



**Meeting Report
Wolf Conservation Stakeholder Subgroup
October 2, 2014**

California Department of Fish and Wildlife
Wildlife Branch Conference Room
1812 9th St.
Sacramento, CA 95811



Photo courtesy of Bruce Bohlander

California Department of Fish and Wildlife

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1.0 Introduction

On October 2, 2014 the Wolf Conservation Subgroup of the California Wolf Stakeholder Working Group (SWG) convened in the Conference Room at CDFW's Wildlife Branch Office in Sacramento. This was the ninth meeting of this subgroup, which was established to help the California Department of Fish and Wildlife (CDFW, Department) develop a consensus-driven framework of strategies for wolf conservation and management in California.

2.0 Meeting Objectives and Mechanics

The purpose of the meeting was to continue discussion of potential topics for inclusion in a Wolf Conservation chapter in the California Wolf Plan.

Objectives of the meeting were:

- Review changes to the conservation objectives strategy
- Determine points of agreement on the conservation objectives strategy

The meeting was attended in person by the meeting facilitator, five stakeholders, and two CDFW staff, with one additional stakeholder attending via conference line. Appendix A provides a list of participants, their affiliations, and their contact information. Appendix B contains the meeting agenda.

3.0 Meeting Outputs

Updates/Housekeeping

- The Wolf Conservation chapter is still in draft. Ms. Converse is drafting the bulk of the text, and Mr. Stopher is working on the Introduction which at this point is intended to be an overview of the history of this planning effort. He is also drafting a narrative to describe the phased approach to the wolf management strategy the stakeholder groups have been discussing.
- Department staff has done some work to develop a rough estimate of a future California wolf population size. Based on the amount of suitable habitat estimated via modeling, average territory size for wolves in Idaho and Washington, and average pack size in the western U.S. the Department estimated approximately 451 wolves. Another Department estimate using ungulate biomass indices developed for other areas yielded a similar figure of 452 wolves (see Appendix C)¹. These estimates represent a potential wolf population in the future, at which

¹ Available historical information related to the distribution, abundance, and ecological role of wolves in California is nonexistent or extremely limited. The information presented here is based on studies from other locations and has

time habitat in California that is potentially suitable today will likely have declined further, which will impact the size of the wolf population. Members stressed the importance of providing adequate information in the chapter to explain how wolves in California may achieve a lower overall population due to lower ungulate densities here, possible differences in wolf diet from other areas, and different prey vulnerability from other areas due to habitat use and climate differences.

- September 16th meeting report comments: bottom of page 7 states that "...the environmental caucus thinks there is a need for further discussion before they are ready to state a position on whether it should be listed for Phase 1;" suggest clarifying that to say "whether lethal take should be considered for Phase 1." Also, some environmental groups made that statement, not the entire environmental caucus.

Review/Discuss Conservation Objectives Strategy

Since the previous meeting significant changes were made to the strategy document. Mr. Stopher listed those made in Elements A through D as follows:

- The Wolf-Livestock and Wolf Conservation strategies are now combined into one table.
- Footnote 2 was added on page 1 to define successful breeding pairs and to demonstrate the range in total population that correlates with 4 breeding pairs in Oregon and Washington.
- Proposed dates for ending phases have been removed.
- Row B was added to provide criteria for when to commence development of the next Phase of wolf management.
- Row D was edited to acknowledge the limitations that federal and state laws impose with respect to the use of lethal control, and to acknowledge other potential requirements as specified in the wolf-ungulate conflict management strategy.
- Row D was further edited in Phase 3 to reflect that at that stage of wolf recolonization the population will likely be fluctuating, and lethal control will not be allowed if the population has experienced greater than a 5% decline from the previous year.

General Comments

Subgroup members' comments and questions are listed below, with Department responses in italics.

uncertain or limited application to current and future conditions in California. This information is included as a preliminary assessment that will be revised once data specific to California has been gathered and analyzed thereby providing greater predictive value.

- We understand why this plan does not propose to delist wolves yet, but we would like to see a commitment from the Department that it could happen at some time. We see the endangered species act as a place where species go forever and we would like to it done differently for wolves.
 - *We will add it to our list of topics for discussion.*

Element A

Members requested some time to break from the group and discuss this element, after which the following comments were expressed. Department responses follow in italics.

