To: Department of Fish and Wildlife Staff

Subject: Human/Wildlife Interactions in California: Mountain Lion Depredation, Public Safety, and Animal Welfare

Overview and Background
More than half of California is mountain lion habitat. Mountain lions are solitary and elusive, and their nature is to avoid people. These majestic animals, however, may prey on pets or livestock creating depredation concerns. In some situations, mountain lions present threats to public safety. As the Department of Fish and Wildlife (Department) notes in its Keep Me Wild program, human and wildlife interaction is more a people problem, perhaps, than a wildlife problem, as each year California’s population continues to grow and expand into wildlife habitat.

In recent years, human-wildlife interactions have substantially increased, requiring a greater staff investment in time, research, and response in the field when interactions do occur. The Department makes the reasonable prediction such interactions will continue to increase over time. The Department’s existing policy regarding mountain lion depredation, public safety, and animal welfare is dated 2007. Department leadership elected to revisit the 2007 policy for the purpose of considering updates and improvements for several reasons, including the anticipated increase in interactions, the likely corresponding increase in demand for Department staff and resources to manage such interactions, and specific field incidents at the end of 2012.

This document is in draft form and is subject to further deliberation and possible amendment. Much of the document describes updated policy and procedures within the Department’s current authority and capacity. However, in limited instances, the Department recommends new policy and procedure that would facilitate management of human-mountain lion conflict, but that are not yet within our current authority or capacity. In those instances, the reader will see a specific caveat that the recommendation is aspirational in nature requiring some condition subsequent in order to become operative.
Human/Wildlife Interactions in California: Mountain Lion Depredation, Public Safety, and Animal Welfare

Preface:

The California Department of Fish and Wildlife’s (Department) existing policy regarding mountain lion depredation, public safety, and animal welfare is dated 2007. Department leadership elected to revisit the 2007 policy for the purpose of considering updates and improvements based on several factors, including but not limited to: the anticipated increase of interactions between humans and mountain lions, the likely corresponding increase in demand for Department staff and resources to manage such interactions, and specific field incidents at the end of 2012.

This document is in draft form and is subject to further deliberation and possible amendment. Much of the document describes updated policy and procedures within the Department’s current authority and capacity. However, in limited instances, the Department recommends new policy and procedure to facilitate management of human-mountain lion interactions, but that are not yet within our current authority or capacity. In those instances, the reader will see a specific caveat that the recommendation is aspirational in nature requiring some condition subsequent in order to become operative.

Issue Statement:

Recent incidents have resulted in multiple mountain lions being taken in a single depredation or public safety event. Historically, such events are rare. These cases have concerned the Department and the public and have prompted the Department to review policies and procedures regarding how the Department responds to all mountain lion interactions. Improvements to training, communication, transparency and decision-making as they relate to managing human/wildlife conflict are addressed.

The following document provides new, revised, and clarified policy/guidance related to mountain lion depredation; public safety wildlife with an emphasis on mountain lions; and, addresses animal welfare specific to orphaned mountain lions. These revisions and clarifications can also apply to black bear, coyote, and certain exotic wildlife as appropriate. However, the Department will consider specific application to such additional species in future efforts during 2013. This document is focused on mountain lions for the reasons described above.

This policy document builds on the Department’s past public safety wildlife policy and is intended to continue to evolve over time as new information and additional experience is gained.
The mountain lion is a symbol of wild California and is regarded as a focal species in the state’s efforts to conserve wildlife and their habitats through ecosystem management. Mountain lions in California are a “specially protected” species (Fish and Game Code Section 4800) and may not be taken, injured, possessed, transported, or imported except under specific circumstances related to depredation, public health and safety, to protect sensitive bighorn sheep populations, and other purposes as described in Division 4, Part 3, Chapter 10 of the Fish and Game Code. Mountain lions may also be taken to prevent or relieve suffering of the animal (Fish and Game Code Section 1001). As California has continued to grow in human population and our communities expand into wildland areas and use those areas more frequently, there has been a commensurate increase in direct and indirect interaction between mountain lions and people and an increase in calls for service to the Department. Additionally, it is widely believed that the mountain lion population has increased in numbers statewide since the 1970s.

