

North Central Regional Association of State Agriculture Experiment Station Directors

196th Meeting

The Lied Lodge and Conference Center, Nebraska City, NE

April 1-3, 2013

Room: Stein AB (lower level)

Final AGENDA and Draft MINUTES

Date/Time	_	Agenda Topic Item						
Monday, April 1:								
3:00 -5:00	Multistate Research Committee (MRC) Meeting (for MRC members Ernie Minton,							
pm	only, alth	ough others are welcome to attend if interested)	2013 MRC Chair					
	Meet for	drinks in the Library Lounge, dinner on your own						
	Library L	ounge: http://www.liedlodge.org/dining/LibraryLounge.cfm						
	Timber D	bining Room (reservations recommended for dinner):						
		w.liedlodge.org/dining/						
Tuesday, Ap	oril 2:							
7:00 am	Breakfast	served in meeting room						
8:00 am	1.0	Call to Order	Dave Benfield,					
			2013 NCRA					
			Chair					
	2.0	Approval of September 2012 Minutes:						
		(http://ncra.info/docs/Historical/Minutes/Sept2012.pdf)						
	3.0	Adoption of the Agenda						
	4.0	Interim Actions of the Chair						
8:10 am	<u>5.0</u>	Executive Director's Report	Arlen Leholm					
		5.1 Update on efforts of Technology managers	Al Levine, Ernie Minton					
		5.2 NC Region and Canadian Prairie Province						
		Collaborations, Draft agenda for MSP Climate Meeting						

		5.3 Federal Register Notice on Grant Reform (Tie-in with NIFA and Cornerstone Updates)	
8:40 am	6.0	ESCOP Budget and Legislation Committee Update	Ernie Minton, Karen Plaut
8:50 am	7.0	NIFA Update (Call-in)	Deborah Sheely, Meryl Broussard
9:05 am	8.0	Cornerstone Update (Call-in)	Hunt Shipman
9:20 am	9.0	Battelle Industry Survey and IUDP Membership Discussion	Dave Benfield, Abel Ponce de León
9:35 am	10.0	ARS Report – NPA	Mickey McGuire
9:45 am	11.0	ARS Report – MWA	
10:00 am	Break -	Break bar outside room	
10:15 am	12.0	P-CAST report: Challenges and opportunities	Steve Pueppke, All
11:30 am	13.0	Executive Session	NCRA Executive
			Committee
11:50 am	1	meeting room, please exit to allow servers a few minutes to s	•
1:30 pm	14.0	MRC Report	Ernie Minton
		14.1 New/Renewal NC Projects	
		14.2 Midterm Reviews	
		14.3 NRSP Report	Abel Ponce de León
		14.4 Other MRC business – NIMSS update; OTT Funding Updates, IR-4 and NRSP7 discussion (added)	Chris Hamilton Doug Buhler, John Baker
		14.5 NC Nominee for National Multistate Award	Ernie Minton
1:50 pm	15.0	Nominations Committee	Ernie Minton
1:55 pm	16.0	ESCOP Science & Tech Committee Update	Bill Ravlin, Abel Ponce de León, Joe Colletti
2:10 pm	<u>17.0</u>	ESCOP Communications & Marketing Committee	Bill Ravlin, Arlen Leholm
2:25 pm	18.0	Committee on Legislation and Policy Update	Steve Pueppke
2:40 pm	<u>19.0</u>	Formation of an NC Regional Water Quality NCERA	Chris Hamilton, All
3:00 pm	Break –	Break bar outside room	
3:20 pm	<u>20.0</u>	NRSP6 Report (Call-in)	John Bamberg
3:35 pm	21.0	NCRCRD Report	Scott Loveridge

3:50 pm	22.0	 Future Meetings: http://ncra.info/Organization_UpcomingMeetings.php Midwest US-Canada Agriculture Climate Change Meeting, May 29-30, 2013, MSP Airport Hilton, Bloomington, MN CARET/AHS Summer Session, July 14-16, 2013, Downtown Marriott, Des Moines, IA Joint COPs, July 22-25, 2013, Hilton Garden Inn, Manhattan, KS Fall ESS/AES/ARD Meeting and Workshop, Hilton Easton, Columbus OH, September 24-26, 2013 (Note: Tues-Thurs schedule) 2014 NCRA Spring Meeting Location, March 31-April 2, 2013, Grand Rapids, MI 	Dave Benfield, All
4:00 pm	23.0	Other business/follow-up as needed: • PBD Update, Steve Slack • International Programs Discussion	All
5:00 pm		he day. Meet for group dinner in Timber Dining Room at 6 pregistration fee)	n. (Meal included

Wednesday, A	Wednesday, April 3					
7:00 am	Breakfast served in meeting room					
8:00 am	State Reports: Focus on budgets, supporting field stations, live-stock facilities, etc. <i>Break as needed – Break bar available throughout the morning.</i>					
12 noon	Adjourn (Boxed lunch provided)					

ACTION ITEMS

Action Items:

• Item 6.0: B&L Update Action Items

- o Action Requested: For discussion and completion of online Priorities Survey by May 1, 2013: https://www.surveymonkey.com/s/B229ZQL
- Action Taken: Arlen agreed to discuss this process more with Mike Harrington during the upcoming April NMCC meeting to determine if another survey is indeed necessary.

• Item 8.0: Cornerstone Action Item:

o Action Items: Please contact your congressional rep ASAP, see notes and instructions in recent BAC Call to Action

• Item 14.0: MRC Actions Taken

- Action Requested: Approval of MRC recommendations for renewals, midterm reviews and nomination of NCCC42 for National Multistate Research Award. Please also provide feedback on the need for a full-time Impact Writer.
- o Actions Taken:
 - All MRC recommendations for NC renewals, midterm reviews were approved.
 - NCCC42 was approved as the NC nominee for the national multistate award. Chris forwarded the nomination on to Rubie Mize for review by the ESCOP S&T committee.
 - The NCRA decided to table any recommendations regarding adding to NRSP1 to fund a full-time impact writer pending error corrections to the NRSP1 budget increase proposal. It appears that the math for the salary/fringe may be incorrect. The NCRA will review the increase again at our July meeting.
 - The NCRA voted not to reduce our NC regional trusts (OTT funded projects, NC7 and NC1100) by the amount of sequestration, for FY2013. We will revisit this again when the FY2014 budgets are final.
 - NRSP project budget reductions:
 - The NCRA recommended keeping the two \$50,000 NRSPs at their current amounts, while reducing the others by the % of the sequestration reduction to Hatch.

• Item 19.0: Water Quality Action Taken

- o Action Requested: Decide if we would like to create an NCERA to serve as a regional water quality group. If so, select a small number of AES directors to work with Extension to development the integrated multistate proposal.
- o Action Taken: Yes, AES would like to be involved with Extension in creating a regional water quality group. Marshall Martin and Archie Clutter volunteered to serve on a this group, if it's created. Ron Turco was also suggested as a potential

member. More discussion on this issue at the Des Moines CARET/AHS session when we meeting with Extension.

Item 22.0: NCRA 2014 Spring Meeting

- Grand Rapids, MI
- March 31-April 3, 2014
- Amway Grand
- Chris will send more information as it becomes available

Item 23: International Programs Discussion

- Working Group Created (will check in with NCRA at future meeting)
 - o Steve Pueppke
 - o Joe Colletti
 - o Karen Plaut
 - o Bill Ravlin
- Contact International Programs offices and see what information they have on other institutions Ag programs abroad that might be of use.
- If not, Bill Ravlin will put together a spreadsheet of basic information (location, priorities, focal point).

Item 5.0: Executive Director's Report

Presenter: Arlen Leholm

Arlen announced his retirement from his role as NCRA Executive Director, effective November 1, 2013. He will be greatly missed!

Item 5.2: Draft Agenda for May 29-30 NC US and Canada Climate Meeting in Minneapolis



Midwest US-Canada Agriculture Climate Change Meeting

Hilton Minneapolis/St. Paul Airport Mall of America 3800 American Blvd E, Bloomington, Minnesota, 55425, USA TEL: 1-952-854-2100 (http://www3.hilton.com/en/hotels/minnesota/hilton-minneapolis-st-paul-airport-mall-of-america-MSPAHHF/index.html)

May 29-30, 2013

Purpose: University, government, farmer/producer and private sector representatives from the US and Canada will serve as a catalyst for action on opportunities and challenges associated with climate change and its impact on agricultural and food production in the region

Expected Outcomes:

- Facilitate collaborations across borders and position Midwest/Prairie US Canada agriculture to successfully adapt to regional climate change
- > Partner with USDA and to develop a framework for Regional Climate Change Centers
- Identify agricultural research needs and adaptation strategies
- ➤ Identify specific actions to align agriculture and food stakeholders in the region to proactively meet and adapt to changes by 2025

Participants: Invitees include US-Canada university agriculture leaders, farmers/producers, and representatives from Ag-Canada, USDA and the private sector.

Draft Agenda

Wednesday, May 29	
6:00 pm - 9:00 pm	Meet and greet dinner reception - Guests at Jamshed Merchant's home
(address here)	
	Gather at hotel lobby at 5:30 pm for van ride to Jamshed's home
Thursday, May 30	
7:00 am – 8:00 am	Breakfast
8:00 am - 8:15 am	Welcome and Charge – Al Levine, Ag Dean, Univ of Minnesota and Jamshed
Merchant,	
	Consulate General of Canada in Minneapolis

8:15 am – 8:35 am	What has worked well with the Northeast USA/Eastern Canada Think Tank on Climate -Donald Smith, McGill University -John Oliver, Maple Leaf Concepts -Dan Rossi, NERA/Rutgers
8:30 am – 9:00 am	Building Infrastructure & Capacity for Regional Climate Centers- What do we need?
	-William Hohenstein, Director, Climate Change Program Office, USDA -Kevin Kephart, Vice President for Research, South Dakota State
University	
9:00 am –9:30 am	Wheat and Barley research (USDA CAP Grant update) -Gary Muehlbauer, U. of Minnesota, Barley and Luther Talbert, Montana State, Wheat
9:30 am – 9:45 am	Implications of Climate Change -Mark Seeley, Extension Climatologist, University of Minnesota
9:45 am - 11:30 am	Panel Perspectives: Where should we focus our efforts on Climate Collaboration: Arlen Leholm, NCRA, facilitator -John Oliver, Maple Leaf Bio-Concepts - Oshawa, Ontario -Harold Birch, Family Farms CEO – USA and Canada -Len Penner, Cargill Canada, CEO - Steve Morgan Jones, Ag Canada -Lauren Hepworth (TBD) -Robin Readnour, Elanco Animal Health, A Division of Eli Lilly and Company -Mary Buhr, University of Saskatchewan; Ernie Minton, Kansas State University; Daniel Scholl, South Dakota State (Livestock)
10:30 am – 10:45 am	Break (as needed)
11:30 am – 12:00 pm etc.)	Breakout Sessions for about three topics (Regional Climate Centers, Animal Ag,
12:00 pm – 1:00 pm	Working Lunch – General Session
1:00 pm – 2:00 pm	Continued Discussion
2:00 pm – 3:00 pm	Wrap-up and Next Steps for Action

Action Requested: When you receive your invitation, please RSVP as soon as possible.