- Environmental Caucus: We cannot support the wolf pack numbers for either Phase 1 or 2. We think the state needs a recovery plan with science-based goals and numbers for the phases developed by a panel of wolf experts.
 - *The current planning effort is not long-term recovery planning, but near-term management planning to develop a set of strategies for wolf conservation, and conflict prevention and mitigation. Further, there currently are no experts on how wolves will interact with California's prey species and habitats, and Department staff are best suited for evaluating and applying available wolf science in California. Finally, the number of breeding pairs selected to end Phase 1 are based on the actual wolf recolonization experience in Oregon, and are only intended to suggest a reexamination of management strategies.*
- Agriculture Caucus: Although these may not be the right numbers, we believe that numbers are needed to guide the end of the phases. What's more important than the numbers is what management is allowed within the phases. We're concerned about a situation where the trigger for entering the next phase is set high and producers are experiencing significant impacts before the trigger is reached.
- Ungulate Conservation Caucus: Some members of our caucus can live with these numbers, and we think there are other much more important concerns. Other members think the numbers are too high, and that lethal management of wolves for impacts to livestock or native ungulates should be allowed in all phases.
- The Wildlife Society: The TWS position on this kind of planning effort is that as a conservation strategy it is important for the Department to account for the best available science, and to consider stakeholder's interests who are most likely to be impacted by the management decisions made. As such The Wildlife Society would support the parameters provided as a reasonable step forward in this planning process.

Element B

Given the lack of consensus on Element A, discussion on Element B was skipped.

Element C

Department staff explained that the footnote to this element was largely drawn from the current mountain lion policy which was substantially revised about a year ago to provide additional guidance for the Department to use in potential public safety situations.

- Environmental Caucus: We are okay with it if you cite Section 1001, which gives the Department the authority to take animals posing a public safety risk.
- Agriculture Caucus: We are okay with this as is.
- Ungulate Conservation Caucus: Okay.

Element D – Phase 1

Discussion of this topic opened with all members present acknowledging the understanding that the Department does not have the authority to use lethal control on wolves for any reason as long as they remain federally listed. Department staff also reiterated that current state law similarly does not allow the use of lethal control of a state listed species. Further, the Department considers that lethal control during the early period of wolf recolonization in California would not be consistent with the guidance provided by Fish and Game Code Section 2061 which defines species conservation. The Department is therefore not proposing the use of lethal control during Phase 1.

- Environmental Caucus: Okay if it is clarified that lethal is not proposed because it is not allowed legally.
- Agriculture Caucus: Okay.
- Ungulate Conservation Caucus: Okay except the California Deer Association representative disagrees.
- The Wildlife Society: Okay.

Element D – Phase 2

Mr. Stopher explained that the limitations suggested in this element of a minimum wolf population increase and a maximum human-caused mortality from the previous year, are based on Fish and Game Code §2061 which defines species conservation, in combination with the acknowledgement that some regulated take may be required in some circumstances. The specific figures of 5% and 10% were derived from a model developed for European wolves (G. Chapron et al. 2003; Conservation and Control Strategies for the wolf (*Canis lupus*) in western Europe Based on Demographic Models).

- Environmental Caucus: Member 1: We think lethal control should not be allowed while the species is listed, so recovery goals should be developed, and we are disagree with pursuing statute changes to allow for the use of lethal control.
Member 2: I need more time to confer with colleagues on items 3 and 4, but I am

open to the approach, however we think that the Phase 1 trigger should be 12 breeding pairs not 4.

- Agriculture Caucus: We are concerned about the 5% and 10% requirements here because of the impacts to Element E. If there was recognition of and allowance for the need to deviate in some situations we would be okay, otherwise these need adjusting. There should be a different set of standards for managing wolves for livestock depredations.
- Ungulate Conservation Caucus: With the exception of the representative from the California Deer Association, we are okay with this.
- The Wildlife Society: From this conversation it seems it will be hard to find common ground, but the strategy proposed appears to provide for the growth of the wolf population, while addressing the concerns for a need to use lethal control. This proposal appears reasonable, and I have no suggested changes to offer.

