



NERA Meeting
Stanley Hotel, Estes Park, CO – Library
September 26, 2011
3:00-6:00 PM

Draft Minutes

In Attendance:

Brad Hillman (NJ), Chair
Tom Burr, NYG
Cameron Faustman, CTS
Stephen Herbert, MA
Michael Hoffmann, NYC
Tim Phipps, WV
Richard Rhodes III, RI
Dan Rossi, NERA
Fred Servello, ME
Adel Shirmohammadi, MD
Gary Thompson, PA
Jon Wraith, NH
Rubie Mize, NERA (Recorder)

MAJOR DECISIONS

- Approved the draft agenda for this meeting as posted in url—
<http://www.nera.umd.edu/workshop/NERAAgendaSept2011.pdf>
- Approved the minutes of the NERA meeting held at Mystic, CT on July 11, 2011, as posted in url--- <http://www.nera.umd.edu/workshop/NERAMinutesJuly2011.pdf>
- Approved the release of the 2012 NERA Planning Grant
- Approved MAC's recommendations to approve the following –
<http://www.nera.umd.edu/workshop/MACReportSept2011.pdf>
 - Proposal for a Coordinating Committee NE_temp1882 - Nanotechnology Risk Assessment
 - Request to Write a Proposal entitled, "Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US" [NE1031]
- Approved the following nominations –
 - NERA Vice Chair - Dr. Adel Shirmohammadi
 - NERA Officer-at-Large - Dr. Fred Servello
 - ESCOP Science and Technology Committee Member - Dr. Tim Phipps
 - ESCOP Communications and Marketing Committee Member - Dr. Richard Rhodes III

THE JOB JAR

(Work Assignments for the Executive Director)

- Release the announcement for the 2011 NERA Planning Grant. Deadline is November 23, 2011
- Assist Drs. Mike Hoffmann, Jon Wraith and Brad Hillman who will be working on the US-Canada Climate Change proposal and budget to implement the recommendations from the White Paper.
- Remind the Directors to hold the dates and submit the names and contact info of their faculty who will attend the Northeast Invasive Plant Species Forum to be held at Beltsville, MD, on March 21-22, 2012.

- Co-sponsor with NEED the Northeast Foods Forum to be held at Beltsville, MD, on December 7-8, 2011.
- Assist the host and the 2012 North Central and Northeast Summer Joint Session Planning Committee in preparing for the 2012 summer meeting to be held at Burlington, VT, on July 2012.
- Prepare for the NERA Spring Meeting to be held at the Admiral Fell Inn, Baltimore, MD on March 20-21, 2012
- Send the list of 'Best Practices' topics to the Directors and ask them to submit their choice(s) and to help identify speakers/presenters.
- Assist Dr. Mike Hoffmann in leading the development of the 2012 ESS/SAES/ARD program. A suggestion was made to invite speakers from Washington State Univ. to talk about their partnership with the apple growers, as one of the topics under our search for alternative funding for agricultural research.

Minutes:

1. Welcome and Introductions – Chair Brad Hillman
2. Approval of Agenda – Chair Brad Hillman

The agenda was modified to include the discussion of the BAC Call to Action.

3. Approval of [Minutes from the July 11, 2011 NERA Meeting at Mystic, CT](#) – Chair Brad Hillman
The motion made to approve the minutes was seconded and passed.

4. Executive Director's Report – Dan Rossi
Please see detailed report below.

ED Dan Rossi noted that he is actively engaged in follow-up actions for the US-Canada Think Tank meeting held at Montreal on June 28, 2011. He is also facilitating the Northeast Invasive Plant Species Forum to be held on March 21-22, 2012, and assisting NEED Exec. Dir. Linda Kay Benning in preparing for the Northeast Foods Forum to be held on December 8, 2011. Both will be held at the USDA-ARS facility in Beltsville, MD. NERA will co-sponsor the Northeast Foods Forum.

5. ESCOP Update – Dan Rossi/Jon Wraith
Please refer to ESCOP and Science and Technology Committee reports below.

A committee had been appointed by the ESCOP Chair to operationalize the roadmap by integrating it in our marketing, advocacy and budget planning. The Communication and Marketing Committee and the Budget and Legislative Committee are heavily engaged in this activity.

S-1032 Improving the Sustainability of Livestock and Poultry Production in the United States, won the 2011 National Multistate Research Award for Excellence. The Science and Technology Committee will recommend that MRF off-the-top funding in the amount of \$15,000 be awarded to the S-1032 Technical Committee to support travel to award ceremony and activities which enhance and contribute to research and/or outreach objectives of project. This will be voted on at the ESS Meeting tomorrow.

There are a few NERA appointments to ESCOP committees that need to be officially appointed by incoming ESCOP Chair Lee Sommers. Rubie Mize will send the info to Dr. Sommers/Harriet Sykes.

