Wolf Advisory Group

MEETING SUMMARY¹, APRIL 26-27, 2022

WAG members present: Dan Paul, Samee Charriere, Tom Davis, Diane Gallegos, Todd Holmdahl, Jessica Kelley, Bill Kemp, Nick Martinez, Lynn Okita, Dan Paul, Rick Perleberg, Caitlin Scarano, Lisa Stone, and Paula Swedeen (Day 2)

Washington Department of Fish & Wildlife (WDFW, Department) staff members present: Ben Maletzke, Jim Brown, Donny Martorello, Staci Lehman(observer), Joey McCanna, Scott McCorquodale, Anis Aoude, Kyle Garrison, Ben Turnock, Melia DeVivo, Steve Pozzanghera, Kevin Robinette, Trent Roussin, Julia Smith, Kyla West, Candace Bennett, Erin Souza, and Jeff Wade.

WDFW Commissioners present: Lorna Smith (observer)

Facilitation team: Susan Hayman and Tristan Marquez

Meeting Action Items

Responsible Party	Action Item	Target Date
Wolf-Ungulate Task Group	Meet and frame discussion for June WAG meeting.	June WAG meeting
Facilitation Team	Edit and distribute recorded April WAG meeting presentations.	May 2
WDFW	Post April WAG meeting presentations to the WDFW website.	May 5

April 26, 2022

Opening

Susan Hayman, Ross Strategic facilitator, opened the Wolf Advisory Group (WAG) meeting by welcoming members, WDFW staff, and meeting observers, and providing an overview of the meeting objectives and agenda.

The purpose of the meeting was to receive an update from WDFW on wolf management activities, proposed rulemaking, and other topics; discuss conflict management plans and coordination with livestock producers in anticipation of the 2022 livestock grazing season; begin establishing a shared understanding of assessment methods and the status of ungulate populations, influencing factors, and management in Washington to provide a foundation for subsequent discussions of wolf-ungulate interactions; and begin identifying potential opportunities to collaboratively address some factors currently limiting ungulate populations.

WDFW Updates

¹ This summary is a synthesis of the meeting discussion April 26-27. Detailed narrative notes for both days will be provided to WAG members and WDFW staff. Both the meeting summary and the detailed narrative notes will be publicly available following finalization of the meeting documentation package.

Julia Smith, WDFW Wolf Policy Lead, introduced staff members providing program and policy updates.

2021 Annual Wolf Report

Ben Maletzke, WDFW Statewide Wolf Specialist, presented on the 2021 Annual Washington Wolf Management and Conservation Report. Maletzke briefly summarized key findings noted in the report and responded to questions from WAG members. He noted 206 wolves were counted across thirtythree packs. The Department measured nineteen successful breeding pairs across the state, a 16% increase from 2020. One new pack and four successful breeding pairs were identified in the North Cascades Recovery Area. A collared wolf moved into the Southern Cascades Recovery Area for the first time, and WDFW is now tracking two wolves in this area. Seventeen events of livestock depredation were recorded in 2021. Maletzke attributed these lower numbers to a combination of luck and proactive application of non-lethal deterrents by producers. Maletzke clarified that depredation data only reflected what was reported to the Department, and that some events may not have been reported by producers. In response to a question from a WAG member, Maletzke reported WDFW did not detect any poaching activity, and encouraged members of the public to report any observed poaching. Maletzke clarified for a WAG member that wolf population numbers were documented through December 31, 2021 and that WDFW was confident with numbers reported by the Confederated Tribes of the Colville Reservation (CTCR) after the annual Tribal wolf harvest. A video presentation of the briefing Maletzke provided to the Washington Fish and Wildlife Commission, April 9, 2022 on April can be found online.

