

SPM AC meeting public comments – June 15, 2026

1. Kathleen Hallal Hallal

Please approve FireHawk Bioherbicide for use by CA farmers, landscapers, and residents so they have a good regenerative option. The approval process for herbicides that support regenerative farming and landcare practices takes too long, and the people of CA need non-conventional options, please! FireHawk Bioherbicide Super Concentrate (EPA Reg. No. 93740-7)

CalPEST ID PRO-2504066

Thank you.

DPR Response: Thank you for your comment. DPR's Pesticide Registration Branch has reviewed your comment. Registration timelines are available to stakeholders and the public: [California Notice 2026-03](#).

2. juan bolanos

Hi guys!! Please focus on education people, particularly home owners on the proper use and disposal of pesticides rather than focusing exclusively on the pest control industry. We need better technology to do whole house treatment for termites and beetles, rather than just relying on fumigation, please invest funding in developing mor effective local termite control.

DPR Response: Thank you for your comments and the suggestion to focus pesticide use and disposal education on homeowners.

3. Kathleen Kilpatrick

SPM Advisory Comm comments:

Thanks to whoever let me into the meeting when the link was locked, not sure if due to my outdated software. Missed some of the intros, but looks like a diverse and engaged group. I was impressed by the liveliness of the comments and questions. Such a contrast from the PREC meetings.

I appreciated that Sapna succinctly described SPM as pest management to protect the food supply and public health in light of climate change and the new science on pesticides. That expands the definition beyond IPM.

I also appreciated the emphasis on cross agency collaboration, would have liked to have seen a whole list plus acronym expansions. What about collaboration and communication among the various committees within DPR that work on related issues? I found it notable that EJAC was not mentioned; indeed, I don't recall hearing the term environmental justice in the meeting, altho the "public" was mentioned a few times, mostly in regard to committee members' belief we're not understanding what growers are doing with respect to IPM. I recognize that the EJAC is not under SPM's umbrella, but its work is certainly related, as is the PREC. And with Sapna's description of the purpose of the SPARC committee, it's unclear to me how that committee's work will differ from that of the PREC.

With the recognition that tools and alternatives are key to SPM implementation, I noted that, while DPR is working on new regulation for drone delivery of pesticides, it didn't appear that anyone with specific expertise in the area of tech solutions as alternatives was on the committee. Yet several committee members have close ties to the pesticide industry, either as purveyors of products or as PCAs who may receive commissions from pesticide sellers.

The role of PCAs in communicating and adopting changes needs more emphasis. As long as PCAs' incomes are dependent on kickbacks from the chemical industry, that's not going to happen. There will need to be some changes in their training and more accountability for their regulatory obligation to offer info on less toxic alternatives first.

The input from people who work in the urban sector was especially valuable. Great suggestion to have urban PURs, especially in light of the toxicity of some of the chemicals used in urban pest control. (E.g. sulfuryl fluoride, a potent greenhouse gas, used heavily in some California communities.) We need to address the risk of exposure for people in their home and indoor settings, from personal pesticide use, institutional use, and use by neighbors. The idea of organic certification for pest control in urban spaces is also a good one. I love the idea of the color-coded stoplight tiered pesticide system, based on the pest hazard as well as pesticide hazard. That could be especially useful in school settings and other public spaces.

I found the first formats of the SPM matrix much too text-based. There were only two

versions that were highly visual, the sort-of-Venn diagram and the flow chart. I thought those had potential as models for effective communication, would need time to read the slides to see past my resistance to other presentation formats.

I agree that there needs to be more explanation of how SPM differs from IPM. That communication should go to concerned groups, both rural residents and growers, and discussion of the potential impacts of SPM should include all "stakeholders". Thus far, the main distinction I've heard is the focus on the economic viability of California's (large and diverse) agricultural system. Other elements worth emphasizing:

Developing collaborative regional- and crop-based solutions, with farmers sharing best practices for pest prevention and early intervention;

Positive response to public pressure both from ag communities and consumers, with their shared desire to reduce the toxicity of our food system;

Climate resilience, which necessarily includes reduced dependence on fossil fuels, from their use for fertilizers and ag chemicals to packaging and delivery of ag products to markets.

Yes, markets are key, and if SPM-engaged agencies plan to provide incentives, practices must be verifiable. Research, support, and training will be needed. Complicated issues will need to be rendered clear and accessible to action.

It was great to end (almost) with mention of an existing color-coded system for birds, ranking harms from pesticides. That's a model that could be adapted more broadly for pesticides, with columns for impacts on human health, soil, water, and wildlife, plus potential for climate harm: a useful task for some of your new, tech-savvy staff!

DPR has the capability to set targets for reduction of highly toxic pesticides, and to measure progress toward that goal. Several lists already exist; new science and community concerns should be taken into consideration. As someone schooled in Public Health, I recognized it's hard to measure the absence of a problem. But that's how healthy conditions are built: by removing harms and unnecessary barriers. 2050 is very likely to be beyond my lifetime. This committee has expertise and enthusiasm that can help DPR pick up the pace.

DPR Response: Thank you for your comments. The relevant DPR programs have reviewed specific comments for consideration.

The Pesticide Registration and Evaluation Committee (PREC) includes representatives of public entities whose activities impact, inform, or intersect with pesticide regulation. The purpose of this interagency body is to advise DPR on its regulatory actions and other pesticide decisions. PREC provides a forum for public agencies to communicate with and provide feedback to DPR regarding proposed registrations, proposed regulations, policy, and implementation issues.

The Scientific Prioritization and Review Committee (SPARC) will provide science-based recommendations to inform DPR's transparent, data-driven process for identifying and addressing potential risks to human health and the environment from pesticide use. The committee will meet quarterly and serve as a public forum for discussing potential priority actions; including risk assessments, data requirements, mitigation development and, when warranted, product cancellation.

DPR uses feedback and information from all the committees to coordinate the department's actions and inform decision making.

4. [Jake Plevelich, California Pest Management Association](#)

June 30, 2026

Sapna E. Thottathil, Ph.D.

Deputy Director for Sustainable Pest Management

California Department of Pesticide Regulation

DPR Staff and Members of the Sustainable Pest Management Advisory Committee

California Department of Pesticide Regulation

Re: California Pest Management Association's Comments on the June 15, 2026

Sustainable Pest Management Advisory Committee Meeting

Submitted via Smart Comment

Dear Deputy Director Thottathil, DPR Staff, and Members of the Sustainable Pest Management Advisory Committee:

The California Pest Management Association (CAPMA) appreciates the opportunity to provide comments following the first meeting of the Sustainable Pest Management

Advisory Committee. DPR's meeting materials state that the Committee will advise DPR on goals, tactics, policies, and partnerships supporting statewide implementation of Sustainable Pest Management, track statewide progress, and review public comments submitted during the 15-day comment period. DPR also made clear that the Committee does not hold decision-making authority.

CAPMA appreciates that DPR is exploring the concept of Sustainable Pest Management and how it may be applied across California. As DPR evaluates this concept, CAPMA urges the Department and the Committee to proceed carefully, practically, and with full consideration of the public health, property protection, housing, and economic realities of professional structural pest management.

CAPMA's primary recommendation is straightforward: DPR should appoint a CAPMA member and structural pest management expert to the SPM Advisory Committee before the next meeting. CAPMA strongly recommends Blair Smith, BCE, or Dr. Sydney Crawley.

1. The Committee needs structural pest management expertise and a CAPMA member. DPR's own meeting materials recognize that pest management is necessary to protect public health. That is especially true in the structural pest management industry, where professionals protect homes, schools, childcare facilities, hospitals, senior care facilities, multifamily housing, restaurants, food processing facilities, grocery stores, hotels, warehouses, public buildings, and commercial properties.

Structural pest management is not interchangeable with agricultural pest management. It involves pests hidden inside walls, attics, crawlspaces, roofs, equipment voids, kitchens, drains, food-handling areas, hospitals, schools, apartment buildings, and other sensitive sites. It also involves real estate transactions, tenant habitability, public health complaints, food safety requirements, customer tolerance, reinspection requirements, regulatory compliance, and liability.