Dr. Mike Hoffmann will be nominated for the position of ESCOP Vice-Chair (2014 Chair). This will be confirmed by votes at the ESS Meeting.

K-Global, the new marketing firm for the system and Cornerstone are working together on a pro-active marketing campaign to raise awareness of the LGU system among our stakeholders. K-Global representatives will give a presentation at one of the ESS/SAES/ARD workshops.

6. One Line Budget Proposal – Dan Rossi

The proposal is to have the entire NIFA budget in a ‘one line budget’, like NSF and NIH. “All NIFA programs would first receive funding equal in amount to what they received in the base year. The excess would then be divided into two pools — “competitive” and “capacity”, with a 70:30 split. The belief is that this will make a stronger case if we are just fighting for one line. This will be incorporated in the next Farm Bill if everyone agrees. Agreement will be needed from the entire LGU family – 1862’s, 1890’s, and 1994’s. If there is a decrease in the budget, only the ‘competitive’ portion will first be adjusted and only when exhausted, will there be proportional cuts to the ‘capacity’ portion.

Based on the discussions, four main issues are emerging---

1. Do you support the one-line budget concept?
2. What is the base year? For purposes of discussion, FY2011 is being used.
3. What is the acceptable split between capacity and competitive?
4. How do we handle the ‘set asides’? Some small 1862’s, the 1890’s and 1994’s are concerned with this.

Is 70:30 a good balance? Extension wants a 45:55 split, but nothing is final at this point.

Additional issues that will come up include matching funds and the full negotiated F&A.

7. BAC Call for Action Letter

The letter (see below) was circulated among the Directors. This is strongly supported by the private sector. It is very generic and it is expected that majority of institutions will endorse it.

8. Eastern US-Canada Climate Change Collaboration – Mike Hoffmann

- o US-Canada Think Tank Meeting Report (see below)
- o Cornell and McGill White Paper (see below)

Dr. Mike Hoffmann wrote the White Paper, “Feeding Our Great Cities”, with Dr. Don Smith of McGill University. There are recommendations in the paper for greater investments in agricultural research from now to 2025. There are opportunities in the Northeastern US and Canada brought about by climate change that should be taken advantage of. Other products from the US-Canada Think Tank are collaborations on ‘Use of Farm Level Data’ and ‘Water Table Management’.

The number of farmers is increasing but the land size is not changing. Are we educating the new, next generation farmers? What are the economic constraints, insurance issues and risks that need to be addressed? An advantage of smaller farms is lower carbon footprint. What is their long term sustainability? Dr. Hillman noted that Dr. Peggy Brennan is doing a study on where we will be in ten years, when kids are not taking over their parents’ farms.

A suggestion was made to extend the discussion of these issues about the next generation of farmers, the demographics and land conversion issues associated, perhaps through a planning grant or a forum. In ME, NH and VT, discussions may be different, so how do we facilitate sub-regional discussions?

What are the next steps for the US-Canada White Paper? –

- Identify the top five priorities and advocate for funding and engage the academic community
- Put together journal articles for submission to scientific publications
- Continue the discussion at the summer meeting
- Put together a proposal and budget on how to implement the recommendations. Drs. Mike Hoffmann, Jon Wraith and Brad Hillman will work on the proposal.

9. Northeast Invasive Species Forum – Fred Servello/Cameron Faustman

The regional forum will be held right after the NERA Spring Meeting, on March 22, 2012 at USDA-ARS, Beltsville, MD. Please refer to the draft program below.

The forum will focus on invasive plant species, addressing Northeast region issues and will include natural science and social science experts. The goal is to build teams for multistate and federal funding pursuits.

The Directors were requested to identify faculty who should attend, and to support their travel to the forum. Those who can participate in multistate projects, even those outside the College, should be informed about the forum.

Attendees will be requested to register, but there will be no registration fee. NERA will cover the meeting/catering costs.

Rubie Mize will send an email reminding the Directors to hold the dates.

APHIS and EPA will also be invited to the Forum.

10. Northeast Local Foods Forum – Dan Rossi

As a follow-up to the Northeast Summer Joint Session, NEED is taking the lead in putting together a regional foods forum. NERA was asked to be a co-sponsor. The forum will be held on December 8, 2011, at USDA-ARS, Beltsville, MD. Rubie Mize is helping with the logistics. Please see more info on this forum below.

11. Multistate Activities Committee Report (see below) – MAC Chair Jon Wraith

- Proposal for a Coordinating Committee NE_temp1882 - Nanotechnology Risk Assessment
- Request to Write a Proposal entitled, “Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US” [NE1031]
- Mid-term Reviews:
 - NE9 - Conservation and Utilization of Plant Genetic Resources
 - NE1031 - Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US
- NRSP Review Committee Recommendations
 - NRSP_temp1 NIMSS 5-year proposal
 - FY2011-12 Off-the-Top Funding for NRSPs 1-3-4-6-7-8-9

A motion was made to approve the NE_temp1182 proposal and the Request to Write for NE1031. The motion was seconded and passed.

