Meeting Report
Wolf-Livestock and Wolf Conservation Stakeholder Subgroups
November 4, 2014

CA Dept of Parks and Recreation Conference Room
1416 9th Street, Room 1412
Sacramento, CA 95814

California Department of Fish and Wildlife

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1.0 Introduction

On November 4, 2014 the Wolf-Livestock Interactions and Wolf Conservation Subgroups convened together in conference room 1412 of the California Department of Parks and Recreation, in the Resources Agency building in Sacramento. This was the first combined meeting of these subgroups, and was intended to assist the California Department of Fish and Wildlife (CDFW, Department) by providing recommendations on a consensus-driven framework of management strategies that are consistent with wolf conservation, and that effectively deal with potential wolf impacts on California's livestock.

2.0 Meeting Objectives and Mechanics

The purpose of the meeting was to continue building consensus through discussion of potential strategies that are consistent with wolf conservation, for inclusion in a Wolf-Livestock Interactions chapter in the California Wolf Plan (Plan).

Objectives of the meeting as initially planned were:

- Discuss recent changes to the Conservation and Livestock strategies
- Deliver final stakeholder comments on Conservation and Livestock strategies

The meeting was attended in person by the meeting facilitator Mr. Sam Magill, nine stakeholders, three CDFW staff, and one member of the public. In addition, two stakeholders attended via conference line. Appendix A provides a list of participants, their affiliations, and their contact information. Appendix B contains the meeting agenda, and Appendix C contains the current version of the Phased Wolf Conservation and Livestock Conflict Strategy document. Appendix D contains documents provided by stakeholders that suggest additions to the strategy, non-lethal/coexistence measures, and draft criteria for providing wolf location information to producers.

3.0 Meeting Outputs

Updates/Housekeeping

- Mr. Mark Rockwell will provide a summary of today's meeting to the larger Stakeholder Working Group (SWG) at its next meeting
- The SWG meeting scheduled for November 18th has been postponed until December 18th. This will allow the Department time to consult with counsel on any significant issues still pending with respect to the Plan, and to wrap up completion of the remaining chapters. Department staff will attempt to provide the draft Plan to

the SWG by the end of November, which should give members sufficient time to read through and comment before the December 18th SWG meeting.

Review/Discuss Draft Phased Wolf Conservation and Livestock Conflict Strategies

Department staff provided an overview of changes to the strategies document since its last iteration. These included:

- Table was rearranged to reflect a progression of depredation management actions from less to more intrusive.
- Initiate a status review process in Element B, Phase 2.
- Additional residential and agricultural structures listed for Element C.
- Language in Element D to reflect a proposal to develop local collaborative proactive efforts toward non-lethal livestock depredation assistance programs.
- Inclusion in Element G of requirements that depredation investigators receive training and approval by the Department, and that protocols for investigating depredations are established.
- Element J – Phase 2 was highlighted as a reminder to craft language that reflects a commitment that any lethal take of wolves for depredations should be focused and thoughtful.
- Element K – Phase 2 contains some edits reflective of suggestions at the prior meeting, including changing the number of depredation incidents that should be considered chronic, adjusting language with respect to how far along a producer is in implementing nonlethal measures if/when a depredation occurs, and whether or a producer should be required to apply for a cooperative agreement with the Department.

Next a discussion of some of the elements contained in the strategy document ensued. Element A lists the number of breeding pairs that constitutes conclusion of a phase, and members expressed their views on why the figures provided by the Department were not appropriate. Some members considered four breeding pairs too high because this prevents producers from utilizing lethal control as a tool against depredations, while those who considered them too low believe that the figures do not reflect a scientifically-based projection of carrying capacity in the state, and lethal take should not be an option as long as wolves are a listed species. Members on both sides of the issue expressed that it is difficult for them to report the proposed figures to their respective boards and constituencies.

Department staff explained that the number of breeding pairs in Oregon and Washington each, after approximately 14 years of documenting wolves in those states, would have just met the proposed four successful pairs for 2 years at the end of 2013. The

Department suspects that California's experience will likely occur at a slower pace because wolf immigration will take place from one source population, whereas Oregon and Washington have at least two sources each, as well as larger ungulate populations than in California. Staff reiterated that the elements in the planning strategy are not related to any recovery or delisting strategy for wolves, and further pointed to Element J, which provides minimum population growth guidelines to the Department before any lethal control measures can be employed. Finally, staff suggested that some clarification of the Department's plans with respect to initiating a science-based assessment of ungulate populations in California will be available with the release of the draft plan at the end of the month. The Department will be commencing such assessments early next year and will continue as wolves arrive, with the ultimate goal of developing an estimate of California's carrying capacity for wolves.

Review/Discuss Stakeholder Produced Documents on Nonlethal Coexistence Measures, Location Information Distribution, and Lethal Control Criteria

After a break the group reconvened to discuss four documents produced by stakeholders. Because the documents were distributed just the previous day, Department staff asked the primary authors to provide an overview of each, and other members to provide what feedback they could today, with more in-depth comments to be sent to the authors in track changes. Summaries provided by members are listed below (in italics):

CDFW Non-lethal/Co-existence Measures to Minimize Wolf-Livestock Conflict

The context for this document is that we wish to prevent wolf-livestock conflict as much as possible. We believe that the more robust the nonlethal program is, and the more effectively nonlethal tools are implemented, the greater the reduction in conflict will be. This document is an attempt to categorize what different tools are available, how they were designed to be used, and why they work. It is meant to provide a robust description of non-lethal tools and their intent, and to stress that it is important for landowners to document incidents to help the Department determine what is and is not effective in different situations. We then provided language for how to incorporate these into the strategies matrix.

<u>Comments on this document included:</u>

- Requiring the use of nonlethal methods before a producer can use harassment may be unreasonable in some cases. If it's early in wolf reestablishment and a producer is unaware of the presence of wolves, s/he will not be able to chase off an offending animal if s/he has not been implementing nonlethal methods.
- Some of these may not be practical on the ground. For example, if a producer has had a depredation, and has to protect the carcass until CDFW can investigate, but

in the interim the wolf returns, can the producer be in trouble for failing to dispose of the carcass? We also need to help producers deal with carcass removal issues when they are in challenging locations.