Introduction of Jim Brown, WDFW Wildlife Conflict Section Manager

Smith introduced Jim Brown, the new Wildlife Conflict Section Manager for WDFW. Brown is a 28-year department veteran with 21 years of experience in enforcement. Brown was the Regional Director of region two in Ephrata for the last seven years of his career with department before retiring in 2020. Brown assumed his role as Wildlife Conflict Section Manager in February 2022 and is excited to take on the new challenges of the job. He has mostly been getting up to speed on budgets, processes, federal grant reports, and preparing the RFQs for range riding. Brown acknowledged that his role is primarily administrative, but he has years of field experience in wildlife conflict. He stated that he was in the process of learning about wolf-related conflict response and management and that he is looking forward to working with everybody. WAG members congratulated Brown on his appointment and expressed their eagerness to work with him.

Range Rider Request for Quotes (RFQ)/Non-Lethal Deterrents

Kyla West, WDFW Statewide Human-Wildlife Conflict Analyst in Spokane, updated the WAG on the range rider RFQ posted on April 7, 2022. The Region 1 communications manager placed an announcement on the WDFW website and published several targeted social media posts and messages. The posting has already been viewed by 5,000 individuals, exceeding the initial WDFW targets. One completed application has been received so far. Eight contract amendment requests have been submitted by active contractors for their 2022 statement of work. Six prospective range riders have reached out to the Department asking for links to the online application.

Smith acknowledged that many people had trouble getting through the lengthy RFQ and had questions around the clarity of the requirements. Brown informed the WAG that extensive discussions were held

regarding the new RFQ, and veteran range riders were consulted during its development. Though the Department wanted to maintain as much continuity as possible with the previous contract, adjustments were made in the RFQ because of these discussions. Changes included clarifying language around communications between wildlife specialists and range riders, and paperwork requirements. The Department previously had issues with required paperwork not being turned in by range riders. According to Brown, the paperwork is crucial for the Department to understand how range riding is effective across the landscape. The Department also eliminated pay structure differences around conveyance methods such as ATVs and horses.

Brown said the requirement for range riders to carry liability insurance created significant concerns. He noted this was a long-standing requirement, however, and the Department would actively enforce the requirement going forward. To help address the concerns, the Department worked with range riders and an insurance carrier that could provide an affordable policy for range riders.

WAG members spoke about how completing the RFQ was very daunting and that some potential qualified applicants were feeling discouraged to apply as a result. West acknowledged that the RFQ was complex, but said the program had a robust history and the language in the document is there to ensure the Department gets the most qualified people on the ground. In response to a comment from a WAG member that the Department may have too high of a bar to meet, West stated that the Department had spoken with prospective range riders and encouraged them to apply even if they might not appear to be a perfect fit on paper. She said the Department understands if producers prefer to have people they know and trust on their private property, and the Department considers those preferences during application review.

West said another option for prospective applicants is the Damage Prevention Cooperative Agreement for Livestock (DPCAL) contract, a cost share agreement between the Department and livestock producers, which allows livestock producers to choose their own range riders. Joey McCanna, WDFW Conflict Supervisor for Region 1, clarified that the Department had recently lost 20% of its funding for DPCAL contracts, and that there was limited money to be spread across all producers.

West and Brown explained that much of the language in the RFQ is "boiler plate" language on how range riders would be paid. They acknowledged that the language could be difficult to understand but informed the group that they are available to speak with any applicants that have questions.

A WAG member asked for clarification on if and how the efficacy of range riding was being measured. West explained that the range riding program had not been set up to measure effectiveness in an empirical way and that it was more reactive in its evaluation. WDFW will be engaging in research conducted by the US Department of Agriculture and the Utah State University to evaluate tools for carnivore conflict minimization, such as range riding. However, several factors influence depredations, including range riding, making it difficult to empirically measure the efficacy of one tool alone. The WAG member thanked West for the clarification but stated again the need for data to evaluate effectiveness range riding as the program grows, and for the future prioritization of non-lethal deterrents. Smith added that non-lethal deterrents are successful enough for WDFW to continue supporting their use, and there is currently not enough funding for a robust evaluation of their effectiveness. She shared a December 2021 preliminary University of Wisconsin study that sought to measure the effectiveness of range riding from an empirical standpoint.

