

Agricultural Pest Control Advisory Committee
Meeting Summary
March 11, 2026
10:00 AM – 12:00 PM

Members Present (7): **Stephen Scheer** – California Agricultural Commissioners and Sealers Association, **Rick Miller** – Commercial Applicator Certificate Holders, **Jhalendra Rijal** – University of California, Division of Agriculture and Natural Resources, **Jill LeVake** – Pesticide Registrants, **Margaret Ellis** – Board of Trustees of the California State University System, **Matt Scally** – Pest Control Maintenance Gardeners, **Dan Gudgel** – Pest Control Aircraft Pilots

Department of Pesticide Regulation (DPR) (10): **Ken Everett** – Deputy Director, **Joshua Ogawa** – Branch Chief, ENF HQ Branch, **Alicia Scott** – Environmental Program Manager I, **Sondra Gomez** – Analyst II, **Jessica Teague** – Senior Environmental Scientist (Supervisory), **Ashley De La Torre** – Environmental Scientist, **Joan Orr** – Office Technician, **Rachel Kubiak** – Environmental Program Manager I, **Fidel Perez** – Branch Chief, ENF RO Branch, **Martine Boswell** – Branch Chief, IPM Branch

Guest (3): **Savannah Gosselin** – Kahn, Soares & Conway, LLP, **Maryana Schmidt** – Pesticide Applicators Professional Association, **Ruthann Anderson** – California Association of Pest Control Advisers

Members Absent (5): **John Erisey** – Agricultural Pest Control Advisers, **Phil Mullins** – Agricultural Pest Control Businesses, **Timothy Smith** – Board of Governors of the California Community College System, **Jeanette Heinrichs** – General Public, **Ronald Berg** – Pesticide Dealers

I. Welcome – Alicia Scott, DPR Licensing and Certification

II. Administrative Topics – Alicia Scott, DPR Licensing and Certification

- a. Member and audience introductions
- b. If there are any comments to the December meeting notes, please let us know. If there are no corrections and/or comments, they will be posted to the website

- c. Reminder, please designate an alternate if you are unable to attend next meeting

III. DPR Updates – Joshua Ogawa, DPR Enforcement Headquarters

- a. Annual SprayDays report is now available on the DPR website
 - i. Public comment through May 1st
 - ii. Please review report and appendices, and contact us if you have any questions.
- b. Registration notice
 - i. Notification requirements
 - ii. Requirements for label amendments
 - 1. Example - Spanish language on labels

IV. DPR Licensing and Certification Renewal Updates – Sondra Gomez, Licensing and Certification Program

- a. New licenses
 - i. Since December 1, 2025, 396 new licenses and certificates have been issued
 - 1. QAL – 188
 - 2. QAC – 116
 - 3. DDA – 28
 - 4. PCA – 40
 - 5. APC – 10
 - 6. JPC -10
 - 7. VCT – 4
- b. 2025 Renewal Statistics
 - i. In 2025, 9,935 individual licenses (8,923 unique individuals) were due to renew
 - 1. 8,386 individual licenses renewed (7,559 unique individuals)
 - ii. In 2025, 2,475 business licenses (1,575 businesses with 718 branch licenses) were due to renew
 - 1. 1,856 business licenses renewed (1,334 businesses with 522 branch licenses)
 - iii. Renewals Received by Month

1. December: processed approximately 2,500 applications
2. July: Began processing early renewals
3. October: Sent out renewals to ensure they could be processed before the expiration date
4. February: Finished processing earlier than the previous year

c. Renewal Challenges this Season

- i. Increase in number of emails and phone calls
- ii. Mail delivery time
- iii. High volume of renewals
 1. Approximately 10,000 applications received
- iv. Continuing Education (CE) taken outside valid license period

d. CE Outside Valid Period

- i. All CE must be earned during the valid license period
- ii. Valid license period is from when a license is issued/renewed until it expires
 1. About 12 applications could not be renewed because CE was completed outside the valid period
 2. Need to increase outreach on timing of CE

e. Top 6 Renewal Application Issues

- i. Renewals form missing
- ii. Renewal form not signed
- iii. Missing CE Records
- iv. Proof of financial responsibility missing (for businesses)
- v. Incorrect payment amount
- vi. Qualified Person not renewed

f. Sign up for Our Email Subscription List

- i. Encourage sign-ups for GovDelivery email updates
- ii. Some examples of email outreach:
 1. How to check application status
 2. Mailing reminders
 3. Confirmation of application receipt

