PEST MANAGEMENT RESEARCH GRANT PROGRAM

PART 1 | 2015-16 SOLICITATION

PEST MANAGEMENT RESEARCH GRANT PROGRAM

The Department of Pesticide Regulation (DPR) established its Pest Management Research Grant Program to develop practices that reduce the use of pesticides that are of human health or environmental concern in California.[1]

Voluntary adoption of these practices, through use of integrated pest management[2] (IPM) systems, reduces use of high-risk pesticides and reliance on regulations to minimize risks associated with these pesticides. Effective California IPM systems developed with the aid of a research grant may be promoted in the future through DPR's Pest Management **Alliance Grants Program**,[3] which emphasizes outreach and implementation.

SCOPE OF PROSPECTIVE RESEARCH PROJECTS

Projects must address issues pertinent to California and all field work must be conducted in California. Projects must contribute to a California IPM system by addressing at least one of the following:

- Decision-making for pest management
- Prevention and management of pests currently controlled with agricultural field fumigants
- Improvement of application technologies[4]
- Increased cost effectiveness of reduced-risk practices
- Modeling or meta-analyses to answer important questions related to agricultural field fumigants and IPM adoption

2015-16 FUNDING PRIORITY:

This year, the Pest Management Research Grant Program will be funding projects that explore integrated pest management (IPM) solutions to pesticide-related risks associated with **agricultural field fumigants.**

IMPORTANT DATES

Phase I, Concepts	Sep 8, 2014	Release grant solicitation
	Sep 10, 2014	Webinar for instructions and questions regarding the FAAST Application Submittal Tool (See Conference Calls and Webinar)
	Sep 17, 2014	Conference call for questions about the Research Grant Program and Solicitation (See Conference Calls and Webinar)
	Oct 2, 2014	Concepts due by 5:00 p.m.
Phase II, Proposals	Oct 23, 2014	Notice of invitation to submit proposals
	Dec 17, 2014	Proposals due by 5:00 p.m.
	Mar 23, 2015	Grants awarded
Project	Jul 1, 2015	Project start date
	Jan 31, 2018	All sub-contract work must be completed
	Mar 30, 2018	All work must be completed
	May 1, 2018	Final invoices due

[1] "Human health or environmental concern" is intentionally open-ended to allow groups to make their own case for project need and impact. DPR does not maintain a comprehensive list of pesticides of human health or environmental concern.

[2] University of California Statewide IPM Program definition of IPM: Integrated pest management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.

[3] http://www.cdpr.ca.gov/docs/pestmgt/grants/alliance/index.htm

[4] Projects should clearly demonstrate how an application technology improvement will benefit an **IPM system**. Projects that improve application technologies solely to mitigate risks of conventional systems are unlikely to be selected for funding.

GRANT SUBMISSION PHASES

Phase I, Concepts: A concept is a concise description of the project's goals and objectives, project team, and the scientific merit of the methodology.

Phase II, Proposals: *Proposals are by invitation only*. A proposal is an expansion of the concept and should provide straightforward descriptions of the proposed project and the IPM issues it will address, including a detailed scope of work, commitments from team members, and a budget justification.

FUNDING

On July 1, 2015 (upon approval of California's 2015-16 state budget), a total of $1,100,000 will be available for research grants. DPR will consider proposals requesting $50,000 to $500,000. DPR expects to fund two to four projects.

TIMELINE

Projects may not begin before July 1, 2015. The grant agreement must be fully executed before any work begins. All project work must be completed by March 30, 2018. Sub-contract work must be completed by January 31. 2018. The final invoice is due by May 1, 2018. Extensions of any kind are not permissible under this program.

ELIGIBILITY

Government and tribal agencies, universities, colleges, consultants, pest control businesses, commodity groups, marketing orders, and nonprofit organizations that have experience performing research are eligible. DPR employees are not eligible to receive funds. Members of DPR's Pest Management Advisory Committee (PMAC) are not eligible to receive funds unless they recuse themselves from participating in the grant review process. However, the organizations with which committee members are associated are eligible for funding. See the PMAC Website for a list of committee members. Principal investigators cannot have outstanding fines or penalties with DPR or the County Agricultural Commissioners.