A WAG member noted that the use of non-lethal tools seems very context-driven and asked how WDFW tracks success and tries to make correlations. for use of non-lethal deterrents. McCanna explained that WDFW uses a checklist to track the reason and timing of deployment of fladry and Foxlights for producers. The department also collects logs from contracted range riders and is working with the Northeast Washington Wolf Cattle Collaborative (NEWWCC) and the Cattle Producers of Washington (CPoW) for access to their logs. West added that DPCAL agreements also track context of deployment. Trent Roussin, WDFW Wolf Biologist, explained that collar data are not accurate to measure the effectiveness of range riding on a temporal or spatial scale. He added that metrics around the effectiveness of range riding would need to be built once WDFW determines what its goals for the program are. Hayman noted that data collection and efficacy evaluation of non-lethal deterrents would be tracked for potential future WAG discussion.

A WAG member noted that producers are currently in tough economic times, and the increasing wolf population puts even more pressure on them. Conflict will increase as the wolf population grows and there is not enough money to go around for deterrent measures. Producers cannot continually be asked to do more for prevention while being paid less. Hayman acknowledged the interest in a conversation around funding for non-lethal deterrents, and said this would be captured as a potential topic for a future WAG meeting. Smith added that WDFW has consistently requested additional funding from the Washington legislature for non-lethal deterrents. Another WAG member suggested that alternative avenues for funding should also be discussed in the future, and that the WAG could play a role in tracking and evaluating data to prioritize non-lethal deterrents.

Recent Wolf-Livestock Activity

McCanna reported that there have been no significant reports of wolf-livestock activity other than sightings of wolves in proximity to cattle. WDFW has responded to sightings by adding fladry and Foxlights, and some producers have chased wolves off independently. Cattle are moving on to federal grazing allotments as well as private and state lands, but WDFW has not received and reported conflicts to date.

Wolf-Livestock Conflict Deterrence Rule

Smith updated the WAG on Wolf-Livestock Conflict Deterrence Rule (CR-102), about which WDFW provided a briefing for Washington Fish and Wildlife Commission, followed by a public hearing on April 8th and 9th. There was substantial public testimony and follow-up discussion by the Commission. The decision on whether to adopt the proposed language for the rule was delayed from its original date of May 13, 2022. A decision is expected sometime in the summer. If the Commission does not make a decision by August 15, 2022, CR-102 will be withdrawn. WDFW received over 10,000 comments from the public and will review and respond to each substantive issue raised (i.e., not a separate response to each comment where there is repetition). Smith directed the WAG to review the <u>rules</u> on how WDFW responds to comments.

Recruitment for New WAG members

Smith provided an update on the soon-to-be initiated WAG member recruitment process, which involves the Ross Strategic team. Hayman and Tristan Marquez, Ross Strategic facilitation team, developed a draft recruitment plan and will be involved in outreach, reviewing applications, and

conducting first-round interviews of applicants. Smith hopes that some new members will be able to join the WAG for its June meeting. Hayman invited WAG members to help with outreach to expand to a broader base once the plan is finalized. The recruitment plan will be provided to WAG members before it becomes publicly available.

2022 Livestock Grazing Season

WDFW transitioned from general updates to reporting on planning for the upcoming livestock grazing season. McCanna provide an overview on the conflict mitigation plan for the Togo pack. Staff have been meeting frequently and hope to have a final draft to move forward on soon. The plan includes an introduction and background information on the Togo pack, as well as a map that tells the story and history of wolf activity and livestock conflict from 2019 to 2021. The map shows the highest concentration of historical wolf activity and depredations, which will be used by WDFW to assess the best areas for targeted range riding efforts. The plan also includes information and updates on the affected livestock producers, landscape characteristics provided by the USDA Forest Service, a wolf-livestock conflict timeline, expectations for non-lethal deterrents, expectations for specific livestock producers, and expectations for WDFW. A history of wolf-livestock conflicts, depredations, and non-lethal deterrents is included in the appendix of the plan.