- g. Questions regarding licensing and renewals can be directed to
LicenseMail@cdpr.ca.gov

V. Sustainable Pest Management – Martine Boswell, IPM Branch

- a. Introduction
 - i. Began position in November 2025, still new to role. Requested that any unanswered questions be sent by email
- b. DPR Mission and Vision overview
 - i. Explained the definitions of SPM and IPM and how they both differ
 - ii. Requested audience feedback regarding SPM/IPM.
- c. SPM Executive Leadership at DPR
 - i. DPR added an executive leadership position to lead its statewide collaboration and coordination to foster SPM across California's urban, agricultural, and wildland settings.
- d. Program Divisions
 - i. Program division overview
 - ii. SPM Branch
- e. How does DPR's IPM Branch Support the State's Goal of SPM?
 - i. By advancing IPM through our core work of grant management, data analysis, and outreach and education.
 - ii. Will also serve a central role in future implementation of recommendations from the SPM Cross Agency Work Group and SPM Advisory Committee, Outreach on IPM in urban/residential, ag, childcare settings.
 - iii. How do we advance outreach for SPM-most important goal
 - iv. Supports cross-agency workgroups-advancing IPM, setting up and facilitating SPM advisory committee
- f. DPR's framework: SPM
 - i. Focusing on 3 pillars
 - 1. Human Health and Social Equity, Broadened Environmental Protections, and Economic Viability.

- ii. Clarified differences between SPM and IPM: both should continue to be used, as they serve different but complementary purposes.
- iii. SPM recognizes that pest management is critical for a stable, healthy food supply, and to protect public health.
- iv. SPM recognizes the need to address new and increasing pest pressures and the need to accelerate availability and adoption of safe and effective tools and strategies.
- v. PUR data focuses on pesticide use but DPR wants to elevate non-chemical SPM/IPM strategies.

g. SPM GRANTS

- i. 2025 - \$4.9 million in funding available and 71 proposed applications received

h. Supporting Alternatives Though IPM/SPM grants

- i. For research and implementation of SPM
 - 1. Examples: use of canines in IPM strategies, IPM/SPM outreach and education in low-income/disadvantaged communities
- ii. Over the past 20 years, awarded over \$28 million for more than 110 projects
- iii. Will grant ~\$6 million annually going forward. Funded organizations included UCs, CalPolys, local government entities, community groups, non-profit organizations
- iv. Solicitation to open in summer 2026
- v. Subscribe to our list serve

i. SPM Initiatives Program

- i. The program focus is to support coordination, outreach, and implementation of SPM in California
- ii. Currently hiring
 - 1. Senior ES and ES
- iii. Funds research through contracts; supports preparation for SPM Advisory Committee work
- iv. Cross-agency workgroup includes multiple state agencies; more information forthcoming
- v. SPM Advisory Committee

1. Multi-stakeholder advisory body that supports the Director and DPR in implementing SPM
 2. Supports the goal of making SPM the de facto approach to pest management in California
- vi. SPM Pilot Projects
- a. Demonstration and implementation of SPM practices in real-world context
 - b. Outcomes
 - i. Case study with metrics and costs
 - ii. SPM plans and technical assistance
 - c. Create pathway to scale-up implementation
3. SPM Advisory Committee
- a. Members with diverse backgrounds and areas of expertise
 - i. IPM, consumer food certifications, procurement, public health, community advocacy, and more
 - b. Focus on barriers and opportunities for SPM adoption
- j. Urban Pesticide Use Program
- i. DPR Strategic Plan Goals
 1. Goal 1.1.4
 - a. By 2028, develop SPM documentation for urban settings
 2. Goal 2.1.4
 - a. By 2028, DPR's pesticide use data collection and trend analysis to include urban and other nonagricultural uses
 - ii. Implementation
 1. Utilize and enhance existing databases
 - a. Pesticide sales, urban use reporting, registered products
 - b. Incorporate other data sources – market data and surveys
 2. Better understand how / where pesticides are used and potential exposures
- k. IPM Achievement Awards
- i. DPR's IPM Achievement Awards highlight organizations and people who are using IPM to advance sustainable pest management practices in

