

MEMBERS
VICE CHAIR, STAN ELLIS
REBECCA BAUER-KAHAN
LETICIA CASTILLO
ALEX LEE
TINA S. MCKINNOR
DIANE PAPAN

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0097
(916) 319-3965



CHIEF CONSULTANT
JOSH TOOKER

SENIOR CONSULTANT
SHANNON MCKINNEY
NAOMI ONDRASEK

COMMITTEE SECRETARY
MARGARET BUXTON



**ASSEMBLY ENVIRONMENTAL SAFETY & TOXIC MATERIALS COMMITTEE
AND
SENATE ENVIRONMENTAL QUALITY COMMITTEE**

**JOINT OVERSIGHT HEARING ON THE CALIFORNIA DEPARTMENT OF PESTICIDE
REGULATION**

To: Members of the Assembly Committee on Environmental Safety & Toxic Materials and Members of the Senate Committee on Environmental Quality

From: Chairs, Assemblymember Damon Connolly and Senator Catherine Blakespear

Subject: **Joint Oversight Hearing:** *Putting Public Protection First: Is California's Pesticide Program Achieving its Purpose?*

Date: August 11, 2026

What is California's Pesticide Program, and Who Implements It?

California is the nation's largest agricultural producer, growing more than 400 commodities that include nearly half of the vegetables and over three-quarters of the fruits grown in the United States (U.S.).¹ In addition, the state's agricultural sector employs nearly half a million people, and roughly 40 million acres—or 40% of California's land—are used throughout the state for agriculture.² Given the scale of agriculture in California, state efforts aimed at ensuring pests are managed safely, effectively, and sustainably are critically important.

In the absence of safer alternatives, pesticides can play an important role in managing pests. However, the same properties that make pesticides effective (e.g., their ability to interfere with growth, reproduction, or neural function) can also make them dangerous to human health and the

¹ Dompka, Hill, & Wilcher. (2025). *California's working landscapes: Evolving contributions to national, state, and regional economies*. University of California Agriculture and Natural Resources.

https://ucanr.edu/sites/default/files/2026-01/WorkingLandscapes-Compliant-Dec_0.pdf; California Department of Food and Agriculture. (2025). "California agricultural production statistics." <https://www.cdfa.ca.gov/Statistics/>

² Employment Development Department. (2026). "Agricultural employment in California." <https://labormarketinfo.edd.ca.gov/data/ca-agriculture.html#Tables>; Cole, Hanak, & Peterson. (2024). "Agricultural land use in California." Public Policy Institute of California. <https://www.ppic.org/publication/agricultural-land-use-in-california/>

environment. To ensure the safe and judicious use of pesticides, state law charges the California Department of Pesticide Regulation (DPR) with state-level implementation, enforcement, and oversight of a pesticide program centered around the following priorities:

- Provide for the proper, safe, and efficient use of pesticides and the protection of public health and safety;
- Protect the environment from harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of these pesticides;
- Ensure that agricultural and pest control workers have safe working conditions, where pesticides are present;
- Permit agricultural pest control by competent and responsible licensees and permittees, under strict control of DPR and County Agricultural Commissioners (CACs); and,
- Encourage the development and implementation of pest management systems that stress application of biological and cultural pest control techniques, with selective use of pesticides when needed to achieve acceptable levels of control, with the least possible harm to nontarget organisms and the environment.³

At the local level, CACs enforce state pesticide laws and regulations under DPR's direction and supervision.⁴ Except as specified, local governments cannot regulate pesticide use. Specifically, state law prohibits local governments from prohibiting or attempting to regulate any matter relating to the registration, sale, transportation, or use of pesticides, and provides that any such local ordinances, laws, or regulations are "void and of no force or effect."⁵

What are DPR's Core Functions?

As noted above, California splits responsibility for the enforcement of state pesticide laws and regulations between two entities: DPR and CACs. At the state level, DPR regulates pesticides by drawing from a suite of tools that includes the following:

- **Registration:** A pesticide must be registered by DPR before it can be sold or used in California. As part of the registration process, DPR must evaluate potential risks associated with the pesticide, as well as consider whether mitigation measures and safer alternatives are needed to protect human health or the environment. State law authorizes DPR to refuse or cancel registration for a pesticide if there is a reasonable, effective, and practicable alternative that is demonstrably less destructive to the environment, and prohibits DPR from registering a pesticide if certain factors are anticipated to result in significant adverse impacts that cannot be avoided or adequately mitigated. In deciding whether to register a pesticide, DPR must consider specified factors, including acute health effects, evidence of chronic

³ California Food and Agricultural Code (FAC) § 11501.

⁴ FAC § 11501.5.

⁵ FAC § 11501.1(a).

health effects (e.g., potential to cause cancer or birth defects), potential for environmental damage, and the availability of feasible alternatives.⁶ "Feasible alternatives" is defined to mean "other chemical or non-chemical procedures which can reasonably accomplish the same pest control function with comparable effectiveness and reliability, taking into account economic, environmental, social, and technological factors and timeliness of control."⁷