A theoretical alternative can look viable in a meeting room but fail in practice because the infestation cannot be located, the pest is inaccessible, the structure cannot tolerate the treatment, the customer cannot tolerate repeated failures, the site requires

immediate correction, or the law requires a higher standard of certainty. The Committee needs someone who understands these realities before recommendations are formed.

2. CAPMA strongly recommends Blair Smith, BCE, or Dr. Sydney Crawley.

Blair Smith, BCE, would bring California-specific structural and urban pest management expertise that is directly relevant to the Committee's work. Her application states that she has more than eight years of experience in structural, urban, and institutional pest management programs throughout California, with a focus on developing, implementing, and auditing IPM programs that reduce pesticide risk while maintaining effective pest control outcomes. As Director of Technical and Quality Assurance for Clark Pest Control, she oversees statewide IPM standards, technician training, regulatory compliance, and quality assurance across residential, commercial, food-handling, healthcare, educational, and municipal settings.

Ms. Smith's CV also shows that she develops technical protocols for approximately 800 technicians, has trained more than 400 technicians for Branch 2 and Branch 3 licensing, performs WDO inspection quality assurance, develops service protocols and SOPs, and participates in UC Riverside Pest Management Alliance work involving field trials on low-impact service techniques. Her application further states that she works at the intersection of regulation, science, and field application, and can contribute expertise in pesticide regulatory compliance, urban and structural pest management, resistance management, stakeholder communication, and translating applied research into practical guidance.

Dr. Sydney Crawley would also bring exceptional expertise in urban and medical entomology. Her CV lists a Ph.D. in Entomology, current service as Principal Vector Scientist at Rentokil Terminix, prior service as Assistant Professor and Extension Specialist in Urban Entomology at North Carolina State University, and prior service as a Public Health Entomologist responsible for public health pest product portfolios, research, product development, technician training, and academic and industry partnerships. Her publications and professional work include bed bugs, ticks, mosquitoes, cockroaches, public health pests, traps, pest monitoring, structural pest inspection, and urban pest management training.

Either candidate would add practical, science-based structural pest management expertise that the Committee needs.

3. Professional pest control protects public health, housing, and property.

Structural pest control professionals manage pests that affect health, sanitation, habitability, and property value. Rodents, cockroaches, mosquitoes, flies, bed bugs, ants, termites, stored product pests, and wood-destroying organisms are not merely nuisances. The Pest Prevention by Design guidelines explain that pests compete with people for resources, can carry disease, create unsafe conditions, and may be associated with sanitation and building maintenance problems.

The same guidelines emphasize that effective structural pest prevention requires an understanding of local pest pressures, pest biology, building conditions, entry points, harborage, food, and water. They also note that pest tolerance varies by setting: an occasional ant trail in a home may be a nuisance, but even a single ant in a surgical ward can have serious consequences.

That is why access to effective pest management tools matters. If California policy limits necessary tools before equally effective and practical alternatives exist, the consequences will not be theoretical. Californians could face more pest pressure, more retreatments, more property damage, higher service costs, greater inequity, and increased public health risks.

4. Sulfuryl fluoride remains essential because there is no comparable whole-structure replacement.

DPR's own sulfuryl fluoride alternatives materials, based on the independent CCST review, state that many chemical and nonchemical localized treatments are effective and widely used in California, but that few viable alternatives exist for whole-structure fumigation. The same materials state that sulfuryl fluoride has been an effective structural fumigant for approximately 30 years and became the only federally approved fumigant for homes, garages, barns, storage units, and commercial warehouses after methyl bromide was phased out.

That distinction is critical. Localized treatments have a role, but localized treatment is not the same as whole-structure fumigation. Whole-structure fumigation is designed to

address all wood in a structure at the same time. Localized treatment depends on locating the infestation. DPR's sulfuryl fluoride materials explain that localized treatments are highly reliant on the ability of pest management professionals to locate the exact site of infested boards and termite tunnel systems, and that existing detection devices cannot reliably identify the presence and location of drywood termites in structures.

The same materials explain that some situations remain legally and practically dependent on sulfuryl fluoride, particularly when termite infestations extend into areas inaccessible to professionals and structures are not amenable to whole-structure heat treatment. They further note that heat treatment, while a whole-structure alternative in some cases, costs approximately twice as much as fumigation, cannot be used on all structures, and can damage heat-sensitive materials such as vinyl, Formica cabinets, and newly installed wood flooring.

A list of possible alternatives should not be confused with a viable replacement for sulfuryl fluoride. The standard should be whether an alternative is effective, available, affordable, legally workable, and capable of protecting public health and property under real structural conditions.

5. The economic stakes are substantial.

A 2024 peer-reviewed article by Dr. David Zilberman and Dr. Vernard Lewis of UC Berkeley in the *Journal of Economic Entomology* modeled the economic effects of restricting sulfuryl fluoride for drywood termite control in California. They estimated that annual drywood termite damage and home equity loss in California would be \$4.5 billion to \$16.8 billion without treatment. They further estimated that current practice, using fumigation for a portion of homes and localized treatments for others, results in a combined social cost of roughly \$1 billion to \$2 billion annually, while a localized-treatment-only scenario would cost \$3.2 billion to \$4.9 billion annually. Their analysis estimated that severe restriction or banning of sulfuryl fluoride would increase annual social costs by \$1.43 billion to \$4.31 billion.

Zilberman and Lewis also explain that when localized treatment is ineffective and sulfuryl fluoride cannot be used, drywood termite colonies may be inaccessible or undetected, creating significant damage risk. They further note that drywood termites

can attack structures in hidden and concealed locations, with multiple colonies attacking simultaneously, and that local treatments are highly dependent on finding active infestation sites.

California's housing affordability challenges make these risks even more serious. Policies that reduce access to effective termite control can translate into higher repair costs, reduced home equity, increased transaction costs, and disproportionate impacts on lower-income property owners and renters.

6. Greenhouse gas discussions should use full social-cost analysis.

Sulfuryl fluoride has been discussed in the context of greenhouse gases. That issue should be evaluated proportionately and in the full context of public health, housing, property protection, treatment efficacy, and economic cost.

Zilberman and Lewis estimate that each sulfuryl fluoride fumigation in California uses approximately 6 kilograms of sulfuryl fluoride on average, and they use an estimated global warming effect of 4,800 kilograms of CO₂-equivalent per kilogram of sulfuryl fluoride. Their analysis estimates total GHG costs for 100,000 fumigated structures annually and concludes that, even accounting for GHG costs, current practice produces large social gains compared with no treatment or localized-treatment-only scenarios.

For context, CARB's 2025 greenhouse gas inventory report states that California's 2023 statewide emissions were 360.4 MMTCO₂e and that direct transportation-sector emissions accounted for 37.1% of statewide emissions. CARB also notes that sulfuryl fluoride is tracked separately from the AB 32 inventory's seven greenhouse gases. Using Zilberman and Lewis's estimate of roughly 2.9 MMTCO₂e for annual California sulfuryl fluoride structural fumigation emissions, that is approximately three days of total statewide emissions or roughly eight days of direct transportation-sector emissions.

That comparison does not eliminate climate concerns, but it does show why single-factor analysis is inappropriate. Zilberman and Lewis estimate that the implied cost of eliminating sulfuryl fluoride emissions through severe restriction or a ban would be \$624 to \$1,465 per ton of CO₂ eliminated, while also increasing social costs by billions of dollars and creating equity and property impacts.

7. Prevention and IPM are important, but they do not replace necessary remedial tools. CAPMA members already use inspection, monitoring, exclusion, sanitation, habitat modification, mechanical controls, customer education, targeted applications, and other IPM practices. These tools are essential. They can prevent infestations, reduce pest pressure, improve sanitation, and help ensure that pesticides are used appropriately.

But prevention cannot fully replace remedial treatment when an active infestation already exists. California has millions of existing structures, many of them older, wood-framed, and vulnerable to termites and other structural pests. Building design, exclusion, and maintenance can help reduce future pest pressure, but they cannot substitute for effective professional tools needed to control existing infestations in real buildings.

The Pest Prevention by Design guidelines themselves recognize the importance of building design and retrofit, but also note that many pest control activities are "predominantly in the realm of pest control professionals," not builders. That is exactly why DPR needs structural pest management expertise and a CAPMA member on the Committee.