California that support human health, protect the environment, and create economic benefits.

- ii. The most recent Annual IPM Achievement Awards Event was held on Tuesday, February 24, 2026.

1. Supporting SPM Adoption

- i. DPR's highest public honor. Recognizes those leading the way in IPM practices and experience/knowledge sharing
- ii. Awardees include those working on: IPM on college campuses and urban landscapes, training community members on invasive species removal, grower trainings, biological control programs

VI. Update on UAS Aerial Application – Dan Gudgel – Agricultural Pilot/CAAA Spray Analyst

a. Definitions/terms

- i. Unmanned Agricultural Aerial Systems (UAAS)
- ii. National Aerial Application Association (NAAA)
- iii. Detect and Avoid (DAA)
- iv. Beyond Visual Line of Sight (BVLOS)
- v. Electronic Conspicuity (EC) / ADS-B
- vi. Pilot-in-Command (PIC)
- vii. Aircraft Gross Weight (GW)
- viii. Active Ingredient (AI)
- ix. "Fines": Spray Droplets, <250 microns
- x. UAAS-distribute sprays from drones
- xi. Aviation industry-fight over airspace; how do we mitigate this and deal with it?

b. Spray coverage and density

- i. Reviewed optimal droplet sizes and associated drift risks

c. Spray droplet movement

- i. Aircraft displacement assistance enhances penetration and minimizes drift

d. USDA Secretary Rollins AATRU (Aerial Application Technology Research Unit)

- i. Research on nozzle technologies to reduce fine droplets

- ii. Applicable to ground and aerial applications
 - iii. Recommended mix of droplet sizes to minimize drift
- e. Swath and Boom Length
 - i. Uniform Distribution of A.I.
 - ii. Desired VMD
 - 1. Minimize “Fines”
 - 2. Minimize Large Droplets
 - iii. Utilize Downwash
 - iv. Eliminate Spray
 - 1. Entrainment into Vortices
- f. Advanced Spray System
 - i. Each nozzle individually controlled; represents major technological improvement
 - ii. Boom Width / Swath Concept
 - iii. Nozzle Technology Improvement
 - iv. Boom Pressure
 - 1. Droplet Shear Minimized
 - v. Spray Droplet Spectrum
 - 1. Narrowed
 - 2. Target Spray VMD
 - a. Minimize Fine / Large Droplets
 - vi. GIS Mapping
 - vii. Variable Rate
- g. NAAA Project
 - i. Spray drift taskforce updated outdated 1970s modeling
 - ii. Introducing new algorithms and validated outputs
 - iii. EPA accepted NAAA recommendation
 - iv. EPA Not adverse to Aerial Application (renewal cycles)
 - 1. Tremendous ecological and economic savings
 - v. Label Needs regarding Risk assessed:
 - 1. Ecological
 - 2. Endangered species
 - 3. Human health

vi. AGDISP Model (Risk Assessment Tool)

Background: USFS Fortran Program

1. 3-Step (years) Update Process(\$600K)
2. Coding Change
3. Additional Algorithms
4. Validate Output