Consistent with sections 4800-4810 and other relevant sections of the Fish and Game Code; and to ensure the conservation of mountain lions as a top predator in California ecosystems, the purposes of the following policy and procedures are to:

1) Guide the Department’s response to reports of mountain lion conflicts with humans in a consistent manner while minimizing to the extent possible, risks to public safety and establish better guidance for responding to these incidents;

2) Provide the public with an understanding of the actions taken by the Department to prevent and resolve human-mountain lion conflicts;

3) Facilitate the Department’s maintenance of a centralized human-wildlife conflict database for support of training and future response to mountain lion incidents and to ensure consistency and transparency in reporting.

The policy addresses situations where:

a) mountain lions have left wildland habitats and entered areas of human habitation and are either observed or are reported by the public;

b) mountain lions have depredated on, or are determined to be a threat to livestock or pets; and,

c) the Department or other responsible law enforcement entity must respond to a situation that has public safety concerns.

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1 “Take” is defined in Fish and Game Code section 86 as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.”
The policy covers the range of activities that may be taken by the Department from initial investigation of a conflict situation to final resolution and reporting, training of Department employees, communications internally, and communications with the public and the media. These policy guidelines are developed to prevent wildlife conflict when and where possible, or resolve the conflict in accordance with the above stated purpose.

Due to staffing distribution at any given time throughout the state, both wildlife and or enforcement programs may need to participate at some level in any of these types of incidents. A new component of the policy is an integrated team approach to certain types of incidents as well as more comprehensive and integrated training between multiple Department functions. However, Environmental Scientists assigned to Regional wildlife programs typically respond to depredation reports and Wildlife Officers typically respond to public safety incidents. Injured or orphaned animals are handled by both Department functions.

Definitions

The working definitions below apply to this policy document and are included to assist Department employees who respond to reports and to improve the communication of the Department’s response to mountain lion situations.

**Dependent Young:** Mountain lion kittens, cubs, or young that are considered dependent upon the mother for survival as evidenced by their size, appearance, behavior, or the knowledge that the mother is/was lactating.

**Depredation:** Mountain lion(s) immediately threatening to cause damage, in the act of causing damage, or has caused damage to private property. This definition emphasizes the temporal aspect regarding property damage (i.e., (a) immediacy, (b) occurring, or, (c) occurred).

**Necropsy:** An autopsy performed on an animal.

**Potential Human Conflict:** A mountain lion that is found in an unusual location and/or is demonstrating unusual behavior that could reasonably be perceived as having potential to cause severe injury or death to humans. This definition is new and describes a possible situation that may exist before a lion becomes an actual public safety threat.

**Public Safety:** A mountain lion demonstrating aggressive action that has resulted in physical contact with a human; or a mountain lion exhibiting an immediate threat to public health and safety, given the totality of the circumstances. Immediate threat refers to a mountain lion 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 mountain lion remains a threat despite efforts to allow or encourage it through active means to leave the area.
Rehabilitation: This refers to bringing an injured adult, injured sub-adult, or orphaned or injured dependent young into captivity for recovery from injury or health issue for subsequent release into the wild. It is not intended for mountain lions that are depredation or public safety animals. Note that the Department currently has no legal authority to rehabilitate mountain lions. Therefore, in the absence of such authority, this definition is not operative. However, the Department will gather information from other states to assess feasibility and practices of rehabilitation and return to the wild. In the event such authority is provided, the Department recommends that rehabilitated and released lions be equipped with telemetry to learn from such efforts.

Relocation: Animal is moved to suitable habitat based on the recommendation from the RGT (see below). Relocation requires consultation with other federal, state, or private landowners in order to determine suitable habitat.

Responder: A Department employee who is first on the scene. However, for an event requiring the Incident Command system, ultimately, the Incident Commander or her designee becomes the official representative of the Department.