8. CAPMA's recommendations.

CAPMA respectfully recommends that DPR:

Appoint a structural pest management expert and CAPMA member to the SPM Advisory Committee before the next meeting, specifically Blair Smith, BCE, or Dr. Sydney Crawley.

Preserve access to essential structural pest management tools, including sulfuryl fluoride, unless and until alternatives are proven to provide comparable efficacy, affordability, availability, legal workability, and protection of public health and property.

Evaluate alternatives using real-world criteria, including whether they work in inaccessible infestations, whether they increase retreatments, whether they are affordable, whether they are legally defensible, whether they protect sensitive sites, and whether they can be implemented by licensed professionals in actual structures.

Consider the full social cost of any restriction, including public health risk, housing

impacts, termite damage, home equity loss, repair costs, retreatment, consumer costs, and disproportionate impacts on renters and lower-income Californians.

Engage CAPMA, the Structural Pest Control Board, County Agricultural Commissioners, UC researchers, and licensed structural pest management professionals before forming recommendations that could affect structural pest management tools or practices.

Conclusion

CAPMA appreciates that DPR is exploring the SPM concept and seeking stakeholder input. As this process moves forward, the Committee must include the practical expertise needed to understand the built environment. Structural pest management protects public health, housing, food safety, schools, hospitals, businesses, and property.

DPR should not move forward without a structural pest management expert on the Committee. CAPMA strongly urges DPR to appoint Blair Smith, BCE, or Dr. Sydney Crawley so future discussions are informed by practical, science-based, field-tested expertise.

Respectfully submitted,

Jake Plevelich Travis Mickel, ACE
Government Affairs Committee, Chair President
California Pest Management Association California Pest Management Association

DPR Response: Thank you for your comments. We acknowledge the need for more urban pest management expertise on the committee and appreciate the invitation to engage with your organization.

DPR recently released findings from an independent study focused on alternatives to fumigants: https://www.cdpr.ca.gov/wp-content/uploads/2026/02/ccst_structural_fumigation_report_phase_2.pdf. The study recognized challenges and opportunities in this space. DPR's current annual grant solicitation has identified alternatives to fumigants as a priority area for funding: <https://www.cdpr.ca.gov/spm-grants/spm-grants-program/>. DPR is also dedicated to expanding the work done on cost analyses and recently hired its

first economist to support this effort. Additionally, your comment has been forwarded to DPR's Risk Assessment and Mitigation team for their awareness.

5. [Ruthann Anderson, CAPCA](#)

Please see uploaded comment letter on behalf of CAPCA and the professional PCA license. Thank you.

June 29, 2026

Submitted Via Public Comment Portal Only

Dr. Karen Morrison, Director

California Department of Pesticide Regulation

1001 St., P.O. Box 4015

Sacramento, CA 95812-4015

RE: Inaugural Meeting of DPR Sustainable Pest Management Advisory Committee

Dear Director Morrison:

The California Association of Pest Control Advisers (CAPCA) submits these comments in response to questions posed and discussed at the Department of Pesticide Regulation's (DPR) inaugural Sustainable Pest Management (SPM) Advisory Committee meeting held on June 15, 2026. CAPCA represents approximately 75% of California's 4,000 licensed Pest Control Advisers (PCAs), with 15 active chapters spanning every crop and commodity grown in this state. We have long been engaged in the discussion and implementation of sustainable pest management, as it reflects the daily activities and practices of our members.

We appreciate DPR's commitment to initiating an advisory process around SPM implementation and welcome the opportunity to provide input. Our comments address the SPM resource development framework as well as the incentives and support programs landscape. We highlight CAPCA's existing programs and networks as critical resources DPR can and should engage, and we welcome a collaborative approach to ensure SPM adoption is grounded in the realities our members experience in the field.

SPM Communication, Messaging and the Resource Development Framework

It is important to note that the SPM Roadmap, as detailed in DPR's matrix framework, describes work that our members are already doing. The individual-level actions outlined in the matrix, including practicing Integrated Pest Management (IPM), refining practices, referencing the science, providing trainings, habitat conservation, supporting research and field trials, applying for grants, and more, are all part of the professional standard of care that Pest Control Advisors actively practice daily. We raise this in support of DPR's goals, and to request thoughtfulness around this critical messaging objective. If SPM outreach is framed as introducing new practices rather than building upon and amplifying existing activities, it will generate confusion and frustration among various stakeholder groups. The continued ambiguity between SPM and IPM, a point raised repeatedly during the meeting, is a symptom of this framing challenge. We encourage DPR to ground all SPM messaging in a clear narrative that acknowledges the activities PCAs engage in daily, while casting a vision to describe what IPM can grow into when coordinated at scale and across landscapes and communities.

PCAs and growers must be a priority audience for SPM outreach, but DPR should not assume that it can reach this audience through its own channels alone. Instead, given this is not a regulatorily driven process, we urge DPR to prioritize non-regulatory channels for getting the information out. DPR should focus on working through the organizations they are members of and trust, such as their commodity groups, farm advisors, and associations like CAPCA. We can and should be valuable partners in that effort.

SPM is explicitly framed as a community-based approach. DPR should consider the potential for audience reach of the organizations that they are funding through SPM grants. We encourage DPR to think about how they can integrate with organizations such as CAPCA to get the outcomes of those efforts, key lessons learned, and implementation recommendations, out to the broader community that can make a substantial impact on meeting SPM goals, including PCAs and growers.

CAPCA is a trusted and effective messenger, through the peer-to-peer content provided through The Adviser magazine, regular chapter meetings held across the state, Continuing Education (CE) programming, and direct member communications. Our members trust us because we represent their professional interests and are engaged in

constant attention to ensuring they have the best possible data, science and resources to do their jobs well.

We encourage DPR to evaluate its outreach investments through the lens of how established the audiences are, and how effective an impact might be made by the organizations getting the information to critical practitioners that drive SPM growth.

Continuing Education: Restoring the Value of Peer Learning

DPR has taken welcome steps toward incorporating SPM into CE requirements. However, the removal of interactive CE formats, including panel discussions that bring together researchers, PCAs and growers to discuss real-world implementation of innovations, has meaningfully reduced the quality and effectiveness of these sessions for our members.

For PCAs to lead SPM adoption in our communities, they need opportunities to learn from one another, not just formal technical presentations. A panel that features a researcher, a PCA and a grower discussing the practical realities of implementing a new practice is among the most effective learning formats available. These bridge the gap between research and adoption in ways that static webinars cannot.

CAPCA urges DPR to reconsider the restrictions currently placed on interactive CE formats and to actively support their use for SPM education, including by crediting them appropriately. We welcome the opportunity to collaborate with DPR on developing CE courses that address SPM in a practical, field-relevant way, that reaches PCAs through channels they already use and trust.

A Case Study in Missed Collaboration: Rodent Management

We want to highlight a gap between DPR's current approach and a true opportunity for collaboration, using a concrete example that is directly relevant to DPR's recent grant awards and SPM.

Since the fall of 2024, CAPCA has been deeply engaged in addressing the rat infestation crisis affecting almond, pistachio and other orchard operations across the Central Valley. Our efforts have included:

- Coordinating with CDFA, UC Cooperative Extension, county agricultural commissioners, and commodity groups to compile and disseminate resources
- Developing and distributing a PCA-designed Rat Infestation Management Checklist
- Building and piloting the Rat Monitor tool as a baseline monitoring framework
- Conducting a RAT survey to gather field-level data on infestation scope and impact
- Collaborating with CDFA on a video training series on roof rat management
- Supporting CDFA OPCA in generating an economic impact memo that informed state-level response
- Facilitating distribution of free bait stations to PCAs and growers in affected counties

DPR's presentation in this meeting spotlighted the recent SPM grant cycle which awarded over \$1.8 million for rodent management alternatives, including projects focused on protecting irrigation infrastructure, an area where CAPCA has directly engaged for over a year. At no point did DPR reach out to CAPCA to ask how these investments might build on the networks and resources we have already developed.