Draft Criteria – Location Information Distribution on Wolves

This document is intended to provide guidance on distributing wolf location information to producers, while addressing concerns about inappropriate information sharing. There have been poaching incidents in Oregon that were likely related to the information-sharing program there. We feel this information should be provided on a need-to-know basis to producers who need it to implement appropriate nonlethal methods, so we drafted this document to provide guidance on what qualifies a producer to receive the information, and what penalties could be put in place for those who violate the confidentiality of the information.

Comments on this document included:

- We don't want to set up a "gotcha" situation for producers. The reality is that people in these communities talk. If someone is apprised that wolves are in the vicinity, they will want to let their neighbors know so they can protect their herds as well. Further, people will infer the wolf presence by seeing their neighbors install fladry. Let's not set people up for failure.
- What if we stipulated no electronic sharing of the information?

Department staff provided additional commentary. With respect to the violations portion, this may further challenge an already strained perception by many livestock producers toward the Department. While we understand the concerns about distributing information on wolf locations, we have to consider that we are asking producers to participate in a voluntary program. Anticipating abuses in advance may make engaging producers in the program even more difficult. On another note, we need to be cognizant of private property rights. Too much information or information that is too detailed going out could lead to unauthorized access of private property by individuals to look for wolves either to view them or to harm them.

Additional Criteria for Lethal Control of Wolves to Address Chronic Depredation

This document provides guidance on the use of lethal control in Phases 2 and 3 for chronic depredation of livestock. Much of this was taken from what Oregon has put into their rules there. It is not intended to replace Element J in the strategy document. Rather, we suggest that it be referenced in Element J, Item 6, under Phase 2, and the language contained in it should occur elsewhere in the plan. This document differs from the strategy matrix in terms of how many instances and over what time period constitutes chronic depredation. It also differs from Oregon's 4 incidents over 6 months, because

Oregon's approach does not account for the fact that livestock are moved around, and a nonlethal strategy that's appropriate in one location may not be appropriate in the new location. It also doesn't account for the difference in vulnerability of calves as they surpass 200 lbs. in size. Because the effectiveness of nonlethal measures changes over a shorter timeframe, it made sense to shorten the timeframe over which depredation incidents are counted. Finally, our intent is not to put us on a path toward allowing lethal control, our intent is to minimize conflicts. Figures from Oregon demonstrate that as the wolf population grew in size, the number of conflicts levelled off.

Comments on this document included:

- Since the time Oregon began posting in 2011, there has never been 5 incidents in 4 months, yet they've had 24 confirmed depredations by the Imnaha pack, which can be defined as chronic behavior.

Next Steps

The group decided that it would be of value to convene a follow-up meeting to further discuss these documents after all members have had a chance to read them over thoroughly, and provide comments to the authors in track-changes format. Mr. Mark Rockwell will accept comments on the "Non-Lethal/Coexistence," and "Location Information" documents, and Ms. Karin Vardaman will accept comments on the "Additional Criteria for Lethal Management" document. They will present them for further discussion at the next meeting, scheduled for November 18th from 10am to 2pm.

Action Items

- Comments on the Criteria for Lethal Control are due to Ms. Vardaman by close of business (COB) November 12. Ms. Vardaman will compile comments and send them to the facilitator for distribution to the group no later than COB November 16.
- Comments on the "Non-Lethal/Co-Existence" and "Location Information" documents are due to Mr. Rockwell by COB November 12. Mr. Rockwell will compile comments and send them to the facilitator for distribution to the group no later than COB November 16.
- CDFW staff will update the strategy matrix based on the discussion and circulate in advance of the meeting on November 18th.

APPENDIX A
WORKSHOP PARTICIPANTS

Name	Affiliation	Email
Stakeholders		
Noelle Cremers	California Farm Bureau	ncremers@cfbf.com
Mark Rockwell	Endangered Species Coalition	mrockwell@endangered.org
Lesa Eidman	California Woolgrowers Association	lesa@woolgrowers.org
Amaroq Weiss	Center for Biological Diversity	aweiss@biologicaldiversity.org
Kirk Wilbur	CA Cattlemen's Association	kirk@calcattlemen.org
Kim Delfino	Defenders of Wildlife	kdelfino@defenders.org
Karin Vardaman	CA Wolf Center	karin.vardaman@californiawolfcenter.org
Robert Timm	UC Agriculture and Natural Resources	rmtimm@ucanr.edu
Jerry Springer	CA Deer Association	jerry@westernhunter.com
John Mc Nerney	The Wildlife Society – Western Section	jmcnerney@cityofdavis.org
Damon Nagami	Natural Resources Defense Council	dnagami@nrdc.org
California Department of Fish and Wildlife Staff		
Karen Kovacs	Wildlife Program Manager – Region 1	karen.kovacs@wildlife.ca.gov
Karen Converse	Environmental Scientist – Lands Program	karen.converse@wildlife.ca.gov
Mark Stopher	Senior Policy Advisor	mark.stopher@wildlife.ca.gov

PUBLIC PARTICIPANTS AND COMMENTS

Name	Affiliation	Email
Legislative Representatives and Public		
Gary Rynearson	Green Diamond Resource Co. and CA Forestry Association	grynearson@greendiamond.com

I represent the timber industry where wolves are likely to occur. We'd like to have input on location information discussion. When we go to harvest we have to submit CEQA documents for potential impacts that have full public disclosure – that will be part of that document. The reason I'm here is we are trying to understand what the protection standards are within CEQA and CESA for the dens and distances around dens on the timbered portion of the species' range.

