ELK MANAGEMENT IN AREAS WITH BRUCELLOSIS

PROPOSED 2019 WORK PLAN

Adopted for public comment August, 2018

INTRODUCTION

This proposed 2019 annual work plan ("plan") listing management actions available for potential implementation has been assembled by FWP with informal input from the Elk Management Guidelines in Areas with Brucellosis Work Group. The plan builds upon previous annual work plans, a growing body of management experience, and public input. Fundamentally these are meant to reduce commingling of elk and livestock (primarily cattle) and the associated the risk of brucellosis transmission while maintaining elk on the landscape. These actions are designed to adjust local elk distribution away from cattle at small geographic scales.

If adopted, this annual plan would be available for potential implementation within the Designated Surveillance Area (DSA) as defined by the Montana Department of Livestock (DoL) and in areas immediately adjacent to Montana's DSA or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle. While the highest potential for disease transmission by elk abortions or live births is well bracketed by the dates January 15 through June 30, these actions may be applied outside that window to reduce risk in subsequent years. While the DoL has authority to define the boundaries and conditions of the DSA for livestock, this work plan does not maintain or create any wildlife management authority for DoL. The wildlife management authority within this plan is wholly represented by FWP and the FW Commission. While identified as the 2019 plan, the term for this plan begins with final commission adoption in fall 2018 and runs to fall 2019 when the next annual work plan is scheduled to be finalized. Exact dates depend upon final commission adoptions.

This work plan is proposed as a "default" or general work plan for implementation beginning in fall 2018. Any additional or replacement work plans from local work groups may be proposed for public review and commission adoption at the time they are assembled.

Non-lethal management actions may be applied in any sequence or combination with appropriate approval from FWP, the area commissioner, or the full commission. DoL has no authority to prescribe wildlife management actions. Lethal removal will be considered only after nonlethal means have been deemed insufficient. While some actions (dispersal hunts, haystack fencing, hazing, etc.) would be available for implementation without additional public review, other potential management actions would require additional public review prior to implementation (biennial season setting, public land habitat manipulations, expanded fencing projects, etc.).

ANNUAL REVIEW OF EFFECTIVENESS

FWP shall make efforts to evaluate effectiveness of management actions relative to commingling and maintaining elk. This may be incidental to other duties and may include general observations and anecdotal information as well as formal research/monitoring. The commission will annually and publicly review yearly efforts in late summer after most of the season's management actions have been implemented and can be summarized for public review.

CONDITIONED FWP ASSISTANCE

Recognizing that effective risk management should be as comprehensive as possible, that individual risk management actions cannot address all risk, and that concentrations of elk can contribute to increased brucellosis transmission risk, FWP will work with landowners to identify and minimize risky elk concentrations including those caused or enhance by limited or no public hunting access during the general fall hunting seasons. While public hunting access or other means of disturbing/displacing elk is not initially required for a landowner to receive FWP brucellosis risk management assistance, effectively identifying and minimizing risky concentrations of elk is considered a necessary component of comprehensive risk management over time. This could potentially include identifying and addressing fall concentrations of elk or other elements outside January 15 – June 30. If, over time, fall concentrations of elk that are contributing to risk and other identified elements of risk remain unaddressed assistance may be suspended until comprehensive risk management is proposed for implementation.

FWP and the landowner may approach this comprehensive response incrementally, adding additional elements over time where appropriate. Efforts to this comprehensive end will be part of the annual public review by the commission which ultimately modifies and/or approves annual work plans with individual commissioners modifying and/or approving individual actions. Proposed and adopted actions should address all recognized risk. If, over time, some risk elements remain unaddressed assistance may be suspended until comprehensive risk management is addressed.

Participation by FWP is contingent upon adequate funding for individual mitigation efforts. In the event demand exceeds fiscal or staff capacity, FWP will prioritize efforts to reflect the most urgent risk management needs and the broadest implementation approach across the DSA.

