#### ELK MANAGEMENT ACTIONS IN RESPONSE TO BRUCELLOSIS RISK

#### **FWP REGION 3, SPRING 2013**

(Note: Each of ten management actions is detailed separately below; some commingling situations may have received multiple management actions.)

#### FWP REGION 3 – MANAGEMENT ACTION #1

1. Type of action (dispersal hunt, hazing, fencing, etc.): Hazing

**2. Brief description of commingling:** Wintering elk from the Dome Mountain WMA habitually move into areas of cattle production in the 6-Mile Creek area. At times there may be over 500 elk in close proximity to cattle operations.

**3. General location(s) of landowner(s) involved:** Two cattle operations in 6-Mile Creek/Dome Mountain WMA/Paradise Valley (HDs 313/317)

**4. Do landowners allow public hunting access during general hunting season?** Some public hunting is allowed however elk are generally scarce or not present during the general season

**5. Elk population status (below, at or above objective):** HD313: below objective HD317: At objective (commingling primarily in HD313)

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 01/12/13 - 06/15/13.

**7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.):** The hazer was on the payroll and available to haze during 1/12/13-6/15/13. The hazer worked a total of 46 hours over 9 days between late February and late May. Total costs for hourly pay, travel expenses and reimbursement for use of horse and trailer was \$664.84

8. Number and results of elk blood collections, if any: None collected

**9. Did action reduce commingling?** For most of the risk period hazing was effective at maintaining separation, during early spring there were some elk remaining in the area after spring migration that were difficult to manage.

**10. General summary consensus by cooperators, collaborators and participants:** Hazing is an effective tool for most of the risk period. In early spring additional tools may be necessary to maintain separation.

**11. Issues, concerns, short/long term circumstances or other comments:** Elk can become less responsive to hazing and more persistent in their movements into cattle occupied areas in late winter/early spring, especially in more severe winters. Most elk leave the area in spring; the few elk that remain to calve in the area are a concern and can be difficult to haze. Concern was expressed over inconsistent hazing efforts due to differences in tolerance of elk among landowners/producers that resulted in elk remaining in the area to calve.

**1.** Type of action (dispersal hunt, hazing, fencing, etc.): Kill Permits (in conjunction with previous hazing effort).

**2. Brief description of commingling:** In early spring after most elk have begun to move towards calving/summer range, small groups of cow elk often remain in the 6-mile area to calve. These cows at times are in proximity to cattle operations, and there is concern that calving may occur within cattle pastures or areas where cattle are soon to be moved.

**3.** General location(s) of landowner(s) involved: Two cattle operations in 6-Mile Creek/Dome Mountain WMA area (HDs 313/317)

**4. Do landowners allow public hunting access during general hunting season?** Some public hunting is allowed however elk are generally scarce or not present during the general season

**5. Elk population status (below, at or above objective):** HD313: below objective HD317: At objective (commingling primarily in HD313)

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 05/24/13 - 05/30/13.

7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): Kill permits were issued in response to complaint from landowner that a small group of elk were in close proximity to cattle. Hazer and landowners were named on kill permit; hazer was instructed to attempt to move elk out of area and to use lethal removal only as necessary if nonlethal methods were insufficient. Landowners had discretion to use kill permits if cows were in proximity to their cattle. No costs beyond time of FWP personnel. Kill permits were not used; elk moved off on their own.

8. Number and results of elk blood collections, if any: None collected

9. Did action reduce commingling? Kill permits were not used; elk moved off on their own.

**10. General summary consensus by cooperators, collaborators and participants:** Landowner expressed frustration with delay in issuing of kill permits, would like kill permits issued routinely in early spring in order to be able to address persistent or lingering elk more immediately

**11. Issues, concerns, short/long term circumstances or other comments:** There are several issues/concerns with the use of kill permits: 1. appropriate dates for use of lethal removal in consideration of advanced stages of pregnancy in April & May, 2. Hazing in late winter/early spring is more challenging as elk may at times be less responsive/more persistent, if there is to be a date cut-off for use of lethal control, are there other non-lethal options available to help maintain separation? 3. Landowner is concerned with habitual return of elk to this area and

would like to address the larger issue of an establishing resident elk population, i.e. using kill permits to discourage resident behavior 4. The kill permits did not specify age/sex of elk that could be taken, clarification is needed as to whether the kill permits can be used to take animals that cannot transmit brucellosis (yearlings/bulls) in order to disperse/discourage elk that reside habitually in this area during calving

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Dispersal Hunt

**2. Brief description of commingling:** A herd of approximately 500 elk congregate on a small winter range in close proximity to numerous cattle operations just north of Mill Creek. Elk have become habituated to irrigated pastures used for wintering cattle, and commonly commingle with cattle among several adjacent cattle operations.