APPENDIX B – AGENDA

PROPOSED AGENDA

Combined Wolf-Livestock and Conservation Subgroups
9 AM-1 PM November 4, 2014
1416 9th St, Room 1412, Sacramento
Teleconference Line 877.860.3058, PC 758045#

Objectives:

- Discuss recent changes to the Conservation and Livestock Strategies
- Deliver final stakeholder comments on Conservation and Livestock Strategies*

1. Introductions and Logistics (5 minutes)

2. Updates/Housekeeping (15 minutes)
    a. Identify Stakeholder member for update at next SWG meeting
    b. Status of Plan release

3. Review/Discuss Livestock/Conservation Strategy (1 hour)

4. BREAK (10 minutes)

5. Discuss Livestock/Conservation-Continued (70 minutes)

6. Public questions (10 minutes)

7. Discuss Action Items and Next Steps (10 minutes)
    - Action Item Review
    - Next Steps

***NOTE: This is the last scheduled meeting of both the Conservation and Livestock Subgroups. 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
DRAFT PHASED WOLF CONSERVATION AND LIVESTOCK CONFLICT STRATEGIES

	Element/Phase	Phase 1	Phase 2	Phase 3
A	Parameters for Concluding Phase	• Four successful breeding pairs[1] anywhere in California for two successive years[2]	• Eight successful breeding pairs anywhere in CA, for two successive years	Indeterminate, based on status review initiated in Phase 2
B	Commence development of next phase when:	• Two successful breeding pairs for two consecutive years	• Six successful breeding pairs for two consecutive years • CDFW will conduct status review to examine CA wolf populations, prospects for the future of wolves in CA, and report to the Fish and Game Commission.	If and when warranted based on experience implementing the Plan or changes to controlling law.
C	Non-injurious harassment, including:[3] • Air horns or whistles • Firearm discharge aimed in a safe direction at an angle of 45° or more away from wolves • Cracker shells	Same for all three phases • Allowed when wolves are within 100 yards of a residential (e.g., homes and garages), agricultural structures (e.g. barns, shops, storage sheds, ~~or~~ lambing sheds, corrals, pens, other livestock confinement facilities, cages); commercial facilities including waste management sites, campsites 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.		

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[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. These numbers are not intended to have meaning for CESA listing status.

[3] Additional methods may become available during implementation of this plan

	Element/Phase	Phase 1	Phase 2	Phase 3
	• Shouting • Throwing objects • 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			
D	Non-lethal livestock depredation assistance by CDFW	Same for all phases (begin with proactive local collaboration, suggestions requested from members) 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.		
E	CDFW Wolf Damage Prevention Cooperative Agreements (WDPCA)[4] with livestock producers	Same for all phases • 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		

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

	Element/Phase	Phase 1	Phase 2	Phase 3
		emergency response fund. • Cost share (i.e. 50%) funding up to $10,000 annually by State for CDFW approved plans[5] • 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.		
F	Payments to livestock producers for wolf presence	Same for all phases 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.		
G	State managed livestock depredation compensation program	Same for all phases 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. Any investigator must have been trained and approved by CDFW prior to responding. ~~3.~~5. Any investigation will follow established protocols and provide substantive documentation to support any determination. ~~4.~~6. File a claim within 6 months of CDFW determination of confirmed or probable wolf depredation ~~5.~~7. 100% of fair market value for confirmed[6]		

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[5] 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.

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

	Element/Phase	Phase 1	Phase 2	Phase 3
		~~6.~~8. 50% for probable ~~7.~~9. 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.		
H	Injurious harassment[7]	1. Not allowed while federally listed 2. Not proposed in Phase 1	1. Allowed when specifically authorized by CDFW, subject to criteria for when, where and how this may be implemented.	1. Same as Phase 2
I	Lethal control for human safety[8]	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.		
J	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.	1. Not allowed while federally listed 2. Not proposed in Phase 1 3. Not currently allowed under State law	1. Not allowed while federally listed 2. If allowed under State law, managed consistent with the following criteria 3. Allowed if the most recent annual statewide wolf population estimate increased by at least 5%	1. Not allowed while federally listed 2. If allowed under State law, managed consistent with the following criteria 3. Allowed if the most recent annual statewide wolf population estimate decreased by no more

[7] 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.

[8] 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.

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	Element/Phase	Phase 1	Phase 2	Phase 3
			compared to the preceding calendar year 4. Allowed to the extent that total human caused mortality[9] in any year does not exceed 10% of the estimate of the statewide wolf population at the end of the preceding calendar year 5. Any lethal take shall be designed by CDFW to accomplish the specific intended purpose while avoiding or minimizing the potential population effects on wolves in CA. 6. Subject to additional requirements of the wolf-livestock conflict management strategy 7. Subject to additional requirements of the wolf-ungulate conflict management strategy	than 5% compared to 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
K	Lethal control of wolves	1. Not allowed while federally	Allowed when carried out by	To be determined in the

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

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	Element/Phase	Phase 1	Phase 2	Phase 3
	depredating livestock	listed 2. Not proposed in Phase 1	CDFW or its agent, consistent with Row J and the following criteria: 1. There have been at least two (three?) separate incidents of livestock depredation (i.e. death or injury) confirmed by CDFW in a six (other number?)-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 are being implemented or the producer is working toward prompt implementation 3. Restricted to wolves in packs confirmed by CDFW to have depredated livestock 4. ~~The livestock producer has applied for a WDPCA.~~	Phase 3 development process based on wolf population and legal status, best available scientific information and experience gained during Phases 1 and 2

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APPENDIX D
STAKEHOLDER PRODUCED DOCUMENTS

Row E – Additional Criteria, in Phase II and III for Lethal Control of Wolves to Address Chronic Livestock Depredation

Lethal take to address chronic livestock depredation. CDFW may authorize its personnel or authorized agents to use lethal force on a wolf or wolves it reasonably believes are responsible for chronic depredation upon livestock where each of the conditions in sections (1) through (6) of this rule is satisfied. CDFW shall limit lethal force to the wolf or wolves it deems necessary to address the chronic depredation situation.

Conditions for Lethal Take by CDFW. CDFW's discretionary authority for use of lethal force pursuant to this rule may be exercised if CDFW:

1. Designates an Area of Known Wolf Activity (AKWA) and upon designation timely coordinates with potentially affected livestock producers to provide information about the California Wolf Plan, wolf behavior/management/conservation, how to document and report wolf activity to CDFW including livestock depredations, nonlethal measures/ incentives /assistance for minimizing conflicts between wolves and livestock/domestic animals in the AKWA.