Department staff have been contacting producers and working with NEWCCC and CPoW to determine range riding capacity for the grazing season. Staff have also met with the USDA Forest Service (Forest Service) to determine range riding expectations for the summer. WDFW encourages other producers to contact them with any new ideas for non-lethal control or for collaboration. McCanna informed the group that a producer is planning to use VHF ear tags on their cattle to see how they work. He explained that VHF ear tags are relatively new and that there is currently research being conducted in Montana to evaluate their effectiveness. When asked, McCanna added that staff had not heard any promising leads of Northeast Washington producers who might be interested in joining the WAG.

Roussin shared the draft Togo mitigation plan map onscreen with the WAG and explained how it was being used. The bulk of the mapped territory is under federal ownership and managed by the Forest Service, but a significant portion is privately owned. Cattle graze on both private and public land, and about half of the depredations in Togo territory have occurred on private property. Roussin explained that private industrial timber land owners generally do not exclude public access for activities like hiking and some private timber companies also allow grazing on their properties. Companies have designated grazing areas, similar to the Forest Service. Timber companies have also been proactive in working with WDFW to limit wolf conflict. McCanna added that WDFW has been working with the Steven's County and Walla County landfills for deposition of cattle carcasses, so that they do not become an attractant for wolves.

In response to questions from WAG members, McCanna clarified that WDFW is proactively placing range riders in locations where livestock are most likely to encounter the Togo pack. He explained that there were no plans to change WDFW's conflict management strategy for the Columbia pack in 2022 other than try to recruit and build range-riding capacity in this area with WDFW contract range riders. Hayman noted that some WAG members were concerned and frustrated with this response. McCanna invited WAG members to reach out to him privately with any additional questions or concerns.

Common Vocabulary/Glossary and Basic Principles of Ungulate Population Ecology

At the conclusion of WDFW's report on plans for the upcoming livestock grazing season, Hayman invited Dr. Scott McCorquodale, WDFW Regional Wildlife Program Manager, to present on the <u>fundamental elements of ungulate population dynamics</u> (presentation slides may be accessed <u>here</u>). WAG members were reminded of the glossary and definition of terms provided in their meeting packets and encouraged to reference this document as needed during the presentations over the next two days.

Following his presentation, McCorquodale addressed WAG member questions. He clarified that there can be different definitions for seasonal carrying capacity. The traditional focus is on winter carrying capacity. However, the strategy for most ungulates is to depend on their fat and glycogen stores from their summer feeding. If the animals are in a good place in the summer habitat, even if carrying capacity was low in the summer, they can still do well. They are always losing condition in the winter, and it is critical that they come into this season at a high level of condition. McCorquodale added that predation is a limiting factor to ungulate populations, but the debate is around how often it is also a regulating factor. There are many limiting factors for ungulate populations, but not all are also regulating factors.

Factors that Influence Ungulate Populations

Prior to beginning the second presentation, Hayman provided a link to a Mural Board (online collaboration tool) and invited members to add thoughts as they emerge about potential ways to address some of the factors limiting ungulate populations, and to note any questions of interest for the June meeting where wolf-ungulate interactions will be discussed. She then introduced Dr. Melia DeVivo, Ungulate Research Scientist for WDFW, and invited her to present on the <u>different factors that influence ungulate populations</u> (presentation slides may be accessed <u>here</u>).

