The Arizona Pest Management Center is the entity that coordinates the IPM research and outreach functions of the University of Arizona. It is governed by a 20-member stakeholder group, the IPM Coordinating Committee, that advises the state IPM Coordinator (Dr. Peter Ellsworth) in management of federal and other IPM resources. Together, they oversee the activities of the IPM Program Manager (Dr. Al Fournier) and all the IPM teams who conduct IPM programming in Arizona.

The IPM Coordinating Committee met on 21 April 2009 to discuss the EIPM program, the results of the last competitive grants program, and ideas for improvement of the new EIPM RFA. The comments detailed here are a consensus that emerged from these discussions.

**General**

The APMC praises the federal IPM program for taking this important evolutionary step that raises the profile and professionalism of Extension IPM programs nationally. The formula lock on distributions of past EIPM moneys was regressive, non-responsive to local or federal priorities, and irrelevant to the current distribution of IPM programs including, for example, critical needs, pesticide use, user demand, and program performance. The new program will stimulate innovation and excellence in IPM program infrastructure and force a much-needed dialog among stakeholders including priority setting, program implementation, impact and evaluation. The new structure also validates and elevates the funding program status to that of other competitive programs, which we hope will create value for our federal partner and stimulate much-needed new funding for Extension IPM in the future. As a competitive program, this change has also forced local administrations to recognize IPM Coordinators and others as Project Directors with access to and full control of awarded funds. This change alone has brought administration of program funds to the program personnel in the state, rather than trapped within administrative levels of the University.

**Fairness**

The structure of the RFA from last year mandated a page limit on the overall proposal with a page limit imposed for introductory materials for the mandated components. The RFA stipulated, "These maximums have been established to ensure fair and equitable competition."

**Issue:** Unfortunately, these maximums did not consider the variable extent and scope of state IPM programs. Smaller programs were required to compete for at least 2 emphasis areas, but larger programs could compete for up to 6 emphasis areas. The result was that regardless of the number of emphasis areas, only 15 pages was allocated to these sections (with 5 available for the "Introduction"). This arrangement immediately biased against larger or more broadly defined IPM programs interested in competing for the maximum number of emphasis areas. In a diverse state like Arizona, one that is heavily urbanized with major agricultural and natural lands assets, we were immediately put into an unfair, disadvantaged competitive position. Adding the optional "Collaboration" component, we could allocate only about 2 pages of proposal space to each competitive component. A lesser program could dedicate 5 pages per competitive component.
(e.g., for two emphasis areas plus collaboration). It simply was unreasonable to expect "fair and equitable competition" under these conditions.

**Solution:** An upper limit should be established for the EIPM proposals that recognizes the different scopes of state IPM programmatic efforts. This will require a dynamic limit based on the number of components that a state elects to compete for. This guiding principle must be followed no matter how the new RFA is configured. But using last year as an example, limits should be structured as follows:

- Mandatory Coordination: 4 pages
- Optional Collaboration: 2 pages
- Emphasis Areas: 4 pages per emphasis area

Under the conditions of the last RFA, this new formula could have produced proposals as long as 30 pages (4+2+6*4). However, it is expected that few states will compete in all components. It could also lead to shorter proposals for states with less diverse requests, minimally 12 pages (4+2*4). In addition, this limit should be applied to the overall page count and not literally observed by emphasis area or component. PDs should be given the freedom within the overall page limits described above to describe their request for programmatic support. So a proposal might invest 5 pages into one emphasis area but only 3 to the other, keeping their overall request below the 8 page limit (4+2) required for the two emphasis areas.

This solution will keep all competing emphasis areas on a par with each other while still allowing the maximum freedom of authors to construct and redistribute pages within their proposal using efficiencies of description that apply across multiple components or emphasis areas. I.e., an author may wish to invest their pages into the introductory materials and coordination as a more efficient manner to describe their programmatic request. Again, as long as they maintain the maximum as described in the formula above, their proposal would be in conformance with requirements and fairly assessed comparatively to other proposals.

Given that page limits should be tied to emphasis areas, the APMC does not support the proliferation of more emphasis areas. Most new ones that were suggested can fit within the existing framework, e.g., animal IPM can fit within "high-value" in most cases.

