



**Meeting Report
Wolf-Ungulate Stakeholder Subgroup
October 14, 2014**

California Fish and Game Commission
Conference Room
1416 9th Street, Suite 1320
Sacramento, CA 95814



California Department of Fish and Wildlife

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1.0 Introduction

On October 14, 2014 the Wolf-Ungulate Interactions Subgroup of the California Wolf Stakeholder Working Group (SWG) reconvened in Sacramento. This was the sixth meeting for this subgroup, having been formed during the August 29, 2013 general SWG meeting to assist the Department with developing a consensus-driven framework of management strategies for addressing potential wolf impacts on California's native ungulate populations.

2.0 Meeting Objectives and Mechanics

The meeting was held in the California Fish and Game Commission's conference room in Sacramento.

Meeting objectives were:

1. Determine points of agreement on Wolf-Ungulate Strategy
2. Confirm Wolf-Ungulate schedule moving forward

The meeting was attended in person by the meeting facilitator, four stakeholders, and four CDFW staff. In addition, one stakeholder attended via conference line. Appendix A provides a list of participants, their affiliations, and their contact information.

3.0 Meeting Outputs

Updates/Housekeeping

- Today's meeting is the final scheduled meeting of the Wolf-Ungulate subgroup
- Comments on the Sept. 10, 2014 Meeting Report:
 - 2 members (EPIC and Sierra Club representatives) requested that their general opposition to considering the use of lethal methods for wolf conflicts while the species remains listed under the California Endangered Species Act be stated in the report.
- Status of and comments on the Draft Wolf-Ungulate Interactions chapter:
 - The EPIC representative requested that the Department provide clarification in the chapter for "evaluation and development" when considering increasing take of bears and coyotes to mitigate for impacts to ungulates where wolves occur.
 - Department staff asked members to provide any additional comments they may have on the chapter by Friday, October 17, and to limit them to substantive topics that will require some rewriting. Any minor comments

such as spelling, punctuation, or grammar can be submitted when the Draft Plan is made available.

Review/discuss Draft Wolf-Ungulate Strategy

Significant changes made to the previous version of the strategy document included restructuring into phases to match the phased approach used for the Wolf Conservation and Wolf-Livestock Interactions strategies, and listing data to be collected on ungulates in Northern California prior to and during the reestablishment of wolves. Such data will provide important baseline information that will help the Department detect potential wolf-related impacts on ungulate populations. Comments and questions from members are provided below for each Element. Any responses from Department staff are provided in italics.

Element A

A map of priority deer and elk populations for pre-wolf data collection was inadvertently not distributed to members prior to the meeting. Although not previously viewed by subgroup members, the Department did intend for them to, so that map appears as Appendix C of this report. Priorities were based on where the Department estimates that wolves are most likely to first establish in California.

All members were in agreement that this Element was acceptable with minor suggested edits.

- How confident is the Department that you can get accurate population figures, and how long will it take to get usable information to detect changes?
 - *At this point the best we can do is to identify those areas for which we want better data. Once wolves arrive we will focus in on where they actually are. We have a statistician who is helping us look at the survey effort required and the length of time necessary to get at data of value. We're hoping to start collaring deer and elk in Siskiyou County early next year.*
- Clarify that this data collection will begin prior to the arrival of established wolves, and will continue after they arrive.
 - *It is stated in the body of document that that is the plan, but we can rearrange things to make it more obvious.*
- How will the Department fund this increased level of data collection?
 - *We would direct your attention to the funding chapter which provides funding information for each chapter of the wolf plan.*
- Should you also collect data on the health of the ungulate populations?

- *Health is usually reflected in other parameters. For example does won't produce twins, or their young will not recruit into the population, or you will see high adult mortality if they are unhealthy.*

Element B

- The number of wolves is less important than the effect that wolves will have on ungulate populations, and 4 pairs may be too many. There could be an unforeseen impact on the ungulate populations. If the number of breeding pairs to conclude Phase 1 is set too high you can't take actions to remedy conflicts. If you inadvertently set the number too low, it doesn't mean you have to use lethal control, but it's an option for you.
 - *Suggest you have a look at the minority report in the Washington Wolf Plan in which some members outlined their concerns, which were similar to yours. See if those concerns have been addressed in the time since they wrote the report. Overall, they were supportive of the plan as a whole.*
- We can't look at other states' plans. Unlike California those states have robust ungulate populations, and Oregon wants to delist after 7 pairs. We're talking about moving to the next phase with 8 pairs. That doesn't make sense.
 - *Oregon's plan addresses delisting. Our plan is not a recovery plan.*
- We are too different to compare ourselves to other states, so we shouldn't set any numbers. There are too many variables that can affect the actual wolf population.
 - *All of you have said that you want the plan to be science-based. The problem is that the only science available comes from other states. There is none from California.*
- Before you provide a trigger for ending Phase 1 you need to identify the priority herds.