REQUIRED REPORTS AND MEETINGS

- **Reports**
    - **Quarterly Progress Reports:** Concise quarterly reports include summaries of project activities, completed milestones, and unexpected problems or special situations. They are due every three months after the project begins.
    - **Annual Reports:** Annual reports include results to date, problems encountered, milestones achieved, and plans for the following year. They are due every 12 months after the project begins.
    - **Final Report:** The final report describes how project goals and objectives have been fulfilled, summarizes and evaluates project activities and accomplishments, and includes recommendations for outreach and/or future research. A draft of the final report is due by March 15, 2018, with the final version incorporating suggested edits due no later than March 30, 2018.
- **Meetings**
    - **Administrative Meeting:** Administrative meeting, to be held within 30 days after the agreement is executed: The Grant Administrators, Grant Managers, principal investigator(s), and procurement, billing, and accounting staff associated with this project should attend this meeting. At this meeting, all grant administrative processes and procedure requirements will be discussed, and any questions regarding project objectives and tasks as they relate to administration will be addressed.

- **Initial Project Update Meeting:** First meeting of the project team, to be held within 30 days after the agreement is executed. The Grant Managers, principal investigator(s), and all research team members will meet for the first of the Project Update meetings. This meeting will be a time to go over team member roles, timeline, and deliverables, as well as discuss any questions regarding project objectives and tasks. (Administrative staff do not need to attend.)

- **Bi-annual Project Update Meetings**: Project update meetings will occur at least every six months, in person or by conference call, as requested by Grant Managers or designated representatives. The grantee must notify the Grant Managers and research team members of meeting dates and locations at least two weeks in advance. If requested by Grant Managers, meetings should occasionally include representation by the intended end-users of the research results (e.g., growers, marketing boards) for feedback and insights to improve effectiveness and usefulness of the results. Grant managers may require additional meetings as needed.

- **DPR Seminar**: The principal investigator(s) will make a summary presentation at a PMAC meeting at DPR headquarters during the grant's final year. The presentation will provide information about project goals, objectives, and results.

FAAST

ONLINE CONCEPT & PROPOSAL SUBMISSION TOOL

DPR contracted with the State Water Resource Control Board (SWRCB) to host the concept and proposal submission process through their Web-based Financial Assistance Application Submittal Tool (FAAST). In order to submit a concept or proposal, the applicant must first register with FAAST. The applicant will then be able to log on to their account and save, edit, and submit their responses.

The FAAST site contains a series of tabs (General Information, Project Budget, Funding, Cooperating Entities, Questionnaire, and Attachments), each with an associated list of questions and response boxes. Please read the instructions below carefully to determine how each question should be answered. Some questions that appear on the FAAST site are specific to the SWRCB and do not require a response for this grant.

NOTE: For those who copy and paste from word processor documents (such as Microsoft Word), please be aware that text from word processors may include hidden formatting code (characters) which count towards the maximum allowed characters in a FAAST text box. In addition, FAAST may change word processor characters into unexpected symbols such as upside-down question marks (¿). To avoid these issues, first copy the text into a text editor such as Notepad.

FAAST can be accessed at: https://faast.waterboards.ca.gov/. Use the Internet Explorer ("IE") browser for best results. **FAAST is not available on the first weekend of every month (6:00 a.m. Saturday through 8:00 a.m. Monday) due to system maintenance.** See Questions and Answers for information on where to get help with the solicitation or FAAST tool.

PHASE I, CONCEPT

CONCEPT QUESTIONS GUIDE FOR FAAST

Log into FAAST and choose the RFP: 2015/16Pest Management Research Grant Program.
Under the Status Tab, it should state Phase I. The instructions below are organized to follow the structure of the FAAST system.

General Information Tab

- Confirm that any pre-populated information is correct. (Applicant/Survey Taker, Applicant Organization, Applicant Division, Submitting Organization, Submitting Division, etc.)
- **Project Title:** Enter a concise, descriptive title for the project. (125 character maximum.)
- **Project Description:** Enter a short descriptive summary of the project. (1000 character maximum.)
- **Project Location**
    - **Latitude:** Leave blank.
    - **Longitude:** Leave blank.
    - **Watershed:** Leave blank.
    - **County:** Select the primary county where the research will take place. If more than one county or all counties, select "Multiple counties" or "Statewide."
    - **Responsible Regional Water Board:** Select "Statewide."

Project Budget Tab

- **Funds Requested ($):** Enter the total dollar amount requested.
- **Local Cost Match ($):** Leave blank. Cost match is not allowed. Projects must be stand-alone.[5]
- **Total Budget ($):** Re-enter the value from the "Funds Requested" box.
- **Applicant Federal Tax ID:** Required for grant submission.
- **DUNS Number:** Optional. (Not required for Concept submission.)

Funding Tab

- Confirm that you wish to apply for this grant by clicking the "Apply?" box next to the Pest Management Research Grant Program description.