The following recommendations by the NRSP Review Committee will be voted on at the ESS Meeting. Rubie Mize will distribute the ballot at the ESS Meeting.

- NRSP-1 = \$50,000, and the new five-year proposal to support NIMSS
- NRSP-3 = \$50,000
- NRSP-4 = \$481,182
- NRSP-6 = \$150,000
- NRSP-7 = \$325,000
- NRSP-8 = \$500,000
- NRSP-9 = \$175,000

Dr. Kirby Stafford III will be the new NERA Delegate to the NRSP Review Committee. Dr. Dan Rossi will be replaced by Dr. Arlen Leholm as the Executive Vice Chair as it is the North Central's turn, to be followed by Dr. Mike Harrington (Western region). Dr. Abel Ponce de Leon is the new Chair for this committee.

9. 2012 NERA Planning Grant – Dan Rossi

The Directors approved the release of the 2012 announcement (see below) with a motion. NERA had so far spent \$17K with a \$14M return. We cannot take all the credit, but the grant certainly helped the groups get organized to work on their proposals.

10. Nominations Committee Report – Brad Hillman/Tom Burr

- NERA Vice Chair – Dr. Adel Shirmohammadi
- NERA Officer-at-Large – Dr. Fred Servello
- ESCOP Science and Technology Committee Member – Dr. Tim Phipps
- ESCOP Communications and Marketing Committee Member – Dr. Richard Rhodes III

The motion made to approve the nominations was seconded and passed.

11. Future Meetings – Discuss Themes/Topics

- March 19-21, 2012 - NERA Spring Meeting, Admiral Fell Inn, Baltimore, MD
 - Suggestions for 'Best Practices' topics

A suggestion was made to include the 'Evaluation Plans for Planned Programs' in station Plans of Work, and 'Results and Conclusions from Evaluations Completed' in Annual Reports. Bart Hewitt will be invited to talk about NIFA's expectations, and the directors will react with what is feasible in reality and the constraints for reporting research impacts.

The list of topics will be re-sent and the Directors will be requested to submit their preference and to help identify speakers/presenters.

- July 8-12, 2012 – North Central and Northeast Summer Joint Session, Hilton Burlington, Burlington, VT [Host-UVM]
 - Joint Session Program Update (please see draft program below)
 - a. Where will the Land-grant system be in the next 150 years?
 - b. We need to look at new funding alternative

- c. Washington State was able to secure funding for \$27M from the apple industry. Are there models out there that we can adopt? How much should the industry be putting into this? Will this affect delivery of our mission to our stakeholders?
 - o Discuss Agenda for Joint NCRA and NERA Meeting
 - a. At the NC/NE Meeting, discuss alternative sources of funding.
- September 24-26, 2012 – ESS/SAES/ARD Meeting and Workshop, Sheraton Harborside Hotel, Portsmouth, NH [Host-UNH]
 - o Invite Washington State to talk about their partnership with the apple industry. Dr. Mike Hoffmann will be a key player in developing the agenda for next year.
 - o We need to select a theme that will showcase the region and issues/challenges that we face.

11. Other Business

12. Closing Remarks/Adjournment – Chair Brad Hillman

Chair Brad Hillman thanked everyone for the lively discussion.

Dr. Jon Wraith is the new NERA Chair effective October 1, 2011.

The meeting was adjourned at 5:56PM.

NERA Meeting
September 26, 2011
Estes Park, CO

Report of the Office of the Executive Director
July 11, 2011- September 25, 2011

NERA and Regional Activities

- Eastern US and Canada Climate Change Collaboration
 - Prepared a summary document for the Think Tank meeting held in Montreal that included 20 leaders from the Land Grant System and the private sector
 - Continued facilitation of this collaboration through a series of conference calls
- NE Invasive Plant Species Initiative
 - Hosted several conference calls to evaluate the need for, potential scope of, and strategies for regional multistate efforts in the area of invasive species
 - Assisted in the development of a regional forum program
 - Coordinated the logistics for the regional forum scheduled for March 21-22, 2012
- NE Food Systems Initiative
 - Coordinated efforts with NEED in the development of a regional forum program
 - Coordinated logistics for the regional forum scheduled for December 7-8, 2011
- NERA Planning Grants Program
 - Supported 2010 and 2011 award recipients
 - Prepared an updated summary report on the 2008 – 2011 awards
 - Prepared the draft 2012 announcement
- 2012 Joint Northeast and North Central Summer Session
 - Hosted several conference calls to develop a program for the joint session
 - Coordinated the logistics for the joint session scheduled for July 2012
- NERA Chair Support
 - Assisted in the development of the September 2011 NERA meeting agenda and compiled agenda materials
 - Assisted in the development of the September 2011 NERA Executive Committee meeting agenda
- Multistate Activities Committee (MAC) Support
 - Assisted MAC Chair in developing agenda and compiling materials for the MAC meeting
 - Assisted advisors and technical committee members in submitting their proposals and participation forms and coordinated peer reviews for the following projects:
 - Proposal for Coordinating Committee NE_temp1882 - Nanotechnology Risk Assessment
 - Request to Write a proposal entitled, “Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US” [Renewal of NE1031]
 - Midterm Reviews for the following-
NE9 – Conservation and Utilization of Plant Genetic Resources