All three ungulate conservation group members suggested that 2 and 4 pairs to conclude Phases 1 and 2 would be more appropriate. Both environmental group members suggested not using wolf pair numbers, and a science-based approach for concluding the phases.

Element C

- Skipped due to lack of consensus on Element B

Element D

- If the number of breeding pairs to conclude Phase 1 was reduced to 2 then I would agree to no use of lethal control. The Department needs to have lethal control as a tool; it doesn't mean they have to use it.

- 25% reduction in ungulate population seems like a huge number. Is that sustainable?
 - *You have to look at the whole picture, and your survey effort within significant confidence intervals is important. It will vary by area. For example at Grizzly Island there is high recruitment so that population can sustain higher take than on the North Coast. But you have to give adequate effort to detect the change.*
- If you have to reduce the number of tags issued, lethal control may be used?
 - *If the ungulate decline is determined to be caused by wolves*
- The population decline should be 10%, the ratios should be 30:100, and should also include does:fawns.
 - *You shouldn't look at recruitment in isolation. You can have a low recruitment rate in a stable population, or high recruitment in a declining population. Recruitment is just one indicator of a population, but 25:100 is usually an indication of stability. 20:100 for three years would be of concern. Elk are generally better at recruiting and surviving than deer. For deer 25:100 is the knife's edge when adult mortality is low.*
- Hunter success is not a useful measure of how a population is doing. Hunter success can vary for a lot of reasons, and it shouldn't be a measure for allowing the use of lethal control of wolves. Also suggest clarifying that lethal control in Element D is specifically for wolves when they cause an ungulate population decline.

After a brief period for caucusing, the following recommendations were made on this element:

EPIC: item 1 in Phase 2 should be 50% population decline; items 3 and 4 should be deleted because deer and elk are not listed species; "impacts" should be specified and "specific ungulate populations" in item 5 should be identified.

Mule Deer Foundation: item 1 in Phase 2 should be 15%; item 2 should be 30:100 and include does:fawns; fine with 3, 4, and 5.

Sierra Club: items 3 and 4 in Phase 2 should be deleted; item 5 needs clarification regarding which wolf/wolves will be taken using lethal control.

California Deer Assn: same as Mule Deer Foundation.

California Houndsmen for Conservation: same as Mule Deer Foundation but the Department should check to see if the doe:fawn ratio should be higher than the cow:calf ratio.

Element E

- Doesn't moving problem animals just move the problem, and don't they often just go back to where they were?
 - *The Department doesn't move animals that are a nuisance or for depredations. However if the wolves are doing what is normal to them, but that activity is depleting a local ungulate population, we might want the option to move them where they will have less impact. Implementation may be difficult but it could be an option for us.*

The following summary comments were offered on this element:

EPIC: same comments as for Element D

Mule Deer Foundation: same comments as for Element D

California Houndsmen for Conservation: same comments as for Element D

Sierra Club: same comments as for Element D

California Deer Assn: I am opposed to relocation

Element F

- We're not going to discuss whether we agree with these or not; rather just that they are potential options, correct?
 - *We need to make sure the public who reads the plan knows what options may be available. Putting them in the document shines light on them.*
- What does item 5 mean here? Is it suggesting making changes to CESA?
 - *We wanted to be sure to capture all the options we have discussed in past meetings. We have talked about changing or adding language to statute to provide the Department with more management flexibility or clarity. Please think about these, and let us know if we have left anything off the list.*

Element G

- If item 1 is currently within the Fish and Game Commission's authority, it is already within your normal scope of work, and should not be in the wolf plan.
 - *The public may not know the scope of Department and FGC authority. Putting these items in here provides people with that information.*
- Someone less familiar with how tags are allocated may balk if you try to reduce tags with less than a 25% population decline.
 - *Currently we use a harvest model to detect population changes and set tag quotas. We can rephrase item 1 to clarify that this is standard procedure for us.*