Element D – Phase 3

- Environmental Caucus: Nothing different than what we suggested for Phase 2.
- Agriculture Caucus: Since this is the long term portion, and given the figures we've seen of 33-35% mortality that wolves can sustain, 15% seems low.
- Ungulate Conservation Caucus: Because of the lag time it takes to evaluate the effectiveness of your management, we suggest you consider increasing the timeframe to two years. For example the statewide wolf population must have decreased no more than 8% in two years, which gives more time to detect the change. Also, a statement should be made to indicate that Phase 3 is far enough in the future that it is difficult to accurately estimate what the population will look like.
- The Wildlife Society: In general the more conservative figures in Phase 2 versus Phase 3 are appropriate. Additional language to suggest adaptation based on research would be useful.

Conclusion: Because further discussion is needed, and because the Wolf Conservation and Wolf-Livestock Interactions strategies are now combined, the group decided to schedule a combined meeting of the two groups on November 14, 2014.

Action Items:

None

APPENDIX A WORKSHOP PARTICIPANTS

Name	Affiliation	Email
Stakeholders		
Noelle Cremers	California Farm Bureau	ncremers@cfbf.com
John McNerney	The Wildlife Society – Western Section	jmcnerney@cityofdavis.org
Lesia Eidman	California Woolgrowers Association	lesia@woolgrowers.org
Amaroq Weiss	Center for Biological Diversity	aweiss@biologicaldiversity.org
Rich Fletcher	Mule Deer Foundation	richfletcher@sbcglobal.net
Damon Nagami	Natural Resources Defense Council	dnagami@nrdc.org
California Department of Fish and Wildlife Staff		
Karen Converse	Environmental Scientist – Lands Program	karen.converse@wildlife.ca.gov
Mark Stopher	Senior Policy Advisor – CDFW	mark.stopher@wildlife.ca.gov

APPENDIX B
AGENDA

PROPOSED AGENDA

Conservation Objectives Subgroup

9AM-1PM October 2, 2014

1812 Ninth Street, 2nd Floor conference room, Sacramento

Teleconference Line 877.860.3058, PC 758045#

*Parking is available on the street (bring lots of quarters) or parking garages on both 10th and 11th streets between "O" and "P" streets

Objectives:

- Review Changes to the Conservation Objectives Strategy
 - Determine points of agreement on Conservation Objectives Strategy
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 16 meeting report
 3. Review/Discuss Conservation Objectives Strategy (90 minutes)
 4. BREAK (20 minutes)
 5. Discuss Conservation Objectives Strategy-Continued (90 minutes)
 6. Public questions (10 minutes)
 7. Discuss Action Items and Next Steps (10 minutes)
 - Action Item Review
 - Next Steps

Agenda items subject to change as needed. For agenda items 3 and 5, each interest group/caucus is given the opportunity to request a breakout session to discuss specific points of the strategy internally. The facilitator will coordinate breakout sessions as needed.

APPENDIX C
APPROXIMATIONS OF LONG-TERM CALIFORNIA WOLF POPULATION*

Prey-based estimate of wolf population in northern California.

Species	Estimate per 1,000 km ²				Total Estimate			
	Ungulate Pop. Estimates ²	Biomass Index ³	Mean BMI per wolf ⁴	Estimated Wolf Pop.	Ungulate Pop. Estimates	Biomass index	Mean BMI per wolf	Estimated Wolf Pop.
Deer	1,524	1,824	506	3.6	210,161	228,461	506	452
Elk	100				6,100			

Spatially-based estimate of wolf population in northern California.

Area of wolf habitat from CA suitable wolf habitat model (not including Sierra Nevada portion; 23,200 mi²) ÷ Average wolf territory size as used by Washington Dept. of Fish and Wildlife (360 mi²) = Number of wolf territories in northern California (64.4) X Average wolf pack size in Montana (7) = Average northern California wolf population size (451).

$$23,200 \text{ mi}^2 \div 360 \text{ mi}^2 = 64.4 \text{ pack territories} \times 7 \text{ wolves per pack} = \mathbf{451 \text{ wolves}}$$

*Available historical information related to the distribution, abundance, and ecological role of wolves in California is nonexistent or extremely limited. The information presented here is based on studies from other locations and has uncertain or limited application to current and future conditions in California. This information is included as a preliminary assessment that will be revised once data specific to California has been gathered and analyzed thereby providing greater predictive value.

² Ungulate population estimates are for the B, C, and X deer zones, and the Northeastern, Siskiyou, Marble Mountain, and North Coast elk units.