Questionnaire Tab

1. **Project Overview**
    1.1. **Abstract:** Provide an abstract of the proposed project. Include the pesticide-related problems that the project is addressing and how the project outcomes may contribute to an IPM-based solution. Include the goals and objectives. (4000 characters maximum.)

    1.2. **Economic considerations:** For a pest management practice to be voluntarily adopted, it needs to be economically feasible as well as effective at controlling the pest(s). An estimate of the cost of materials and labor can be useful in promoting adoption of an effective practice. Will the project be able to collect cost information of the IPM practices it explores? If the question is not applicable to project, explain why. (2000 characters maximum.)

[5] **Cost Match:** It is permissible for the proposed project to be a component of a larger project funded by multiple sources, but the proposed project cannot be dependent on other funding sources for completion of any task or deliverable included in this concept or proposal. A proposed project must be complete with its own goals, outcomes, and deliverables, all of which must be completed entirely using the requested dollar amount. The DPR-funded portion of any larger project must be "stand-alone": If all aspects of the larger research endeavor were taken away, the DPR-funded project must still be able to achieve all objectives and deliverables. In-kind or matching contributions of effort, equipment, or materials by team members are allowed, however (See In-Kind Funds).

1.3. **California Stakeholders:** A stakeholder can be defined as an individual, group, or environmental entity with an interest, concern, or connection to the pesticide-related problems or the IPM-based solutions that the project plans to address. Who are the project's primary stakeholders in California, and why would they be interested in the project's outcome? (2000 characters maximum.)

2. Project Summary

2.1. **Tasks:** Briefly outline the key tasks (activities) of the project. (2000 characters maximum.)

2.2. **Timeline:** Provide a timeline for completion of tasks. Assume a start date no earlier than July 1, 2015, and an end date no later than March 30, 2018, when all work must be completed. (Billable work performed under subcontract must be completed by January 31, 2018.) (2000 characters maximum.)

3. Principal Investigators and Team

3.1. **Project Team:** List the principal investigator(s) and all staff (personnel and contractors) involved in the research. Include their affiliations, expertise, and role in the project. If a position has not been filled yet, list the position title and role. (2000 characters maximum.)

3.2. **Résumés:** Combine résumés of the principal investigator(s) and any key team members involved in the research into a single PDF document. While there is no page limit for the PDF of the combined résumés, please limit the length of each individual résumé to two pages or less. Résumés should focus on the skills, publications, and work relevant to the project. See instructions under the Attachments Tab section for directions on how to upload your attachment to the FAAST system.

4. Project Design and Analysis

4.1. **Design and Analysis:** Briefly discuss the experimental design(s) or analytical study(s) the project intends to conduct, including hypotheses, experimental unit, treatments, number of replications, randomization, measurements, statistical analyses, and/or modeling approaches as applicable. (2000 characters maximum.)

5. Additional Information

5.1. **Notification:** Invitations to submit full proposals will be sent via letter and email to the organization address associated with the applicant's FAAST account. If you would prefer the letter to be sent to a different mailing address, enter it here. Additional email addresses to receive notifications of invitation may also be added here. (2000 characters maximum.)

Attachments Tab

- **Résumés:** Under the Attachment Category drop down menu, select "Résumés."
    - Use the Browse button to navigate to your saved PDF document completed in Question 3.2 containing the résumés of the principal investigator(s) and any key team members l involved in the research.
    - Enter "Résumés" as the Attachment Title.
    - Click "Attach Selected File."

Status Tab

- The Status Tab allows the user to view the progress and status of the application. This tab is for viewing only.

UPON COMPLETION OF CONCEPT QUESTIONS, CONTINUE TO THE SUBMISSION OF CONCEPTS AND PROPOSALS SECTION FOR DETAILED INSTRUCTIONS ON THE SUBMISSION PROCESS.

PHASE II, PROPOSAL

Proposals are by DPR invitation only. **Uninvited proposals will not be accepted into the FAAST system and will not be reviewed.**

PROPOSAL QUESTIONS GUIDE FOR FAAST

Log into FAAST and choose the RFP: 2015/16Pest Management Research Grant Program. Under the Status Tab, it should state Phase II.

The General Information Tab, Project Budget Tab, Funding Tab, and Cooperating Entities Tab were completed during Phase I, but may be edited if needed. Please enter the information requested in the new Phase II Questionnaire Tab and Attachments Tab.

