

# *California State Plan for Protection of Endangered Species from Pesticide Exposure*

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**DRAFT**

**PURPOSE:** The purpose of this plan is to protect federally listed endangered species in California from potentially harmful pesticide exposures, incorporating federal protection strategies or developing alternative local plans where needed. In the context of this plan, "endangered" species refers to any species federally listed as "Endangered", "Threatened", "Proposed Endangered", "Proposed Threatened" or "Category 1" candidate for listing.

**OVERVIEW:** As required by Section 7 of the federal Endangered Species Act, the U.S. Environmental Protection Agency (U.S. EPA) and the U.S. Fish and Wildlife Service (U.S. FWS) have consulted on more than seventy occasions on potential hazards of pesticides to endangered species. These consultations resulted in a series of biological opinions that propose to prohibit applications of certain pesticides in occupied habitats of listed species and buffer zones around these habitats. The biological opinions compel U.S. EPA to implement use prohibitions to protect endangered species unless someone develops alternative protection strategies that are approved by U.S. EPA and U.S. FWS.

In many cases throughout the United States and in some cases in California, the apparent lack of economic activity in or near habitats of listed species results in no identifiable costs of use prohibitions to individuals or local communities. In such cases, use prohibitions under the federal program may be implemented without the need for further local discussion.

Where habitats are associated with areas of economic activity, especially cultivated agriculture, the economic impact of use prohibitions could be severe. The potential impact is greatest in California. No state, other than Hawaii (with 224), has more federally listed species than California (with 161). Moreover, when species now proposed for listing become protected, California (with 71) will overtake even Hawaii (with 5) in number of listed species. California also has more candidate species (127) by far than any other state (Oregon is a distant second with 29) which means that California will continue to bear the greatest responsibility and impact of endangered species protection of any state in the foreseeable future. The potential impact on California citizens of endangered species protection is

compounded by the unique population size and diversity of land uses that could be impacted by pesticide use prohibitions.

U.S. EPA proposed a dual objective for the federal endangered species protection program: 1) protecting threatened and endangered species and 2) minimizing impact on agriculture and other pesticide users. Upon thorough examination of local conditions, it is almost always possible to develop use conditions (as opposed to prohibitions) that protect endangered species and that allow most economic benefits of pesticide applications to continue. Local plans can be developed that protect endangered species and control pests by limiting pesticide uses where endangered species occur to certain highly focused and selective practices only.

**INTRODUCTION:** The Department of Pesticide Regulation (DPR) proposes this plan to protect threatened and endangered species in California from pesticide effects. This plan implements the U.S. Environmental Protection Agency's (U.S. EPA) national endangered species program in California through the development and distribution of Interim Measures Bulletins. Interim Measures Bulletins are precursors to County Bulletins, the instrument by which U.S. EPA will implement the federal endangered species protection program. Interim Measures Bulletins will become County Bulletins when U.S. EPA's endangered species protection program is finalized. A County Bulletin is a form of supplemental pesticide labeling for certain pesticides that specifies additional use limitations for protection of endangered species. County Bulletins implement 1) use limitations specified in U.S. FWS biological opinions, or 2) use limitations as determined by U.S. EPA to preclude a "may-affect" determination, or 3) local plans developed as alternatives to U.S. FWS or U.S. EPA use limitations. This plan contributes to federal implementation of endangered species protection measures, through development of local plans.

The federal Endangered Species Act directs all federal agencies to ensure that any action authorized, funded or carried out by those agencies is not likely to jeopardize the continued existence of a federally listed threatened or endangered species, or result in the destruction or adverse modification of the critical habitat of the listed species. This mandate includes regulatory and licensing activities such as the federal registration of pesticides. U.S. EPA must ensure that the action

of registering pesticides will not result in harm to listed species.

If any state believes that the needs of the state and listed species can be better served through a State-Initiated Plan (Plan), then U.S. EPA may allow the state to implement adaptations to the U.S. EPA's national program. U.S. EPA wants to allow states all possible flexibility. Therefore, when a state expresses a desire and has the capacity to develop and implement its own program, and a commitment to provide full protection of listed species from harm due to pesticide uses, then it may do so through a U.S. EPA-approved Plan. When a Plan is approved, U.S. EPA will substitute implementing its national program in favor of the alternative state plan.

**SCOPE:** This Plan includes all federally listed species designated threatened, endangered, proposed threatened, proposed endangered and Category 1 candidate species in California and will address new listings on an ongoing basis. The Plan includes all pesticides registered for use in California and all types of registrations including new active ingredients, experimental use permits and emergency exemptions.