³ This BMI is estimated by adding the elk population / 1000 km² multiplied by 3 to the deer population / 1000 km²; this is done to account for the biomass of elk as 3 times that of deer.

⁴ The mean BMI per wolf used in this estimate was an average of two studies in northern Wisconsin (Wydeven et al. 1995) and north-central Minnesota (Berg and Kuehn 1980) where white-tailed deer are the primary prey for wolves. The deer densities in those locations are 7,200 and 6,170 per 1,000 km² respectively (Fuller et al. 2003).

APPENDIX D
CDFW PHASED WOLF CONSERVATION AND LIVESTOCK
CONFLICT STRATEGY

	Element/Phase	Phase 1	Phase 2	Phase 3
A	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
B	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.
C	Lethal control for human safety ³	After Federal delisting, allowed when authorized by CDFW and carried out by CDFW or its agent. No limit on how many wolves can be removed for public safety.		
D	Use of lethal control for management. Allowed when authorized by CDFW in Phases 2 and 3, if legal to do so, and carried out by CDFW or its agent. Allowed consistent with required preliminary measures.	<ol style="list-style-type: none"> Not allowed while federally listed Not proposed in Phase 1 	<ol style="list-style-type: none"> Not allowed while federally listed If allowed under State law, managed consistent with the following criteria Allowed if the most recent annual statewide wolf population estimate increased by at least 5% compared to the 	<ol style="list-style-type: none"> Not allowed while federally listed If allowed under State law, managed consistent with the following criteria Allowed if the most recent annual statewide wolf population estimate decreased by no more than 5% compared to

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.

³ This is anticipated to be an extremely rare occurrence. Will be implemented when a wolf demonstrates aggressive action that has resulted in physical contact with a human; or a wolf exhibits an immediate threat to public health and safety, given the totality of the circumstances. Immediate threat refers to a wolf that exhibits one or more aggressive behaviors directed toward a person that is not reasonably believed to be due to the presence of responders. Public safety includes situations where a wolf remains a threat despite efforts to allow or encourage it through active means to leave the area.

	Element/Phase	Phase 1	Phase 2	Phase 3
			preceding calendar year 4. Allowed to the extent that total human caused mortality ⁴ in any year does not exceed 10% of the estimate of the statewide wolf population at the end of the preceding calendar year 5. Subject to additional requirements of the wolf-livestock conflict management strategy 6. Subject to additional requirements of the wolf-ungulate conflict management strategy	the preceding calendar year 4. Allowed to the extent that total human caused mortality in any year does not exceed 15% of the estimate of the statewide wolf population at the end of the preceding calendar year 5. Subject to additional requirements of the wolf-livestock conflict management strategy, 6. Subject to additional requirements of the wolf-ungulate conflict management strategy
E	Lethal control of wolves depredating livestock	1. Not allowed while federally listed 2. Not proposed in Phase 1	Allowed when carried out by CDFW or its agent, consistent with Row D and the following criteria: 1. There have been at least two separate incidents of livestock depredation confirmed	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

⁴ Human caused mortality includes public safety take, poaching, vehicle accidents, accidental death from trapping or hunting and any authorized lethal take for management.

	Element/Phase	Phase 1	Phase 2	Phase 3
			by CDFW in a six-month period by the same wolf or pack 2. Non-lethal deterrent methods recommended by CDFW to the producer have been implemented after the first depredation incident 3. Restricted to wolves in packs confirmed by CDFW to have depredated livestock 4. The livestock producer has applied for a WDPCA.	
F	Non-injurious harassment, including: ⁵ <ul style="list-style-type: none"> Air horns or whistles Firearm discharge aimed in a safe direction at an angle of 45° or more away from wolves Cracker shells Shouting Throwing objects 	Same for all three phases <ul style="list-style-type: none"> Allowed when wolves are within 100 yards of a residential or agricultural structure (i.e. barns, shops, storage sheds or lambing sheds) or within 0.25 mile of livestock. Harassment is not allowed within 0.25 mile of known den or rendezvous sites. CDFW will advise affected livestock producers of these locations. 		

Comment [MS1]: Agriculture caucus suggested expanding this list. Specific suggestions requested. Do not suggest: fences, roads, powerlines, irrigation or drainage facilities.

