Evaluation and Recommendations

for
California Department of Pesticide Regulation's

Pest Management Alliance Program

by

Center for Agricultural Partnerships

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ACKNOWLEDGEMENTS

The evaluation of such a wide-ranging program over multiple crops and years with an array of stakeholders and participants necessarily relied upon the time and cooperation of numerous people who had been involved in the Pest Management Alliance (PMA) Program. The people and organizations that graciously participated in the evaluation surveys, interviews, and focus groups had varying perspectives, levels of interaction, and differing opinions on Department of Pesticide Regulation (DPR) and PMA. Alliance project managers were particularly generous with their time in responding to survey and interview questions. This report attempts to accurately and completely convey what we learned from those individuals and organizations. Taking that vast amount of information and using it to create an insightful analysis that DPR can readily use in improving the PMA program within the constraints of a public regulatory agency proved to be an exciting and challenging task. To the extent that we have succeeded, it is due to the energy of the participants and stakeholders and the commitment of DPR staff who have made the PMA program possible.

It would be difficult to overstate the foresight and diligence that the Department of Pesticide Regulation leadership and staff have demonstrated in initiating an evaluation of the PMA. Their willingness to engage in a careful and comprehensive review of the program, its results, and needs is a salutary example of how public agencies can increase their ability to create lasting benefits.

EXECUTIVE SUMMARY

BACKGROUND

The Pest Management Alliance (PMA) Program is a unique effort to carry out the pest management mandate of California's Department of Pesticide Regulation (DPR) on a considerably larger scale than other state programs and many federal programs. PMA has systematically provided resources for industry-wide activities to improve the effectiveness and reduce the impacts of pest management. It has been particularly forward-looking in the level of involvement it has sought with the agricultural community. As a regulatory agency, DPR has recognized that taking regulatory action is only part of the job necessary to create environmental benefits. The rest of the task, and often the more difficult part, is securing the widespread and sustained use of practices that provide long-term improvements. To the extent that DPR has encountered challenges and problems in accomplishing that work, these have come about from taking on an ambitious and worthwhile mission.

The California Food and Agricultural Code provides a broad and progressive mandate for DPR's involvement in pest management in addition to its regulatory mandate. Section 11501 states among its purposes: "(f) To encourage the development and implementation of pest management systems, stressing application of biological and cultural pest control techniques with selective pesticides when necessary to achieve acceptable levels of control with the least possible harm to non-target organisms and the environment." The original authority for the Department of Pesticide Regulation to make funds available to conduct pest management projects is provided through Section 1279, which establishes a competitive grants program.

Based on this mandate and authority, in 1997 DPR established the Pest Management Alliance Program to "…help agricultural commodity, non-agricultural, urban, and other groups address important pest management issues on a regional or statewide scale." According to DPR leadership at the time, PMA was established to facilitate the implementation of new practices on a much wider scale than was currently taking place. By emphasizing the creation of partnerships through the Alliance, DPR hoped to address pest management issues more holistically and develop better links between DPR and commodity groups. This was envisioned as an effective approach to "reducing risk to human health and the environment associated with pesticide use." Just as important, DPR leadership hoped to establish an internal connection between the registration and pest management functions within the department.

DPR originally oriented the PMA to 1) work extensively with commodity groups; 2) involve the commodity on a state- or industry-wide basis; and 3) focus on important regulatory concerns associated with pest management. Over time PMA projects have come to focus largely on demonstration, education, and outreach. Thus the role of the Alliance program is perceived in many ways as supporting the same set of accomplishments, though with differences in emphasis and scope, as those supported by other organizations engaged in pest management issues.

METHODOLOGY

The evaluation conducted a series of intensive measures to understand the background and genesis of the PMA program, determine the context in which PMA exists, review PMA administration and accomplishments, and solicit the views of DPR staff, project managers, and participants and the wider agricultural community. The evaluation included interviews and focus groups with DPR leadership and staff, interviews with representatives of seven stakeholder groups, a review and analysis of all Alliance proposals and reports, a survey of 27 Principal investigators, interviews with 44 project managers and participants, intensive focus groups with participants in two representative Alliance projects, and a survey of 348 agricultural groups organizations.

FINDINGS

The findings are divided into two sections. The first section focuses on the Administration issues associated with the PMA program. The second section focuses on the programmatic issues associated with the Pest Management Alliance Projects.

Administration DPR has taken significant steps to clarify the application process, such as including sample forms as examples for applicants to follow. However, responding to the RFP and the logistics of meeting state contracting requirements continue to impose significant transaction costs on applicants. Improvements are needed to increase the clarity of the directions and improve the substance of Alliance proposals. DPR staff pointed out that providing additional guidance to potential projects would have improved the design of the proposals and eventual projects, but that ensuring fairness with the state competitive grants procedures precluded that kind of advice. As a result, the RFP is relied upon as the document for securing all of the information that DPR wants from a potential Alliance project, but it does not adequately provide guidance to the applicant in a coherent and consistent manner.

The RFP process, while significantly improved, would benefit greatly from increased clarity of terminology and consistent articulation of the intended outcomes. Given that consultation during the application process does not take place and the proposal is the only document that guides the project once it is funded, the RFP has become convoluted, unclear, and inconsistent. In addition, the RFP is relied upon to direct the writing of proposals that allow reviewers to determine the congruence of the proposal with priority areas, suitability of the Alliance team, the effectiveness of work plan and measures of success, evaluation plans, and the substance of the proposed approach. The problems with clarity and measurable results begin with relying on the RFP and proposal to accomplish so much while providing so little support and guidance to the development of the projects.

At the same time, DPR contract managers face a difficult task in being ambassador, ombudsman, advisor, administrator, and enforcer for the projects. That the involvement of DPR staff is so well received is a credit to their commitment and to the overall benefits that the PMA program is intended to produce. However, given the challenges of managing the PMA program and the relatively limited amount of staff time dedicated to

the program, it is important to increase staff skills, provide opportunities for collective learning, establish an effective record-keeping system, and connect PMA with other parts of DPR.

Pest Management Alliance Projects DPR has initiated and undertaken a program, among several programs engaged in pest management issues in California, which is unique in its focus on statewide commodities and a broad range of regulatory issues. Through the PMA program, DPR has attempted to meet a broad mandate for improving pest management while still running the largest state pesticide regulatory program in the nation. As a regulatory agency, DPR has grappled with administrative procedures, staffing constraints, criticism from stakeholders, and intense public scrutiny. It was inevitable that DPR would have encountered a series of challenges and additional needs as the program unfolded.

Overall the PMA program has been very successful in creating a means for bringing together a broad cross-section of the industry to focus on pest management issues. Valuable new information on pest management alternatives has been generated, and DPR has provided an opportunity for commodity groups to increase awareness of alternative pest management practices and to leverage funding to accomplish work more rapidly and on a wider scale. In operating the PMA program, DPR staff has actively sought advice and addressed problems, revising the program procedures to make them more appropriate to the needs of participants.

DPR staff, project participants, and stakeholders have been very candid in identifying a broad array of needs. The needs can be organized into two areas: 1) The need to clarify and create a more effective focus for the PMA program; and 2) the need to make significant quality improvements to the program in order to carry out a more strategically focused effort. Meeting those needs would enable DPR to put to use the experiences of the past five years in creating a more effective program that can produce measurable results and serve as a catalyst for significant benefits in pest management and the environment.

RECOMMENDATIONS

The findings indicate that there are two areas in which DPR can make valuable improvements in the PMA program: 1) clarification and strategic focus for the program and 2) quality improvements in the administration of the program. For the most part, these changes should be made sequentially: the program focus should be clearly established first. Then an appropriate re-structuring of the program can be designed.

Taken as a whole, these recommendations constitute a comprehensive outline of work to increase the effectiveness of the PMA program. It is recommended that DPR develop a coherent plan for putting these recommendations into effect and then review them with PMAC and other stakeholders. This will allow DPR to implement changes in a coordinated manner and provide opportunities to assess the effectiveness of the improvements.

Focus As a first step, DPR needs to establish the primary focus for its efforts. In doing so, the department should look to use its resources strategically to create the most significant and lasting benefits for pest management and the environment. DPR should recognize that 1) the majority of resources on pest management issues are focused at the demonstration, outreach, and education end of the spectrum and 2) that achieving sustainable reductions in pesticide risks requires the commercial adoption of effective pest management practices.

Structure Once the primary focus has been established, DPR should consider a substantive restructuring of the program that allows DPR to retain and build upon the current strengths. It is recommended that DPR adopt a two-step process to ensure that the right opportunities are identified and that projects are well designed. The first step would satisfy the need for an open process to award Alliance grants through a competitive RFP process to determine which commodity groups and situations qualify for project funding. By focusing on the task of determining where the proposed project and organization coincided with critical priorities and opportunities, this step would allow for simplification of the RFP process. It would also eliminate the demands on the RFP process both to determine which proposals meet the criteria for an Alliance grant and to validate a comprehensive work plan and evaluation scheme.

This approach to project development allows for interaction between DPR staff and the projects. While some Alliance groups may not need assistance and support from DPR in this part of the process, many of the groups indicated that support by or through DPR would be helpful. Since this part of the process is time- and staff-intensive and requires skills that may not be available to technical staff, engaging outside support would be particularly appropriate. In addition, support would be especially useful to groups that qualify for the Alliance program but have limited resources and might otherwise not be able to participate. Most important, ensuring that projects are well organized and effectively initiated is a critical step in ensuring that useful and measurable results are produced for growers and the environment.

Staffing Since staffing and infrastructure support have been cited as critical to the success of PMA projects, DPR can strengthen the PMA program by revising the administrative processes and increasing the quality and level of its support for the program and, by extension, to the Alliance projects. The administrative and enforcement responsibilities for contract management should be separated from the project support, guidance and facilitation responsibilities, and assigned to different people. DPR should ensure that adequate staff time is available for the oversight and support of the PMA program. Oversight should be concentrated in this smaller number of staff rather than dispersed over a larger number of people who have only minimal contact with the projects. DPR should also develop a clearer description of the roles and responsibilities of staff who will be interacting with the projects. Finally, with changes in staffing and in the structure of the program, the role of contract managers should focus primarily on facilitating, supporting, providing general oversight, and serving as a communications link between DPR and the Alliance.

Evaluation DPR can do three basic things in the short term that will improve the ability to document and measure results: 1) establish baselines for measuring the outcomes that are intended; 2) document and assess qualitative changes that result from Alliance projects as well as quantitative, physical changes; and 3) measure changes that are directly related to the activities of those participating in the project.

CONCLUSION

As a non-traditional funder of agricultural projects, DPR needs to identify a strategic focus for its program that fulfills its mandate and original intentions for the PMA program. Having done that, it will be in a position to restructure its program and reinforce its staffing to accomplish its objectives. The process for achieving measurable and meaningful results needs to be built into the structure of the program from the beginning. If DPR determines the primary focus for the program, applies the appropriate resources and skills for working with agricultural groups, and makes the necessary improvements for effective staff interaction with the projects, measurable results will be a logical outcome of the program.

INTRODUCTION

The Pest Management Alliance (PMA) Program is a unique effort to carry out the pest management mandate of California's Department of Pesticide Regulation (DPR) on a considerably larger scale than other state programs and many federal programs. PMA has systematically provided resources for industry-wide activities to improve the effectiveness and reduce the impacts of pest management. It has been particularly forward-looking in the level of involvement it has sought with the agricultural community. As a regulatory agency, DPR has recognized that taking regulatory action is only part of the job necessary to create environmental benefits. The rest of the task, and often the more difficult part, is securing the widespread and sustained use of practices that provide long-term improvements. To the extent that DPR has encountered challenges and problems in accomplishing that work, these have come about from taking on an ambitious and worthwhile mission.

In the summer of 2001, the Center for Agricultural Partnerships (CAP) contracted with the California Department of Pesticide Regulation to conduct an evaluation of its Pest Management Alliance Program. CAP's evaluation focused on several components of the program, identified as important by DPR: 1) Request for Proposal (RFP) procedures and their effect on participation in the program; 2) the role of DPR; 3) measures of success; 4) identification of a model approach; and 5) data management. In doing so, even though PMA has funded non-agricultural projects, CAP focused, at DPR's behest, solely on the agricultural commodity projects.

The body of this report includes background on the PMA Program, its dimensions and environment; findings; and recommendations. A methodology section follows, which describes the process and instruments used in conducting the evaluation. The findings and recommendations are organized around the areas on which DPR sought information and advice in its original request for proposals for this evaluation. The appendices include supplementary documentation and the survey instruments used in the evaluation.

BACKGROUND

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Dimensions

Since it was initiated, the PMA program has provided grant funds totaling more than $3.2 million, in grants of up to $100,000 per project annually. PMA is intended to build on DPR's Pest Management Grants program that funds applied research and demonstration projects. The PMA program includes two parts: the "Evaluation," which is a situation analysis of pest management for the specific crop, and the "Alliance," which is a collaborative project ostensibly based on the information compiled in the Evaluation. Evaluations are required for a commodity group to be eligible for an Alliance grant. For the first two years of its existence, the Evaluation and Alliance parts of the program were part of a single RFP. Since then the application processes have been separate. While applicants are not required to have received an Evaluation grant (which can be up to $10,000) before applying for an Alliance grant, they are required to submit an Evaluation report.

Year	Project	Commodity	Organization	$ Amount	Total Amount as of 6/30/01
1998	An evaluation of soil borne mgmt for strawberries in CA in the absence of methyl bromide	Strawberries	CA Strawberry Commission	$ 93,458	$ 186,758
2000	A multi-disciplinary approach to methyl bromide replacement in strawberries using non-chemical alternatives	Strawberries	CA Strawberry Commission	$ 93,300	
1998	Reduced risk pest mgmt programs for iceberg and leaf lettuce in CA	Lettuce	CA Lettuce Research Board	$ 58,000	$ 58,000
1998	Poultry meat bird IPM system: evaluation, demonstration, and implementation	Poultry	AgriLynx Corporation	$ 99,597	$ 99,597
1998	Pesticide reduction in CA prunes	Prunes	CA Prune Board	$ 50,000	$ 242,727
1999	Pesticide reduction in CA prunes	Prunes	CA Prune Board	$ 92,727	
2000	Pesticide reduction in CA prunes	Prunes	CA Prune Board	$ 100,000	
1998	To promote a reduced risk system of almond production through alternative practices	Almonds	Almond Board of CA	$ 99,000	$ 297,756
1999	To promote a reduced risk system of almond production through alternative practices	Almonds	Almond Board of CA	$ 98,756	
2000	To promote a reduced risk system of almond production through alternative practices	Almonds	Almond Board of CA	$ 100,000	
1998	A reduced risk pest mgmt program for Walnuts	Walnuts	Walnut Marketing Board	$ 100,000	$ 365,750
1999	A reduced risk pest mgmt program for Walnuts	Walnuts	Walnut Marketing Board	$ 65,750	
2000	A reduced risk pest mgmt program for Walnuts	Walnuts	Walnut Marketing Board	$ 100,000	
2001	A reduced risk pest mgmt program for Walnuts	Walnuts	Walnut Marketing Board	$ 100,000	
1998	Pear pest mgmt alliance	Pears	CA Pear Advisory Board	$ 100,000	$ 265,750
1999	Pear pest mgmt alliance	Pears	CA Pear Advisory Board	$ 65,750	
2000	Pear pest mgmt alliance	Pears	CA Pear Advisory Board	$ 100,000	
1999	Alfalfa seed pest mgmt implementation training program for the Central San Joaquin Valley	Alfalfa seed	CA Seed Association	$ 55,000	$ 55,000
1999	Extending IPM strategies for cotton: improving outreach and field evaluations in pima and upland cotton	Cotton	CA Cotton Growers Association	$ 100,000	$ 100,000
1999	Reduced risk pest mgmt of insect pests in sugarbeets	Sugarbeets	CA Beet Growers Asso.	$ 88,841	$ 226,693
2000	Reduced risk pest mgmt of insect pests in sugarbeets	Sugarbeets	CA Beet Growers Asso.	$ 67,849	
2001	Reduced risk pest mgmt of insect pests in sugarbeets	Sugarbeets	CA Beet Growers Asso.	$ 70,003	
2000	The CA winegrape pest mgmt alliance	Winegrapes	CA Associations of Winegrape Growers	$ 99,380	$ 199,274
2001	The CA winegrape pest mgmt alliance	Winegrapes	CA Associations of Winegrape Growers	$ 99,894	
2000	Development of an integrated system for controlling San Jose scale, peach twig borer, and oriental fruit moth in clingstone canning and fresh shipping peaches, plums and nectarines	Peaches, Plums, Nectarines	CA Tree Fruit Agreement	$ 51,251	$ 140,676
2001	Development of an integrated system for controlling San Jose scale, peach twig borer, and oriental fruit moth in clingstone canning and fresh shipping peaches, plums and nectarines	Peaches, Plums, Nectarines	CA Tree Fruit Agreement	$ 89,425	
1999	Demonstration and implementation of a reduced risk pest mgmt strategy in fresh cut roses	Roses	CA Cut Flower Commission	$ 85,000	$ 85,000
1999	A pest mgmt alliance for reducing the environmental risk of rice pesticides in CA	Rice	CA Rice Research Board	$ 20,000	$ 20,000
2000	Pest mgmt alliance for the containerized nursery industry	Nursery	University of CA	$ 67,849	$ 143,810
2001	Pest mgmt alliance for the containerized nursery industry	Nursery	University of CA	$ 75,961	
2001	Southern San Joaquin Valley citrus pest management alliance	Citrus	CA Citrus Research Board	$ 98,838	$ 98,838
2000	The CA turkey pest mgmt alliance: promotion of a reduced risk multiple pest control program through field level IPM tactics, demonstrations and grower training	Turkey	AgriLynx Corporation	$ 100,000	$ 100,000
			GRAND TOTAL		$ 2,685,629

The Context for PMA and the Role of DPR

Early in CAP's evaluation, it became clear that there was a good deal of ambiguity about the terminology that was regularly used to describe the purposes and activities of DPR and other organizations. For the purposes of this discussion, demonstration is seen as distinct from implementation, and education is distinct from outreach. Demonstration is the limited use of practices as a means for illustrating their efficacy, while implementation is the sustainable use of the practices in commercial operations. Education is the process of conveying specific information to develop understanding of a practice, while outreach is the process of creating awareness and interest in the practice.

When it was established, the PMA program became one of several programs that are intended to address pest management issues and work with agricultural constituencies. Initial reaction to the program was mixed, as some organizations felt that DPR was engaging in activities, such as education, that were already being done by other institutions on whom the money would be better spent. To the credit of DPR and its staff, they continued to work with those organizations that, for lack of a better term, are referred to as "stakeholder organizations." Thanks to the perseverance of DPR staff, current relationships among the institutions are very cooperative.

The role of DPR and the PMA program in relation to the work being done by other institutions is a key concern and one that this evaluation investigated extensively through interviews and surveys. In doing so, CAP queried representatives from stakeholder organizations, DPR staff, and project participants. The stakeholders were asked to describe their organizations and their missions as summarized below:

The **University of California Integrated Pest Management Program** (UCIPM) develops and delivers pest management information through county extension. The core people in the program are IPM advisors who are technical specialists. UCIPM runs an applied research and science-based education program and funds efforts similar to components of PMA's program, but is more research oriented.

The U.S. Environmental Protection Agency Region IX Agriculture Initiative is a non-regulatory initiative in a regulatory agency, working with state universities, non-profits, and commodity groups to support more environmentally friendly farming. Region IX provides grants through its Food Quality Protection Act Program, the Pesticide Environmental Stewardship Program, and the Regional Initiative, in addition to its support for the Biologically Integrated Farming Systems (BIFS) program through the University of California Sustainable Agriculture Research and Education Program (SAREP).