2. CDFW confirms an incident of depredation by a wolf or wolves.

3. Within 14 days of CDFW's confirmation of first wolf depredation incident, designates an Area of Depredating Wolves (ADW).

4. Concurrent with designation of ADW, prepares and publicly discloses area-specific wolf-livestock conflict-deterrence plan in coordination with potentially affected parties that identify appropriate non-lethal measures most likely to be effective for the particular circumstances.

5. Confirms a total of at least 5 separate qualifying incidents of livestock depredation on separate days within the previous 3 months by the same wolf or wolves.

6. Each of the documented depredation incidents has resulted in livestock mortality or injury.

7. Issues and makes publicly-available, prior to exercise of lethal force, written determination by CDFW Director or their designee to use lethal force to address specified situation of chronic depredation, with supported findings that (a) criteria (1)-(6) above and (8)-(13) below have been met, (b) livestock producers in ADW have worked to reduce wolf-livestock conflicts and are in compliance with wolf protection laws and conditions of any harassment or take permits, (c) the situation of depredation by wolves on livestock in ADW is likely to remain chronic despite use of additional non-lethal conflict deterrence measures and (d) wolf or wolves identified by CDFW for removal are those which CDFW finds to be associated with the qualifying depredations and CDFW finds that their removal will decrease risk of chronic depredation in ADW.

8. **Qualifying Contingencies and Counting Incidents.** An incident of depredation is a single event resulting in the injury or death of one or more lawfully present livestock that is reported to CDFW for investigation and, upon investigation by CDFW or its agent(s), CDFW confirms to have been caused by a wolf or group of wolves.

A qualifying incident of depredation is a confirmed incident of depredation for purposes of this rule only if:

A. If the depredation is outside an AKWA or ADW, only the first confirmed depredation by a wolf or wolves counts as a qualifying depredation. As soon as a depredation by a wolf or wolves outside of an AKWA or ADW is confirmed by CDFW, the agency must immediately designate an ADW and an AKWA and take the steps described in (1)-(4) above. If additional depredations occur outside the AKWA or ADW before the agency has acted pursuant to (1)-(4), these subsequent depredations will not count as qualifying depredations.

B. If the depredation is within an AKWA or within an ADW, the landowner or lawful occupant has, at least 7 days prior to the depredation removed, treated or disposed of all intentionally placed, known or reasonably accessible unnatural attractants such as bone or carcass piles or disposal sites; and prior to and on day of depredation incident been using non-lethal measures CDFW deems appropriate to protect the specific livestock operation there.

C. After the first depredation incident, the livestock producer has applied for or already has in place a Wolf Depredation Prevention Cooperative Agreement (WDPCA).

9. **Human Presence.** Human presence, when used as non-lethal measures, is presence that CDFW could reasonably expect to deter wolf-livestock conflict under the circumstances and if it occurs at proximate time prior to and in an area proximate to a confirmed depredation per CDFW and indicates timely response to wolf location information in situations of potential wolf-livestock conflict.

10. **Transparency and Public Disclosure.** Prior to using lethal force to address chronic wolf depredation, and with adequate notice to the public, CDFW shall document and make publicly available on at least its website (a) the determinations and supported findings referenced in section (7) above (b) but with any personal information of landowners, lawful occupants or other relevant individuals redacted from public disclosure.

11. **Duration of Chronic Depredation Lethal Take Authority.** Chronic depredation lethal take authority expires (a) when wolf or wolves identified for lethal removal have been removed by CDFW; (b) 45 days after issuance of the take authority unless within that time period another qualifying depredation incident occurs by same wolf or wolves identified for lethal removal and non-lethal methods have continued to have been implemented; or (c) if CDFW determines wolf or wolves identified for lethal removal have left the ADW for more than just a short-term or seasonal movement outside the area's boundary.

CDFW Non-Lethal/Co-existence Measures to Minimize Wolf-Livestock Conflict

The purpose of co-existence/non-lethal strategies is to prevent, reduce or eliminate livestock-wolf conflicts. Awareness of all of the methods, tools and strategies, how to implement them, and effectively doing so are all essential to best ensure success in reducing/eliminating wolf-livestock conflicts. It is the goal of this section to inform regarding the various methods, tools and strategies, and to provide guidance in the use of these techniques, based on experience in ranching communities in other states. That said, specific face-to-face training is the best way to learn, understand and then apply these measures in the field. It is the intent of the CDFW to provide opportunities for ranchers to have access to this face-to-face training in each county where wolves are likely to be present. The best outcome is no conflicts, both for livestock producers and wolves. Knowledgeable and diligent application of these strategies can minimize or eliminate conflicts.

The following is a list of non-lethal or preventative measures which are intended to help landowners or livestock owners minimize the risk of wolf predation on livestock. These measures should be required before other, more harmful measures can be applied (Yet to be determined). While ongoing research may identify new, additional measures not listed here, the following is a guide for non-lethal measures which are currently known to be the most effective in different circumstances.

CDFW may periodically update this list based on new research, information, and experience in working with wolves, landowners, and situations of wolf-livestock conflict.

Eliminating Attractants – Bone Piles, Carcass Disposal Sites, or Other Known Carcasses/attractants

Application: General Removal: Wolves and many predators are attracted to dead animals and the presence of a single carcass can have the effect of attracting and keeping wolves in areas of livestock. Wolves have a highly-developed sense of smell, and are attracted to dead animals even if that animal is many miles away from known wolf

locations. When wolves become used to an easily-attained food source they may return to that area, which increases the risk of depredation. As a general practice, and specific to reduced wolf habituation, carcasses should be removed as quickly as possible. Removing dead or diseased livestock is a very important way to reduce conflicts.

Description and Intent: The physical removal or treatment of dead or diseased livestock greatly reduces the opportunity for conflicts. Removal may occur by hauling carcasses to disposal in a landfill or other appropriate location, or by burying in some situations (see Considerations and Limitations below). In situations where removal or burying is not an option, treatment of carcasses may include liming, covering up the carcass, or limiting access to the carcass via fladry or temporary predator-resistant fences. (We should consider if there is any way Wildlife Services or other public agencies could help in the removal. In the Blackfoot valley in Montana, FWS provides truck hauling from pick-up points 2X weekly)

Regulatory Implications: Unknown at this time.