Response Guidance Team: The Response Guidance Team (RGT) is established to provide assistance and guidance related to policy level decisions only for potential human conflict situations or public safety situations. The RGT will be available to help evaluate a situation and provide personnel to assist as needed. The RGT will consist of the Chief of Wildlife Branch, Chief of Law Enforcement Division, Deputy Director of Wildlife and Fisheries Division, a representative from the Wildlife Investigations Lab, Regional Manager/District Assistant Chief where the activity/incident is occurring, the Deputy Director of the Office of Communications, Education, and Outreach (OCEO), or their named designees.

Sighting: An animal is seen by the public and is not displaying unusual behavior.

Sub-Adult Mountain Lion: A mountain lion that appears nearly full-grown based on size, appearance, and behavior. These are considered to be mountain lions that are not young-of-the-year and are at or near the age of independence from the mother. Sub-adults may travel with the mother, but are considered capable of surviving on their own in the absence of the mother.

Training
Training is a necessary part of a professional and reasoned response to mountain lion conflict incidents. The Department has provided and will continue to provide training opportunities for staff who respond to wildlife conflict incidents.

*Wildlife Restraint Fundamentals* Class - Provides an introduction to capture and restraint of wildlife, disease considerations when working with wildlife, personnel and animal safety, Department policies regarding wildlife handling, wildlife rehabilitation, and restricted species. The Department will provide this class at least once per year beginning in 2013.

*Wildlife Restraint and Chemical Immobilization* Class - Provides the background of the Fundamentals Class, plus an introduction to uses and applications of chemical immobilization techniques. An annual training course, the Department or other appropriate entities will continue to provide this class at least once per year (or more) beginning in 2013, for appropriate staff qualified to engage in restraint and immobilization.

*Basic Academy Training for Enforcement* - Basic introduction for all wildlife officers on responding to wildlife incidents. Each Academy will offer this training.

Advanced Officer Training Update - Focused training for all wildlife officers and review of policies and procedures dealing with public safety, wildlife incidents, and media relations. The Department will require this training for all officers, beginning in 2013 with the first half of all officers.

*Ongoing Coordination and Cross-Training* - Coordination and cross-training within and between Department programs on responding to wildlife incidents. The RGT will meet not less than twice a year to review efforts and discuss effectiveness of this policy.

*Wildlife Incident Report (WIR) Training* - Training specific to use of the online WIR system. This training will be introduced as a component of each class described, but also be offered once a year as a focused stand-alone training unit.

Annually, the Department will evaluate the training program and needs with the Wildlife Branch, Law Enforcement Division and OCEO. The Department’s Office and Training and Development will assist in such review and implementation of training wherever possible.

**Communications**

History shows that internal and external communication is important to enhancing the public’s understanding of mountain lion and human conflicts. OCEO is part of the RGT and will designate a single point-of-contact for media calls who will be responsible for information dissemination to media and public if necessary.

Responders should contact their immediate supervisor and the RGT by any means available including phone, email, or dispatch.
The Department will develop an internal automated email notification system for the RGT and Responders. Such development will look to our Office of Oil Spill Prevention and Response and Information Technology Division for advice on creating the system, which shall be operational in 2013.
**STEPWISE PROCESS FOR MOUNTAIN LION INCIDENTS**

**Receiving reports of Mountain Lion Sightings, Depredation, Potential Human Conflict, or Public Safety Situations**

Human/mountain lion interactions are categorized into one of four areas: sightings, depredation, potential human conflict, and public safety. Each of these areas is discussed below in terms of Department actions to be taken. Attached at the end of this document is a pathway/flowchart to assist in the process of handling mountain lion conflict incidents. All Department employees involved in implementing this policy and the stepwise process shall also be familiar with the specific requirements of Fish and Game Code Sections 4800-09.

**1.0 Sighting Response**

Within 24 hours of receiving a report of a mountain lion sighting from a reporting party (RP), the initial Regional staff receiving the report shall enter the required information into the WIR system and assess such information to determine if it requires further action. The assessment will include consideration of whether the animal could become a depredation, potential human conflict, or public safety concern. Volunteers or seasonal staff may be assigned to respond to reports of sightings where the RP does not indicate the existence of any potential or actual threat to public health and safety. Appropriate response may be either by phone or email directly to the RP and shall emphasize non-lethal measures to prevent a human/mountain lion conflict (*e.g.*, *Keep Me Wild* and Living with Mountain Lions).