Following her presentation, DeVivo responded to WAG member questions and comments. In response to a request for clarification on how well an elk study would extend to white tail deer, DeVivo explained that it is not advised to extrapolate the data for one species for another species even if they are closely related. Both species occupy a unique niche in an ecosystem, employ different anti-predator strategies, and use different resources. All these factors influence how predators impact their populations. Anis Aoude, WDFW Game Division Manager, added that data should not even be extrapolated for different populations of the same species, due to differences in the habitat and conditions they occupy. DeVivo confirmed for a WAG member that harvest reduction of adult female elk had additive effects on elk populations with high predator activity. Aoude clarified that managers use antlerless harvests to reduce populations believed to be above their carrying capacity.

DeVivo confirmed that predator's help limit the spread of disease among ungulate populations by targeting sick animals. While there is no empirical data on predators controlling disease such as chronic wasting disease (CWD), models show that predators can reduce CWD presence in populations. She explained that predators test the fitness of animals, and those affected with CWD will be more vulnerable to predation. A study of mule deer in Wyoming showed that cougars, too, will kill more infected than non-infected animals in a population. Studies also show that CWD prions are eliminated in the digestive tracks of the carnivores, potentially cleaning the environment of the infectious prions.

² All three presentations regarding ungulate management were recorded and may be accessed on the WDFW website through the links provided in this summary.

However, there has not yet been significant overlap of wolf populations with a CWD affected deer to collect the data. West shared a <u>Colorado State University study</u> that indicated how wolves could potentially help limit the spread of CWD in deer and elk populations.

DeVivo acknowledged that information on ungulate populations in Washington is limited. A WAG member questioned how the WAG could suggest ways to address factors affecting ungulate population in the state without knowing how they were specifically being affected. Hayman acknowledged the concern and encouraged WAG members to use the opportunity to learn and brainstorm potential solutions. Smith added that the presentation was meant to provide WAG members with foundational knowledge before attempting to address issues. Aoude and a WAG member advised the group not to attempt to solve a presumed problem that may not actually exist in Washington. DeVivo cautioned a WAG member not to extrapolate data from bear predation on ungulates for wolve predation.

Following the discussion of factors affecting ungulate populations, five persons provided public comment, as documented in Appendix A.

WAG members thanked WDFW staff for the discussions and presentations and Hayman closed out the meeting for the day, reminding public attendees of the opportunity to meet informally with WDFW staff from 4:05-5:00pm

April 27, 2022

Opening

Hayman opened the second day of the meeting by reviewing the meeting agenda and objectives. In response to a question from a WAG member, she confirmed that the ungulate task group comprised of WAG members and WDFW staff that helped develop the agenda material for wolf-ungulate discussions did not include any livestock producers, as none had expressed interest in participating.

Ungulate Management in Washington State

Anis Aoude, WDFW Game Division Manager, presented on how WDFW monitors deer, elk, and moose populations in the state (presentation slides may be accessed here). Breaks were taken between topical areas of the presentation to allow time for questions.

Elk

Following his presentation on elk, Aoude responded to WAG member questions and comments. A WAG member asked for additional information on the hoof rot disease that has been affecting the Mt. St. Helen's elk herd. Aoude explained that hoof rot disease likely did not affect the population much until the population became nutritionally stressed. This stress affects the population's reproduction rates and leads to higher predation. Research shows that animals with hoof disease have a lower survival rate that results in the reduction of the population. WDFW is unsure of how low the percentage of animals with hoof rot disease will need to reach before it becomes a non-issue. They have also implemented a new hunting regime to target inflicted animals and reduce the prevalence. The WAG member suggested discussing the impact of habitat and how forest management can impact elk habitat at a future meeting. Hayman noted that suggestion.

In response to a question on the situation with the Blue Mountain elk herd, Aoude explained that the Department was looking into why the population has fallen below expectations, and concluded that the decline was due to low reproductive rates. WDFW collared neonates (newly born calves) to understand the greatest cause of mortality, which was primarily cougar predation. The issue appears to be predation-specific, and WDFW is assessing its response.