Questionnaire Tab

1. **Project Background**
   - **1.1. Pesticides and Pests:** List the high-risk pesticide product names or active ingredients that the project will address. Identify the key pests that these pesticides target. (If too numerous to list in the space provided, please list important examples.) (2000 characters maximum.)
   - **1.2. Risk:** Describe why the pesticides listed in question 1.1 are considered high-risk. (Examples: Risks to the quality of ground water, soil, surface water, or air; risks to the safety or health of workers, the general public, wildlife, or endangered species; drift, runoff, or leaching; and contributions to atmospheric volatile organic compounds [VOCs]) (1500 characters maximum.)
   - **1.3. IPM Solution:** Describe how the project may contribute to an IPM solution and reduce the risk of high-risk pesticides. (Examples: Does it develop a component of an IPM system that could serve as a feasible option to conventional pest control practices? Does it analyze data to answer important questions that could assist in promoting the adoption of IPM?) (2000 characters maximum.)
   - **1.4. Related Research:** Describe any related research or preliminary data that supports the value of the proposed project. (4000 characters maximum.)

2. **Scope of Work and Budget**
   - **2.1. Scope of Work and Budget:** Download the "Scope and Budget" form located at the DPR website[6]. The form is an Excel workbook consisting of five worksheets, tabbed at the bottom of each page for easy navigation. Use this form to enter details about the project's scope of work and budget. Each worksheet has instructions and questions regarding goals and objectives (1. Goals Objectives Worksheet), tasks and deliverables (2.Tasks Worksheet), line item budget (3. Line Item Budget Worksheet), task budget (4. Task Budget Worksheet), and timeline (5. Task List Timeline Worksheet). See instructions under the Attachments Tab section for directions on how to upload your attachment to the FAAST system. There are two versions of the form available:
     - Scope and Budget ("PC")[7]. This is a workbook for use with Windows-based personal computer ("PC"). You will need to use a computer capable of opening an Excel document with an .xlsx extension (Excel 2007 or later). Use of earlier versions of Excel may result in compatibility issues and lack of functionality.
     - Scope and Budget ("Mac")[8]. This is a trial workbook for use with Apple computers in an attempt to address compatibility issues between Windows and Apple. You will need to use a computer capable of opening an Excel document with an .xlsx extension (Excel 2008 or later). Use of earlier versions of Excel may result in compatibility issues and lack of functionality. If problems are encountered, please use the PC workbook on a Windows-based personal computer.

[6] http://www.cdpr.ca.gov/docs/pestmgt/grants/research/solicitation.htm
[7] http://www.cdpr.ca.gov/docs/pestmgt/grants/research/solicitation/attach1pc.xlsx
[8] http://www.cdpr.ca.gov/docs/pestmgt/grants/research/solicitation/attach1mac.xlsx

3. **Project Design and Analysis:** If a question is not applicable to the project, please explain why. Applicants will not be penalized if a question is not applicable to their project if they respond with a satisfactory explanation. For example: Observational studies such as meta-analysis or certain types of models may be computer-based analyses of existing data and therefore do not need a traditional experimental field or laboratory design. See Experimental Design Example for an example of a sketch and answers to questions regarding the design of a field experiment.

3.1. Hypotheses: Describe all hypotheses to be tested by the project. (1000 characters maximum.)

3.2. Study Method: Identify the basic method(s) that will be used to test the hypotheses listed in question 3.1. If none of the options apply to the project, check "Other" and explain why in the optional text box. (1000 characters maximum.)

- **Field experiment:** Statistical inference from scientific method applied in the field (controlled setting).
- **Laboratory experiment:** Statistical inference from scientific method applied in the laboratory (controlled setting).
- **Observational study:** Statistical analysis of existing data or measured variables under existing conditions (research without manipulation of setting).

Check all applicable methods (multiple boxes may be checked).

☐Field experiment ☐Laboratory experiment ☐Observational study ☐Other

3.3. Treatments: In an experiment, a treatment is what is imposed on a group of objects in order to observe the group's response, such as pre-plant fumigation or solarization on a bed to receive strawberries transplants. In observational studies, the treatments cannot be imposed, but instead are observed under existing conditions.

- If applicable, list the treatments to be analyzed by the project. If the question is not applicable to project, explain why. (1000 characters maximum.)

3.4. Control: A control treatment is a baseline used for comparative purposes. The other treatments of interest are compared with the control. (For example, a solarization soil treatment might be compared against either no treatment or the grower's standard treatment as a control.)

- Is there a control treatment in the project study? If so, what is it? If the question is not applicable to project, explain why. (1000 characters maximum.)

3.5. Experimental unit: The experimental unit is the smallest independent unit that can be assigned a treatment. (For example, a row of strawberries that undergoes a treatment of fumigation would be an experimental unit.)