Item 6.0: ESCOP B&L Committee Update Presenters: Karen Plaut and Ernie Minton

March 12, 2013 Cornerstone Report (See Senate numbers for FY2013 cuts):

http://www.land-grant.org/reports/2013/03-12.htm

ESCOP Priority Setting Process

The process begins for ESCOP with the Budget and Legislative (B&L) Committee determining funding priorities, which will be initiated via regional discussions followed by an on-line survey among the five regions. The process necessarily identifies priorities two years in advance of the federal fiscal year budget according to the BAA-Budget and Legislative Committee schedule.

For the last several years, The ESS has agreed that the top priorities are capacity funding including (Hatch, Evans Allen, and McIntire-Stennis) and AFRI. In addition, capacity programs and AFRI funding would be presented as a complementary package to Congress. B&L agrees to a voting survey for regions consisting of NIFA budget lines under the Research and Education Activities, those lines with system wide benefit (e.g. certain Integrated Activities) and on possible consolidation of lines where it make sense to do so. In addition, the survey would assist the B&L in:

- 1) Specifying a program topic that ESCOP B&L needs to advance to ESCOP and BAC, and
- 2) Identifying topics for potential budget collaboration with ECOP and ACOP
- 3) Identifying 2-3 emerging issues for future consideration by the B&L.

Timeline:

- March 1 Survey sent to regional EDs from spring meeting discussions, Encourage discussion at each region's spring meetings.
- April 1 Memo with link to on-line survey for regional distribution sent to EDs
- May 1 Responses would be due from each region and tabulated by the ED supporting the B&L Committee.
- May B&L conference call The survey summary would be discussed along with consideration of the responses to the open-ended questions. Following the discussion, the B&L would consult with Cornerstone about the feasibility of focusing attention on these budget lines. Recommendations forwarded to ESCOP Chair and CAC.
- June ESCOP CAC Call The B&L presents priorities to ESCOP for initial discussion.
- July ESCOP meeting during Joint COPs B&L presents priority recommendations to ESCOP for approval
- Sept. B&L presents priorities to ESS
- Nov. ESCOP priorities presented at BAC meeting

2015 Priorities Process:

Discussions occur at regional spring meetings on topics developed by the committee (See below). This would be followed by a national survey deployed via the regional EDs as above. The survey would appear as follows:

- I. Please indicate your priority 1- highest, 2 lowest, Both could be ranked 1
 - Capacity Funds: Hatch, Evans Allen, McIntire Stennis
 - AFRI
- II. Please select the top 5 priorities from the USDA-NIFA lines below and rank them from one to five with one being the highest priority.
 - Animal Health and Disease
 - Food and Agriculture Defense Initiative (FADI)
 - Ag and food system educational grants (e.g. Higher Ed Challenge and Fellowship grants programs)
 - Pest Management
 - Region Pest Management Centers
 - Regional Rural Development Centers
 - Sustainable Agriculture Programs including SARE
 - Sustainable Agriculture Federal-State Matching Grants
 - Water Quality Programs

•	Other		
•	Ouici		

- III. Specify one program or topic the B&L and ESCOP needs to advance that is not necessarily associated with the USDA-NIFA budget.
- IV. Please identify one budget issue on which ESCOP and ECOP should work together.
- V. Please identify one budget issue on which ESCOP and ACOP should work together
- VI. Please identify an emerging issue for future consideration by the B&L.
- VII. Please offer any suggestions you might have to strengthen ESCOP partnership with Extension and ACOP
- VIII. Please indicate your regional affiliation
 - ARD
 - NERA
 - NCRA
 - SAAESD
 - WAAESD

Additional Files:

- New Pest Management Program Executive Summary: http://ncra.info/docs/Historical/Minutes/April2013files/PM%20Executive%20Summary%20FINAL.pdf
- New Pest Management Working Group Discussion Paper: http://ncra.info/docs/Historical/Minutes/April2013files/PM%20Working%20Group%20P aper%20FINAL.pdf

Discussion Notes:

- How does this survey relate to the Science Roadmap? We need them to be complementary, not competitive or confusing. We need to give a consistent message to the USDA.
- Emerging issues are important, but we probably don't need to do a survey every year; our priorities really don't change.

Action Requested: For discussion and completion of online Priorities Survey by May 1, 2013: https://www.surveymonkey.com/s/B229ZQL

Action Taken: Arlen agreed to discuss this process more with Mike Harrington during the upcoming April NMCC meeting to determine if another survey is indeed necessary.

Item 7.0: NIFA Update

Presenters: Meryl Broussard and Deborah Sheely (Call-in)

Reform of the Guidance for Federal Grant Policies

What?

- 1. OMB issued a Federal Register notice (February 1, 2013; 78 FR 7282) entitled, "Reform of Federal Policies Relating to Grants and Cooperative Agreements; Cost Principles and Administrative Requirements (Including Single Audit Act)"
- 2. Deadline for submission of comments currently is June 2 (comment period extended by Federal Register notice published on Thursday, March 21, 2013 (78 FR 17300)

Why the reform?

- 1. In response to:
 - a. Nov 23, '09 Executive Order 13520 on Reducing Improper Payments
 - b. Feb 28, '11 Presidential Memorandum on Administrative Flexibility, Lower Costs, and Better Results for State, Local, and Tribal Governments
 - c. Jan 18, '11 Executive Order 13563 on *Improving Regulation and Regulatory Review* for this point:
 - i. Federal agency must "tailor its regulations to impose the least burden on society, consistent with regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations." To that end, it is important that Federal agencies identify those "rules that may be outmoded, ineffective, insufficient, or excessively burdensome," and "modify, streamline, expand, or repeal them in accordance with what has been learned."
 - ii. This point was further supported in Executive Order 13579—Regulation and Independent Regulatory Agencies (July 14, 2011)
- 2. The goal of this effort is to transform our Federal financial assistance framework so that it meets a higher standard of performance on behalf of the American people.
- 3. Federal grant awards provide important benefits and services to the public. To ensure that the public receives the most value, it is essential that Federal grant programs function as effectively and efficiently as possible, and that there is a high level of accountability to prevent waste, fraud, and abuse. In order to ensure that the public receives the most value, it is essential that these programs function as effectively and efficiently as possible, and that there is a high level of accountability to prevent waste, fraud, and abuse.

What ideas did OMB have in developing proposed guidance?

The reform ideas are outlined four main categories:

- 1. Section A: Reforms to Administrative Requirements (the government-wide Common Rule implementing Circular A–102; Circular A–110; and Circular A–89).
- 2. Section B: Reforms to Cost Principles (Circulars A–21, A–87, and A–122).
- 3. Section C: Reforms to Audit Requirements (Circulars A–133 and A–50).
- 4. Section D: Additional Suggestions Outside of the Guidance Reform.
- 5. Minor changes are included as well.

What does the proposed guidance do?

- 1. Combines multiple guidance documents into one consolidated document
- 2. Current administrative requirements that currently vary by type-of-recipient would be streamlined into one set of common requirements, while at the same time some provisions that vary among different types of recipients would be retained.
- 3. Eliminates unnecessary, duplicative requirements and focuses on preventing waste, fraud, and abuse.

What is the format of the currently proposed document?

- 1. Subchapters B through E of this Guidance set forth the requirements for agency management of Federal grant programs before the award has been made, and the requirements agencies may impose on recipients after the award has been made.
- 2. Subchapter F of this guidance establishes principles for determining the allowable costs incurred by non-Federal entities under Federal awards.
- 3. Subchapter G of this guidance is issued pursuant to the Single Audit Act Amendments of 1996, (31 U.S.C. §§ 7501-7507). It sets forth standards for obtaining consistency and uniformity among Federal agencies for the audit of non-Federal entities expending Federal awards. These provisions also provide the policies and procedures for use by Federal agencies when reporting the results of these audits.
- 4. The following provides a bit more detail about the organizational structure of the document.
- Subchapter A General Provisions
- Subchapter B Pre-Award Requirements
- Subchapter C Federal Award Notice
- Subchapter D Inclusion of Award Terms and Conditions in Federal Award Notice
- Subchapter E Post Federal Award Requirements
- Subchapter F Cost Principles
 - o General Provisions
 - Basic Considerations
 - o Direct and Indirect (F&A) Costs
 - o Special Considerations for State, Local, and Indian Tribal Governments
 - o Special Considerations for Institutions of Higher Education
 - o General Provisions for Selected Items of Cost
- Subchapter G Audit Requirements
 - o General
 - Audits
 - o Auditees
 - o Federal Agencies
 - Auditors
- Subchapter H Appendices
 - o Definitions
 - o Full Text of Notice of Funding Opportunity
 - o Contract Provisions for Recipient and Subrecipient Contracts

- Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Educational Institutions
- Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Non-Profit Institutions
- o State/Local- Wide Central Service Cost Allocation Plans
- Public Assistance Cost Allocation Plans
- State and Local Indirect Cost Proposals
- o Nonprofit Organizations Exempted From Subchapter F Cost Principles
- Hospital Cost Principles
- o Audit Data Collection Form (Form SF-SAC)
- o Single Audit Compliance Supplement

Where can I find the text of the proposed guidance?

- 1. Links to the full text of the proposed guidance can be found on http://www.whitehouse.gov/omb/grants_docs#proposed.
- 2. Included on that website also are documents that are intended as supporting materials to facilitate the review of the proposed guidance.
 - a. Crosswalk from existing to proposed guidance
 - b. Crosswalk from proposed guidance to predominant source in existing guidance
 - c. Administrative Requirements Text Comparison
 - d. Cost Principles Text Comparison
 - e. Audit Requirements Text Comparison
 - f. <u>Definitions Text Comparison</u>

Discussion Notes:

- We are still waiting on final budgets, may see another 0.08-0.1% decrease
- April 10: Date set for release of President's budget for FY2014.
- Dr. Woetcki will give a presentation shortly thereafter
- House and Senate appropriations hearings will also follow, to include ARS, Sonny, and all 4 REE Missions
- USDA trying to move forward with RFAs
- USDA hiring freeze, travel restrictions for rest of fiscal year to try and avoid furloughs
- Sonny may set up a conference call with EDs, ESCOP leaders, etc. after budget release

Action Requested: None, for information only.

Item 8.0: Cornerstone Update Presenter: Hunt Shipman

Notes:

- Looking at a 7.6% cut for almost all lines
- 12.5% increase in AFRI
- President's budget should be released April 10, although this has already been moved once.
- kglobal and Cornerstone:
 - o Chairs and ranking Ag appropriations committee members are targets
 - o Massive group created to share LGU stories and value
 - o Twitter and Facebook efforts, Twitter is mostly used to reach staffers

Action Items: Please contact your congressional rep ASAP, see notes and instructions in recent BAC Call to Action

Item 9.0: Battelle Industry Survey and IUDP Membership Discussion Presenters: Dave Benfield, Abel Ponce de León

Discussion Notes:

- Battelle Industry Survey Update:
 - o \$40,000 NC industry survey approved last year by NCRA and NCCEA
 - o We have NOT been billed yet
 - o Do we want to go forward still? YES, no formal action needed, since this was approved last year.
 - o April 22 call with Simon Tripp, NCRA, and NCCEA reps
- IUDP
 - o Membership in UIDC was to be an alternative to NC Institute
 - Turns out they are more national than regional, we wanted regional focus
 - Can we go nationwide, then create regional groups within?
 - o UIC: University and Industry Consortium
 - Ag related included
 - U of MN paid dues
 - Also not regional, but hear it's very effective
 - Upcoming meeting in Gainesville, FL mid-April, Abel will go and report back during summer meeting
 - We need action on this soon!