Documentation: Landowners or livestock owners should document all carcass removal or treatment actions, and final disposition of carcass. All documentation should include date(s) of actions taken.

Appropriate Season & Area: Year-round in all areas where possible.

Considerations and Limitations: Not all carcasses can be physically removed due to terrain or the condition of the carcass. In situations where a carcass cannot be removed, other options to discourage wolf use of these carcasses such as covering the carcass with lime, burying the carcass with lime, or limiting access to the carcass via fladry or barrier fencing should be considered. However, some of these measures must comply with other land-use policies (i.e., U.S. Forest Service, BLM or State of California) and may not be allowed in certain situations. In addition, some landfills may not be authorized to accept dead animal carcasses.

In some situations, weather conditions (i.e., frozen, snow covered, or extreme wet/muddy) may prevent the removal of carcasses. When this occurs, carcasses should be removed as soon as possible, and temporary barrier fencing or fladry to prevent access may be appropriate as an interim measure.

Carcasses of natural prey species (i.e., deer and elk) are not generally considered unnatural attractants. However, if livestock are grazing in areas of dead natural prey species, those species should be removed, or livestock moved to locations away far away from those dead carcasses. In some cases wildlife carcass disposal sites may be identified as attractants and these should also be removed by the appropriate entity, or livestock grazing in those areas prohibited.

Removal of injured or ill livestock: Removal of sick or injured non-ambulatory livestock from pastures and open range in areas where wolves are present is important to prevent attraction of wolves to these particularly vulnerable animals. Livestock owners and their agents should be on the lookout for sick or injured animals to provide immediate veterinary care if the illness or injury is minor or to immediately remove the sick or injured animal from the grazing location if it is non-ambulatory.

Human Presence as a Non-Lethal Measure

Description and Intent: The underlying concept of increasing human presence as a deterrent to wolf depredation is that wolves tend to avoid humans. When human presence occurs in an area of simultaneous use by wolves and livestock, it is expected that wolves will move away and depredation will be reduced or eliminated. Human actions are often conducted with the primary intent of reducing or deterring wolf or other predator depredation, while at other times human presence may be passive or secondary to other ranching operations (e.g., all-night

presence during calving, while wolves are in the area, would be expected to minimize wolf-livestock conflict).

Regulatory Implication: Unknown at this time for Calif. In Oregon, here is the rule: The 2013 rule (OAR 635-110-0010) requires that human presence, when used as a non-lethal measure, must; 1) occur at a proximate time prior to and in an area proximate to an ODFW confirmed depredation, and 2) indicates a timely response to wolf location information (such as text messages or other knowledge that wolves are in an area of potential conflict). By rule, human presence is defined as presence which could reasonably be expected to deter wolf-livestock conflict under the circumstances.

Application: Two approaches to using human presence as a deterrent are: 1) Regular or planned presence using range riders, herders, or other planned human guarding of livestock, and 2) Presence in response to alerts (i.e., texts, tracks, observations of wolf activity), wolf location information (not yet determined), or during susceptible depredation times (i.e., night, when wolves are known to be present in areas of livestock, etc.). Monitoring for signs of wolf activity, though not considered a non-lethal measure by itself, is important to help prioritize effective wolf-deterring presence. When provided on a limited, need-to-know basis, the locations of known wolf dens and rendezvous sites, as well as general wolf pack habits, can be helpful to specific livestock owners in that vicinity in keeping livestock away from conflicts.

Regular or Planned Human Presence – Range riders: Generally considered to be regular or sometimes continuous presence for the specific purpose of protecting livestock, range riders should patrol areas with wolves and livestock at hours when wolves are most active (dawn, dusk, night). The rider should use any information available to patrol in livestock areas with current wolf activity and should be equipped to actively haze wolves away from livestock when found, or move livestock to safer location. In areas of active depredation or in large

areas with dispersed livestock, more than one range rider likely is necessary to provide adequate protection.

Range riders can manage grazing livestock near the core areas (dens, rendezvous sites) of wolf territories to minimize wolf-livestock interactions. Tools that may help this include placing watering sites, mineral blocks and supplemental feed away from wolf core areas. If available, it may also include temporarily switching grazing sites and moving livestock to another location. Range riders can be used to increase the frequency of human presence checking livestock in areas with wolves or when wolves are in the vicinity of livestock pastures. Range riders can be used to keep cattle distributed throughout pastures (as appropriate) and away from wolves while working to distribute grazing and improve forage utilization.

Human presence in sheep operations is a normal part of sheep ranching. human presence in cattle operations via range riders should similarly become a normal part of cattle ranching in areas where wolves reside or travel through.

Herders or other Guarding: Directly applicable to sheep operations where human herding is a normal part of sheep ranching. This measure is especially useful if herders are present and active at night when sheep are gathered or in bedding areas – and effectiveness is increased if a herder is working with guarding animals and/or fladry to protect sheep. Additional herders may be needed in areas of high wolf activity to specifically work at night when depredation is most likely to occur.

Human Presence – Individual: This is human presence which may be additional to regular ranch operation and with the intent of deterring wolf-livestock conflict if wolves are present. Human presence should be flexible in approach, but should be tailored to situations when wolves are in proximity to livestock (i.e., may not be practical or expected when wolves are known to be in another area). Presence may be conducted by patrolling during active wolf periods such as dawn and dusk, and in situations such as calving or lambing periods; may be best to conduct at

night when depredation is most likely to occur. It should also include monitoring and responding to information of wolf activity in areas of livestock. Though increased human presence may not prevent all wolf-livestock conflicts, it should be conducted in a manner which would reasonably be expected to deter wolf-livestock conflict; this would be determined based on frequency of wolf use in the area, depredation patterns (i.e., depredation around calving areas), seasonal patterns of wolf and livestock use, and in conjunction with other known presence (i.e., range rider was in area last night so producer did not go out).