- Item 2 needs clarification. Is it suggesting translocating elk from areas where hunters have access on private land to areas where they don't have access, so it reduces hunter take?
 - *The purpose is to enhance the overall elk population as a way to offset losses to wolves where they are preying on elk.*
- In item 6 it is important to stipulate that you will only increase take of bears or coyotes if they are actually affecting the ungulate populations, and “encourage increased take” should say “consider increased take.”
 - *We want to sustain our ungulate populations. To do that and accommodate wolves, we have to find ways to reduce non-wolf mortality of ungulates. One part of that could be to reduce the number of other ungulate predators.*

Conclusions

Because this group was able to discuss and make recommendations on all elements of the Wolf-Ungulate Interactions Strategy, Department staff suggested that no additional meetings were necessary. Any additional comments should be provided to staff by the end of the day on Friday, October 17th.

Action Items

- Department staff will incorporate the latest round of internal edits and suggestions for the Wolf-Ungulate Interactions chapter and will send to the subgroup members as soon as possible
- Department staff will consider the subgroup members' suggested changes to the Wolf-Ungulate Strategies table and incorporate as appropriate

APPENDIX A. WORKSHOP PARTICIPANTS

Name	Affiliation	Email
Stakeholders		
Marilyn Jasper	Sierra Club	marilyn.jasper@mlc.sierraclub.org
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California Department of Fish and Wildlife Staff		
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APPENDIX B – AGENDA

PROPOSED AGENDA

Wolf-Ungulate Subgroup

1-5 PM October 14, 2014

Fish and Game Commission, 1416 9th St, Suite 1320, Sacramento

Teleconference Line 877.860.3058, PC 758045#

Objectives:

- Determine points of agreement on Wolf-Ungulate Strategy
 - Confirm Wolf-Ungulate schedule moving forward
1. Introductions and Logistics (5 minutes)
 2. Updates/Housekeeping (15 minutes)
 - a. Identify Stakeholder member for update at next SWG meeting
 - b. Review, discuss, and revise September 10 meeting report
 - c. Status of Wolf-Ungulate chapter
 3. Review/Discuss Wolf-Ungulate Strategy (1 hour)
 4. BREAK (10 minutes)
 5. Discuss Wolf-Ungulate Strategy-Continued (70 minutes)
 6. Public questions (10 minutes)
 7. Discuss Action Items and Next Steps (10 minutes)
 - Action Item Review
 1. Next Steps

APPENDIX C
DRAFT PHASED WOLF-UNGULATE STRATEGY

Element		Phase 1	Phase 2	Phase 3
		Pre-wolf occupation phase		
A	Collection of data on ungulates in northern CA in advance of wolf occupation	<p>Data collection to be expanded and modified in northern California with an emphasis on elk and deer herds adjacent to Oregon. For elk this includes the Northeastern, Siskiyou, Marble Mountain, and Northcoast EMU's, and the Department will identify and prioritize elk herds (see Figure X). Deer herds in this area are the Warner Mountains, Devil's Garden, McCloud Flats, Klamath, Happy Camp, and Smith River deer herds. Data collection will continue after wolf colonization in order to detect wolf-related changes on ungulate populations where they establish and where they may likely establish. The following data will be needed to monitor ungulate populations:</p> <ol style="list-style-type: none"> 1. Biologically measurable changes in ungulate population parameters including sex ratios (deer - fawn:doe and buck:doe ratios; elk - calf:cow and bull:cow ratios); fecundity, survival; recruitment; and mortality. 2. Establish a cost-effective long-term population monitoring strategy for elk and deer of sufficient statistical power to evaluate predation effects on the populations. 3. Study mortality factors to assess the proportions and types of predation and other mortality. 4. Evaluate habitat condition and use by ungulates in combination with mortality factors to identify limiting factors. 5. Identify and map seasonal ranges and migration corridors. Identify important and/or high use ungulate areas that could be used as focused management (study) areas. (Example: deer fawning or wintering concentration areas, preferred range of limited elk populations, etc.). 6. Develop more refined ungulate density estimates based on population monitoring and habitat modeling. 		