Aoude clarified that population objectives require an interplay with local stakeholders. WDFW assesses how large a population can be without causing any agricultural damage on private lands. Steve Pozzanghera, WDFW Region 1 Regional Director, added that setting herd objectives is a collaborative and public process which includes, aesthetic, Tribal, community, and agricultural interests.

A WAG member asked if there was a plan to manage the elk herd in the Skagit Valley to limit damage to agricultural property and limit spread of hoof rot. Aoude explained that the level of hoof rot is not population limiting for this herd. WDFW is also assisting agricultural producers in the valley to help fence elk out of their land. Elk work to maximize their fitness prior to going into the winter, and will go to the places with the best quality food, which is often agricultural land rather than the natural forestland. WDFW is working hard to mitigate agricultural damage. The elk population in the Skagit Valley is comanaged with Tribal authorities, which adds another layer of complexity to management. Brown added WDFW has money set aside to fund fencing in the Skagit Valley, but it is not adequate to cover all of the fencing needs for agricultural land. The Department usually prioritizes by crop value by acre, as it cannot protect all crops with the available resources it has. Most of the agricultural land affected is pasture for dairies. However, the legislature has appropriate funding for the Skagit to provide more fencing for agricultural pastures, and WDFW is working with local producers to install the fencing. Some WAG members expressed doubt that fencing would solve the elk impact on agricultural land but thanked WDFW for their efforts and collaboration with producers in trying to solve the problem. The WAG member suggested that wolf presence in the valley could help limit the elk activity, but Aoude clarified that elk trend to congregate around areas with more human activity, which wolves tend to avoid.

Deer

Aoude resumed his presentation, focusing on deer. Following his presentation (recorded presentation and slides) there was a question about the drop in dear harvest data over the past 20 years in East Washington. Aoude clarified that the trend has been less dramatic in recent years compared to the overall downward trend further in the past. He also explained that the decline in white tail dear population specifically is because of hemorrhagic disease and increased winter mortality. Another member asked why WDFW did not ask hunters to report on the species they kill while hunting. Aoude clarified that they do ask but hunters are not always knowledgeable on how to distinguish between species. The overlap between white tail and mule dear is specifically complicated, and WDFW does not want to risk the confusion.

Aoude clarified for another member that the Department implemented a "three-point or better" restriction on mule deer to have enough buck escapement to maintain a level of 15 bucks per 100 does. The WAG member asked there was any correlation between when restrictions began and if it was reflective of the drop in harvest data. Aoude confirmed that the Department didn't notice any difference in buck to doe ratios.

Moose

Aoude resumed his presentation, focusing on Moose. Following his presentation (recorded presentation and slides) he responded to questions and comments from WAG members. When asked if and how climate-mediated disease is starting to affect moose in Washington, Aoude confirmed that it is seen in Washington but results more from a parasite load than disease. Winter tick infestations significantly impact moose populations. Moose were built to live in snow rather than warmer climates and they are being affected by climate change. Aoude also clarified that habitat loss is expected but does not have the same effect for all species. It especially affects highly migratory species such as mule deer and elk. Predators are often the first factor thought of for ungulate population declines, but human development and loss of habitat also contribute substantially to declines.

Aoude responded to a WAG member that predation plays a part in the declining white tail deer population in Northeast Washington, but it is not the greatest factor. Aoude acknowledged that the long-term decline was concerning, and that habitat loss may be a significant factor. And it is not just related to humans being on the landscape, but how humans are managing the landscape. DeVivo added that the Washington Predator Prey Project's preliminary models suggest the white tail deer population in the Northeast is decreasing to potentially stable models. Analysis to identify cause-specific mortality is underway as part of the project. Ben Turnock, WDFW Assistant District Wildlife Biologist, explained that white tail deer tend to congregate in valleys and agricultural land, which are more likely to be developed for residential property. Roadkill is also being explored as a potential factor limiting the population. Turnock added that habitat issues is big driver in the decreasing moose population. A WAG member observed that livestock producers are likely going to begin selling their land for residential developments if they are continuously pushed out, which is not a benefit to wildlife. They asked why habitat is a problem for moose in Washington if there is already a such a low number of them. Aoude clarified that moose require very specific conditions for their habitat. Moose are at the southern extreme of their range in Washington and require high quality habitat and forage quality. Many factors have to align for moose to thrive at the state's latitude.