NE1031 - Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US

- Reports
 - Report to NERA on ESCOP Activities
- Service
 - Board of Directors of the Northeast Regional Center for Rural Development
 - Board of Directors of the Northeast Regional Aquaculture Center Mid-Atlantic
 - Food Systems Consortium Leadership Committee
 - Administrative advisor to:
 - NE-1029
 - NECC-63
 - IR-4 (NRSP-4)
 - Northeast States and Caribbean Islands Regional Water Program

National Activities

- Science Roadmap for Food and Agriculture
 - Supported operations of the Science Roadmap Implementation Task Force
 - Assisted in the development of a ESS/SAES/ARD workshop session on operationalizing the Science Roadmap
- ESCOP Science and Technology Committee Chair Support
 - Continued to serve as the Executive Vice-Chair of the Science and Technology Committee
 - Prepared a committee report and PowerPoint presentation for the September ESS meeting
 - Prepared monthly reports for ESCOP CAC calls
- ESCOP NRSP Review Committee Chair Support
 - Continued to serve as the Executive Vice-Chair of the NRSP Review Committee
 - Prepared a committee report and PowerPoint presentation for the September ESS meeting
 - Coordinated communications with the NRSP-6 and NRSP-9 committees as a result of NRSP-RC recommendations
- Regional IPM Center Grant Panel
 - Served as Panel Manager for the Regional IMP Center Grant Review Panel NIMSS
- 2012 ESS/SAES/ARD Meeting
 - Initiated planning and logistics for 2012 ESS/SAES/ARD meeting
- Dairy Program
 - Continued a dialogue with Research ED's and Tom O'Connell, President of Marketing Concepts, Inc. to explore potential partnerships with the private sector on important dairy projects including broader issues of sustainability
- Service
 - ESCOP Chair's Advisory Committee

- ESCOP Executive Committee
- ESCOP NIMSS Oversight Committee
- National Multistate Management Committee
- NIFA One Solution Stakeholders Group
- BAA PBD Committee on Legislation and Policy
- Program Monitoring and Feedback
 - ESCOP Marketing Plan
 - Farm Bill development
 - NIFA budget developments
 - NIFA competitive grants programs
 - NIFA operational web and teleconferences

Travel

- July 18-21, 2011, Boston, MA – Joint COPS and ESCOP Meetings
- September 6-7, 2011, Washington, DC – NIFA Grant Review Panel and CLP Meeting
- September 26-29, 2011, Estes Park, CO – NERA and ESS/SAES/ARD Meetings

NERA Meeting
September 26, 2011
Estes Park, CO

Experiment Station Committee on Organization and Policy Report
July 2011- September 2011

ESCOP Officers

- Chair - Orlando McMeans
- Chair-Elect – Lee Sommers
- Past Chair – Clarence Watson
- Executive Vice Chair – Carolyn Brooks
- ESS Rep to BAA Policy Board – Steve Slack
- Budget and Legislative Committee Chair – Steve Slack
- Communications & Marketing Committee Chair - Gerald Arkin
- Science & Technology Committee Chair – Bill Ravlin
- NRSP Review Committee Chair – Ralph Cavalieri

NERA Representatives to:

- ESCOP:
 - Tom Burr
 - Brad Hillman
 - Jon Wraith
- ESCOP Budget & Legislative Committee
 - Tim Phipps
 - Tom Burr
- ESCOP Communications and Marketing Committee
 - Steve Herbert
 - Mike Hoffmann
- ESCOP Science & Technology Committee
 - Cameron Faustman
 - Mike Hoffmann
- NRSP Review Committee
 - Jon Wraith

Meetings

- ESCOP met at the Joint COP's session on July 20-21, 2011 in Boston, MA

- The ESCOP Executive Committee will meet at the APLU Annual Meeting in November in San Francisco
- ESCOP will next meet during the AHS/CARET Meeting in February in Washington, DC

Budget and Legislative

ESCOP through its Budget and Legislative Committee provides input into the BAA Budget and Advocacy Committee. The Committee is closely monitoring progress on and providing input into the FY 2012 USDA/NIFA budget development process. The Committee is also providing input into the 2012 Farm Bill development through the BAA Committee on Legislation and Policy (CLP). A session is planned for the ESS/SAES/ARD Workshop to discuss the one-line budget proposal developed by the CLP.