This is not a criticism of the grant recipients. Instead, it is an observation about process. DPR developed and funded parallel efforts without engaging the organization that has built trusted infrastructure, established relationships in the research and state agency communities, and is actively reaching the practitioners that implement these programs. The result is a missed opportunity that leads to duplication of effort, slower adoption and outreach that does not benefit from the credibility and trust CAPCA has already established with PCAs and growers on this critical issue.

We raise this rodent management example because it is indicative of a broader pattern, and because we believe this gap can be filled through collaboration. Before launching future pilots, outreach programs or funding initiatives in areas where CAPCA is already active, we encourage DPR to reach out early to build genuine collaboration that leverages existing relationships and resources to maximize impact.

Pesticide Use Reporting and Accurately Contextualizing the Data

During the June 15 meeting, comments from some members focused on Pesticide Use Report (PUR) data transparency. We want to offer important context for how the committee considers this discussion as it evolves.

The PUR captures what pesticides are applied. It does not, and cannot, capture the extensive monitoring, scouting, threshold-based decisions, and interventions that PCAs and growers engage in before any application occurs. The absence of a pesticide application in the PUR record does not mean that no pest management occurred, in most cases, it means IPM worked as intended. Treating PUR data as a complete picture of pest management implementation and practice fundamentally misunderstands how professional pest management is conducted in California.

UC Davis recently published a DPR-funded study: Conflicts of Interest, Risk Aversion, and Pesticide Use in California Agriculture, on PCA decision-making¹. This study is an important counter-narrative to some of the assumptions brought up by these committee members. DPR and the SPM committee should actively review that research and its findings to provide a stronger understanding of PCA decision making methodologies in practice.

We are also looking forward to the release of the forthcoming report by CDFA OPCA on Evaluating SPM adoption by Pest Control Advisers (PCAs) which in collaboration with CAPCA tracks the non-chemical PCA observations that are critical to understanding the broad activity of IPM that already exists in the field. We believe understanding the full picture of integrated decision making to mitigate pest and disease, not just PUR data is a critical component as this committee looks to build meaningful next steps to enhance IPM into SPM. This study should serve to furthermore validate the DPR-funded, UC Davis published study by Dr. Jay Rosenheim noted above.

Conclusion

CAPCA appreciates the opportunity to share our interest in collaboration and vision for growing awareness and meeting SPM objectives through California. We believe that SPM success depends on the recognition of the existing IPM processes and dynamic nature of tools that are fundamental to SPM. We believe that SPM success depends on building connections with the practitioners that will implement it, through the

organizations they trust. We welcome the opportunity to discuss any of these recommendations further.

Sincerely,

Ruthann Anderson | President/CEO

CAPCA

AT THE CENTER OF PLANT HEALTH

¹ Rosenheim, J. A., & Culshaw-Maurer, M. (2026). Conflicts of interest, risk aversion, and pesticide use in California agriculture. *Journal of Pest Science*, 99(1), Article 19.

<https://doi.org/10.1007/s10340-025-01999-8>

DPR Response: Thank you for your comments.

Regarding SPM communication: We acknowledge that PCAs are a critical audience for SPM education and outreach. We agree that partnerships between DPR and trusted organizations will be important for successful outreach. We appreciate the invitation to engage further with your organization.

Regarding continuing education: DPR agrees with the value of panel discussions that positively support the learning of material focused on pesticides or pest management. Panel discussions can earn up to 30 minutes of credit as long as the remainder of the course contains a minimum of 4 hours of approvable CE content.

DPR also supports sponsors in including structured sessions or presentations from a variety of pesticide and pest management subject matter experts in a course. Experts can share a presentation and/or present collaboratively while engaging in interactive conversations with licensees. DPR considers this format that is structured with clear objectives to be separate from panel discussions. A clear agenda with talking points facilitates a dialogue between the experts and audience that maximizes the learning environment and keeps topics focused on content relevant to pesticides or pest management.

Regarding the rodent management case study: We appreciate CAPCA's efforts related to rodent management. DPR's current annual grant solicitation has identified alternatives to rodent management as a priority area for funding:

<https://www.cdpr.ca.gov/spm-grants/spm-grants-program/>. **Regarding grant proposal application funding, California Association of Pest Control Advisers is represented on the Pest Management Advisory Committee (PMAC), a diverse pest management stakeholder group that assists DPR in proposal application review. During a public meeting, PMAC makes a recommendation to DPR's Director regarding proposal application funding via a consensus-based process. DPR's Director considers PMAC's recommendations when selecting proposal applications for funding. In accordance with the Bagley Keene Open Meeting Act, PMAC meetings are open to the public and are on the public record. Comments regarding proposal applications that are received outside of the public review meeting cannot be considered as part of PMAC's recommendation, as it would violate the Act. We encourage CAPCA to share perspectives on how proposal applications relate to CAPCA's work during the public PMAC review meetings to ensure that these perspectives can be considered when funding decisions are made.**

Regarding contextualizing PUR data: We acknowledge California growers' and pest management professionals' existing IPM programs and efforts and recognize the need for additional data to better understand the use of nonchemical practices not reported in PUR.

6. [Leslie Hickle, FarmSense Inc](#)

I appreciate the immense effort and thought that the SPM Advisory Committee has put into the Roadmap. It's clear that the focus is shifting from killing pests to building a system. You also addressed the challenge of streamlining the registration of safer alternatives which helps spur public and private investment in AgTech and it was also clear that the team spent a lot of time bringing divergent stakeholders into the conversation. Thank You.

After reading the Roadmap and listening to the presentation, I have the following questions/observations:

- 1) Since most of the new hires are focusing on accelerating the registration of biologics, are we creating a "biological treadmill" to replace the "pesticide treadmill"? Are we implying that all synthetic pesticides are bad rather than using them more judiciously and integrating them into a more comprehensive program?
- 2) A 2050 timeline is incredibly optimistic. Shifting an entire agricultural economy away from a century of chemical-dependent practices in just a few decades presents massive

logistical and biological hurdles.

3) Can you adjust the transition time for different crops? Fast Adopters with short-cycle crops, row crops, and industries with strong organic market premiums are more likely to hit the 2050 benchmarks. But the timeline is strained for permanent specialty crops like almonds, walnuts, and citrus. Because a tree crop represents a 25-to-30-year financial investment, growers cannot easily "rotate" crops or survive a failed trial of an unproven biological tool. For these sectors, 2050 will represent a tight, high-stakes deadline

4) The SPM advisory committee has not addressed the core bottleneck of IPM adoption/lack of adoption which is labor and preventative overhead costs associated with monitoring and sanitation. I understand that education and training and regulatory incentives might stimulate interest but adoption historically has been poor because of cost and lack of real-time tools. If SPM is to be a system-wide ecologically-based prevention platform, then why not mandate sanitation and monitoring? Both are pillars of IPM and included in every IPM publication regardless of what the practice was called (Re: Insect Pest Management, Insect Control, Integrated Pest Control).

5) Pest monitoring (other than rodents) is not included as a topic of interest in DPR SPM grants, yet would be critical for the effective use of biologics. The FDA requires a companion diagnostic for every biologic drug registered because biologics work differently than small molecule drugs. Biologic pesticides are more challenging to use effectively so why not mandate a tool to ensure that it's used correctly.

6) The proposal to encourage and retrain independent PCAs is good; however, it ignores the reason why only a small percentage of the PCAs are independent which is financial support while they build a business. Perhaps SPM grants, vouchers, or other forms of reimbursement can fund or provide support for these professionals while they train while the state figures out how to fund it? (Note: this might be a policy goal rather than a reality?)

7) It appears that the state is considering providing all the funding for salaried public advisors to break the reliance on retail advice but this defeats the purpose of independent PCAs. The state-salaried employees will have "no skin in the game" and historically cannot endorse or make recommendations so this would seem to be a conflict of interest.

8) You mentioned that this Department would be "stand-alone" and would not necessarily interact with other agencies even though there is significant overlap in many areas. I think that the other agencies would benefit and contribute to the program's success.

9) Maybe a clearer explanation of SPM is needed since a couple of the Advisors and myself didn't understand the difference? IPM was always a community approach-that's why the early inundative releases of beneficials worked and how we eradicated boll weevil and pink bollworm.