**3.** General location(s) of landowner(s) involved: Four cattle operations near Mill Creek, Paradise Valley (HD 317)

**4. Do landowners allow public hunting access during general hunting season?** Three of the landowners allow limited public access, 1 landowner allows substantial public access

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 03/09/13 - 04/07/13.

7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): The hunt was implemented for 4 weeks, however commingling did not occur during the first week so harvest did not begin until the second week. Harvest occurred during weeks 2 and 3; during that time 9 hunters participated and 8 antlerless elk were harvested. During week 4 this effort transitioned to hazing and did not need to call in additional hunters. Cost of FWP personnel time for administrative and field hunt management. The hunt combined with hazing was effective; after the initial harvests elk behavior changed, including separation of the large group into 2-3 smaller herds, and longer periods of spatial separation between elk and cattle.

**8.** Number and results of elk blood collections, if any: 7 samples submitted, including 5 adult cows and 2 calves. Both calves were seronegative, 3 cows were seropositive, 2 were seronegative. Additionally 1 fetus was collected and cultured for brucella, culture was negative (consistent with negative blood test for this cow)

**9. Did action reduce commingling?** Overall, producers were satisfied with results of dispersal hunt/hazing efforts, commingling was reduced.

**10.** General summary consensus by cooperators, collaborators and participants: Overall, producers were satisfied with results of dispersal hunt/hazing efforts, commingling was reduced

**11. Issues, concerns, short/long term circumstances or other comments:** There were some challenges with communication, involving hunters being confused or misunderstanding instructions, boundaries, and rules of the hunt. A significant amount of time was required from both the landowners and the FWP biologist to manage the hunt in order to minimize

misunderstandings and potential conflicts. A primary challenge was ensuring cattle were not exposed to potentially infectious gut piles, and that hunters directed their efforts in ways that would achieve hunt objectives. This was an antlerless-only hunt; clarification is needed as to whether animals that are unable to transmit brucellosis (calves/bulls) should be included in dispersal hunts. Concern expressed by sportsmen over lack of public access during the general season by some of the participating landowners.

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Hazing

**2. Brief description of commingling:** A herd of approximately 500 elk congregate on a small winter range in close proximity to numerous cattle operations just north of Mill Creek. Elk have become habituated to irrigated pastures used for wintering cattle, and commonly commingle with cattle among several adjacent cattle operations.

**3.** General location(s) of landowner(s) involved: Four cattle operations near Mill Creek, Paradise Valley (HD 317)

**4. Do landowners allow public hunting access during general hunting season?** Three of the landowners allow limited public access, 1 landowner allows substantial public access

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 03/09/13 - 04/07/13.

7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): Landowners had been hazing elk on their own with declining success prior to the dispersal hunt. FWP hazing efforts began after the initial harvests. The hazer worked a total of 22 hours over 5 days. Total costs for hourly pay, travel expenses and reimbursement for use of horse and trailer was \$331.69. Elk were successfully moved and/or dispersed in conjunction with hunting during the second and third week of the dispersal hunt, and effort was able to transition to hazing only in the 4th week of the hunt. One additional hazing effort in April was necessary after the end of the dispersal hunt.

8. Number and results of elk blood collections, if any: None collected.

**9. Did action reduce commingling?** Elk were successfully moved and/or dispersed in conjunction with hunting during the second and third week of the dispersal hunt, and we were able to transition to hazing only in the 4th week of the hunt. One additional hazing effort in April was necessary after the end of the dispersal hunt.