The University of California Sustainable Agriculture Research and Education Program (SAREP) focuses on working with the top 20 commodities (in terms of value *and* pesticide use), mostly with farm advisors, PCAs, specialists *and* consultants. SAREP administers the BIFS program, a regional program that relies on farmer-to-farmer mentoring. Its RFP calls for collaborative efforts, was started in 1995, and has provided $3 million in funding over the last six years.

Community Alliance with Family Farmers (CAFF) started the Biologically Integrated Orchard Systems (BIOS) projects, which focus on farmer-to-farmer interaction, field days, demonstration using many different tools (newsletters, face to face), and support for scouting. CAFF is interested in changes in the attitudes and perceptions of farmers. Core constituents are growers and pest control advisors (PCAs) who are risk takers and innovators willing to participate in the interaction process.

The University of California Regional Center (Western Region) is a non-research program that uses its primary grant to contract with other states in the Western Region that form an information network to develop crop profiles and pest management strategic plans, and provide information on pest management to USDA. The Center's mission is to identify key pest management issues and work with USDA to help find solutions. It has been particularly active in working with commodity groups to develop pest management strategic plans (PMS plans) and crop profiles.

Although reservations were voiced by some of these organizations about the intentions and mission of PMA when it was established, they have had significant interaction with DPR and the PMA program. Representatives from each of them serve on DPR's Pest Management Advisory Committee (PMAC), established by DPR for public interaction and counsel on the department's activities and programs. Region IX and DPR recently worked together organizing a partnership conference. The Walnut PMA grew out of a BIFS project, and joint funding of a prune project led to an Alliance project for that commodity. CAFF has contracted to do outreach for projects and was instrumental in securing funds for PMA. The U-C Regional Center helped put together the wine, grape, and walnut proposals. Of particular significance is the fact that the Principal investigators (PIs) for projects funded by these organizations have also served as PIs for PMA projects.

These organizations perceive key similarities and differences between their programs and the PMA program. For example, while UCIPM funds efforts similar to PMA, it is more research oriented in its own grant program. On the other hand, BIFS and BIOS use advisory teams to guide their individual projects, as do the Alliance projects. Most important, except for UCIPM, which describes itself as having an implementation component, the stakeholder organizations indicated that they perceive their own programs as being primarily demonstration, education, and outreach, which is also how they characterize the PMA program. None of the groups characterized PMA as an implementation program.

DPR originally oriented the PMA to 1) work extensively with commodity groups; 2) involve the commodity on a state- or industry-wide basis; and 3) focus on important regulatory concerns associated with pest management. Over time PMA projects have come to focus largely on demonstration, education, and outreach. Thus the role of the Alliance program is perceived in many ways as supporting the same set of accomplishments, though with differences in emphasis and scope, as those supported by other organizations engaged in pest management issues.

To the extent that the different programs are distinct, they can be characterized as being intensive or extensive. For example, the BIOS and BIFS programs rely on intensive application of a "system" of practices and entail intensive interaction among a relatively small number of participants. By contrast, the PMA program aims for extensive industry-wide efforts that have broad application in pest management for a particular commodity. This approach is consistent with its interests in achieving measurable reduction on the risk from pesticides. The work of SAREP and UCIPM includes both characteristics through intensive research and demonstration efforts, along with extensive statewide education and communications activities.

It should be noted that neither DPR nor the stakeholder organizations articulated an overall model for putting new practices and technologies into practice into which their program fit, either individually or collectively. There seems to be an implicit sense that changes occur along a continuum from research through demonstration, education, and outreach to final adoption by growers. For example, it was pointed out in stakeholder interviews that BIFS had created groups of innovators out of which PMA projects emerged. However, there is no shared understanding among the various programs of their specific roles in the process of creating change or how their efforts should be coordinated.

The lack of coordination and the lack of an underlying model have led to inadvertent consequences. Most program efforts and resources among the organizations are generally concentrated on demonstration, education, and outreach. This concentration of resources by several programs in the same area has increased confusion about the roles played by the individual programs and may diminish support for them. Furthermore, although DPR charted a unique and progressive course in establishing the PMA program, the role of supporting implementation of new practices has gone largely unfilled.

Having taken on the ambitious task of initiating a new program, it is understandable that DPR would encounter challenges even as important accomplishments were achieved. The findings that follow attempt to document those accomplishments and challenges in a way that provides the basis for capitalizing on success, crafting improvements, and creating new opportunities.

FINDINGS

The Findings are divided into two sections. The first section focuses on the administration issues associated with the PMA program. The second section focuses on the programmatic issues associated with the Pest Management Alliance Projects.

ADMINISTRATION

The Administration section of the findings covers those parts of the Pest Management Alliance Program that are the responsibility of DPR staff: 1) the Request for Proposal (RFP) process; 2) interaction of DPR staff with projects and role of the contract manager; 3) reporting requirements and information handling; and 4) coordination within DPR. The findings are derived from interviews with staff and participants, an extensive survey of principal investigators, and a survey of California agricultural organizations.

Request for Proposal Process

Mandated as a competitive grants program, DPR uses a Request for Proposals (RFP) process to inform potential applicants and to solicit and direct the format and content of applications. Originally the RFP for the Evaluation Grants and the Alliance Grant were part of a single RFP. In 2000 the Evaluation and Alliance Grants applications were separated into two separate RFPs.

The RFP process has prompted extensive comments from principal investigators about the substance and logistic burden imposed by completing the application package. Admittedly, much of the application process is mandated by California state contracting procedures and is outside the discretion of DPR staff. However, the content of the RFP, priority areas, format for proposals, and evaluation criteria are within the purview of DPR.

A survey was conducted to which 19 of 27 principal investigators responded for proposals submitted within the past four years to the DPR Pest Management Alliance grant program. The survey respondents were asked to answer questions about the process for acquiring and responding to the request for proposal as well as the evaluation criteria for selection of proposals to be funded. Participants tended to represent well-funded row and tree crop commodity organizations with small memberships. While they have pursued funding for a number of different reasons, they tended to look at the Alliance grant program to address pressing issues.

University personnel (i.e. researchers and cooperative extension) exercise significant roles in writing, coordinating, and developing proposals. Full-time staff from the commodity organization were a distant second in fulfilling these roles. With respect to assembling a proposal, respondents categorized most tasks as being “somewhat difficult” (as opposed to “not difficult” or “very difficult”). In particular, writing text, developing a budget, creating a work plan, and updating evaluations were most identified as being “somewhat difficult.” These tasks also tended to be the ones that took the most amount of time in addition to the task of filling out forms required for submitting the application.

The work plan, abstract, priority areas, and identified measures of success were designated by the majority of respondents as being the best indicators (of the current RFP components) for judging whether a proposal should be funded. The RFP components are listed below, followed by the percentage of those who ranked them as good-excellent indicators.

1. Work plan (94%)
2. Abstract (77%)
3. Priority areas indicated as having recognized importance (77%)
4. Measures of success are identified (77%)
5. Evaluation or progress report (65%)
6. Readiness for demonstration (65%)
7. Composition and qualifications of management team (65%)
8. Realistic timetable (59%)
9. Budget summary and detail (53%)
10. Alliance participants (47%)
11. Application forms adequately completed (47%)
12. Resumes of principal investigators (35%)
13. Letters of commitment from team members (29%)

Strengths

DPR has taken significant steps to clarify the application process, such as including sample forms as examples for applicants to follow. Respondents recognized and expressed appreciation for a) the improvements in RFP clarity over the last three years, especially those that increased the respondent's understanding of DPR intentions for the Alliance program, and b) DPR's work in responding to issues raised by stakeholders.

In addition, respondents appreciated the priorities set by DPR in terms of pest management and were willing to devote organizational resources to such issues. Respondents expressed overall satisfaction with the point allocations used to critique both Evaluation and Alliance grants. They also expressed satisfaction with timelines, the selection process, and the general financial factors associated with the grant program.

Weaknesses

The process of responding to the RFP and the logistics of meeting state contracting requirements continue to impose significant transaction costs on applicants. Respondents indicated a need for earlier announcement dates and a longer application period. Respondents also indicated that the current process for applying anew each year to continue an existing project provided little additional information or value to the Alliance project.

As DPR has made improvements in the process, those changes have also added to the demands placed on the RFP process itself. DPR staff has conceded that priority areas have been added over time, but none have been eliminated. As a result, while the RFP should assist applicants in targeting their proposals, it has in fact blurred the scope and results that are intended. If every new issue is a priority, the focus of the PMA becomes

less obvious or targeted. In addition, as DPR has identified the need to document results, additional language has been added to the RFP, such as emphasizing requirements for economic data. However, without additional guidance, and since most of the PIs have technical rather than social science backgrounds, this emphasis has only broadened the area of work without producing more substantive results.

DPR's current RFP priorities are not fully shared by the projects. While survey respondents expressed satisfaction with the current allocation of points in the RFP for evaluating proposals, they also identified work plan, abstract, priority areas, and measures of success as the best indicators of a proposal being worthy of funding. These components account for an insufficient proportion of the total number of points needed for a successful proposal. While respondents did share some of DPR's priorities, implementation—the primary focus identified by DPR staff—was not a "best reason" identified by respondents for preparing a proposal.

The criteria for the RFP can be divided into two basic areas: criteria for judging whether the applicants qualify for a PMA and criteria for whether they have a plan or are able to carry out a successful PMA project. While the qualification criteria such as resumes of participants may be important for determining whether an Alliance can be formed, they do not provide a direct indication of the likely effectiveness of the intended project.

Neither the overall direction nor the intended outcomes are explicitly or consistently articulated in the RFP. The introduction to the 2001 RFP states that the Alliance "promotes alternative methods" that are formed to help "…address important pest management issues" and "to demonstrate and promote adoption of reduced risk practices." Neither of the terms "promote" or "address" indicate the outcomes intended or the types of work the projects are intended to accomplish. As a result, the RFP begins with ambiguity that continues throughout the document.

Based on survey and interview responses, it is clear that there is considerable confusion about the meaning of terms such as "demonstration," "outreach," and "implementation." This is in part due to the lack of an explicit and shared model for how the adoption of new practices takes place, as pointed out in the previous section. The lack of precision and the multiple meanings ascribed to the terms reinforce the ambiguity of the intended outcomes DPR hopes to engender.

A review of the selection criteria reveals a number of areas where improvements are needed to increase the clarity of the directions and improve the substance of Alliance proposals. In the most recent RFP, the selection criteria under "Work Plan" call for the objectives to "be measurable and consistent with the goals of the project." Little further direction is given as to what the objectives should measure (outcomes, effort expended), nor are the "goals of the project" listed as a requirement in any other part of the RFP. As a result, the objectives often need additional specificity to be valid indicators of sound planning or to serve as guidelines for project activities and evaluation. For example, of the two highest-rated proposals for Alliance grants reviewed in 2001, only one of the objectives is listed clearly and none of them list measurable results or the time frame in

which they will be accomplished. In one of those highest-ranked proposals, the objectives are stated in one sentence and then the tasks are listed instead of the objectives.

Without specifying the measurable objective to be accomplished, it is difficult to assess the feasibility of the tasks or track their progress in meeting the objectives. Under the Measures of Success section, the applicant is not asked to provide a description of how a baseline will be established against which progress is to be measured. Measurement methods need to be tied to the specific objectives that the project is intended to produce. In addition, the RFP does not ask the applicant to explicitly link the practices that are to be implemented or demonstrated to the objective.

In short, the RFP does not help to guide the applicant in constructing a project that leads to the creation of specific outcomes or measurable results. While DPR recognizes the importance of providing flexibility for the commodity groups to craft projects that meet the realities of crop, pest, and regional conditions, the current RFP process is a major contributing factor to the problems in adequately documenting progress. DPR staff pointed out that providing additional guidance to potential projects would have improved the design of the proposals and eventual projects, but that ensuring fairness with the state competitive grants procedures precluded that kind of advice. As a result, the RFP is relied upon as the document for securing all of the information that DPR wants from a potential Alliance project, but it does not provide that information to the applicant in a coherent and consistent manner.

Interaction of DPR staff with projects and the role of the contract manager

DPR staff interacts with the projects primarily as "contract managers." Since they have multiple responsibilities, contract managers often find their roles in the PMA quite challenging. They must simultaneously build trust and become familiar with a commodity and its project, while also serving as the bearer of paperwork and reporting requirements. As a liaison and participant in the project, the contract manager comes into the project as something of an outsider, representing the regulatory agency. As the representative of the funding agency, the manager has the responsibility to make sure that contract procedures are followed, requirements met, results produced, and reports filed. At the same time, the contract manager has internal responsibilities in initiating the contract, handling invoices, and fulfilling paperwork requirements.

Project managers—the people from commodity groups or Cooperative Extension who actually manage the project operation—and project participants were asked to offer their observations on the interaction of DPR staff with the projects. Contract managers tend to interact most with the PI and/or project manager. The role of the contract manager in the interaction between projects and DPR was characterized as "liaison" and "observer." This was likely due to the fact that most participants had little intensive contact with the contract manager.

Strengths

More than 75 percent of the project managers who were interviewed were positive about the interaction with their contract managers. They indicated that the DPR staff

contributed most effectively by being actively involved in project meetings, providing information in a timely fashion, increasing communication with DPR, and serving as a resource to the project. Their comments included: "Been outstanding, actively participated, attended meetings and events. Familiar with our program and our people. Excellent working relationship . . ." "Expecting greater and better communication and we got it."

Weaknesses

To the extent that there were negative comments about contract managers from the project participants, these comments indicated that information provided by DPR staff was inconsistent. Participants got different answers on substantive questions, depending on the staff person with whom they had contact. There was also some concern that the staff was not sufficiently engaged in the project. It also became clear that there was significant variation in the level of skill, attention, and value brought by individual contract managers to the projects. It was clear from the interviews that some staff were quite helpful, that some were not as helpful, and that the consistency of information coming from DPR could be improved.

The majority of criticisms about the role of the contract manager were voiced by the DPR staff, who felt that the manager's role in the project was not clearly defined. Beyond providing guidance when asked, staff exert very little significant authority over project design or outcomes. They do not want to be perceived as "pushing" a DPR agenda, so their oversight is typically passive. Some, but not all, PMAP management teams ask for staff advice on contracts, DPR procedures, and DPR expectations. As tools for oversight, the contract manager has only the proposal with its work plan, which was developed in advance of the project, and the reporting requirements that come after the work has been done, against which to gauge project activities or progress.

While there is legitimacy to deferring to the Alliance in designing and operating the project, DPR staff and project participants pointed to the need for a better sense of the contract manager's role and responsibilities. The Contract Manager's Guide provides a general direction for the staff and sets out the paperwork requirements. However, it does not provide guidance in clarifying how a manager deals with problems as they arise. Hence, staff use it only rarely after their initial involvement with the program.
The only document that the manager (or the project for that matter) has to guide the operation of the project is the proposal that was prepared as much as six months earlier. In this situation, the manager has to balance being a participant, ombudsman and standard enforcer. Balancing these roles while interacting with a diverse Alliance team requires skills in which staff are not experienced or trained. While there is guidance for the mechanical tasks involved in serving as a manager, additional structure and tools are needed for managers to play a more active role in the projects.

Internal constraints further limit the ability of contract managers to fulfill multiple responsibilities. Eighty percent of the staff interviewed spend 50 percent or less of their time on PMA. No one had more than 75 percent of his/her job allocated to PMA. Given the time demands and professional challenges from internal and external responsibilities,

DPR staff have a fragmented approach to the program. In addition, the current mechanism within DPR for contract manager interaction does not provide sufficient opportunity for staff to learn from each other and increase their individual or collective effectiveness. This leaves contract managers in need of additional opportunities for airing and resolving concerns, ensuring consistency, and increasing the collective knowledge base from which the program operates.

Reporting requirements and information handling
As a state agency, DPR has standard accountability and reporting requirements over which the staff has no discretion. A number of those requirements show up in the RFP or as documentation required for payment of grant funds.

Strengths
Over the past four years, DPR staff have worked to minimize the burden of those requirements. Staff have included reporting requirements for the PMA projects as a means to document, track and focus on measurable results.

Weaknesses
Project managers and contract managers from DPR indicated a number of concerns about the reporting requirements, albeit from very different perspectives.

Despite improvements in reporting requirements, project managers and participants were still unclear about what DPR wanted and felt that the reporting requirements were unreasonable for the amount of money received. Concerns were raised by participants about the frequency of reports and the complexity of budget reports.

From a DPR management point of view, contract managers and the projects do not have an ongoing mechanism to track progress as an organic result of project activities. This has left the report as largely an external requirement to be met at the end of the reporting period and not as an important outcome from or documentation of project activities. That situation further reinforces the sense among project managers that reporting requirements are an administrative burden.

A particular problem that staff mentioned is the difficulty in getting timely submission of reports. In response to any overdue reports, contract managers have little recourse except to withhold money. They are reluctant to do this at times because they already have invested a great deal of time and energy in the projects.

Two other problems related to the reporting requirements are worth noting. CAP's evaluation also included a comprehensive comparison of project objectives as listed in the proposals with reported results. The format, content, and presentation of information varied widely among the reports. Some of the reports were very long (more than 200 pages) and detailed and had little regard for synthesizing the information. The intended objectives of the projects as outlined in the proposals did not always relate directly to the information in the reports. In addition, the report archives were disorganized and

incomplete. If a simple, complete, and user-friendly resource for coherent document did exist, it was not made available for use in this evaluation.

At the time of this evaluation, all of the reports were not on the DPR web site, though efforts have been made recently to bring the site up to date. In reviewing the documents, it was difficult to determine the year for which the proposal and/or final report was written. The contract numbers did not relate to final reports; in fact, contract numbers on the title page and in the body of the work were different in one case. Some final reports appeared to be missing or had apparently never been received. In part, these problems may be due to the recent move of DPR to new office space. Even so, as a result of these two problems, it was difficult to use the reports in evaluating progress or in documenting and describing the overall impact of the PMA program.

Coordination within DPR

One of the early intentions in establishing the PMA program was to provide a connection between the pest management section of DPR and the registration section. One of the most important preconditions for shifting to more reduced-risk pest management practices and technologies is having them available to demonstrate and implement. The registration of new technologies by DPR is a critical component in making those technologies available. Given DPR's investment in the PMA program, it is important that appropriate registrations are available to implement in reducing risks. Since PMA has direct information about the needs and exigencies of pest management among Alliance commodities, this information could be provided to registration staff for use in setting priorities and facilitating the availability of new and effective materials.

Strengths

Coordination with the Director's Office and Communications staff has been good. They regularly are provided information on the PMA projects and the people involved with them as examples of pollution prevention and DPR's efforts to work in a positive way to effect change within the regulated community.

Weaknesses

To date, the link between pest management and registration has not been established. Such a link would have value to the grower community as well. Among the benefits that the grower community perceives from PMA involvement is the opportunity to develop a better working relationship with DPR. This provides an opportunity for DPR staff to better understand pest management for the affected commodity and, ostensibly, to help DPR make more informed regulatory decisions. Creating an institutional connection between the PMA program and registration would help DPR in reducing risks and commodities in adopting new technologies.

Conclusions

The RFP process, while significantly improved, would benefit greatly from increased clarity of terminology and consistent articulation of the intended outcomes. Given that consultation during the application process does not take place and the proposal is the only document that guides the project once it is funded, the RFP has become convoluted,

unclear, and inconsistent. In addition, the RFP is relied upon to direct the writing of proposals that allow reviewers to determine the congruence of the proposal with priority areas, suitability of the Alliance team, the effectiveness of work plan and measures of success, evaluation plans, and the substance of the proposed approach. The problems with clarity and measurable results begin with relying on the RFP and proposal to accomplish so much while providing so little support and guidance to the development of the projects.