- If applicable, what is the project's experimental unit? If the question is not applicable to the project, explain why. (1000 characters maximum.)

3.6. Replication: Replication is the repetition of a treatment in order to understand how responses to the treatment vary. (For example, if four strawberry rows (experimental unit) are treated with anaerobic soil disinfestation (ASD) and four rows are treated with a fumigant, then there are four replications of the treatments.)

- If applicable, what is the expected number of replications in the project? If the question is not applicable to project, explain why. (500 characters maximum.)

3.7. Measurements: Measurements are the types of information that are collected for analysis. (For example, a comparison study between fumigants and ASD might measure variables such as yield, disease level, and nematode abundance.)

- If applicable, what measurements will be taken during the project? If the question is not applicable to the project, explain why. (1000 characters maximum.)

3.8. Experimental design: Experimental design refers to the organization of the experiment: the types and amount of collected data, the method of assigning treatments, the layout of the treatments, and so forth. (For example, a field study may implement a randomized complete block design, split plot design, or some other experimental design, while observational studies may not have an experimental design given the inability to change existing conditions.) Questions 3.1 through 3.7 were all directly or indirectly related to the experimental design—this question gives the applicant an opportunity to bring relevant information together in a concise summary.

- If applicable, briefly summarize the basic experimental design and assignment of treatments that the project expects to follow. If the question is not applicable to the project, explain why. (2000 characters maximum.)

3.9. Observational study design: Observational study design refers to the organization and analysis of observational data. (For example, meta-analyses, modeling existing data, survey, descriptive, case study, ecoinformatics, or others. Laboratory or field experimental studies may or may not have an observational study design component.)

- If applicable, briefly describe the basic observational study design that the project expects to follow. If the question is not applicable to the project, explain why. (2000 characters maximum.)

3.10. Statistical analysis: Statistical analyses should be chosen based on the hypotheses and the characteristics of the data. (For example, ANOVA, regressions, mean comparisons, meta-analyses, non-parametric tests, or other algorithmic models)

- What statistical analyses do you foresee as being likely candidates for use by the project? If the question is not applicable to the project, explain why. (2000 characters maximum.)

3.11. Optional Project Design Diagram: An optional diagram of the layout of the experimental or analytical design (see Experimental Design Example) may be saved as a one page PDF document called "Project Design Diagram." There is no specified format or criteria for the diagram beyond that it should be a graphical visualization that can assist reviewers in better understanding the design of your project and can be saved as a one-page PDF. See instructions under the Attachments Tab section for directions on how to upload your attachment to the FAAST system.

4. Budget Narrative

4.1. Personnel Services: Personnel Services consists of salaries and benefits for staff directly involved in the planning and implementation of the project who receive their grant funds (salary, travel, operating expenses, or equipment) through the same organization as the principal investigator. (If they cannot receive funds through the principal investigator's organization, they are **not** considered personnel staff. They may still receive grant funds, however, if they are listed in the budget under Contracts. Personnel does not include office support staff involved in activities such as procurement, billing, accounting, and other administrative functions. Instead, those activities should be considered in the budget under Overhead.)

- For each personnel staff receiving salary from the project, include the wage ($/month or $/hour), the percent time (100% = full time, 40 hour work week), and the benefits as a percentage of salary for each fiscal year of the project. Factor in any annual salary or benefit increases. Fiscal years run from July 1st through June 30th. (Example: Post doc $3,322.22 per month with 3% increase in years 2 and 3, 48% time years 1 and 2, 100% time year 3; benefits 21%, with estimated 2% annual increase.) (2000 characters maximum.)

4.2. In-Kind Contributions[9]: Identify any sources of in-kind services as they relate to the proposed project (see footnote for information on what is allowed). In-kind services are not required for receiving an award. They should be identified here if they are needed to explain how an otherwise unfunded task is accomplished. Keep in mind that while the Pest Management Research Grant Program encourages the collaboration with and leveraging of complementary research projects, all tasks and deliverables of projects funded through this grant program must be able to be accomplished entirely on grant funding alone. (1000 characters maximum.)

4.3. Operating Expenses: Briefly describe any operating expenses the project personnel[10] will incur. (For example, pesticides, seeds, software licenses, and office supplies.) Any labor should be listed under personnel or contracts, not operating expenses. (1000 characters maximum.)

4.4. Travel: Briefly describe any travel expenses that will be incurred by project personnel.[10] All travel must be within California. Identify the personnel that will incur the travel expenses, the types of travel, and the frequency. Include travel to meetings with the Grant Manager and project team members that might be required under the terms of the prospective grant agreement. (For example: Post doc and field assistant to make approximately 20 trips to local field sites; principal investigator and post doc to travel to biannual meetings with Grant Manager and project team.) (1500 characters maximum.)