**Relevance**
A major perceived goal of the new structure is to create better relevance and responsiveness of the federal EIPM program. This goal is paramount, and the APMC supports this idea.

**Issue:** It was clear from the many comments made by states about the specific criticisms written by reviewers that there were some fundamental misunderstanding about the nature of this funding program. In short, the EIPM program must continue to address and fund **programmatic IPM infrastructure** within states. "Project-based" support comes from other sources, e.g., other competitive grants programs, commodity and other user/stakeholder groups, and state/institutional partners. It is inappropriate to evaluate EIPM proposals based on a "project" funding model. As such, requests for support should be expected for new and existing personnel salaries, extensive in-state travel, and other stakeholder-identified infrastructural needs. Value
judgments about program direction or attempts to micro-manage funding allocations in these proposals is inappropriate. Reviewers should be dedicated to technically assessing program quality and capacity, not direction (but see below) or funding allocation.

Selection of panel reviewers and the instructions given to them is critical. An over-zealous attention given to COI considerations may have led to a very poorly formed and/or informed panel. State IPM programs are very inclusive and COI lists are likely quite large and extensive. Excluding all IPM personnel nationally results in a panel unable to professionally and peer review proposals. Sensible safeguards are desirable, e.g., excluding regional participation in voting or ranking of proposals from within that same region.

**Solution:** Two approaches are needed, one with two possible solutions. First, the RFA should explicitly instruct authors to demonstrate the relevance of their program elements (e.g., emphasis areas) to stakeholder need. This is a classic Extension requirement for program identification. The quality and veracity of these claims can be assessed by reviewers; however, once established as credible, no value judgments should be permitted regarding "how" a state invests their EIPM resources. For example, EIPM funds can be invested into any type of agricultural, urban or natural lands context, i.e., resource-poor, resource-rich, low input or high input, small-scale or large-scale, etc. as long as demonstrated stakeholder need is properly identified. Panels should be made aware of this limit on their evaluations and comments.

The other approach is to build capacity in the evaluation system so that IPM programs are fairly and appropriately assessed. This can be accomplished in two ways. Preferably, the panel should be made up so as to include at least two members from one of two classes of individuals: IPM Coordinators (or Assoc. Coordinators) and IPM Center Directors (or Assoc. Directors). At least two should be selected from each region (total 8) to sit on the panel, deliberate on all proposals outside their respective regions, with similar rights to voting/ranking as other members of the panel. Other potentials for COI would be handled in the customary ways by exclusion of the individual from deliberations on a specific proposal. E.g., if an IPM Coordinator in one region serves as a co-PD or identified collaborator on another region's proposal, he/she would be excluded from the review process for that proposal.

These individuals will provide oversight to the process, while contributing insightful and quality reviews to the process. They would also safeguard against unreasonable discussion about the nature of the funding request or how the funds are used, as well as biased comments about program priorities.

A second option to better establish the relevance of each request is to assemble a totally separate relevancy panel as is customary in some other programs. This is logistically more difficult and creates new demands on the authors of proposals. Authors would have to construct separate relevancy statements that would not serve necessarily to summarize the entire proposal, but instead would focus on issues of stakeholder-identified programmatic needs and evaluation of capacity and impact. The panel could be made up of stakeholders representing diverse regions and user-groups. Their charge would be to rank proposals based on their responsiveness or relevance to stakeholder-identified needs and program potential for impact. Their assessment would have to be by emphasis area.
**Resources**

The EIPM federal program is resource limited. It is shocking that niche programs that serve such a small segment of our stakeholders garner over double the federal investment in all of IPM (e.g., Organics competitive program). It is also unfortunate that some capacity in some states may be lost as a result of this competitive EIPM RFA.

**Issue:** The EIPM program should reward and fund programs of distinction and activate and leverage significant in-state capacities for delivering IPM. At the same time, the program must permit program expansion as well as new program development in states/territories that might re-establish lost infrastructure in IPM. Sensible program limits are therefore needed to incentivize exemplary IPM programs and elevate the performance of all potential institutional participants. At the same time, the EIPM must provide some measure of continuity, because infrastructure and programmatic capacity cannot be maintained on annual RFA process.

