MEMORANDUM

TO: Legislative Audit Committee Members
FROM: Kyle Hartse, Performance Auditor
Cc: Mike Honeycutt, Executive Director, Department of Livestock
    Martin Zaluski, State Veterinarian, Department of Livestock
    Martha Williams, Director, Department of Fish, Wildlife, & Parks
    Ken McDonald, Wildlife Division Administrator, Department of Fish, Wildlife & Parks
DATE: June 2018
RE: Performance Audit Follow-Up (18SP-09): Brucellosis Management in the State of Montana (orig. 16P-06)
ATTACHMENTS: Original Performance Audit Summary

Introduction
The Brucellosis Management in the State of Montana (16P-06) report was issued to the Legislative Audit Committee in January 2017. The audit included four recommendations to the Department of Livestock (DOL) and one recommendation to the Department of Fish, Wildlife & Parks (FWP). We conducted follow-up work to assess implementation of the report recommendations. This memorandum summarizes the results of our follow-up work.

Overview
Audit work identified the need for DOL to improve its process for ensuring all required brucellosis testing is carried out, consistently respond to noncompliance with brucellosis testing requirements, improve documentation of bison management, and increase coordination with FWP regarding bison management. Audit work further identified the need for FWP to better define its brucellosis management responsibilities, including defining criteria for landowners requesting assistance from FWP. The performance audit contained four recommendations to DOL, all of which are implemented. FWP received one recommendation from the performance audit, which is partially implemented.

Background
Brucellosis is a contagious disease of certain species of livestock and wildlife caused by the bacterium Brucella abortus. Affected species include cattle, domestic bison, wild bison, and elk. Brucellosis can cause pregnant livestock to abort their calves. Management responsibility over the species of livestock and wildlife that can carry the disease is carried out by DOL and FWP. The Greater Yellowstone Area (GYA) is the last known area in the United States where the disease is present in the wild, with both elk and bison infected. DOL and FWP are state agencies with lead roles in preventing the transmission of brucellosis from wildlife to livestock. In complying with federal regulations regarding brucellosis, DOL maintains a Designated Surveillance Area (DSA), which is a defined boundary within the state where brucellosis-infected wildlife potentially exist. Cattle or domestic bison living or grazing within the DSA are subject to
brucellosis testing requirements. Producers within the DSA, which do not comply with brucellosis testing requirements, are subject to penalties. DOL also maintains a Bison Program to ensure compliance with the Interagency Bison Management Plan (IBMP). The IBMP is a collaborative plan between the state of Montana, a number of federal agencies, and tribal governments that defines goals and objectives for the management of wild bison, both in Yellowstone National Park and those migrating into Montana. Under the Bison Program, DOL conducts hazing and herding operations to prevent bison from interacting with livestock. In some cases, lethal removal of bison is required. FWP manages elk potentially infected with brucellosis. By testing elk herds, FWP is able to track the prevalence of brucellosis in elk populations in the state, which helps inform the DSA boundary maintained by DOL. FWP responds to landowner concerns when elk commingle or are at risk of commingling with livestock. Actions taken by FWP to mitigate commingling include hazing, stackyard fencing, habitat manipulation, small-scale lethal removals, and issuing kill permits to landowners. The Legislative Audit Committee prioritized brucellosis management as an audit topic for fiscal year 2016, and the Legislative Audit Division issued its performance audit addressing the topic in January 2017.

Audit Follow-Up Results

Follow-up work included:
- Interviewing DOL and FWP management and staff.
- Reviewing amended administrative rules relevant to the audit for both DOL and FWP.
- Examining DOL and FWP policies, procedures, and forms.
- Reviewing DOL field inspection and market reconciliation processes.
- Examining an original and updated DOL herd management agreement.
- Examining documentation of DOL vaccination reimbursement payments and related procedures.
- Examining documentation of steps taken by DOL prior to lethal removal of a bison in 2017.

RECOMMENDATION #1

We recommend the Department of Livestock improve its oversight of brucellosis testing compliance by:

A. Using the brand inspection process to better monitor movements and testing of DSA livestock, and incorporating this information into DSA compliance monitoring.