4.5. Equipment: Equipment is defined as any one durable, reusable item with residual value costing more than $500 purchased by personnel.[10] Briefly list any equipment and justify why it is needed by the project. (1000 characters maximum.)

4.6. Contracts: List any professional and consultant services you expect will be needed to complete project tasks. Include any team members who will require funds from the grant but cannot be considered "Personnel"[10] because they are affiliated with a different organization than the principal investigator. Briefly justify why these contracts are needed by the project. (1500 characters maximum.)

5. References

5.1. References: Compile a list of any references cited into a single PDF document. See instructions under the Attachments Tab section for directions on how to upload your attachment to the FAAST system.

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[9] **In-kind contributions**: Project activities by team members that have been approved by their employers to be compensated with existing employer funds at the time of proposal submission.

Allowed:

- Personnel time given to project by team members.
- Use of team member's existing equipment or facilities.
- Donation of materials by team members.

Not allowed:

- Project tasks that are simultaneously funded by more than one source.
- Project tasks reliant on labor or outcomes of activities that are not part of the DPR-funded project.

[10] Personnel is defined as the staff directly involved in the planning and implementation of the project. To be included as personnel, staff must receive their grant funds (salary, travel, operating expenses, or equipment) through the same organization as the principal investigator. If they cannot receive funds through the principal investigator's organization, they are not considered personnel staff. They may still receive grant funds, however, if they are listed in the budget under Contracts. Personnel does not include office support staff involved in activities such as procurement, billing, accounting, and other administrative functions. Instead, those activities should be considered in the budget under Overhead.

6. Additional Information

6.1. Resubmission: Using the drop-down menu, indicate if this project idea has been submitted for funding under the CDPR Research Grant Program before. If it has, use the text box to indicate what year the project idea was previously submitted and briefly discuss how reviewer's previous concerns (as stated in the past notification letter) were addressed in this current submission. (2000 characters maximum.)

☐No, this project idea is not a resubmission ☐Yes, this project idea is a resubmission

6.2. Notification: Applicants whose projects were chosen for funding will be sent a letter and an email to the mailing address and email associated with the applicant's FAAST account. If you would prefer the letter to be sent to a different mailing address, enter it here. Additional email addresses to receive notifications of award may also be added here. (1000 characters maximum.)

6.3. Signatory Authority: The signatory authority is the person duly authorized to execute all grant-related documents in the name of the applicant. At academic and governmental institutions, the signatory authority usually is NOT the same as the principal investigator. Enter the name and contact information for the signatory authority in the text box below. (500 characters maximum.)

6.4. Media Contact: The media contact is the organization's contact person for media inquiries. If the organization does not have an official media contact, the principal investigator may be designated. Enter the name and contact information for the media contact in the text box below. (500 characters maximum.)

6.5. Optional Additional Relevant Information: We understand that some applicants may feel that their projects cannot be adequately described solely by answering the questions in this application. You may submit a one page (maximum) document of any information (For example, text, graphs, photos, updates to project team members, or anything else) not covered in the previous questions that you think are important for the reviewers to know. Save your one page document as a PDF document entitled "Additional Relevant Information." See instructions under the Attachments Tab section for directions on how to upload your attachment to the FAAST system.

6.6. Letters of Support: Combine letters of support and commitment from any co-principal investigators or other key research personnel into a single PDF document. Save your one page document as a PDF entitled "Letters of Support." See instructions under the Attachments Tab section for directions on how to upload your attachment to the FAAST system.

Attachments Tab

- **Scope and Budget:** Under the Attachment Category drop down menu, select "Scope and Budget."
  - Use the Browse button to navigate to your saved Scope and Budget Excel worksheet that you downloaded from the DPR website and completed in Question 2.1.
  - Enter "Scope and Budget" as the Attachment Title.
  - Click "Attach Selected File."

- **Optional Project Design Diagram**: Under the Attachment Category drop down menu, select "Project Design Diagram."
  - Use the Browse button to navigate to your saved PDF document completed in Question 3.11 containing a diagram of the layout of the experimental or analytical design.
  - Enter "Project Design Diagram" as the Attachment Title.
  - Click "Attach Selected File."

- **References:** Under the Attachment Category drop down menu, select "References."
  - Use the Browse button to navigate to your saved PDF document completed in Question 5.1 containing a reference list of any citations in the proposal.
  - Enter "References" as the Attachment Title.
  - Click "Attach Selected File."