Item 10.0: ARS Report

Presenter: Mickey McGuire, Associate Director, USDA-ARS-Northern Plains Area

USDA Agricultural Research Service (ARS) Report to NCRA State Agriculture Experiment Station Directors

April 2013

Area Leadership

Northern Plains Area

Area Director: Larry Chandler (effective July 2012) Associate Area Director: Michael (Mickey) McGuire Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming

Midwest Area

Area Director: Robert Matteri (effective July 2012)

Associate Area Director: J.L. Willett

Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin

Budget Information

FY 2013 Appropriations

- ARS Salaries and Expenses: \$1,101,853,000
 - o 2.513% Rescission which is a reduction of \$27,690,000
 - o Spending cuts required by sequestration of \$55,067,000
 - o Final Budget Authority for FY 13 is \$1,019,096,000
 - o Represents a reduction of funding to ARS of \$157 million in the past 24 months

Research Priorities and Initiatives

ARS research continues to address priorities in the following program areas: Animal Production and Protection, Crop Production and Protection, Natural Resources and Sustainable Agricultural Systems, and Nutrition, Food Safety and Quality.

New Leadership and Vacancies

Midwest Area (MWA)

- Illinois
 - o National Center for Agricultural Utilization Research (Peoria)
 - Plant Polymer Research Unit (vacant, Gordon Selling, Acting RL)
- Iowa
 - o National Animal Disease Center (Ames)
 - Center Director: Kurt Zuelke took position in Australia January, 2013; candidate interviews week of April 8.

- Minnesota
 - o Cereal Disease Laboratory (St. Paul)
 - New Research Leader selected, report to duty on May 6, 2013
- Wisconsin
 - o Dairy Forage Research Center (Madison)
 - Center Director: Neal Martin retired, January, 2013 (Ron Hatfield, Acting CD)
 - Dairy Forage and Aquaculture Research Unit Research Leader, Richard Muck (effective October 1, 2012)

Northern Plains Area

- Kansas
 - o Center for Grain and Animal Health Research (Manhattan)
 - Stored Product Insect Research Unit, Vacant effective April 7.
- Nebraska
 - o U.S. Meat Animal Research Center (Clay Center)
 - Environmental Management Research Unit, Vacant (Tami Brown Brandl, Acting RL)
 - New Unit: Genetics, Breeding and Animal Health Research Unit, Gary Bennett, RL
- North Dakota
 - o Red River Valley Agricultural Research Center (Fargo)
 - Insect Genetics and Biochemistry Research Unit, Vacant (Bill Kemp, Acting RL)
 - New Unit: Sunflower and Plant Biology Research Unit, Mike Foley, RL

Action Requested: None, for information only.

Item 12.0: P-CAST report: Challenges and opportunities

Presenters: Steve Pueppke, All



EXPERIMENT STATION COMMITTEE ON ORGANIZATION AND POLICY

Experiment Station Section
The Board on Agriculture Assembly
National Association of State Universities and Land-Grant Colleges

March 21, 2012

Dr. John P. Holdren
Assistant to the President for Science and Technology
Director, Office of Science and Technology Policy
Eisenhower Executive Office Building
1650 Pennsylvania Avenue
Washington, DC 20504

Dear Dr. Holdren:

The Experiment Station Committee on Organization and Policy (ESCOP), the representative governing body of the APLU Board of Agriculture Experiment Station Section, commends the President's Council of Advisors on Science and Technology (PCAST) on its "Report on Agricultural Preparedness and the Agriculture Research Enterprise." We strongly support the Report's recommendation that additional public investment is needed in agricultural research to adequately address the challenges our nation will be facing in the coming decades.

Further support for the PCAST recommendation for increased public funding for agricultural research, is found in a recent paper by Philip G. Pardey and Julian M. Alston, "For Want of a Nail: The Case for Increased Agricultural R&D Spending." (http://tinyurl.com/8hjub3t) In the paper, the authors report benefit-cost ratios for public investment in agricultural research as 20:1 and higher. Based on their findings, they argue that: "A failure to increase publicly funded agricultural R&D will likely have long-term consequences for the sustainability of US agriculture in a competitive global environment and for the natural resources on which it depends."

We also note that the Report's findings are consistent with those of an ESCOP document, "A Science Roadmap for Food and Agriculture."

(http://www.nera.umd.edu/escop/scienceroadmapnov172010.pdf) The Roadmap was the product of the input from more than 250 research administrators and land grant university scientists from

a wide range of disciplines and institutions. These individuals participated in a process that identified seven Grand Challenges facing our nation and developed a systematic and detailed Roadmap to address them. The Roadmap presents specific research priorities needed to tackle these challenges into the next decade and to guide strategic public investments in research. The seven Grand Challenges outlined in the Roadmap can be summarized into three strategic issues: Food Security and Human Health; Economic Growth and Job Creation; and Sustainable Environmental and Natural Resources.

We agree that an increase in federal investment in agricultural research is necessary across a variety of mechanisms and would welcome an increase of \$700 million per year. We were encouraged by the acknowledgement of the importance of additional investments in fellowships and infrastructure. The former will be critical to attract the brightest and best students into the disciplines needed to address these critical challenges. Lack of continuous investment in infrastructure due to decreasing federal and state funding have seriously limited the ability of our institutions to conduct state-of-the art science. Lastly, we also see a need for increased funding of Cooperative Extension to ensure that the results of research are put into practice. The research – extension partnership is fundamental to the success of our land grant university system.

We also recognize that such an increase, though laudable, is insufficient when compared to the serious challenges we are facing. For example, the recommended increase in USDA competitive grant fund from \$265 million to \$500 million is a good starting place. However, such a level would still be far below the \$700 million authorized in the 2008 Farm Bill.

While the report appropriately recommends increases in competitive funding, it is also vital to note the importance of capacity funding. Capacity funding provides a critical base of infrastructure that supports a national system of land grant institutions, which serve a very complex biological, social and economic food and agricultural sector. Such funding supports efficient, systematic, inclusive, and sustainable multistate collaborations due to its flexibility and continuity. It promotes ongoing engagement of the land grant system with its stakeholders – producers and consumers – and allows for continuous adjustment of program direction and objectives based on that engagement. In fact, a 2006 study by Hoffman and Evenson showed that each unit of capacity funding for agricultural research had a larger impact on local agricultural productivity than a similar unit of federal competitive grant funding. (Huffman, W. E. and R. E. Evenson. 2006b. Do formula or competitive grant funds have greater impact on state agricultural productivity? *Am J Agric Econ* 88:783–798).

Capacity funding is also a critical component of the overall portfolio of support needed to conduct high quality, innovative research. There are numerous examples of how capacity funds have been used by faculty to sustain cutting edge science and have been highly leveraged with funds from private foundations, corporations, the National Institutes of Health, National Science Foundation, and several USDA competitive grants programs. For example, at Cornell University for every \$1 in capacity funding allocated to Cornell researchers, an additional \$5.60 was leveraged from other sources. Not only do the capacity funds help researchers address a multitude of problems, they also position them very well for additional funding.

Capacity funding further provides a bridge to maintain infrastructure, personnel, and competitiveness between successful grants. It gives land-grant university systems, through state and local cost-sharing, the capacity to support faculty at the state, regional, and local levels to address continuing as well as emerging needs. In other words, it is critical to maintain human and programmatic capacity to respond rapidly to crises and emerging needs, to make significant discoveries of new knowledge and technology, and to sustain high priority programs. The list of emerging needs is long and growing and includes invasive species and changes occurring due to climate change such as increases in extreme weather events, droughts and floods.

ESCOP supports the Report's recommendations for increased competitive funding. However, such an increase should not come at the expense of continued support for capacity funding. We believe a balanced increase in competitive and capacity funding portfolio available to agricultural research is the best path.

We look forward to the implementation of the PCAST recommendations and urge the Administration to quickly appoint the proposed committee to consider how to operationalize the recommendations. We look forward to providing input to and assisting the committee as it proceeds.

Thank you once again for an excellent report and for your consideration of these comments.

Sincerely,

Michael P. Hoffmann ESCOP Chair 241 Roberts Hall Cornell University, Ithaca, NY 14853-5905 Phone: 607-255-2552

Fax: 607-255-9499

EMAIL: mph3@cornell.edu

Much discussion on appropriate response ensued. Let's have kglobal work on getting P-Cast report out to legislators.

Steve Pueppke's presentation.

Action requested: For information and discussion only.

Item 14.0 MRC Report Presenter: Ernie Minton, MRC Chair 2013

DRAFT MRC Table:

Item	Proj Type MRC Rvwr	Current Proj # (Temp #)	Title	NCRA AA	MRC Comments
1.00	New/Renewal	Projects	<u> </u>		
	NC-Type				
	Colletti	NC213 (NC_temp213)	Marketing and Delivery of Quality Grains and BioProcess Coproducts	W. Ravlin, OH (01)	The project is relevant to the goals of NIFA and because of the supply/value chain framework and close linkage with industry is responsive to dynamics in the US related to food safety, marketing and economics and grain utilization. The previous committee worked well to address the objectives and did complete informative annual reports. The proposed new project has more-or-less the same three objectives with a bit more emphasis in objective three on a multi-institutional framework to cause measureable impacts to occur. The methods section articulates by objective the activities planned by a state or groups of states to cause the achievement of the objectives. It is recommended that in the introductory paragraph to the Methods section attainment of competitive grants be mentioned as a vehicle to facilitate the actions/activities. Also, it is recommended that another paragraph that provides a "logic" framework for the many separate activities listed under each of the three objectives. For example, a "logic" framework would clearly

		explain why 16 seemingly separate activities assigned by state or groups of states are needed to achieve objective one. [Note that the "logic" framework may already exist in the section entitled "Measurement of Progress and Results" inasmuch as the outputs are organized by objective and for each objective a clear set of outputs (that are linked in some way back to the activities) are presented.] In the Outcomes and Projected Impacts section it recommended to consider organizing by objective. Recommend deferring approval until a modestly modified proposal is resubmitted.
		Recommend deferring approval until a

Minton	NC1040 (NC_temp1040)	Metabolic Relationships in Supply of Nutrients for Lactating Cows (NC-1009)	D. Benfield, OH (99)	The project addresses important questions in dairy cattle nutrition and metabolism. It is multistate and multidisciplinary. The group has already identified their ability/willingness to leverage multistate funds with extramural grants. The project is consistent with NIFA goals. NCAC6 and the administrative advisor have reviewed the project. Both recommend approval. The MRC reviewer concurs with that recommendation to approve. However, the project outline requires some editorial attention and other changes. Parts of the project are an editorial mess, especially the Literature Cited that is nearly devoid of line breaks and contains periodic repeats of text. 1. Most sections of the outline require editorial attention as they contain few hard line breaks to separate the write-up into reasonably sized paragraphs. The same is true with the Literature Cited, plus, that section contains repeats of certain blocks of text. Perhaps part of that is the way the print version is assembled in NIMSS? 2. Work is called for in Indiana, but no scientist from Purdue is listed in the Appendix E. Same is true for the corn silage and alfalfa hay work at
				2. Work is called for in Indiana, but no scientist from Purdue is listed in the Appendix E. Same is