Documentation: Producers should document activities when human presence is used to deter wolf-livestock conflict. CDFW or other agency/individual presence which meets the above applicability standards should also be documented. Documentation could include, but is not limited to the following: dates, times, specific location, action taken, purpose or intent of action, and findings or results.

Appropriate Season and Area: All seasons, but should be tailored to livestock areas which are being used by wolves. Lambing and calving areas and periods should especially be prioritized if wolves are known to be in area.

Considerations and Limitations: With dispersed livestock grazing, range riders will need to cover as much area as possible or focus on the area where the wolves are known to roam. All increased human presence activities (i.e., range riders, herders, and individual producers) should consider information of wolf activity, areas of livestock use, and recent depredation information to prioritize areas and times to best apply human presence. Herding livestock together, temporary fencing/fladry or moving them to safer locations within a grazing allotment should always be considered. Costs associated with any kind of increased presence will have the effect of increasing production costs. Agencies and affected livestock producers should consider pooling resources to increase human presence most effectively based on the situation.

Barriers – Fladry and Fencing

Description and Intent: Fencing used specifically to deter wolves from livestock, may be permanent or temporary, and may be from a variety of fencing materials, depending on each situation. In general, fencing is considered when attempting to protect livestock in a small pasture, enclosure, or when stock is gathered in a reasonably protectable area. It is generally not applied to larger, open-range type of grazing operations. The type of barriers used is highly dependent on the type of livestock and conditions, but includes two general types as follows.

Fencing: May be effective, and often a good option for small numbers of livestock and/or small acreages or pens. Types of fencing vary and may include multiple-strand electric, mesh, panels, or other hard barriers. In some cases, existing fences may be augmented (e.g., by increasing effective height or by fladry) to protect against wolves at a lower cost than new permanent fencing. Fencing may also be used to create small temporary or permanent pens to protect livestock at night and may be used in conjunction with other measures such as noisemakers, guard animals, or lighting.

Fladry and Electrified Fladry: Highly portable and quickly installed, fladry can be used for a variety of livestock operations –sheep night penning, and some calving areas. Fladry consists of a line of rope from which are suspended strips of fabric or colored flags that will flap in a breeze, intended to deter wolves from crossing the fladry-line. It may be applied to certain open range situations but is best used as mobile protection on a short term basis. Producers are encouraged to work with CDFW managers, or other knowledgeable agents to determine if fladry is appropriate. Fladry requires regular maintenance for effective use. In general, fladry is not intended for use over long periods of time in the same location because wolves may become habituated, and thereby reduce its effectiveness. CDFW or other organizations may develop cooperative fladry projects to assist producers with installing and maintaining fladry protection. Fladry enhances any permanent fence

situation, and should be added to permanent pasture fences at times of the year when livestock are more vulnerable.

Turbo-fladry (electrified) – This is the use of fladry and electricity together for increased protection. It is more appropriate in more permanent fencing locations, like home-range grazing, or smaller pastures.

Application:

Sheep: Electrified hard fencing is recommended for all small, protectable areas that have sheep. Open range night penning of sheep in portable fenced areas or fladry fences in areas of wolf use is highly recommended. Even with herders present, fladry may reduce depredation risk. Defined areas of lambing when wolves are present would also be an appropriate application for fladry. It is not recommended that lambing be done in large open range areas, but rather in lambing pens or locations close to human occupation and livestock guardian dogs (see below).

Cattle: Fencing options are generally used where cattle are confined to small pastures or pens. Some operators calve in smaller areas which could be appropriate for fladry or other fencing. If range riders are present in known wolf locations, tighter herding and use of fladry could be very helpful, especially during vulnerable times like evening, night and early morning. Awareness of wolf locations and habits helps to better know when to apply fencing, fladry or turbo-fladry.

Documentation: It is recommended that livestock owners document when and how they use fladry or fencing, and the conditions under which its use was determined. This helps to better manage livestock over multiple-year periods, and helps to build a history of understanding and success/failure.

Appropriate Season & Area:

Sheep: All seasons for hard fences, but fladry is most appropriate for night penning on open range in areas of wolf use.

Cattle: Specific cattle pens or small pastures (often during winter months) or calving areas (calving season) for fences. Fladry is useful on open range when tightening the herd is possible. It can also be applied on larger home ranges if wolf presence is know. Fladry is NOT to be used over long periods due to wolf habituation. Its use in addition to permanent fencing is helpful for short periods (days to a couple of weeks).

Considerations and Limitations: Permanent fencing, though long lasting, is usually expensive and can often only be affordably applied to small areas. Fladry is much less expensive but can have limited availability on short notice. Fladry should be "on hand" so its use can be implemented quickly as circumstances mandate. Fladry, when determined to be an appropriate deterrent, is generally effective on a short-term basis, requiring the use of other tools (lights, noise makers, human presence), sometimes in conjunction with fladry, for longer-term deterrence.

Livestock animals which are fenced may require additional feeding which can increase the cost to the livestock owner. Some livestock may not respond well to confinement, which may also increase management costs. Fencing on allotments must comply with grazing permit requirements, and may not be allowable in some cases.

Livestock Guardian Dogs and Other Guarding Animals

Description and Intent: Use of specific breeds of livestock guardian dogs or other animals with intent to protect livestock from wolves or other predators, discourage predators from exploring the flock or herd and to alert humans to predators in the area.

Application: Livestock Guardian Dogs (LGDs): Breeds such as Great Pyrenees, Anatolian Shepherd, Akbash, Pyrenean mastif, Spanish Mastif and other established guarding breeds. Livestock guardian dogs are often used in conjunction with herded livestock such as sheep, but may be used for cattle or other livestock species. Multiple dogs are recommended, but may depend on the level of wolf activity in the area, size of grazing area, and behavior characteristics of the dogs. It is important to have a suitable number of LGDs present to deter wolves. The goal is not active conflict between the dogs and wolves but an appropriate number of dogs to discourage wolf exploration and to alert the humans in the area responsible for the livestock. Some livestock owners use protective collars for dogs to prevent injury in case of conflict with wolves. Consultation with CDFW or other professionals may be necessary to evaluate the most effective guard dog strategy.