- **Optional Additional Relevant Information**: Under the Attachment Category drop down menu, select "Additional Information."
  - Use the Browse button to navigate to your saved PDF document completed in Question 6.5 containing any important information not covered in previous questions.
  - Enter "Additional Relevant Information" as the Attachment Title.
  - Click "Attach Selected File."

- **Letters of Support:** Under the Attachment Category drop down menu, select "Letters of Support."
  - Use the Browse button to navigate to your saved PDF document completed in Question 6.6 containing a reference list of any citations in the proposal.
  - Enter "Letters of Support" as the Attachment Title.
  - Click "Attach Selected File."

Status Tab

- The Status Tab allows the user to view the progress and status of the application. This tab is for viewing only.

SUBMISSION OF CONCEPTS OR PROPOSALS

Preview and Submit

- To preview your application, click a "Preview/Submit" button (a "Preview/Submit" button is available on all tabs except for the Status Tab).
- To print your application, use the print function on your web browser to print the preview.
- The "Back to Application/Survey" button will allow you to exit the preview without submitting.
- The "Application/Survey Completion Check" button will check that all required fields have been answered. *NOTE: The Application/Survey completion check will not check for any unanswered questions in the Questionnaire Tab.*
- Once the Application is complete, the "Certification and Submission Statement" will appear. By initializing the certification statement, you are verifying under penalty of perjury that the following statements are true:
  - The information entered on the behalf of the Applicant Organization is true and complete to the best of your knowledge.
  - You are an employee or a consultant for the Applicant Organization and are authorized to submit the application on behalf of the Applicant Organization.
  - You understand that any false, incomplete, or incorrect statements made may result in the disqualification of this application.
- To submit the Application, read the "Certification and Submission Statement," verify that the certification requirements are met by entering your initials, and click the "Submit Application/Survey" button.

SELECTION PROCESS

The questions and guidelines for reviewers are included here to assist the applicant in understanding the selection process. Applicants are encouraged to use these review questions as a checklist to ensure that they have been addressed in their application.

Concept Review
DPR staff will review all concepts to determine which applicants will be invited to submit a full proposal. Feedback will be included in a letter mailed to the applicant. There is not an official scoring point system at the concept level. In general, concepts will be reviewed for strengths and weaknesses in the following areas:

1. OVERVIEW: (a) Does the proposed project fulfill a need and will it provide significant benefits? (b) Are the risks from pesticide use clearly described, and is the project likely to contribute to an IPM-based solution to pesticide related risks? (c) Are the overall goals and objectives for the project clearly stated, important, and reasonably achievable within the grant period? (d) Does the project address the 2015/16 DPR priority area: exploring IPM solutions to pesticide-related risks associated with agricultural field fumigants for soil pests in California?

2. SCOPE OF WORK: The project's methodology should have scientific merit and the timeline should be feasible. (a) Are hypotheses clearly stated and can they be reasonably tested within the grant period? (b) Do the experimental designs, analytical studies, statistical analyses, and modeling approaches appear adequate to test the hypotheses? (c) Is the timeline reasonable to complete the key activities and achieve the project's objectives? (d) Does the applicant plan to collect cost information of the IPM practices it explores?

3. PRINCIPAL INVESTIGATOR(S) AND TEAM: The expertise level of the principal investigator(s) and key research personnel should be appropriate for the successful completion of the project. (a) Do the principal investigator(s) and key research team members have the background and technical experience to complete the project?

Proposal Review
Proposals will be reviewed by the PMAC and DPR staff. The PMAC reviewers are from diverse affiliations with expertise in pest management. PMAC's role, as specified in law and regulations, is to review proposals for pest management research and recommend to DPR's director which proposals should be funded. The director then makes the final decision.

Below is the point system that all reviewers will be asked to use to initially score each project. Proposal reviewers will have access to both the concept and the proposal submissions during their review. Each section is assigned a maximum number of points that can be received. The total points a project can receive is 100. The scores are then ranked and used by reviewers as the basis for discussing the merits of applications during a review meeting where the final recommendations are determined.

1. OVERVIEW: The reviewer's overall assessment of the project. Consider the following:

    1.1. Is the project needed and will it provide significant benefits to California stakeholders? Are the risks from pesticide use clearly described, and is the project likely to contribute to an IPM-based solution to pesticide related risks?
        1.1.1. Maximum of **20 points**, with 1 = poor and 20 = excellent.

    1.2. Are the overall goals and objectives for the project clearly stated, important, and reasonably achievable within the grant period?
        1.2.1. Maximum of **10 points**, with 1 = poor and 10 = excellent.