					 For work on Objective 2, collaborations are identified between MI, WI, KS, and VT. No Wisconsin or Vermont scientists are identified in the Appendix E. Similarly; no Ohio, Cornell or Washington State scientist is mentioned in the Appendix E. For work on Objective 3, again WA, IN, WI, and OH are identified to contribute, but no scientist listed in the Appendix E. Define or spell out AKEY. Again, define or spell out PROVINI. Defer approval pending revisions listed above.
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Hamernik	NC1042	Management Systems to	D. Benfield,	The Management Systems to Improve the
	(NC_temp1042)	Improve the Economic and	OH (04)	Economic and Environmental Sustainability of
		Environmental Sustainability of Dairy Enterprises		Dairy Enterprises focuses on collaborative
		Daily Enterprises		research leading to dairy management
				strategies and systems to facilitate sustainable
				and profitable decisions by managers of milking
				cow and heifer enterprises. Three objectives
				are proposed: 1) Optimize calf and heifer
				performance through increased understanding
				of feeding strategies, management systems,
				well-being, productivity and environmental
				impact for productivity and profitability; 2)
				Improve dairy cow management decisions
				through nutrient utilization, well-being and
				profitability; and 3) Analyze whole farm system
				components and integrate information into
				decision-support tools to improve efficiency,
				enhance profitability, and environmental
				sustainability. These objectives are related to
				the objectives from the previous, five-year
				project (NC-1042) but also include some new
				components (e.g., well-being; precision dairy).
				Overall, the committee has been extremely
				productive and includes a good mix of
				disciplinary expertise as well as research and
				extension experience. The committee may
				want to consider a formal evaluation or
				assessment of their programs in the future.
				There are a large number of publications listed
				in the SAES-422 reports; however, there does
				not appear to be much collaboration between
				stations on the publications. The committee
				also lists a good deal of extramural support for
				their projects, including large USDA AFRI grants

				and smaller grants from commodity boards and industry. The milestones and outreach plan are appropriate. The Appendix E lists 12 participants from 10 states. There appear to be several states listed in the project (CN, FL, IN, LA, MD, NH, NE) but not in the Appendix E. It is not clear what "CN" refers to. Should this be CT or CA? Two items (#1 and #5) under Outputs are not really outputs but seem to be statements of methods. These should be deleted or reworded into outputs (i.e., tangibles). Under Outcomes, the first bullet is incomplete (Dairy farmer). This should be deleted or reworded. The Literature Cited Section is a mess and should be reformatted so that each new literature citation begins on a new line. There is an impact statement for NC1119 on the NCRA website; however, it is not clear if this statement is up to date. The impact statement is well done. Approval deferred until revisions described above are completed.
Clutter	NC1169 (NC_temp1169)	EFNEP Related Research, Program Evaluation and Outreach	D. Hamernik, NE (10)	This is a renewal of a multi-state project to improve the methods employed in the Expanded Food and Nutrition Education Program (EFNEP). The stated goal of the EFNEP is to assist low-income audiences in acquiring the knowledge, skills, attitudes, and changed behaviors necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being.

Accordingly, the committee aims to improve data collection instruments and program processes to positively impact dietary habits in low income communities, and ultimately the quality of life for not only the targeted audiences but also the paraprofessionals in the program with whom they interact. The previous technical committee has met annually on a continuous basis throughout the previous five-year period and has submitted annual reports in a timely manner. It is difficult to determine in the proposed plan, and from the submitted information, what has been accomplished in the past 5 years, and how those specific accomplishments relate to and justify what is proposed in a new plan of work. The committee reports only 3 publications in peer-review journals during the previous 5-year period, all three with the same lead author. Much of the newly submitted plan seems to overlap with the previous plan — in		 I	
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lead author. Much of the newly submitted plan			
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fact much of the new proposal includes the			fact much of the new proposal includes the
same text. The multi-state participation is			same text. The multi-state participation is
intended to bring unique and complementary			intended to bring unique and complementary
expertise and data (especially related to			
diverse demographics) to the effort, but aside			
from reference to collaboration between			
Nebraska and Michigan State, there is no			Nebraska and Michigan State, there is no
specific description of how the team intends to			
leverage the multistate platform.			
All in all, however, this is an important project,			All in all, however, this is an important project,
so we recommend the following revisions:			

Minton	NC1170 (NC_temp1170)	Advanced Technologies for the Genetic Improvement of Poultry (was NC-168)	S. Lamont, OH (13)	 More clearly define your impacts and how they will lead to future work Reflect on previous accomplishments and describe how they have led to the new objectives Provide more specific information on who will do what in the Methods section. Provide more information on multistate functions and activities. Recommend deferring approval until a modified proposal is resubmitted. Requested revisions due in NIMSS by June 1, 2013. Proposal will be re-evaluated after that time. The project addresses important questions focused on the genetic improvement of poultry. This appears to be a mature project group. They seem to be clearly multistate and collaborator. The group has already identified their ability/willingness to leverage multistate funds with extramural grants. The project is consistent with NIFA goals. It does not appear that the administrative advisor has reviewed the project. NCAC6 has reviewed the project and recommends approval. The MRC reviewer concurs with the recommendation to approve. No changes to the proposal are requested. Recommend approval. Will renew on 10/1/2013 as NC1170.
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Leholm	NC1172 (NC_temp1172)	The Complex Nature of Saving: Psychological and Economic Factors	J.E. Minton, KS (10)	This committee has been productive in the past. The objectives and expected outcomes for the next five years are clearly stated. Renewing this project will contribute to the understanding to the field of consumer economics, particularly the barriers and motivators that influence the decision making process of consumers. I recommend approval of this project.
NCCC				
Colletti	NCCC207 (NCCC_temp207)	Biochemistry and Genetics of Plant-Fungal Interactions	G. Bollero, IL (10)	Deferral of approval pending minor changes to the proposal: Please update Objectives, focusing on how past accomplishments will affect future impacts The database mentioned sounds like a great tool, but is hard to find. I was unable to locate an active link. Please update the link and be sure it is accessible, current, active to ensure access to the most recent information on the plant-fungal interactions for important crops. More active recruiting of members is recommended. A few states with researchers who would be a good fit (i.e. IA State) are not listed in your Appendix E. Please make these minor revisions in NIMSS by June 1, 2013. The proposal will be reevaluated at that time.

Hamernik	NCCC208	Nutrition and Management of	J. Lawrence,	The Nutrition and Management of Feedlot
I Idillomik	(NCCC_temp208)	Feedlot Cattle to Optimize	IA (08)	Cattle to Optimize Performance, Carcass Value
	(11000_tomp200)	Performance, Carcass Value	17 (00)	and Environmental Compatibility project
		and Environmental Compatibility		focuses on research and education efforts to
		(NCT192)		support the cattle feeding industry in the North
		(NC1192)		
				Central Region of the U.S. and beyond. The
				project lists 15 participants from 14 states,
				including the top five states with cattle on feed
				in the US. Together, these participants provide
				educational programs to approximately 5,000
				feedlots and nearly 100% of the feedlot
				consultants and feed dealers thereby having an
				impact on more than 80% of the feedlots in the
				US. The committee has the research expertise
				and access to appropriate infrastructure to
				generate new information that will allow the
				feedlot industry to transition from a corn-rich
				diet to a diet that is more dependent on corn co-
				products and forage. The objectives are
				appropriately focused on utilization of carbon
				from energy feeds to compete in an energy
				economy and improve national food security;
				enhanced environmental sustainability; and
				enhanced production efficiency and quality of
				feedlot cattle. A three-way collaborative
				approach is proposed so that participants will
				focus on: 1) pre-feedlot nutrition by
				management interactions; 2) feedlot nutrition
				and management; and 3) post-harvest
				evaluation of nutrition and management
				interventions (beef quality). Overall, this is a
				strong project with excellent representation from
				appropriate states. The topic is timely and
				important. Information generated by the
				participants will be rapidly transferred to the
				feedlot industry and will be of significant,
				positive benefit to the future sustainability of this
				industry. The committee may want to consider a
				formal evaluation or assessment of their
				programs in the future. There is an impact

					statement for NCC208 on the NCRA website; however, it is not clear if this statement is up to date. The impact statement is well done. Be sure to submit a new impact statement to the NCRA office at your next midterm review. Recommend approval.
	NCERA				
	Leholm	NCERA210 (NCERA_temp21 0)	Improving the management and effectiveness of cooperatively owned business organizations	S. Lovejoy, MI (08)	This ERA is outstanding and a great example of how ERA's should function. Advancing cooperatives is a key goal of the ERA. In the past two years, this group has published 6 peer reviewed articles and advanced a Community of Practice in extension. A nice mix of academics and industry contribute to the work of this committee. This is a very active group with great accomplishments. I recommend approval with no reservations. Will renew on 10/1/2013 as NCERA210.
		NCERA211		K. Grafton, ND ((03) One-year extension request approved.
2.00	Mid-Term Revie	ews			
	NC-Type				

Colletti	NC205	Ecology and Management of European Corn Borer and Other Lepidopteran Pests of Corn	S. Pueppke, MI (01)	NC205 is a model multi-state research project in terms of working across state and disciplinary boundaries on clearly defined objectives and causing real impact on the ecology and management of European Corn Borer (ECB) and other Lepidopteran pests of corn. There is very strong attendance at the annual meetings and all annual reports have been submitted. Overall the performance and impact of this "research team" is outstanding. Their willingness and ability to enhance the engagement with industry and governmental agencies to address the dynamic issue of understanding the ecology and (moving towards) optimization of management of ECB is particularly noteworthy. Strongly recommend continuation of this high-functioning research team.
Minton	NC1023	Improvement of Thermal and Alternative Processes for Food	D. Jackson, NE (10)	The members of NC1023 appear to be making reasonable progress towards the objectives of their project. This group seems to truly work across state lines on objectives of common interest. The committee has both the expected number of annual reports and an impact statement on file. It should be noted that the Impact statement lists the former AA as the contact person. Perhaps this suggests the Impact statement is not especially current. The group has leveraged their association with the multistate project into significant numbers of joint publications, conferences, etc. Based on the foregoing evidence of progress towards objectives and evidence of impact, it is recommended that the project continue, pending submission of a current impact statement to the NCRA office by June 1, 2013.

NA	NC1	Enhancing Rural Development Technology Assessment and Adoption Through Land Grant Partnerships	S. Lovejoy, MI (09) See OTT funded regional trust NC1100 below.	
Clutte	er NC1	Mycotoxins: Biosecurity, Food Safety and Biofuels Byproducts (NC129, NC1025)	D. Jackson, NE (11)	This is a mid-term review of a committee studying the toxicity and management of mycotoxins in grains – specifically related to the greater risks to livestock and humans due to increased concentrations in biofuel byproducts. Objectives are aimed at collecting data to address knowledge gaps related to the mechanistic basis for mycotoxin induced diseases in animals and humans, integrated strategies to detect and reduce contamination in cereal and distillers grain, and understanding the regulation of mycotoxin biosynthesis and the relationships among mycotoxigenic fungi. The work also has connections to biosecurity due to the potential damage from intentional contamination of grain with mycotoxins. The committee has held two annual meetings and submitted timely and informative annual reports. Eleven publications in 2011 and 21 in 2012 are reported, most in peer-review journals or book chapters. The committee has a website at which they have posted the project outline; development is ongoing. NC1183 also has an impact statement on file in which they report impacts ranging from new basic knowledge about mycotoxigenic fungi to practical evaluation of antioxidants and other therapies to reduce the effects of mycotoxins. There is not clear evidence of the leveraging the committee collaborations for new external funding, but there is mention of plans to submit a collaborative proposal to USDA. Otherwise the committee appears to making reasonable progress along their project plan. Recommend continuation.