- **Restricted material designation:** State law requires DPR to "control and otherwise regulate" pesticides as restricted materials if they threaten public health, applicators, farmworkers, domestic animals, the environment, or crops.⁸ Because of the higher levels of risk associated with these pesticides, they typically cannot be used without additional training and oversight. Once DPR designates a pesticide as a restricted material, it can generally only be purchased and used under a permit issued by a CAC. The permitting process allows CACs to assess the potential effects of a proposed pesticide application on human health and the environment, before the pesticide is applied. If a CAC decides that substantial harm is likely, they must evaluate alternatives (including the alternative of "no pesticide application"), deny the permit, or impose permit conditions that are designed to mitigate the risk of harm to people or the environment.⁹ This basic regulatory structure—in which DPR registers pesticide products and designates restricted materials, while CACs issue permits and enforce pesticide use laws—has been in place since at least 1949, and many of the state laws governing this structure have not substantively changed for decades.¹⁰
- **Continuous evaluation, including reevaluation:** State law requires DPR to "endeavor to eliminate from use in the state any pesticide that endangers the agricultural or nonagricultural environment, is not beneficial for the purposes for which it is sold, or is misrepresented." In meeting this responsibility, DPR must develop a program for the "continuous evaluation" of registered pesticides.¹¹ Notably, "continuous evaluation" is not defined in state law, and there are few statutes and regulations that clearly establish requirements specific to the continuous evaluation process. State regulations do require DPR to undertake continuous evaluation of all registered products, with "first priority" given to products selected according to specified criteria, and "next priority" given to other products considered by DPR to pose the greatest risk to people and the environment.¹²

DPR describes continuous evaluation as a process that the department uses to address new information (i.e., information that is new after a pesticide has been registered) about a pesticide's risks and impacts on human health and the environment. New information can come from scientific literature; public submissions of data; monitoring for pesticides in the air, groundwater, surface water, or ecosystems; worker exposure studies; data submitted to

⁶ FAC § 12825, 3 California Code of Regulations (CCR) § 6158.

⁷ 3 CCR § 6000.

⁸ FAC § 14001, FAC § 14004.5.

⁹ DPR. "What you need to know about the permit process for restricted pesticides."

¹⁰ Malloy, T., Froines, J., Hricko, A., Vasquez, K., & Gamble, M. (2019). *Governance on the ground: Evaluating the role of county agricultural commissioners in reducing toxic pesticide exposures*. University of California, Los Angeles. <https://law.ucla.edu/news/governance-ground-evaluating-role-county-agricultural-commissioners-reducing-toxic-pesticide>.

¹¹ FAC § 12824.

¹² 3 CCR § 6226.

DPR via Pesticide Use Reports, which detail the quantity and types of pesticides used in agricultural and some non-agricultural settings; monitoring for pesticide residues in food; and investigations of pesticide illnesses identified in physician reports, CAC reports, or by California Poison Control.

If, pursuant to new information, DPR identifies a risk, the department may either determine that more data are needed, or take immediate action, which can include expanded training for pesticide applicators, designation of a pesticide as a restricted material, adoption of mitigation measures, labeling changes, or cancellation of a product's registration. Mitigation measures can include, among other things, controls on timing and frequency of application; limits on crops to be treated; use of personal protective equipment by workers; and required buffer zones to protect people or wildlife near the application site.

If more data are needed, DPR may initiate a risk assessment or reevaluation—or both, since risk assessment is a step in the reevaluation process—to acquire the data. While both risk assessments and reevaluations are key tools used by DPR to gather more data, the department draws a distinction between them. DPR describes risk assessment as a tool that the department uses to identify or quantify human health or ecosystem risks, and to "determine the significance of an adverse impact to inform mitigation actions such as label or use changes, permit conditions or other regulatory changes." According to DPR, risk assessments can serve as a flexible tool that can either be "narrowly tailored," or used to evaluate a "wider range" of impacts.

In contrast, DPR describes reevaluation as a formal statutory process that can take years to complete, with the duration varying considerably depending upon the complexity of the process needed to generate new data, the number of sites where products are used, the number of products containing a specific active ingredient (the chemical(s) in pesticide products that act to control pests), and data gaps.¹³ State regulations require DPR to "investigate all reported episodes and information received...that indicate a pesticide may have caused, or is likely to cause, a significant adverse impact, or that indicate there is an alternative that may significantly reduce an adverse environmental impact." If DPR finds from an investigation that a significant adverse impact has occurred or is likely to occur, or that an alternative is available, the department is required to reevaluate the pesticide.¹⁴ For reevaluations, DPR must adhere to a number of statutory and regulatory requirements (many of which have not substantively changed since the 1980s), including the following:

- DPR must require the submission of data that are relevant to the focus of the reevaluation, were not previously submitted to DPR, and would be compulsory under federal and state law for the registration of a new pesticide. DPR must allow for a reasonable amount of time for the development and submission of the data, not to exceed two years. Notwithstanding the lack of such data, DPR must act expeditiously to protect against risks to human health and the environment;

¹³ DPR. (2024). "How continuous evaluation informs DPR actions to mitigate pesticide risks." https://www.cdpr.ca.gov/wp-content/uploads/2024/08/continuous_evaluation.pdf

¹⁴ 3 CCR § 6220.

- DPR must immediately notify a registrant, if the registrant's product has been designated for reevaluation, and include the basis for the reevaluation;
- DPR must determine if the pesticide should be classified as a restricted material and whether additional restrictions are necessary, or if other actions, as specified, should be taken; and,
- DPR must publish a semi-annual report on pesticides that have been reevaluated or are under reevaluation, and include pesticides that DPR received factual or scientific information for, but chose not to reevaluate.¹⁵

In a recent report on its reevaluation process (required pursuant to AB 2113 (E. Garcia, Chapter 60, Statutes of 2024), described further below), DPR states that reevaluation "may not always be the most effective pathway for mitigation" and provides the following rationale:¹⁶

AB 2113 sets specific expectations for how quickly reevaluations should start and finish. However, reevaluation is only one tool to address pesticide risks. DPR's continuous evaluation and mitigation program can allow DPR to skip certain steps associated with reevaluation to more quickly complete risk assessments and mitigation, consistent with AB 2113, while maintaining scientific integrity. In some cases, DPR may proceed with initiating a reevaluation to meet the quota in statute. However, an alternative pathway to identify mitigation and move more quickly to mitigation, such as a risk assessment outside of a reevaluation, could be the best path for DPR to meet the goals of AB 2113.