Communications and Marketing

The ESCOP Communications and Marketing Committee is providing leadership for a system wide proactive marketing campaign aimed at raising awareness of the Land Grant System among key stakeholders. K-Global and Cornerstone Government Affairs are engaged to coordinate this campaign. K-Global uses a combination of trust-based local relationships leveraged with social media marketing and traditional media (e.g. articles, op eds, commentaries) capabilities. The Committee has prepared a session (Marketing the ESS in the 21st Century) during the ESS/SAES/ARD Workshop during which K-Global will provide a presentation to the directors.

Science and Technology

The Science Roadmap for Food and Agriculture report is completed and has been distributed. The Chair of the Committee, Bill Ravlin, agreed to chair an ESCOP Task Force on operationalizing the Science Roadmap. The Task Force includes the chairs of the ESCOP Budget & Legislative, Communications & Marketing, and the Science & Technology Committees and the five regional research Executive Directors. The charge is to develop operational plans and corresponding strategies for implementing and marketing the Roadmap. It will also develop strategies for the use of the Roadmap recommendations in the development of budget requests and advocacy efforts. The Task Force has designed a session at the ESS/SAES/ARD Workshop to obtain initial input from the SAES/ARD directors.

National Research Support Projects

The NRSP Review Committee received additional documentation from the NRSP-6 and NRSP-9 Committees and will recommend continued funding for FY2011-12 at the same levels as FY2010-11. Directors will have the opportunity to vote on the NRSP-1 proposal and for the FY2011-12 budgets for all NRSP's at the ESS meeting. Abel Ponce de Leon will replace Ralph Cavalieri as Chair of the NRSP-RC following the ESS meeting.

Agenda Brief: ESCOP Science and Technology Committee

Date: September 27, 2011

Presenter: William Ravlin/Daniel Rossi

Background Information:

1. Committee Membership:

- Chair
 - William Ravlin (NCRA)
- Delegates
 - John Liu (SAAESD)
 - John Russin (SAAESD)
 - Mike Hoffmann (NERA)
 - Cameron Faustman (NERA)
 - Steve Meredith (ARD) – Vice Chair
 - _____ (ARD)
 - Larry Curtis (WAAESD)
 - David Thompson (WAAESD)
 - Jozef Kokini (NCRA)
 - Abel Ponce de Leon (NCRA)
- Executive Vice-Chair
 - Dan Rossi (NERA, Executive Director)
- NIFA Representative
 - Muquarrab Qureshi
- Social Science Subcommittee Representative
 - Travis Park
- Pest Management Strategies Subcommittee Representative
 - Frank Zalom

2. Meetings

The Committee met by conference call on May 23, 2011. The next face-to-face meeting of the committee has not yet been scheduled.

3. Multistate Research Award

The Committee reviewed the following nominations for the 2011 National Multistate Research Award for Excellence:

- NC-1030 - *Family Firms and Policy in Times of Disruption*
- NE-1025 - *Biology, Ecology and Management of Emerging Pests of Annual Bluegrass on Golf Courses*
- S-1032 - *Improving the Sustainability of Livestock and Poultry Production in the United States*
- W-2188 - *Characterizing Mass and Energy Transport at Different Vadose Zone Scales*

The Science and Technology Committee selected **S-1032** and forwarded this recommendation to the ESCOP Executive Committee for approval. The Executive Committee approved this recommendation and documentation was forwarded to APLU to be included in the Annual APLU Awards Program.

The Science and Technology Committee recommends that MRF off-the-top funding in the amount of \$15,000 be awarded to the S-1032 Technical Committee to support travel to award ceremony and activities which enhance and contribute to research and/or outreach objectives of project.

4. Science Roadmap

The Science Roadmap for Food and Agriculture report is completed and has been distributed. The Chair of the Committee, Bill Ravlin, agreed to chair a joint Task Force on operationalizing the Science Roadmap. The current composition of the Task Force includes the chairs (or their designees) of the ESCOP Budget & Legislative, Communications & Marketing, and the Science & Technology Committees and the five regional research Executive Directors. The charge is to develop operational plans and corresponding strategies for implementing and marketing the Roadmap. It will also develop strategies for the use of the Roadmap recommendations in the development of budget requests and advocacy efforts. The Task Force has designed a session at the 2011 ESS/SAES/ARD Workshop to obtain initial input from the SAES/ARD directors.

Action Requested: Approval of MRF off-the-top funding for 2012 Multistate Research Award winner (S-1032).