Clutter	NC1184	Molecular Mechanisms	D. Hamernik,	This is a mid-term review of a long-standing
Ciuttei	1101104	Regulating Skeletal Muscle	NE (09)	committee studying the regulation of skeletal
		Growth and Differentiation	NE (09)	
		Growin and Differentiation		muscle growth and differentiation, with a goal of
				more efficient and profitable meat production for
				livestock producers and a healthy product for
				consumers. The present objectives are aimed
				at characterizing signal transduction pathways
				that regulate muscle growth and metabolism
				including the influence of endogenous growth
				factors and producer management, the cellular
				and molecular basis of myogenesis, and
				mechanisms of protein assembly and
				degradation.
				The committee and its plan represent well the
				concept of multi-state efforts. There is expertise
				represented by the committee that spans the
				spectrum from very basic muscle biology to
				livestock production and meat industry
				applications. The committee appears to have
				met twice for annual meetings, both of these
				meetings at VPISU. There are corresponding
				postings of annual reports, but the minutes from
				the second of these was not readable from the
				website. The minutes from the first meeting
				report that 10 of the stations attended, and the
				report includes updates of work from those
				groups. The first report includes a list of
				publications and invited presentations related to
				the committee objectives that reflect a
				reasonably high level of productivity by the
				attending stations. It is unclear what amount of
				real collaboration across stations is occurring
				beyond the sharing of research results. There
				does not appear to be an impact statement
				online.
				The committee is encouraged to find ways to
				engage the entire breadth of stations, and to
				find valuable opportunities for joint work and
				grant proposal submissions. Recommend
				approval for continuation pending submission of
<u> </u>				application continuation portaing cubinioolon of

					an impact statement to the NCRA office by June 1, 2013.
Har	mernik	NC1186	Water Management and Quality for Ornamental Crop Production and Health	D. Buhler, MI (10)	The Water Management and Quality for Ornamental Crop Production and Health committee lists 37 participants from 21 states. The committee submitted detailed SAES-422 reports with extensive publication lists. However, it is not clear how many publications result from collaborations across stations. The planned four-part series of publications (State of Water) is impressive. The impact statements are good. The committee also includes industry participation at annual meetings. A survey of water use by stakeholders appears to be a routine activity and is viewed as a strength of the committee. Some or all of the committee members received a planning grant from the USDA NIFA SCRI in 2010. This planning grant was also used as the basis for discussion of potential research and extension collaborations at the 2012 committee meeting. The project appears to be novel, timely, important, and it aligns with the goals of the USDA NIFA. There does not appear to be an impact statement for NC1186 on the NCRA website. Recommend approval for continuation, but please complete the impact statement one-page form and send to the NCRA office by June 1, 2013.

Hamilton	NC1187	The Chemical and Physical Nature of Particulate Matter Affecting Air, Water and Soil Quality	W. Bland, WI (11)	NC1187 is a productive group that meets regularly, with special attention to the Bouyoucos Conference in 2011 on advanced methods for studying soil processes; they publish prolifically; and provide extensive information and education on techniques and instruments related to the scope of the project the chemical and physical nature of particulate matter affecting air, water, and soil quality. As more summary papers and training links are developed by members, we encourage the committee to upload these into the NIMSS project homepage. Some minor deficiencies include: 1) Current funding efforts haven't been well outlined in the annual reports, so we recommend these be listed in future annual reports under the Accomplishments section, although we do realize that submission of these proposals is only just now occurring, as stated in the NC1187 timeline, please just keep this in mind; 2) there is no current impact statement on file for this project, the last one received was from the expired NC1022; 3) and the formatting of the publication list in NIMSS needs improvement for future reports. Please keep in mind that a .pdf list can be uploaded in NIMSS. 4) Meetings could be better attended, only about half of the committee members are named on the attendance lists in the annual reports. This project is recommended for continuation pending receipt of the one-page impact statement by the NCRA office by June 1, 2013.
NCCC				
Hamilton	NCCC31	Ecophysiological Aspects of Forage Management	D. Buhler, MI (06)	All reports submitted and complete. Recommend continuation

	Hamilton	NCCC52	Family Economics	C. Jasper, WI (09)	All reports submitted and complete. Recommend continuation			
	Hamilton	NCCC134	Applied Commodity Price Analysis, Forecasting, and Market Risk Management	A. Hallam, IA (04)	All reports submitted and complete. Recommend continuation			
	Hamilton	NCCC211	Cover crops to improve environmental quality in crop and biofuel production systems in the Great Lakes and Upper Mississippi basins	K. Lamkey, IA (10)	All reports submitted and complete. Recommend continuation			
	NCERA							
	Hamilton	NCERA197	Agricultural Safety and Health Research and Extension	M. Martin, IN (03)	All reports submitted and complete. Recommend continuation			
3.00	NRSP Proposa	Is/Budgets		1				
NDODOOA	N. C. II.	<u> </u>	10 10 10 10 10 10 10 10 10 10 10 10 10 1	0.1.0	5 "11 1 1 1 1			
NRSP001: National Information Management and Support System (NIMSS), 2011-2016 Possible budget increase request, please sometime impact position justification.								
NRSP-3 T	The National Atmo	spheric Deposition P	rogram (NADP), 2009-2014		No action			
		<u> </u>	ecialty Crops and Minor Uses, 2010		Midterm Review			
Distribution	NRSP-6 The US Potato Genebank: Acquisition, Classification, Preservation, Evaluation and Distribution of Potato (Solanum) Germplasm, 2010-2015 Midterm Review							
		ural Program for Min	No action					
		enome Research Pro	Budget and renewal proposal					
NRSP-9 N	National Animal Nu	utrition Program, 201	0-2015		Midterm Review			
				<u> </u>				
4.00	4.00 Other funding decisions							

4.01	NC	Conservation, Management, Enhancement and Utilization of Plant Genetic Resources	Wintersteen	OTT Funding from AES to be reduced by Hatch reduction %; Business plan review to be discussed at summer NCRA meeting		
4.02	NC	Enhancing Rural Development Technology Assessment and Adoption Through Land Grant Partnerships	Lovejoy	OTT Funding from AES to be reduced by Hatch reduction %; Business plan review to be discussed at summer NCRA meeting		
5.00	Other MRC Issues					

MRC Item 14.3 NRSP Update

Presenter: Abel Ponce de León, NRSP-RC Chair 2012-2013

Background:

At the 2012 Fall ESS Business Meeting in Portsmouth, NH, the directors approved the following changes to the NRSP-RC's process in an effort to streamline the NRSP review process:

Changes to NRSP Operational Guidelines (Updated 10/10/2012)

- 1. The NRSP RC will approve 5 year budgets for new and renewing projects, with the stipulation that if Hatch funds are reduced, NRSP funding will also be reduced by the same percentage. Typically there would be no more than 2-3 projects under consideration for five year renewal in any given year. This would allow for in depth discussion if needed.
- There will be a 3rd year review to assess progress toward goals, objectives and funding targets. The interim review would be provided to the Directors as part of the committee's report at the regional association summer meetings and may include a recommendation for the reduction of funding if adequate progress has not been made.
- Approval of NRSP RC recommendation on five year budgets, new projects, and other actions will be by a simple majority vote of those voting at the ESS Annual Meeting 2. All NRSPs should expect a finite time frame for off the top support after which resources would decline to a maintenance level (e.g. \$50,000 to \$100,000/year). This would allow the project to maintain visibility as an NRSP and providing a conduit for outside resources to leverage AES funds. An excellent example of this can be found in the history of NRSP-3.
- 3. Total funds expended on NRSP projects cannot exceed \$2,000,000. This upper limit is slightly higher than the current \$1.731 million, but still well less that 1% of Hatch. This limit combined with more effective management and planned reduction of funding to existing projects will facilitate the development of new high priority NRSPs.

 NOTE: The requirement for a Management and Business Plan will be examined. The program requires submission of a plan that must include "provisions for developing alternative funding or reducing off-the-top funding to a minimal level". Included would be an assessment of transition options, and alternative funding sources that would help accomplish item 2 above.

Activity as of February 2013:

- The EDs, Mike Harrington in particular, are working to complete an official, revised version of the NRSP Guidelines. These revised guidelines will be distributed and uploaded to the ESCOP website when finalized.
- We created and distributed the fillable .pdf NRSP Midterm Review Form to all members
 of the NRSP-RC and the AAs of the projects scheduled for midterm review this year
 (NRSP4, NRSP6, and NRSP9). These completed forms were due to Chris Hamilton in
 the NCRA office by February 28, 2013 and were distributed to the other regions by
 March 15, 2013.
- This year should be considered a trial-run of our midterm review process, which may be updated/changed as needed.

- NRSP8's renewal, NRSP_temp281, is also under review by the NRSP-RC this spring.
 This project has submitted all required materials, which have also been distributed to the NRSP-RC members.
- The NRSP-RC will meet by teleconference to discuss NRSP_temp281 and the three midterm reviews on June 3 at 1 pm Central Time. If needed, a follow-up call will be scheduled for later in the summer.
- NRSP1 will be requesting a budget increase to cover upgrades and maintenance of NIMSS, in addition to a request to hire Sara Delheimer on full time as our Impact Reporting writer. The exact details of the NIMSS upgrade are not yet known, but the increase for Sara is described in the "NRSP001 Impact Communication Proposal for Increased Commitment" statement under the table below.
- A summary of NRSP budgets and projects up for review is listed below:

		Project Period	Midterm Review Year
†NRSP-1	National Information Management and Support System (NIMSS)	2011-2016	2014
NRSP-3	The National Atmospheric Deposition Program (NADP)	2009-2014	-
NRSP-4	Enabling Pesticide Registrations for Specialty Crops and Minor Uses	2010-2015	2013
NRSP-6	The US Potato Genebank: Acquisition, Classification, Preservation, Evaluation and Distribution of Potato (Solanum) Germplasm	2010-2015	2013
NRSP-7	A National Agricultural Program for Minor Use Animal Drugs	2009-2014	-
NRSP-8	National Animal Genome Research Program	2008-2013	-
NRSP-9	National Animal Nutrition Program	2010-2015	2013
††NRSP_temp281	National Animal Genome Research Program (NRSP8 renewal)	2013-2018	2016

[†] NRSP-1 is requesting a budget increase to cover NIMSS upgrade and increased commitment to impact communications. The exact details of the increase are not known at this time.

NRSP001 Impact Communication Proposal for Increased Commitment

Background

Effective communications of research outcomes is crucial to maintaining as well as building support for such programs. In order to effectively communicate impacts and outcomes of the multistate research program in each region, the NSRP001 Management Committee committed funds to support the hiring of a professional writer to prepare impact statements for all

^{††}NRSP_temp281's requested annual budget for 2013-2018 is \$500,000, the same as the expiring NRSP8's.

terminating multistate research/coordination projects, including NRSPs. These impact statements communicate the importance of Land Grant Universities and the funding required to sustain and grow the Agricultural Experiment Stations and Extension to the general electorate and influential leaders of America and American agriculture.

Since July 2012, the impact writer has designed a template for publishing Impact Statements that is visually appealing and facilitates comprehension, completed 42 impact statements for Multistate Research and National Research Support Projects that terminated in 2011 and 2012, helped to develop an archiving system for impact statements in NIMSS, and written several press releases and stories for the media to promote key outcomes and milestones reached by multistate research project teams (see appended Annual Report for details). Completed impact statements are now regularly published on regional websites and are promoted by AgIsAmerica via their web page (www.AgIsAmerica.org) and social media.