In addition to registration, restricted material designation, and continuous evaluation, DPR tracks and issues reports on statewide pesticide use. DPR is also responsible for statewide enforcement activities that include licensing of pest control advisors, who provide recommendations to growers pertaining to the safe and legal agricultural use of pesticides; licensing of pesticide applicators; monitoring fresh produce for pesticide residues; and conducting compliance inspections at retail locations to ensure pesticide products are registered and correctly labeled.

As part of its statewide oversight role, DPR also provides supervision, training, guidance, coordination, and technical support to CACs; evaluates county programs through records inspections to review the completeness of permits, accuracy and thoroughness of investigations, appropriateness of enforcement actions, and adequacy of other aspects of enforcement programs; and conducts oversight inspections of county staff to ensure consistent enforcement of pesticide laws and regulations throughout the state.¹⁷

¹⁵ 3 CCR § 6222-6225.

¹⁶ DPR. (2026). *AB 2113—Food & Agricultural Code Section 12824.5(d) report to the Legislature*. https://www.cdpr.ca.gov/wp-content/uploads/2026/06/ab2113_food_agricultural_code_section_12824-5d_report_legislature.pdf

¹⁷ DPR. (2025). "Enforcement." <https://www.cdpr.ca.gov/enforcement/>

What does pesticide use look like in California?

In 2023, 176 million pounds of active ingredients were applied across the state.¹⁸ In 2024, there were nearly 13,000 pesticide products and more than 1,000 different active ingredients registered for use in California.¹⁹ According to DPR, production agricultural pesticide use has always made up the majority of total reported pounds of pesticides applied throughout the state (in 2023, production agricultural pesticide use made up 91% of the total pounds applied).²⁰

In its analysis of pesticide use trends, DPR groups pesticides into the following eight categories, based either on the type of pesticide (e.g., "biopesticides"), or a pesticide's potential to cause environmental or health impacts (e.g., "carcinogens").²¹

- 1) **Toxic air contaminants:** Pesticides that are air pollutants that may cause or contribute to increases in serious illness or death, pose a present or potential hazard to human health, or are identified as "hazardous air pollutants" under the federal Clean Air Act, and pesticides determined to be toxic air contaminants in consultation with the Office of Environmental Health Hazard Assessment (OEHHA). This category also includes all chemicals listed in 3 CCR § 6860.
- 2) **Carcinogens:** Pesticides that are on the state's Proposition 65 list of chemicals known to cause cancer, as well as pesticides receiving a "carcinogen," "probable carcinogen," or "possible carcinogen" rating under the U.S. Environmental Protection Agency's (US EPA) "chronic dose-response assessment table," compiled by the US EPA as part of an assessment of health risks associated with exposure to hazardous air pollutants.
- 3) **Fumigants:** Volatile gas pesticides that can penetrate into soil, stored products (such as food, seeds, and fibers), structures, and other sites to kill pests.
- 4) **Oils:** Pesticides with a petroleum-based oil chemical (not including botanical oils). Petroleum-based oils are often used as insecticides, fungicides, or adjuvants (chemicals that are added to improve the effectiveness of a pesticide). Oils used as broad spectrum insecticides kill insects by either physically blocking their ability to breathe or affecting how they eat. According to DPR, some refined petroleum-based oils are relatively lower-risk than conventional pesticides and may be used in organic farming.
- 5) **Biopesticides:** Biopesticides include naturally occurring substances (biochemical pesticides) and microorganisms (microbial pesticides) that control pests. According to DPR, this

¹⁸ California Department of Pesticide Regulation. (2025). *California pesticide use report highlights*.

https://www.cdpr.ca.gov/wp-content/uploads/2025/08/2023_pur_highlights.pdf

¹⁹ Malloy & Allard. (2026). *Building capacity for robust pesticide regulation*. University of California, Los Angeles. https://law.ucla.edu/sites/default/files/UCLSL-0371_UCLALaw_Cumulative-Impacts-Report_Final_Screen.pdf?gl=1*p99eii*up*MQ.*ga*MTkzNTEwMTIyNC4xNzg0ODc2MzA5*ga_LH03WX2T8B*czE3ODQ4NzYzMDgkbzEkZzAkdDE3ODQ4NzYzMDgkajYwJGwwJGgw

²⁰ DPR. (2025). *Pesticide use annual report: 2023 data summary*. https://www.cdpr.ca.gov/wp-content/uploads/2025/08/2023_pur_annual_report.pdf

²¹ Pesticide use reporting—2023 summary data." <https://www.cdpr.ca.gov/pesticide-use-in-california/pesticide-use-reporting/pesticide-use-reporting-2023-summary-data/>

definition may also include new technologies that cannot be easily categorized as either a biochemical or microbial pesticide.

- 6) **Reproductive toxins:** Pesticides that are on the state's Proposition 65 list of chemicals that are known to cause reproductive toxicity in the form of birth defects or reproductive harm.
- 7) **Cholinesterase inhibitors:** These pesticides work by attacking the nervous system. Specifically, they inhibit cholinesterase, a protein that plays a central role in regulating communication between nerve cells, and between nerve and muscle cells. Organophosphates and carbamates are the two primary chemical classes of cholinesterase-inhibiting pesticides, although not all pesticides in these two classes exhibit cholinesterase inhibition.
- 8) **Groundwater contaminants:** Pesticides that have the potential to pollute groundwater based on their chemical properties and labeled use. The groundwater contaminant category includes all chemicals listed in 3 CCR § 6800(a).