Lacking clarity of mission, faced with a complicated task and multiple responsibilities, DPR contract managers face a difficult task in being ambassador, ombudsman, advisor, administrator, and enforcer for the projects. That the involvement of DPR staff is so well received is a credit to their commitment and to the overall benefits that the PMA program is intended to produce. However, given the challenges of managing the PMA program and the relatively limited amount of staff time dedicated to the program, it is important to increase staff skills, provide opportunities for collective learning, establish an effective record-keeping system, and connect PMA with other parts of DPR.

PEST MANAGEMENT ALLIANCE PROJECTS

In an effort to get a more complete understanding of the PMA program, the majority of the CAP review involved interviews, surveys, and focus groups with agricultural commodities and project managers and participants. Having consulted with DPR staff and stakeholders about the intended mission of the PMA program, CAP polled project participants and managers on their understanding of the intended focus of the program. Each of the projects identified specific accomplishments, such as determining the efficacy of a particular reduced practice or providing a specific pest management education. In the surveys and interviews, respondents were also asked to further identify both quantitative and qualitative accomplishments of their projects. Project managers listed improved pest management, in general, increased awareness, and bringing people together as major accomplishments. Project participants also identified increasing knowledge about pest management as an accomplishment.

Strengths

Bringing people together was cited by DPR senior and program staff as an important accomplishment for the PMA program. The importance of providing resources and a focus for collaborative action with a commodity is difficult to overstate. By requiring a broad cross-section of the industry to be involved in the establishment of an Alliance, PMA has helped bring together people and organizations who had not worked together before. One project participant stated that the Alliance project had “galvanized” the industry. As a result, respondents indicated that there is an increased commitment and a more strategic focus on pest management issues.

This improved collaboration has led to increased awareness within the commodity and within the industry about new control methods and reduced risk practices. Successful demonstration efforts, as a result of the PMA projects, have shown the feasibility and efficacy of new pest management methods. In addition, participants indicated that

significant new information had been generated by the PMA projects, in the use of "softer materials." A review of project reports submitted to DPR substantiates the view that a great deal of on-farm research and demonstration results have been compiled from the projects.

DPR staff concur with respondents from the projects that the main strengths are open communication within groups as a result of putting together an Alliance project and the involvement of new people and organizations in industry efforts through the Alliances. The program has also provided visibility for DPR in helping to solve problems and in meeting its mandate for sound pest management. PMA has also provided an opportunity for DPR to "wear a white hat" by engaging with the agricultural community in more than a command-and-control relationship. This is corroborated by responses from project participants, two-thirds of whom indicated that their view of DPR has changed in a positive way.

Finally, although project participants and managers, like DPR staff and stakeholders, did not perceive widespread commercial implementation as part of the program's mission or purpose, one notable exception is the poultry projects funded in 1998 -2000. These projects are unique in that there was a significant commitment among the relatively small number of companies to ensure training of personnel in the management of pests using various reduced-risk techniques. Farm personnel were required to pass an industry test to satisfy the requirements of companies that participated in the California Poultry Federation Quality Assurance (CPF QA) Program. The companies provided the support and line oversight to ensure that training took place and the practices were implemented. Even though the infrastructure existed within the companies and the industry, the support from DPR was unique in that it provided the catalyst and the resources to bring the various industry and company players together.

As a result of the integration within the poultry industry, line authority in the participating companies, and dedication of senior personnel to the projects, the poultry PMAs produced substantive and measurable results. According to the Poultry Meat Bird Integrated Pest Management System Final Report (PMA 97-0277) two CPF QA meetings included training in pest management using information developed during the Alliance project. A pest management committee was formed by one large company to share and implement information on pest management statewide among all segments of poultry production (breeders, fryers, turkeys). One poultry company eliminated all formaldehyde from three winter flock disinfectant schedules, saving more than $1.3 million as well as reducing pesticide risk. The reduced-risk breeder program saved more than $5,000 on one farm, and the company's other breeder farms are now on the same program that eliminated the use of diuron, reduced the use of fly bait, fly spray and rodenticide bait, and now relies on monitoring for pest population assessment and treatment.

Outreach was assessed from three different perspectives: within PMA projects, among PMA projects, and within the larger agricultural community. Most of the projects had outreach built into their projects, and many of the results included in the final report indicated that field days, education meetings, newsletters, and presentations were an

important part of their demonstration efforts. When asked about their contact with other projects, more than 60 percent of the Alliance participants had heard about other projects, mostly through reading the summary reports.

For organizations outside of the projects, approximately 60 percent knew of other organizations applying for/receiving grants, had read of activities and/or results of alliance projects, and/or had attended a meeting or conference sponsored by DPR relative to the Alliance Program.

Weaknesses

Along with the accomplishments, project respondents identified a number of challenges with their projects. Although the interaction of the industry was a benefit, problems with bringing together large groups were also noted. Group decision-making was seen as complicated, sometimes slowing down the work of the project. The requirement to bring together a group that was statewide was suggested to be more suited to a local BIFS-type of model than to a commodity-wide effort.

A number of the groups pointed out that the amount of work involved in establishing and running an Alliance required more money than was available and required a longer term than the grants provided. Other comments indicated a continuing frustration with the time and effort demanded by the grant application process and the reporting requirements. Since funds are available to Alliance projects only on a reimbursable basis, some commodity organizations pointed out the cash-flow problems created for them. Although DPR and some of the projects would like to take a systems approach, the available resources and the pressing nature of specific pest management problems make it difficult to carry out a systems approach with the available time and money. Finally, as will be discussed below, documenting and evaluating measurable results are problems identified by DPR staff and the projects.

Stakeholder organizations pointed out significant additional needs for outreach. In particular, it was suggested that DPR could do a better job of communicating to the public at large about the work that agriculture is doing to reduce risks.

Participation

Participation in the Alliance program requires significant allocation of staff time and resources. As collaborative efforts, the projects necessitate significant transaction costs in order for the Alliance to function effectively. Although the emphasis of DPR is on the commodity groups, the projects depend on university personnel and farm advisors, particularly IPM advisors, to write proposals, conduct fieldwork and education, as well as provide organizational and technical support.

Although the PMA projects have primarily involved relatively well-organized groups, more than half (58 percent) of which have operating budgets over $1 million, these organizations do not have the infrastructure to dedicate solely to a PMA. In those projects that have indicated significant success, such as poultry, a key factor was the availability of staff to coordinate and oversee work. Without that element, projects must rely on

people who serve as volunteers to the project but who have other important responsibilities.

According to DPR staff and project participants, growers and pest control advisors (PCAs) have not been particularly involved, although there were exceptions to that rule in some of the projects. When growers and PCAs are involved, they generally participate as cooperators for demonstration or research sites and as members on some of the management teams. Concerns were raised by one of the PMA projects that the emphasis on reducing pesticide risk would lead to resistance by some PCAs affiliated with chemical companies out of fear that their sales would be reduced. However, the vast majority of comments about PCAs recognized that their involvement was crucial to the PMA projects and process. PCAs serve as the primary link between the information developed by university researchers and demonstrated by Cooperative Extension. More active participation by PCAs in the design and oversight of projects can mitigate the shortage of staff in the university system and commodity groups for undertaking staff-intensive Alliance projects. In addition, PCAs have a statewide organization (CAPCA) that conducts training and disseminates information throughout California and through chapters in a number of growing regions. Their involvement and that of growers will be particularly important if the PMA projects are to produce results in widespread commercial implementation of new practices.

Future participation

This evaluation attempted to determine the interest of organizations to participate, the congruity of DPR and commodity group priorities, and needs of those organizations in seeking funds. The top five reasons for seeking grant funds in the last four years were: conducting educational activities, addressing pressing issues, doing outreach, augmenting or supplementing an existing program, and demonstrating concepts or technologies. Implementation was not a "best reason" identified by respondents. Their responses showed extremely high interest in applying for future Alliance grants. At the same time, they indicated low to moderate interest in applying for future Evaluation grants.

Approximately one-third of the respondents had submitted one-two grants to programs sponsored by national or federal government, state government, and private foundations. More than half of the respondents did not seek any grants. As a means of acquiring information about future grant opportunities, respondents strongly rated email notification, direct mailings, and the RFP document as being the most important means. Least important were the California State Contracts Register, word-of-mouth, and the grantor web site.

Strengths

Principal investigators from existing Alliances indicated that they continue to share many of the same priorities identified by DPR in terms of pest management topics needing to be addressed and they were willing to devote organizational resources to such issues.

Respondents not previously associated with Alliances also shared many of the same priorities identified by DPR in terms of pest management topics needing to be addressed,

and more than half of them were willing to devote organizational resources to such issues. Reduction of worker exposure to pesticides and protection of surface/ground water quality received the highest priority rankings. Thirty-six percent of respondents indicated that they had pursued grant monies for pest management issues.

Weaknesses

The survey of the wider agricultural community indicated that they are concerned about paperwork burdens and potential micro-management of projects via reporting requirements. If DPR is interested in attracting new commodity groups to participate in the PMA program, these perceptions may need to be addressed.

Stakeholder organizations mentioned that pest management funding programs tend to draw from the same pool of potential applicants. PMA involvement requires a significant commitment of staff time and, as such, at least inadvertently selects for well-organized and funded organizations. The availability of funding only on a reimbursable basis may also limit involvement by smaller, less organized commodities for which problems and potential progress might still be significant. Given the amount of time and energy required to apply for funding and organize an Alliance team, and given the strains already placed on university and extension personnel, there is significant concern that the current Alliance projects have effectively tied up the vast majority of available staff. As mentioned before, many of these people are simultaneously involved in projects sponsored by other organizations. Respondents also pointed out that university promotion and tenure decisions do not place a particularly high value on the sort of work that PMA participation entails, further limiting the availability of university personnel. There is concern that, because of this, the available pool of potential Alliance organizations has already been exhausted.

Respondents reported that securing matching funds (79 percent) and writing text (68 percent) were the two most difficult tasks in responding to an RFP. It is important to note that both of those difficulties are directly connected to the need for staff and infrastructure. Virtually all of the matching support identified by project applicants is in the form of in-kind support from university and commodity group staff. That staff time is both essential to the successful operation of projects and the resource that is in the shortest supply. Current participants also pointed out that writing the text was the most difficult task; that is, it required staff time, and university staff regularly filled that need. Again, it is abundantly obvious that the availability of staff time and the infrastructure necessary to support it is an absolutely essential part of a PMA project and, by extension, a successful proposal. The availability of staff time and infrastructure is a serious limiting factor in current or future participation in PMA. That fact effectively, if unintentionally, makes it difficult for small or loosely organized groups with few resources to successfully apply for an Alliance project, even if they face a high-priority problem or have an effective solution that can significantly reduce risk.

MEASURES OF SUCCESS

Stakeholders, DPR senior and program staff, and project managers and participants all indicated that measurable results are important for the program and the affected community. This evaluation reviewed and compared proposals with project reports and focused extensively on interviews, surveys, and focus groups on the question of what the projects accomplished and how that compared to what they were intended to accomplish.

Strengths

DPR has recognized the importance of achieving and documenting measurable results. The RFP includes a section that requires applicants to indicate the measures of success that will be used in evaluating the project.

DPR staff have regularly evaluated the measurement requirements and revised them as needs have been identified. For example, noting the influence of economic data on perception and use of new practices, DPR has included additional requirements for collecting economic data from the projects.

DPR requirements include the submission of progress and final reports for each of the years of an Alliance project. The reports specify the information that is to be collected and provides a standardized form that is to be used in summarizing the information. These reports include a significant amount of information on project activities and a comprehensive compilation of results from field trials and demonstrations. Participation in education, outreach meetings, field days, and communication efforts are listed by the projects.

Weaknesses

Despite DPR's efforts, among the most widely stated concerns about the PMA program—in addition to problems with the RFP and the inevitable discontent with California state contracting procedures—has been the need for substantive and measurable results. Stakeholders, DPR senior and program staff, and project managers and participants all indicated that measurable results are important but are lacking and/or difficult to assemble. All of this is in spite of the fact that the RFP calls for such results, and the report forms list specific results to be documented. Four basic factors are involved in the problems associated with securing measurable results: 1) lack of clarity about what results are to be measured; 2) lack of standards for conducting evaluation; 3) lack of support and guidance in documenting and evaluating results; and 4) lack of commercial implementation to measure industry-wide changes in pest management and reduced risk.

The unclear direction in the RFP is reflected in the Project Summary Report form. The RFP does not clearly indicate whether demonstration, implementation, or other outcomes are intended. By the same token, the report forms used by DPR simultaneously ask for quantifiable implementation, demonstration, and outreach results. Even though specifying the reporting requirements is legitimate, accomplishing, documenting and evaluating results from solely demonstration, outreach, or implementation efforts would be a formidable task in itself, given the statewide scope of the projects. Asking for

detailed accounting for all three activities, regardless of whether thy have been specified in the RFP or fully included in the work plan, creates confusion and leads to imprecise reporting. As a result, the widely acknowledged benefits from the projects are often not well captured or measured.

When project participants and DPR staff were asked to identify the accomplishments of the PMA projects, bringing together people in the industry and increasing awareness were listed as important results. But the program does not attempt to measure the qualitative effects of the collaboration engendered by the Alliance. By the same token, increased awareness, while a recognizable accomplishment, is not being measured.

The report form also contributes to the lack of clarity by confusing documenting activities with 1) measuring changes in awareness and 2) identifying outcomes within the industry as a result of an increased awareness. For example, the RFP and DPR staff referred regularly to the value of reducing the risks from pesticides to human health and the environment. It is clearly difficult for the majority of existing projects to document and measure precise reduction in risk from their projects, even though they could legitimately maintain that their efforts are important steps in a process that eventually leads to quantifiable risk reductions. That task is made doubly difficult by the lack of clear direction from DPR on the indicators or means for measuring progress.

In addition, improving the standards for evaluation and providing guidance and support for projects would also improve the ability to secure measurable results. Baseline evaluations would provide a starting point against which to compare qualitative or quantitative results, but they are not required and no guidance is provided for conducting them. Developing standards for conducting evaluations would also help guide measurement efforts. Among the results that are provided by the projects are the data from field trials and demonstrations. Given that the work of the projects is largely in demonstration and on-farm research, this information is a considerable product of the Alliance efforts. However, no standards exist for measuring the value or impact of those field data that, along with increased collaboration and awareness, are consistently identified as the primary outcomes of the projects.

Just as important, project and university staff could benefit from support and guidance in their evaluation efforts. Although collecting technical data from demonstration efforts is a familiar task to project participants, documenting and evaluating outcomes involves additional experience, skill, and time that seems unavailable to most projects. In addition, DPR needs to be able to provide guidance to projects as they are developed and conducted to ensure that the basis for measurement is consistently included in project activities. For example, the work plans of the most highly rated proposal in 2001 did identify data compilation and evaluation as critical tasks.

The difficulty in securing measurable results seems to lie equally in documenting the widespread commercial change in pest management practices and the associated changes in pesticide use and risk. Most projects indicate that the commercial implementation of the new practices that have been demonstrated will be a legacy for the project, but not an

immediate result. Project managers believe that the current projects have not operated long enough to have really changed practices on a large scale. While changes in pesticide use and risk can be measured on field trial and demonstration sites, the wider impact on the industry is difficult to gauge. Relying on pesticide use reporting (PUR) for evaluation is imprecise at best. The compilation and analysis of PUR data lags two or more years after the project year, and drawing a causal link between project activities and pesticide use through PUR is a tenuous proposition. Just as important is the fact that most of the projects are demonstration, education, and outreach projects and not oriented toward producing commercial implementation as a primary result. Without commercial implementation, it is extremely difficult to document measurable changes in pesticide use and risk at the industry level.

Summary and synthesis

DPR has initiated and undertaken a program, among several programs engaged in pest management issues in California, that is unique in its focus on statewide commodities and a broad range of regulatory issues. Through the PMA program, DPR has attempted to meet a broad mandate for improving pest management while still running the largest state pesticide regulatory program in the nation. As a regulatory agency, DPR has grappled with administrative procedures, staffing constraints, criticism from stakeholders, and intense public scrutiny. It was inevitable that DPR would have encountered a series of challenges and additional needs as the program unfolded.

Overall, the PMA program has been very successful in creating a means for bringing together a broad cross-section of the industry to focus on pest management issues. Valuable new information on pest management alternatives has been generated, and DPR has provided an opportunity for commodity groups to increase awareness of alternative pest management practices and to leverage funding to accomplish work more rapidly and on a wider scale. In operating the PMA program, DPR staff have actively sought advice and addressed problems, revising the program procedures to make them more appropriate to the needs of participants.

DPR staff, project participants, and stakeholders have been very candid in identifying a broad array of needs. The needs can be organized into two areas: 1) The need to clarify and create a more effective focus for the PMA program; and 2) the need to make significant quality improvements to the program in order to carry out a more strategically focused effort. Meeting those needs would enable DPR to put the experiences of the past five years to use in creating a more effective program that can produce measurable results and serve as a catalyst for significant benefits in pest management and the environment.

RECOMMENDATIONS

The findings indicate that there are two areas in which DPR can make valuable improvements in the PMA program: 1) clarification and strategic focus for the program and 2) quality improvements in the administration of the program. For the most part, these changes should be made sequentially: the program focus should be clearly established first; then an appropriate re-structuring of the program can be designed.

Taken as a whole, these recommendations constitute a comprehensive outline of work to increase the effectiveness of the PMA program. It is recommended that DPR develop a coherent plan for putting these recommendations into effect and then review them with PMAC and other stakeholders. This will allow DPR to implement changes in a coordinated manner and provide opportunities to assess the effectiveness of the improvements.

Determine the primary focus for the Pest Management Alliance Program
As the findings indicate, DPR staff and project participants characterize the PMA program primarily as an education, outreach, or demonstration effort and rarely as an implementation effort. While each of these is a worthwhile activity, the lack of focus has diluted the overall effectiveness and results of the program. As a first step, DPR needs to establish the primary focus for its efforts. In doing so, the department should look to use its resources strategically to create the most significant and lasting benefits for pest management and the environment. DPR should recognize that 1) the majority of resources on pest management issues are focused at the demonstration, outreach, and education end of the spectrum and 2) that achieving sustainable reductions in pesticide risks requires the commercial adoption of effective pest management practices.

It is abundantly clear from this evaluation that commercial implementation of new practices is the one area of change that has received the least support and attention. It is the part of the process of change that appears to be the least understood and the part that most requires effective interaction with the private sector. But it is also the area where measurable change takes place, where publicly generated information and private innovation combine in the commercial use of practices that can be economically sustained and that can provide real benefits to the environment. DPR's regulatory and pest management mandates will ultimately be judged on the use and effects of pest management practices in the field. This is an area in which DPR has the most at stake, for which its orientation toward working with commodity groups is appropriate, and by which it can make the most strategic contribution.

The recommendations that follow are predicated on the assumption that commercial implementation is adopted as the primary focus for the PMA program. However, DPR can certainly determine that another area, such as demonstration or outreach, should be legitimately pursued. Most of the subsequent recommendations, though intended to support an implementation focus, can readily be adapted to serve other purposes.

Integrate the PMA program with other DPR and stakeholder efforts
Short Term DPR should explore ways to more explicitly link the Pest Management Grants program with the PMA program. Interviews and focus groups with project participants pointed out that determining the applicability and efficacy of new reduced-risk practices requires significant field work. The need for that field information has often slowed the ability of commodities to adopt the new practices on a commercial scale. Once applied research has been conducted, the new practices and/or technologies often require demonstration efforts as a precursor to wide-scale adoption.

The web site information provided by DPR on the Pest Management Grants program describes the incremental connection between conducting applied research activities as a preparation for later demonstration efforts: " Demonstration grants are best suited for projects with sufficient applied research data to support full-scale demonstration activities." DPR staff has acknowledged an implicit progression from research and demonstration to a full-fledged Alliance project. Having recognized that linkage, DPR should consider explicitly linking at least part of the applied research and demonstration grants to the Alliance projects. This would 1) provide a direct incentive and support for applied research and demonstration on important problems by qualifying commodity groups; 2) outline a straightforward process for moving from the identification of a problem to validating a solution and implementing it; 3) clarify the distinction between research and demonstration and the implementation efforts supported by PMA; and 4) provide a means to coordinate resources efficiently to ensure results, especially in the face of limited funding.