The WAAESD Office (WDO) has provided coordination, editorial oversight, and physical space for this effort to ensure a common voice and consistent approach to impact reporting efforts. The WDO also provides coordination between this effort and the ongoing efforts of ESCOP and ECOP (i.e., with kglobal, Cornerstone, the ESCOP/ECOP Communications and Marketing Committees, and any joint ECOP/ESCOP committee on Marketing and Communication). The WDO is uniquely poised to take on this responsibility because Sarah Lupis, the Assistant to the Director of WAAESD, is a communications specialist with over six years of experience as a science writer and communicator, including experience coordinating science writing teams. In addition, Dr. Michael Harrington, Executive Director of the WAAESD, serves on the ESCOP Communications and Marketing Committee and has led the development of impact statements for multistate activities. Examples of this effort can be found at www.waaesd.org.

Purpose and Need

Although initially conceived as a part-time position, temporary funds permitted the impact writer to work full-time from July 2012 to March 2013, when those funds were exhausted and the position returned to part-time. Based on the success of this initial period of implementation, we propose continuation of the impact writer position at a competitive full-time rate for the following reasons:

- There are over 50 projects terminating in 2012. Working full-time (40 hrs/wk), the writer has been able to finalize one to two impact statement per week. Working only part-time (18 hrs/wk), the writer would not be able to generate impact statements for all 2012-terminating projects in a timely manner.
- During the period of temporary full-time employment, the writer has developed additional impact stories and pitched them to national and institutional media outlets. A press release developed in October 2012 was published in over 10 media outlets. Efforts like this that provide additional promotion for multistate work would be curtailed if the position remains at part- time.

Proposed Scope of Work

The impact writer will continue to create impact statements using the proven process developed during the initial period of employment. For each terminating project:

• In October of the year prior to expiration, each regional System Administrator will provide the WDO with a list of terminating projects. The WDO and the writer will track

the status of impact statements (external to NIMSS) to ensure that all terminating projects are communicated in a timely and efficient manner.

- The writer will review SF-422 reports in the NIMSS and draft an initial impact statement.
- The writer will share this first draft with the project AA who will then pass it on to the committee for review. Committees will have up to two weeks to respond with comments.
- The writer will develop a final draft impact statement based on comments from the AA and committee and will format the impact statement, including addition of photographs/graphics/charts/etc. as provided by the committee for this purpose. The writer will distribute this near final version to the committee via the AA to ensure that all the information is correct, photo/graphic captions are accurate, etc. Committees will again have up to two weeks to respond with comments.
- The writer will make final revisions to the impact statement and send the final version in PDF form to the AA and committee for approval.
- Once the final version is approved, the writer will upload the impact statement on NIMSS and distribute to the regions, ESCOP, ECOP, NIFA, and kglobal as necessary.

Additional Communications Efforts

In addition to developing impact statements, the writer will create press releases and feature stories about multistate research activities for distribution to participating universities, government agencies, industry, and regional and national media outlets their use. Additional communications efforts will not be limited to terminating multistate research projects, but will also include new projects and projects that have reached major milestones. In this way, impact of multistate activities will reach a wider audience in a timely manner. Selection of stories for additional communication efforts will be coordinated with the NRSP001 Management Committee, the ESCOP Communications and Marketing Committee, the ECOP Communications and Marketing Committee, any joint ESCOP-ECOP Communications committee, kglobal, and Cornerstone to ensure that timely, relevant stories are distributed.

Budget Justification

Salary and benefits for the writer are projected at \$24,980 and \$8440 (24.1%) respectively. The WDO will continue to provide oversight, review and coordination for \$6,000. Software updates are projected at \$1,000. Travel/Other funds are requested for long distance telephone charges and to attend the ACE Annual meeting and/or the ESS meeting to summarize activities.

Budget

Category	Proposed Annual Expense
Impact Writer Salary + Fringe (24.1%)	\$34,980
Fringe benefits (24.1%)	8440
WDO Coordination	\$6,000
Software/Equipment/Office Supplies/Phone	\$1,000

Travel/other	\$3,000
TOTAL	\$53,425

MRC Item 14.5: NC Nomination for National Multistate Research Award

Nominating Region: North Central

Nominator: Neal R. Merchen E-mail: nmerchen@illinois.edu

Project or Committee Number and Title: NCCC 042

Technical Committee Chair: Marcia Shannon **E-mail:** <u>CarlsonM@missouri.edu</u> **Administrative Advisor:** Neal R. Merchen **E-mail:** <u>nmerchen@illinois.edu</u>

Summary of Significant Accomplishments: Below

2013 Experiment Station Award for Excellence in Multistate Research Nomination of NCCC 042: Committee on Swine Nutrition

INTRODUCTION

Issue: The Multistate Committee on Swine Nutrition has served as the foundation for coordinated and collaborative swine nutrition research that has enabled the United States and the nation's pork industry to adapt and prosper throughout history. The United States is the world's third-largest producer and consumer and the largest exporter of pork and pork products. Pork accounts for approximately 50 percent of daily meat protein intake worldwide. As the sixth-largest U.S. farm commodity in cash receipts, the pork sector provides consumers with pork products, whose consumption has increased over the past years and is expected to continue increasing as the U.S. population grows. Since its inception in 1964, research conducted by this committee has led to improved human health, enhanced product quality, healthier environment, and increased economic returns on investment. The interdependent work of this committee—which includes representation from all regions of the United States—has been essential given that productivity growth in the U.S. hog sector varied substantially by region over time as a result of shifts in production attributed largely to environmental policy changes at the state level (Economic Research Service, 2011). In addition, U.S. energy independence as a national priority has created spillover effects in the animal industries that resulted in an urgent need for a national multidisciplinary team-driven approach to guide the nation in its response to use of byproducts of fuel production and major shifts in available feedstuffs. The mutually supportive nature of the committee's activities has allowed the swine and related industries to respond and adapt accordingly to changes in the marketplace, policy arena, natural environment, and science base.

Objectives: The overall objective of the committee is to provide quick resolution to nutritional problems and opportunities relevant to the swine industry, while paying particular attention to environmental, animal welfare, human health, and economic aspects of swine production.

SIGNIFICANT ACCOMPLISHMENTS

Outputs and Outcomes

Providing Solutions to Problems of Diet Form, Feedstuffs, and Feeding Programs: Early research studies, first published in 1969 and 1970, identified the importance of diet form (pellet vs. meal) in the feeding of swine and evaluated the value of unidentified growth factors in by-product

feeds, both of which were important in reducing feed wastage and improving the conversion of feed nutrients into edible animal protein. Since then, projects have dealt with feedstuff evaluation, gestating or lactating sows, vitamin and trace minerals, and amino acids. This balance and focus of research is important given that feed costs represent approximately 70% of the total cost of pork production; feed efficiency, body weight or rate of gain, mortality, and sow productivity are key drivers influencing production and are underpinned by swine nutrition research.

Research on the development of feeding programs to refine requirements for different production phases (i.e, sows versus growing pigs), body weight, genetic potential, and gender has been utilized by all associated with the swine industry. Likewise, the committee has exhibited balance in its research in establishing requirements for vitamins, minerals, and amino acids, as well as defining the best use of different feedstuffs and processing methods to improve feedstuff quality. In essence, these areas of research have not only had a direct impact on feed costs (commonly evaluated by productivity measures such as rate of gain, feed efficiency, and litter size) but also by impacting piglet mortality, all of which affect economic and environmental sustainability of pork production.

Providing Rapid Response to Problems of Contaminated Feed: Vomitoxin (DON)-contaminated corn, known to reduce feed intake and subsequent growth performance, is a major concern of many swine producers, and yet no research had been previously conducted to resolve the problem. Vomitoxin-contaminated corn was widely prevalent in the Corn Belt in 2010. In response, the committee rapidly set up a series of treatments in which a common DON-contaminated corn diet was fed to pigs across 12 experiment stations. The committee evaluated three commercial forms and reported that one product could eliminate the negative responses to the DON-contaminated corn. Within 4 months, the results were reported to the national media for immediate application.

Overcoming Barriers and Providing Economic Feed Alternatives: Another important current issue in the swine and feed industry involves the use of distillers dried grain with solubles (DDGS) in feed formulation. Although corn and soybean meal have been the main staples of swine diets since the 1950's, the large quantities of corn for ethanol production resulted in elevated corn prices, thus reducing the corn supply and ultimately the profitability of the swine enterprise. The committee undertook a study involving the feeding of various levels of DDGS and demonstrated that up to 45% could be used in swine diets without affecting performance. Because there was an associated issue with pork quality (soft bellies) noted in this project, the committee is currently evaluating various DDGS withdrawal strategies to alleviate this negative effect.

Providing Answers to Environmental Concerns: Another area of investigation is dietary phosphorus, which is of environmental concern if large quantities of phosphorus are excreted in manure. Depending on soil type, phosphorus excretion may impact where swine can be produced. To improve understanding of phosphorus nutrition, the committee worked on a project to clearly define the digestibility of phosphorus in different feeds and utilize this information to formulate diets minimizing dietary phosphorus levels while still meeting the pig's requirement for this essential nutrient. A similar project is underway with calcium. These projects deal not only with improving pig nutrition, but also address reduced impacts of swine production on the environment.

Serving as Recognized Leaders in the Scientific Community: Throughout its tenure, the committee has made its work highly visible and readily accessible by publishing under its name

(Multistate Committee on Swine Nutrition, NCCC 042, NCR 42) a total of 25 peer-reviewed papers, 34 scientific abstracts, and initiating 2 books (listed on NIMMS project website). Leveraging the quality and value of their scientific interaction, the current 16 individual members alone have collectively published over 1250 peer-reviewed articles, which have been cited in peer-reviewed literature over 20,000 times. In addition, members of the committee have been selected to serve on the past seven Nutrient Requirements of Swine committees of the National Academies, an honor bestowed on top scientists with membership and service to the nation. The work of this multistate committee serves as a scientific resource to inform the development of the National Academies reports, which are used as the gold standard by regulators, industry, and academe.

Impacts

Four areas of recent high impact that exemplify the value of the committee's work can be seen in the areas of human health, product quality, economics and environment. Specifically, the committee has had measurable impact in the following areas.

Health Impacts: Advanced knowledge regarding the nutritional value of feed ingredients and the nutrient requirements of pigs, as a result of the research coordination and results provided by the Committee on Swine Nutrition, has allowed producers to meet consumer demands for reduced levels of fat in pork. Today's pork has 16% less fat and 27% less saturated fat as compared to 1991.

Product Quality Impacts: It is well known that feeding DDGS to growing and finishing swine can result in less-than-desirable carcass fat quality. As a result of timely interdependent feeding trials and research published by the committee, it has been shown that DDGS can be used successfully in the pork industry, without deleterious effects. As a result, a conservative estimate of the use of DDGS in the pork industry indicates an increase of 37% over the past several years to over 1.1 million metric tons (16 percent of total production).

Economic Impacts: Based largely on the type of collaborative research produced by this committee, feed productivity (unit gain per unit feed) has realized nearly 8% annual growth rate per year in the swine feeder to finish industry. Productivity gains arising from efficiencies in feeding have prevented pork prices to consumers from rising by 20-30% (ERS, 2011).

Environmental Impacts: The committee's research on bioavailability of phosphorus and phytase to reduce phosphorus excretion has been cited in at least 16 patents. Based on the committee's research, dietary phytase can reduce manure phosphorus concentration by up to 50%.