Across the above eight categories, DPR reported the following levels of pesticide use for 2023:

Category	Total pounds applied	Cumulative acres treated (e.g., if a one-acre field was treated three times in a year, the cumulative acres treated would equal three acres)
Toxic air contaminants	34.5 million	1.7 million
Carcinogens	32.5 million	7.1 million
Fumigants	32.4 million	184,000
Oils	28.3 million	5.0 million
Biopesticides	8.8 million	8.1 million
Reproductive toxins	5.6 million	3.3 million
Cholinesterase inhibitors	2.7 million	2.1 million
Groundwater contaminants	130,000	187,000

In 2023, the top ten pesticides used statewide, ranked by total pounds applied, were:

Chemical	Total pounds applied	Categories
Sulfur	39.8 million	N/A
Mineral oil	28.2 million	Oil
Potassium n-methyldithiocarbamate	8.6 million	Carcinogen, fumigant, toxic air contaminant
Chloropicrin	8.5 million	Fumigant, toxic air contaminant
1,3-dichloropropene	7.0 million	Carcinogen, fumigant, toxic air contaminant
Glyphosate, isopropylamine salt	5.3 million	Carcinogen
Glyphosate, potassium salt	5.1 million	Carcinogen
Calcium hydroxide	4.7 million	N/A
Kaolin	3.3 million	Biopesticide

Sulfuryl fluoride (note: this chemical is most frequently used in structural pest control (e.g., the control of household pests))	3.1 million	Fumigant, toxic air contaminant
--	-------------	---------------------------------

According to DPR, in 2023, as in previous years, the region of highest pesticide use was California's San Joaquin Valley. The top five counties with the highest use were Fresno, Kern, Tulare, San Joaquin, and Monterey, which accounted for 50% of the total pounds applied in California. These counties were also among the leading producers of agricultural commodities.²²

Why does California's pesticide program matter for human health?

As noted above, the state of California maintains a pesticide program to ensure that pesticide use does not threaten human health and the environment. Scientific studies have demonstrated associations between agricultural pesticide use and human health risks. As a result, agricultural pesticide use is included as an indicator of pollution burden in CalEnviroScreen, a science-based mapping tool developed by OEHHA and the California Environmental Protection Agency (CalEPA) to help identify communities affected by multiple sources of pollution and communities that may be especially vulnerable to pollution's effects. According to OEHHA, CalEnviroScreen includes pesticide use as an indicator of pollution burden because:

- Farmworker families and people who live near agricultural fields can be exposed to pesticides, both outdoors and inside homes;
- Studies have found that people living in agricultural areas of California have higher amounts of pesticides in their bodies than other people; and,
- Exposure to high levels of some pesticides can cause illness immediately, or conditions such as birth defects or cancer later in life.²³

In a summary of the scientific research and data underscoring the above three points, OEHHA states:

High use of pesticides has been correlated with both exposure and acute pesticide-related illness, and there is evidence for an association with chronic disease outcomes. Pregnant, low-income Latina residents in an agricultural area of California had pesticide metabolite levels in their urine up to 2.5 times higher than a representative sample of US women (Bradman et al. 2005). A study in the California San Joaquin Valley found that 22% of adult participants' air monitor found detectable levels of at least one pesticide, including chlorpyrifos, which had already been banned in California at that time of sampling (Bennett et al. 2025). Exposures among children in preschools were found to be higher in counties with higher agricultural or commercial pesticide use or when children lived near agricultural fields (Alkon et al. 2022).

²² DPR. (2025). *Pesticide use annual report: 2023 data summary*. https://www.cdpr.ca.gov/wp-content/uploads/2025/08/2023_pur_annual_report.pdf

²³ OEHHA. (2026). "Pesticide use." <https://oehha.ca.gov/calenviroscreen/fact-sheet/pesticide-use>

Some research indicates that proximity to agricultural fields is correlated with measured concentrations in homes (Bradman et al. 2007; Harnly et al. 2009). A study in California comparing farmworker homes to homes of low-income urban residents found indoor concentrations of an agricultural pesticide only in homes of farmworkers (Quiros-Alcala et al. 2011). Another study, based on data from the California PUR database, found that nearby agricultural pesticide use was significantly associated with pesticide concentrations in carpet dust (Gunier et al. 2011).

A large cohort study of male pesticide applicators found a significant association between the use of four specific insecticides and aggressive prostate cancer (Koutros et al. 2013). The same study cohort also found that an elevated risk of hypothyroidism was significantly associated with the use of seven pesticides (Shrestha et al. 2018). Studies have also found significant associations between decreased sperm quality and pesticide exposure (Knapke et al. 2022). Ambient exposure to pesticides was also found to be associated with increased risk of developing Parkinson's Disease in a California-based study (Wang et al. 2014). Chronic, moderate pesticide exposure has also been associated with cognitive and psychomotor dysfunction, as well as other neurodegenerative diseases (Kamel and Hoppin 2004).

A study of California births found that rates of preterm birth by county increased significantly as county-wide pesticide use increased, using pesticide information from the California [Pesticide Use Reporting] database (Winchester et al. 2016). Prenatal exposure to the organophosphate chlorpyrifos has been associated with abnormalities in brain structure in children (Rauh et al. 2012). In an agriculture-intensive area of California, children prenatally exposed to several pesticides were found to have significant decreases in Full-Scale IQ (Gunier et al. 2017). Children are at increased risk of pesticide toxicities because of exposures through hand-to-mouth behaviors, higher ratio of body surface area to volume, higher respiratory rates, and closer proximity to the ground. Early life exposures to pesticides, measured as urinary metabolite concentrations, were significantly associated with childhood respiratory symptoms, such as exercise-induced coughing (Raanan et al. 2015). Residential proximity to agricultural pesticide applications has also been linked to childhood cancer (Lombardi et al. 2021; Park et al. 2020).

