ESCOP Budget and Legislative Committee Agenda Brief For information only

The committee holds regular monthly conference calls that have generally been well attended. The current B&L Committee membership is shown below.

| Chair: Steve Slack (NCRA) | NIFA Liaison | | |
|-------------------------------|---|--|--|
| | Paula Geiger (NIFA) | | |
| Delegates: | | | |
| William (Bill) Brown (SAAESD) | Representatives | | |
| Jeff Jacobsen* (WAAESD) | Caird Rexroad (ARS) | | |
| Ernie Minton (NCRA) | Glen Hoffsis (APLU Vet Med) | | |
| Karen Plaut (NCRA) | Eddie Gouge (APLU) | | |
| Orlando McMeans (ARD) | lan Maw (APLU) | | |
| Carolyn Brooks (ED-ARD) | Dina Chacon-Reitzel (CARET) | | |
| Bob Shulstad (SAAESD) | Cheryl Achterberg (APLU - B of Hum Sci) | | |
| Tim Phipps (NERA) | | | |
| Thomas Burr (NERA) | Jim Richards (Cornerstone) | | |
| Bret Hess (WAAESD) | Hunt Shipman (Cornerstone) | | |
| | | | |
| Executive Vice-Chair | *Chair elect | | |
| Mike Harrington (WAAESD) | | | |

BAC Meeting Results: The BAC met in Washington on Feb. 15-16 to finalize the system's FY 2013 appropriations requests for the National Institute of Food and Agriculture (NIFA). The take home message is that the committee supported all programs at the appropriated level or the president's budget request whichever is higher.

The BAC agreed to the following seven priorities:

| Core Priorities (\$Millions) | FY 2012 | President | A·P·L·U Goal |
|---|---------|-----------|--------------|
| Agriculture and Food Research Initiative | 264.470 | 325.000 | 325.000 |
| Smith-Lever 3(b)-3(c) | 294.000 | 292.411 | 294.000 |
| Hatch Act | 236.334 | 234.834 | 236.334 |
| Evans-Allen | 50.898 | 50.898 | 50.898 |
| 1890 Institutions Extension | 42.592 | 42.592 | 42.592 |
| McIntire-Stennis Cooperative Forestry | 32.934 | 32.934 | 32.934 |
| 1994 Institutions Research and Extension | 6.113 | 6.113 | 6.113 |

Each of these priorities will be documented in a one-pager (two-sided). The document repository is here: <u>www.land-grant.org/documents.html</u>

Another incredibly difficult budgetary year is expected and the BAC determined that everything must be done to protect the significant gains that have been secured in the recent past.

| Other Critical Initiatives Supported by A · P · L · U Component Organizations | | | |
|---|---|--|--|
| 1890 Institutions Capacity Building Grants | Higher Education Competitive Grants | | |
| 1890 Institutions Facilities Grants | New Technologies for Ag Extension (eXtension) | | |
| 1994 Institutions Equity Grants | Renewable Resources Extension Act | | |
| Insular Area Competitive Grants | Veterinary Medicine Loan Repayment Program | | |
| Non-Land-Grant Univ. Capacity Building Grants | Animal Health and Disease Research | | |

The BAC also supported in principle the new Crop Protection Program \$29 million and will seek to have all programs moved out of the Integrated Programs account to either Research and Education or Extension. Unfortunately the explanatory budget notes do not address how existing programs would continue and it appears that more programs would be included with an overall budget that has less funds than in 2012. Robin Shepard and Mike Harrington will develop a background white paper covering the issues (see Item 8.1)

Integrated Crop Protection Program For discussion

Robin Shepard and Mike Harrington were charged by BAC Chair Frank Galey with developing a background white paper on the crop Protection Program proposed in the Presidents FY 2013 budget. The ESCOP and ECOP Budget and Legislative Committees were asked for input. Below is the result of that effort. Of significance is the fact that the IR-4 program has decided to "go it alone" with their stakeholders already advocating for a separate line in the Research and Education portion of the NIFA budget.