Links to Extension, Integrated Activities, and Partnerships

A distinctive feature of NCCC 042 is that Extension has been integral to the planning, execution, and delivery of the committee's work. Approximately 30% of the committee's current membership is represented by Extension. While the majority of multistate committees are populated and led by individuals with primary research appointments, NCCC 042 is currently led by an Extension Swine Specialist. Comprised of seasoned researchers and educators as well as new faculty, perspectives range from those dealing with education, youth program development, production and environment, and pigs as models of human nutrition, which allows for mentoring and exchange of ideas and

technologies at meetings in an atmosphere that is unselfish and productive. Leveraging relationships and funding have been key to accomplishing goals of the committee. Routinely meeting with other multistate committees (e.g., S1044), representatives from the American Feed Industry Association, the National Pork Board, and others has resulted in support to address industry needs.

PARTICIPATING INSTITUTIONS

Brian Kerr (USDA, IA)	Layi Adeola (IN)	John Patience (IA)
Phil Miller (NE)	Gary Cromwell (KY)	Shengfa Liao (MS)
Don Mahan (OH)	Gretchen Hill (MI)	
Michael Azain (GA)	Tom Crenshaw (WI)	
Sam Baidoo (MN)	Sung Woo Kim (NC)	
	Phil Miller (NE) Don Mahan (OH) Michael Azain (GA)	Phil Miller (NE) Gary Cromwell (KY) Don Mahan (OH) Gretchen Hill (MI) Michael Azain (GA) Tom Crenshaw (WI)

Action Requested: Approval of MRC recommendations for renewals, midterm reviews and nomination of NCCC42 for National Multistate Research Award. Please also provide feedback on the need for a full-time Impact Writer.

Actions Taken:

• All MRC recommendations for NC renewals, midterm reviews were approved.

- NCCC42 was approved as the NC nominee for the national multistate award. Chris forwarded the nomination on to Rubie Mize for review by the ESCOP S&T committee.
- The NCRA decided to table any recommendations regarding adding to NRSP1 to fund a full-time impact writer pending error corrections to the NRSP1 budget increase proposal. It appears that the math for the salary/fringe may be incorrect. The NCRA will review the increase again at our July meeting.
- The NCRA voted not to reduce our NC regional trusts (OTT funded projects, NC7 and NC1100) by the amount of sequestration, for FY2013. We will revisit this again when the FY2014 budgets are final.
- NRSP project budget reductions:
 - The NCRA recommended keeping the two \$50,000 NRSPs at their current amounts, while reducing the others by the % of the sequestration reduction to Hatch.

Item 15.0: Nominations Committee Report

Presenter: Ernie Minton, Nominations Committee

NORTH CENTRAL REGIONAL ASSOCIATION OF STATE AGRICULTURAL EXPERIMENT STATION DIRECTORS

2014 Officers and Committee Members (Fiscal Year 2014 begins **October 1, 2013**)

Officers:

E. Minton, KS, NCRA Chair (14) (eminton@ksu.edu)
D. Benfield, OH, Past Chair (13) (benfield.2@osu.edu)

Executive Committee:

E. Minton, KS, Chair (14) (eminton@ksu.edu)
D. Benfield, OH, Past Chair (13) (benfield.2@osu.edu)
D. Hamernik, NE, MRC Chair (14) (dhamernik2@unlnotes.unl.edu)
A. Leholm, NCRA, Exec. Vice Chair (Perm) (leholm@cals.wisc.edu)

Multistate Research Committee (3-year term):

D. Hamernik, NE, MRC Chair (14) (dhamernik2@unlnotes.unl.edu)
Archie Clutter, NE (12-15) (aclutter2@unl.edu)
J. Colletti, IA, (13-16) (colletti@iastate.edu)
R. Lindroth, WI, (14-17) (lindroth@wisc.edu)
A. Leholm, Ex-Officio (leholm@cals.wisc.edu)

Resolutions Committee (3-year term):

M. Linit, MO, (11-14) (<u>linit@missouri.edu</u>)

Nominating Committee (2-year term):

Ernie Minton, KS (12-14) (eminton@ksu.edu)

Committee on Legislation and Policy

S. Pueppke, NC Representative, MI (<u>pueppke@msu.edu</u>)
A. Leholm, Ex officio, (<u>leholm@cals.wisc.edu</u>)

Rural Development Center Board (2-year term):

J. Baker, MI (perm, MSU rep), (<u>baker@anr.msu.edu</u>) A. Ponce de Leon, MN, (13-15) (<u>apl@umn.edu</u>) Daniel Scholl, SD, (12-14) (<u>daniel.scholl@sdstate.edu</u>)

NRSP Review Committee Representative (NCRA):

A. Ponce de Leon, MN (apl@umn.edu)

ESCOP (3-year term):

E. Minton, KS, NCRA Chair (14) (eminton@ksu.edu)
D. Benfield, OH, NCRA Past Chair (13) (benfield.2@osu.edu)

A. Leholm, NCRA (Perm Alt) (leholm@cals.wisc.edu)

ESCOP Executive Committee:

E. Minton, KS, NCRA Chair (14) (eminton@ksu.edu)
A. Leholm, NCRA (Perm Alt) (leholm@cals.wisc.edu)

ESCOP Chair's Advisory Committee:

A. Leholm, NCRA (Perm Alt) (leholm@cals.wisc.edu)

ESCOP Budget and Legislative Committee:

S. Slack, OH (oardc@osu.edu)
J. E. Minton, KS (eminton@ksu.edu)
Karen Plaut, IN (kplaut@purdue.edu)

ESCOP Communications and Marketing Committee:

W. Wintersteen, IA (agdean@iastate.edu)
W. Ravlin, IN (<u>ravlin.1@osu.edu</u>)
A. Levine, MN (<u>aslevine@umn.edu</u>)
A. Leholm, NCRA (Perm Alt) (leholm@cals.wisc.edu)

ESCOP Science and Technology Committee:

F.W. Ravlin, OH (ravlin.1@osu.edu)
A. Ponce de Leon, MN (apl@umn.edu)
J. Colletti, IA, (colletti@iastate.edu)

ESCOP Science and Technology Committee Social Science Sub-Committee (3-year term):

Beth Forbes, IN (11) (forbes@purdue.edu) - Ag Communications Scott Loveridge, MI (13) (loverid2@anr.msu.edu) - Ag Econ (Joe Colletti to replace when Scott steps down)

> Mike Retallick, IA (13) (<u>msr@iastate.edu</u>) – Ag Education Soyeon Shim, WI (13) (<u>sshim7@wisc.edu</u>) – Human Sciences Vacant – Rural Sociology

ESCOP NIMSS Oversight Committee:

J. Colletti, IA (colletti@iastate.edu) F.W. Ravlin, OH (ravlin.1@osu.edu)

North Central Bioeconomy Consortium NCBEC Vice President, J. Colletti (colletti@iastate.edu)

Action Requested: None, for information only.

Item 17.0: AES/CES Communications & Marketing Project

Presenters: Bill Ravlin and Arlen Leholm

Purpose of the effort:

The Experiment Station Committee on Organization and Policy (ESCOP) and the Extension Committee on Organization and Policy (ECOP) joined together in 2012 to coordinate a targeted educational effort to increase awareness and support of basic and applied research and transformational education provided by land-grant universities through the Agricultural Experiment Stations (AES) and Cooperative Extension System (CES). kglobal, a public affairs/marketing firm, in cooperation with Cornerstone Government Affairs, are assisting with this educational effort. Guided by the AES/CES Communications and Marketing Committee (CMC), ESCOP and ECOP have entered into a two-year agreement effective May 1, 2012 with kglobal and Cornerstone, with annual renewal. The annual commitment is \$400,000 split equally between ESCOP and ECOP. See link below for a more complete description of the effort.

The CMC had their annual meeting on Sunday, February 24, 2013 from 4 to 6 PM during the CARET meetings in Washington, DC. Nancy Cox, Research, and Scott Reed, Extension, cochairs of CMC led a discussion on strategies and priorities for the coming year. Actions from this meeting were reported at the February 25, ESCOP Monday morning meeting.

As of March 2013, the CMC Committee approved the addition of an ACE (Assoc for Communication Excellence) representative, Faith Peppers, to the committee. The CMC has also been working with ACOP to determine whether they wish to be involved and now has a member of ACOP listening in on monthly calls.

Information for Directors, Administrators and University Communications Professionals: http://escop.ncsu.edu/comattach/3 CMC%20Directors%20Info_Final_20120814.pdf

Monthly kglobal Report:

Each month kglobal provides an electronic update to the Communication and Marketing Committee (CMC) of their work which is conducted in close coordination with Cornerstone and the CMC. See the monthly kglobal reports and all other background information on CMC efforts at the link here: https://mywebspace.wisc.edu/xythoswfs/webui/_xy-48320354_1-t_vIvjX5gF

Action: None, for information only

Item 19.0: Formation of an NC Regional Water Quality NCERA

Presenters: Chris Hamilton, All

Background:

USDA-NIFA provided funding under AREERA Section 406 from 2000 to 2012 for a coordinated National Water Program based on a regional structure. Since these 406 programs have ended, other regions are working on setting up water quality committees through the multistate program. Since NC Extension is very interest in a regional water quality committee, we propose considering setting up an NCERA, composed of both AES and EXT members to help put together the proposal. More discussion on this will also take place during the summer NC AHS/CARET Mini-Land Grant meeting in Des Moines, IA.

Water quality committees in other regions:

WERA1020: http://lgu.umd.edu/lgu_v2/homepages/home.cfm?trackID=14536

Draft SERA Proposal, NE working on something similar to the below SERA proposal.

Proposal to Establish a Southern Extension and Research Activity (SERA) for Water Resources

Project Number: TBA

Requested Duration: October 1, 2013 to September 30, 2018.

I. Project Title: Southern Region Integrated Water Resources Coordinating Committee

II. Statement of Issues and Justification:

Water quantity/availability and water quality protection are interrelated, high-priority issues throughout the South. A projected 40% increase in population between 2012 and 2050 will dramatically increase the demand for finite water resources and the potential for adverse impacts on the quality of those resources. While agriculture currently accounts for about 80% of consumptive water use nationally and for more than 90% in parts of the south and west, demand by urban and energy sectors are increasing. At the same time, climate-related factors are increasing concerns about food security, natural system health, and water supply stress.

New technologies, Best Management Practice adoption, and improved water policies are needed to meet future water resource challenges. For agriculture, these include developing water-efficient crop varieties and cropping systems, increasing water capture, transitioning to dryland and limited-irrigation strategies, improving water distribution systems and irrigation efficiencies, and developing economic risk assessment tools that enable producers to identify profitable, water-efficient production options. Agriculture also must protect water resources by reducing off-site transport of sediment, nutrients, pesticides, and pathogens. Similar challenges exist for the urban sector to enhance domestic water conservation, improve irrigation efficiency and management, improve landscape design, expand and optimize water reuse, and improve water capture, while at the same time reducing point and nonpoint source pollution in stormwater runoff. At the watershed scale, all citizens will be affected by these outcomes and are stakeholders in achieving long-term water security.