⁵ Additional methods may become available during implementation of this plan

	Element/Phase	Phase 1	Phase 2	Phase 3
	<ul style="list-style-type: none"> • Motion activated lights or sprinklers • Using deterrent sprays • Radio activated guard boxes Chasing wolves on foot or horseback for no more than 0.5 mile			
G	Injurious harassment ⁶	<ul style="list-style-type: none"> • Not allowed while federally listed • Not proposed in Phase 1 	<ul style="list-style-type: none"> • Allowed when specifically authorized by CDFW, subject to criteria for when, where and how this may be implemented. 	<ul style="list-style-type: none"> • Same as Phase 2
H	Non-lethal livestock depredation assistance by CDFW	Same for all phases <ol style="list-style-type: none"> 1. Provide technical information (e.g. telephone and email assistance, web access to information, local public meetings). 2. On-site evaluations and recommendations if requested by livestock producers. 3. Focused disclosure when GPS collared wolves are detected within a geographic area (i.e. polygon) developed for a specific livestock producer. An information sharing agreement between CDFW and the livestock producer must be in place for this to occur. A commitment to not disclose provided information will be required. 4. Short-term loan of equipment (e.g. fladry, RAG box, noisemakers). Individual agreements will set terms of the loan. 5. Technical assistance, funding and approval for Wolf Damage Prevention Cooperative Agreements. 		
I	CDFW Wolf Damage	Same for all phases		

⁶ Defined as any harassment that causes any object to physically contact a wolf, including firearms discharging nonlethal ammunition (e.g. rubber bullets or bean bags) or using motorized equipment (e.g. an all-terrain vehicle, motorcycle, or four wheel drive vehicle) to follow or pursue a wolf.

	Element/Phase	Phase 1	Phase 2	Phase 3
	Prevention Cooperative Agreements (WDPCA) ⁷ with livestock producers	<ul style="list-style-type: none"> • Implemented in priority counties with sympatric distributions of wolves and livestock. List of priority counties to be updated as needed, but at least annually by CDFW. • CDFW shall withhold 10% of available funding, on an annual basis, from regular allocation, as an emergency response fund. • Cost share (i.e. 50%) funding up to \$10,000 annually by State for CDFW approved plans⁸ • Plans are valid for 12 month period from time of approval and may be renewed or amended. • CDFW may cap the funds to be allocated by county. • On-site evaluation by CDFW required. • Livestock producer must report on implementation and effectiveness of the actions. • An evaluation by CDFW is required prior to amending or renewing an Agreement. 		
J	Payments to livestock producers for wolf presence	<p>Same for all phases</p> <ol style="list-style-type: none"> 1. Implemented in priority counties with sympatric distributions of wolves and livestock. List of priority counties to be updated as needed, but at least annually by CDFW. 2. Applications by livestock producers will be scored based on a formula which accounts for wolf presence, number of livestock exposed to wolves, and implementation of non-lethal deterrents by the livestock producer. 3. Annual payments for wolf presence will be reduced by any amounts paid in compensation for confirmed depredation by wolves on livestock. 		
K	State managed livestock depredation compensation program	<p>Same for all phases</p> <ol style="list-style-type: none"> 1. Through CA Victim’s Compensation and Government Claims Board with supporting documentation by CDFW 2. Livestock producer must notify CDFW within 24 hours, or as soon as possible, of discovery of dead or injured livestock 3. Protect the carcass(es) and site and provide access to CDFW or its agent to investigate 4. File a claim within 6 months of CDFW determination of confirmed or probable wolf depredation 		

⁷ Potential Cooperating entities include: County Agricultural Commissioners, USDA Wildlife Services, University of California Cooperative Extension, Natural Resources Conservation Service

⁸ Funding priority will be established by relative scoring of all plans received during the designated application period which exceed a previously established minimum acceptable score.

California Department of Fish and Wildlife
 Phased Wolf Conservation and Livestock Conflict Strategy
 09242014
 Draft for Discussion with members of the stakeholder working groups

	Element/Phase	Phase 1	Phase 2	Phase 3
		5. 100% of fair market value for confirmed ⁹ 6. 50% for probable 7. After two confirmed depredation incidents in any twelve month period, future compensation for the affected producer is available only if that producer has applied for a Wolf Damage Prevention Cooperative Agreement with CDFW and the application is still active or has been approved.		

⁹ Process claims in the chronological order received and pay claims on a July 1-June 30 fiscal year basis until annual funds are exhausted.