If people or other entities apply those methods available as intended, risks to non-targets associated with those methods would be similar to Alternative 1. If people or other entities apply methods available incorrectly or apply those methods without knowledge of animal behavior, risks to non-target animals would be higher under any of the alternatives. If frustration from the lack of all available assistance under Alternative 2, Alternative 3, and Alternative 4 caused those people experiencing blackbird damage to use methods that were not legally available for use, risks to non-target animals would be higher under those alternatives. People have resorted to the use of illegal methods to resolve blackbird damage that have resulted in the lethal removal of non-target animals.

Based on a review of those threatened or endangered species listed in Acadia, Allen, Calcasieu, Cameron, Evangeline, Jefferson Davis, St. Landry, and Vermilion Parishes during the development of the EA, WS determined that activities conducted pursuant to the proposed action would have no effect on those species listed by the USFWS and the National Marine Fisheries Services nor their critical habitats. The rationale for the no effect determination for each species was based on several considerations, which were discussed in Section 4.1 of the EA.

Issue 3 – Effects of Damage Management Activities on Human Health and Safety

The threats to human safety associated with the methods available would be similar across the alternatives since the same methods would be available across the alternatives. The only method that may not be available under all the alternatives is the avicide DRC-1339. Currently, the avicide DRC-1339 is not available to entities other than WS. However, in the absence of WS' involvement with the use of DRC-1339, other entities could pursue registration of DRC-1339 for use in the State. If other entities registered DRC-1339 with the LDAF for use in the State to minimize blackbird damage to sprouting rice and people used DRC-1339 in accordance with label requirements and in consideration of human safety, the risks to human safety from the use of DRC-1339 would be similar to those risks under Alternative 1. If people used DRC-1339 inappropriately and/or without regard to human safety, risks to people from the use of DRC-1339 could be higher than Alternative 1. Based on the evaluation in the EA, the availability of DRC-1339 for use by WS' personnel under Alternative 1 would not increase risks to human safety compared to the other alternatives.

The expertise of WS' employees in using those methods available likely would reduce threats to human safety since WS' employees would be trained and knowledgeable in the use of those methods. If methods were used incorrectly or without regard for human safety, risks to human safety would increase under any of the alternatives that those methods could be employed. Although risks do occur from the use of those methods available, when people use those methods in consideration of human safety, the use of those methods would not pose additional risks beyond those associated with the use of other methods. No adverse effects to human safety occurred from WS' use of methods to alleviate blackbird damage in the State from FY 2009 through FY 2015.

Issue 4 – Humaneness and Animal Welfare Concerns

The issue of humaneness was also analyzed in relationship to methods available under each of the alternatives. Since many methods addressed in Appendix B of the EA would be available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. With the exception of DRC-1339, all lethal methods listed in Appendix B of the EA would be available under all alternatives. Personnel from WS have experience with managing animal damage and receive training in the employment of methods. The ability of WS to provide direct operational assistance under Alternative 1 and Alternative 2 would ensure methods were employed by WS' personnel as humanely as possible. Under the other alternatives, other entities could use methods inhumanely if used inappropriately or without consideration of bird behavior. The skill and knowledge of the person implementing methods to resolve damage would determine the efficacy and humaneness of methods. A lack of understanding of the behavior of blackbirds and other animals or improperly identifying the damage caused by blackbirds along with inadequate knowledge and skill in using methodologies to resolve the damage or threat could lead to incidents with a greater probability of other people perceiving the action as inhumane under Alternative 2, Alternative 3, and Alternative 4. Despite the lack of involvement by WS under Alternative 4 and WS' limited involvement under Alternative 2 and Alternative 3, those methods perceived as inhumane by certain individuals and groups would still be available for use by the public to resolve damage and threats caused by blackbirds, except the avicide DRC-1339. However, in the absence of DRC-1339 being available under Alternative 2, Alternative 3, and Alternative 4, other entities could pursue registration of DRC-1339 for use to manage damage to sprouting rice.

