



SUMMARY | PEST MANAGEMENT ADVISORY COMMITTEE ALLIANCE GRANT REVIEW MEETING CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION

May 10, 2018

Produced by the Consensus and Collaboration Program, CSU Sacramento College of Continuing Education

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1. Attendance

Pest Management Advisory Committee (PMAC) Members

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| 1. Mary Grisier, U.S. EPA Region IX | 7. Jenny Broome, Driscoll Strawberry Associates, Inc. |
| 2. John Roncoroni, University of California Cooperative Extension | 8. Jim Farrar, University of California Statewide IPM Program |
| 3. Paul Towers, Pesticide Action Network | 9. Marcia Gibbs, Sustainable Cotton Project |
| 4. Anne Katten, California Rural Legal Assistance Foundation | 10. Kendra Klein, Friends of the Earth |
| 5. Robert Ehn, Western Plant Health Association | 11. Lara Matsumoto (alternate), Center for Environmental Health |
| 6. Kevin Wright, California Agricultural Commissioners & Sealers Association | 12. Steve Blecker, California Department of Food & Agriculture |

California Department of Pesticide Regulation (DPR)

- | | |
|-------------------------------|------------------|
| 13. Brian Leahy, Director | 16. Doug Downie |
| 14. Joe Damiano, Branch Chief | 17. Megan Parker |
| 15. Matt Fossen | 18. John Gerlach |
| | 19. Rodney Jones |

Facilitation Support

20. Ariel Ambruster, CSUS

21. Alex Cole-Weiss, CSUS

Other

1. Eric Denemark, DPR
2. Melissa Plemons, DPR
3. Nick Lupien, Syngenta

2. Opening Comments and Background

Introductions and Chair's Opening Comments

Brian Leahy, Director of the Department of Pesticide Regulation (DPR), welcomed everyone and thanked them for joining the meeting. The goal of the meeting was to obtain the PMAC's recommendations of Pest Management Alliance Grant proposals for possible DPR funding.

Alliance Grant 2018-2019 Solicitation Focus

Megan Parker, Environmental Scientist, provided background for DPR's Pest Management Alliance Grant Program. The Alliance Grant Program aims to promote the adoption of established Integrated Pest Management (IPM) practices that reduce the use of pesticides of human health or environmental concern through the guidance of a collaborative team of knowledgeable participants known as an "Alliance." The focus of the grant program is outreach, but research may be a minor component.

The 2018-2019 Alliance Grant Program has \$400,000 available for funding proposals.

Criteria for Ranking Proposals and Grant Program Procedures

Ms. Parker presented the following criteria for PMAC members to use to rank the proposals:

- 1) How well each proposal met the solicitation focus for funding priority; and
- 2) The overall quality of the proposal.

She provided an overview of the grant application process. Key grant program milestones are as follows:

- Fourteen concept proposals were received by February 2, 2018
- Applicants were invited to submit proposals by February 23, 2018
- Nine full proposals were received by April 3, 2018
- Following the review period, grant projects will be selected by June 30, 2018
- Project start date is September 1st, 2018

The following table summarizes those proposals:

2018/2019		
Proposal	Principal Investigator	Budget
Sutherland – Bed Bugs	Andrew Sutherland,	\$59,593
Lamb – Affordable Housing IPM Expanding IPM Adoption among Affordable Housing Developers	Anne Kelsey Lamb Public Health Institute	\$250,000

2018/2019 Alliance Grant Summary of Submitted Proposals		
Proposal Short and Full Title	Principal Investigator	Budget
Williams – Bee IPM	Neal Williams	\$210,812
Robison – Invasive Plants BMPs for Non-Herbicide Approaches to Invasive Plant Management in Wildlands	Ramona Robison Cal-IPC (California Invasive Plant Council)	\$194,765
Baumgartner – Beneficial Birds	Jo Ann Baumgartner	\$112,540
Arroyo – Pollinator Protection Pollinator Protection Plan for the State of California	Ruben Arroyo Riverside County Agricultural Commissioner	\$400,000
Todd – CSU IPM	Ryan Todd	\$269,394
Haring – Weed IPM in Almonds Outreach for Implementing Integrated Weed Management and Cover Crops in Almond Orchards	Steve Haring UC Davis	\$199,981
Bacharach – Coyote Management	Jacki Bacharach	\$228,249

Ms. Parker reviewed the meeting objectives:

- Identify the proposals PMAC considers fundable and unfundable
- Rank those proposals in order of preference
- Record merits and concerns for all proposals
- Provide Grant Program feedback

Ms. Parker reminded participants that PMAC committee members who are principal investigators or key team members are not eligible to receive funds through a project unless they recuse themselves from the entire grant review process; PMAC members who serve in an advisory capacity on a proposed project must recuse themselves from review of only that proposal. However, organizations with which the committee members are associated are eligible for funding.