Long term Given that other organizations are involved in the same area, DPR and those stakeholders should look seriously at the possibility of coming together to better coordinate funding efforts. A workshop jointly sponsored by DPR and other organizations would offer an opportunity to seek efficiencies and identify possible synergies among the programs. Since some projects already get funding from multiple agencies, the funding organizations should look at the option of deliberately funding all or various agreed-upon components of a larger project. That sort of interaction could improve the effectiveness of resource allocation and increase coordination for achieving outcomes at the commodity level.

Restructure the PMA program
Once the primary focus has been established, DPR should consider a substantive restructuring of the program that allows DPR to retain and build upon the strengths of the current program. In considering the restructuring, it will be important to acknowledge that when PMA projects—or projects in other programs, for that matter—have produced substantial results, several conditions have been in place:

1) There is a clearly identified problem for which the commodity group sees the need for a solution. These problems, such as control of codling moth on deciduous tree fruit and nut crops, are likely to be the intersection of more than one issue. In the case of codling moth control, pesticide resistance, concern about

secondary pests, and potential regulatory action have combined to create a problem to which the commodity groups must respond.

2) A feasible alternative solution has been identified that can be implemented. For adoption to take place, a new practice or technology needs to be available that can be brought into mainstream production.

3) Leadership exists in the industry to support a substantive implementation effort. Since efforts to increase adoption of new practices require coordination of many organizations and people over multiple years, the project needs to be a priority for industry leadership. Their participation lends credibility to the effort, provides opportunities for disseminating results, and provides commitment to sustain the effort.

4) The intended activities and expected outcomes are well-defined and shared by participants. As the project is initiated, there is a clear understanding of the project's objectives, what needs to be accomplished, and how results will be evaluated. The project activities need to fit well with the existing farm operations and need to be relevant to successfully using the new practices in a way that meets the growers' needs.

5) The efforts of growers, PCAs, and researchers are well coordinated. Given that a number of people will be involved across an industry, staff needs to be available to organize efforts and provide for good internal communication and timely sharing of information. Participation of the private sector, particularly PCAs, is critical for the success of adoption efforts, if they are to be sustained beyond the end of the project.

6) Results are tracked at the field and project level and communicated to the wider industry. A baseline is established and field results, relevant to the growers and PCAs, are documented so that they can judge the effectiveness of the new practices and technologies.

Since these conditions or components are central to success at the field level, the program should be structured to create and support them. These components can be sorted into two basic task areas. Components 1-3 involve identifying the need and opportunity, determining the feasibility of a solution, and the creating a team to implement the solution. Components 4-6 comprise the process for designing, organizing, conducting, and evaluating a project. In the current PMA program, the RFP labors under the burden of being the mechanism for accomplishing all of these tasks in the same document. This has led to an RFP process that attempts to do too much and a project development process that needs clearer expectations, additional time and support, and better organization in order to deliver measurable results.

For these reasons, it is recommended that DPR adopt a two-step process to ensure that the right opportunities are identified and that projects are well designed. The first step would

satisfy the need for an open process to award Alliance grants, through a competitive RFP process to determine which commodity groups and situations qualify for project funding. By focusing on the task of determining where the proposed project and organization coincide with critical priorities and opportunities, this step would allow for simplification of the RFP process. It would also eliminate the demands on the RFP process both to determine which proposals meet the criteria for an Alliance grant and to validate a comprehensive work plan and evaluation scheme.

This would increase the ability of DPR's process to clarify expectations and establish work plans. Having, in Step One, selected the commodities that qualified for inclusion in the program, DPR would then be able in Step Two to work with those commodities in the subsequent development of the project. Once the project has been selected in a competitive process, the need for greater consultation and interaction in the project design could be satisfied. DPR could use its own staff, consultants, and/or staff who had worked in other projects as mentors to devise a project plan that would meet the commodity's needs by providing clearer expectations, a more precise work plan, better systems for documentation and evaluation, and more support for areas in which the Alliance group needed help.

Step One:

- This step would allow the Alliance program to focus explicitly on the process of organizing an Alliance team and capitalizing on the benefits of interaction among industry players. Commodities would apply to qualify for the program through a competitive Request for Proposals process. The qualification process would require commodities to document 1) the problem(s) faced, its importance, and its intersection with Alliance program priorities; 2) the availability and feasibility of the solution(s); 3) existence of a qualified and committed Alliance team; 4) the commitment of industry leadership; 5) the involvement of PCAs in the initiation and organization of the Alliance; 6) the potential for widespread adoption; and 7) the benefits to the grower community, along with the involvement of the industry and their qualifications.

- In place of the evaluation that has been required, applicants can supply a crop profile or Pest Management Strategic Plan as a situation analysis of pest management for the commodity. This would provide the basis for articulating the problem and clearly defining the solution that the project would implement. As part of the review process, DPR should consider the possibility of requiring a presentation by the Alliance team before a review panel. This would give the panel an opportunity to ask a standard set of questions to supplement the information provided in the proposal as a further means of assessing industry's ability and commitment to carrying out the Alliance project. The presentation would elicit additional qualitative information and would serve to reduce subjectivity in assessments of the proposal and Alliance teams.

- As part of the restructuring process in Step One, particular attention needs to be paid to rewriting the RFP. Since the RFP is designed only to determine which

commodity is best qualified, the RFP could be streamlined. Precise outcomes need to be specifically identified and expectations made more explicit in the application package and description of the program. The allocation of points in the evaluation criteria should be analyzed to ensure that they are the best indicators for project success. In addition to the qualifications of the Alliance team, attention should be given to the clarity of the problem statement, the feasibility of the proposed solution, and the specificity of the outcomes identified in the application.

- It is recommended that DPR explore the option of bringing in additional outside help to make these revisions and that a mechanism be devised to solicit public feedback on the revisions. In addition, DPR should develop direct communications channels to get information on the RFP to a wide range of agricultural groups. Current reliance on the State Contracts web site is not a particularly effective means for providing potential applicants with information or application packages.

Step Two:
Since the review process would only determine who would be funded to implement a project, the competitive qualification process would be separated from the project development process. In Step Two, DPR staff and the projects would have more opportunity to organize projects, clarify expectations, and establish measurable objectives. The process for designing the project should be made as simple as possible so that objectives are clear and achievable, project activities can be integrated into the existing pest management system, and intended results are explicit and readily achievable.

The following steps are suggested as an outline for organizing and initiating a project:

Initial meeting of the Alliance team. A facilitated discussion or focus group format can be used to clearly identify the specific practice(s) to be implemented and their intended outcomes. Participants are asked to identify what growers and consultants need in order to use the new practices and to determine how they will judge the effectiveness of the new practices at the end of the growing season.

Develop a work plan. The initial discussion about the needs of growers and PCAs will guide the development of the project activities. Determining how the effectiveness of the new practices will be assessed will create the parameters of the documentation and evaluation to be used in the project. At a minimum, the work plan should:

- Identify roles and responsibilities
- Identify project tasks
- Develop a time line and milestones for project activities
- Allocate resources within budget guidelines
- Establish internal coordination
- Provide data collection, analysis, and evaluation

- Create a feedback loop for project evaluation

Establish a documentation and evaluation process. Staff will meet with participating growers and PCAs to ensure that baseline data is collected. Since the emphasis of an implementation project is on the commercial use of new practices, a baseline for each grower is compiled and a documentation system put in place so that each participant can see and evaluate the practices on his/her own farm or ranch, in terms such as yield, quality, efficacy, and net revenue, that are relevant to the farmers' decision-making needs. The aggregated results of new practices on individual fields will be the overall effects of the project. If the effect of the project on the wider industry is to be evaluated as part of the project, an industry-wide baseline should be established.

This approach to project development allows for interaction between DPR staff and the projects. While some Alliance groups may not need assistance and support from DPR in this part of the process, many of the groups indicated that support by or through DPR would be helpful. As pointed out in the recommendations for DPR staff, there are several possible means by which the support can be provided. Since this part of the process is time- and staff-intensive and requires skills that may not be available to technical staff, engaging outside support would be particularly appropriate. In addition, support would be particularly useful to groups that qualify for the Alliance program but have limited resources and might otherwise not be able to participate. Most important, ensuring that projects are well organized and effectively initiated is a critical step in ensuring that useful and measurable results are produced for growers and the environment.

In order to make progress on implementation, PMA will have to broaden and intensify its efforts to involve PCAs at the project level. As the people who most directly affect the pest management decisions on thousands of acres each day, PCAs can be a valuable constituency in identifying and implementing important changes. They will need to be involved from the beginning. An effective way to do this is to hire them as contractors to conduct project work in areas such as data collection, training, implementation support, and/or evaluation. This will integrate project activities into the existing infrastructure and provide the means for continuing support for the new practices after the project ends.

The statewide PCA organizations, California Agricultural Production Consultants Association (CAPCA) and the Association of Applied IPM Ecologists (AAIE), can serve as a resource for identifying PCAs who have interest in progressive and effective pest management practices. They can also serve as forums for disseminating information about the program and soliciting advice.

As a part of the restructuring process, DPR should make a concerted effort to consult with current and former project managers and participants to ensure that the changes it plans to make are viable and well understood. DPR should precede the implementation of a new RFP process with a workshop for potential participants to brief them on the new approach. In addition, DPR should consider the value of providing a training session for Alliance participants as part of the process in Step Two.

DPR should also consider a number of discrete changes to the program in response to PI and project manager concerns. For example, DPR should look into increasing the amount of money available for grants, even if this means reducing the number of Alliance grants funded each year. A concern frequently voiced by participants was how small the grants were for the amount of work necessary to secure them and for the work that was expected to be accomplished. As a part of this re-structuring, DPR could consider providing a graduated amount of funding, depending on the stage to which the project had progressed. While project managers indicated that project terms need to be longer than one year, it is not clear that state contracting regulations will allow that change.

As a part of these changes, DPR should seriously consider eliminating the Evaluation Grants program for the agricultural part of the Alliance. Current programs are already supporting the development of crop profiles and Pest Management Strategic Plans that serve the same purpose and produce much of the same information. They can be used as documentation for the purposes of qualifying for participation in PMA in place of requiring a separate analysis solely for DPR's use. In addition, the number of applications has declined, and project participants indicated low to moderate interest in applying for those grants. One subsequent use of the evaluation funds might be to provide help to groups who qualify for the program but do not have sufficient resources to participate in the development of an Alliance project.

In making any changes, DPR should still retain the focus on the development of industry alliances. This is a particularly strong part of the program. However, DPR may want to allow for situations when regional groups are far more effective than statewide groups that may prove unwieldy and difficult to convene.

Improve the ability of DPR staff to administer the PMA program and ensure the effectiveness of Alliance projects

Staffing and infrastructure support has been cited as critical to the success of PMA projects. DPR can strengthen the PMA program by revising the administrative processes and increasing the quality and level of its support for the program and, by extension, to the Alliance projects.

<u>Administration</u>

- The administrative and enforcement responsibilities for contract management should be separated from the project support, guidance, and facilitation responsibilities, and assigned to different people. A central person or persons should be designated to oversee administrative responsibilities for the projects and to ensure that program requirements are met by the projects. This function should be kept distinct from the work of those who interact in the development and operation of the projects.

- DPR should ensure that adequate staff time is available for the oversight and support of the PMA program. Staff assignments should be structured so that more program staff have primary responsibility (time allocation of 75 percent or more) to the PMA program and projects.

- Oversight should be concentrated in this smaller number of staff rather than dispersed over a larger number of people who have only minimal contact with the projects. If the number of projects is reduced, this will be relatively simple to accomplish.

- DPR should develop a clearer description of the roles and responsibilities of staff who will be interacting with the projects. This should be done in consultation with managers from Alliance projects to ensure that project needs and DPR intentions are coordinated.

Support and training. With changes in staffing and in the structure of the program, the role of contract managers should focus primarily on facilitating, supporting, providing general oversight, and serving as a communications link between DPR and the Alliance.

Contract managers should work with project managers to implement the tasks in Step Two. Under the current system, DPR staff have identified the need for skills, experience, and training necessary to guide, facilitate, support, and evaluate projects. Given that the PMA is unique in its emphasis on interaction and its intent to produce measurable results, these skills are important to ensuring the success of the program and the individual projects. However, those skills are in relatively short supply. These capabilities are, admittedly, often outside the skill set required of DPR staff in other aspects of their jobs. They are also skills that are likely to be outside the training of university, extension, or commodity group personnel. For that reason, support should be provided to DPR staff to gain skills in facilitation, project and work plan design, as well as documentation and evaluation methods.

This support can be provided in the form of training for DPR staff or in the form of contracted services to augment DPR staff skills and resources. Resource people and organizations can be identified to work with or on behalf of DPR. In addition, models for work plans, formats for survey instruments, and other tools can be acquired for DPR and the projects to use.

Work plans. DPR staff should use the work plans as the primary means of tracking the progress of projects. The work plans will serve as a yardstick for DPR staff and project managers to keep track of progress. Since the work plans will make certain that baselines and documentation methods are in place, measurable results will be a result of project activities and not a *post hoc* reconstruction of past events. If the program is reorganized, developing work plans cooperatively and with the support of DPR will be a valuable and integral part of carrying out the project. Evaluations of project success that are used in making decisions to provide grants for additional years should measure success in terms of how well projects have met their work plan objectives as well as in terms of measurable results.

Improve coordination within DPR and among projects

Increase coordination between PMA and Registration Division.

DPR should establish a work group of pest management and registration staff, convened by senior staff, to share information and coordinate efforts. The group would provide a means for sharing information with registration staff on needs and constraints in agricultural production that can be valuable in registration and other pending regulatory actions.

On a functional level, staff associated with PMA should update the document archives to ensure that all of the documents (RFPs, proposals, and reports) are accounted for and accessible.

Increase opportunities for interaction and learning among PMA staff. An important part of the staff responsibilities should be to regularly exchange information with each other so that there is an opportunity for collective staff learning. This will be particularly critical as program revisions take place. Opportunities to assess the restructuring and make adjustments will be valuable in ensuring that the program successfully implements a new approach.

Create opportunities for learning among Alliances. DPR should provide opportunities for project managers to interact and share solutions to common problems that the projects face. Where a project has developed an effective educational approach or a survey instrument that would be of use to other projects, a mechanism should be created so that those tools can be shared. It may be possible for project staff or participants to serve as advisors or mentors for other projects, especially those that are just starting. Providing this interaction would be of particular benefit for smaller, less organized groups and would also offer efficiencies for existing projects, so that they do not have to duplicate products developed by other Alliances. In addition it would provide an opportunity for DPR to consolidate the knowledge and experience of the overall PMA effort, so that the whole could be greater than the sum of its currently disconnected parts.

Improve the ability to measure results

If the above recommendations are implemented, most of the problems with documenting and measuring results can be resolved. The recommendations are intended to create a clear set of outcomes and expectations that are meaningful, feasible, and shared by DPR and project staff. Determining the outcomes that are to be achieved and creating the work plan that will be used to accomplish those outcomes will provide the means for ensuring that results will be documented and measured. Documenting and evaluating results need to be viewed as integral parts of the project and the logical outcome of carrying out project activities.

DPR can do three basic things in the short term that will improve the ability to document and measure results:

- Establish baselines for measuring the outcomes that are intended. In addition to baselines for participating growers and PCAs, baselines of industry awareness of

new practices can be established through commonly used instruments such as surveys, interviews, or focus groups. The key point is that a baseline is essential—without a baseline it is very difficult, if not impossible, to measure progress.

- Document and assess qualitative changes that result from Alliance projects as well as quantitative, physical changes. Some of the most important benefits from current projects have been qualitative changes in the ability of the industry to work together. Those changes can be measured as competently as changes in pesticide use. They are also important factors that influence the use of new practices.

- Measure changes that are directly related to the activities of those participating in the project. While an overall industry baseline is interesting, the most compelling information for a grower is establishing a baseline and measuring progress in his/her own operation. The project results should be the aggregate results of what takes place on individual operations involved in the project. While data such as PUR data can be analyzed, it should not be substituted for information on changes that comes directly from the project, since the time lag is significant and it is difficult to establish a causal link between project activities and PUR data.

CONCLUSION

As a non-traditional funder of agricultural projects, DPR needs to identify a strategic focus for its program that fulfills its mandate and original intentions for the PMA program. Having done that, it will be in a position to restructure its program and reinforce its staffing to accomplish its objectives. The process for achieving measurable and meaningful results needs to be built into the structure of the program from the beginning. If DPR determines the primary focus for the program, applies the appropriate resources and skills for working with agricultural groups, and makes the necessary improvements for effective staff interaction with the projects, measurable results will be a logical outcome of the program.

METHODOLOGY

The evaluation conducted a series of intensive measures to understand the background and genesis of the Pest Management Alliance (PMA) program, determine the context in which PMA exists, review PMA administration and accomplishments, and solicit the views of DPR staff, project managers and participants, and the wider agricultural community. The evaluation included interviews and focus groups with DPR leadership and staff, interviews with representatives of seven stakeholder groups, a review and analysis of all Alliance proposals and reports, a survey of 27 principal investigators, interviews with 44 project managers and participants, intensive focus groups with participants in two representative Alliance projects, and a survey of 348 agricultural groups organizations. In addition, several specific measures were used to initiate the project, secure advice and counsel, and keep DPR staff and the Pest Management Advisory Committee apprised of the evaluation and its progress. Those initial measures included:

Announcement

An introductory letter was sent from David Duncan, Manager of DPR's Pest Management and Licensing Branch, to stakeholders on the DPR mailing list **(Appendix I)**. The purpose of the letter was twofold: 1) to inform recipients that an evaluation of the Pest Management Alliance Program would be conducted; and 2) to introduce CAP as the organization conducting the evaluation.

Advisory Committee

CAP convened an Advisory Committee of key Californians who either have had contact with the PMA program, who understand the issues it is intended to address, and/or have expertise in public policy **(Appendix II)**. On June 26, 2001, the committee met to review the initial work plan and offer specific advice on the scope of work, evaluation activities, key stakeholders, and other issues important to conducting a comprehensive and accurate evaluation. On January 17, 2002, the committee reconvened to review and provide expert advice on preliminary findings, recommendations, and preparation of the final report.

Periodic Feedback and Reporting

Interim progress reports were provided to DPR, and a brief summary of evaluation activities was presented to the Pest Management Advisory Committee on two occasions.

Project Methodology

The specific analytical tools used to conduct the evaluation are listed below under the specific objectives they served. These correspond to deliverables listed in CAP's original proposal.

I: Evaluate the effectiveness of the processes by which DPR administers the PMA program.

CAP proposed and employed two strategies to fulfill this objective. The first strategy was to evaluate current processes for RFP development, distribution, proposal evaluation,

project initiation, and management by DPR staff. In particular, the following criteria were considered:

- Congruity of expectations and perceptions among levels within DPR;
- Extent to which explicit objectives for the PMA projects and a model for implementation are incorporated in DPR process;
- Extent to which evaluation criteria are well articulated and shared among staff;
- Roles and guidelines for DPR manager(s);
- Extent to which support and resources are effective and sufficient to administer the program;
- Extent to which objectives and expectations are consistent and shared among staff;
- Consistency within DPR as to its role and the mission of the PMA program;
- Consistency between RFP intentions and proposals received;
- Extent to which processes are clearly articulated and implemented;
- Process for evaluating results, change in practices, and outreach; and
- Utility of databases for compiling project results.