Issue 5 – Effects of Damage Management Activities on the Aesthetic Values of Blackbirds

Blackbirds 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 that could

be employed under each of the alternatives could result in the dispersal, exclusion, or removal of individuals or groups of blackbirds to resolve damage and threats. Therefore, the use of methods often results in the removal of blackbirds from the area where damage was occurring or the dispersal of blackbirds from an area. Since most methods available would be similar across the alternatives, the use of those methods would have similar potential impacts on the aesthetics of blackbirds. However, even under the proposed action alternative, the dispersal and/or lethal removal of blackbirds under the alternatives would not reach a magnitude that would prevent the ability to view those species outside of the area where damage was occurring. The effects on the aesthetic values of blackbirds would therefore be similar across the alternatives and would be minimal.

CUMULATIVE IMPACTS OF THE PROPOSED ACTION

No significant cumulative environmental impacts are expected from any of the four alternatives, including Alternative 1. Under Alternative 1, the lethal removal of blackbirds by WS would not have significant impacts on statewide populations of those species when known sources of mortality are considered. No risk to public safety is expected when activities are provided under Alternative 1, Alternative 2, and Alternative 3 since only trained and experienced personnel would conduct and/or recommend damage management activities. There could be a slight increased risk to public safety when persons who reject assistance and recommendations made by WS and conduct their own activities under Alternative 3, and when no assistance is provided under Alternative 4. However, under all of the alternatives, those risks would not be to the point that the impacts would be significant. The analysis in the EA indicates that an integrated approach to managing damage and threats caused by blackbirds would not result in significant cumulative adverse effects on the quality of the human environment.

DECISION AND RATIONALE

I have carefully reviewed the EA prepared to meet the need for action. I find the proposed action/no action alternative (Alternative 1) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately address the identified issues, which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action. Therefore, the analysis in the EA does not warrant the completion of an Environmental Impact Statement.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 1 (proposed action/no action) and applying the associated standard operating procedures discussed in Chapter 3 of the EA. Alternative 1 successfully addresses (1) managing damage using a combination of the most effective methods and does not adversely impact the environment, property, human health and safety, target species, and/or non-target species, including T&E species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occur that broaden the scope of damage management activities in the State, that affect the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action/no action alternative (Alternative 1) as described in the EA.

Finding of No Significant Impact

Based on the analyses provided in the final EA, there are no indications that the proposed action/no action alternative (Alternative 1) would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an Environmental Impact Statement should not be prepared. This determination is based on the following factors:

1. WS' activities to manage damage in the State would not be regional or national in scope.

2. Based on the analyses in the final EA, the methods available under the proposed action would not adversely affect human safety based on their use patterns.

3. There are no unique characteristics, such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas, that would be significantly affected. WS' standard operating procedures and adherence to applicable laws and regulations would further ensure that WS' activities do not harm the environment.

4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to managing damage and the methods, this action is not highly controversial in terms of size, nature, or effect.

5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.

6. The proposed action would not establish a precedent for any future action with significant effects.

7. No significant cumulative effects were identified through the assessment. The EA analyzed cumulative effects and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State of Louisiana.

8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.

9. WS has reviewed those threatened or endangered species listed within the project area and determined that activities would have no effect on those species listed by the USFWS and the National Marine Fisheries Services nor their designated critical habitats.

10. The proposed action would be in compliance with all applicable federal, state, and local laws.

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) damage management would only be conducted by WS at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) no adverse effects to the environment were identified in the analysis. As a part of this Decision, the WS program in Louisiana would continue to provide effective and practical technical assistance and direct management techniques that reduces damage and threats of damage.