**10. General summary consensus by cooperators, collaborators and participants:** Overall, producers were satisfied with results of dispersal hunt/hazing efforts, commingling was reduced.

**11. Issues, concerns, short/long term circumstances or other comments:** Limited area for hazing elk into, and concerns with pushing elk into adjacent cattle operations. If hazing/dispersal efforts continue in this area it is not unlikely that additional adjacent landowners will need to be included in hazing/dispersal efforts.

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Fencing

**2. Brief description of commingling:** A herd of approximately 500 elk congregate on a small winter range in close proximity to numerous cattle operations just north of Mill Creek. Elk have become habituated to irrigated pastures used for wintering cattle, and commonly commingle with cattle among several adjacent cattle operations.

**3.** General location(s) of landowner(s) involved: One cattle operation near Mill Creek, Paradise Valley (HD 317)

**4. Do landowners allow public hunting access during general hunting season?** Not feasible due to small landholding and proximity of road and house

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 1/14/2013

7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): Landowners have a small cattle operation just south of Mill Creek, elk frequent the area to depredate on haystacks which brings them into proximity with cattle. DOL recommended fencing haystacks to reduce attractant and potential commingling. Total costs for fencing supplies \$1980.00. Fencing was effective in keeping elk out of hay, elk were rarely observed in the area after hay was secured.

8. Number and results of elk blood collections, if any: None collected.

9. Did action reduce commingling? Response was effective, commingling was reduced.

**10. General summary consensus by cooperators, collaborators and participants:** Response was effective, commingling was reduced.

**11. Issues, concerns, short/long term circumstances or other comments:** No concerns or issues.

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Fencing

**2. Brief description of commingling:** A herd of approximately 500 elk congregate on a small winter range in close proximity to numerous cattle operations just north of Mill Creek. Elk have become habituated to irrigated pastures used for wintering cattle, and commonly commingle with cattle among several adjacent cattle operations.

**3.** General location(s) of landowner(s) involved: One cattle operation near Mill Creek, Paradise Valley (HD 317)

**4. Do landowners allow public hunting access during general hunting season?** Landowner allows limited public access.

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): This fencing effort was initiated 3/26/2013

**7.** Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): FWP provided funds for fencing material up to \$2000, landowner provided labor to construct fencing to restrict cattle to the lower 2/3 of the property. The objective of this fencing project was to provide a clear boundary to facilitate separation of cattle and elk, while providing additional conflict-free range for elk in this very limited winter range. Total costs for fencing supplies \$1776.99. Fencing project was not complete until after elk had dispersed from the area. Effectiveness of fencing will be assessed during the next brucellosis risk season.

8. Number and results of elk blood collections, if any: None collected.

**9. Did action reduce commingling?** Effectiveness of fencing will be assessed during the next brucellosis risk season.**10. General summary consensus by cooperators, collaborators and participants:** Landowner was satisfied with FWP response, fencing likely to be effective in reducing commingling.

11. Issues, concerns, short/long term circumstances or other comments: None identified.

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Hazing

**2. Brief description of commingling:** A herd of over 300 elk began depredating on haystacks for the first time on this producers land this winter. In order to access the haystacks the elk moved through pastures occupied by cattle, with evidence of elk lingering within the cattle pasture at night.

**3.** General location(s) of landowner(s) involved: One cattle operation in Trail Creek, Paradise Valley (HD 314)

**4. Do landowners allow public hunting access during general hunting season?** Yes, however elk are scarce during general season and hunting options are limited due to proximity of roads.

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 2/15/2013 - 3/4/2013

**7.** Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): Hazer was made available at the landowner's request in mid-February, hazing efforts continued into early March after which elk moved out of the area. Hazer worked a total of 40.5 hours over 15 days. Total costs for hours worked and travel for hazer was 561.71. Hazing was effective at deterring elk and maintaining separation. As elk only moved in after nightfall, hazing occurred during late night/early morning and on foot as fencing made hazing on horseback unfeasible. Response was effective, commingling was reduced

8. Number and results of elk blood collections, if any: None collected.

9. Did action reduce commingling? Response was effective, commingling was reduced.

**10. General summary consensus by cooperators, collaborators and participants:** Response was effective, commingling was reduced.