Other Animals: This may include the use of non-guarding dog breeds used to specifically alert herders of wolf presence. With this type of use, dogs must be protected from wolf attack. These dogs are not expected to be as effective as a group of LGDs to sound an alarm to humans on site. Other aggressive breeds of animals (i.e., donkeys, etc.) may help protect against wolves but should be considered experimental.

Documentation: Livestock owners should keep records of LGD use including numbers of animals, dates, areas, species protected, etc. Experimental use of other guarding animals should be documented and coordinated with CDFW so that their effectiveness can be evaluated.

Appropriate Season and Area: All seasons. Wolves may be more aggressive towards dogs near den sites and rearing areas (rendezvous sites) and dogs are not recommended in these areas.

Considerations and Limitations: LGDs and other types of guarding animals must be appropriate for each grazing application. For example, a single guard dog in a large dispersed grazing situation would not be expected to provide adequate protection from or deterrent to predators or serve to alert humans.

Guard animals require specific training, care, oversight and precautions. Livestock owners using guard animals should seek advice on the use of this method from professionals or others with experience using these animals.

Alarm or Scare Devices

Description and Intent: This includes any combination of alarm system with lights and/or loud sounds which are used for the purpose of scaring wolves from areas of livestock. Primarily used for protection of defined/enclosed areas or small pastures, but in certain situations may be used to deter wolves from using a more general area (esp. calving/lambing pastures) or to alert livestock owners of the presence of wolves in the area. Using these devices in conjunction with fladry and human presence increases effectiveness.

Application: Radio-Activated-Guard (RAG) Devices: These are scare devices which are triggered by the signal from an approaching radio-collared wolf. Typically they are affixed to a fenceline. When activated they emit strobe light flashes and varying loud sounds. RAG devices may be available through CDFW (?) or other organizations. Coordinate with CDFW for information on placement and use.

Other Light and Sound Making Devices: These may be warranted in situations similar to above but where wolves are uncollared and could include a variety of lighting devices such as Foxlights™ (lights which blink on and off in a rotating fashion), radios, music players, etc. Varying the sounds and frequently changing positions of the device will increase effectiveness and reduce the chance that wolves become habituated. Techniques such as lighted pastures or pens may be considered experimental (depending on situation) and should be coordinated through CDFW to determine if applicable.

Documentation: Producers should track use of devices, dates, times, locations, etc. In addition, proper function and effects of devices (on wolves) should be monitored and documented.

Appropriate Season and Area: Any season, but generally not expected to be effective in large areas, or areas with widely dispersed livestock.

Considerations and Limitations: RAG devices require the presence of a radio-collared wolf to activate. Wolf packs do not always travel together and depredation may occur by uncollared wolves even in the presence of a properly functioning device.

Scare devices are generally only effective for short-term use, and work more effectively when combined with fladry, or other deterrents in smaller areas. Wolves can easily become habituated to any type of fixed scare device or tactic, and devices should be varied by moving or changing the response.

Livestock Management/Husbandry Changes

Description and Intent: These are husbandry actions taken specifically to help avoid wolf- livestock conflicts. Actions taken may be tailored to each ranching situation and thus, not all actions used will be appropriate for all. Management actions may include but are not limited to switching or changing pasture use to avoid areas of wolf activity, night feeding, reducing length of calving period, birthing earlier to have larger calves on allotments, changing herd structure, developing more aggressive or protective livestock breeds, calving and lambing in a discrete defensible area rather than on the open range and possibly others. Actions should be considered individually for each producer and in some cases may be experimental.

Application: Changing pastures or grazing sites to avoid wolf use areas may be an option when wolf use data or recent depredation indicates area-specific problems. This may be most applicable when wolves show seasonal use of a particular area.

Night feeding can have the effect of bunching cows and calves into a common area where they would be less vulnerable to night predation.

Night feeding may also affect birthing times of livestock (some animals do not give birth while their stomach is full).

Other techniques such as adjusting birthing seasons or shifting to more protective or aggressive breeds are typically long-term changes and may not be appropriate to solve immediate depredation situations. Mixing cattle with sheep may also be effective in some cases. The purpose here is to encourage producers to explore options to protect herds and to coordinate those efforts with CDFW so that all may continue to develop workable solutions.

Keeping calving or lambing areas away from areas known to be occupied by wolves can help prevent conflict. In the event there is known wolf activity in a producer's calving or lambing areas, then protective fencing or fladry should be used around calving or lambing areas. Producers should also use lambing sheds during and immediately after lambing.

Changes in turnout of livestock that can be helpful, including turnout of calves onto forested/upland grazing pastures or allotments after calving is finished and once calves are larger (e.g., 200 lbs). Delaying turnout of livestock onto forested / upland grazing pastures or allotments until June 10th [or whatever date CDFW staff think pertinent for CA] when wild ungulates are born.

Documentation: Producers should track and document changes in herd management practices and coordinate closely with CDFW on how a particular husbandry practice may reduce wolf depredation. There is much to learn on which herd changes result in conflict reduction. Keeping track of outcomes of herd management changes helps everyone to employ effective strategies.

Appropriate Season and Area: All seasons and areas. However, practices associated with birthing livestock or management of newborn/young livestock should receive priority.

Considerations and Limitations: The effects of any particular action may be unknown in some cases and will be dependent on many factors. In some cases a practice may be experimental and close communication between producers and CDFW (for the purpose of reducing risk of wolf predation) will be important.

There may be costs associated with alternative grazing practices used to reduce wolf risk. Producers are encouraged to coordinate with CDFW, other state or federal agencies (Dept. of Ag, NRCS, RCD's, etc.) and local Compensation Committees to determine resources available for implementing any changes.

Not all producers have grazing pasture options, or options may be dependent on other allotment plans. Individual producer coordination will be necessary to evaluate appropriate actions.