New Integrated Crop Protection Program - Comments Prepared on Behalf of the BAA Budget and Advocacy Committee -March 9, 2012

The APLU Board on Agriculture Assembly (BAA), Budget and Advocacy Committee (BAC) supported "in principle" the Integrated Crop Protection program proposed in the President's 2013 Budget. In taking this action the BAC recognized the need to simplify the budget by consolidating lines as appropriate but also expressed concern with the location of the Integrated Crop Protection program with the Integrated Activities area of the NIFA budget because some \$34.368 M has been lost from this account over the last 5 years. The BAC recommendation was endorsed by the BAA Policy Board of Directors [*Pending March 22, 2012 review of this document.*]

The President's 2013 Budget Proposal would eliminate a number of lines related to pest management totaling \$31,744,000 and create a New Crop Protection Program. Existing programs impacted by this action are:

| | | Total |
|------------------------------------|-----------|----------|
| Research and Education Programs | (1,000's) | (1000's) |
| IR-4 | 11,913 | |
| Expert IPM Decision support system | 153 | |
| IPM and Biocontrol | 2,362 | |
| Pest Management Alternatives | 1,402 | |
| | | 15,830 |
| Integrated Activities | | |
| Regional IPM Centers | 4,000 | |
| Methyl Bromide Transition | 1,996 | |
| | | 5,996 |
| Extension Programs | | |
| Pest Management | 9,918 | |
| | | 9,918 |
| | | |
| | Total | 31,744 |
| | | |
| New Crop Protection Program | | 29,056 |

Significant funding has been redirected and/or combined from three sections of the NIFA budget (Research and Education, Extension and Integrated activities). Further, several budget lines have been reduced and/or eliminated overall to create the New Crop Protection Program.

It is apparent from the above table that some \$2.688 million has been redirected or not accounted for. In addition, two important programs, Crops at Risk (CAR) (\$1.4 M) and the Risk Avoidance and Mitigation program (RAMP) (\$4.4 M), have been eliminated in the last 2 years further reducing funding for crucial programs that are focused on specific crop protection problems. Together, these total nearly \$8.5 million that should be restored to bolster critical crop protection needs.

The stated goal of NIFA is to combine all related pest management efforts into a single coordinated effort, i.e., create a new program from the ground up in order to "respond to pest management challenges with coordinated region-wide and national research, education and extension programs, and serve as a catalyst for promoting further development and use of IPM approaches. This New Integrated Crop Protection Program is intended to foster regional and national team building efforts, communication networks, and enhanced stakeholder participation."

There is pressure within government to simplify the budget process by consolidating program lines where appropriate. There may be many positive aspects to repackaging current IPM funding. A larger banner like <u>Integrated</u> Crop Protection "should" include many existing programming efforts and give more emphasis to the needs of all programs that support a common goal and the funding to achieve it; rather than unilaterally defending smaller projects in ways that pit programs against one another. Furthermore, it has sometimes been easier to increase funding for larger initiatives when stakeholders see themselves reflected in those goals and local responses to problems. To succeed in creating a New Integrated Crop Protection Program at a minimum there must be level funding; however, given the descriptions provided (to date) by the agency there is a strong need for increased funding. Any new initiative will not be successful when it asks us to do more – with less. In addition, a new initiative needs to actively engage the stakeholders of the programs whose budget lines are being consolidated.

If the intent is to create a program that better addresses the needs of the nation and stakeholders in the broadest sense, it must also be very flexible, yet comprehensive, in supporting local problem solving. Focusing solely on funding one-time projects is not sufficient to addressing the nation's crop protection needs. The New Integrated Crop Protection Program should recognize the tremendous capacity already in place across our states in local E-IPM programming, regional IPM Centers and plant protection tactics and tools like the IR-4program. For a national effort in crop protection to be successful, it must support both: (1) a comprehensive state and local response that reaches local producers; and (2) competitive projects that support, and take advantage of local and state expertise.

The development of a New Integrated Crop Protection Program needs to be much more "inclusive" than merely complying with requirements for federal listening sessions. If we are to move forward on developing these concepts and sharing common goals, there must be greater opportunity for participation in establishing how a New Integrated Crop Protection Program will be designed and implemented as well as resources that will be needed.. Some redirection of effort is important; however, it is <u>not</u> necessary to recreate an entirely new initiative, and especially one solely based on national coordination of single function projects.