**2.0 Depredation Response**

Within 48 hours of receipt, the responding Department official shall answer reports of mountain lion depredation and entered such reports into the WIR system. Seasonal staff or volunteers may assist when necessary. Staff should be trained in identifying the species involved in a depredation incident and in preventative measures.

The responding Department employee, under the authority of his/her Regional Manager or Assistant Chief of Enforcement, or his/her designee, will verify the validity of the complaint and preliminarily determine the appropriate action according to the following criteria. This employee is also responsible for entering reports into the WIR.

**2.1 Confirmation of Depredation and Issuance of a Permit.** Reports of mountain lion depredation must be verified by the Department, or by a Department authorized animal damage control officer. A non-Department control officer may only serve this function if the other officer’s agency or governmental entity and the Department have previously entered into a written agreement specifying protocols and the delegation of authority conditions. The Department responder shall confirm within 48 hours that depredation from a mountain lion has occurred. If damage is confirmed, a depredation permit shall be issued.
2.2 Oral Authorization. Per Fish and Game Code Section 4805, oral authorization to pursue and take the depredating mountain lion may be granted. A depredation permit shall be issued as soon as practical.

2.3 Terms and conditions of mountain lion depredation permits. Only one mountain lion may be taken under a depredation permit. In order to ensure that only the depredating lion will be taken, the permit shall: (1) expire 10 days after issuance; (2) authorize the permittee to begin pursuit of the depredating mountain lion not more than one mile from the depredation site; and, (3) limit the pursuit of the depredating mountain lion to within a 10-mile radius from the location of the reported damage or destruction. If damage continues to occur following the killing of a mountain lion under a permit, the Department may issue an additional depredation permit, or Fish and Game Code Section 4807 may allow for immediate additional take.

2.4 Tracking of depredation permit. Upon concluding the depredation incident, the responder shall complete the reporting requirement within the WIR application and close the incident. All reporting shall be complete not more than 3 business days hours after the incident.

2.5 Retrieval of a depredation mountain lion. Regulation (Title 14, Section 402) requires a mountain lion killed under depredation be tagged and turned over to the Department for necropsy. Upon taking a depredation mountain lion into possession, the Department responder shall contact the WIL for guidance on storage, necropsy and/or delivery of the carcass. After a mountain lion is necropsied, the Department shall dispose of the carcass by incineration, burial at a secure location, or as provided for in Fish and Game Code Section 4800 (b)(3).

2.6 Preventative action. Whenever possible, the Department shall recommend non-lethal means of managing mountain lion damage. Department personnel shall advise property owners of measures to reduce the potential for attracting mountain lions, and confinement and protection of livestock and pets to reduce or minimize damage.

3.0 Potential Human Conflict Response

All potential human conflict and public safety incidents shall be entered into the Wildlife Incident Reporting (WIR) system as immediately as possible. Personnel involved with the initial response shall be required to complete the WIR.

The potential human conflict portion of the stepwise process is new and describes a possible situation that may exist before a lion becomes an actual public safety threat. A mountain lion’s actions, location, and other factors may be considered as a potential threat to public safety. Because the mountain lion is not an immediate threat, this category allows personnel the time to evaluate the situation and consult with the RGT before a decision is made on the next steps. If the RGT cannot be reached, the responder is authorized to take appropriate action.
A mountain lion deemed to be a Potential Human Conflict mountain lion may be re-classed to a Public Safety mountain lion if the situation and conditions change, upon which reclassification the Public Safety Wildlife Guidelines shall be followed. The responder is charged with exercising best professional judgment in making decisions in the zone between potential and actual public safety threat.