I acknowledge that my comments may be biased as I studied under Drs. Hal Reynolds, Vern Stern, and Roy Fukuto who were my major and minor professors during my Ph.D. research at UC Riverside. My degree is in Economic Entomology and Pesticide Toxicology and I have 40+ years in ag and animal health. I am currently leading a UCR spinout with real-time pest monitoring technology which has been commercialized and used in several crops. My concern is that we are still focusing on only a couple of pieces of IPM, the biologics and education, and excluding other foundational elements which would ensure success.

DPR Response: Thank you for your comments. We recognize that there are many challenges to transitioning to SPM. To support statewide SPM implementation, DPR has increased staffing to support multiple programs across the department and has convened a cross-agency workgroup to coordinate state agencies. We recognize the complexities regarding efficacious use of biocontrols and biopesticides. We acknowledge that more clarity is needed to help our stakeholders differentiate SPM from IPM; we are working on creating content to help with education and outreach efforts. We appreciate the suggestion to discuss labor and overhead costs as barriers to IPM adoption.

7. Staci Cibotti The Xerces Society for Invertebrate Conservation

Dr. Karen Morrison

Director

California Department of Pesticide Regulation

1001 I Street Sacramento, CA 95814

June 30, 2026

Re: Comments on SPM Advisory Committee Meeting - June 15, 2026

Dear Director Morrison and other members of the SPM Committee:

Thank you for the opportunity to comment on the topics discussed during the Sustainable Pest Management (SPM) Committee meeting held on June 15, 2026.

The Xerces Society for Invertebrate Conservation is a science-based nonprofit organization focused on the conservation of invertebrates and their habitats. We work closely with growers, researchers, agencies, municipalities, tribal partners, and conservation organizations across California to expand pollinator habitat, reduce pesticide risks to beneficial insects, and improve the health and resilience of agricultural, urban, and natural systems.

We are encouraged to see the California Department of Pesticide Regulation's continued commitment to advancing sustainable pest management practices and supporting their adoption across the state. We offer the following comments regarding the relationship between SPM and existing pest management frameworks, several examples of programs that may serve as useful case studies for SPM implementation across landscapes, and insights into our experiences with several of the incentive-based programs referenced in the meeting.

1. Clarify how Sustainable Pest Management (SPM) differs from Integrated Pest Management (IPM)

We appreciated the committee discussion regarding the relationship between SPM and Integrated Pest Management (IPM). Several committee members noted that the distinction between these concepts remains somewhat unclear under the current framing. We encourage DPR to more explicitly communicate how SPM differs from, builds upon, or operationalizes existing IPM principles.

This is particularly important given that IPM is not a single, universally consistent concept. There are likely over a hundred current definitions, and its interpretation can vary across programs and contexts (Deguine et al. 2021), which can lead to inconsistency in how it is applied in practice. The SPM Roadmap appears to anchor its framing in the University of California Statewide Integrated Pest Management Program (UC IPM) definition, which describes IPM as an "ecosystem-based strategy that emphasizes long-term prevention through approaches such as biological control, habitat

manipulation, modification of cultural practices, and resistant varieties, while using pesticides only when needed and in ways that minimize risks to human health, beneficial and non-target organisms, and the environment."

We note that the UC IPM definition already reflects many principles commonly associated with SPM, including prevention, ecological approaches, and minimization of risks to human health, beneficial organisms, and the environment, and thus extends beyond many traditional formulations of IPM, which have often focused more narrowly on pest monitoring, economic thresholds, and judicious pesticide use. The clearest potential distinction appears to be that SPM places these practices within a broader sustainability framework and more explicitly involves reduction in reliance on high-risk pesticides. We encourage DPR to make this distinction clearer, including the extent to which pesticide reduction (or pesticide risk reduction) is intended to be a defining feature of SPM implementation.

2. Existing programs provide examples of SPM implementation

During the June 15 meeting, DPR staff expressed interest in identifying examples and case studies that demonstrate successful implementation of sustainable pest management principles. We would like to make the department and committee aware of several existing programs that align closely with SPM objectives and may serve as useful examples or implementation resources.

Xerces Habitat Kit Program

The Xerces Habitat Kit Program is a nationwide initiative that provides free, regionally appropriate, climate-resilient, sustainably grown native plants to support pollinators and other beneficial insects. In California, the program includes two complementary efforts: one focused on creating or enhancing habitat across working lands, public lands, tribal lands, post-wildfire recovery areas, and other community spaces in collaboration with landowners and land managers across the state (including farms, ranches, urban farms and gardens, city parks, school gardens, and other public spaces); and a Southern California Residential Pollinator Habitat Kit Program that provides free plants to residential properties, schoolyards, community gardens, and other urban spaces across Los Angeles, Orange, Ventura, Santa Barbara, San Bernardino, Riverside, San Diego, and Kern counties.

In addition to providing habitat resources, the program incorporates pesticide-related siting criteria designed to help ensure the establishment of high-quality, low-risk habitat for pollinators. In some cases, follow-up engagement with Xerces staff has supported landowners in adjusting pesticide use practices to improve habitat quality and reduce risks to pollinators. Since 2019, the program has distributed more than 250,000 native plants to partners across the state. This initiative demonstrates how habitat creation, pesticide risk reduction, technical assistance, and voluntary participation can be integrated into a practical conservation model.

Bee City USA and Bee Campus USA

We also encourage the committee to consider the Bee City USA and Bee Campus USA certification programs as examples of urban and institutional approaches that support SPM goals. California currently hosts eleven cities and eighteen college campuses that have all committed to conserving native pollinators by providing them with healthy habitat that is rich in a variety of native plants, provides nest sites, and is protected from pesticides. In addition to habitat creation and maintenance requirements, participating communities commit to developing and implementing integrated pest management (IPM) plans designed to prevent pest problems, reduce pesticide use, and expand adoption of non-chemical pest management approaches.

Many California affiliates have adopted actions to reduce pesticide use and risks, including implementing specific non-chemical pest prevention and management practices, avoiding use of pesticides on designated pollinator habitat or other sensitive sites, eliminating aesthetic and cosmetic use of pesticides, transitioning to using only organic pesticides, and using pesticides only as a last resort within their IPM plans. Communities are also investing in public outreach and training for their staff to increase adoption of SPM practices. These programs may provide useful urban sector examples of how SPM principles can be incorporated into municipal and institutional land management.

Bee Better Certified™

The final Xerces program we would like to mention is Bee Better Certified™ a third-party verified eco-label focused on pollinator and biodiversity conservation that provides a framework for farmers and food systems to implement practices that reduce pesticide risks and strengthen ecological resilience on working lands. Through habitat

creation and stewardship, integrated pest management practices, and restrictions on high-risk pesticide use, the program offers a practical example of how sustainability goals can be translated into measurable on-farm actions. To date, the program has certified 28 farms across 40 crops, encompassing 29,000 crop acres and 1,000 acres of permanent pollinator habitat. This program may provide a useful example of how SPM principles can be operationalized through measurable standards and third-party verification.

3. Incentive-based programs can support broader adoption of SPM practices

We also appreciated the discussion of existing incentive-based approaches to support adoption. In addition to the programs mentioned above, the Xerces Society has extensive experience implementing habitat and pesticide risk mitigation on working lands through a range of different programs, including USDA NRCS conservation programs, private sector supply chain initiatives, and the California Department of Food and Agriculture (CDFA) Pollinator Habitat and Healthy Soils Programs.

During the meeting, the CDFA Pollinator Habitat Program (PHP) block grant was referenced as one example of this type of investment. Please note that funding for the pilot phase of the PHP was fully allocated in 2022, and the program was not included in the 2026-27 budget and is not currently being offered. As the pilot program approaches conclusion, we encourage DPR to communicate the value of this and similar programs to CDFA and highlight the role well-structured state incentive programs can play in helping growers transition toward more sustainable pest management practices. We also want to emphasize how effective the PHP program was in facilitating grower adoption by addressing the two most common limiting factors in implementing on-farm habitat and biodiversity conservation: limited technical knowledge and high upfront costs of materials and labor. The PHP provided block grant awardees with the flexibility to tailor technical assistance to grower needs (including providing training on IPM), absorb much of the program's administrative burden, and cover upfront implementation costs on behalf of growers. While other incentive programs, including the CDFA Healthy Soils Program block grant, continue to support implementation of some SPM practices, they often place greater administrative and financial responsibility on growers while offering less funding for technical assistance, which may reduce accessibility and participation for some operations.