Moving Forward

Given the importance of crop protection including pesticide approvals and use, IPM, etc. and far reaching impacts of restructuring existing programs to meet future needs, it would be appropriate to appoint a coordinating representative group with members in consultation with ESCOP, ECOP, stakeholders and NIFA with a charge of creating a program. This group would include representation from the IR-4 program, Regional IPM Centers, Extension IPM, IPM PIPE, Experiment Station and Extension Directors and Administrators, end user stakeholders and NIFA. Given the relatively short time frame to meet FY 2013 budget constraints this group should be appointed immediately by the Budget and Advocacy Committee Chair with a clear charge of devising a new comprehensive program that will effectively meet current and future needs.

Guiding Principles*

Based on preliminary reactions to the proposed "Integrated Crop Protection Program," by the ESCOP and ECOP Budget and Advocacy Committees it is important that such an emerging initiative be based on:

- Protect/maintain the funding for E- IPM, Regional IPM Centers, IR-4 programs of the Land Grant Colleges and Universities, this includes local capacity as well as competitive support for important programs and projects ;
- Consolidate budget lines where it makes sense, doing no harm;
- Maintain intent (functionally equivalent) of programs, e.g., integrated activities regardless of where the budget resides within the USDA/NIFA Budget;
- Expand our ability to integrate research, education and Extension functions of the nation's Land Grant Universities in local and multistate problem solving;
- Ensure regional multistate collaboration focused on sharing and cooperating among Land Grant institutions and NIFA;
- Acceptable to those directly affected and supported by the COPs, BAC and PBD;
- Acceptable to appropriators.

*These guiding principles were also reflected in the 2011 ECOP/ESCOP Task Force Report on Section 406 Programs, including recommendations that addressed a number of IPM activities supported in the Integrated Activities Accounts of NIFA.

Potential Essential Elements of an Integrated Crop Protection Program

IR-4 Project

The IR-4 Project which provides crucial support to specialty crops (vegetables, fruits, nuts, herbs, flowers, ornamentals, turf, etc.) and minor uses by developing residue and other data that is required by US EPA to facilitate the g regulatory clearance of conventional reduced risk pesticides and biopesticides. The IR-4 Project is needed because the cost of the data required for specialty crops/minor uses far exceeds the potential return on investment to industry in this small acreage markets.. As National Research Support Project, the IR-4 Program has financially supported by the AES Directors for a number of years (\$ 481,000 currently/yr). This program is essential for the success of specialty crops/minor uses, an industry valued over \$40 billion. The IR-4 program must be maintained into the future to assure competitiveness of the specialty crop industry.

Regional IPM Centers

Regional IPM Centers provide direct linkage to stakeholders in each state. Each center has an advisory and/or a steering committee comprised of IPM practitioners, industry and other regional representatives. The groups meet regularly meet to discuss issues and provide oversight. Each state has an IPM Coordinator who is typically connected to their respective regional center providing direct feedback on needs. These regional centers have components that include: state and regional crop profiles, multistate pest management strategic plans on major problems, regional/national pest alerts on emerging issues, and regional/national training programs in cooperation with Land Grant Universities, NPDN, APHIS and ARS. The IPM Centers also administer the regional competitive IPM (RIPM) Grants programs (\$2,863,043) assuring that regional and local needs are met. The Regional IPM Centers are the core of effective IPM programs across the Nation and must be maintained.