USDA-NIFA provided funding under AREERA Section 406 from 2000 to 2012 for a coordinated National Water Program based on a regional structure. This program effectively used an integrated, multi-disciplinary approach that is essential to address complex water quality and quantity problems. The Southern Region Water Planning Committee, first formed by the Southern Extension Directors in 1988, served as the model for the national program and has represented the South. As USDA-NIFA works to develop a new funding and programmatic model to integrate water resources research, outreach and teaching, a Southern Multi-State Coordinating Committee is needed to sustain this long-standing regional effort and fill the gap created by completion of the current 406 Regional Integrated Water Projects. In addition, there are a number of existing networks and research programs that must be linked to solve critical water problems. USDA-NRCS and ARS, Cooperative Extension, Agricultural Experiment Stations, Water Resources Institutes, existing multi-state committees, and non-governmental organizations all have unique roles that should be coordinated. The niche of Land Grant Institution (LGI) water programs should be to foster the integration of university research, teaching, and outreach, while partnering with others, to translate science into action. However, one essential component is more significant partnerships with USDA-NRCS and ARS. Continuing coordination with 1890, 1994, and Hispanic-serving institutions in the region also will be important to create linkages, develop and share resources for underserved audiences, and build capacity within these institutions.

The proposed Regional Water Resources Coordinating Committee will include representation from all 13 southern region 1862 LGIs, 1890 LGIs, 1994 LGIs, Puerto Rico, and the Virgin Islands. Once formed, this team will identify representatives from sister agencies and other entities that should be engaged in support of the effort. The team also will develop specific output and outcome goals that are complementary to the other existing water-related SERAs including SERA003 (IPM); SERA006 (Soil, plant, byproduct, and water analyses); SERA017 (Agricultural phosphorus); and SERA020 (Conservation tillage).

III.Objectives:

- 1) Convene an annual meeting of the committee to a) foster multi-state, multi-disciplinary collaboration on projects and programs to address high priority water resource issues; b) develop more effective linkages between extension and research personnel at LGIs and with external partners, and c) identify specific annual outputs and impacts.
- 2) Establish priorities for LGI work on southern water resource issues.
- 3) Develop collaborative, multi-state project proposals to address identified issues, and where appropriate, coordinate use of internal funding on priority projects.
- 4) Conduct a biennial, regional water conference to share research and resources, and to facilitate broader interaction among faculties and with external partners.
- 5) Develop a web-based portal for LGI water programs, curricula, and resources to enhance technology transfer among institutions and to external partners and clientele.

IV. Procedures and Activities:

- 1) Conduct an annual committee meeting and facilitate routine communication. Work with the Administrative Advisors to develop the first annual meeting (agenda, location, etc.). Subsequent meetings will be planned and coordinated by an elected chair and vice-chair of the committee. Conduct quarterly (or as needed) teleconferences to coordinate efforts.
- 2) Prepare a plan of work. First, existing water programs will be inventoried to avoid duplication or overlap. Second, potential new programs will be assembled and prioritized. Finally, a 5-year work plan will be written to identify mechanisms for better coordination and

- integration of LGI water programs across the South with the goal of achieving greater adoption of research-based methods to conserve and protect water resources. The plan will be finalized in year 1 and revised biennially to maintain relevance.
- 3) <u>Seek external funding</u>. Teams will be recruited as appropriate to collaborate in the development of multi-state and regional proposals for research, extension, and integrated projects that address priority water resource issues in the South.
- 4) <u>Coordinate use of internal funding</u>. For selected priority issues, institutions may opt to commit internal funding to participate and achieve specified outcomes.
- 5) <u>Conduct a biennial regional conference</u>. Seek external funding through the collaborative grant writing effort to organize/conduct the first regional conference in year 2. Appoint a conference subcommittee to coordinate the process with support from the full committee.
- 6) <u>Develop a regional web-based water resource clearinghouse</u>. Establish a web subcommittee to design a clearinghouse for water resources information and tools. Coordinate with eXtension to minimize duplication. Seek external funding to support development and maintenance. The website will be housed and managed by one of the 1862 LGIs. Begin work in year 1 and complete site development by year 3.
- 7) Evaluate outputs and impacts. Establish an evaluation subcommittee to ensure that specific goals and milestones are established and met and to coordinate development of progress reports and the final report.

V. Expected Outcomes and Impacts:

- 1) New and innovative multi-disciplinary approaches to key water challenges in the South.
- 2) New collaborative research and extension projects and programs that serve the needs of the Southern Region to enhance, conserve, and protect water resources.
- 3) More and stronger partnerships with key external water resource agencies and groups, e.g., USDA-NRCS.
- 4) Increased awareness and knowledge of water resource issues and increased adoption of science-based management practices for water conservation and water quality protection by agricultural and urban stakeholders.
- 5) Greater water and food security in the South.

VI. Internal and External Linkages:

Because a key objective of this committee is to foster integrated research, teaching and extension involving all disciplines relating to water resources, it is requested that Deans and Directors sponsor at least two professionals from each state to attend the annual meetings as voting members; others also may attend. Disciplines, agencies (state and federal) and private entities that should participate and/or be engaged include:

- 1) LGI disciplines: Ag Economics, Ag/Bio Engineering, Soil and Crop Science, Environmental Horticulture, Forestry, Wildlife/Fisheries, Marine Science, Animal Science, 4-H, Family & Consumer Science.
- 2) State agencies: Conservation agencies, water boards, agriculture and environmental protection departments, soil and water conservation districts.
- 3) Federal agencies: NRCS, ARS, NIFA, EPA, FSA, NOAA, USGS.
- 4) Private entities: Environmental and water NGOs, Farm Bureau, commodity groups.

VII. Educational Plan:

The annual meeting will serve as a venue for sharing information and resources among committee members that will then be communicated and/or distributed by members to all

participating states, territories, and partner entities as appropriate. The biennial conference will serve as a broader opportunity to provide training and share information, resources, and lessons learned. The regional website will provide a clearinghouse for water-related resources that can be accessed, adapted, and employed by member institutions, partner entities, and citizen stakeholders throughout the region.

VIII. Governance:

Officers will include a chair, vice-chair (records minutes and maintains a current e-mail list of members), and past-chair. Elections will occur at the annual meeting with new officers installed at the conclusion. Committee meetings will be held once per year, with alternate year meetings potentially held in conjunction with the biennial regional conference.

Discussion Notes:

Joe Colletti mentioned that Extension could try to work with our existing NC1190 project, but we think Extension is looking for a more "on-farm" project. More discussion on this issue at the Des Moines CARET/AHS session when we meeting with Extension.

Action Requested: Decide if we would like to create an NCERA to serve as a regional water quality group. If so, select a small number of AES directors to work with Extension to development the integrated multistate proposal.

Action Taken: Yes, AES would like to be involved with Extension in creating a regional water quality group. Marshall Martin and Archie Clutter volunteered to serve on a this group, if it's created. Ron Turco was also suggested as a potential member. More discussion on this issue at the Des Moines CARET/AHS session when we meeting with Extension.

Item 20.0: NRSP-6 Report Presenter: John Bamberg

Executive 3-year summary for NRSP6 Midterm Review, CY2010-2012

A. Acquisition. A total of 74 new germplasm stocks were collected in the wild and 33 more imported from cooperators.

- **B. Preservation** schedule was maintained and **Evaluation** was successful for many useful traits: Seed populations multiplied = 660, germination tests = 4014, virus tests = 2110. Over 3000 field plots were grown for evaluation and taxonomy. We worked with numerous cooperators, providing germplasm handling technology, custom samples and hybrids resulting in identification of elite new materials for antioxidants, anti-appetite proteins, orange flesh, folate, thiamine, starch balance, low acrylamide, anti-cancer, resistance to greening, frost tolerance and calcium use efficiency. We discovered a new floral mutant. We demonstrated that hotspots of genetic diversity can be identified in the wild for collecting, and that an AFLP-based core collection of model species will capture all of the known useful traits. We showed that pesticide overspray of wild populations near farmers' fields in Peru may reduce fecundity, but probably not gentic diversity of the wild populations.
- **C.** Classification reduced the number of species to about 100, for a more stable and predictive taxonomy.

D. Distribution totals were strong showing continued interest and value in our germplasm:

Category	Seed	TU	TC	IV	DNA	Plants	Herb	Total	Populations
Domestic	6,709	13	7,681	4,435	123	586	11	19,558	13,236
Foreign	2,537	0	0	1,578	3	0	0	4,118	2,460
Total	9,246	13	7,681	6,013	126	586	11	23,676	15,696

¹ Types of stocks sent/(number of seeds, tubers or plantlets per standard shipping unit): Seed= True Seeds/(50), TU = Tuber families/(12), TC = Tuber Clones/(3), IV = *in vitro* stocks/(3), DNA = dried leaf samples/(1), Plants = rooted cuttings /(1), Herb= herbarium specimens/(1).

E. Outreach. A robust website including access to all NRSP6 stock data, ordering information, technology tips, mapping features, publications, and complete reference to administrative reports was maintained. We hosted numerous visiting scientists, were featured in two documentary films and a syndicated article by the Milwaukee Journal Sentinel, gave invited keynote lectures at the <u>US Botanic Gardens (DC)</u>, and <u>Latin American Potato Association (Cuzco)</u>; served as Editor in Chief for American Journal of Potato Research and chairman of the Potato Crop Germplasm Committee. We returned benefits to Peru by cooperatively selecting and testing productive frost hardy and calcium responsive lines in the highlands. We trained two summer interns attending UW-Madison and Princeton.

F. Impact. Ten cultivar releases were published, each having at least one of nine different exotic potato species in their pedigrees. No other crop matches potato in use of exotics in

practical breeding. Staff published 55 scholarly research papers, and nearly 400 more were cited by others using NRSP6 species.

Work Plans / Staff & Funding / administration / Integration

Acquire wild germplasm in southwest USA and valuable germplasm from other genebanks and/or scientists

Preserve/multiply 200 populations per year, with associated maintenance of purity, germination, and health

Classify in a way that maximizes the groupings of germplasm by genetic value Distribute germplasm and info rapidly to clients in a way that maximizes their research and breeding success

Evaluate traits already under study and engage new traits, especially nutritional ones (like anti-diabetes)

Publish results of evaluation and technical research (see above)

Lead Crop Germplasm Committee and American Journal of Potato Research
Maintain integration with UW-Madison as full professor in Dept of Horticulture
Maintain >\$45K level of 2012 industry support and \$150K maintenance level of Multistate
Research Funds

Action Requested: None, for information only.

Item 23.0: Other Business

- PBD Update: Steve Slack
 - Sonny's requested survey similar to the ARS one from last year; be aware of this. Goal: to create a state of affairs of facilities to bring forward to Congress
 - APLU: Bringing in selective universities from Canada and Mexico. May roll in through various COPs, but structure mostly still unknown. Same discussions occurring for Hispanic serving institutions.
 - BAA: If APLU assessments not paid, then institutions cannot vote. Since marketing assessment is included, sections can decide on their own how they want to proceed for marketing involvement of unpaid states. This may mainly be an E-extension issue for EXT to deal with.
 - New Deans and Directors Program has fallen off in the past few years, but we
 would like to re-establish. How you mentor your new members is very important,
 since attendees have often been in their roles for a few years before they attend
 the formal program
- Sharing Our International Programs
 - Many of us are stretched thin in places where other institutions may also be
 - Let's share/work together on these international programs
 - Bill Ravlin volunteered to create a database of basic information on NC Ag programs internationally
 - First we should contact our International Programs offices and see what information they have. They might already have all this for us.
 - Working Group (will check in with NCRA at future meeting)
 - i. Steve Pueppke
 - ii. Joe Colletti
 - iii. Karen Plaut
 - iv. Bill Ravlin