We also encourage continued consideration of USDA NRCS Conservation Practice Standard 595 (Pest Management Conservation Systems) as an existing mechanism that can support SPM implementation. Through programs such as the Environmental Quality Incentives Program (EQIP), NRCS 595 provides a framework for integrating both comprehensive and crop-specific pest management activities that can support grower adoption of lower-risk pest management systems. California NRCS already supports several crop- and pest-specific applications of 595 that align closely with SPM objectives, such as support for mating disruption for navel orangeworm in almonds. However, the current suite of crop-specific applications of 595 remains limited and adoption of 595 appears relatively low. There may be opportunities to increase adoption and effectiveness through development of additional crop-specific applications, stronger implementation support, and increased outreach and technical assistance for both growers and NRCS conservation planners. Advancing development and broader adoption of these approaches will likely require coordination among multiple agencies and organizations, including California NRCS, UC IPM, and other partners.

Finally, we'd like to request that future public comment periods remain open for at least two weeks following the posting of meeting recordings rather than two weeks following the meeting date itself. This would improve accessibility and provide stakeholders a more meaningful opportunity to review discussions and provide thoughtful feedback.

We appreciate DPR's leadership and continued efforts to advance sustainable pest management in California and thank you for your consideration of these comments.

Sincerely,

Staci Cibotti, PhD

Pesticide Program Specialist

The Xerces Society for Invertebrate Conservation

Links and References:

Bee Better Certified: <https://beebettercertified.org/>

Bee City USA/Bee Campus USA: <https://beecityusa.org/>

Xerces Society Pollinator Habitat Kit Program

- California Monarch and Pollinator Habitat Kits:

<https://xerces.org/pollinator-conservation/habitat-kits/california>

- Southern California Residential Pollinator Habitat Kits:

<https://xerces.org/pollinator-conservation/habitat-kits/southern-california>

Deguine, Jean-Philippe, Jean-Noël Aubertot, Rica Joy Flor, Françoise Lescourret, Kris A. G. Wyckhuys, and Alain Ratnadass. 2021. "Integrated Pest Management: Good Intentions, Hard Realities. A Review." *Agronomy for Sustainable Development* 41 (38). <https://doi.org/10.1007/s13593-021-00689-w>.

DPR Response: Thank you for your comments. We acknowledge that more clarity is needed to help our stakeholders differentiate SPM from IPM; we are working on creating content to help with education and outreach efforts. We appreciate your examples of SPM implementation. We also appreciate you sharing your knowledge and experience with incentive programs; we will keep your comments in mind as we continue work on incentives for SPM. Regarding public comment periods: we have learned from our experience and will implement improvements for post-meeting actions going forward.

8. Sarah Aird, Californians for Pesticide Reform

Comments on June 15, 2026 SPM Advisory Committee Meeting from Californians for Pesticide Reform

June 30, 2026

Karen Morrison, Director

California Department of Pesticide Regulation

1001 I Street, Sacramento CA 95814

Karen.Morrison@cdpr.ca.gov

RE: SPM ADVISORY COMMITTEE

Dear Director and Sustainable Pest Management Program Staff:

Californians for Pesticide Reform (CPR) appreciates DPR's adoption of the Sustainable Pest Management (SPM) Roadmap, the formation of the SPM Advisory Committee, and the Department's recognition that California must transition toward more sustainable approaches to pest management.

During the initial meeting of the SPM Advisory Committee on June 15, 2026, we were encouraged by discussions regarding:

- improving pesticide use data, including urban pesticide use reporting and incorporation of target pest and disease information into pesticide use reporting systems to better understand pest pressures, critical uses, and potential alternatives;
- using state institutional procurement to act as a key driver of SPM;
- increasing grower participation, peer-to-peer learning, and landscape-scale approaches to pest management;
- incorporating SPM training into continuing education requirements for pest control advisors;
- developing hazard indices and classification systems, such as color-coded approaches, that help identify the least harmful pest management practices and products; and
- establishing tools and metrics for measuring progress toward sustainable pest management

Critical Next Step: Establishing Timelines, Milestones, and Phase-Out Pathways to Eliminate Priority Pesticides by 2050

The most visionary and important component of the Roadmap is its commitment to the "North Star" goal of eliminating the use of Priority Pesticides by 2050 through a transition to sustainable pest management practices. ***Above all else, we recommend that the SPM Advisory Committee be charged with developing, by June 2027, a timeline, process, and interim milestones for achieving this crucial goal.***

We are concerned by statements made by DPR staff during the June 15 meeting indicating that the SPARC Committee will not identify a list of Priority Pesticides but will instead focus on mitigation recommendations and prioritized actions within DPR's existing authorities.

We appreciate that mitigation measures are an important part of reducing immediate harms from hazardous pesticide use. However, mitigation alone cannot substitute for the Roadmap's broader commitment to eliminate the use of Priority Pesticides by 2050. If DPR does not charge the SPM Advisory Committee and SPARC with helping identify Priority Pesticides¹, develop reduction milestones, and establish phase-out pathways, California risks creating a process that manages continued use of hazardous pesticides rather than driving the transition away from them.

It is critical that DPR establish transparent interim targets, milestones, and transition timelines that provide growers, pest control operators, researchers, technical assistance providers, and others with clear expectations regarding future priorities. Such planning would help identify where additional research, incentives, and support are needed while providing certainty regarding the direction of California policy.

Measuring Progress and Ensuring Accountability

California should establish transparent methods for tracking reductions in Priority Pesticide use, adoption of sustainable pest management practices, environmental outcomes, and other indicators of progress. Any pesticides under consideration for Priority Pesticide designation should be publicly identified, and Priority Pesticides should be tracked using pesticide use reporting data to measure and publicly report reduction trends over time.

The Committee should develop clear metrics for supporting transition and for measuring progress toward the Roadmap's goals. Developing and maintaining these metrics should be considered one of the Committee's core responsibilities.

The Committee Needs a Comprehensive Understanding of All Tools Available to Support SPM

A recurring theme throughout the meeting was discussion of certain grant programs, incentives, and technical assistance programs² that could support transition to sustainable pest management.

- We appreciated DPR's interest in developing materials to help make information regarding these SPM-related funding and technical assistance opportunities more useful to potential applicants and echo Committee members' call for inclusion of additional information, including: clear eligibility requirements, which practices

are supported, average award sizes, technical assistance availability, application timelines, and whether funding is currently available (to our knowledge, for example, neither the Organic Transition Pilot Program nor the Pollinator Habitat Program are allocating new funds).

- We recommend adding to this resource list by analyzing other incentives and support offered by additional partner agencies, universities, extension programs, Resource Conservation Districts, nongovernmental organizations, and other relevant entities who are advancing sustainable pest management.
- DPR will need to allocate time and resources to increasing farmers' access to safer pest management practices and products, with an emphasis on practices. The support for and adoption of new tools and products will get the support of those entities whose economic wellbeing benefits from their sale and adoption. On the other hand, the agroecological practices that individually, and more effectively in combination, function to PREVENT pest problems will require more government support as they do not benefit from private sector support afforded the suppliers of commercial products.
- We also recommend the Committee receive information regarding the overall scale of these investments and whether current funding levels for these programs and initiatives are sufficient to support the transition envisioned by the Roadmap.

In addition to these incentives that can support adoption of pest management practices, DPR should also clarify the regulatory tools at its disposal that could act to discourage continued use of the most hazardous pesticides, such as reevaluations, restricted-material classifications, enforcement priorities, and pesticide-use reporting.

As part of this process the Committee should assess whether existing regulatory tools are sufficient to achieve the Roadmap's goals. This discussion should include, for example, whether DPR's current ponderous reevaluation process and timelines are adequate, whether additional resources or statutory changes are necessary, and whether DPR should take a more precautionary approach to registering new pesticides when safer and feasible alternatives already exist.