Once an animal is deemed a potential human conflict animal the following steps should be considered:

A. The responder shall contact their supervisor or one member of the RGT, who in turn will contact the full RGT.
B. Provide the information as identified in the Wildlife Conflict Evaluation Form (Attachment 1) to assist in communication with the RGT.
C. The RGT and on-site personnel will discuss non-lethal options that include but are not limited to the following options: tranquilizer darts, Taser, aversion tactics, bean bags, rubber bullets, pepper spray, catch pole and cage, trained aversion dogs, and assistance from approved non-governmental organizations (NGOs). Note that the Department requires additional authority before relying on NGO assistance. In addition, the Department requires additional capacity to ensure the options related to physical goods, such as darts, dart guns, tasers, etc., will be available in sufficient numbers.²
D. After initial attempts, evaluate effectiveness and potential next steps.
E. Department will maintain an official on site until released by the RGT or relieved by additional personnel. So long as the subject animal(s) remains a potential human conflict, then the on site responder(s) shall continue to pursue non-lethal options.

Potential Options if Mountain Lion Captured:

F. Relocation- upon approval of the RGT. Location must be an approved site. Relocation requires consultation with relevant federal, state, and local government entities, and private landowners as necessary.
G. Placement- If approved by the RGT an animal may be considered for placement at a Department approved facility. The Wildlife Investigations Lab (WIL) coordinates placement of wildlife with permitted facilities.
H. Rehabilitation- For injured adults, sub-adults, and dependent young which may be candidates for rehabilitation, the animal may be transported to an approved facility for evaluation and potential release or placement. The RGT must approve this decision. Note that the Department requires additional authority to rehabilitate mountain lions.

² With additional capacity necessary, the Department would establish common housing points within each Region for this non-lethal option equipment to expedite employing equipment in the field for responder use.
I. Placement out of state- Transport of mountain lions outside California. No mountain lion shall be authorized for release or captive placement in another state without the advance approval of the RGT, the Director, and that state’s wildlife agency.

PUBLIC SAFETY WILDLIFE GUIDELINES

The Department’s foremost consideration is the protection of human life. Responding to public safety wildlife incidents are a priority for the Department and a public safety mountain lion shall be humanely euthanized as quickly as possible by a Department official or a public safety peace officer.

4.0 Public Safety Wildlife Response (No Attack on a Human)

A. Secure the scene.

B. Humanely kill the public safety mountain lion with lethal take methods.

C. Notify Dispatch and the RGT.

D. Gather information for report and enter into the WIR.

5.0 Public Safety Wildlife Response (Attack on a Human)

A. Secure the scene and ensure proper medical aid if there is a victim. Identify the victim and obtain the following minimal information about the victim: name, address, phone number.

B. Notify the appropriate Dispatch Center. Dispatch shall notify the field investigator’s supervisor, the appropriate regional manager and assistant chief, the Deputy Director WFD, Chief of Enforcement, Chief of WLB, the WIL, the Wildlife Forensics Lab (WFL), OCEO, and the local law enforcement agencies.

C. Initiate the Incident Command System (ICS). If a human death has occurred, a Law Enforcement Division supervisor or specialist will respond to the Incident Command Post and assume the Incident Commander (IC) responsibilities. The IC holds initial responsibility and authority over the scene, locating the animal, its resultant carcass, and any other physical evidence from the attack. The IC will ensure proper transfer and disposition of all physical evidence.

D. Treat the area as a crime scene. In order to expedite the take of the offending animal and preserve as much on-scene evidence as possible, the area of the incident must be secured immediately by the initial responding officer. The area should be excluded from public access by use of flagging tape or similar tape (e.g., “Do Not Enter”) utilized at crime scenes by local law enforcement agencies. One entry and exit port should be established. Only essential authorized personnel should be permitted in the excluded area. A second area outside the area of the incident should be established as the command post.
E. In cases involving a human death, WFL personnel will direct the gathering of evidence. Secure items such as clothing, tents, sleeping bags, objects used for defense during the attack, objects chewed on by the animal, or any other materials which may possess the attacking animal's saliva, hair, or blood.

F. If the victim is alive, advise the attending medical personnel about the Carnivore Attack-Victim Sampling Kit for collecting possible animal saliva stains or hair that might still be on the victim. If the victim is dead, advise the medical examiner of this evidence need. This sampling kit may be obtained from the WFL.