LOCAL WORK GROUPS

FWP staff will continue efforts to coordinate with local working groups to potentially assemble more area-specific annual work plans. At a minimum, FWP should attend and provide technical input if necessary and any interested member of the public should also be allowed to attend. Local work groups may represent one of the best opportunities to address risky concentrations of elk associated with limited or no public hunting access. Any proposed local work plan will be

presented to the commission for public review and comment. At that time, it shall be made clear what perspectives were present in the local discussion and to what degree any proposal does or does not represent consensus.

EDUCATION AND OUTREACH

FWP will continue to explore and implement effective communication, education and outreach with the FW Commission, general public and landowners. This should include opportunities to communicate with and educate new landowners that may not be familiar with elk, elk management, and brucellosis.

GENERAL HUNTING SEASONS

The statewide work group recognized there may be some opportunities to manage risk of brucellosis transmission with adjustments to Montana's general hunting seasons. Objectives could include adjusted elk numbers consistent with elk objectives as well as short- and long-term distribution adjustments and minimizing resident elk where they may conflict with wintering populations. In the event these proposals are identified, they would be incorporated into the established public season setting process and public review with the FW Commission.

STEP-WISE IMPLEMENTATION

Recognizing the public advocacy and value in identifying those risk management efforts that are least impactful to elk and effective at mitigating risk, FWP will consider non-lethal options before implementing lethal tools in addition to the general hunting season. FWP shall also consider practical limitations including manpower, equipment, fiscal resources, terrain, weather, elk numbers, and landownership when assessing whether to initiate or continue efforts to adjust elk distribution.

AGENCY COLLABORATION

Work with DoL and USDA APHIS to assess and potentially coordinate the need, opportunity and capacity for continued targeted elk surveillance captures. This collaboration shall not dilute the wildlife management authority of FWP and the FW Commission and it shall not expand management authority of DoL or APHIS beyond livestock.

NON-LETHAL ACTIONS APPLIED IN ANY SEQUENCE OR COMBINATION

Elk Hazing to Reduce Commingling with Cattle

• The intent of hazing is to minimize commingling of elk and cattle. In addition to responding to observed or reported commingling events, hazers should continue to attempt to periodically assess local elk distribution and movement patterns to better anticipate, intercept, and prevent commingling. This approach is not to suggest all

commingling events will or can be prevented given the proximity of elk and cattle during winter and spring. The presence of hazers does not prevent or preclude landowners from hazing elk as well; to be effective hazers/FWP and landowners need to work together in this effort.

- This plan alone does not limit the number of private land hazing efforts that may take place.
- Prior to implementation, hazing efforts shall recognize and provide areas of functional and sufficient winter habitat with adequate forage and security available for elk.
- These efforts shall consider and avoid to the degree possible the potential for elk to be inadvertently encouraged into more risky circumstances.
- Available for potential implementation on private lands and Montana Department of Natural Resource Conservation (DNRC) lands within the DSA and in areas immediately adjacent to Montana's or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle. Elk may not be deliberately hazed off Montana state lands managed as Wildlife Management Areas.
- These actions may be applied at any time to reduce risk during current or subsequent years.
- At the beginning of hazing efforts, hazers/FWP shall work with landowners to commonly
 define and agree to an effective communication strategy to assist all parties' awareness
 and evaluation of hazing efforts and results, elk presence, livestock presence, and
 observed or anticipated commingling events. This strategy should include
 communication inputs and updates to/from both hazers/FWP and landowners.
- Both the FWP Regional Supervisor and local area FW Commissioner may modify and both must approve hazing efforts.

Fence Modification

- The intent of fence modifications is to minimize damage to existing fence by elk being hazed to reduce disease transmission risk. Modifications would ease elk passage through existing fences while maintaining the integrity of the fences for livestock. Fence modification projects may include some limited fence repair of elk damage from hazing. As described below, fence repair must be done in conjunction with fence modifications to preclude future damage.
- As described below, FWP may contribute materials with the landowner being responsible for installation and routine maintenance. Additional cost sharing is encouraged.

