

To: Department of Fish and Wildlife Staff
Subject: Beaver Depredation Policy in California

Overview and Background

As a keystone species and ecosystem engineer, the North American beaver (*Castor canadensis*) provides ecosystem services that promote biodiversity protection, habitat restoration, and wildfire-resilient landscapes in California, as aligned with the State Wildlife Action Plan (SWAP, 2015) and the state's Natural and Working Lands Climate Smart Strategy (Executive Order N-82-20). Beavers also have an ecological relationship to many species listed under the California Endangered Species Act (CESA; Fish & Game Code (FGC), §2050 et seq.) and/or federal Endangered Species Act (ESA; 16 U.S.C. §§1531-1544). The Department of Fish and Wildlife (Department) is committed to ensuring that humans and beavers can coexist, recognition of their ecological value, and that the removal of any depredation beaver is done in a thoughtful manner.

Issue Statement

The Policy outlined in this document is intended to implement a deliberative, tiered approach when responding to reported beaver depredation. The Department will promote the use of various nonlethal beaver damage deterrent techniques to resolve depredation conflicts where feasible. This approach is consistent with FGC section 4181, California Code of Regulations (CCR) Title 14 section 401, the CDFW Ecosystem Services Policy (DB 2017-06), and the Fish and Game Commission Policy on Depredation Control. Therefore, we are providing the following direction for all beaver depredation permits issued in the state. Authorizing the removal of beaver dams is beyond the scope of this policy and may require federal, state, and/or local authorizations (e.g., FGC section 1602 agreement, FGC section 1610 emergency notification, CESA Incidental Take Permit).

Additionally, this Policy is intended to support coordination between the Human-Wildlife Conflict (HWC) Program, HWC staff, wildlife unit biologist, and others (responders), and the newly established Beaver Restoration Program (BRP). Upon completion of the Department's new Beaver Management and Restoration Plan, the BRP will conduct beaver conservation translocations to restoration and reintroduction sites approved by the Department. When and where opportunities exist, the BRP will seek to utilize depredation beavers in its projects. Such efforts will require advance communication among the BRP and appropriate Department staff about impending translocation projects, BRP capacity to intake beavers, and depredation reports that may warrant beaver take.

STEPWISE PROCESS FOR BEAVER DEPREDATION INCIDENTS IN CALIFORNIA

1. **Confirmation of depredation.** Per Fish and Game Code section 4181, a beaver depredation reported by the reporting party (RP) must be verified by a Department responder.
 - a. Responders will collect the following information:
 - i. Full description of the property damaged, destroyed, or immediately threatened, including pictures as available, and the date(s) occurred.
 - ii. Method of identifying the species suspected of damaging, destroying, or threatening land or property (e.g., camera trap, chew marks).
 - iii. Description of nonlethal or less-lethal measures used to prevent beaver damage prior to requesting the permit.
 - iv. If the location of the property with reported damages is located within the known range of a species listed pursuant to CESA or ESA (see 3b).
 - b. Responders will assess if the damage to the property pose an imminent threat to public safety.
 - i. If the responder determines that the beaver activity poses an imminent threat to public safety (e.g., catastrophic infrastructure damage), the responder, in consultation with their chain of command, may prioritize issuance of a depredation permit upon request of the RP. The responder, at their discretion, shall add terms and conditions to the permit necessary to protect wildlife and ensure public safety.
2. **Education.** To help reduce requests for permits, the responder shall first educate the RP regarding beaver behavior, ecology and ecosystem benefits, and site-specific options to mitigate beaver damage.
 - a. Responder will have reasonable situational awareness, such as understanding of relevant research, population dynamics, co-occurring species, habitats, or natural communities that may be impacted, as well as any other pertinent factors.
 - b. Responder shall provide the RP options to institute logistically and economically feasible corrective actions to prevent future occurrence of the beaver damage. The concurrent use of multiple methods is recommended. Potential actions may include, but are not limited to:
 - i. Install water-flow management devices (e.g., flexible pond levelers, Clemson levelers, “beaver deceivers”, “Beaver Back-Saver Device”).
 - ii. Install trapezoidal fencing with or without pond leveler device attached.
 - iii. Install cylindrical cages, exclusion fencing (e.g., electric fence, hardware cloth around trees).
 - iv. Deploy repellents (e.g., coating trees with paint/sand mixture).
 - v. Eliminate local attractants (e.g., gardens, crops, lush vegetation).