2. ECONOMIC CONSIDERATIONS: For a pest management practice to be voluntarily adopted on a wide scale, it needs to be economically feasible as well as effective at controlling the pest(s). Consider the following:

    2.1. Does the project plan to collect cost information of the IPM practices it explores? Alternatively, do they explain why they will not be collecting economic information and is their reason valid?
        2.1.1. Maximum of **5 points**, with 1 = poor and 5 = excellent.

3. SCOPE OF WORK: The scientific merit of project's methodology and the feasibility of the timeline. Consider the following:

    3.1. Are hypotheses clearly stated and can they be reasonably tested within the grant period?
        3.1.1. Maximum of **10 points**, with 1 = poor and 10 = excellent.

    3.2. Are the data collection, experimental or analytical design, statistical analyses, and/or modeling approaches appropriate to investigate the research topic? If not applicable to their project, is their explanation reasonable?
        3.2.1. Maximum of **15 points**, with 1 = poor and 15 = excellent.

    3.3. Are the tasks adequately described? Will the tasks achieve the project objectives?
        3.3.1. Maximum of **5 points**, with 1 = poor and 5 = excellent.

    3.4. Does the task timeline outline reasonable dates for the commencement and completion of each task, objective, and deliverable?
        3.4.1. Maximum of **5 points**, with 1 = poor and 5 = excellent.

4. PRINCIPAL INVESTIGATOR(S) AND TEAM: The expertise level of the principal investigator(s) and key research team members to complete the project successfully. Consider the following:

    4.1. Do the principal investigator(s) and key research team members have the background, technical experience, and commitment to complete the project?
        4.1.1. Maximum of **10 points**, with 1 = poor and 10 = excellent.

5. BUDGET: The likelihood that the budget will allow completion of the project and that the project's value is commensurate with the amount of funds requested. Consider the following:
    5.1. Is the Line Item Budget reasonable to complete the project?
        5.1.1. Maximum of **10 points**, with 1 = poor and 10 = excellent.

    5.2. Is the Task Budget reasonable and does it effectively link project expenses to tasks?
        5.2.1. Maximum of **5 points**, with 1 = poor and 5 = excellent.

    5.3. Do the answers to the budget narrative questions (personnel, supplies, travel, equipment, academic remissions, and contracts) appropriately justify project expenses?
        5.3.1. Maximum of **5 points**, with 1 = poor and 5 = excellent.

QUESTIONS & ANSWERS

Pest Management Research Grant Questions: Please see the Questions and answers[11] document for answers to frequently asked questions.

Or contact Kimberly Steinmann at ksteinmann@cdpr.ca.gov or (916) 445-7929.

FAAST Submission Tool Questions: Please see the FAQ link and User Manual link available at the FAAST[12] website The FAAST Help Desk can be reached at faast_admin@waterboards.ca.gov or (866) 434-1083. It is open 8:00 a.m.–5:00 p.m. Monday through Friday.

Conference Calls and Webinars (Voluntary)
Research Grant: Conference call for general questions about the Research Grant Program and Solicitation.
Time: September 17, 10:00 a.m.
Phone: 800-779-9040
Passcode: 40430

FAAST: Webinar for instructions on how to submit applications using the FAAST application submittal tool
Time: September 10, 10:00 a.m.
To join online meeting:

1. Go to Webinar: CDPR FAAST Training[13]
2. If requested, enter your name and email address.
3. If a password is required, enter the meeting password: cdpr
4. Click "Join".

To join the teleconference only:

1. Call-in toll-free number (Verizon): 1-866-631-4936 (US)
2. Call-in number (Verizon): 1-203-277-4888 (US)
3. Attendee access code: 889 259 1

For assistance: Go to https://waterboards.webex.com/waterboards/mc. On the left navigation bar, click “Support”.

FEEDBACK

We continue to strive to create a Pest Management Grants Program application and review process that is straight-forward and easy to use. Your input is valuable in letting us know what we are doing right and where we may be able to improve. We appreciate your constructive feedback in the form of comments and suggestions regarding our Pest Management Grants Program and application process. Anonymous feedback can be submitted at the Pest Management Grants Feedback[14] page.

[11] http://www.cdpr.ca.gov/docs/pestmgt/grants/research/solicitation/q_and_a.pdf
[12] https://faast.waterboards.ca.gov/
[13] https://waterboards.webex.com/waterboards/j.php?MTID=mccd6271c41cc897ce8ad48a44e62deb1
[14] https://docs.google.com/forms/d/1iWakoGWhU12alfijqmdznsQtuIEAhihkR2hVO2Dggb4/viewform