Element		Phase 1	Phase 2	Phase 3
B	Parameters for Concluding Phase	<ul style="list-style-type: none"> Four successful breeding pairs¹ anywhere in California for two successive years² 	<ul style="list-style-type: none"> Eight successful breeding pairs anywhere in CA, for two successive years 	Indeterminate
C	Commence development of next phase when:	<ul style="list-style-type: none"> Two successful breeding pairs for two consecutive years 	<ul style="list-style-type: none"> Six successful breeding pairs for two consecutive years 	If and when warranted based on experience implementing the Plan or changes to controlling law.
D	Lethal control of wolves causing population decline of wild ungulates	<ol style="list-style-type: none"> Not allowed while federally listed Not proposed in Phase 1 	<p>Allowed when carried out by CDFW or its agent, consistent with Row D and the following criteria:</p> <ol style="list-style-type: none"> 25% or more population reduction in deer or elk herds in a five year monitoring period, or Elk calf:cow ratios fall below 20 calves:100 cows over a three year period, or Hunter success for deer or elk declines 10% over three years, or Allocated big game tags reduced below current levels in areas occupied by wolves. Restricted to wolves in packs 	To be determined in the Phase 3 development process based on wolf population and legal status, best available scientific information and experience gained during Phases 1 and 2

¹ A successful breeding pair is an adult male and adult female which produce at least two pups in a breeding season, all of which survive until December 31 of the year of their birth.

² Four successful breeding pairs explicitly means at least sixteen living wolves at the end of a calendar year. In Oregon and Washington the existing data indicates that four successful breeding pairs are correlated with a range of 45-65 wolves at years end.

Element	Phase 1	Phase 2	Phase 3	
		confirmed by CDFW to have an impact to specific ungulate populations.		
E	<p>CDFW monitoring and research shows that wolves are significantly impacting California ungulate populations. Relocate wolves having demonstrated impact to ungulate herds, to another location in California.</p> <p>Consider if wolf predation is significantly reducing, or likely to result in extirpation or significant reductions of elk or deer populations in a geographic unit or area (such as a herd unit).</p>	<p>Not allowed while federally listed.</p> <p>Not proposed in Phase 1.</p>	<p>Allowed when carried out by CDFW or its agent, consistent with Row D and the following criteria:</p> <ol style="list-style-type: none"> 1. 25% or more population reduction in deer or elk herds in a five year monitoring period, or 2. Elk calf:cow ratios fall below 20 calves:100 cows over a three year period, or 3. Allocated big game tags reduced below current levels in areas occupied by wolves. 4. Restricted to wolves in packs confirmed by CDFW to have an impact to specific ungulate populations. 	<p>To be determined in the Phase 3 development process based on wolf population and legal status, best available scientific information and experience gained during Phases 1 and 2</p>
F	<p>CDFW monitoring and research shows that wolves are significantly impacting California ungulate populations. The following actions/options outside of CDFW regulatory authority in cooperation with other</p>	<ol style="list-style-type: none"> 1. Recommend actions on public³, private and tribal lands that improve ungulate habitats such as: forage and water enhancements, restoring/enhancing meadow, aspen, and riparian habitats, management of forest openings and other early successional habitats, controlling noxious weeds, livestock grazing modification, controlling conflicts for forage and water from wild (feral) horses and burros, limiting OHV use, managing hunter harvest, and other strategies. 2. Conserve important lands as wildlife habitat through easements, acquisitions, and other appropriate methods. 3. Work with CalTrans and other agencies to reduce other mortality factors such as road kill, fence 		

³ These include but are not limited to potential cooperating land management agencies principally USDA Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service.

Element		Phase 1	Phase 2	Phase 3
	agencies may be pursued to enhance ungulate populations.		entanglement, illegal harvest, etc. 4. Petition to list an ungulate species as threatened or endangered. 5. Work through the legislative process to seek a remedy to the impact of wolves on game species of ungulates.	
G	The following actions within Fish & Game Commission authority (as recommended by CDFW) can be implemented to reduce non-wolf mortality to ungulates.		1. Reduce hunter harvest if the following occur: A. 25% or more population reduction in deer or elk herds (hunt units) in a five year monitoring period. B. Elk calf:cow ratios fall below 20 calves:100 cows over a three year period. C. Allocated big game tags reduced below current levels in areas occupied by wolves. 2. Translocate elk within California to enhance populations where potential conflicts with private landowners are minimal. 3. Encourage landowner agreements (such as Private Lands Management (PLM) or SHARE hunting opportunity). 4. List elk as threatened or endangered within a significant portion of their range. 5. Increase law enforcement presence in select areas to reduce poaching concerns on deer and elk. 6. Encourage increased take of other predators such as bears and coyotes.	