Aoude reminded WAG members that all the information that was discussed could be found on the WDFW website and shared a map that lists all the game management units (GMUs) in Washington.

June Meeting Planning

After thanking all the presenters, Hayman share her screen to show the <u>Mural Board</u>, focusing on the questions that had emerged for members for the June discussion of wolf-ungulate interactions. She noted that the wolf ungulate task group had so far identified two objectives for the June meeting:

- Begin establishing a shared understanding of the state of knowledge (what is known and not known) about the interactions between wolves and different ungulate species.
- Discuss indicators and testable predictions relative to assessing if/when wolves are adversely impacting ungulate populations.

Hayman invited WAG members and WDFW staff to add thoughts and ideas on what they believed would be relevant to discuss during the June meeting.

As the group discussed the June meeting, there was a comment regarding the need for data to understand the efficacy of non-lethal deterrents and continued research for new innovations or ideas that could help reduce wolf-livestock conflicts. A member suggested WAG establish a task group to look into these ideas and to continue problem-solving for wolf-livestock conflicts. A spirited discussion followed about WDFW's providing the best tools and processes it can, producer responsibilities and frustration with the current suite of tools offered, and the value of continuing to discuss methods to address wolf-livestock conflict at WAG meetings. Hayman noted the request for the WAG to consider a task group around non-lethal tools and noted the expressed concern for the ongoing impact to producers from wolf predation on livestock.

Hayman said a good portion of the June meeting will be reserved for the second part of the wolf-ungulate interactions discussion. She also invited any interested producers in the WAG to join the task group and assist in planning for the meeting. The facilitation team will also assist the WAG in coordinating their travel for the in-person June meeting.

Following the discussion of June meeting planning, four persons provided public comment, as documented in Appendix B.

Closing

The group confirmed that it would meet again on June 26 and 27 in Moses Lake Washington. The facilitation team will discuss the possibility of a virtual/hybrid option for the meeting.

Hayman invited WAG members and WDFW staff to provide final comments. Many expressed appreciation for the meeting and anticipation for meeting in person in June. Appreciation was expressed for the workstream used to develop the agenda for this meeting, and to use this as a model for future meetings. There was also a suggestion to form a work group to focus on non-lethal tools that would meet periodically to hear what is and isn't working well and do some problem-solving. There was a also a request for more engagement by all WAG members during group discussion.

Hayman thanked members and WDFW staff for their participation and closed the meeting.

Appendix A: Public Comment

Public comment received at the end of each meeting day is paraphrased below:

April 26, 2022

Erin McKenna:

Thank you for another interesting meeting. I was really struck by the human activity impact discussion. I know you are looking at how predators affect the availability ungulates for human hunting. Wondering how you will work in how human development will impact ungulate populations. What is recreation use doing? I remember in last meeting hunters said that they were not seeing as many ungulates. Are other recreational activities interfering with them? Are producer activities affecting ungulate populations such as with fencing? Also, what about disease factors to livestock populations? Interested in how that factors in.

• Wayne Johnson, Co-Founder, Project Wolf USA:

Project Wolf USA is an organization that works to stop the murder of wolves in British Columbia. I appreciate the dialogue I have had with Dan Paul and Julia Smith. But dialogue cannot be a substitute for hard work and hard truth. IN 1949, Albert Camus said that the crime is silence. The great crime against wolves is silence. The holocaust of wolves across the country, the truth must be spoken. It is time for those who call themselves wildlife advocates on the committee to say that no more wolves will be killed including the two wolves in Columbia County. The greatest danger to the planet is the cattle rancher. The perceived conflict between wolves and cattle is what is killing the wolves in the state. It is time to say that the director of WDFW was horribly wrong about bears and historically wrong about wolves.