B. Developing and implementing a consistent response to cases of noncompliance with DSA program requirements.

Implementation Status – Implemented

In response to the audit, DOL concurred with the recommendation and indicated the Animal Health Division and Brands Enforcement Division would continue to work together to monitor compliance. DOL stated the original audit did not recognize existing analysis of movements of cattle outside of the DSA. DOL also stated brand inspections are used to confirm ownership of cattle sold or moved across county lines, and adding health requirements to the brand inspection process would hinder commerce, require a large investment in technology, require more personnel, and necessitate a change in Montana Code Annotated (MCA). Our follow-up work found DOL has made a number of improvements in its approach to brucellosis management.

Our work found DOL has taken steps to better monitor movement of DSA livestock. DOL updated its BE-10 form, which is the form used for field brand inspections. The form was revised to record if livestock are within the DSA at the time of inspection. Previously, the BE-10 only indicated in which county an inspection took place. Since the DSA splits some counties, it was previously unclear if inspected livestock were in the DSA or not. With the revised form, DOL is now better able to monitor livestock movements.
into or out of the DSA. DOL has also prioritized processing of BE-10 forms originating from the DSA over non-DSA BE-10 forms. DOL now uses field inspections as part of its annual compliance evaluation by matching field inspection forms with market sale records and the brucellosis testing history of each producer.

DOL is in the process of formalizing a consistent response to cases of noncompliance with DSA program requirements. DOL staff stated field enforcement personnel were all instructed to no longer issue verbal warnings for DSA violations. All warnings must be issued in writing to ensure consistency and proper documentation. This policy is not in writing. However, DOL is in the process of developing a comprehensive policy for all violations, both DSA and non-DSA related. According to DOL management, enforcement personnel will soon issue weekly reports of all violations they encounter and what actions are taken for each violation, whether it be education, warning, or a ticket. Eventually all violations will be tracked together and analyzed for trends and effectiveness. DOL staff anticipate this policy to be finalized and implemented on July 1, 2018.

**RECOMMENDATION #2**

We recommend the Department of Livestock improve oversight and accountability of DSA herd management plans through the following steps:

A. Develop criteria that provide the basis for herd management plans and use these criteria as the basis of documented risk assessments for the creation of herd management plans.

B. Comply with administrative rule regarding the review of herd management plans on an annual basis, or seek changes to administrative rules in order to modify the review period for herd management plans.

C. Document review and update of DSA herd plans when completed.

**Implementation Status – Implemented**

In response to the audit, DOL concurred with the recommendation and indicated it had established criteria for herd management plans, was anticipating changes to administrative rule regarding review periods for herd management plans, and stated it would document review and renewal of such agreements.

Our work found DOL had established basic criteria for herd management agreements. Any producer whose livestock use land within the DSA may request an agreement. A producer may request their herd agreement incorporate a variance to DSA regulations based on unique circumstances, such as limitations on location of testing of livestock or the time of year livestock are present in the DSA. Such variances are subject to the approval of DOL. Risk assessments for herd management agreements are incorporated into the agreements themselves, rather than created separately from each agreement. The level of risk is identified by the nature of the variance granted in a herd management agreement. Administrative Rule of Montana (ARM) 32.3.401 was amended by DOL on April 29, 2017. Herd management plans were renamed as herd management agreements and were designated to be reviewed every five years or earlier if requested by the herd owner or DOL. Previously, this rule required herd management plans to be reviewed by DOL on an annual basis.

Our follow-up audit work found DOL is now tracking its review of DSA herd management agreements and any updates made to the agreements. Many of the existing agreements are older than five years and do not have variances, but simply explain in writing to the producer the DSA legal requirements. This is because previously all producers within the DSA were required to have what was at the time called a herd management plan, regardless of whether they requested a variance to DSA regulations or not. DOL is currently prioritizing the updating of more recent management agreements and agreements with variances.
In this way, DOL is ensuring the most pressing agreements are being updated first. The older agreements that lack variances will be updated last, as they are not as pressing at this time.

**RECOMMENDATION #3**

We recommend the Department of Livestock maintain full supporting documentation for oversight and approval of brucellosis vaccination reimbursement payments.

**Implementation Status – Implemented**

In response to the audit, DOL concurred with the recommendation and indicated copies of all vaccination certificates and the information required for reimbursements are maintained with reimbursement requests. DOL also stated it had a written standard operating procedure for fully documenting reimbursement payments.