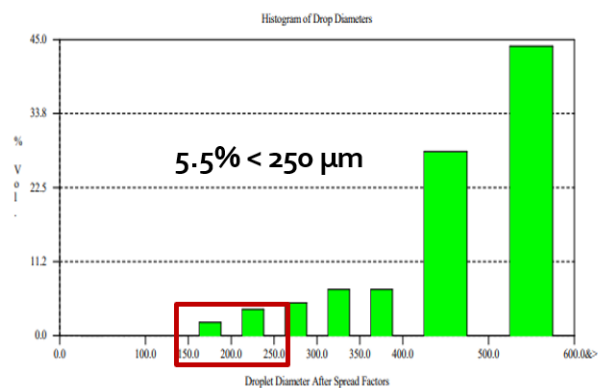
h. AGDISP

- i. Useful for endangered species protection and site-specific risk assessments
- ii. Available to the public
- iii. Open Source
- iv. Estimate off-target spray movement
 1. All types of pesticide application (aerial, ground, unmanned aerial, etc.)
- v. Use by EPA for Risk assessment
- vi. AGDRIFT model also set stage for real-time, site-specific risk assessments

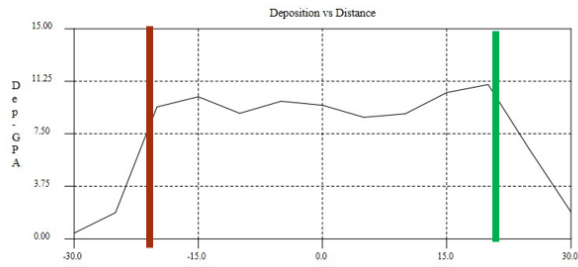
i. AGDISP AND EPA Label Components and Goals

- i. Meteorological evaluation equipment
- ii. Digital labels
- iii. Data on adjuvants
- iv. Application equipment setup parameters

j. Spray Volume Composition Bell 206/5gpa Target

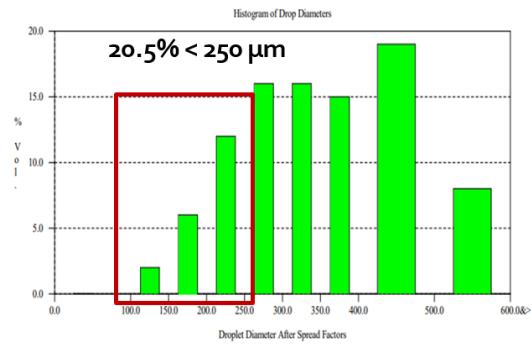


k. Bell 206 (Single Rotor Helicopter)

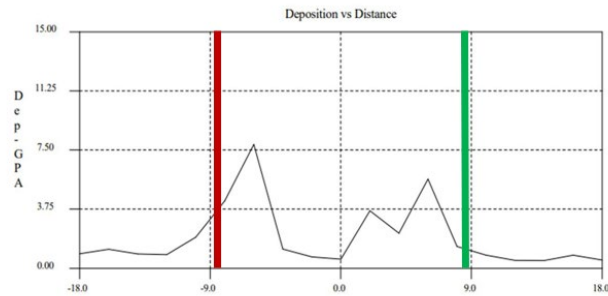


i. Swath width decreases significantly; goal is uniform application

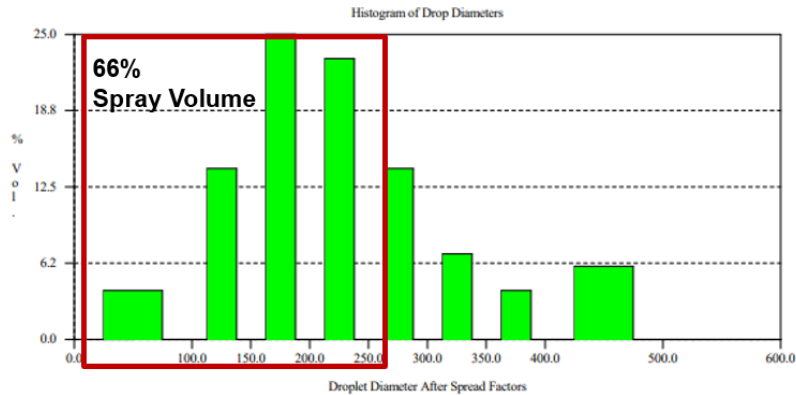
l. Spray volume composition UAAS Multi-Rotor / 5gpa Target