**AUTHORITIES:** Several departments have overlapping jurisdiction for pesticide issues. On fish and wildlife issues, DPR relies heavily on the expertise of CDFG's Pesticide Investigations Unit to identify field hazards of pesticides and to validate mitigation strategies. The California Department of Food and Agriculture (CDFA) helps coordinate the participation of the agricultural industry, reviews the feasibility of alternative mitigation strategies and proposes methods to reduce the cost to agriculture. County agricultural commissioners coordinate local advisory groups and ultimately enforce the program. Other departments participate in pesticide evaluations through the Pesticide Registration and Evaluation Committee (PREC).

**Department of Pesticide Regulation:** DPR is the state lead agency for regulation of pesticides in the State of California. Before any pesticide may legally be sold or distributed in California, it must first be registered by DPR. DPR has the authority to refuse, revoke or suspend the license of any pesticide that harms or is likely to harm fish and wildlife including endangered species. Section 6158(d) of the California Code of Regulations (CCR) provides that DPR may refuse to register a pesticide due to

unmitigated risks to aquatic biota and wildlife. CCR Section 6221 also provides for reevaluation of existing registrations for reasons including fish or wildlife hazard. Each registration for an outdoor use pesticide is reviewed for unmitigated hazards to fish and wildlife at the time of registration, at the time of any substantive modification of use directions, and during any subsequent reevaluation. Re-evaluation may result in cancellation or suspension of registration or lesser measured responses as warranted. Before a registration is issued, a 45-day posting period is provided for public comment. DPR works closely with CDFG Pesticide Investigations Unit whenever a new registration is proposed that has a toxicity profile and use pattern that could result in hazards to fish and wildlife.

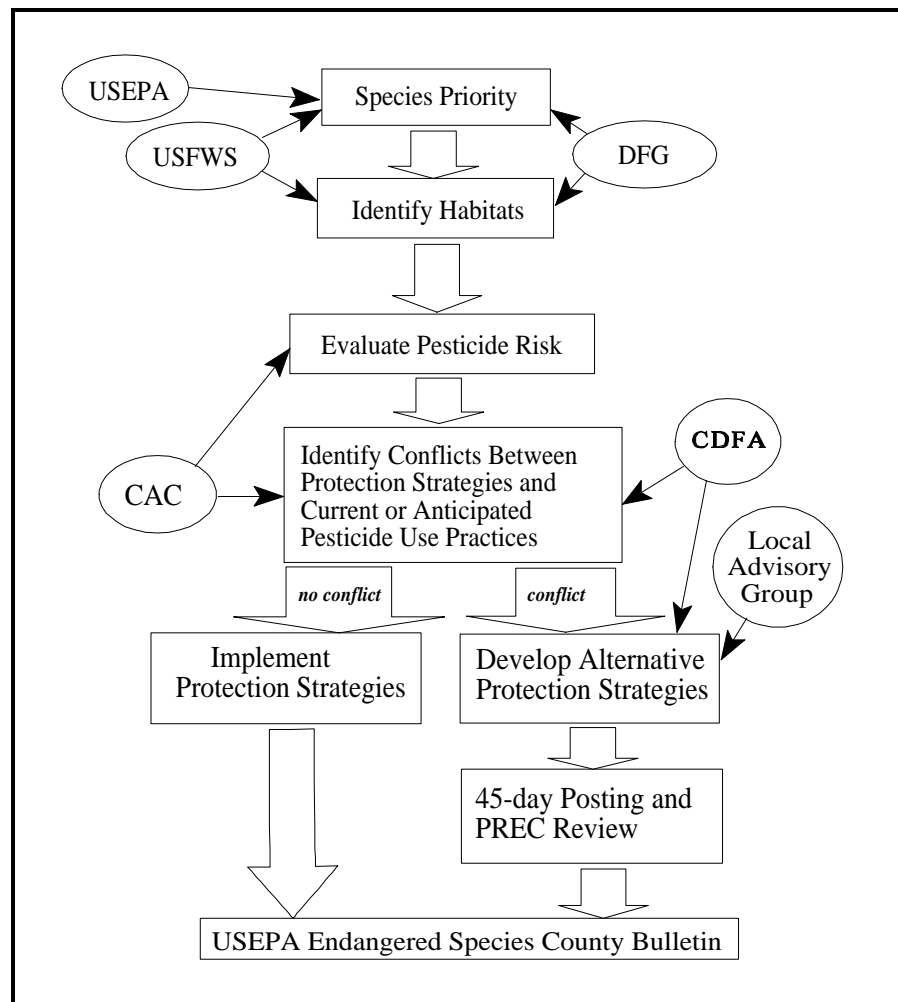
**CDFG Pesticide Investigations Unit:** CDFG is the trustee agency for fish and wildlife resources in California. CDFG manages all fish, wildlife and plant resources and the habitats on which they depend for their ecological values and for their use and enjoyment by the public. The California Fish and Game Code Sections 1301, 1600, 1700, 1802, 1900, 2050-2098 and 2701 list specific authorities and policies associated with the management of fish and wildlife resources in California by CDFG, including threatened and endangered species of fish, wildlife and plants. CDFG Pesticide Investigations Unit investigates all suspected cases of pesticide-related injury to fish and wildlife, reviews all pesticide registration actions by DPR, advises DPR on mitigation strategies to protect fish and wildlife and proposes re-evaluation of registration whenever unmitigated impacts on fish and wildlife are identified.