To initiate this strategy, CAP staff gathered background information via interviews conducted with past DPR leadership. In addition, a document review provided a written situation analysis of the creation and operation of the program since its inception. Next, CAP staff orchestrated a focused discussion with current staff involved in administering the PMA program and project oversight. In particular, the discussion addressed identification of program supporters, critics, strengths, weaknesses, and opportunities. These efforts were followed by a series of individual interviews with current DPR leadership and current staff administering the Pest Management Alliance Program to glean individual experiences and perceptions.

Background Information – Part I	
Method	Personal Interviews – Background
Purpose	• Understand the rationale for and history of the PMA program, • Determine the original objectives for the program, • Determine what successes and problems were encountered in establishing and running the program.
With whom	• Jim Wells, former Director, DPR • Jean-Mari Peltier, former Deputy Director, DPR • Nita Vail, former Assistant to Secretary, CA Dept. of Food and Agriculture
Questions	1. Please describe your role in the PMA program. 2. What was the rationale for establishing PMA? 3. Who were the supporters; critics? 4. What problems were encountered in establishing PMA? 5. What were/are the program's successes, failures? 6. Looking back, what advice about running the program would you give to the people running it today? 7. Who or what is /was going to change as a result of the program?

	8. How is the PMA grant program different from similar programs offered by USDA, EPA, private foundations, etc? 9. During the next 3-5 years, what are the best opportunities for the PMA program? What would cause DPR to miss those opportunities?

Background Information – Part II	
Method	Document Review - Background
Purpose	• Verify origination of program. • Identify program mandates.
With whom	• Code of California Regulations
Questions	1. What are the original intentions of the program? 2. How is funding for the program garnered?
Current Operating Information – Part I	
Method	Personal interviews conducted on-site.
Purpose	• Identify expectations and perception among levels within DPR. • Document within DPR as to the role and mission of the PMA program.
With whom	• Paul Helliker, Director of Pesticide Regulation, DPR • Paul Gosselin, Chief Deputy Director of Pesticide Regulation, DPR • Tobi Jones, Assistant Director, Division of Registration and Health Evaluation
Questions	1. What is your primary role with the PMA program? 2. What results is PMA intended to produce? 3. How are the results being documented and measured? 4. What results are currently being achieved? How do you know? 5. Is PMA measuring results in the most appropriate way? If not, how should they be measured? 6. How would you describe the mission of the PMA program? 7. How would you characterize the PMA program (implementation, demonstration, on-farm research, applied research, education, outreach, other)? Why? 8. What are the most important benefits to DPR from PMA? Why are they important? 9. Does the program need change? If so, how?

Current Operating Information – Part II	
Method	Focused Discussion
Purpose	• Identify and document staff perceptions of operating environment, program structure, and program opportunities.
With whom	• DPR PMA staff.
Questions	1. What is the financial structure/environment for the PMA program? 2. Who are the stakeholders (internal and external)? 3. What are your perceptions of their expectations? 4. Who are the critics and supporters (internal and external)?

	5. What are the strengths and weaknesses of the PMA program? 6. How is the PMA program unique (compared to other grant programs)? 7. During the next 3-5 years, what are the best opportunities for the PMA program? 8. What would cause you to miss those opportunities?

Current Operating Information – Part III	
Method	Personal interviews via phone.
Purpose	• To determine staff roles, perceptions, consistency of views among staff. • To establish staff views of PMA for comparison with clients and stakeholders. • Congruity of expectations and perception among levels within DPR.
With whom	• Eleven individual members of the DPR staff actively working on the PMA program within the past year.
Questions	Questions focused on staff roles and responsibilities, outreach, oversight, evaluation of results, and their perceptions of the PMA program. **See Appendix III**

The second strategy used in this objective involved evaluating stakeholder and participant experiences with the DPR process. Initial efforts focused on conducting personal interviews with selected stakeholders participating in or aligned with alternative pest management grant programs. In essence, the findings provided a situation analysis of pest management grant opportunities and structures currently available to agricultural constituencies in California. This was followed by the administration of a 12-page survey to principal investigators as identified on evaluation and alliance proposals for the 1997-2000 time period. The goal was to document the RFP process from the perspective of applicants—both funded and non-funded.

Key Stakeholders	
Method	Personal interviews – group, individual (on site or via phone)
Purpose	• Document the opinions of important stakeholder groups about the PMA program and its role. • Compare stakeholder impressions with DPR program staff impressions. • Identify key opportunities. • Compare the objectives and structure of other programs with PMA.
With whom	• Frank Zalom, Pete Goodell, Lucia Varela – UC IPM Program • Rick Melnicoe – UC Regional Center • Mark Cady – Community Alliance of Family Farmers • Lori Berger – California Minor Crops Council • Tess Dunham – California Farm Bureau Federation • Sean Swezey, Jenny Broome – U.C. Sustainable Agriculture Resource Education Program • Ann Thrupp, Kathy Taylor, Karen Heisler, Jamie Leibman – EPA Region IX
Questions	1. Describe program objectives, constituency, clients, and/or audiences for

(selected)	both your program and your perception of these for the PMA program. 2. How have you, your staff, and/or your organization interacted with the PMA grant program—either now or in the past? 3. Describe your views on PMA (strengths, weaknesses, needs, opportunities) 4. During the next 3-5 years, what are the best opportunities for the PMA program? What would cause DPR to miss those opportunities? **See Appendix IV**

Survey of Principal Investigators: Pest Management Alliance and Evaluation Grant Process	
Method	Twelve-page mail questionnaire using a tailored design survey protocol.
Purpose	Document behavior, experiences, and perceptions of principal investigators relative to the RFP process up to the point of being funded.
With whom	Twenty-seven principal investigators who had applied for evaluation and/or alliance grants during the time period of 1997-2000. Nineteen participated for a 70 percent effective response rate.
Questions (themes)	1. Reasons for seeking grants. 2. Who coordinates and develops grants, as opposed to writing them? 3. Level and longevity of participation in PMA program. 4. Difficulty and time involved in preparing proposal. 5. Evaluation criteria for selecting proposals to be funded. 6. Prioritization of pest management issues. 7. Recommendations. **See Appendix V**

II. Evaluate the effectiveness of PMA projects results, collaboration, and outreach. CAP employed two strategies to fulfill this objective. The first strategy was to determine overall stakeholder and participant experiences and perceptions of PMA projects and their results. In terms of the life of the grant process, the intent for this work was to take up where the previous process survey with principal investigators had left off: from the point of a project being funded through its completion. To that end, two separate phone surveys were conducted during September and October. The initial survey involved project managers/principal investigators. These individuals were then asked to provide recommendations on the interviewees for a second survey involving project participants and stakeholders.

Principal Investigators	
Method	Telephone interviews consisting of 26 questions conducted with 16 project managers/principal investigators.
Purpose	Document the experiences and perceptions of PMA project managers and/or principal investigators regarding project results, collaboration, and outreach.
With	Principal investigators of Alliance grant projects as listed on the initial

whom	project documentation and/or received from personnel at DPR. In some instances, the same individual was the primary contact for more than one project and, as such, only one interview was scheduled.
Questions	Questions focused on interaction with and perception of DPR, project outcomes, project results, project processes, and outreach. **See Appendix VI**

Project Participants and Stakeholders	
Method	Telephone interviews consisting of 21 questions conducted with 28 project participants/stakeholders (i.e. one or two per project).
Purpose	Document the experiences and perceptions of PMA project stakeholders/participants regarding project activities, collaboration, and results.
With whom	Two to three project stakeholders/participants. These individuals were identified by the project managers as likely interviewees, but the final list of participant interviewees came from in-depth telephone work starting with the contact provided by the project manager.
Questions	Questions focused on participants' role and interest level, project outcomes, collaboration efforts, results, outreach, and perception of DPR. **See Appendix VII**

In addition, a document review was conducted of project proposals and project reports. This effort attempted to compare and contrast proposed objectives and reported outcomes for all alliance projects. Unfortunately, complete documentation was not available for all projects.

Document Review – Project Proposals and Final Reports	
Method	Document review.
Purpose	Compare and contrast the objectives and outcomes of PMA projects as presented in project documentation.
With what	All available project proposals and final reports. (Note: not all projects had complete documentation available via DPR hard copies and/or electronic means.)
Questions	What are the intended outcomes? What are the reported results? **See Appendix VIII**

The second strategy was to conduct an in-depth evaluation of selected projects to develop a more complete view of the effectiveness of projects. Specifically, a focus group was conducted with key participants, stakeholders, and project staff for each of two projects: Containerized Nursery and Prunes. CAP staff initially used a process-of-elimination strategy to narrow the potential projects being considered for this effort. Initial criteria included:

- Omit projects that occurred two or more years ago. Time lapse is too great for people to recall the pertinent levels of information desired, and the PMA program has changed significantly over time.
- Omit projects that were initiated in 2001 and that did not have prior years. These projects would not have completed a full funding cycle, so complete information would be unavailable.
- Omit sugar beet project because project staff and DPR staff have had previous professional relationship.
- Omit wine grapes and almond projects because both have received significant amounts of funding from other programs. It would be difficult to isolate impacts and relationships unique to PMA program.
- Omit pear and walnut projects to avoid any potential appearance of conflict of interest. Members of the CAP review team either had previously been or are currently involved in these two projects.

This reduced the options to four projects: Containerized Nursery, Prunes, Turkeys, and Stone Fruit. The Containerized Nursery Industry project was selected for the following reasons: it is a smaller and less structured industry organization; the magnitude of changes are huge in terms of the present state of the industry; the IPM concept is emerging within the industry; and it is facing significant issues relative to water run-off and state/federal quarantines. The Prune project was selected based on its similarities in structure and scope to many of the other PMA projects, its long-term involvement in the PMA program, and the fact that a significant proportion of its pest management funding has originated from the PMA program.

Project Reviews	
Method	Focus group (participants were selected by the respective principal investigator)
Purpose	• Gather in-depth information about the effectiveness of two PMA projects. o What did the project propose to accomplish? o What were the intended and unintended results? o Who was involved and to what extent?
With whom	• Prunes • Containerized Nursery Industry
Questions	1. What was the outcome of your Pest Management Alliance project? 2. What were the legacies of your project? 3. What did your project measure, why did you measure it, and how did you measure it? 4. What did or did not work? Why and why not? 5. Would your industry do it again? 6. Any final comments, input, or recommendations for DPR?

The project's principal investigators from both projects were asked to identify 8-10 project participants to take part in a focus group. The majority of these participants were members of each PMA's management and/or advisory team and composed of industry

and UC personnel. Each focus group session was informal and lasted approximately 90 minutes. Respondents were assured that their responses would be kept anonymous. Written questionnaires **(Appendix IX)** were completed by all participants before the focus group began to gain a better understanding of their relationship to and with the PMA project.

III. Determine awareness of PMA by the California agricultural industry and identify needs and opportunities relevant to future PMA strategies.
CAP employed a single strategy to fulfill this objective: develop an understanding of the extent to which DPR and industry outreach efforts have influenced awareness of PMA and query stakeholders as to future direction for PMA.

An eight-page, 16-question mail survey was administered to nearly 350 agricultural organizations located throughout the state of California. The survey focused on respondents' grant-seeking activity; identification and prioritization of pest management issues; and their awareness of PMA program, projects, and achievements. A 30.3 percent response rate was attained, using a tailored design survey protocol consisting of three contacts by U.S. postal service first-class mail during the period of September through December 2001.

Survey of California Commodity and Agricultural Organizations	
Method	Eight-page mail questionnaire using a tailored design survey protocol.
Purpose	• Document pest management issues and determine congruity with priorities established for PMA program. • Identify potential opportunities and constraints associated with applying for pest management grants. • Determine awareness of PMA program by the agricultural organizations.
With whom	Three hundred forty-eight commodity/agricultural organizations identified in the 2001 California Agricultural Directory who are interested in or eligible to apply for PMA grants per the criteria stated in the request for proposal.
Questions	**See Appendix X**

Appendix I.

July 10, 2001

«Title» «FirstName» «LastName»
«Company»
«Company_2»
«Address1»
«City», «State» «PostalCode»

Dear «Title» «LastName»:

The Department of Pesticide Regulation (DPR), in its role as administrator of the Pest Management Alliance Program, seeks to build on the success of the Alliance work and improve the program for future years. DPR has contracted with the Center for Agricultural Partnerships (CAP) for an independent review of the Pest Management Alliance grant program. Mr. Larry Elworth, Mr. Pat Weddle, and Ms. Susan Pheasant of CAP met with DPR staff on June 27, 2001, to begin the review process. A final report is expected in March 2002.

A critical component of this review is an evaluation of what growers, pest control advisors, commodity groups, researchers, and other stakeholders consider strengths and weaknesses of the Alliance program. Alliance participants, including groups that were not funded, may be contacted by CAP regarding their experience and perceptions of the entire Alliance grant program. Recommendations from the review will be evaluated and integrated into the 2002/03 grant process.

I would appreciate your cooperation assisting CAP in the evaluation of the Alliance program. If you have any questions, please feel free to contact me or Mr. Thomas Babb, Associate Environmental Research Scientist, at (916) 323-2743.

Sincerely,

David Duncan, Chief
Pest Management and Licensing Branch
(916) 324-4100

cc: Mr. Larry Elworth, CAP
Mr. Pat Weddle, CAP
Ms. Susan Pheasant, CAP
Mr. Thomas Babb

Appendix II.

Advisory Committee Members

Steve Balling, Ph.D., DelMonte Research Center, Walnut Creek, CA

Michael Campbell, University of CA-Merced, Merced, CA

Peter Cooey, Sacramento, CA

Kimberly Crum, California Agricultural Production Consultants Association, Sacramento, CA

Anne Downs, Novigen Sciences, Sacramento, CA

Deanna Marquart, Marquart Policy Analysis Associates, Sacramento, CA

Gary Obenauf, Agricultural Research Consulting, Fresno, CA

Michael O'Hare, Berkeley, CA

Appendix III.

Current Operating Information – Part III: Staff Interview Questions

STAFF ROLE/RESPONSIBILITY

1. What jobs (responsibilities, tasks) do you do for the Alliance program?
   - RFP (writing/revising the RFP, distributing the RFP, working with members of the agriculture industry…, everything up to review of the grant proposal)
   - Grant proposal review (physical receipt of the proposal through awarding of grant monies and contract)
   - Oversight (from disbursing grant monies through completion of project)
   - Evaluation/measurement (using project data to evaluate project results, etc.)
   - Administration/finance (administering the PMA program, taking care of budgetary matters, etc.)
   - Other: _____

2. What percentage of your time is devoted to the PMA program?
   - < 25%
   - 25% - 50%
   - 51% - 75%
   - 76% - 99%
   - 100%

OUTREACH (If yes, in Q 1)

3. What outreach activities are you involved in for the Alliance program?

OVERSIGHT

4. Describe the types of interactions you have with Alliance projects.
   - With whom?
   - How often?
   - For what purposes?

5. How are you involved in the Alliance team for each project?
   - Design
   - Guidance
   - Budget
   - Decision-making
   - Liaison between project and DPR
   - Evaluation
   - Administrative
   - Other

6. What problems do you encounter in conducting oversight? Which one of

these most affects your work?

7. Do you use the Reduced Risk Pest Management Grants Contract Manager's Guide? If yes, how?

EVALUATION OF RESULTS
8. What results is PMA intended to produce?

9. What results are actually being achieved? How do you know?

PERCEPTION
10. How would you characterize the PMA grant program? Why?

- Implementation
- Demonstration
- On-Farm Research
- Applied Research
- Education
- Outreach
- Other

11. What challenges have you encountered in working on the PMA program?

12. What are the most important benefits to DPR from PMA? Why are they important?

13. Imagine that you are advising someone who was starting this program over again? What advice would you give that person?

14. Is there anything else you would like to add?

Staff Interviewees:
Tom Babb
Sandy Brooks
Bob Elliott
Chris Geiger
Nan Gorder
Bob Hobza
Charles Hunter
Belinda Messinger
Lisa Ross
Sewell Simmons
Angelica Welsh

Appendix IV.

Key Stakeholders: Interview Questions

1. Describe your program, its objectives, constituency, clients, and/or audiences.

2. How would you characterize your program? Why?
- Implementation
- Demonstration
- On-Farm Research
- Applied Research
- Education
- Outreach
- Other

3. How have you, your staff, and/or your organization interacted with the PMA grant program? (past and present)
- Submitted evaluation proposal
- Submitted Alliance proposal
- Received money as a principal investigator
- Participated on an evaluation or Alliance project
- Served on the management team for an evaluation or Alliance project
- Served on Pest Management Advisory Committee (PMAC)
- Other

4. How would you characterize this interaction?

5. How would you characterize the PMA grant program? Why?
- Implementation
- Demonstration
- On-Farm Research
- Applied Research
- Education
- Outreach
- Other

6. What is the most appropriate role for the PMA program?

7. Describe your views on PMA.
- Strengths
- Weaknesses

8. During the next 3-5 years, what are the important needs and opportunities for the PMA program?

Appendix V. Survey of Principal Investigators:

Q1. **For each of the following, please tell us how frequently this was a reason for you/your organization to seek grant funding in the last 4 years.** ***(Please circle one number for each statement.)***

		Not a Reason ▼	Sometimes a Reason ▼	Often a Reason ▼	Always a Reason ▼
A.	A source of operating funds	0	1	2	3
B.	A way to address pressing issues in industry/commodity	0	1	2	3
C.	A way to conduct specific industry or commodity group educational activities	0	1	2	3
D.	A way to demonstrate concepts or technologies	0	1	2	3
E.	A way to do outreach activities	0	1	2	3
F.	A way to implement concepts or technologies	0	1	2	3
G.	A way to conduct applied research	0	1	2	3
H.	A way to conduct on-farm research	0	1	2	3
I.	A way to conduct special, one-time-only projects	0	1	2	3
J.	A way to augment or supplement an existing program	0	1	2	3
K.	Other reasons *(Please specify.)* _____	0	1	2	3

Q2. **Of the reasons listed in Q1, A-K above, which one best describes your reason for applying for Department of Pesticide Regulation (DPR) Pest Management *Alliance* Program funds?** ***(Please indicate which letter, A-K, from the above question on the line below.)***

_____

Mail Questionnaire

Q3. **When you or your organization submits a proposal, of those individuals listed below, how often do you rely on each to serve as the lead person(s) to coordinate and develop proposals, and to write proposals?** ***(Please circle one number for each statement and question.)***

	Who coordinates and develops proposals?			Who writes proposals?		
	Not at all ▼	Sometimes ▼	Most or all of the time ▼	Not at all ▼	Sometimes ▼	Most or all of the time ▼
A. Full-time paid staff person in commodity organization	0	1	2	0	1	2
B. Part-time paid staff person in commodity organization	0	1	2	0	1	2
C. A volunteer for commodity organization	0	1	2	0	1	2
D. Contracted person outside of commodity organization	0	1	2	0	1	2
E. Industry or commodity stakeholder	0	1	2	0	1	2
F. University researcher	0	1	2	0	1	2
G. Cooperative Extension	0	1	2	0	1	2
H. Other (*Please specify.*) _____	0	1	2	0	1	2

Q4. **Regarding DPR Pest Management *Alliance* Program grants, for which year(s) has your organization:**

	1997 ▼	1998 ▼	1999 ▼	2000 ▼
A. Applied for an Evaluation grant?	0	1	2	3
B. Received an Evaluation grant?	0	1	2	3
C. Conducted an Evaluation without seeking an Alliance grant?	0	1	2	3
D. Updated an Evaluation for the purpose of applying for an Alliance grant?	0	1	2	3
E. Applied for Alliance grant	0	1	2	3
F. Received an Alliance grant	0	1	2	3

Q5. **For each of the tasks required to assemble a response to a proposal request for DPR, how difficult and time consuming is it for you or your organization?** ***(Please circle one number for each statement and question.)***