m. Multi rotor deposition



n. Disproportionate fines



o. NAAA NAAREF

- i. UAAS Classification (from UAAS Sub-Committee)
 1. Fixed-Wing
 2. Single Rotor System
 3. Multi-Rotor System

p. UAAS

- i. Pyka Pelican Spray UAS (fixed-wing)
 1. 1400# (CY2024)
 2. 720#/90Gals (~ 2/3rds Pawnee with 2900# G.W.)
- ii. Sprayhawk (single-rotor; autonomous)
 1. 2500# (increased CY2025)
 2. 110 Gallons (Robinson R-44)
- iii. DJI T-50 (multi-rotor)
 1. 70 #
 2. 13.21 Gals
 3. Compare both from old tech to new tech

q. UAAS Single rotor

- i. Based on Robinson 44
 1. GW = 2400#
 2. Empty Wgt = 1400#
- ii. 110 gallon Capacity
- iii. 33 ft Spray booms
- iv. 80 miles per hour
- v. Flight time of 50 minutes

- r. UAAS multi Rotor
 - i. Hyllo
 - 1. 2.5 gal to 18 gal capacity
 - 2. Eight rotors with 16 nozzles
 - 3. Claimed 40ft Swath and
 - a. Obstacle Avoidance Technology
 - ii. DJI T-50
 - 1. 70 #
 - 2. 13.21 Gals

s. Part 137 Certificates Issued

<i>Part 137 Certificates Issued</i>		
	<u>Conventional</u>	<u>UAAS</u> (includes Hybrid)
• 2019	~500	~10
• 2021	~40	~20
• 2023	~40	~770
• 2025	~25	~945

- t. California Pilot Certification
 - i. Apprentice Pilot
 - 1. Knowledge exam
 - 2. Supervised
 - ii. Journeyman Pilot
 - 1. 150 hrs (fixed-wing)
 - 2. 50 hrs (rotor-wing)
 - 3. One year experience

- u. Ag drone sales
 - i. CY2024 – ~9000+ Sold
 - ii. CY2025 – 3700+ Sold (*)
 - 1. (*) Security Restrictions (Focused on DJI Sales)
 - iii. FAA Mandated Registration
 - 1. But Only 14% Registered !
 - iv. NTSB Reporting on Aircraft Accidents / Injuries

- 1. UAAS Reports Essentially non-Existent
- v. All drones are supposed to be registered but only 14% are registered
- vi. Observations about lack of historical experience among new users; education efforts ongoing
- v. UAAS Issues
 - i. Spray potentials
 - 1. Spray Droplet Shearing
 - 2. Location of Nozzles
 - ii. Efficacy
 - 1. Effective Swath Width
 - 2. Uniform AI
 - 3. Lower Coefficient of Variation (target VMD)
 - 4. Label Rates (LV / ULV ?)
 - iii. Safety Considerations
 - 1. Aircraft Components Quality
 - 2. UAAS Pilot Safety
- w. NPRM: 14 CFR Part 108 (BVLOS)
 - i. ADS-B Requirements
 - 1. ALL Aircraft
 - 2. UAS up to 1320#
 - ii. UAS Operate within 50-Ft Shielded(*) Areas
 - 1. (*) wires, rights-of-way, rail lines, obstacles, etc. Operate at or below 400 Foot above Ground
 - 2. No Requirement to Give Way to Crewed Aircraft
 - iii. NAAA push for EC (not just ADS-B); UAS/UAAS have DAA
 - iv. Part 108 covers drones up to 2,500 pounds; larger systems expected in future
 - v. Challenges with mid-air detection and line-of-sight limitations
- x. Questions?

VII. Discussion – Next Meeting Agenda

- a. Reminder if you can't attend next meeting to send alternates if available

- b. If there are any topic ideas you would like discussed for next meeting, please email any suggestions to Alicia.Scott@cdpr.ca.gov