- This plan alone does not limit the number of fence modifications that may take place. Where annual resources are limited, any one landowner may receive materials for only one stackyard or fence modification (approximately \$2500) per year
- At least one half of the cost of all materials for modifications and repair shall be used for fence modifications and fence modifications must be fully paid for before FWP dollars may be used to purchase materials to repair fence damaged by elk being hazed to reduce transmission risk. Any fence repair with FWP dollars must be tied to new fence modifications to aid passage of elk being hazed to mitigate brucellosis risk and fence repairs may not be tied to pre-existing fence modifications.
- These efforts shall consider and avoid to the degree possible the potential for elk to be inadvertently encouraged into more risky circumstances.
- Available for potential implementation within the DSA and in areas immediately adjacent to Montana's or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle.
- These actions may be applied at any time to reduce risk during current or subsequent years.
- Both the FWP Regional Supervisor and local area FW Commissioner may modify and both must approve fence modifications.

Stackyard Fencing

- FWP may contribute materials with the landowner being responsible for installation and routine maintenance. Additional cost sharing is encouraged.
- This plan alone does not limit the number of stackyard fencing efforts that may take place. Where annual resources are limited, any one landowner may receive materials for only one stackyard or fence modification (approximately \$2500) per year.
- These efforts shall consider and avoid to the degree possible the potential for elk to be inadvertently encouraged into more risky circumstances.
- Available for potential implementation within the DSA and in areas immediately adjacent to Montana's or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle.
- These actions may be applied at any time to reduce risk during current or subsequent years.

• Both the FWP Regional Supervisor and local area FW Commissioner may modify and both must approve stackyard fencing.

Expanded Fencing in the Paradise Valley

- Except for small scale fencing of attractants including stackyards, any proposed fencing project with FWP support that reduces the ability for elk to cross the fence or move across the landscape shall require a written plan submitted to the Fish and Wildlife Commission for review and potential approval. The written plan shall clearly enumerate:
 - o fence description;
 - o size of fenced area;
 - o location:
 - o season of use;
 - o timing and size of any elk concentrations and their relationship to risk and mitigation;
 - o a description of sufficient seasonal habitats and their availability for elk and other wildlife species while the fence is operational; and
 - o cost and cost share opportunities.
- FWP may contribute materials with the landowner being responsible for installation and routine maintenance and seasonal put up and take down. Additional cost sharing is encouraged.
- These efforts shall consider and avoid to the degree possible the potential for elk to be inadvertently encouraged into more risky circumstances.
- Any such fencing project may be proposed only if FWP has identified sufficient dollars for cost share participation at the time of proposal.
- Any such fencing project may include only the minimum acreage and minimum structure necessary to keep elk out of consistent commingling situations with cattle.
- Any such fencing project may be proposed only on private lands in those specific areas with a history of applied livestock risk management plans, other elk management risk mitigation efforts (such as hazing) and repeat livestock infections.
- Any such fencing project may be only with those landowners that have developed and followed a livestock risk management plan for brucellosis. This may include risk management plans developed by the landowner with DoL.

- Any such fencing project may be only with those landowners that have worked with FWP to implement other elk management risk mitigation efforts (such as hazing).
- Fencing projects may include multiple landowners.
- Any such fencing project must minimize the potential to capture elk and other wildlife. Without prior FWP approval, no managed species of wildlife may be lethally removed from within an elk proof fence.
- Except for permanent stackyard fencing where FWP and the Landowner agree the fence should remain in place, any such elk proof fence may be in place not more than two weeks before and after January 15 June 30.
- Consistent with the concept of a "pilot project", not more than two of these fencing projects may be implemented without at least one full year of evaluation after the fences have been put in place. Any evaluation shall assess effective wildlife passage around these fenced areas. In the event adequate wildlife passage is not maintained or there are consistent wildlife captures, the landowner and FWP must pursue appropriate modifications.
- These projects shall include a public review and comment period and site specific environmental assessment ("EA") as provided for in the Montana Environmental Policy Act ("MEPA").
- The written plan and MEPA document must be presented to the FW Commission for their public review and potential adoption prior to implementation.