**11. Issues, concerns, short/long term circumstances or other comments:** Hazing was logistically challenging given multiple adjacent landowners, many fences, and late night/early morning commingling; the effectiveness here is particularly a reflection of the dedication and competence of the hazer.

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Fencing

**2. Brief description of commingling:** A herd of over 300 elk began depredating on haystacks for the first time on this producers land this winter. In order to access the haystacks the elk moved through pastures occupied by cattle, with evidence of elk lingering within the cattle pasture at night.

**3.** General location(s) of landowner(s) involved: One cattle operation in Trail Creek, Paradise Valley (HD 314)

**4. Do landowners allow public hunting access during general hunting season?** Yes, however elk are scarce during general season and hunting options are limited due to proximity of roads.

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 2/15/2013

**7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.):** Total costs for fencing supplies \$1995.88. Haystacks were made secure; however work was not completed until late winter.

8. Number and results of elk blood collections, if any: None collected.

**9. Did action reduce commingling?** Landowner was satisfied with FWP response, fencing likely to be effective in that the attractant for elk has been secured.

**10. General summary consensus by cooperators, collaborators and participants:** Landowner was satisfied with FWP response, fencing likely to be effective in that the attractant for elk has been secured.

**11. Issues, concerns, short/long term circumstances or other comments:** There are additional haystacks a half mile away that elk have not yet discovered, not unlikely that elk will return to the area and additional fencing may be required to remove attractant.

1. Type of action (dispersal hunt, hazing, fencing, etc.): Hazing (available, not used)

**2. Brief description of commingling:** Approximately 300-400 elk moved into a new cattle operation on Dry Creek and depredated on poorly fenced haystacks, then keyed in on cattle feed lines with commingling occurring on a daily basis.

**3.** General location(s) of landowner(s) involved: One cattle operation in Dry Creek, Paradise Valley (HD 314)

4. Do landowners allow public hunting access during general hunting season? No.

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): NA

**7.** Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): Hazer was made available but was not used.

8. Number and results of elk blood collections, if any: None collected.

9. Did action reduce commingling? NA

10. General summary consensus by cooperators, collaborators and participants: NA

**11. Issues, concerns, short/long term circumstances or other comments:** Producers had questions about the legality of doing their own hazing rather than engaging the FWP hazer, including pushing elk across neighboring lands (with landowner permission). Elk have become familiar with the cattle feedline and may return next year. Haystack attractant has been secured however there may be need for hazing to deter commingling along feedline. Remains to be seen if public access improves in the future.

# 1. Type of action (dispersal hunt, hazing, fencing, etc.): Fencing

**2. Brief description of commingling:** Approximately 300-400 elk moved into a new cattle operation on Dry Creek and depredated on poorly fenced haystacks, then keyed in on cattle feed lines with commingling occurring on a daily basis.

**3.** General location(s) of landowner(s) involved: One cattle operation in Dry Creek, Paradise Valley (HD 314)

4. Do landowners allow public hunting access during general hunting season? No.

5. Elk population status (below, at or above objective): At objective

**6.** Start and stop date for action implementation (identify if fencing was permanent or temporary): 2/10/13

7. Brief summary of action (include fence delivered, cost/cost shares, number of hunters involved, number/classification of elk harvested, etc.): FWP provided funds for fencing m material up to \$2000, lessees/cattle producers provided labor to construct stackyard fencing. Total costs for fencing supplies \$1999.88. Elk remained in area in mid-winter, moved out with late winter thaw. Stackyard fencing was not completed until after the elk had already dispersed from the area. Landowner was satisfied with FWP response, fencing likely to be effective in that the attractant for elk has been secured

8. Number and results of elk blood collections, if any: None collected.

**9. Did action reduce commingling?** Landowner was satisfied with FWP response, fencing likely to be effective in that the attractant for elk has been secured

**10. General summary consensus by cooperators, collaborators and participants:** Landowner was satisfied with FWP response, fencing likely to be effective in that the attractant for elk has been secured.

**11. Issues, concerns, short/long term circumstances or other comments:** Elk have become familiar with the cattle feedline and may return next year. Haystack attractant has been secured however there may be need for hazing to deter commingling along feedline.