Robert Hudson, Acting Director-Eastern Region
USDA/APHIS/WS
Raleigh, North Carolina

12/8/15
Date

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APPENDIX A

RESPONSES TO COMMENTS ON THE ENVIRONMENTAL ASSESSMENT: MANAGING BLACKBIRD DAMAGE TO SPROUTING RICE IN SOUTHWESTERN LOUISIANA

During the public involvement process for the draft EA, WS received 11 comment letters. WS has reviewed the comments to identify additional issues, alternatives, and/or concerns that were not addressed in the draft EA. The comments received during the public involvement process are summarized below along with responses to the comments.

I. COMMENTS RELATING TO AN ALTERNATIVE

Comment – Commenter supports continuing the current program. Support for the proposed action/no action alternative (Alternative 1). Using an integrated methods approach to manage blackbird damage to rice is effective and environmentally sound.

Response: The WS program appreciates the comment. WS developed alternatives to meet the need for action, which was described in Chapter 1 of the EA, and to address the identified issues associated with managing damage to rice caused by blackbirds in southwestern Louisiana, which were described in Chapter 2 of the EA. The EA analyzed continuing the current program using an integrated methods approach to managing blackbird damage to sprouting rice in southwestern Louisiana (Alternative 1; see Section 3.1 of the EA). Section 4.1 of the EA analyzes the environmental consequences of each of the alternatives in comparison to determine the extent of actual or potential impacts on the issues, including continuing the current program. Based on the analyses of the alternatives that were developed to address those issues analyzed in detail within the EA, including individual and cumulative impacts of those alternatives, the WS program will issue a decision for the final EA.

Comment – Commenter opposes any involvement by WS. Support for the no involvement by WS alternative (Alternative 4).

Response: The WS program appreciates the comment. WS developed alternatives to meet the need for action, which was described in Chapter 1 of the EA, and to address the identified issues associated with managing damage to rice caused by blackbirds in southwestern Louisiana, which were described in Chapter 2 of the EA. The EA analyzed a no involvement by the WS program alternative (Alternative 4; see Section 3.1 of the EA). Under Alternative 4, the WS program would not be involved with any aspect of managing blackbird damage to sprouting rice. Section 4.1 of the EA analyzes the environmental consequences of each of the alternatives in comparison to determine the extent of actual or potential impacts on the issues, including the no involvement by WS alternative. Based on the analyses of the alternatives that were developed to address those issues analyzed in detail within the EA, including individual and cumulative impacts of those alternatives, the WS program will issue a decision for the final EA.

II. COMMENTS ON METHODS

Comment – WS should continue to pursue an effective blackbird repellent. Commenter supports full registration of the bird repellent anthraquinone.

Response: As discussed in the EA, research scientists with the National Wildlife Research Center (NWRC), the research unit of the WS program, have been involved with conducting research on taste repellents to discourage blackbirds from feeding on rice. Research has focused on seed treatments (*i.e.*, applying the repellent directly to the seed before planting) since damage is caused by blackbirds feeding

on the seed or pulling sprouts to feed on the seed. Research scientists with the NWRC have evaluated a non-toxic clay-based seed coating (Decker et al. 1990), methiocarb (Besser 1973, Mott et al. 1976, Ruelle and Bruggers 1979, Holler et al. 1985), methyl anthranilate (Avery et al. 1995), anthraquinone (Avery et al. 1998), and caffeine (Avery et al. 2005). Despite extensive research efforts, the commercial development and regulatory approval of an effective repellent for sprouting rice remains elusive (Avery et al. 2005).

If a repellent were available to reduce damage to newly seeded rice, the EPA would have to approve the use of the repellent pursuant to the FIFRA and the LDAF would have to allow its application in the State. Under the pesticide emergency exemption in Section 18 of the FIFRA, a commercial product with the active ingredient anthraquinone received approval by the EPA and the LDAF for limited use in the State to prevent damage to newly seeded rice. However, the emergency exemption has expired and the commercial product is no longer available for use in the State. Caffeine has been the focus of the most recent research by WS on possible taste repellents (Avery et al. 2005).

Comment - WS should continue to pursue new methods to alleviate damage. Commenter supports the development of new methods.