Assess Current Structures That Could Inhibit Progress Toward Sustainable Pest Management

The Committee should also explore whether existing structures align with the Roadmap's long-term objectives:

- **Mill Fee:** DPR's budget, for example, is substantially supported by the mill assessment on pesticide sales, raising important questions about how the Department will be funded as California seeks to reduce reliance on hazardous pesticides. The Committee should consider whether reforms to the mill assessment could better reflect the societal and environmental costs associated with the most hazardous pesticide products while encouraging transition toward safer alternatives and sustainable pest management practices.
- **Pest Control Advisors:** Similarly, the Committee should also examine whether existing pest-control advising structures align with the goals of sustainable pest management. In particular, it's concerning that some pest control advisers who work for pesticide dealers may receive commissions or other financial incentives tied to pesticide sales. This creates an inherent tension with SPM goals because advisers may benefit financially from recommending pesticide use rather than non-chemical approaches, prevention-based practices, or lower-risk alternatives.
- **Cost Analyses:** The Committee would benefit from a discussion of the broader economic costs associated with pesticide-dependent pest management systems. California incurs significant costs associated with pesticide contamination, environmental degradation, public health impacts, regulatory oversight, monitoring, remediation, and other downstream consequences of pesticide use. Yet these costs are not reflected in DPR's pesticide regulatory decisions. A comprehensive assessment of these costs could help policymakers and regulators better understand the economic benefits of transitioning toward more sustainable pest management systems. The Committee should explore whether California's decision-making frameworks adequately account for environmental, public health, and community impacts when evaluating pest management policies and how they contribute to or alleviate racial and other social disparities.

Without understanding the full range of available tools as well as current structures that may be inhibiting progress toward sustainable pest management, it will be difficult for

the Committee to evaluate how to best position California to achieve the Roadmap's goals.

Understanding Degree of SPM Alignment of Key Agencies' Resources, Funding and Staffing (at least for DPR, CDFA)

The Committee would also benefit from a clearer understanding of how current agency budgets, staffing levels, and resources align with implementation of the Roadmap. Future meetings should include presentations from at least DPR and CDFA regarding staffing levels, funding sources, program priorities, and resource gaps.

Understanding how DPR and CDFA allocate staffing and resources will help illuminate department priorities. For example, DPR continues to devote substantial resources to registering new pesticide products while reevaluations often take many years to complete and alternative pest management approaches receive comparatively less regulatory attention. If California is serious about achieving the goals of the SPM Roadmap, the Committee should understand whether and how current staffing and resource allocations are aligned with a transition toward sustainable pest management.

We appreciate recent investments related to sustainable pest management, including the hiring of DPR's first economist and additional staff within the SPM program. However, the Committee cannot evaluate whether agency resources are aligned with the Roadmap's goals without a more complete picture of staffing and funding across the department. We recommend that both DPR and CDFA provide the Committee with department-wide staffing and budget overviews, including major program areas, staffing levels, funding sources, recent growth trends, and how resources are being directed toward implementation of the Roadmap.

Provide a More Complete Picture of Interagency SPM Collaboration³

Many of the resources necessary to support grower transitions exist outside DPR. Achieving the Roadmap's goals will require coordination among DPR, CDFA, the California Natural Resources Agency, CARB, the University of California, Resource Conservation Districts, and many others.

We appreciate DPR's efforts to coordinate with partner agencies, but we believe the Committee would benefit from a more comprehensive understanding of these partnerships. Future meetings should identify all agencies involved in implementation,

describe their respective roles and responsibilities, explain how often coordination occurs, and provide examples of work products, initiatives, or projects that have resulted from these collaborations.

Because many of the resources necessary to support grower transitions are administered by agencies other than DPR, understanding how these partnerships function will be critical to evaluating implementation progress and identifying opportunities for improvement.

Learning from Existing SPM-Related Ag Programs and Addressing Grower Barriers

Extensive analyses exist regarding barriers that growers face in accessing existing grant, incentives and technical assistance programs intended to support sustainable farming practices. We recommend DPR staff pull these resources together as a starting point for deeper analysis.

- For example, research examining the Healthy Soils Program⁴ suggests that much of the funding has supported relatively incremental practices rather than more transformative agroecological approaches that reduce reliance on external inputs through biodiversity, ecological functions, and natural pest regulation. The Committee should discuss what lessons can be learned from these experiences and how future investments can better support the long-term systems changes envisioned by the Roadmap.
- Particular attention should be paid to barriers facing small-scale growers, socially disadvantaged farmers, and growers who may have limited access to technical assistance or grant-writing support.

Support Farmer Networks, Demonstration Projects (Especially Organic Infill and Reduced Pesticide Use Near Schools), and Knowledge Hubs

Grant programs constitute only a fraction of the support needed to help farmers transition to sustainable pest management practices. Farmer-to-farmer networks, demonstration projects, trusted local farm-support organizations, peer-learning opportunities, and resource-backed Indigenous-led and other agroecological knowledge hubs are all essential for the successful and widespread adoption of sustainable pest management.

The Committee should receive regular updates on organic transition projects, alternatives demonstration projects, and other efforts that showcase practical alternatives to hazardous pesticides, particularly near schools, childcare centers, parks, and other sensitive sites.

With respect to demonstration or pilot projects, we urge DPR to prioritize and support projects that help growers transition acreage within one mile of schools to organic or other sustainable pest management systems, with an immediate focus on eliminating fumigants and other high-risk pesticide uses in these sensitive areas. Decades of community advocacy have underscored the special vulnerability of children to pesticide exposures and the importance of reducing pesticide use near schools, childcare centers, and other locations where children spend significant time. Because of the special public interest in protecting children, successful demonstration projects near schools have the potential to become particularly influential models for broader adoption, helping to overcome skepticism and accelerate implementation of sustainable pest management practices elsewhere.

Finally, traditional Ecological Knowledge (TEK) remains underrepresented in IPM and SPM frameworks despite offering valuable insights into ecosystem stewardship, biodiversity, and non-chemical approaches to pest management. Contemporary Indigenous-led initiatives are important but often underrecognized contributors to holistic ecological knowledge systems and should be supported as part of California's broader transition to sustainable pest management.

Prioritize State Institutional Procurement

Institutional state procurement policies represent perhaps the most significant market-shaping opportunity available to advance sustainable pest management.

- We are concerned that several Roadmap commitments related to procurement appear to have fallen behind schedule, including commitments regarding:
 - establishment of an SPM purchasing criteria task force and
 - development of purchasing criteria for agricultural products grown in accordance with SPM principles. Attached is a document highlighting the Strategic Plan deadlines we believe have been missed so far, including key ones related to procurement.

- California's Farm to School Program represents a largely untapped opportunity to accelerate adoption of sustainable pest management by using public purchasing power to reward and expand markets for growers implementing SPM practices.

We also recommend that the Committee establish work groups, as the original SPM Work Group did, to collaborate with DPR on developing a verifiable definition of on-farm SPM compliance, as well as purchasing criteria and procurement protocols for state agencies that purchase fresh produce.

Learning from Successful SPM Transitions in Other Countries/States

Finally, the Committee would benefit from a review of successful pesticide-reduction and sustainable farming initiatives implemented in other states and countries. Several countries have achieved meaningful reductions in pesticide use through combinations of pesticide fees, transition assistance, technical support, farmer networks, procurement programs, regulatory measures, and targeted investments in sustainable agricultural practices.

A review of these experiences could help identify effective strategies, lessons learned from implementation challenges, and opportunities for adapting successful approaches to California's unique agricultural and regulatory landscape.

The Roadmap's goals are ambitious and worthy of support. Achieving them will require more than incentives alone. It will require clear priorities, measurable milestones, accountability, adequate resources, coordinated interagency action, support for growers, and a willingness to use the full range of tools available to the state.

We look forward to working with DPR and the Committee to help ensure that California successfully achieves the vision set forth in the Sustainable Pest Management Roadmap.

With thanks for your consideration,

Sarah C. Aird

Policy Director

¹ California already has access to scientifically vetted information regarding some of the state's most hazardous agricultural pesticides. As a starting point, DPR should consider using the pesticides already identified and prioritized by the California Office of

Environmental Health Hazard Assessment (OEHHA) in CalEnviroScreen 4.0 (<https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf>) and then organizing those pesticides into broader categories based on common hazards, modes of action, environmental persistence, or exposure concerns. Such categories could include neurotoxic pesticides, including organophosphates and other cholinesterase-inhibiting pesticides, PFAS pesticides, and particularly hazardous application methods such as fumigation, aerial spraying, and air-blast spraying.