Experimental Practices

Description and Intent: A number of non-lethal and preventative practices (i.e., bio-fencing, belling cattle, using wolf-savvy cattle, shock collars, and possibly others) which may reduce depredation risk, but are not yet known to be effective, are being tested. Experimental practices are encouraged but may require additional use to determine if they are practical, useful, and the conditions in which they would be most effective.

Application: Development and implementation of any unproven non-lethal action would require close coordination with CDFW, especially to ensure that a new method being tested was not, in fact, an attractant to wolves. Experimental practices will be evaluated based on their reasonable expectation to reduce depredation risk.

Documentation: Documentation of experimental practices will vary depending on the practice. Livestock owners who implement experimental practices must coordinate with CDFW to track use and effectiveness. The sharing of information and learned outcomes helps

all livestock owners, and can lead to reduced conflicts for neighbors and other producers in California. Sharing with friends and neighbors is expected, but engaging CDFW and other agency people allows the learned information to be disseminated broadly, which helps everyone.

Appropriate Season and Area: May be implemented during any season or area.

Considerations and Limitations: Some experimental practices such as bio-fencing and shock collars on wolves require active involvement by CDFW to implement. In an effort to assist with costs of implementing, CDFW or other agencies/organizations may enter into cooperative agreements to implement experimental practices. (Not sure what the requirements of the state are here)

Addition of Non-lethal/Co-existence methods to the Conservation/livestock Matrix (Draft), 10-29-14

Element/Phase - Location in Matrix seems best as section 'C', the beginning of management strategies, and as the least harmful at the beginning.

1. Co-existence/non-lethal strategies, to include but not limited to:
- Reducing Attractants
- Human presence
- Barriers - Fladry and Fencing
- Protection dogs and guard animals
- Alarm and scare devices
- Livestock management & husbandry changes
- Experimental practices

For Phases - " Allowable and recommended in all 3 phases. Must be implemented before injurious or more lethal management options are allowable. Implementation is necessary to prevent, reduce or eliminate conflicts."

Draft Criteria - Location Information Distribution on Wolves-Calif.

Ranchers have a 'need to know' relative to wolf and wolf pack location in order to take action to prevent, reduce and/or eliminate wolf-livestock conflicts. However, distribution of location information could place wolves at greater risk resulting from individuals who have a desire to see wolves killed or harmed. Because these two competing realities exist, it is appropriate to craft policies that both help ranchers protect their livestock, and eliminate the likelihood of harm to wolves. The policies listed below are designed to accomplish these dual goals.

The wolf location information released pursuant to these policies is strictly limited to use by the recipient or his or her on-the-ground agent to implement earnest and verifiable efforts to prevent, reduce or eliminate conflict between livestock and wolves in a manner that can be readily confirmed by CDFW. A comprehensive process shall be established to ensure wolf location data shall not be distributed beyond the qualifying recipients who have met prevention criteria and agreed to use the information for that purpose.

As indicated elsewhere in this chapter, as wolves occupy and frequent a particular territory, CDFW will designate as areas on a map, posted to the agency's website, Areas of Known Wolf Activity (AKWA). CDFW will then work with individual livestock owners whose livestock are present within the AKWA to create polygons depicting where the individual livestock owner has livestock present. Wolf location information provided to qualifying individuals will consist of notification by CDFW that one or more radio-collared wolves have been detected as present, within the past 24 hours, within that individual's polygon. The location of radio-collared wolves in California will be obtained by CDFW as a result of satellite detection of the collar's signal and the downloading of that information every 24 hours. CDFW will not provide point location information of any data points downloaded from the satellite but will provide notice to qualifying individuals that data obtained from the satellite indicate a wolf (or wolves, if more than one is radio-collared) was present within their polygon.

Allowance of location information sharing to individual ranchers will be allowed only if the following criteria are met:

1. The livestock producer has been briefed by CDFW or its agent on the rules and criteria for information receipt and confidentiality.
2. A confidentiality agreement with that individual has been read and signed, with original or copies provided to both CDFW and the signer. This agreement will allow the livestock producer or his/her on-the-ground agent to receive the information. The agreement does not allow sharing or distribution of information to any other entity unless CDFW or its agent approve.
3. The livestock producer receiving information has participated in a CDFW-sponsored program to learn and implement non-lethal predator management tools and conflict-reduction strategies.

4. The livestock producer receiving information is implementing approved and verifiable non-lethal strategies to prevent, reduce or eliminate conflict in the grazing areas relative to possible wolf-livestock conflicts.
5. The livestock producer documents his/her use of non-lethal strategies and makes this information available to CDFW.
6. The livestock producer agrees to communicate with CDFW staff or agent about any conflict problems or issues that are of concern.
7. The livestock producer reports to CDFW the outcomes that result from the information-sharing.

Violation of the agreement will result in the following:

1.Violation of the confidentiality agreement will result in cessation of information-sharing with that individual for 12 months and notice to be posted to the CDFW website of the violation. The notice will indicate that a breach of confidentiality has occurred; it will not indicate the identity of the violator.

2.Any subsequent violation of the confidentiality agreement, whether by the same participant or another participant, will result in a review by CDFW of the wolf-location information-sharing program, and if CDFW determines that misuse of information is putting wolves at risk the program may be terminated.

3.Wolf location information used by the recipient for any purpose other than to implement approved and verifiable efforts to prevent, reduce or eliminate conflict between livestock and wolves will result in cessation of information-sharing with that individual for 12 months.

Information-sharing is a necessary component in assisting the livestock community to prevent wolf-livestock conflicts. It is the goal of the CDFW and others to give the livestock community as many tools as possible to prevent possible conflicts, but all the strategies must be used in concert to be effective. Of primary importance is the use and implementation of the nonlethal tools available to all impacted individuals and communities. It is highly encouraged that those who could be impacted as wolves immigrate into California take the opportunity to learn about and implement these nonlethal tools. It is important to understand that nonlethal actions are effective only if (a) they are used together, not relying on any one action alone, but implemented in concert; (b) they are used correctly; and (c) they are the most appropriate actions for the specific livestock operation. CDFW will assist with educational opportunities, information distribution and financial assistance to allow these tools and strategies to be implemented correctly.