Extension - IPM (E-IPM)

The Extension Integrated Pest Management Coordination and Support Program (E-IPM) works directly with agricultural producers, urban clientele and other pest managers to educate them about sound pest management practices that meet economic and environmental goals. EIPM has a long record of increasing the adoption of such methods and practices through training, demonstration, and evaluation of impacts at the grower level. Each Land Grant Institution identifies an individual to be the primary institutional/state lead when taken together form a national network of more than 50 E-IMP Coordinators providing an essential cadre of experts on IPM within each state. Coordinators also form the critical bridge between local, county-based extension personnel and the research and extension capacities of their institutions, and act as a catalyst for state and regional IPM programs. They translate needs into programs, and then coordinate implementation back to the client base. USDA-NIFA E-IPM programming is based on an implementation strategy that rapidly addressees state/local/multistate needs and existing as well as emerging pest problems. Those (state-based) plans and strategies are funded at various levels based on a national competitive review, and IPM Coordinators merge these funds with local funding sources to enable our national IPM capacities to operate efficiently. By addressing pest problems locally, regionally, and sharing successes, E-IPM meets national IPM goals and larger geographic issues of significance. This network of interconnected state-based programs is critical for providing pest managers, producers and urban clientele with unbiased information on pest control tactics.

Integrated Pest Management Pest Information Platform for Extension (IPM PIPE)

The IPM PIPE is a monitoring and early-warning system initially developed by the land grant universities, USDA, and private groups to alert farmers to the presence and spread of soybean rust. It has since been expanded to include other crops and pests. The system includes surveillance and monitoring networks, a Web-based information management system and criteria for deciding when to apply fungicides, predictive modeling, and outreach directly to producers often through the E-IPM network of state coordinators. The program's coordinated framework that has also been highly effective in helping our nation's producers with informed decision making about fungicide application. The development of the web-based tracking and early-warning system has greatly enhanced the ability of farmers to manage risk and avoid unnecessary fungicide applications. USDA's Economic Research Service has found that rust

management due to PIPE saved farmers as much as \$353 million in 2005. The IPM PIPE is essential assuring in agricultural biosecurity for the Nation.

Competitive Grants Programs

With the development of a new Crops Protection program there is an opportunity to consider more broadly how competitive funding could be brought to bear on critical issues. By recapturing CAR and RAMP funds that have been recently cut, it may be possible to expand Integrated Crop Protection funding to create new focus areas. The Regional IPM (RIPM) Grants programs, managed by the Regional IMP Centers, (\$2,863,043) should be enhanced and recognize that the current regional distribution needs to be reexamined to reflect the extent of pest management issues and value of crops. The RIPM program provides research, research and extension and extension-only grants to further IPM regionally. It is one of the few sources of competitive funding to generally address IPM issues. Regional coordination by the IPM Centers insures stakeholder input into priorities and relevance of funded projects. Also included should be a mechanism for funding emergency issues, possibly new instruction related program and other areas yet to be determined.

Budget Disposition/Location

The President's budget proposes the new Crop Protection program within the Integrated Activities area of the NIFA budget. However, experience over the last few years indicates that the Integrated Activities lines have been severely cut or eliminated. Any budget lines in the integrated account are likely in future jeopardy providing the justification for locating this program elsewhere. If the goal is budget simplification, all lines should move to the same location and it is essential that the affected programs be partners in any reconciliation. Given that the majority of funds would come from Research and Education Programs and Integrated Activities, all elements of the Integrated Crop Protection program could be moved to the Research and Education Programs area. Following the guiding principles outlined above, this could be accomplished with full authority and functional intent of the legislation such that the several programs highlighted above will maintain form and function. Again the concept of functional equivalency is essential to the success of this effort. It is important to protect program integrity, including maintaining current eligibility for accessing the funding. Without functional equivalency many current successful programs will only be asked to do more with less.

In the 2013 Explanatory notes most pest management programs funds have been moved without mentioning elimination of the programs or functions. However, several programs have their language specifically removed (e.g. "This change eliminates language for the following programs, which are not funded in 2013 through this account: Smith-Lever 3(d) Pest Management Centers and Food Animal Residue Avoidance Database.").

Below are the areas of focus in the Crop Protection program proposed in the President's 2013 Budget. At least some of the above highlighted critical activities are discernible but others are not.