Response: The WS program researches and actively develops methods to address blackbird damage through the NWRC. The NWRC functions as the research unit of the WS program by providing scientific information and by developing methods to address damage caused by animals. Research biologists with the NWRC work closely with wildlife managers, researchers, and others to develop and evaluate methods and techniques. For example, research biologists from the NWRC were involved with developing and evaluating repellents for blackbirds. Research scientist with the NWRC have evaluated a non-toxic clay-based seed coating (Decker et al. 1990), methiocarb (Besser 1973, Mott et al. 1976, Ruelle and Bruggers 1979, Holler et al. 1985), methyl anthranilate (Avery et al. 1995), anthraquinone (Avery et al. 1998), and caffeine (Avery et al. 2005). The NWRC is continually conducting research to improve the selectivity and humaneness of wildlife damage management methods used by WS' personnel in the field.

Comment – Delaying the planting of rice is not a viable option.

Response: As discussed in Section 3.2 of the EA, many factors can influence planting dates for rice and research suggests the highest rice yields in southwestern Louisiana occur when planting seeds in late February and early March (Louisiana State University Agricultural Center 2011), which can coincide with the presence of large blackbird concentrations in southwest Louisiana. In general, rice yields decrease as the date of planting is delayed (Slaton et al. 2003, Linscombe et al. 2004, Louisiana State University Agricultural Center 2011). Therefore, as the commenter indicates, planting rice after the large concentrations of blackbirds have dispersed to nesting areas is not practical for rice producers in many cases.

Comment – Support continued use of the avicide DRC-1339. The avicide DRC-1339 can be part of an effective damage management program.

Response: DRC-1339 is an avicide that the EPA has registered for reducing damage from several species of birds, including blackbirds, starlings, pigeons, crows, ravens, magpies, and gulls. Glahn and Wilson (1992) noted that baiting with DRC-1339 is a cost-effective method to reduce damage by blackbirds to sprouting rice. The WS program developed DRC-1339 as an avicide due to the differential toxicity exhibited by the compound when ingested by wildlife. The differential toxicity of DRC-1339 reduces the risk of non-targets consuming a lethal dose (DeCino et al. 1966). Most bird species that are responsible for damage, including starlings, blackbirds, and pigeons, are highly sensitive to DRC-1339 (Johnston et

al. 1999). Many other bird species, such as raptors, are less sensitive (EPA 1995, DeCino et al. 1966, Schafer 1984).

Currently, WS is the only entity that could use the avicide DRC-1339; therefore, DRC-1339 would only be available for use to manage damage when WS was providing direct operational assistance. Therefore, under the proposed action alternative (Alternative 1), WS could continue to use the avicide DRC-1339 as part of an integrated methods approach to managing damage to sprouting rice caused by blackbirds in southwestern Louisiana. However, in the absence of WS' involvement with the use of DRC-1339, other entities could pursue registration of DRC-1339 for use in the State.

Comment – Producers should grow rice in buildings and use artificial lights.

Response: During 2012, rice producers planted 395,063 acres of rice in southwestern Louisiana (NASS 2015). Therefore, it would likely not be economical for rice producers to build buildings and use artificial lights to grow rice. In addition, WS does not have the authority to specify where agricultural producers can or cannot plant rice.

Comment – Translocation should not be a method considered.

Response: The WS program identified and considered an alternative to reduce blackbird damage to sprouting rice that would have required WS' personnel to live-capture blackbirds and translocate those blackbirds to other areas for release. However, WS did not considered that alternative in detail for the reasons provided in Section 3.2 of the EA. As described in Section 3.2 of the EA, the translocation of blackbirds causing damage to other areas following live-capture would generally be ineffective because blackbirds are highly mobile and can easily return to damage sites from long distances, blackbirds generally already inhabit other areas, and translocation may result in blackbird damage problems at the new location. In addition, WS would need to capture and translocate hundreds or thousands of blackbirds to solve some damage problems; therefore, translocation would be unrealistic. Translocation of wildlife is also discouraged by WS policy (see WS Directive 2.501) because of stress to the relocated animal, poor survival rates, and difficulties animals have in adapting to new locations or habitats (Nielsen 1988).