		Level of Difficulty?			Amount of Time Required?		
		Not Difficult	Somewhat Difficult	Very Difficult	Small Amount of Time	Moderate Amount of Time	Large Amount of Time
		▼	▼	▼	▼	▼	▼
A.	Accessing RFP package	1	2	3	1	2	3
B.	Writing text for body of proposal	1	2	3	1	2	3
C.	Identifying and coordinating stake-holders or Alliance team members	1	2	3	1	2	3
D.	Securing matching funds (Alliance only)	1	2	3	1	2	3
E.	Developing a budget	1	2	3	1	2	3
F.	Creating a work plan	1	2	3	1	2	3
G.	Filling out forms	1	2	3	1	2	3
H.	Updating pest management evaluation for continuing projects	1	2	3	1	2	3
I.	Obtaining letters of commit-ment from Management Team members	1	2	3	1	2	3
J.	Obtaining resumes or vitae from principal investigators	1	2	3	1	2	3
K.	Other (*Please specify.*) _____	1	2	3	1	2	3

Q6. **Of the tasks listed in Q5, A-K, which one task is most challenging for you?**

_____ Most challenging task

Q7. **For each component of a DPR Request for Proposal, please rate whether it is a good indicator that a proposal is worthy of funding.** ***(Please circle one number for each statement.)***

	Poor Indicator ▼	Fair Indicator ▼	Good Indicator ▼	Excellent Indicator ▼
A. Abstract	1	2	3	4
B. Priority areas indicated as having recognized importance	1	2	3	4
C. Work plan	1	2	3	4
D. Composition and qualifications of Management Team	1	2	3	4
E. Identification of Alliance participants	1	2	3	4
F. Letters of commitment from team members	1	2	3	4
G. Resume or vitae of principal investigators	1	2	3	4
H. Readiness for demonstration	1	2	3	4
I. Measures of success are identified	1	2	3	4
J. Pest management evaluation or progress report available	1	2	3	4
K. Timetable is realistic	1	2	3	4
L. Budget summary and detail	1	2	3	4
M. Application forms adequately completed	1	2	3	4

Q8. **For each topic below, how much priority do you/your organization place on it as an important pest management issue, and would your organization devote resources to addressing this issue?** ***(Please circle one number for each statement and question.)***

		How much priority is the issue?				Would your organization devote resources?	
		No Priority ▼	Low Priority ▼	Medium Priority ▼	High Priority ▼	Yes ▼	No ▼
A.	Alternatives to highly toxic pesticides that are organophosphates, carbamates, or are on the Prop 65 list	0	1	2	3	1	2
B.	Alternatives to highly toxic pesticides included in the Toxicity Category 1 products	0	1	2	3	1	2
C.	Alternatives to highly toxic pesticides that are Restricted Use Materials	0	1	2	3	1	2
D.	Reduction of worker exposure to pesticides	0	1	2	3	1	2
E.	Protection of surface or ground water quality	0	1	2	3	1	2
F.	Alternatives to methyl bromide and other soil fumigants	0	1	2	3	1	2
G.	Alternatives to new or secondary pest problems that occur after moving to a pest management system that relies on reduced-risk approaches	0	1	2	3	1	2
H.	Development of reduced-risk pesticides for new or exotic pests	0	1	2	3	1	2

Q9. What other pest management issues would be of most value and of benefit to be addressed by your commodity and/or organization?

_____

_____

_____

Q10. How would you rate each of the following? ***(Please circle one number for each statement.)***

		Satisfactory ▼	Unsatisfactory ▼	If Unsatisfactory, your suggested level of appropriation ▼
A.	Funding levels of the Evaluation grant ($10,000 maximum)	1	2	$_____
B.	Funding level of the Alliance grant ($100,000 maximum)	1	2	$_____
C.	Matching funds requirement (Alliance grants only; 100% match)	1	2	_____%
D.	Total amount of money available in granting program	1	2	
E.	Number of years of funding available	1	2	
F.	The degree to which the timing of this RFP is compatible relative to you/your organization's core business	1	2	
G.	The amount of time available to prepare a proposal (RFP due date)	1	2	
H.	Length of proposal required	1	2	
I.	Partnerships necessary for proposal	1	2	
J.	Your overall impression of the RFP itself	1	2	
K.	Quality of service/support by DPR staff if need RFP questions answered/ clarifications made	1	2	
L.	Your overall impression of the process to critique proposals submitted for funding consideration	1	2	
M.	The utilization of PMAC to review and evaluate proposals for funding for Alliance and Evaluation grants	1	2	

Q11. **EVALUATION proposals are presently judged based on the following point system. What, if any, recommendations for change would you suggest?** ***(Please indicate point level or check appropriate box.)***

	Current Points	Point Level You Recommend	No Change
A. Collaborative effort	30	☐	☐
B. Priority areas/current system	30	☐	☐
C. Regional/statewide approach	30	☐	☐
D. Proposal content and organization	10	☐	☐
E. Other *(Please specify.)* _____	0	☐	☐

Q12. ***ALLIANCE* proposals are presently judged based on the following point system. What, if any, recommendations for change would you suggest?**

	Current Points	Point Level You Recommend	No Change
A. Priority areas/recognized importance	10	☐	☐
B. Work plan	25	☐	☐
C. Management Team	10	☐	☐
D. *Alliance* participants	15	☐	☐
E. Ready for demonstration	0	☐	☐
F. Measures of success	15	☐	☐
G. Pest management evaluation/progress	10	☐	☐
H. Proposal content and organization	5	☐	☐
I. Other *(Please specify.)* _____	0	☐	☐

Q13. **How would you characterize your organization's interest in applying for a future Evaluation and/or Alliance grant?** ***(Please circle one number for each statement.)***

	No Interest	Low Interest	Moderate Interest	High Interest
A. Future Evaluation Grant	0	1	2	3
B. Future Alliance Grant	0	1	2	3

Q14. **Which of the following best describes your organization?** ***(Please circle the number of your answer.)***

1 Agricultural organization
2 Commodity group
3 Farm cooperative
4 Commodity commission
5 Marketing order
6 Commodity Marketing Program
7 Other *(Please specify.)* _____

Q15. **Which of the following best describes the commodity group or industry interest of your organization?** ***(Please circle the <u>one</u> number of your answer.)***

1 Animal agriculture
2 Field and seed crops
3 Fruits
4 Nuts
5 Vegetables
6 Floral and nursery
7 Other *(Please specify.)* _____

Q16. **Which one category best describes your organization's annual operating budget in 2001?**

1 Less than $500,000
2 $501,000 to $800,000
3 $801,000 to $1,000,000
4 $1,000,001 to $3,000,000
5 More than $3,000,000

Q17. **Which <u>one</u> size category best describes the membership of your organization?** ***(Please circle the number of your answer.)***

1 Less than 500 members
2 501 to 1,000 members
3 1,001 to 1,500 members
4 1,501 to 2,000 members
5 2,001 to 3,000 members
6 More than 3,000 members

Q18. **What recommendations, if any, do you have for DPR's Pest Management *<u>Alliance</u>* Grant Program request for proposal process?**

Q19. **What recommendations, if any, do you have for future directions of the DPR Pest Management *<u>Alliance</u>* Program?**

Thank you for filling out this questionnaire. If you have comments about the questionnaire, please feel free to write them in the box below.

Please turn to the back page ☞

Please return your completed questionnaire to:

Social & Economic Sciences Research Center
Washington State University
PO Box 641801
Pullman, WA 99164-1801

Thank You!

Appendix VI. Principal Investigators: Telephone Interview Questionnaire

MANAGER EXPERIENCE SURVEY

Target:	Project managers
To be administered by:	Scharlau Consulting Inc.
Purpose:	Determine overall project manager experience and perceptions of PMA project, project results, and DPR.
Format:	Telephone interview with project managers (maximum one hour in length)

Focus:

- Impact of project from a management point of view
- Results, expectations, outreach, operations, recommendations for future
- Understand how to improve project mechanics and logistics—relative to DPR

Good morning/afternoon.

Thank you for your willingness to participate in this evaluation. As I mentioned earlier (i.e. when interview was set up), the Center for Agricultural Partnerships has been hired by CA-DPR (Department of Pesticide Regulations) to conduct an evaluation of the Pest Management ***Alliance*** *program (**NOT pest management grants**!). As part of this evaluation, I am talking to each of the project managers for all of the alliance grants.*

Before we begin, I want to assure you that everything you share in this interview will be kept strictly confidential. Your comments will be available only to a limited number of CAP staff. Excerpts of this interview may be included in the final report, but under no circumstances will your name or any identifying characteristics be attached to your comments in this report.

*I'm going to be asking you questions regarding four areas: **project outcomes, documentation and evaluation of results, interaction with and perceptions of DPR**, and, finally, **outreach**. There are approximately two to five questions in each area. There will also be time at the end for you to bring up any other issues or additional information you feel would be of value to this effort.*

Do you have any questions at this time? Okay, ready? Let's begin.

The first topic I would like you to address regards interactions with and perceptions of DPR with respect to your project and the Pest Management Alliance program.

Interaction with and Perception of DPR

1. ***On the basis of 1-5, with 1 being unsatisfactory and 5 being outstanding, please describe each of the following. Let me know if something is just "not applicable."***

Your interaction with DPR Project Liaison/Manager for the PMA grant.	
	5 – Outstanding
	4
	3 – Average
	2
	1 - Unsatisfactory
	N/A - Not Applicable

Communication with DPR staff regarding your PMA grant(s) – i.e. invoicing, data, paperwork, phone calls, meetings	
	5 – Outstanding
	4
	3 – Average
	2
	1 - Unsatisfactory
	N/A - Not Applicable

Timing of fund disbursements for your PMA project relative to meeting the demands of the growing season and project activities	
	5 – Outstanding
	4
	3 – Average
	2
	1 - Unsatisfactory
	N/A - Not Applicable

DPR's grant reporting <u>requirements</u> for the Pest Management Alliance grant (i.e. narrative final report)	
	5 – Outstanding
	4
	3 – Average
	2
	1 - Unsatisfactory
	N/A - Not Applicable

The next area that I want you to describe has two parts: field data and project data (both as they relate to the Pest Management Alliance grants). Using the same 1-5 scale, please describe

	a) DPR's data management <u>requirements for field data</u> (i.e. pest monitoring results, reduced risk pesticide usage, damage levels, etc.)
	5 – Outstanding
	4
	3 – Average
	2
	1 - Unsatisfactory
	N/A - Not Applicable

	b) DPR's data management <u>requirements for project data</u> (e.g., progress toward pre-defined objectives)
	5 – Outstanding
	4
	3 – Average
	2
	1 - Unsatisfactory
	N/A - Not Applicable

Next I would like to get your perspective on how the DPR project manager contributed to the project. What were your expectations? What actually happened or didn't happen?

2. How did the DPR project liaison/manager contribute to your Pest Management Alliance project(s)? (expected versus actual)

3. What does your commodity get from doing a DPR-funded Pest Management Alliance project that might not have accrued via another funder? (intended versus unintended)

4. Would your industry/commodity work with DPR in the future on additional Pest Management Alliance projects?

	Yes	Why?
	No	Why not?

5. How has your view of DPR changed as a result of participating in a Pest Management Alliance project funded by them?

The next topic I would like to get your input on is project outcomes, results, and processes.

6. We understand that each Alliance project involves a number of different facets. From the following list, please select the word(s) that best characterizes your PMA project(s) and then give a brief explanation as to why. I'll read the entire list first and then we can go through them individually and you can let me know which words are applicable to your Alliance project.

	Implementation	
	Demonstration	
	On-Farm Research	
	Applied Research	
	Education	
	Outreach	
	Other	

7. Please identify three things the project accomplished (quantitative or qualitative).

8. Would you consider any of these to be "legacies?" If not, what would be a project legacy?

9. In terms of the people working together to conduct the project, what do you think worked well? What didn't work well?

10. <u>What</u> results did the project measure (i.e. document and evaluate)?

11. What did the industry learn from doing the Alliance project that they didn't know before the project?

12. How did the project measure those results (i.e. documentation and evaluation processes)?

Again, using a scale of 1 to 5 (with 1 being the least successful and 5 being highly successful), please identify to what degree do you feel you were successful in documenting and evaluating results. You may also use the "I don't know" option.

13. To what degree do you feel you were successful in documenting and evaluating results?

	5 - Highly successful
	4 - Moderately successful
	3 - Average
	2 - Fairly successful
	1 - Not at all successful
	I don't know

Using a scale of 1 to 5 (with 1 indicating no reductions and 5 indicating significant reductions), please identify to what extent have pesticide risks been reduced as a result of this project? You may also use the "I don't know" option.

14. To what extent have pesticide risks been reduced as a result of this project?

	5 – Significant reductions
	4 - Moderately reductions
	3 – Average
	2 – Minimal reductions
	1 – No reductions
	I don't know

Using the 1- to-5 scale (with 5 indicating extremely important and 1 indicating unimportant), please identify to what extent having an Alliance grant through DPR was critical to your organization's and/or industry's ability to engage in this type of work? (note: may need to elaborate on meaning of each of the categories)

15. To what extent was receiving an Alliance grant through DPR critical to the organization's and/or industry's ability to engage in this type of work?

	5 – Extremely important (i.e. work would not have taken place without this particular funding)
	4 –
	3 – Moderately important (i.e. funding supplemented other efforts)
	2 –
	1 – Unimportant (i.e. work would have taken place anyway)
	I don't know

The last two questions involve project outreach with respect to other Pest Management Alliance projects. DPR has funded Pest Management Alliance grants for the past four years.

Outreach

16. During that time, to what extent have you heard or participated in other Pest Management Alliance projects or requested information about any of their outcomes?

	5 – Have heard lots; attended multiple meetings
	4 – Read summary results of other projects
	3 – General awareness of other projects
	2 – Vaguely aware of other projects
	1 – Have not heard anything nor have I participated in anything

17. If yes, which project(s)? (You can refer to a project by general topic, commodity, principal investigator, etc.)

Finally, I would like to ask you

18. What advice would you give DPR on running the Pest Management Alliance program?

That concludes the formal questions that I have for you.

19. Is there anything else you would like to add?

In addition to interviewing each of the Alliance project managers, I would like to do a couple of short, one-half-hour interviews with two participants involved in each project. Would you provide me with the name and phone numbers of one farmer/grower and one farm advisor/PCA for your Alliance projects who would be willing to provide their perspectives? It is important that these individuals be able to provide a realistic and honest interpretation of the project. I don't want to hear just about all the great stuff that the project did or accomplished.

Farmer/Grower

- Name
-
- Affiliation
-
- Role in project
-
- Phone number

Farm Advisor/PCA

- Name
-
- Affiliation
-
- Role in project
-
- Phone number

Again, THANK YOU for taking the time to share your insights and experiences. I really appreciate this and know that it will be an important part of our evaluation.

(Note: We will <u>not</u> be distributing a final report to interviewees. If you want more information on the evaluation results, contact DPR directly after January 2002.)

PROJECT MANAGERS

Commodity	First Name	Last Name	Affiliation	Phone	Fax
Cut Flowers	Lee	Murphy	CA Cut Flower Commission	831-728-7333	831-728-7337
Citrus	Ted	Batkin	CA Citrus Research Board	559-738-0246	559-738-0607
Rice	Dana	Dickey	CA Rice Research Advisory Board	530-673-6247	530-671-4664
All Seed & Hay/Forage Alfalfa	Anne	Downs	For the CA Seed Association and CA Hay and Forage Association	916.443.2793	
Peaches, Plums, Nectarines	Gary	Van Sickle	CA Tree Fruit Agreement	559 638-8260	559 638-8842
Sugar Beets	Ben	Goodwin	CA Beet Growers Association	209-477-5596	209-477-1610
Almond	Chris	Heintz	Almond Board of CA	916-834-4520	209-549-8267
Poultry	Leslie	Hickle	Diversa for the California Poultry Industry Federation	619-482-1243	619-482-1243
Lettuce, head and leaf	Ed	Kurtz	California Lettuce Research Board	408-424-3782	408-424-3785
Prunes	Gary	Obenauf	For the California Prune Board	559.447.2127	559.436.0692
Walnuts	Dave	Ramos	For the Walnut Marketing Board	530.756.0531	
Wine grapes	Joe	Browde	For the CA Association of Winegrape Growers	707-776-4943	
Nursery	Michael	Rust	Department of Entomology, UC Riverside for the California Association of Nurserymen	909.787.5327	909.787.3086
Strawberries	Christopher	Winterbottom	For the CA Strawberry Commission	831-724-1301	831-724-0660
Cotton	Earl	Williams	CA Cotton Growers	559-252-0684	559-252-0551
Pears	Bob	McLain	CA Pear Advisory Board	916-441-0432	916-446-1063

Appendix VII.

Project Participants and Stakeholders:
Telephone Interview Questionnaire

PARTICIPANT EXPERIENCE SURVEY

Target:	Project participants
To be administered by:	Scharlau Consulting Inc.
Purpose:	Determine overall participant experience and perceptions of PMA projects, project results, and DPR.
Format:	Phone interviews with 1-2 stakeholders per project (max 1/2 hour in length).
Focus:	Impact, results, recommendations relative to project from industry view

Thank you for your willingness to participate in this evaluation. As I mentioned earlier (i.e. when interview was set up), the Center for Agricultural Partnerships has been hired by **CAL-DPR** (California Department of Pesticide Regulations) to conduct an evaluation of their **Pest Management Alliance** program (**not pest management grants**). We've already talked with the managers or coordinators for each of the Alliance projects. Now we're following up to talk with two people who actually participated in a project to get additional real-world perspectives.

Before we begin, I want to assure you that everything you share in this interview will be kept strictly confidential. Your comments will be available only to a limited number of CAP staff. Excerpts of this interview may be included in the final report, but under no circumstances will your name or any identifying characteristics be attached to your comments.

I'm going to be asking you questions on your role and interest level in the project, project outcomes, collaborative efforts, results, perceptions of DPR, and outreach. There are two to four questions in each area. There will also be time at the end for you to bring up any other issues you feel would be of value to this effort.

NAME: _____

GROUP: _____

PHONE NUMBER: _____

First, I would like to get an understanding of what role you had with the project and how you would gauge your level of interest in the project. From the following list of activities, please let me know which ones describe your participation in the PMA project.

ROLE/INTEREST

1. What was your role in the project? (*Indicate all that apply or provide your own*)

	Assisted with project proposal, work plan, industry evaluation	
	Served on management team	
	Served on advisory committee	
	Represented a participating stakeholder group (Which one?)	
	Conducted field demonstrations	
	Attended field days and educational meetings	
	Other	

2. How would you characterize your interest in the project?

	High interest	
	Moderate interest	
	Low interest	
	No interest	

PROJECT OUTCOMES

3. From the following list, please select the word(s) that best characterizes your PMA project and then give a brief explanation as to why. Let me read them first…

	Implementation	
	Demonstration	
	On-Farm Research	
	Applied Research	
	Education	
	Outreach	

	Other	

1. Please identify three things the project accomplished (quantitative or qualitative).

2. Would you consider any of these to be "legacies?" If not, what would be a project legacy?

3. In terms of the people working together to conduct the project, what do you think worked well?

What didn't work well?

COLLABORATIVE EFFORTS

4. The next question is in two parts and refers to how the project team worked together. *The first part is asking you to characterize the <u>effectiveness</u> of the PMA project's team efforts; that is, their collaborative efforts. How would you describe the efforts:* breaking new ground, progressive, standard *or* do you have no opinion*? (Provide some detail for your choice.)*

	Breaking new ground – individuals and groups that had not previously worked together were at the same table for the first time	
	Progressive – expanding traditional relationships	
	Standard – same people, same topic, same routine	
	No Opinion	

The second part refers to how well the Alliance project team worked together with respect to project goals. Given the following options, which I'll read to you, how would you characterize the Alliance team?