**California Department of Food and Agriculture (CDFA):** CDFA advises DPR on pesticide issues of general interest to the agricultural industry and maintains specific programs such as noxious weed control, curly top virus vector control and eradication of exotic pests. In addition, CDFA maintains registrations of certain field use rodenticides. CDFA advises DPR on the feasibility of proposed mitigation measures and strategies to reduce the cost of regulatory programs to agriculture. CDFA participates in local advisory groups that develop alternative protection strategies and in the PREC.

**Pesticide Registration and Evaluation Committee:** By regulation, DPR routinely consults with other state agencies that have overlapping jurisdiction for pesticide-related issues or

resources that may be impacted by pesticides. In addition to informal consultation, DPR exchanges information in regular meetings of the Pesticide Registration and Evaluation Committee (PREC). The PREC includes representatives of the Department of Fish and Game Pesticide Investigations Unit, the Office of Health Hazard Assessment, the Air Resources Board, the Water Resources Control Board, the Department of Industrial Relations, the Department of Food and Agriculture, the University of California Department of Environmental Toxicology and the California Agricultural Commissioner's Association.

**County Agricultural Commissioners:**  
County agricultural commissioners (CACs) administer the restricted materials permitting system and enforce other State laws and regulations relating to



**California State Plan Flow Chart**

pesticide use at the local level. The commissioners inspect the operations and records of growers, pest control operators, pesticide dealers and agricultural pest control advisors, conduct pesticide incident investigations; provide training to pesticide users; and collect samples for residue monitoring on food and

feed products. The commissioners conduct thousands of compliance inspections each year. The inspections take place at use and mixing and loading sites, where pesticides are sold and locations where records are maintained. By law, pest control businesses, agricultural pest control advisors and pest control aircraft pilots must register with each county in which they operate. Any registration may be revoked for cause as provided for in the Food and Agriculture Code.

The county agricultural commissioner makes site-specific regulatory decisions regarding pesticide use. The commissioner independently evaluates site-specific factors concerning pesticide uses that may not have been anticipated by the label. The commissioner may propose local plans for any potential hazards that are not mitigated by labeling or to allow mitigated uses of pesticides that would otherwise be prohibited.

**PROCESS:** The process of the Plan includes: a) establishing species priorities, b) identifying habitats, c) evaluating pesticide exposure risk, d) resolving conflicts and e) developing protection strategies. Each component is discussed in more detail below.

Establishing species priorities : Priority will be given to species with 1) jeopardy determinations in biological opinions and 2) any history of pesticide impacts, and 3) conflicts between current or anticipated pesticide use practices and protection strategies. Within this general group, DPR, CDFG and FWS will address priorities identified by U.S. EPA and U.S. FWS. CDFG and DPR will jointly propose species priorities to the Pesticide Registration and Evaluation Committee for review. If, during the process of the plan, any of the agencies involved becomes aware of additional information that may indicate that a certain species is under greater risk or should be given higher priority for evaluation, the species priority listing will be reviewed and revised if necessary.