Proposed New NIFA Crop Protection Program (from FY 2013 Budget Explanatory Notes for NIFA)

Plant Protection Tactics and Tools. This program area will support the development and introduction of new pest management tactics into agricultural production systems. In some cases, the program will develop new tactics that provide the breakthrough needed to fundamentally change a pest management system, resulting in greater profitability and smaller environmental and health risks. In other cases, the program will support the introduction of a new replacement tactic when a critical tactic is no longer available due to development of pest resistance, regulatory action or marketing decisions of manufacturers. The loss of a key management tactic can have devastating impacts on productivity, product quality and profitability. Examples include the impending loss of methyl bromide, the loss of effectiveness of glyphosate due to the development of resistant weed populations, and the endocrine disruptor issue associated with atrazine in runoff.

Diversified IPM Systems. Diversified IPM systems represent the long-term sustainable solution to many pest management problems. This program will support long-term projects focused on the development and implementation of innovative IPM systems on an area or landscape basis. The outcomes associated with IPM systems projects will be reduced reliance on single pest management tactics, the reduction of potential risks to human health and the environment caused by pests or the use of pest management practices, and increased economic benefits of adopting IPM practices. IPM systems projects will typically be multi-state or regional in scale and will involve multiple managed ecosystems with emphasis on enhanced stability and sustainability of IPM systems. The projects supported will be broad and systems-oriented efforts, with involvement of relevant disciplinary and subject matter experts in plant and animal sciences, water quality, food safety, and other relevant areas.

Enhancing Agricultural Biosecurity. This program area will support the development and maintenance of key information systems, networks, and decision support tools that provide the knowledge infrastructure needed for early detection and the application of science-based IPM systems for invasive, emerging and high-consequence pests that threaten U.S. agriculture. The program will support formal and informal education/training programs, and the development of pest management data and information needed by pest managers, regulatory agencies and policy makers to improve their ability to respond appropriately to endemic and exotic pests and diseases.

IPM for a Sustainable Society. Much of the IPM knowledge and expertise developed for agricultural systems has direct application in non-traditional settings. As IPM becomes more relevant in the areas that are fringe to agricultural crop production, much of what is learned can be applied to less traditional areas of food and quality of life on the rural-urban interface. For example IPM discoveries can be applied to urban pests (including Asian Long-horned Beetle, Emerald Ash Borer, and Laurel Wilt) and in community gardens. In addition, knowledge gained from IPM can be applied to pests/pesticides within living spaces in schools and homes.

Development of the Next Generation of IPM Scientists. This program area will support education programs needed to prepare the next generation of IPM scientists. Education efforts will focus on the training of interdisciplinary IPM scientists and IPM discipline experts such as new age systematists who are able to link to traditional methods. Support also will be provided for curriculum development, including web-based courses.

Science Roadmap Survey Results For information only

Final Results from the Science Roadmap Priorities Survey: The survey was closed with a total of responses 50 as follows: ARD - 8, NCRA – 7, NERA – 8 SAAESD – 14, WAAESD – 12. As discussed earlier these results should be used to provide input to NIFA and to ARFI. There will be an AFRI listening session on February 22 at Waterfront Center with a written comments deadline of March 22, 2012. Water and sustainability were deemed to be cross challenge area issues.

We propose that the top two priorities in each Challenge be forwarded to NIFA.

Challenge 1: We must enhance the sustainability, competitiveness, and profitability of U.S. food and agricultural systems.

Improving agricultural productivity by sustainable means, considering climate, energy, water, and land use challenges (90%)

Developing new plant and animal production systems, products, and uses to increase economic return to producers (62%)

Developing profitable agricultural systems that conserve and recycle water (26%)

Developing institutional mechanisms that create incentives for sharing agricultural water and that increase public support for balancing the requirements for food production on the one hand and the life-quality issues of society on the other (12%)

Challenge 2: We must adapt to and mitigate the impacts of climate change on food, feed, fiber, and fuel systems in the United States.

Improving existing and developing new models for use in climate variability and change studies; addressing carbon, nitrogen, and water changes in response to climate; assessing resource needs and efficiencies; identifying where investments in adaptive capacity will be most beneficial; and addressing both spatial and temporal scale requirements for agricultural decision making (84%)

Developing economic assessments to provide more accurate estimates of climate change impacts and the potential costs and benefits of adaptation, and to validate and calibrate models (54%)

Identifying appropriate policies to facilitate both mitigation and adaptation, and identifying how these policies interact with each other and with other policies (36%)

Incorporating advances in decision sciences that could improve uncertainty communication and the design of mitigation and adaptation strategies (20%)

Developing new technologies, including social networking tools, for more effective communication to selected target audiences (4%)

Challenge 3: We must support energy security and the development of the Bioeconomy from renewable natural resources in the United States.