	Focused on goals and objectives of project	
	Cooperatively working on goals	
	Passively marking time	
	Divisive pursuit of individual goals	

RESULTS

5. To what extent have pesticide <u>risks</u> been <u>reduced</u> as a result of this project <u>today</u>?

	5 – Significant reductions
	4 - Moderate reductions
	3 – Average
	2 – Minimal reductions
	1 – No reductions
	I don't know

6. To what extent do you think pesticide risks will be reduced as a result of this project in 3 to 5 years?

	5 – Significant reductions
	4 - Moderate reductions
	3 – Average
	2 – Minimal reductions
	1 – No reductions
	I don't know

7. To what extent do you feel that your industry is aware of the project's results?

	Very aware	
	Moderately aware	
	Not aware	
	I don't know	

8. To what extent was receiving an Alliance grant through DPR critical to your industry's ability to engage in this type of work?

	5 – Extremely important, work would not have taken place without this funding
	4 –
	3 – Moderately important, funding supplemented other efforts
	2 –
	1 – Unimportant, work would have taken place anyway
	I don't know

OUTREACH

9. During the four years that DPR has funded the Pest Management Alliance program, have you heard about any of the other projects or requested information about any of their outcomes?

	Yes, which ones?	
	No	

If yes, you can refer to a project by general topic, commodity, research investigator, etc.

PERCEPTION OF DPR

10. Would you recommend that your industry work with DPR on a PMA grant in the future?

	Yes, why?	
	No, why?	

11. **How** has your view of DPR changed because of participating in a project?

12. What advice would you give DPR on running the Pest Management Alliance program?

That concludes the formal questions that I have for you.

13. Is there anything else you would like to add?

Again, THANK YOU for taking the time to share your insights and experiences. We really appreciate your time. Your comments are an important part of our evaluation.
(Note: We will not be distributing a final report to interviewees. If you want more information on the evaluation results, you may contact DPR directly after January 2002.)

PROJECT PARTICIPANTS

Commodity	First Name	Last Name	Affiliation
Stone Fruits	Rick	Schellenberg	Grower
Stone Fruits	Walt	Bentley	UC-Farm Advisor
Walnut	Don	Norene	Grower
Walnut	Carolyn	Pickel	UC IPM Farm Advisor
Cotton	Bob	Hutmacher	UC Coop Extension
Cotton	Pete	Goodell	UC Coop Extension
Strawberries	John	Duniway	UC Davis Plant Pathologist
Beets	Dr. Steve	Koffkee	UC Davis Agronomist
Cut Flowers	Bill	Young	Aspen Enterprises
Cut Flowers	Dr. Michael	Parella	UC Davis Dept. of Entomology
Prunes	Joe	Turkovich	Grower
Prunes	Bill	Olsen	UC Farm Advisor
Pears	Diane	Henderson	Grower
Pears	Rachel	Elkin	Farm Advisor
Nurseries	Toby	Mancini	El Modeno Gardens
Wine Grapes	Steve	Quashnick	Grower
Wine Grapes	Julie	Nord	Grower
Rice	Larry	Godfrey	UC Davis Entomologist
Lettuce	Bill	Cheney	Cooperative Extension
Lettuce	Belinda	Platz	PCA Supervisor
Almonds	Merlyn	Garber	Garber Farms
Almonds	Joe	Connell	Farm Advisor
Citrus	Beth	Grafton-Cardwell	Farm Advisor
Citrus	Craig	Callsen	Kern County Farm Advisor
Seed	Kirk	Rolff	Pioneer
Seed	Dr. Shannon	Mueller	Farm Advisor
Poultry	Rick	Palermo	Zachy Farms
Poultry	Mike	Altomar	Private PCA

Appendix VIII.

Document Review:

Sample Grid

REVIEW SUMMARIES FOR EACH PROJECT YEAR:

Year

Commodity

Contract #_____ from start date to end date

Proposal Objectives	Final Report Results
1.	1.
2.	2.
3.	3.
4.	4.

Documents Reviewed Included The Following:

Almonds	1998 Contract #97-0281 from 8/1/98 to 7/31/99
Almonds	1999 Contract #98-0326 from 8/1/99 to 7/31/00
Alfalfa Seed	1999 Proposal dated 5/4/99 from July 1999-September 2000 (2 years)
Containerized Nursery	2000 Final Report Dated Dec. 13, 2001 Contract #99-0255 6/15/2000-6/30/200101
Cotton	1999 Proposal dated (no date) for term 6/98 through 12/99
Iceberg Lettuce	1998 Proposal #97-0282 dated (no date) Report dated Aug 30, 1999
Iceberg Lettuce	Proposal dated 5/14/98 Contract #97-0267
Pears	1999 Final Report dated January 2000 Contract #97-0279
Pears	2000 Final Report Dated 5/15/01 Contract #98-0333 & #99-0212. Term from June 15, 1999 through December 31, 2000
Prunes	1999 Final Report Dated 12/31/99 Contract #97-0284 Term from June 15, 1998 through December 31, 1999 (?)
Prunes	2000 Final Report Dated 2/23/01 Contract #98-0328 Term: Unspecified
Roses	1999 Proposal dated 5/15/98 for term 6/15/98 through 6/14/99

Roses	2000 Final report dated 3/30/2001 Contract #98-0332
Poultry	1999 Proposal dated Final Report dated 4/30/2000 Term 6/15/98 through 10/31/99 97-0255 or 97-0277
Poultry	2000 Final Report (PMA 97-0277) Dated April 30, 2000 Term 6/15/2000 through 12/15/01 Proposal dated (no date)
Rice	1998 Proposal Dated May 15, 1998
Rice	1999 Proposal and Final Report Contract #98-0327 dated 6/2/99 Term from 6/15/99 through 6/15/00
Stone Fruit	2000 Proposal Final Report dated 6/30/00 for term 6/99 through 6/00 Contract #98-0325
Strawberries	1998 Proposal Contract #97-0278 Dated 6/15/98
Strawberries	1999 Final Report Contract #99-0195 Dated 3/9/00
Strawberries	Proposal dated 4/14/00 Final Report Dated Feb 2000 Contract # 97-0278
Sugarbeets	Proposal Objectives dated 5/15/98 Final Report Results
Sugarbeets	Final Report dated 3/31/2001 Contract #98-0330 for Year 1 6/15/99 – 3/31/01
Walnuts	1999 Contract #97-0280 Final Report dated 2/29/00 term 6/15/98 through 12/31/99
Walnuts	Year 2 Final Report dated 2/28/2001 Term January 1, 2000 through December 31, 2000

Appendix IX.

Focus Group:
Written Pre-Questionnaire for Participants

Commodity PMA – Focus Group Participant's Background Survey

Name:

Affiliation:

1. What was your role in the project? (indicate all that apply)

	Assisted with project proposals, work plan, industry evaluation	
	Served on management team	
	Served on advisory committee	
	Represented a participating stakeholder group (Which one?)	
	Conducted field demonstrations	
	Attended field days and educational meetings	
	Other	

2. How would you characterize your interest in the project?

	High interest	
	Moderate interest	
	Low interest	
	No interest	

3. From the following list, please select the word(s) that best characterizes your PMA project and then give a brief explanation as to why.

	Implementation	
	Demonstration	
	On-Farm Research	
	Applied Research	
	Education	
	Outreach	
	Other	

4. How are you involved in the _____ industry?

Appendix X.
Survey of California Commodity & Agricultural Organizations: Mail Questionnaire

Survey of California Commodity and Agricultural Organizations

Pest Management Issues and Grants

September 2001

This work has been commissioned by the California Department of Pesticide Regulation

Q1. **For each of the following, please tell us how frequently this was a reason for you/your organization to seek grant funding in the last 4 years.** ***(Please circle one number for each statement.)***

	Not a Reason ▼	Sometimes a Reason ▼	Often a Reason ▼	Always a Reason ▼
A. A source of operating funds	0	1	2	3
B. A way to address pressing issues in industry/commodity	0	1	2	3
C. A way to conduct specific industry or commodity group educational activities	0	1	2	3
D. A way to demonstrate concepts or technologies	0	1	2	3
E. A way to do outreach activities	0	1	2	3
F. A way to implement concepts or technologies	0	1	2	3
G. A way to conduct applied research	0	1	2	3
H. A way to conduct on-farm research	0	1	2	3
I. A way to conduct special, one-time-only projects	0	1	2	3
J. A way to augment or supplement an existing program	0	1	2	3
K. Other reasons *(Please specify.)* _____	0	1	2	3

Q2. **From each source of grant funds, about how many Requests for Proposals do you/your organization respond to annually?** ***(Please circle one number for each statement.)***

	None	1 to 2	3 to 4	Over 4
A. National or federal government	0	1	2	3
B. State government	0	1	2	3
C. Private foundations	0	1	2	3

Q3. **How much influence does each aspect of a Request for Proposal (RFP) have on your/your organization's decision on whether to respond to a grant opportunity?** ***(Please circle one number for each statement.)***

	No Influence	Slight Influence	Some Influence	Large Influence
A. RFP requirements	0	1	2	3
B. Length of proposal required	0	1	2	3
C. Time of year RFP is released	0	1	2	3
D. Amount of time between RFP and proposal due date	0	1	2	3
E. Amount of money available for grant	0	1	2	3
F. Total amount of money available in granting program	0	1	2	3
G. Number of years of funding available	0	1	2	3
H. Matching funds requirements	0	1	2	3
I. Who is offering the grant opportunity	0	1	2	3
J. Ability to integrate grant opportunity into a larger and/or existing effort	0	1	2	3

Q4. **For each of the following sources of information for learning about future grant opportunities, which is the most important means for alerting you or your organization to grant opportunities?** ***(Please circle one number for each statement.)***

	Not Important ▼	Slightly Important ▼	Somewhat Important ▼	Very Important
A. Calls for proposals by the granting institution	0	1	2	3
B. Website of granting institution	0	1	2	3
C. California State Contracts Register website	0	1	2	3
D. Direct mailings about program	0	1	2	3
E. University or Cooperative Extension materials	0	1	2	3
F. Agricultural trade publications	0	1	2	3
G. E-mail notification sent to you	0	1	2	3
H. Word-of-mouth	0	1	2	3
I. Other (Please specify.) _____	0	1	2	3

Q5. **For each of the tasks required to assemble a response to a proposal request, how difficult is it for you or your organization to complete each task?** ***(Please circle one number for each statement and question.)***

	Level of Difficulty? Not Difficult ▼	Somewhat Difficult ▼	Very Difficult ▼
A. Writing text for body of proposal	1	2	3
B. Identifying and coordinating stakeholders or team members	1	2	3
C. Securing matching funds	1	2	3
D. Developing a budget	1	2	3
E. Creating a work plan	1	2	3
F. Other (*Please specify.*) _____	1	2	3

Q6. **For each topic below, how much priority do you/your organization place on it as an important pest management issue, and would your organization devote resources to addressing this issue?** ***(Please circle one number for each statement and question.)***

	How much of a priority is the issue?				Would your organization devote resources?	
	No Priority ▼	Low Priority ▼	Medium Priority ▼	High Priority ▼	Yes ▼	No ▼
A. Alternatives to highly toxic pesticides that are organophosphates, carbamates, or are on the Prop 65 list	0	1	2	3	1	2
B. Alternatives to highly toxic pesticides in the Toxicity Category 1 products	0	1	2	3	1	2
C. Alternatives to highly toxic pesticides in the Restricted Use Materials	0	1	2	3	1	2
D. Pest management projects that reduce worker exposure to pesticides	0	1	2	3	1	2
E. Pest management projects that protect surface and ground water quality	0	1	2	3	1	2
F. Alternatives to methyl bromide and other soil fumigants	0	1	2	3	1	2
G. Alternatives to new or secondary pest problems that occur after moving to a pest management system that relies on reduced-risk approaches	0	1	2	3	1	2
H. Development of reduced-risk practices for new or exotic pests	0	1	2	3	1	2

Q7. **What are the key pest management issues for your organization/commodity?** ***(Please specify.)***

_____

_____

Q8. **Within the past 4 years, have you applied for grant funds to address pest management issues?** ***(Please circle the number of your answer.)***

1 Yes
2 No

Q9. **Now we would like to know how familiar you are with DPR's Pest Manage-ment *Alliance* Grant Program.**

	Yes ▼	No ▼
A. Have not heard of the DPR Pest Management *Alliance* program	1	2
B. Have accessed the web site of DPR and/or CA State Contracts Register	1	2
C. Have applied for an Evaluation grant	1	2
D. Have applied for an *Alliance* grant	1	2
E. Know of other organizations/businesses who have either applied for and/or received grant(s)	1	2
F. Have read of activities and/or results of Pest Management *Alliance* projects funded by DPR	1	2
G. Have attended a meeting or conference sponsored by DPR relative to their Pest Management *Alliance* Program	1	2
H. Other *(Please specify.)* _____	1	2

Q10. **Which of the following best describes your organization?** ***(Please circle the number of your answer.)***

1 Agricultural organization
2 Commodity group
3 Farm cooperative
4 Commodity commission
5 Marketing order
6 Commodity Marketing Program
7 Agricultural commissioners ——→ **Go to Q15**
8 Other *(Please specify.)* _____

Q11. **Which of the following best describes the commodity group or industry interest of your organization?** ***(Please circle the number of your answer.)***

1 General agriculture
2 Animal agriculture
3 Field and seed crops
4 Fruits
5 Nuts
6 Vegetables
7 Floral and nursery
8 Forest and forestry products
9 Other *(Please specify.)* _____

Q12. **Which of the following best describes the geographic focus of your organization and its constituents?**

1 Local or county
2 Regional
3 Multiregional
4 State
5 Other *(Please specify.)* _____

Q13. **Which one category best describes your organization's annual operating budget in 2001?**

1 Less than $500,000
2 $501,000 to $800,000
3 $801,000 to $1,000,000
4 $1,000,001 to $3,000,000
5 More than $3,000,000

Q14. **Which one size category best describes the membership of your organization?** ***(Please circle the number of your answer.)***

1 Less than 500 members
2 501 to 1,000 members
3 1,001 to 1,500 members
4 1,501 to 2,000 members
5 2,001 to 3,000 members
6 More than 3,000 members

Q15. **How is DPR perceived by members of the agriculture community?**

_____

_____

_____

Q16. **What recommendations, if any, do you have for future directions of the DPR Pest Management *Alliance* Grant Program?**

_____

_____

_____

Thank you for filling out this questionnaire. If you have comments about the questionnaire, please feel free to write them in the box below.

Please return your completed questionnaire to:

Social & Economic Sciences Research Center
Washington State University
PO Box 641801
Pullman, WA 99164-1801

Thank You!

Master Mailing List For Industry Awareness Survey (n=348)

Affiliation	First	Middle	Last	Title
African American Farmers/Central Valley	Joanne		Powell	Program Coordinator
Agricultural Commissioner - Alameda County	Earl		Whitaker	Agricultural Commissioner
Agricultural Commissioner - Amador County	Mike		Boitano	Agricultural Commissioner
Agricultural Commissioner - Butte County	Richard		Price	Agricultural Commissioner
Agricultural Commissioner - Calaveras County	Jearl	D.	Howard	Agricultural Commissioner
Agricultural Commissioner - Colusa County	Harry	A.	King	Agricultural Commissioner
Agricultural Commissioner - Contra Costa County	Edward	P.	Meyer	Agricultural Commissioner
Agricultural Commissioner - Del Norte County	Glenn	E.	Anderson	Agricultural Commissioner
Agricultural Commissioner – El Dorado/Alpine County	Bill		Snodgrass	Agricultural Commissioner
Agricultural Commissioner - Fresno County	Jerry		Prieto, Jr.	Agricultural Commissioner
Agricultural Commissioner - Glenn County	Ed		Romano	Agricultural Commissioner
Agricultural Commissioner - Humboldt County	John		Falkenstrom	Agricultural Commissioner
Agricultural Commissioner - Imperial County	Stephen	L.	Birdsall	Agricultural Commissioner
Agricultural Commissioner - Inyo/Mono County	George	L.	Milovich	Agricultural Commissioner
Agricultural Commissioner - Kern County	Theodore		Davis	Agricultural Commissioner
Agricultural Commissioner - Kings County	Dennis	F.	Bray	Agricultural Commissioner
Agricultural Commissioner - Lake County	Mark	T.	Lockhart	Agricultural Commissioner
Agricultural Commissioner - Lassen County	Kenneth	R.	Smith	Agricultural Commissioner
Agricultural Commissioner - Los Angeles County	Cato	R.	Fiksdal	Agricultural Commissioner
Agricultural Commissioner - Madera County	Robert	J.	Rolan	Agricultural Commissioner
Agricultural Commissioner - Mariposa County	Stacy	K.	Carlsen	Agricultural Commissioner
Agricultural Commissioner - Mendocino County	David	A.	Bengston	Agricultural Commissioner
Agricultural Commissioner - Merced County	Michael	J.	Tanner	Agricultural Commissioner
Agricultural Commissioner - Modoc County	Joseph	A.	Moreno	Agricultural Commissioner
Agricultural Commissioner - Monterey County	Eric		Lauritzen	Agricultural Commissioner
Agricultural Commissioner - Napa County	David		Whitmer	Agricultural Commissioner
Agricultural Commissioner - Nevada County	Paul		Boch	Agricultural Commissioner
Agricultural Commissioner - Orange County	Richard	M.	Le Feuvre	Agricultural Commissioner
Agricultural Commissioner - Placer County	Christine		Turner	Agricultural Commissioner
Agricultural Commissioner - Plumas/Sierra County	Karl		Bishop	Agricultural Commissioner
Agricultural Commissioner - Riverside County	James	O.	Wallace	Agricultural Commissioner
Agricultural Commissioner - Sacramento County	Frank	E.	Carlsen	Agricultural Commissioner
Agricultural Commissioner - San Benito County	Mark		Tognazzini	Agricultural Commissioner
Agricultural Commissioner - San Bernadino County	Edouard	P.	Layaye	Agricultural Commissioner
Agricultural Commissioner - San Diego County	Kathleen		Turner	Agricultural Commissioner
Agricultural Commissioner - San Francisco County	David	C.	Frieders	Agricultural Commissioner
Agricultural Commissioner - San Joaquin County	Scott	T.	Hudson	Agricultural Commissioner
Agricultural Commissioner - San Luis Obispo County	Richard	D.	Greek	Agricultural Commissioner
Agricultural Commissioner - San Mateo County	Gail	M.	Raabe	Agricultural Commissioner
Agricultural Commissioner - Santa Barbara County	William	D.	Gillette	Agricultural Commissioner
Agricultural Commissioner - Santa Clara County	Greg		Van Wassenhove	Agricultural Commissioner
Agricultural Commissioner - Santa Cruz County	David	W.	Moeller	Agricultural Commissioner
Agricultural Commissioner - Shasta County	Mary		Pfeiffer	Agricultural Commissioner
Agricultural Commissioner - Siskiyou County	William		Stephans	Agricultural Commissioner
Agricultural Commissioner - Solano County	Susan	E.	Cohen	Agricultural Commissioner
Agricultural Commissioner - Sonoma County	John	G.	Westoby	Agricultural Commissioner
Agricultural Commissioner - Stanislaus County	Donald	O.	Cripe	Agricultural Commissioner
Agricultural Commissioner - Sutter County	Mark	P.	Quisenberry	Agricultural Commissioner
Agricultural Commissioner - Tehama County	Mark		Black	Agricultural Commissioner
Agricultural Commissioner - Trinity County	Jay		Thesken	Agricultural Commissioner
Agricultural Commissioner - Tulare County	Lenord	L.	Craft	Agricultural Commissioner