Item 8.2 – ESS Meeting Agenda

BAA Committee on Legislation and Policy

Presenters: Steve Pueppke and Mike Harrington

For information only

Background

This BAA committee has representation from all parts of the family making for a large diverse group with many interests. We have had several conference calls and a recent face-to-face meeting on Sept 7-8 to discuss the so-called one-line budget proposal. With the exception of the latter, all minor legislative issues have been endorsed by the committee. The one line budget proposal (Version 1.0) of the CLP proposal emanates from the CREATE-21 effort in the last Farm Bill which proposed a one line budget with a 70:30 allocation between competitive and capacity programs for new funds (See attachment 1). Based on discussions during the last several years (including CREATE-21), the following would be tenets for a one-line funding concept for NIFA funding:

- Provide downside protection on capacity funding if appropriations are reduced, and
- Assure increases in capacity funding when new appropriations are made.

Fundamental details:

- There would be a “base year” from which all calculations would be made
- If funding is reduced, funds would be taken from the competitive pool.
- Funds will be made available to carry out capacity and infrastructure programs in an amount up to or equal to the capacity and infrastructure funding levels in the “base year.” The NIFA Director will apportion the funds in accordance with the proportions that each applicable capacity and infrastructure program received during the critical base funding year.
- After NIFA funds equal to the capacity and infrastructure critical base funding level have been allocated for capacity and infrastructure programs, funds will be made available to carry out competitive programs until funds are allocated in an amount equal to the competitive program during the critical base funding year
- Any NIFA funding in excess of the amounts needed to fulfill items 1 and 2 will be made available by allocating 70% of the amount of excess funding to competitive programs and 30% to capacity and infrastructure programs in accordance with the proportions that each applicable capacity and infrastructure program received during the critical base funding year.

Recent CLP Recommendations

Based on feedback received at the recent CLP meeting this ratio was proposed to be 55:45 competitive to capacity primarily due to Extension members wanting to increase capacity funding on parity with research funds (Attachment 2, Version 2.0). However, there appear to be some erroneous assumptions with research funding levels because not all competitive funds come to the SAES system. A second proposal advanced was to include a 22.5% set aside for capacity building at small 1862, territories and 1890 institutions. This proposal was also part of C-21. Small 1862s would be defined as those institutions receiving than 1% of NIFA funds including formula and competitive funds.

Discussion Points

- What are the political ramifications? What are you hearing from your delegations?
- What are the unintended consequences?
- What year should be the base for calculations? (Generally, this is the last enacted budget year.)

Key decision points for the ESS:

- Does the Section support the overall concept of this proposal?
- What is the base year?
- What is the appropriate split of funds? 55:45, 60:40, 70:30?
- Does the Section support a set aside capacity program or something like an EPSCoR program?

Unresolved Issues:

The committee will hold a conference call on Thursday Sept 22 to discuss undecided issues:

- Have the NIFA funding lines been correctly delineated as either “capacity/infrastructure” or “competitive”?
- If FY 2011 becomes the “base year,” how should we treat “new starts”? (Example: the AASCARR (Non-Land-Grant) Universities Capacity Building Program proposed in the Senate version of the FY 2012 bill.)
- Should there be an enhancement pool for both “capacity” and “competitive” sides of the ledger?
- How should the 22.5% competitive enhancement pool funds be distributed?
- Should capacity enhancement pool funds be competed among eligible institutions?

Item 8.2, Attachment 1

Proposal Version 1.0

National Institute of Food and Agriculture

One-Line Funding Concept (A Numerical Example)

Important Note: This document is a numerical **example** of how a single-line NIFA funding concept might work. It contains these assumptions, which have **not** been agreed to by the Committee on Legislation and Policy: (1) Base Year = FY 2011; (2) Upside split between competitive and capacity/infrastructure = 70% to 30%; and (3) final disposition of programs/funding lines (as either capacity or competitive).

REDUCTION / INCREASE INPUT FIELDS (\$Millions)>	R e		
	Reduction	Increase 1	Increase 2
	\$ 100	\$ 100	\$ 500