She then introduced the facilitator, Ms. Ariel Ambruster from the Consensus and Collaboration Program, California State University, Sacramento.

3. Rankings Based on Reviewers' Scoring

Prior to the meeting, 15 PMAC members reviewed and scored the nine proposals. One reviewer recused himself from review of the Robison – Invasive Plants, and Sutherland – Bed Bugs proposals. The numeric scores were converted to ranks, where 1 was the most highly regarded proposal and 9 was the least, as presented in the following chart:

Project	Rank	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	Avg	High	Low	\$
Sutherland - Bed Bugs	1	2.5	3	5	3	1	1	3	ND	1	3.5	5	1	6	4	2	2.93	1	6	\$59,593
Lamb - Affordable Housing IPM	2	1	1	9	4	2	2	2	1	2	1	8	4.5	1	1	9	3.23	1	9	\$250,000
Williams - Bee IPM	3	2.5	2	4	2	5	7	1	5	4	2	2	7	2	5	3	3.57	1	7	\$210,812
Robison - Invasive Plants	4	4	4	6	5	4	4	4	ND	6	3.5	4	3	3	6	1	4.11	1	6	\$194,765
Baumgartner - Beneficial Birds	5	5	5	3	7	3	5	5.5	2	3	5	1	8	5	3	5.5	4.40	1	8	\$112,540
Arroyo - Pollinator Protection	6	6	9	8	1	8	3	5.5	4	6	8	3	6	8.5	2	5.5	5.57	1	9	\$400,000
Todd - CSU IPM	7	8	6	1.5	8	7	6	7	6	9	6.5	7	4.5	8.5	7.5	7	6.63	2	9	\$269,394
Haring - Weed IPM in Almonds	8	9	8	7	6	6	9	9	ND	7	6.5	6	2	4	7.5	8	6.79	2	9	\$199,981
Bacharach - Coyote Management	9	7	7	1.5	9	9	8	8	3	6	9	9	9	7	9	4	7.03	2	9	\$228,249

4. Discussion of Proposals

Ms. Ambruster reviewed the objectives and reminded participants of the ground rules for discussion. She went through the proposals in the order of their ranking. PMAC members discussed the merits and concerns for all nine projects proposals. Below is a summary of PMAC members' comments for each of the proposals. Comments reflect individual PMAC member observations, not consensus opinions. Thus, merits and concerns may occasionally appear to be contradictory.

Sutherland – Bed Bugs

Merits

- The project addresses a major problem about which people need to be more informed.
- The proposal is inexpensive.
- The focus on prevention is a great example of IPM in practice.
- The principal investigator (PI) is great, and the project has a good team and strong connections with implementation partners.
- The project includes various outreach approaches—online, in print, in person—so it is likely to be successful in connecting resources to the right people.

Concerns

- The focus on online training may not be sufficient to achieve project goals.
- There is no tenant representative, which would be of value to the project.
- Barriers to adoption were not well addressed.
- PMAC members suggest that the proposal provide a demonstration project to show how it will work.

Lamb - Affordable Housing IPM

Merits

- Great example of trying to get research into practice.
- Project builds on existing research.
- There is a strong link to human health concerns (e.g. asthma).
- This project targets a group that has not received much outreach in the past (affordable housing developers and managers), who may be in a good position to bear higher upfront costs in exchange for lower costs in the long term.

- The project benefits from affordable housing developers paying some of the costs.
- A good approach to address a problem.
- Proposes a smart approach with clear reductions and targets.
- Project addresses housing needs and crisis.
- Great example of an “alliance.”
- Project shows a good chance for success.
- Outreach has potential to reach a lot of different groups.
- Budget is reasonable given the objectives.