- vi. Subject matter experts may be consulted to help identify appropriate nonlethal measures and corrective actions.
3. **RP requests a permit.** If the RP requests a depredation permit, the Department may issue a revocable permit that authorizes take of the animal(s) by the permittee and their authorized agents, pursuant to FGC section 4181 and CCR section 401.
 - a. Consistent with Fish and Game Code section 86, “take” means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.
 - b. Responder shall provide technical guidance to reduce the risk of incidental take of a non-target species.
 - c. If the BRP has communicated with HWC staff or wildlife biologists that beavers are needed for an approved project, the responder will consult BRP staff to determine whether to request voluntary cooperation from the RP to live capture/relocate the depredation beaver(s). This action would occur in place of issuing a permit. If there is no active request for beavers, BRP consultation is not required.
 4. **Terms and conditions of permit.** The Department, at its discretion, shall add terms and conditions to the permit necessary to protect wildlife and ensure public safety, including but not limited to conditions that require the permittee to implement corrective actions to prevent future damages.
 - a. Valid period. Permit issued for beaver shall be valid for a period deemed reasonable *only* for removal of the number of offending animals authorized to be taken (e.g., 30 days), but not to exceed one year.
 - b. Number of take. Responder shall authorize only the take of beavers if satisfactory evidence shows that beavers have been damaging or destroying, or immediately threatening to damage or destroy, land or property.
 - i. Responder must first determine, then specify on the permit, the number of offending animals authorized for take on the property.
 - c. Corrective actions. The permit shall include a description of corrective actions that will be implemented to prevent future damages.
 - i. If prior corrective actions have been implemented and failed to prevent damages, the responder shall document the reasons for that assessment.
 - d. Authorized agents. The permittee may designate up to three persons, 21 years of age or older, as his/her agents to take animals under the permit.
 - i. An employee of a federal, state, or local government agency, or local district or public utility with responsibilities including but not limited to animal control, animal damage control, irrigation, flood, or natural

resource reclamation, while acting in his/her official capacity, may take depredating animals on the property, when so designated per the terms of a valid permit.

- e. Disposition. Beavers taken pursuant to a permit must be disposed of as required in the permit.
 - i. No beavers, beaver carcasses, or beaver parts may be utilized by the permittee or designated agent. Raw furs, as defined in FGC section 4005, that are taken under FGC section 4180, shall not be sold.
 - ii. If a depredation beaver is taken under a trapping license, the holder of the trapping license must submit to the Department a report of their annual take by July 1, pursuant to CCR section 467.
 - f. Permit renewal. Responder may renew a permit, upon request of the RP, if the offending animals are not taken under the initial permit and damages or threatened damages continue to exist.
5. **Method of take.** Animals taken pursuant to a permit may be taken in any legal manner except as herein prohibited and in accordance with the provisions of CCR section 465.5 and any other applicable regulations.
- a. Lethal methods.
 - i. The permittee shall ensure that all animals are killed in a humane manner, instantly, and will prevent any injured animal from escaping.
 - ii. No poison or steel-jawed leghold traps may be used.
 - iii. The permit shall specify the caliber and type of firearm, ammunition, archery equipment, or crossbow to be used, if applicable.
6. **Tracking of permits.** Upon concluding the incident response, the responder shall ensure completion of the reporting requirement and close the incident in the Wildlife Incident Reporting (WIR) System.
- a. All reporting shall be completed no more than five business days after the permit expires and the incident is closed.
 - i. No tags are required for beavers taken under a depredation permit.
 - ii. The responder shall request that the permittee voluntarily report all beavers taken under a depredation permit.

Decision Authority

The decision to issue a depredation permit shall be made by a Regional Manager (RM) for a period of one year from the date of issuance and consistent with this policy. The RM should consider the extent to which additional input from Wildlife Branch, BRP or Law Enforcement staff is needed. To help with efficiency in decision making, at the end of one-year decisions to issue a depredation permit may be made by an Environmental Program Manager (EPM) such that the EPM and RM have established an efficient and frequent communication path to thoughtfully evaluate the type and status of depredation requests in the Region. The RM will brief executive staff upon request.

Communication

The need for RM communication with executive staff on beaver depredation permit requests and approvals should be carefully considered in each situation, especially as the BRP evolves across California. Things to consider include the number of take being requested, the location and/or owner of the property, whether there are California Native American Tribes, non-governmental or local, state, or federal agencies involved, and if the beaver is located in a highly populated area.


Training

Training is a necessary part of a professional and reasoned response to beaver conflict and beaver damage management. The Department has provided and will continue to provide training for HWC staff and other responders, such as the Wildlife Restraint and Chemical Immobilization Class, WIR Training, cross-trainings between Department programs (e.g., Lake and Streambed Alteration), and external trainings. The Department will assess priority needs, review, and implement training wherever possible.

Outreach and Education Resources

Throughout the state, the Department implements its HWC Program to objectively disseminate information on measures to prevent HWC and provides a HWC Toolkit accessible to the public and staff at <https://wildlife.ca.gov/HWC>. Staff utilizing this Policy should familiarize themselves with the Department outreach and education efforts with the public regarding human-wildlife conflicts. Beaver species information is available at <https://wildlife.ca.gov/Conservation/Mammals/Beaver>.

Importantly, the Department relies upon interactions with affected landowners and RPs to establish a record related to potential conflict to inform management decisions. The Department's Wildlife Incident Reporting (WIR) portal allows individuals to report beaver damage, review of information, and the issuance of a revocable permit under certain circumstances. The WIR portal is accessible at <https://apps.wildlife.ca.gov/wir/>



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