Our follow-up audit work found DOL is documenting oversight and approval of brucellosis vaccination reimbursement payments. Audit staff reviewed DOL’s written standard operating procedure for brucellosis testing reimbursements and found it to be a comprehensive step-by-step guide on how to document test information, process reimbursements, and create monthly reports on brucellosis vaccination reimbursements. Audit staff also examined DOL records of fully reconciled compliance evaluations, which include copies of certificates of inspection, vaccination reimbursement requests, and an invoice from accounting showing the reimbursement has been paid. Each compliance evaluation examined had this documentation. The number of livestock on the certificates of inspection matched the number of vaccination reimbursements requested and ultimately reimbursed by DOL.

**RECOMMENDATION #4**

We recommend that the Department of Livestock, when dealing with bison that have breached the tolerance boundaries:

- **A.** Use IBMP adaptive management documents as the guidelines for determining when to conduct hazing and lethal removals, or

- **B.** Document circumstances that require department staff to conduct hazing and lethal removals in cases that deviate from IBMP adaptive management guidelines, and

- **C.** Emphasize cooperation with FWP through the use of public hunters to remove bison in non-tolerance areas.

**Implementation Status – Implemented**

In response to the audit, DOL concurred with the recommendation and indicated the recommendation reflects existing DOL policy and practices. Our work found DOL uses the Interagency Bison Management Plan (IBMP) to guide its responses to bison breaching tolerance areas. DOL staff stated the IBMP provides guidelines for when lethal removal of bison may be undertaken. Furthermore, DOL staff reiterated that per the IBMP, lethal removal is not always warranted as only a last resort after hazing has failed. In certain cases, lethal removal may be required regardless of whether or not hazing is first attempted. Audit staff reviewed documentation of a case of lethal removal of bison from the summer of 2017 and found DOL followed IBMP guidelines. In this case, two bull bison had ventured west of the tolerance area. DOL field staff were able to locate one of the bison and initially attempted to haze it. However, field staff hazing efforts had no effect. Lethal measures were eventually taken to remove the bison from the non-tolerance area. In coordination with DOL, a FWP warden dispatched the bison. The second bison, having eluded DOL, found its way to Idaho where it was hit and killed by a vehicle. DOL’s actions in this circumstance are consistent with IBMP guidelines, which allow for broad discretion in the application of bison hazing.
and lethal removal actions under the direction of the DOL Montana State Veterinarian. During original audit work, no evidence was found that DOL coordinated with FWP in these cases. In this case, DOL did coordinate with FWP. Given the time of year of this case, it is also unlikely public hunters could have been used to remove the bison.

**RECOMMENDATION #5**

We recommend the Department of Fish, Wildlife, & Parks seek legislation and adopt administrative rules that:

A. Clearly define the responsibilities of the department for providing brucellosis mitigation assistance to landowners and the eligibility criteria landowners must meet to receive assistance.

B. Define and implement specific program policies that provide guidance on consistently carrying out and documenting brucellosis response actions.

**Implementation Status – Partially Implemented**

In response to the audit, FWP partially concurred with the recommendation and indicated it viewed its brucellosis-related efforts as already falling within its statutory authority. However, FWP also stated additional clarity of FWP’s role could be realized through a combination of revised administrative rules and the existing annual review process carried out with the Fish and Wildlife Commission.

FWP management staff stated the agency has not sought legislation to define the department’s brucellosis-related responsibilities and does not intend to. We still believe statutory clarification would better define FWP’s responsibilities for providing landowner assistance to mitigate brucellosis risks. However, FWP has made amendments to ARM 12.3.109, 12.3.110, and 12.3.111. These amendments added a definition of “disease” which encompasses brucellosis and added addressing the risk of disease as a possible reason for establishing a hunting season. The amendments also specify that any person who is selected to harvest elk as part of disease management must follow specific regulations for that management action, approved by the area commissioner. While these ARM amendments help further define brucellosis-related actions FWP may take, they do not address the department’s specific responsibilities to landowners in providing brucellosis mitigation assistance.

Another change FWP made in response to the audit was amending its “Brucellosis Risk Management Complaint/Response Form.” This form is used by FWP staff to document landowner complaints of elk commingling with livestock. The updated form is more streamlined and requires FWP personnel to summarize the results of any brucellosis management actions taken as a result of the initial landowner complaint, whereas the previous version of the form did not require such a summary. FWP also approved an “Implementation Policy for Elk Management Guidelines in Areas with Brucellosis” on February 27, 2018. This written policy replaces what was previously a more ad-hoc, informal approach FWP personnel took toward brucellosis management. The policy instructs steps and actions regional staff will take in response to a request for assistance from any landowner regarding commingling concerns between elk and livestock.