G. It is essential to locate the offending animal as soon as practical. The assistance of USDA Wildlife Services (WS) may be arranged by the regional manager, assistant chief or designee contacting the local WS District Supervisor. If possible, avoid shooting the animal in the head to preserve evidence.

H. If an animal is killed, the IC will notify the appropriate Dispatch Center. Treat the carcass as evidence. Use clean protective gloves and (if possible) a face mask while handling the carcass. Be guided by the need to protect the animal's external body from: loss of bloodstains or other such physical evidence originating from the victim; contamination by the animal's own blood; and contamination by the human handler's hair, sweat, saliva, skin cells, etc. Tape paper bags over the head and paws, and then tape plastic bags over the paper bags. Plug wounds with tight gauze to minimize contamination of the animal with its own blood. Place the carcass inside a protective durable body bag (avoid dragging the carcass, if possible).

I. WFL will receive from the IC and/or directly obtain all pertinent physical evidence concerning the primary questions of authenticity of the attack and identity of the offending animal. WFL has first access and authority over the carcass after the IC. WFL will immediately contact and coordinate with the county health department the acquisition of appropriate samples for rabies testing. Once WFL has secured the necessary forensic samples, it will then release authority over the carcass to WIL for disease studies.

J. An independent diagnostic laboratory approved by WIL will conduct necropsy and disease studies on the carcass. The WIL will retain primary authority over this aspect of the carcass.

K. In the event that a Public Safety Wildlife animal cannot be located and taken and the immediate threat no longer exists, the RGT shall re-assess the Public Safety Wildlife status of the animal.

6.0 Responsibilities of the Wildlife Investigations Lab (WIL) and Wildlife Forensics Lab (WFL)

Public safety animals that do not injure or kill a person will be necropsied by the WIL or an independent diagnostic laboratory approved by WIL. A public safety animal that injures or kills a person will be necropsied by an independent diagnostic laboratory in consultation with the WIL and WFL. Contact WIL prior to submission of the carcass to any laboratory to allow the Department veterinarian to discuss the disease testing requirements with the attending pathologist.
Public safety animals killed in an attack on a person must be examined by WFL personnel or a qualified person approved by WFL supervisor using specific procedures established by WFL.

If a human death occurs, coordination of the autopsy between the proper officials and WFL is important so that WFL personnel can be present during the autopsy for appropriate sampling and examination. In the event of human injury, it is important for WFL to gather any relevant physical evidence that may corroborate the authenticity of a wildlife attack, prior to the treatment of injuries, if practical. If not practical, directions for sampling may be given over the telephone to the emergency room doctor by WFL.

signed original on file
Charlton H. Bonham
Director

Attachments:
Flowchart of Stepwise Progression through Mountain Lion Incident Response (PDF)
Wildlife Conflict Evaluation Form (below)
Sample Wildlife Conflict Evaluation Form

Date: ________________  Time: ________________

Employee Evaluator: _____________________________________

Species: ____________________________

Descriptors (Age, sex, size, weight etc.): 

Animal Behavior:

Animal Location:

Environmental Conditions:

Extenuating Circumstances:
Flow Chart of Mountain Lion Response
2013

- **Type Determined**
  - **Depredation**
    - Investigate - site visit or confirmation
      - Lion depredation confirmed
        - Issue permit if warranted
      - Lion taken
        - Cannibalism reported
        - Necropsy
      - Lion not taken

  - **Potential Human Conflict**
    - Notify superior, Response Guidance Team
      - Potential only
        - Review/implement non-lethal options
      - Problem resolved
      - Problem not
        - Review with RGT take new action if warranted

  - **Immediate Public Safety**
    - Lethal Take
      - Immediate Public Safety
      - Problem not
        - Review with RGT take new action if warranted

  - **Immediate Public Safety**
    - Lethal Take
      - Immediate Public Safety
      - Problem not
        - Review with RGT take new action if warranted

- **Response - phone or email**
- **Response - WR report file**

- **CDFW Decision**
  - Action