Identifying habitats : Protecting endangered species requires accurately identifying the habitat. The CDFG Natural Diversity Database (NDDDB) supplemented by other available information will be used to locate habitats. The NDDDB is a compilation of occurrence data for listed and certain non-listed species that provides geographically accurate polygon habitat boundaries for precise locations or circle boundaries for approximate locations

and includes such reference information as name of the observer, date of observation, number of individuals seen, condition of the site, etc. The NDDDB draws on every authoritative source of biological information including museum records, literature and observations of species experts. Each record describes one species or ecological community. With over 20,000 records, the NDDDB is by far the single largest source of compiled habitat data, but updates are perennially backlogged. Many locations have not be revisited in years. The status of these sites is given as "presumed extant" from historical record and lack of new information to indicate otherwise. For the purpose of this plan, we also consider historically occupied sites to remain occupied unless the land use has changed in a manner that is incompatible with the needs of the species. CDFG and U.S. FWS biologists are consulted for interpretation of current habitat status.

Evaluating pesticide exposure risk : The California pesticide regulatory structure which includes existing state institutions with appropriate coordination (MOUs and contracts), the county agricultural commissioners, and CDFG field offices offer an efficient means of identifying real and potential pesticide exposures.

Resolving conflicts : The coincidence of certain habitats with land uses that entail pesticide use creates a potential conflict between species protection and pesticide use. Such potential conflicts are addressed and minimized through the development of local plans. The Plan will seek to resolve conflicts while maintaining a high standard of protection for listed species. The identification of conflicts will be determined from land use data, county agricultural commissioner review and public comment.

If there are no conflicts between current or anticipated pesticide uses and proposed mitigation measures, then the state plan will implement the proposed mitigation measures.

Developing protection strategies : Developing protection strategies (local plans) that resolve pesticide use conflicts within habitats and buffer zones takes advantage of the flexibility of state plans. It is possible to develop use conditions in lieu of use prohibitions that offer equal protection to the species. Protection strategies may begin with applicable USFWS biological opinions. The biological opinions provide a framework of "default" protection strategies that will

be incorporated into County Bulletins unless alternative protection strategies are needed. Where a need for alternative protection strategies is determined by the county agricultural commissioner, a local advisory group may be convened. The local advisory group can include representatives of affected landowners, environmental advocacy groups, pest control advisors, pesticide applicators, other government agencies, and other interested persons.

U.S. FWS and U.S. EPA will be invited to participate in local advisory group meetings. DPR, CDFG and the county agricultural commissioner will conduct the meetings. The local plan will reflect local advisory group recommendations.

**IMPLEMENTATION:** Implementation of the Plan will be through U.S. EPA County Bulletins developed by DPR and CDFG that incorporate local plans as needed. DPR and CDFG will present local plans for review and approval by a subcommittee of the Pesticide Registration and Evaluation Committee (PREC). The U.S. Fish and Wildlife Service (U.S. FWS), U.S. EPA (Region 9), the Department of Food and Agriculture and the California Association of County Agricultural Commissioners and Sealers will be included in the subcommittee and meetings will be noticed and open to the public. After PREC approval, the bulletins will be listed in a public notice that allows 45-days for public comment. If no comment is received that requires further discussion, the bulletins will be promptly distributed for implementation as Interim Measures Bulletins. Participation in local advisory groups, the PREC subcommittee and further consideration during the posting period will be considered adequate approval by all parties for development of Interim Measures Bulletins unless they notify the PREC of any remaining concerns during the posting period. This review process is intended to reflect a broad range of interests, contribute substantial outside expertise, provide for public notice and expedite the issuance of Interim Measures Bulletins without undue burden on any one agency. Section 7 consultation between U.S. EPA and U.S. FWS will occur as necessary. Interim Measures Bulletins will become enforceable County Bulletins when U.S. EPA's Endangered Species Protection Program becomes final. At that time, U.S. EPA will publish a Federal Register notice announcing the program and registrants will be given a deadline to revise all affected pesticide labels to require compliance with applicable County Bulletins. Compliance with County Bulletins will thereafter be required by the Federal Insecticide,



Fungicide and Rodenticide Act (FIFRA) as part of pesticide labeling and enforced in California by county agricultural commissioners.

**PLAN OUTPUTS:** The Plan will produce Interim Measures Bulletins. Annual reports will be produced identifying the status of all protected species down to Category 1 candidate species, distribution by county, protection strategy, status of map development, local review and bulletin development.

**PERIODIC REVIEW AND UPDATE:** Annual meetings will be held to review progress of the Plan and update priorities. An Endangered Species Advisory Committee including U.S. EPA Region 9, USFWS, CDFG, California Department of Food and Agriculture and various political organizations representing diverse interests will be invited to participate.

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**REFERENCES**

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