Translocation of blackbirds could only occur under the authority of the USFWS and the LDWF. Therefore, the translocation of blackbirds by WS would only occur as directed by those agencies. WS' personnel would have to identify release sites and obtain approval to release the blackbirds from the USFWS, the LDWF, and/or the property owner prior to live-capture. When authorized by the USFWS and/or the LDWF, WS could translocate birds under Alternative 1 and Alternative 2 when WS provides direct operational assistance. Although not practical as the sole method of alleviating damage to sprouting rice, the translocation of blackbirds could be practical in some limited situations (*e.g.*, to prevent damage to small research projects or for research purposes). Therefore, WS considered translocation as a possible method to alleviate damage. Since WS does not have the authority to translocate blackbirds in the State unless permitted by the USFWS and the LDWF, those agencies would maintain the ability determine when translocation was appropriate.

III. COMMENTS ON FUNDING

Comment - Tax dollars should not be used to kill birds. Taxpayers should not have to pay for bird damage to agriculture. The WS program should be eliminated.

Response: WS considered this issue during the development of the EA but did not analyze the issue in detail for the reasons provided in Section 2.3 of the EA. Damage management activities are an appropriate sphere of activity for government programs, since managing wildlife is a government

responsibility. Eliminating the WS program would be similar to the alternative analyzed in detail in the EA where there would be no involvement by the WS program with any aspect of managing blackbird damage to sprouting rice in southwestern Louisiana (Alternative 4). Therefore, adding an analysis of an additional alternative whereby WS or another entity pursued the termination of the authority of WS would not add to the existing analyses in the EA. Under Alternative 4, the WS program would not be involved with any aspect of managing blackbird damage to sprouting rice; however, other entities could conduct damage management activities in the absence of the WS program.

IV. COMMENTS ON BIRD POPULATIONS

Comment – Bird populations are in serious decline.

Response: One issue commonly identified when addressing damage associated with animals is the potential effects that alleviating damage could have on the overall population of a species. Section 4.1 of the EA analyzes the environmental consequences of each of the alternatives in comparison to determine the extent of actual or potential effects on the issues, including the potential effects that could occur to the populations of target blackbird species and the populations of non-target species from implementation of the alternatives. As discussed throughout the EA, the WS program would continue to monitor activities under each of the alternatives (except the no involvement by WS alternative) and would continue to consider the potential effects on animal populations using the available population information. In addition, WS would continue to submit reports to the USFWS, which would insure the USFWS has the opportunity to consider activities conducted by WS when setting management objectives for blackbird species and other bird species. Activities conducted by WS would also occur in collaboration with the LDWF. Therefore, the EA considered available bird population information and available trend data in the analyses.

Comment – Birds eat insects, which is very beneficial.

Response: The value of blackbirds to reduce weed seeds and insects was discussed in Section 2.3 of the EA. Blackbird species are generally omnivorous but their diet can vary depending on habitat and season (Dolbeer 1994). In general, the diet of blackbirds consists primarily of insects during the breeding season and transitions to grain and weed seeds during the fall and winter (Dolbeer 1994). Damage management activities that could possibly involve the use of lethal methods to reduce damage generally occur during those periods when blackbirds roost and feed in large flocks, which occurs in the fall and winter. Those birds that form large flocks in the southern United States, including southwestern Louisiana, likely originate from breeding populations across a wide geographical area. Therefore, the blackbirds found in the rice growing areas of southwestern Louisiana likely are from a wide geographical area and any lethal removal would not represent a large portion of the blackbird breeding population in any one specific area.