An examination of national pesticide illness data concluded that agricultural workers and residents near agriculture had the highest rates of pesticide poisoning from drift incidents, with soil fumigation accounting for most of the cases (Lee et al. 2011). In 2021 alone, DPR recorded 158 cases of illnesses caused by agricultural pesticide drift (DPR 2021). Because of their physical and chemical characteristics, fumigants and other volatile pesticides are most likely to be involved in pesticide drift incidents and illnesses. However, any pesticide that is applied by air or sprayed during windy conditions can drift over neighboring communities (Coronado et al. 2011; Lee et al. 2011).

Although pesticide air monitoring data are not available statewide, DPR has established a pesticide air monitoring network for eight agricultural areas as of 2018 where there is high use of pesticides likely to concentrate in air. This network tracks concentrations of 30–40 pesticides and compares monitored ambient air concentrations of individual pesticides with their health screening level. In 2021 it showed that 22 of the 36 pesticides and breakdown

products sampled were detected, and although none were found to be above acute health screening levels, 13-week average concentrations for 1,3-dichloropropene and chloropicrin exceeded their sub-chronic health screening levels (DPR 2023a). Similarly, in 2022 and 2023, 19 of the 40 sampled pesticides and breakdown products were detected, with none exceeding health or regulatory screening levels (DPR 2023b, 2024). In 2023, chloropicrin was found to have a 13-week average concentration that reached 95.4% of its sub-chronic screening level (DPR 2024).²⁴

What Are the State's Goals for Pesticide Use?

The Sustainable Pest Management Work Group: In 2021, DPR, CalEPA, and the California Department of Food and Agriculture (CDFA) launched the "Sustainable Pest Management Work Group" (SPM Work Group), out of recognition that "there are still chemical tools in use that can cause harm to humans and the environment." In 2023, following 20 months of a multistakeholder collaborative process, the SPM Workgroup issued a report called *Accelerating sustainable pest management: A Roadmap for California* (SPM Roadmap), which detailed the group's findings and recommendations for acting on the state's commitment to "accelerating the transition away from high-risk pesticides toward adoption of safer, sustainable pest control practices." The SPM Roadmap defines "high-risk pesticide" to mean "active ingredients that are highly hazardous and/or formulations or uses that pose a likelihood of, or are known to cause, significant or widespread human and/or ecological impacts."²⁵

Sustainable Pest Management (SPM): The SPM Roadmap establishes a definition for SPM, stating that SPM is a "holistic, whole-system approach applicable in agricultural and other managed ecosystems and urban and rural communities that builds on the concept of integrated pest management (IPM)." IPM is an ecosystem-based strategy that focuses on:

- Long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties;
- The use of pesticides only after monitoring indicates they are needed according to established guidelines, with treatments made with the goal of removing only the target organism; and,
- The selection and application of pest control materials in ways that minimize risks to human health, beneficial and nontarget organisms, and the environment.

SPM builds on the IPM concept by including the following "three sustainability pillars": 1) impacts on communities, and equity; 2) linkages to broader environmental issues such as water conservation, biodiversity conservation, soil health, and climate impact; and 3) a broader consideration of economic benefits and impacts.

²⁴ OEHHA. (2026). *CalEnviroScreen 5.0: California's environmental health screening tool*. <https://oehha.ca.gov/sites/default/files/media/2026-06/calenviroscreen50reportf2026.pdf>

²⁵ SPM Workgroup and Urban Subgroup. (2023). *Accelerating sustainable pest management: A roadmap for California*. https://www.cdpr.ca.gov/wp-content/uploads/2024/10/spm_roadmap.pdf

The SPM Roadmap's plan: To accelerate the transition away from high-risk pesticides toward adoption of safer, sustainable pest control practices, the SPM Roadmap articulates the following goals, keystone actions, and leverage points:

Goals: By 2050, California has eliminated the use of Priority Pesticides by transitioning to SPM practices, and SPM has been adopted as the de facto pest management system in California. The SPM Roadmap defines "Priority Pesticides" to mean pesticide products, active ingredients, and groups of related products that have been deemed to be of greatest concern, warranting heightened attention, planning, and support to expedite their replacement and eventual elimination.

Keystone actions: Prioritize pest prevention; coordinate state-level leadership; invest in building SPM knowledge among pest management practitioners; improve the pesticide registration process and bring alternative products to high-risk pesticides to market; and enhance health and environmental monitoring and data collection. As a first step in implementing these priorities, the SPM Roadmap recommends that, by 2025, the state develop a plan, funding mechanisms, and programs to prioritize pesticides for reduction, and to support the practice change needed to transition away from the use of high-risk pesticides.

Leverage points: To move the system "toward a greater state of health," the SPM Roadmap includes the following leverage points:

- To achieve agricultural and urban SPM: update California's pest prevention, exclusion, and mitigation systems; improve DPR's pesticide registration and continuous evaluation processes; and strengthen coordinated SPM leadership structures at both a state and regional level;
- To achieve agricultural SPM: enhance knowledge, research, and technical assistance; align pest control advisors with SPM; reduce economic risk for growers transitioning to SPM; and activate markets to drive SPM; and,
- To achieve urban SPM: enhance data and information collection for urban pesticide use; advance research and outreach on urban pest management issues; make SPM the preferred choice for both licensed and unlicensed users; and refocus urban design, building codes, and regulations to enhance pest prevention.