CAPACITY AND INFRASTRUCTURE	FY 2011	Reduction	Increase 1	Increase 2
Research and Education Activities				
Hatch Act	236.334	236.334	245.367	281.496
Evans-Allen Program (1890s Research)	50.898	50.898	52.843	60.624
McIntire-Stennis Cooperative Forestry	32.934	32.934	34.193	39.227
Capacity Building Grants (1890 Institutions)	19.336	19.336	20.075	23.031
Payments to the 1994 Institutions (Equity Grants)	3.335	3.335	3.463	3.973
Native Alaska/Hawaiian-Serving Education Grants	3.194	3.194	3.316	3.804
Animal Health and Disease (Sec. 1433)	2.944	2.944	3.057	3.507
1994 Institutions Research Program	1.801	1.801	1.870	2.146
Resident Instruction Grants for Insular Areas	0.898	0.898	0.933	1.070
Distance Education Grants for Insular Areas	0.749	0.749	0.777	0.892
Extension Activities				
Smith Lever Sections 3(b) and 3(c)	293.911	293.911	305.144	350.075
Expanded Food and Nutrition Education (EFNEP)	67.934	67.934	70.530	80.915
1890 Institutions and Tuskegee Extension	42.592	42.592	44.219	50.731
1890 Facilities Grants (Sec. 1447)	19.730	19.730	20.485	23.501
Extension Services at the 1994 Institutions	4.312	4.312	4.477	5.136
Renewable Resources Extension Act	4.060	4.060	4.215	4.836
CAPACITY & INFRASTRUCTURE SUBTOTAL	784.963	784.963	814.963	934.963

COMPETITIVE PROGRAMS	FY 2011	Reduction	Increase 1	Increase 2
Research and Education Activities				
Agriculture and Food Research Initiative	264.470	199.524	309.932	491.779
Improved Pest Control	16.153	12.186	18.929	30.036
Sustainable Agriculture Research & Ed. (SARE)	14.471	10.917	16.959	26.909
Hispanic Education Partnership Grants	9.219	6.955	10.803	17.142
Higher Education Challenge Grants	5.643	4.257	6.613	10.493
Veterinary Medicine Loan Repayment Program	4.790	3.614	5.614	8.908
Aquaculture Centers (Aquaculture Grants)	3.920	2.957	4.594	7.289
Graduate Fellowship Grants	3.851	2.906	4.513	7.161
Sun Grant Program	2.246	1.694	2.631	4.175
Farm Business Management and Benchmarking	1.497	1.129	1.754	2.784
Multicultural Scholars Program	1.239	0.934	1.451	2.303
Critical Agricultural Materials Act	1.081	0.815	1.267	2.010

Joe Skeen Institute for Rangeland Restoration	0.981	0.740	1.150	1.824
Secondary/2-year Post Secondary	0.981	0.740	1.150	1.824
New Era Rural Technology Program	0.873	0.659	1.023	1.624
Alternative Crops	0.833	0.629	0.977	1.550

COMPETITIVE PROGRAMS	FY 2011	Reduction	Increase 1	Increase 2
Extension Activities				
Pest Management	9.918	7.483	11.623	18.443
Youth at Risk	8.395	6.334	9.838	15.611
Farm Safety	4.853	3.661	5.688	9.025
Sustainable Agriculture	4.696	3.542	5.503	8.731
Indian Reservation Agents	3.039	2.293	3.561	5.651
Grants to Youth Organizations	1.780	1.343	2.086	3.311
New Technologies for Ag Extension (eXtension)	1.747	1.318	2.047	3.248
Rural Health and Safety Education	1.735	1.309	2.033	3.225
Food Animal Residue Avoidance Database	0.998	0.753	1.170	1.856
Youth Farm Safety Education and Certification	0.485	0.366	0.568	0.902
Women and Minorities in STEM fields	0.399	0.301	0.468	0.742
Integrated Activities				
Food Safety	10.978	8.282	12.865	20.413
Water Quality	8.982	6.776	10.526	16.702
Food and Agriculture Defense Initiative	5.988	4.518	7.017	11.135
Organic Transition Program	3.992	3.012	4.678	7.423
Regional Pest Management Centers	2.994	2.259	3.509	5.567
Methyl Bromide Transition Program	1.996	1.506	2.339	3.712
International Science and Education Grants	0.998	0.753	1.170	1.856
Regional Rural Development Centers	0.998	0.753	1.170	1.856
COMPETITIVE PROGRAMS - SUBTOTAL	407.218	307.218	477.218	757.218

DIRECTOR'S DISCRETION	FY 2011	Reduction	Increase 1	Increase 2
Research and Education Activities				
Federal Administration	11.230			
Special Research Grants	2.838			
Extension Activities				
Federal Administration and Special Grants	8.548			
DIRECTOR'S DISCRETION - SUBTOTAL	22.617	22.617	22.617	22.617

	FY 2011	Reduction	Increase 1	Increase 2
		\$ (100)	\$ 100	\$ 500
SINGLE NIFA BUDGET (TOPLINE) TOTAL	1,214.798	1,114.798	1,314.798	1,714.798

Questions & Answers

NIFA single-line funding concept to be discussed
by the
Committee on Legislation and Policy

Note: This document contains some questions and answers that help to clarify the “mechanics” of the concept now under discussion. It does not attempt to address the various political and hypothetical questions that have been raised to date. CLP constituent organizations are urged to raise any questions and/or concerns of that nature in preparation for and during the CLP meeting in September.