Concerns

- This project seems related to and similar to the Sutherland project—Sutherland is involved in both but role(s) and overlap are not entirely clear.
- Budget seems a little high.
- The team has a lot of people involved.
- The connection between affordable housing developers and on-the-ground implementation was not clear. Proposal does not clarify why affordable housing developers would be interested in IPM.
- It is not clear if this project will be successful.
- It was not clear how the project would extend beyond the life of the grant.
- The roles of the affordable housing developers are not clear.

Requested Clarification

- Is there a link between this project and the bed bug project with regard to Sutherland’s involvement?

Williams – Bee IPM

Merits

- Proposal addresses an important issue and takes a unique approach by looking at adjacent crops.
- Good team with buy-in from Almond Board and pollinator groups.
- This proposal addresses high exposure risks for bees and could help inform decisions about pesticide application.
- Well-qualified researchers and a great team.
- Well-written proposal.
- Project approach is doable and success is easily measurable (change in rate of compliance).
- Integration of existing data sources is a good approach.
- Good approach to verify risk of exposure by comparing the use report with pollen contamination analysis.

Concerns

- The proposal stressed the importance of bees to high value crops. This industry can afford to pay for such a research project, rather than DPR.

- PMAC members expressed concern about the timeliness of the PUR data that the project will use, and whether PIs will have access to the data before they are publicly available.
- The section of the proposal on measures of success does not address the question (potential formatting error).

Requested Clarification

- Where will the PUR data come from and how timely will that data be?

Robison – Invasive Plants

Merits

- There is a need to look at alternatives to chemicals in natural areas. Some of this information is covered under existing resources, but this project addresses more practical uses.
- Proposes a positive approach.
- A good example of an “alliance.”
- The proposed outreach will be sufficient to reach intended targets.
- This project is likely to extend beyond the life of the grant.
- Good partners with long-term expertise in this area.
- The proposal addresses where non-chemical projects are successful and where they are not successful.
- Non-chemical solutions are of value to land managers, as public concerns about chemical exposure on public lands have increased.

Concerns

- DPR funded a similar alliance grant several years ago. This project is not different enough to warrant funding again.
- Pesticides are relatively low in toxicity – there may not be as great a need. But noted that there is a lot of political pushback on low toxicity herbicides like glyphosate.
- Proposal seemed more like a research project.
- Proposal did not include any budget for materials development.

Baumgartner - Beneficial Birds

Merits

- Well-written and complete proposal with good information on birds and pesticide reduction.
- Addressed potential side effects (e.g. increase in pest birds) but also long-term benefits.
- Project addresses a key gap in IPM understanding of the role of birds and represents a true IPM approach.
- Proposal compiled relevant research on the topic.
- Effective approach of including videos to show value to other farmers.
- Project is ambitious as it seeks to address both raptors and insect-eating birds.
- The project includes specific and measureable outcomes.
- Presents an innovative ecological approach and considers different crops.

- Reasonable budget.
- Good team with long-term expertise.
- There is a need for more knowledge about the complexity of ecological systems and how to share cropland with birds.

Concerns

- Pest-eating birds would be unlikely to be effective enough at removing pests to meet the blemish-free standards demanded of high-value crops.
- Birds could cause damage to high value organic crops.
- Proposal did not address food safety issues, particularly for produce eaten raw.
- The citation mentioned on increase in apple yields does not include a quality assessment component – project needs to consider crop damage, not just crop quantity.
- Proposal did not directly address the barriers to adoption/participation among conventional growers who see birds as pests.

Arroyo – Pollinator Protection

Merits

- Sets a good target to increase compliance with hive location reporting.
- Addresses current need – it is very important to know where hives are located.
- Proposal builds off of existing reporting structure at the local level.

Concerns

- The proposal does not include any letters of support from beekeepers. Project may not be successful without beekeeper buy-in. Proposes a high budget given lack of inclusion of beekeepers.
- Communication is not necessarily the source of the problem.
- There is currently extensive activity (funding, policy) on this topic. It is questionable if this project, which is expensive, would be the best way to address the issue.
- The proposal does not address native pollinators that are also important to crops.
- The project lacks discussion of on-the-ground IPM methods.
- It may not be feasible for commercial beekeepers to move bees even if they know about a potential exposure.
- If beekeepers aren't concerned if their bees are alive, why fund this proposal?

Todd – CSU IPM

Merits

- Interesting to see university partners take up the IPM approach given the movement on this topic in the K-12 educational sector.
- High enthusiasm and aspirations, good idea.