DPR's activities since release of the SPM Roadmap: Increased funding under AB 2113 (described further below), which was enacted in 2024, provided DPR with additional resources that it has since used to implement AB 2113 requirements, as well as recommendations from the SPM Roadmap and additional goals outlined in the department's 2024-28 Strategic Plan, released in December 2024. In June 2026, DPR's newly formed SPM Advisory Committee held its inaugural meeting. The aim of the SPM Advisory Committee will be to advise DPR on goals, strategies, policies, and partnerships to advance SPM; identify barriers and opportunities for SPM adoption; and inform DPR's work to foster pest management approaches that support

human health, ecosystem resilience, agricultural sustainability, community wellbeing, and economic vitality.²⁶

In April 2026, DPR announced appointments to its newly formed Scientific Prioritization and Review Committee (SPARC), which will serve in an advisory role. SPARC was established to support implementation of the SPM Roadmap by providing science-based recommendations on potential continuous evaluation or mitigation actions; providing input on identification of data gaps, scope of scientific assessment, and feasibility of alternatives; and helping DPR identify where early investments in alternatives may be needed.²⁷

What questions and concerns have stakeholders raised, and where has the Legislature taken action?

A range of stakeholders—including community-based, environmental justice, environmental, and public health organizations; farmworkers; agricultural organizations; pesticide registrants; and CACs—have in recent years raised questions and concerns regarding the state's pesticide program. Below is a summary of some of these critiques, issues for the Committees to consider, and relevant actions taken by the Legislature. Key legislative actions include the passage of AB 2113 in 2024, which, among other things, boosted DPR's ongoing funding by initiating increases to the mill assessment (a fee on the sale of all pesticides sold into the state) over a four-year period. AB 2113 also established transparency, reporting, and timeline requirements pertaining to pesticide registration and reevaluation, described further below.

- 1) **Pesticide registration:** In 2023, the Joint Legislative Audit Committee approved an audit request pertaining to DPR's pesticide registration process. The audit request letter notes that registrants "have increasingly raised concerns around significant product registration delays through DPR." In a 2024 report based on this request, the California State Auditor (State Auditor) states that DPR's pesticide registration application processing times had been increasing, and that some stations in the registration process had "extensive backlogs" of applications. In 2023, the department took an average of more than 3.5 years to process registrations for pesticides with new active ingredients and major new uses. The State Auditor concluded that DPR's delays were in part caused by insufficient funding and inadequate staffing, and an outdated, paper-based registration system.²⁸

To help address some of these issues, AB 2113 increased DPR's funding and established new requirements pertaining to reporting and timelines for the registration process. This includes

²⁶ DPR. (2026). "Sustainable Pest Management (SPM) Advisory Committee." <https://www.cdpr.ca.gov/committees/sustainable-pest-management-spm-advisory-committee/#Meet-DPRs-SPM-Advisory-Committee-Members>

²⁷ DPR. (2026). "Scientific Prioritization and Review Committee." <https://www.cdpr.ca.gov/committees/scientific-prioritization-and-review-committee-sparc/?es=archived#Meetings-and-Events>; DPR. (2026). "Scientific Prioritization and Review Committee (SPARC) and DPR prioritization of pesticide actions." https://www.cdpr.ca.gov/wp-content/uploads/2025/10/sparc_fact_sheet.pdf

²⁸ California State Auditor. (2024). *Department of Pesticide Regulation: Insufficient staffing and inefficient processes delay pesticide registrations*. <https://www.auditor.ca.gov/wp-content/uploads/2024/07/2023-128-Report.pdf>

a requirement that DPR, on or before May 1, 2025 and annually thereafter until May 2, 2028, report and post on its website the average time it took to review, evaluate, and issue final decisions on applications to register new pesticide products in the prior calendar year. In addition, beginning on July 1, 2027, DPR must review, evaluate, and issue final decisions on applications to register new pesticide products, or amend existing pesticide product registrations, within specified timeframes. For example, for new active ingredient applications, the process must be completed within 30 months from the application submission date.

In October 2025, DPR announced that it had launched the final phase of the California Pesticide Electronic Submission Tracking (CalPEST) system. Originally launched in 2024, CalPEST is designed to improve the registration process by "increasing internal efficiency and providing a centralized location for real-time status updates."²⁹

Issues to consider:

- *AB 2113's registration timelines will take effect on July 1, 2027. Are there key milestones between now and then that will help DPR, the Legislature, and interested stakeholders know if the department is resolving backlogs and on track to meeting these timeline requirements?*
- *The SPM Roadmap identifies the following "keystone action" as important for accelerating a transition from high-risk pesticides toward safer, sustainable pest control practices: "Create mechanisms to improve DPR's registration review process and to prioritize and expedite safer, more sustainable alternative products to high-risk pesticides." AB 2113 also articulates this as the Legislature's intent. As DPR improves its registration process, what specific steps is the department taking to prioritize the registration of safer, more sustainable alternatives, and how is the department tracking this?*

- 2) **Pesticide reevaluation:** Some stakeholders have expressed concerns pertaining to the clarity and transparency of DPR's continuous evaluation process. Questions have included how the department decides when to use reevaluation versus risk assessment, and how DPR uses findings from these processes to design appropriate mitigation measures in order to reduce pesticide risks.

In addition, some stakeholders have questioned why so few reevaluations have been initiated and completed over the last two decades, and whether this is protective of human health and the environment. In a 2024 letter on AB 2113, a coalition comprised of environmental justice and environmental organizations stated, "These processes have been extremely slow at DPR. Multiple pesticides have been in the reevaluation process for decades. Cyfluthrin (since 1998) and chloropicrin (since 2001) are two examples. Chloropicrin remains one of the most heavily used pesticides in California. DPR's most recent public prioritization, in 2014, listed the top 10 priority pesticides for risk assessment. All 10 have active registrations today, and are still waiting for DPR to initiate the risk assessment process."

²⁹ DPR. (2026). "DPR launches final phase of the CalPEST System." <https://www.cdpr.ca.gov/2025/10/06/dpr-launches-final-phase-of-the-calpest-system/>

Even though DPR has a process in place to evaluate the safety of registered pesticides, initiate reevaluations, and adopt mitigation measures, the Legislature has in recent years deemed it necessary to compel the department to take action for some pesticides of particular concern, including paraquat (AB 1963, Friedman, Chapter 688, Statutes of 2024), rodenticides (AB 1322, Friedman, Chapter 836, Statutes of 2023), and neonicotinoids (AB 1789, Williams, Chapter 578, Statutes of 2014; AB 363, Bauer-Kahan, Chapter 520, Statutes of 2023).