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³ We also recommend coordination between DPR Committees, including the SPM Advisory Committee, SPARC, EJAC, PMAC and the PREC.

⁴ Systemic change or input substitution? The impact of the Healthy Soils Program on agroecological transitions within California food systems:
https://www.researchgate.net/publication/389547381_Systemic_change_or_input_substitution_The_impact_of_the_Healthy_Soils_Program_on_agroecological_transitions_within_California_food_systems#fullTextFileContent

Missed or Delayed Deadlines

Although DPR's First Strategic Plan Progress Update indicates that DPR has not missed deadlines, details are scant, and it's clear DPR has missed at least a few important target deadlines. The Committee should receive regular updates regarding the status of these commitments.

By 2025, in collaboration with CDFA and others and with public input, compile a list of certifications of agricultural and pest management practices, such as organic certifications, consistent with SPM, and develop a process for documenting IPM/SPM practices for California-grown produce.

By 2025, establish a science-based pesticide prioritization process, informed by a diverse, cross-sector advisory Committee, external engagement, and public input, to prioritize pesticide use risks, identify and evaluate the availability and feasibility of alternatives, and take expeditious action for completing mitigation.

By 2025, increase the number of integrated pest management and SPM technical assistance resources that DPR provides by 10% each year.

By 2025, in partnership with CDFA and UC ANR, increase by 300 the number of Pest Control Advisors trained in sustainable pest management crop practices as part of a holistic approach to reducing pest pressures.

By 2025, develop metrics for analyzing compliance trends and regulatory effectiveness across pesticides, repeat violations, repeat violators, application methods, and counties.

By 2025, establish ongoing ecosystem monitoring and collect information on the impacts of pesticide applications to organisms in the environment, targeting areas most impacted by pesticide use and providing timely public access to the monitoring data and information.

By 2025, evaluate regulations governing pesticide use around schools to inform additional actions to support safe pest management around schools.

By 2025, expand efforts to coordinate and collaborate with a broad range of interested parties representing and serving those who work with or near pesticides, such as community-based organizations, CAC offices, community health workers and organizations, and growers to provide training and resources to migrant and other workers in multiple languages.

By 2025, assess language access needs, including Indigenous languages, across department programs to expand and enhance connection points, services, resources, and safety information offered by DPR.

By 2025, establish collaborations with community-based health organizations to share information on pesticide safety training and enforcement.

DPR Response: Thank you for your comments and recommendations for topics to discuss with the committee in future meetings. The relevant DPR programs have reviewed specific comments for consideration.

Regarding priority pesticides: The pesticide prioritization process is a data-driven, transparent, and coordinated approach for DPR to prioritize its work to identify and mitigate risks posed to human health and the environment by pesticide use.

The prioritization process is in alignment with the goals of the SPM Roadmap and allows opportunity for SPARC members, stakeholders, and the public to engage on potential priorities. SPARC meetings will inform DPR's decision-making and allow for transparent communication and centralized conversations on DPR's prioritized actions and associated timelines.

Regarding DPR's reevaluation process: DPR is consistently assessing the needs of the reevaluation process. Additionally, Assembly Bill 2113 of 2024 made statutory changes to DPR's reevaluation process and established relevant timelines. Along with this, DPR was allocated additional staffing for continuous evaluation, including reevaluation. Details about DPR's continuous evaluation and mitigation actions are available online: <https://www.cdpr.ca.gov/look-up-pesticide-info/continuous-evaluation-and-mitigation-update/>

Regarding cost analyses: We acknowledge that economic and cost analyses are essential to understanding the economic impacts of DPR's regulations. DPR is dedicated to expanding the work done on cost analyses and recently hired its first economist to support this effort.

9. Stephanie Hughes, Bay Area Clean Water Agencies

Thank you for your introductory SPM advisory meeting. As a representative for urban stakeholders, I appreciated listening in.

Comment #1: Recommend separate partner and incentive program lists for urban stakeholders

Partners and incentive programs for urban stakeholders look very different than agriculture, be it industrial/commercial (such as facility managers) or residential (point-of-purchase outreach). Consider developing a parallel but separate partner list and grant/incentive program list. Partners could include the Structural Pest Review Board, as suggested by Andrew Sutherland. Other key stakeholders could include those that provide CE units to key stakeholders, such as state and local veterinary associations. Incentive programs could include Dr. Farrar's examples of IPM inclusion in LEED building certification and Green Shield for IPM practitioners. I also liked his idea of a co-benefit for energy upgrade tax incentives (in which a new door sweep is both energy efficient and keeps pests out).

Comment #2: Add DTSC, particularly their Safer Consumer Products (SCP) Program, to your list of external state partners

Biocides (antimicrobials) are commonly added into consumer products, often to protect people using the products from the unwanted growth of viruses, fungi, bacteria, or other microorganisms. Examples include preservatives in eye drops, cosmetics and other personal care products. Because many biocide-containing products do not make a pesticidal claim on the label, they are not regulated by DPR. Meanwhile, DTSC's SCP Program already includes many of these biocides on their Candidate Chemical List (such as quaternary ammonium compounds, QACs). Therefore, BACWA recommends that DPR include DTSC and their SCP Program in your state partner list.

Comment #3: Add Cal-OSHA to your list of external state partners

Agricultural workers face occupational pesticide exposure, as do urban workers such as janitors and hospital staff exposed to biocides or veterinarians and dog groomers exposed to on-pet flea treatments. Therefore, BACWA recommends that DPR include Cal-OSHA in your state partner list to build SPM knowledge, enhance data collection (with respect to human health risks), and coordinate state-level leadership.

Comment #4: Add the Water Board to your list of external state partners

The State Water Board issues discharge permits to agencies managing urban stormwater and wastewater treatment facilities, both of which are conduits of upstream urban pesticide use. These discharge permits (known as NPDES permits) may include IPM and SPM activities. Therefore, BACWA recommends that DPR include the Water Board in your state partner list to build SPM knowledge, enhance data collection (with respect to aquatic toxicity risks), and coordinate state-level leadership.

Comment #5: Possible urban SPM success story

Committee members commented that urban examples would help ease the pressure (and fear) from the agricultural community regarding SPM. We might have one regarding flea/tick treatments. Fipronil and imidacloprid are observed in treated

wastewater discharged to water bodies, often at concentrations greater than aquatic life benchmarks. Scientists (including those at DPR's SWPP) have tied that to on-pet flea treatments. As a pilot project, the City of Palo Alto reached out to the contractor operating their city animal shelter to ask them to (1) replace fipronil for on-pet flea control and (2) include educational flyers in adoption baggies. While it took some time, this was successful. Palo Alto has since shared their outreach materials with other municipalities interested in coordinating with their municipal animal shelters. Reach out if you would like us to prepare a more detailed success story (with links) to share.

DPR Response: Thank you for your suggestions on urban incentive programs and partners and for sharing an urban SPM success story. We will keep your comments in mind as we continue work on SPM outreach and incentives for SPM.

10. Cliff Kitayama (sent via email)

Dear Sir:

I have a few comments:

Salaried public advisors would have no real time experiences. Many chemicals don't work as the labels say and only by personal experience does the PCA find out. Even if these salaried public advisors are very experienced PCA's, if they aren't in the field every season working in different crops, they quickly fall behind in current technology. Chemicals work differently in every crop; how can some salaried public advisors cover the diversity of crops in California? PCA's already specialize in the crops that they advise. The scenario gets even more complicated with biologicals. Where will you get salaried public advisors that can be knowledgeable in multiple crops using multiple species of natural enemies. The Entomological field is so large, that we have thousands of experts in academia and they can only cover a small percentage of the knowledge needed. Working with biologicals and natural enemies of insects is extremely complex. Failures can happen even working with knowledgeable experts.

This is an extremely ambitious project. Success or failure will depend on careful planning.

Sincerely,

Cliff Kitayama, Ph.D.

Entomologist, Biological Control Specialist

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DPR Response: Thank you for your comments. We acknowledge the complexities regarding agricultural pest management and efficacious use of biocontrols and biopesticides.