Developing technologies to improve production-processing efficiency of regionally-appropriate biomass into bioproducts (including biofuels) (70%)

Assessing the environmental, sociological, and economic impacts of the production of biofuels and coproducts at local and regional levels to ensure sustainability (44%)

Expanding biofuel research with respect to non-arable land, algae, pest issues that limit biofuel crop yields, and emissions of alternative fuels (36%)

Developing agricultural systems that utilize inputs efficiently and create fewer waste products (30%)

Restructuring economic and policy incentives for growth of the next generation domestic biofuels industry (20%)

Challenge 4: We must play a global leadership role to ensure a safe, secure, and abundant food supply for the United States and the world.

Developing technologies and breeding programs to maximize the genomic potential of plants and animals for enhanced productivity and nutritional value (80%)

Developing effective methods to prevent, detect, monitor, control, trace the origin of, and respond to potential food safety hazards, including bioterrorism agents, invasive species, pathogens (foodborne and other), and chemical and physical contaminants throughout production, processing, distribution, and service of food crops and animals grown under all production systems (55%)

Developing food supply and transportation systems and technologies that improve the nutritional values, diversity, and health benefits of food and that enhance preservation practices, safety, and energy efficiency at all scales, including local and regional (43%)

Decreasing dependence on chemicals that have harmful effects on people and the environment by optimizing effective crop, weed, insect, and pathogen management strategies (14%)

Identifying plant compounds that prevent chronic human diseases (e.g., cancer), and developing and encouraging methods to enhance or introduce these plants and food system (8%)

Challenge 5: We must improve human health, nutrition, and wellness of the U.S. population.

Investigating the potential of nutritional genomics in personalized prevention or delay of onset of disease and in maintenance and improvement of health (60%)

Developing community-based participatory methods that identify priority areas within communities, including built environments, that encourage social interaction, physical activity, and access to healthy foods— especially fruits and vegetables—and that can best prevent obesity in children and weight gain in adults (58%)

Understanding factors, including biological and psychological stresses, that contribute to chronic diseases and the aging processes (40%)

Identifying and assessing new and more effective nutrient delivery systems for micronutrients and antioxidants (28%)

Identifying, characterizing, and determining optimal serving size and frequency of intake for health benefits of the consumption of specific foods containing bioactive constituents (12%)

Challenge 6: We must heighten environmental stewardship through the development of sustainable management practices.

Reducing the level of inputs and improving the resource use efficiency of agricultural production (56%)

Developing ecologically-sound livestock and waste management production systems and technologies (44%)

Developing systems-oriented and science-based policy and regulation for sustainable agricultural systems (36%)

Assessing the capacity of agricultural systems to deliver ecosystem services, including trade-offs and synergies among ecosystem services (34%)

Enhancing internal ecosystem services (e.g., nutrient cycling, pest control, and pollination) that support production outcomes so that chemical inputs can be reduced (30%)

Challenge 7: We must strengthen individual, family, and community development and resilience.

Understanding how local food systems actually work, particularly for small producers and low-income consumers, and how local food production contributes to the local economy, to social and civic life, and to the natural environment (78%)

Understanding the relative merits of people-, sector-, and place-based strategies and policies in regional economic development and improving the likelihood that rural communities can provide supportive environments for strengthening rural families and spurring a civic renewal among people, organizations, and institutions (58%)

Understanding the links among individual behavior, community institutions, and economic, social, and environmental conditions (36%)

Assessing the role of broadband and the accelerated investment being made in broadband penetration in rural America as a community economic development strategy (16%)

Modeling of poverty risks and outcomes to disentangle the influences of characteristics of poor individuals from the influences of their families, communities, and other organizational and institutional factors (12%)