In addition, only 50% to 60% of blackbirds survive annually (Dolbeer 1994). As discussed further in Section 4.1 of the EA, lethal removal in the winter is likely a substitute for natural mortality and does not add to the mortality that occurs annually. Therefore, the use of lethal methods to alleviate damage would not likely represent a large portion of a local blackbird population and those blackbirds lethally removed would likely represent blackbirds that would have died annually despite damage management activities. Based on those considerations, WS did not consider this issue in detail.

Comment – Considering the impacts to Sprague's pipit.

Response: The EA addresses the effects of the proposed action alternative on the status of the Sprague's pipit in Section 4.2. As discussed in the EA, the Sprague's pipit is considered a candidate species for listing by the USFWS as an endangered or threatened species across their range. Their breeding range

includes the native prairie regions of the Upper Great Plains, while their wintering range extends along the southern edge of the United States from southern Arizona across to southern Louisiana and northern Mexico (USFWS 2014). Pipits are rarely observed on cropland (USFWS 2014). Most of the Sprague's pipit population winters in Mexico with some sightings along the coastal prairies of Texas and Louisiana (USFWS 2014). Sprague's pipit feed primarily on arthropods during the migration and wintering periods; however, they may feed on seeds during the latter wintering periods (Davis et al. 2014). Of the methods available to alleviate blackbird damage, of primary concern would be the use of DRC-1339. Of concern would be pipits consuming treated rice baits. However, no Sprague's pipits have been observed in plots to date in Louisiana.

The primary threats to the Sprague's pipit are habitat conversion (*e.g.*, land conversion, grazing, fire suppression, mowing, fragmentation) and energy development (*e.g.*, oil, gas, wind, roads). The proposed activities would not result in destruction or modification of native prairie habitats. Based on the habitat preferences of the Sprague's pipit and their feeding habits, WS concluded the proposed activities would have no effect on the status of the Sprague's pipit.

V. COMMENTS ON BIODIVERSITY

Comment – Concern about the take of non-target animals.

Response: A common issue when addressing damage caused by wildlife are the potential impacts of management actions on non-target species, including threatened or endangered species. The use of non-lethal and lethal methods to alleviate damage or threats caused by target species also has the potential to inadvertently disperse, capture, or kill non-target animals. The potential effects of conducting damage management activities on non-target animals, including the potential effects on threatened or endangered species, was a concern addressed in detail within the EA (see Section 2.2 and Section 4.1 of the EA). Section 4.1 of the EA analyzes the environmental consequences of each of the alternatives in comparison to determine the extent of actual or potential impacts on this concern.

Comment – Blackbirds are essential to the environment and the ecological scheme.

Response: Another issue identified as a concern is that managing blackbird damage could affect biodiversity or the diversity of species. WS does not attempt to eradicate any species of native wildlife. WS operates in accordance with federal and state laws and regulations enacted to ensure species viability. As stated previously, the purpose of damage management is to reduce or alleviate the damage or threats of damage by targeting individual or groups of blackbirds identified as causing damage or posing a threat of damage. Any reduction of a local population or group is frequently temporary because immigration from adjacent areas or reproduction replaces the animals removed. The potential effect of blackbird damage management activities on biodiversity was a concern identified during the development of the EA; however, the EA did not analyze this concern in detail for the reasons provided in Section 2.2 of the EA.

Comment – Loss of assistance by WS could result in the conversion of land from rice production to other forms of agriculture production, which would have less benefit to wildlife

Response: The conversion of land from rice production to other forms of agriculture production was addressed in Section 1.2 of the EA. The EA states, "*The abandonment of rice production due to economically unsustainable damage associated with blackbirds and the subsequent conversion of land to other forms of agriculture could reduce the availability of important habitats to many wildlife species in southwestern Louisiana. Rice production typically occurs in areas where wetlands were converted to agricultural production*". As addressed in Section 1.2 of the EA, rice fields are flooded for at least part of

the year, which can act as surrogate wetland habitats that are beneficial to many species of waterbirds. If a decline in rice production occurs and those acres are converted to other agricultural production, those areas may have less value to wildlife than rice production (Eadie et al. 2008).

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