**Solution:** The overall cap for individual proposals to EIPM should be established at $500,000 per annum, the maximum award made in last year's award. Award duration should be fixed and multi-year. The APMC would recommend no fewer than 3 years and no more than 4 years, depending on the consensus of public comment on this issue.

Coordination is a very important component to these proposals. At the same time, this element can best reflect the institution's commitment to IPM implementation in their state or territory. We agree that panel reviews should consider activating as large a network as possible, while still honoring the spirit of a competitive process. As a result, we do not believe the funding cap on Coordination should be raised substantially from $25,000, and if so, no more than to $40,000. If more funding is needed to enable in-state "coordination", it should be incumbent on the PDs to link these activities directly with emphasis areas and appropriately distribute some of this funding among these components. Funding for the Coordination component should not be automatic.

The EIPM program should re-visit the number of proposals allowed as a resource and efficiency issue as well as a fairness issue. While eligibility has expanded significantly, the number of proposals submitted by previously ineligible applicants was very limited. It is unreasonable to expect institutions without any pre-existing Cooperative Extension and/or IPM infrastructure is going to mount a competitive proposal independent of other institutions. We therefore recommend that proposals be limited to one per state or territory. This would create incentives for institutions to collaborate to mount the strongest and most comprehensive proposal possible. It would also give greater chance of involvement of previously ineligible institutions through direct collaboration with the major institutional IPM stakeholder of each state.

**Process & Planning**

The model for successful Extension programming is deeply rooted in four critical steps: 1) program identification that hinges on stakeholder-identified need; 2) development of solutions through applied research and education; 3) assessment and measurement of impact and change in client behavior; and 4) development of feedback and adjustment to programs and program direction. The APMC is very outcome-oriented and manages a scarce resource. Therefore, we
follow a priority-process that demands careful program planning.

**Issue**: The LOGIC model for program planning has permeated the Cooperative Extension culture. Is this an appropriate model for proposal development?

**Solution**: While the APMC supports this as a leading model for program planning and proposal development, we acknowledge that there may be similarly robust systems for doing the same. We suggest that the RFA continue to point to this approach as one of the leading paradigms for program development that can be reflected in their proposal development. We further suggest that a proposal not be disqualified for not following this model explicitly. However, we do believe that proposals can and should be assessed negatively if they are unable to show program development based in some sort of proactive, pre-conceived planning process.

**Collaboration & Leverage**

The federal EIPM program must recognize that they are a minority fiscal stakeholder in most local IPM programs in this country. Collaboration with in-state entities is therefore an expected and natural outcome of any successful IPM programming. Leverage of intramural and extramural, competitive and non-competitive funding is also a hallmark for successful IPM programming. Collaboration and leverage from outside local state/territories is very context dependent. Larger states may have little incentive, need, or stakeholder requirement for extra-state interaction, while smaller states may be unable to energize in-state capacity without assistance out-of-state. Leverage, however, should be a common theme and scale-independent.

**Issue**: The EIPM program should be designed to stabilize and energize local IPM infrastructure. Should these scarce resources be used to reward or support "Collaboration"? And if so, was the $25,000 funding cap adequate to address this function of an IPM program? The APMC pursued the "Collaboration" component of last year's EIPM RFA, and values these verifiable collaborations. However, it appears from institutional comments that few pursued this optional component of the RFA. Further, others have suggested doing away with the component as inadequately funded, or alternatively greatly increasing the funding cap to recognize significant collaborations. Logistically, too, there were difficulties in institutions coordinating their requests to convey properly to panel reviewers that collaborations were "verifiable".

**Solution**: It would seem that the Collaboration component of the previous EIPM RFA did not activate or significantly reward major collaborations. The diverse nature of local programs as described above may not be conducive to properly and fairly assessing the nature of the collaborations, especially given the page limits of these proposals. As an alternative, the APMC suggests that the EIPM look at constructing and RFA that explicitly addresses and rewards proposals capable of demonstrating significant leverage of federal EIPM dollars. All programs must currently leverage these dollars in order to even mount an IPM program, let alone develop ones of distinction and with high impact. The APMC is categorically against ANY matching budgetary requirements. However, the EIPM panel may benefit from reviewing a section dedicated to the nature and scope of the in- and out-of-state leverage created by the local IPM program, perhaps in lieu of the Collaboration section.