In an effort to try to address some of the above issues, AB 2113 requires DPR, on or before July 1, 2025 and annually thereafter, until July 2, 2029, to annually identify and initiate reevaluation for at least one pesticide, in addition to those that were already under reevaluation at the time AB 2113 was enacted. AB 2113 then increases the number of required reevaluations, such that, on or before July 1, 2029, and each year thereafter, DPR must annually identify and initiate the reevaluation of at least two pesticides. If DPR identifies potential adverse effects pursuant to these reevaluations, the department must adopt necessary mitigation measures within two years. AB 2113 also requires DPR to annually report a list of pesticides under risk assessment, reevaluation, or mitigation development, and provide projected timelines associated with each of these actions.

AB 2113 also required DPR, by July 1, 2026, to identify actions needed to improve its reevaluation process, with a goal of completing new reevaluations within five years of initiation, and to notify the Legislature if it had identified any regulatory or statutory changes that would improve the reevaluation process. In July 2026, DPR released its reevaluation report. The report describes DPR's existing reevaluation process and steps the department has been taking to improve reevaluation, which include:

- As required by AB 2113, publicly posting a summary of all ongoing evaluation and mitigation work, including milestones and timelines for reevaluations;
- Advancing mitigation actions, reevaluations, and risk assessments that have been delayed by historic understaffing. DPR states that, as of June 2026, it had 7 reevaluations, 2 risk assessments, and 10 mitigation efforts in progress;
- Improving efficiency by narrowing the scope of reevaluations, focusing on the specific toxicity or exposure pathways that need attention, instead of reviewing all possible risks for a pesticide;
- Establishing SPARC; and,
- Making improvements to the continuous evaluation process that include staff training, strengthened coordination, and expanded data collection and modeling to deepen understanding of pesticide impacts.

The report also identifies challenges on the horizon, including that timeline and workload pressures (due to the increased number of reevaluations and AB 2113's goal that

reevaluations be completed within five years) may limit the department's ability to conduct certain scientific evaluations and external engagement. The report does not identify regulatory or statutory changes that would improve the reevaluation process.³⁰

Issues to consider:

- *AB 2113 currently requires DPR to initiate one reevaluation per year, and then increases that to two reevaluations beginning in 2029. There are around 13,000 pesticide products and more than 1,000 active ingredients registered for use in California. How does DPR identify and prioritize pesticides for risk assessment and reevaluation?*
- *DPR's AB 2113 report on its reevaluation process states that reevaluation may not always be the most effective pathway to mitigation of a registered pesticide's environmental or human health risks, and that other tools, like risk assessment, might be a better approach. How do these processes differ? What factors inform DPR's decision to use risk assessment versus reevaluation, and how are these decisions communicated to stakeholders?*

- 3) **Efforts to advance SPM Roadmap recommendations:** Some stakeholders have raised concerns regarding implementation plans for the SPM Roadmap. The recommendations in the SPM Roadmap are ambitious and a range of stakeholders, including agricultural organizations, as well as environmental and environmental justice groups, have shared that growers, who experience many competing pressures, will need support identifying safe, effective, and sustainable alternatives to high-risk pesticides and adopting SPM practices. Questions have also emerged about whether the state, while it advances efforts to eliminate the use of high-risk pesticides and promote the adoption of SPM practices by growers, is also effectively prioritizing state investments in pest prevention. In addition, some groups have questioned whether the 2050 timeline established for the SPM Roadmap's core goals is further out than necessary, and whether momentum may be lost in the absence of a clearly articulated implementation plan.

Issues to consider:

- *Transitioning away from high-risk pesticides will require not only eliminating these pesticides from use, but also ensuring growers have access to safe, sustainable, and effective alternatives. What is DPR's plan for identifying and taking action on Priority Pesticides, while also identifying safer alternatives, including SPM practices and low- or non-toxic alternative pesticide products? How will DPR disseminate this information to CACs, growers, and pest control advisors? How can these efforts be woven into a comprehensive statewide strategy for reducing high-risk pesticide use that also includes a focus on pest prevention?*
- *The SPM Roadmap aims for California to have eliminated the use of Priority Pesticides and adopted SPM as the "de facto pest management system" by 2050, which is nearly a*

³⁰ DPR. (2026). AB 2113—Food & Agricultural Code Section 12824.5(d) report to the Legislature. https://www.cdpr.ca.gov/wp-content/uploads/2026/06/ab2113_food_agricultural_code_section_12824-5d_report_legislature.pdf

quarter of a century away. Should this timeline be moved up and, if so, what would be needed (e.g., resources, technical assistance, investments, support for growers, etc.)?

- *What role can the Legislature play in supporting implementation of the SPM Roadmap?*

- 4) **Funding:** DPR's core functions and responsibilities are supported by the DPR Fund, a repository of taxes and fees paid by pesticide retailers, wholesalers, and businesses. The DPR Fund is primarily supported by three main funding sources: the mill assessment, registration fees, and licensing fees. The largest revenue source for the DPR Fund—about 80%— is the mill assessment, a tax levied on pesticides when first sold into or within the state. Environmental and environmental justice stakeholders have raised concerns that this funding approach creates a disincentive for DPR to reduce pesticide use, since the department's funding depends upon maintaining pesticide sales.