Habitat Adjustments

- Habitat adjustments could be used on public or private lands to lure elk into areas away from cattle or to remove habitat attraction near cattle.
- Given wide support of this concept vs. other potential management actions, FWP shall place priority on identifying and implementing this option.
- This plan alone does not limit the number of habitat adjustments that may take place to adjust elk distribution.
- On private and public lands FWP may contribute materials with the landowner being responsible for installation and routine maintenance. Additional cost sharing is encouraged. These efforts shall consider and avoid to the degree possible the potential for elk to be inadvertently encouraged into more risky circumstances.

- Available for potential implementation within the DSA and in areas immediately adjacent to Montana's or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle.
- These actions may be applied at any time to reduce risk during current or subsequent years.
- Habitat manipulations on state lands would require additional MEPA review and commission approval.

LETHAL ACTIONS APPLIED AFTER NONLETHAL ACTIONS HAVE BEEN DEEMED INSUFFICIENT (not including general hunting seasons)

Small Scale Lethal Elk Management Removals (EMR) Using Hunters

- Non-lethal actions must be deemed insufficient prior to implementing EMRs.
- The total elk lethally removed by EMRs and kill permits (see below) shall not exceed 250 elk across the entire DSA and not more than 25 elk may be taken by EMRs and kill permits in any hunting districts below management objective in the most recent FWP survey efforts. Recent elk surveys reveal not less than 24,000 elk directly observed within the DSA.
- EMRs will be used to adjust elk distribution and not for population control.
- Each EMR may harvest no more than 10 elk and would be individually described (dates, area, number of hunters, etc.) by FWP regional staff working directly with the landowner(s) involved. Multiple EMRs (each up to 10 harvested elk) could be applied in the same area/same time but each would require specific approval.
- Hunters must use elk licenses valid for the license year in which the management removal takes place.
- Antlered and/or antlerless elk may be made available for take depending upon circumstances that include herd composition, population status and risk to other elk and cattle from reproductive tissues in gut piles.
- EMRs may be initiated no earlier than August 15 and no EMRs will be initiated after April 15. All EMRs will conclude not later than April 30.
- EMRs may be applied on private, DNRC, BLM, and USFS lands but may not include Montana state lands managed as Wildlife Management Areas. These public lands would be within or in close proximity to deeded private lands where co-mingling is occurring;

- the purpose would be to increase the effectiveness of risk mitigation and reduce the frequency of lethal removals/hazing and therefore the overall impact to wintering elk.
- EMR area identification will be based in part on commingling risk of re-distributed elk on other properties.
- EMR descriptions shall recognize and provide areas of functional and sufficient winter habitat with adequate forage and security available for elk.
- Hunters will be selected using mechanisms comparable to those used for game damage hunts. If Hunt Roster hunters cannot quickly respond when needed and the FWP Regional Supervisor determines that it can help achieve the EMR objective, FWP may request the landowner(s) provides names of hunters in addition to hunters identified from the FWP Hunt Roster. Landowner-identified hunters may not constitute more than 25% of the total number of hunters identified for the EMR.
- Hunters contacted for EMRs will be provided with written information addressing human infection risk and how to mitigate that risk.
- Prior to any lethal removal, FWP staff and landowners will agree how gut piles will be managed to minimize the potential for disease transmission to cattle and elk. Depending upon circumstances this may range from leaving the gut piles at the harvest site to instructing the hunter where any gut piles must be removed to. In some situations landowners may be able and willing to assist hunters with this logistic but the primary responsibility should be communicated and placed upon the hunter before he/she accepts the opportunity to participate.
- Available for potential implementation within the DSA and in areas immediately adjacent to Montana's or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle.
- Both the FWP Regional Supervisor and local area FW Commissioner may modify and both must approve EMR proposals, including the sex/age of animals harvested dispersal.