Concerns

- Team does not demonstrate knowledge of pesticides that are currently in use.
- Risks identified did not seem like high priority issues (e.g. roach bait stations).
- Proposal did not establish a clear problem.

- The proposal does not connect to what has already been done in other types of schools or at other universities. There is already information on what can be done to address some of the issues.
- The PI did not seem to have appropriate background knowledge on the topic.
- The tone of the narrative was a little extreme and seemed more focused on a total ban of pesticides.

Haring – Weed IPM in Almonds

Merits

- Cover crops are not as widely used in almonds. The information from the project might increase the use of cover crops in almonds, which would be of benefit.
- Repeated field days is a good approach.
- Proposal includes multiple tactics in weed management, which is a helpful approach.

Concerns

- The outreach approach lacked detail and it was not clear it would be effective.
- Proposal did not address key barriers, such as lack of water for Central Valley growers.
- Promoting cover crops in almonds has been occurring for almost 20 years with little adoption.
- Project does not really address reduction in pesticide use. Pesticide use for weeds is usually along a tree row. There will likely still be herbicide use in the tree row.
- This is not seen as a high priority issue in almonds – fungicide and insecticide issues are more important to address with this crop.
- Project team needs to build out an alliance (e.g. Almond Board, CAFF).

Bacharach – Coyote Management

Merits

- Coyotes are a major problem in Southern California and attacks on humans are increasing.
- It is a very well-written project.
- It includes a great alliance of partners.
- Enforcement agents are in need of guidelines for when to euthanize a coyote and responding to public concerns regarding that practice.
- Good team and reasonable budget.

Concerns

- Project does not address the Alliance grant program purpose for reducing pesticide risk because no pesticides are used by the applicants for coyote management.
- Project is not a good fit with the agency – there are other more appropriate granting agencies to direct a proposal to.
- The basic premise that coyotes belong in the urban environment seems flawed. Stomach content analysis would be of benefit to understand if coyotes are preying on pests (e.g. rodents).

- Project includes development of outreach materials in other languages, but no community groups were included as partners.

5. Revised Rankings and Summary Recommendations

Based on the discussion, PMAC members who had participated in the initial review re-ranked the nine proposals. Re-ranking results are shown in the table below:

Project	Rank	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	Avg	High	Low	\$
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Haring - Weed IPM in Almonds	7	7	6	7	7	6	9	7	8	7	8	8	8	7.33	6	9	\$199,981
Todd - CSU IPM	8	6	7	8	8	7	7	8	7	8	7	7	9	7.42	6	9	\$269,394
Bacharach - Coyote Management	9	9	4	9	9	9	8	9	9	9	9	9	7	8.33	4	9	\$228,249

PMAC members validated the re-rankings. A committee member commented that both projects at the top (rank 1 and 2) are valuable and just because they address the same topic, one should not exclude the other.

Ms. Ambruster asked if PMAC members considered any proposals to be unfundable. Ms. Parker clarified that there is not partial funding offered. PMAC members agreed projects ranked 6-9 are unfundable in their current form.

Mr. Leahy commented on the important conversation the PMAC members had, and noted that the top-ranked projects regarding urban housing pests are of great interest to DPR. He said that all the issues touched upon by the top-ranked projects are important, and there were a lot of good projects submitted.

6. Grant Program Process Feedback

PMAC members were invited to provide feedback to DPR on the Grant Program review process.

Several individuals expressed gratitude for the smaller number of proposals offered for review. Nine proposals is much more manageable and enjoyable. A committee member added that the FFAST system is still terrible.

Members noted that the process was great and helps people of diverse perspectives agree on the top priorities. They also observed that this was a fairly straightforward round of proposals that addressed non-controversial subjects, for the most part.

One member commented on the letter received by a previous PMAC member about the prevalence of proposals from the University of California. One consideration for the future is how to make sure that people who have good projects are able to write good proposals; offering technical assistance is a potential way to even the playing field.

7. Closing Remarks

Mr. Leahy concluded the proposal review discussion by thanking PMAC members for reviewing and commenting on the proposals. Their recommendations provide invaluable input for DPR's proposal review and expand DPR's services overall. Their input helps DPR as an organization and us as a society to think about new approaches. He thanked members for their time and energy.

Upcoming PMAC Meeting

- November 8, 2018