Using one-time funding appropriated in the 2021-22 state budget, DPR contracted with Crowe LLP to evaluate options for addressing a structural deficit in the DPR Fund by conducting a study on the mill assessment. The 2023 report recommends initially raising the mill assessment using the "flat rate" approach, with the option of revisiting the possibility of adopting a tiered rate "once the process of identifying Priority Pesticides through the process outlined in the SPM Roadmap has begun." At that point, DPR could consider establishing higher mill assessments on Priority Pesticides and reduced mill assessments on certain lower-risk products. According to Crowe LLP, this "tiering option would serve to educate users and manufacturers, and function as a policy signal to incentivize the development and use of safer pest management tools and practices."

Notably, AB 2113, which increased the mill assessment over a four-year period using the flat rate structure, represents the only substantive revision to the mill assessment that has occurred in the last twenty years.

Issue to consider:

- *Should the tiered option and its potential intersections with the state's SPM goals be taken into consideration, if the mill assessment becomes a topic of conversation again in the future?*

- 5) **Stakeholder engagement:** In 2023, the Legislature passed AB 652 (Lee, Chapter 662, Statutes of 2023), which establishes an Environmental Justice Advisory Committee (EJ Advisory Committee) at DPR, to integrate environmental justice considerations into DPR's programs, policies, decision making, and activities. In a letter on AB 652, community-based, environmental justice, and environmental organizations explained the need for an EJ Advisory Committee:

Despite the known environmental injustices of pesticide exposure in California, DPR is not publicly accountable to the communities most affected by its decisions... There is currently no formalized, public, or consistent way for environmental justice communities to provide feedback or recommendations to DPR, despite the fact that they bear the brunt of pesticide-

related health impacts. DPR rarely addresses the concerns of environmental justice communities in their regulations and activities, often adopting industrial agriculture's recommendations instead...An Environmental Justice Advisory Committee at DPR would create more transparency and accountability to environmental justice communities and require DPR to integrate environmental justice into its decision-making.

In 2024, in a letter on AB 2113, pesticide registrants also identified issues with transparency, stating, "Unfortunately, lack of transparency in departmental activities for fee payers is not a new phenomenon...DPR's self-reported annual processing times for new active ingredients have increased from 734 days in 2018 to 1,832 days in 2022. There is little to no transparency about the reasons for longer delays despite steady and substantial revenue increases."

In addition, in 2024, CACs articulated concerns regarding their engagement with DPR. In a letter to the department, the California Agricultural Commissioners and Sealers Association (CACASA) state that CACs "need increased support from DPR in order to fulfill [their] pesticide use enforcement responsibilities." The letter also contains several requests and considerations, including requests that DPR collaborate with CACASA on clarifying the role and responsibilities of each entity (DPR and CACs) with respect to enforcing pesticide use regulations; actively communicate regulatory protections in place for communities, the work of CACs, and the several regulatory changes that have taken effect the past few years aimed at continually addressing community concerns; prioritize pesticide use enforcement training for regional DPR offices and CAC staff, with a clear timeline for delivering this training; refrain from adding and imposing unfunded mandates upon CACs that are outside the scope of pesticide laws and regulations; and acknowledge that the "Agricultural Commissioners/ Sealer of Weights and Measures system is broader and more complex than just pesticide use enforcement" and that the work CACs perform is essential to the state's economic viability.

Issue to consider:

- *What specific actions has DPR taken (e.g., in terms of structures, systems, practices, etc.) to improve its communication and transparency with stakeholders? How is the department evaluating the success of these efforts?*

- 6) **Statewide oversight:** Released in 2023, an audit by Region 9 of the US EPA (Region 9 Audit) examined CAC investigations involving pesticide exposure of farmworkers and community members and identified enforcement inconsistencies among CACs. The Region 9 Audit concluded that a lack of specificity in state laws and regulations "can allow for inconsistencies in how different CACs interpret the severity of the same violation," and asserted that DPR needs to evaluate and modify its enforcement procedures and guidance to address discrepancies in how penalties are assessed.³¹ Similarly, in 2025, the *Los Angeles Times* reported—based on an investigation that involved interviews, public record review, and data analyses—that "enforcement of pesticide safety rules is splintered among dozens of county agriculture commissioners, resulting in piecemeal citations. Companies that operate

³¹ US EPA, Region 9. (2023). California counties priority exposure episode audit. <https://www.epa.gov/ca/final-report-california-counties-priority-pesticide-exposure-episode-audit>

in multiple counties were not fined for hundreds of violations—many of them pertaining to worker safety."³²

In 2025, the Joint Legislative Audit Committee approved an audit to examine, among other things, the oversight and support that DPR provides to CACs to ensure consistent statewide enforcement of pesticide use laws pertaining to restricted materials permitting, alternatives evaluations, and the activities of pest control advisors, who provide pest management advice to growers and may be paid commissions associated with pesticide sales. This audit is currently underway.

In 2024, the Legislature passed AB 1864 (Connolly, Chapter 552, Statutes of 2024), which requires DPR to establish specified reporting requirements for pesticide use near schools. In part, this bill was deemed necessary because the information required on DPR's forms made it difficult to evaluate compliance with, and enforce, state regulations that are intended to protect children and school staff from pesticide drift.

Issue to consider:

- *How does DPR evaluate the efficacy of its enforcement activities, identify inconsistencies in local enforcement, and evaluate the effectiveness of the oversight and support it provides to CACs? How does DPR examine the potential causes of inconsistencies (e.g., unclear state laws or regulations, information or data gaps, under-resourcing, training needs, etc.) and address them?*
- *Are there areas of state pesticide law where improved clarity and specificity could support state and local enforcement efforts?*

³² Lopez, R. (2025). "Lax oversight, few inspections leave child farmworkers exposed to toxic pesticides." *Los Angeles Times*. <https://www.latimes.com/california/story/2025-11-20/child-farmworkers-toxic-pesticides-exposure>