Kill Permits Issued to Landowners or Their Agents

- Non-lethal actions must be deemed insufficient prior to implementing kill permits.
- Kill permits will be used to adjust elk distribution and not for population control.
- Kill permits may be utilized in circumstances where lethal removal is prescribed but with cause the use of hunters is precluded.

- The total elk lethally removed by kill permits and EMRs (see above) shall not exceed 250 elk across the entire DSA and not more than 25 elk may be taken by kill permits and EMRs in individual hunting districts identified as being below management objective in the most recent FWP survey efforts. Recent elk surveys reveal not less than 24,000 elk directly observed within the DSA.
- Each kill permit may be authorized for no more than five elk. Multiple kill permits (each up to 5 harvested elk) could be applied in the same area/same time but each would require specific approval
- Antlered and/or antlerless elk may be made available for take depending upon circumstances that include herd composition, population status and risk to other elk and cattle from reproductive tissues in gut piles.
- Throughout the DSA and with cause in areas immediately adjacent, kill permits will be available from January 15 thru April 30.
- Kill permits may be applied on private lands and DNRC lands but may not include Montana state lands managed as Wildlife Management Areas.
- Kill permit area identification will be based in part on commingling risk of re-distributed elk on other properties.
- Kill permit descriptions shall recognize and provide areas of functional and sufficient winter habitat with adequate forage and security available for elk.
- Prior to any lethal removal, FWP staff and landowners will agree how gut piles will be managed to minimize the potential for disease transmission to cattle and elk.
- Available for potential implementation within the DSA and in areas immediately adjacent to Montana's or another state's DSA if there is confirmed elk movement from inside to outside the DSA representing increased transmission risk to cattle.
- Both the FWP Regional Supervisor and local area FW Commissioner may modify and both must approve kill permit proposals, including the sex/age of animals harvested for dispersal.

Expanded Kill Permits Issued to Landowners or their Agents in Paradise Valley May 1 – May 15

- Non-lethal actions must be deemed insufficient prior to implementing kill permits.
- Kill permits will be used to adjust elk distribution and not for population control.

- Kill permits may be utilized in circumstances where lethal removal is prescribed but with cause the use of hunters is precluded.
- The total elk lethally removed by kill permits and EMRs (see above) shall not exceed 250 elk across the entire DSA and not more than 25 elk may be taken by kill permits and EMRs in individual hunting districts identified as being below management objective in the most recent FWP survey efforts. Recent elk surveys reveal not less than 24,000 elk directly observed within the DSA.
- Individual kill permit authorizations will not exceed three elk. Only one kill permit per landowner May 1 May 15.
- To further reduce risk and public concern with the late stage of pregnancy, emphasis shall be given to lethal removal of yearling and bull elk.
- Available for potential implementation on private land only within the Paradise Valley portion of the DSA.
- Kill permit area identification will be based in part on commingling risk of re-distributed elk on other properties.
- Kill permit descriptions shall recognize and provide areas of functional and sufficient winter habitat with adequate forage and security available for elk.
- Prior to any lethal removal, FWP staff and landowners will agree how gut piles will be managed to minimize the potential for disease transmission to cattle and elk.
- Both the FWP Regional Supervisor and local area FW Commissioner may modify and both must approve kill permit proposals, including the sex/age of animals harvested for dispersal.

Authorization Needed for Specific Brucellosis Risk Management Actions

Full Commission

Annual Work Plans

Regional Supervisor AND Area Commissioner

- Hazing
- Stackyard Fencing and Fence Modifications in conjunction with elk hazing
- Elk Management Removals

- Kill Permits
- Expanded Kill Permits in Paradise Valley (May 1 May 15)

Full Commission/MEPA

- Expanded Fencing in Paradise Valley
- Habitat manipulations on public land