Agricultural Commissioner - Tuolumne County	Gary		Caseri	Agricultural Commissioner
Agricultural Commissioner - Ventura County	W.	Earl	McPhail	Agricultural Commissioner
Agricultural Commissioner - Yolo County	Rick		Landon	Agricultural Commissioner
Agricultural Commissioner - Yuba County	Dennis	S.	Pooler	Agricultural Commissioner
Agricultural Council of California	Donald	G.	Gordon, Jr.	President
Alameda County Farm Bureau	Sue		Russo	Manager
Alfalfa Council	Sharon		Bowen	Executive Secretary
Alfalfa Seed Production Research Advisory Board	J.	D.	Allen	Manager
Alliance for Food and Fiber	Debbie		Calvo	Executive Director
Alliance of Western Milk Producers	Jim		Tillison	Chief Executive Officer
Allied Grape Growers	Nat		DiBuduo	President
Almond Hullers and Processors Association	Gene		Beach	Manager
Amador County Farm Bureau	Jean		Scanlon	Manager
American Dehydrated Onion & Garlic Assn	Dennis		McQuaid	Secretary/Treasurer
American Mule Association	David		Ketcher	President
Anderson Valley Winegrowers	Rex		McClellan	President
Apple Hill Growers	Linda		Lindner	Secretary
Apricot Producers of California	William		Ferriera	President
Association of Applied Insect Ecologists	John	F.	Plain	Executive Secretary
Association of Natural Bio-Control Producers	Maclay		Burt	Executive Director
Association of Zinfandel Advocates & Producers	Rebecca		Robinson	Executive Director
Atwater Fruit Exchange	Walt		Weimer	President
Beaumont-Cherry Valley Cherry Growers Assn	Stella		Parks	President
Blue Anchor	Patrick		Sanguinetti	Senior Vice President
Blue Diamond Growers	Walter	F.	Payne	President
Butte County Almond Hullers' Association	John		Crowe	General Manager
Butte County Farm Bureau	Michelle		Laffranchi	Executive Director
Butte County Rice Growers Association	Carl		Hoff	Manager
CA Garlic & Onion Dehydrator Advisory Board	Bob		Rohner	Manager
Cal/West Seeds	Paul		Baumer	President/CEO
Calaveras County Farm Bureau	Lorey		Oliver	Manager/Secretary
Calaveras Wine Association	Jan		Olsen	President
Calavo Growers of California	Lee		Cole	CEO
Cal-Bean and Grain Cooperative	Donald		Cameron	Manager
Calcot	Thomas	W.	Smith	President/CEO
Calcot Almond Division	Doug		Starr	Manager
California Agricultural Production Consultants Association	Kim		Crum	Executive Director
California Alfalfa and Forage Association	Aaron		Kiess	Executive Director
California Apple Commission	Kenton		Kidd	President
California Aquaculture Association	George		Ray	Secretary
California Artichoke Advisory Board				
California Asparagus Commission	Cher		Watte	Executive Director
California Assn of Flower Growers & Shippers	Cindy		Bonior	Executive Vice President
California Association of Lime Growers	Thomas	Y.	Palmer	President
California Association of Nurserymen	Elaine		Thompson	Executive Director
California Association of Wheat Growers	Mike		Kahoe	Executive Director
California Association of Farm Advisors and Specialists	Franz		Rulofson	Treasurer
California Avocado Commission	Mark		Affleck	President
California Avocado Development Organization	Tim		Hanify	Director
California Avocado Society	Thelma		Piercy	Secretary
California Beef Cattle Improvement Association	Kimberly		Bradley	Executive Secretary
California Beef Council	Bruce		Berven	Executive Director
California Canning Peach Association	Ronald	A.	Schuler	President/CEO
California Cantaloupe Advisory Board	Jerry		Munson	Manager

California Cattlemen's Association	John	L.	Bray	Executive Vice President
California Celery Research Advisory Board	J.	D.	Allen	Manager
California Certified Crop Advisers	Marilyn		Martin	Program coordinator
California Certified Organic Farmers	Brian		Leahy	Executive Director
California Cheese and Butter Association	Lisa		Waters	Executive Director
California Cherimoya Association	Walter		Barrows	President
California Cherry Advisory Board	Jim		Culbertson	Manager
California Christmas Tree Association	Sam		Minturn	Executive Director
California Chrysanthemum Growers Assn	Cap		Utsunomiya	General Manager
California Citrus Mutual	Joel		Nelsen	President
California Citrus Nursery Society	Jim		Hatakeda	Foreman
California Citrus Quality Council	Hugh	W.	Ewart	President
California Clean Growers Association	Betty		Crum	Office Manager
California Cling Peach Growers Advisory Board	Jim		Melban	General Manager
California Cooperative Rice Research Foundation	Kent	S	McKenzie	Director
California Corn Growers	Paul		Link	Manager
California Dairies	Gary		Korsmeier	Executive Vice President
California Dairy Herd Improvement Association	Bill		VerBoon	General Manager
California Dairy Research Foundation	Joseph	A.	O'Donnell	Executive Director
California Desert Grape Administrative Committee	Dorothy		Morgan	Manager
California Dry Bean Advisory Board	Jerry		Munson	Manager
California Egg Commission	Robert		Pierre	President/CEO
California Emu Association	Gail		Finn	President
California Farm Bureau Federation	William	C.	Pauli	President
California Farm Bureau Federation	William	C.	Pauli	President
California Floral Council	Ted	K.	Kubota	Executive Vice President
California Flower Cooperative	Patsy		Edwards-Kemp	Manager
California Foliage Association	Jack		Wick	Chairman
California Freestone Peach Association	Ron		Schuler	President
California Fresh Apricot Council	Tom		Tjerandsen	Manager
California Fresh Carrot Advisory Board	Jerry		Munson	Manager
California Fresh Fig Growers Association	Ron		Klamm	Manager
California Grain and Feed Association	Richard		Matteis	Executive Vice President
California Grape & Tree Fruit League	Richard		Matoian	President
California Highlander Cooperative	Phen		Vue	President
California Interior Plantscape Association	Mary	A.	Golden	Manager
California Jersey Cattle Association	Carol		Ahlem	Secretary
California Kiwifruit Commission	Scott		Horsfall	President
California Macadamia Society	Jim		Russell	President
California Melon Research Advisory Board	J.	D.	Allen	Manager
California Milk Producers Advisory Board	Adri	G.	Boudewyn	Chief Executive Officer
California New Potatoes	Mary Lu		Waddell	Marketing Director
California North Coast Grape Growers	Rhonda		Wallace	Executive Director
California Olive Association	Bill		Grigg	Secretary
California Olive Committee	Janet		Nelson	Manager
California Olive Oil Council	Patricia		Darragh	Publicist
California Pear Growers	Terry	W.	Barton	President
California Pepper Commission	Jerry		Munson	Manager
California Pistachio Commission	Karen		Reinicke	President
California Plant Health Association	Steve		Beckley	President/CEO
California Planting Cotton Seed Distributors	Bill		Van Skike	President
California Pork Producers Association	Susan		Dallaire	Executive Secretary
California Potato Research Advisory Board	Jim		Melban	Manager
California Poultry Federation	Bill		Mattos	President

California Raisin Marketing Board	Terry	W.	Stark	Manager
California Rare Fruit Growers	Glenn		Young	President
California Reining Horse Association	Rick		Flathers	President
California Rice Commission	Tim		Johnson	Interim Manager
California Sheep Commission	Glenn	E.	Yost	Interim Administrator
California State Beekeepers Association	Martin		Renn	President
California State Floral Association	Donna		Boggs	Manager
California State Horsemen's Association	Faye		Duran	Secretary
California Stonefruit Coalition				
California Sweet Potato Growers Association	Diane		Gilbert	Manager
California Table Grape Commission	Kathlene		Nave	President
California Thoroughbred Breeders Association	H.	Douglas	Burge	Executive Vice President
California Tomato Growers Association	John	C.	Welty	Executive Vice President
California Tomato Research Institute	Charles	J.	Rivara	Director
California Wheat Commission	Bonnie		Fernandez	President/CEO
California Wild Rice Board	Melvin	D.	Androus	Manager
California Women for Agriculture	Ellen		Sanders-Way	President
California Wool Growers Association	Dierdre		Flynn	Executive Director
California/International Llama Association	M.		Solomon	President
California-Arizona Watermelon Assn	Dana		Abercrombie	Executive Secretary
California-Nevada Polled Hereford Association	Karen		Perrin	Secretary/Treasurer
Cal-Pure Pistachio Cooperative	Charles		Goldman	President
Central California Almond Growers Assn				
Central California Lettuce Producers Cooperative	Rusty		Horton	Manager
Central California Tomato Growers Cooperative	Timothy		McCarthy	Manager
Central Coast Agricultural Task Force	Thelma		Puckett	Consultant
Central Valley Almond Association	Harold		Foster	General Manager
Chico Bean Growers	Michael	D.	Brown	Manager
Colusa County Farm Bureau	Linda		Eveland	Executive Manager
Commonwealth Club of California, Food & Farming Section	Bill		Scott	Section Chairman
Contra Costa County Farm Bureau	Amber		Pflager	Executive Secretary
Cortez Growers Association	Joe		Kollmeyer	Manager
Dairy America	Richard		Lewis	Chief Executive Officer
Dairy Council of California	Peggy		Biltz	Chief Executive Officer
Dairy Farmers of America	Ralph		Sartori	Northern Manager
Dairy Institute of California	Rachel		Kaldor	Executive Director
Dairy Issues Forum	Craig		Moyle	
Del Norte County Farm Bureau	LeVada		Silva	Secretary/Treausurer
Delano Growers Grape Products	Ray		Cox	Administrative/Sales Manager
Diamond of California	Sandra		McBride	Public Affairs Director
Dried Fruit Association of California	Richard		Novy	President/CEO
Ecological Farming Association	Lynn		Young	Executive Director
El Dorado County Farm Bureau	Valerie		Zentner	Executive Director
El Dorado Winery Association	G.	M.	Puclowski	
Exotic Fruit Fly Coalition	Richard		Matoian	Chairman
Farmers' Rice Cooperative	Michael		Sandrock	President/CEO
Fillmore Citrus Protective District	Monte		Carpenter	General Manager
Fresh Produce and Floral Council	Linda		Stine	President
Fresno Cooperative Raisin Growers	Richard		Orique	Business Manager
Fresno County Farm Bureau	Julianne		Bakke Dittman	Executive Director
Glenn County Farm Bureau	Staci		Buttermore	Manager
Gold Crown Macadamia Association	Dan		Hecko	President
Grower-Shipper Vegetable Assn of Central California	James	W.	Bogart	President
Grower-Shipper Vegetable Assn of SB & SLO Counties	Richard		Quandt	President

Half-Moon Bay Growers Association	David		Lea	Manager
Hmong American Cooperative	Touxia		Thao	Chairman
Humboldt County Farm Bureau	Katherine		Ziemer	Executive Director
Imperial County Farm Bureau	Lauren		Grizzle	Executive Director
Imperial Grain Growers	Mike		Thomas	Chief Executive Officer
Imperial Valley Vegetable Growers Assn	Lauren		Grizzle	Executive Director
Inyo/Mono County Farm Bureau	Cindy		Kitts	Secretary
Kern County Farm Bureau	Loron		Hodges	Secretary/Manager
Kern County Hay Growers Association	Truman		Brown	Manager
Kern Produce Shippers Association	Ken		Gilliland	Manager
Kings County Farm Bureau	Kelly		Deming	Executive Director
Lake County Farm Bureau	Charles		March	Executive Director
Lake County Winegrape Commission	Shannon		Gunier	Executive Director
Land O'Lakes - Dairyman's Division	Lee		Blakely	Vice President
Lassen County Farm Bureau	Shirley		Murrer	Secretary
Livermore Valley Winegrowers Assn	Michael		Perry	Executive Director
Livingston Farmers Association	Tad		Kurosaki	Chief Executive Officer
Lodi District Grape Growers Assn	Diego		Olagaray	President
Lodi District Vintners Association	Bill		Wieland	President
Lodi-Woodbridge Winegrape Commission	Mark		Chandler	Executive Director
Loomis Fruit Growers Association	Randy		Hansen	Treasurer/Manager
Los Angeles County Farm Bureau	Patty		Zellers	Executive Secretary
Madera County Farm Bureau	Jason		Baldwin	Manager
Marin County Farm Bureau	Anna		Kehoe	Executive Director
Mariposa County Farm Bureau	Ruth		Catalan	Secretary/Manager
Mendocino County Farm Bureau	Carre		Brown	Executive Administrator
Mendocino Winegrowers Alliance	John	A.	Enquist	Executive Director
Merced County Farm Bureau	Nancy		Slater	Executive Director
Mid-Valley Cotton Growers	Stan		Creelman	Manager
Milk Producers Council	Robert		Feenstra	Executive Director
Modoc County Farm Bureau	Kathy		Porter	Secretary
Monterey County Farm Bureau	Robert		Perkins	Executive Director
Monterey County Vintners & Growers Assn	Amanda		Robinson	Executive Director
Mushroom Council	Bart		Minor	President
Napa County Farm Bureau	Sandra		Elles	Executive Director
Napa Valley Grape Growers Association	Joelle		Gallagher	Executive Director
Napa Valley Vintners Association	Linda		Reiff	Executive Director
National Farmers Organization	Francis		Pacheco	Pacific Regional Director
National Meat Association	Jeremy		Russell	Communications Manager
Naturipe Berry Growers	Nick		Pasculli	Vice President
Nevada County Farm Bureau	Darlene		Moberg	Secretary/Manager
Newell Grain Growers Association	Ronald	K.	Greenbank	Manager
Newell Potato Cooperative	John		Cross	Manager
North Coast Livestock Protective Association	Al		Gerhardt	President
Northern California Vineseed Growers Association	Laverne		Reische	Secretary
Oak Glen Apple Growers Association	Audrey		Green	Manager
Olive Growers Council	Adin		Hester	President
Orange County Farm Bureau	Kathy		Nakase	Executive Director
Organic Farming Research Foundation	Bob		Scowcroft	Executive Director
Ostrich Association	Donna		Dold	President
Pacific Coast Producers	Larry	D.	Clay	President
Pacific Coast Quarter Horse Association	Jane		Goddard	Office Manager
Pacific Egg and Poultry Association	Anne		Downs	Executive Director
Paso Robles Vintners & Growers Assn	Judy		Ackermann	President/CEO

Pesticide Applicators Professional Association	Judy		Letterman	Executive Director
Pistachio Producers of California	Larry		Freels	Chairman
Placer County Farm Bureau	Lillian		Brumbeloe	Executive Secretary
Placerville Fruit Growers Association	John		Caswell	Manager
Plumas-Sierra County Farm Bureau	Helen		Roberti	Secretary/Treasurer
Pomegranate Council	Tom		Tjerandsen	Manager
Processed Tomato Foundation	Pamela		Jones	Executive Director
Processing Strawberry Advisory Board	George		Faxon	Manager
Processing Tomato Advisory Board				
Producers Livestock Marketing Association	Clif		Calhoun	Manager
Red Top Rice Growers	Richard		Storm	President
Rice Growers Association of California	Bill		Ludwig	Chief Executive Officer
Rice Producers of California	Mark		Lavy	President
Riverside County Farm Bureau	Sharon		Bolton	Executive Manager
Royal Valley Fruit Growers Association	Stuart		Rotan	General Manager
Russian River Valley Winegrowers	Kirk		Lokka	President
Sacramento Area Beekeepers Association	Nancy		Stewart	Secretary
Sacramento County Farm Bureau	Denny		Lewis	Executive Manager
San Benito County Farm Bureau	Mildred		Freeborn	Executive Director
San Bernardino County Farm Bureau	Rachael		Scott	Manager
San Diego County Farm Bureau	Eric		Larson	Executive Director
San Diego County Flower & Plant Assn	Alissa		Adams	Executive Secretary
San Francisco Flower Growers Assn	Leno		Piazza Jr	President
San Joaquin Farm Bureau	Russell		Matthews	Executive Director
San Joaquin Valley Hay Growers Association	Rick		Staas	General Manager
San Luis Obispo County Farm Bureau	Marilyn		Britton	Executive Manager
San Mateo County Farm Bureau	Jack		Olsen	Executive Manager
San Ramon Valley Horseman's Association	Bill		Borden	President
Santa Barbara County Farm Bureau	Richard		Morgantini	Secretary/Manager
Santa Barbara County Vintners' Association	Michael		Perry	Executive Director
Santa Clara County Farm Bureau	Jenny		Midtgaard Derry	Executive Director
Santa Clara Valley Winegrowers	Judy		Bogardus	Secretary
Santa Cruz County Farm Bureau	Jess		Brown	Executive Director
Santa Cruz Mountains Winegrowers Assn	Karen		Hibble	Executive Director
Scotts Valley Fruit Exchange	Hector		Monreal	Manager
Sequoia Walnut Growers Association	Richard		Reese	Manager
Shasta County Farm Bureau	Rachel		Hickerson	Executive Director
Sioux Honey Association	Carl		Kayl	Plant Manager
Siskiyou County Farm Bureau	Marcia		Armstrong	Executive Director
Solano County Farm Bureau	Mary Ann		Diehl	Executive Secretary
Sonoma County Farm Bureau	Lex		McCorvey	Executive Director
Sonoma County Grape Growers Assn	Nicholas	M.	Frey	Executive Director
Sonoma County Wineries Assn	Jaime	M.	Douglas	Executive Director
Sonoma Valley Vintners & Growers Alliance	Claudia		Glade	Executive Director
Southern California Flower Growers	Charles		Ueda	Operations Manager
Southern California Turfgrass Council	Phillip		Lange	Association Manager
Squab Producers of California	R.	E.	Shipley	President
Stanislaus County Farm Bureau	Jan		Ennenga	Executive Manager
Stockton District Kidney Bean Growers	Ken		Kirsten	Manager
Stratefod Growers	Joe		Vierra	Manager
Suisan Valley Fruit Growers Association	Robert		Hansen	Manager
Sun Growers of California	William		Beaton	President
Sunkist Growers	Jeffrey	D.	Gargiulo	President
Sun-Maid Growers of California	Barry		Kriebel	President

Sunsweet Growers	Harold		Schenker	President/CEO
Sustainable Cotton Project	Kate		Duesterberg	Managing Director
Sutter Basin Growers Cooperative	Stephen		Haskell	General Manager
Sweet Potato Council of California	Bob		Weimer	President
Tehama County Farm Bureau	Colleen		Kinner	Office Manager
Trinity County Farm Bureau	Carol		Michener	Secretary
Tulare County Farm Bureau	Cheryl		Lehn	Executive Director
Tulelake Growers Association	Deb		Crisp	Executive Director
Tuolumne County Farm Bureau	Lettie		Beerman	Secretary
United Ratite Cooperative	Sharyn		Felts	Director
United Wine Growers for Sonoma County	Bob		Anderson	Executive Director
Valley Fig Growers	Michael	N.	Emigh	President
Ventura County Agricultural Association	Robert	P	Roy	President
Ventura County Farm Bureau	Rex		Laird	Executive Director
Vitagold Brands Cooperative Association	Len		La Poirte	General Manager
West Coast United Egg Producers	David		Goldenberg	President
West Stanislaus Growers Association	Roy		Haile	General Manager
West Valley Cotton Growers	Thomas		Pires	Manager
Western Apiculture Society of North America	Nancy		Stewart	Secretary
Western Brahman Breeders Association	Glenda		Jameson	Secretary/Treasurer
Western Cotton Shippers Association	Judith		Zweigle	Executive Vice President
Western Growers Association	Matt		McInerney	Acting President
Western Pistachio Association	Corky		Anderson	Vice Chairman
Western Range Association	Larry		Garro	Executive Director
Winegrowers of Dry Creek Valley	Diane		Johannsen	Administrative Assistant
Yolo County Farm Bureau	Denise		Sagara	Secretary/Manager
Yuba-Sutter County Farm Bureau	Doris		Joaquin	Executive Secretary