Dave Hedrick:

I was only able to catch the first part of the presentation today regarding wolf-cattle conflicts. I want to speak to sustainability of the non-lethal program and protocol that WDFW has developed through the WAG. The costs remain unknown. We were hopeful that with the development of this rule that the cost related to what ranchers are paying would be more available, but it remains unknown. It is clear that people in Washington want more non-lethal deterrents. The average taxpayer plays 20 cents a year for non-lethal deterrents and it gets pushed on rural communities. It is not sustainable. Looking at the presentation at the last commission meeting. DFW wants more non-lethal control on the ground, but their input for non-lethals has decreased since 2016. They want more but will not pay more. Does not seem to be a priority. How do you go to the legislature and ask for more money when you don't even know what it costs? I believe that as much as people do not want to do it, if you want non-lethals you need to pay for them or reevaluate the protocol. WDFW needs to step up and right now it is going in the wrong direction.

• Chris Bachman, Kettle Range Conservation Group

- As a biologist I was really impressed with the presentations and conversation at this
 meeting. There needs to be more of this at WAG meetings and I want to see more of
 this discussion in the future.
- Amaroq Weiss, Senior Wolf Advocate, Center for Biological Diversity:

Appendix A: Public Comment

Thanks for the opportunity. I really loved Julia's comments that we heard at the end of the meeting today. The idea was to give WAG members more of a foundation and vocabulary before problem solving. I could not agree more. What my experience says to me is that these science type presentations to the WAG only started in earnest two years ago. The lack of having WAG members understand the science in previous years resulted in a number of unfortunate circumstances. Relationships and consensus between WAG members was prioritized over science-based decisions. I am thrilled to see this emphasis on science presentations happening over the last few years and I was impressed by the questions from the WAG members. There has been a marked change in realizing you need to have a common vocabulary and understanding of science before making decision on Washington wildlife.

April 27, 2022

- Sam Bruegger, Executive Director, Washington Wildlife First:
 - O I want to make sure that there is a way to access the meetings afterwards for people who can't make it. Now that meetings are being recorded, are there plans to make this available to the public? We need to make meetings transparent. We also need to find a way to make the first part of the meeting that's not available to the public more transparent as well.
- Rachel Bjork:
 - Thanks to the WAG for the discussion. Second what Sam said. I am glad I am able to attend these virtual meetings. There is no way I could attend the meetings in person; I hope these meetings remain accessible to the public. I continue to hear that cattle are important to the landscape. The depredation I look at, depredation from wolves and coyotes is a small percentage on how cattle die. Cattle die by disease and accident and end up in the slaughterhouse, and it is odd that the livestock portion takes up so much discussion in the WAG.
- Ilene Le Vee, Rancher from Klickitat County:
 - o Ranching has been part of all my life. This has been one of the best meetings I've had the privilege of viewing. My brothers and fathers would travel to Canada to bag a moose. Moose like close proximity to water. I am very concerned that we get lost in the political environment and forget that ranching is a tough occupation. I want to give kudos to Anis. Our state is so small, it is mostly in private land. Public land is getting smaller and smaller as it is impacted by water accessibility which is getting worse. Water situation will impact wildlife and livestock community. I do not want to see other ranchers lose sight of the fact that their ability to prospering in this life relates to water. Humans are in charge not animals, so let us keep our thinking caps on and not get wrapped up in political conversation.
- Chris Bachman, Kettle Range Conservation Group:
 - It is important to have virtual opportunity to come into these meetings. It is a great way
 for the public to access what's going on. Public will need to have a chance to attend the
 upcoming in-person meetings.