Question**Answer****General Questions**

1. Why are we having this discussion?
In light of the federal budget situation and at the specific urging of the Administrative Heads Section, the Policy Board of Directors of the Board on Agriculture Assembly directed its two standing committees — the Committee on Legislation and Policy (CLP) and the Budget and Advocacy Committee — to revisit the concept of a “single funding line” to provide downside protection and potential upside growth for the NIFA programs that support the land-grant system’s infrastructure/capacity. (The single funding line concept was originally recommended by the BAA as part of the CREATE-21 proposal, but was not enacted into law.)
2. What is the basic concept?
Statutory mechanisms would be established to distribute the annual congressional appropriation for the National Institute of Food and Agriculture (NIFA) in a predictable manner.
3. How would this work?
Conceptually, Congress would appropriate a *single* amount for all NIFA programs and the total would be distributed *automatically* in one of two ways depending upon whether the final appropriation was *larger* or *smaller* than a specified “base year.”

“Downside” Questions

4. What would happen if the total amount appropriated was *smaller* than the base year?
The cuts would be absorbed proportionally by those NIFA programs awarded through competitions open to a wide range of entities. After such “competitive” funds are exhausted, then (and only then) would there be proportional cuts to the “capacity/infrastructure” funds which support the land-grant system.

“Upside” Questions

5. What would happen if the total amount appropriated was *larger* than the base year?
All NIFA programs would *first* receive funding equal in amount to what they received in the base year. The excess would then be divided into two pools — “competitive” and “capacity” — with 70 cents of every excess dollar going into the competitive pool and 30 cents into the capacity pool. *(The “70” and “30” are placeholders.)*
6. How would the funds in the capacity and competitive pools be distributed?
Specific formulae have not been determined. For discussion purposes only, it is assumed that the funds within each pool would be divided in the same proportions as in the base year.
7. Is the 70/30 (competitive/capacity) split carved in stone?
No. This was the ratio used in the CREATE-21 proposal. A final “upside” split must be recommended by the CLP.
8. Should there be “set asides” within the competitive or capacity pools?
CREATE-21 included set-asides for the 1 890s, 1994s, and small 1862 land-grant institutions. Whether such set-asides should be included within the present proposal is an open question to be determined by the CLP.

#	Question	Answer
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Questions Applicable to both “Upside” and “Downside” Mechanisms

- | | | |
|-----|---|---|
| 9. | Has a “base year” been chosen? | No. For discussion purposes only, the most recent fiscal year (FY 2011) is being used. A final base year must be agreed upon by the CLP in consideration of political realities and whether ratios for program lines change substantially for any given year. |
| 10. | Have the NIFA budget lines/programs been divided into “competitive” and “capacity” columns? | No. Under current statutory authority many programs are defined as either “competitive” or “capacity,” but a final list of budget lines will need to be determined by the CLP. Then the programs on that list can be divided into competitive and capacity columns. |

Other Questions

- | | | |
|-----|--|---|
| 11. | How would earmarks be affected by this proposal? | Appropriations for NIFA special research grants or federal administration grants (earmarks) would not be impacted if and when Congress lifts the earmark moratorium put in place for fiscal years 2011 and 2012. |
| 12. | Does the proposal include any “new” funding for NIFA? | No, it does not. All it would do is provide predictable distribution mechanisms for whatever amount is appropriated for NIFA. |
| 13. | Does the proposal put federal funding for research and extension activities at risk? | No. As is true at the present time, all but four NIFA programs receive funding through the annual congressional appropriations process. (The four programs with mandatory funding expire at the end of FY 2012 and their reauthorization is uncertain.) In fact, the proposal creates new <i>protections</i> for those NIFA research and extension funds that flow directly to land-grant universities. |
| 14. | What is the timeline for finalizing this concept? | The Committee on Legislation and Policy will discuss the concept and make recommendations about how exactly the upside and downside mechanisms would work during its meeting in September 2011. The CLP’s recommendations will then go to the Policy Board of Directors for decision. If the PBD decides to move ahead, legislative language will be drafted later this fall and presented to potential House and Senate champions shortly thereafter. All of this is in preparation for debate on the next Farm Bill which is expected to begin in earnest in late 2011 or early 2012. |
| 15. | How can changes be made to the upside/downside allocation mechanisms? | Changes could be made by the House and Senate Agriculture Committees during their deliberations on the Farm Bill, which occur every five to seven years, or changes could occur during the annual House and Senate Appropriations process. |
| 16. | How would the ability of the NIFA director to make budget decisions be impacted? | There would be little change from the current situation. Congress decides how federal funds are appropriated. The only discretion provided to the director is to set specific parameters for funding distributed through competitive (RFA) awards. |

Item 8.2

Attachment 2, Current One Line Proposal, Version 2.

National Institute of Food and Agriculture

One-Line Funding Concept (A Numerical Example)

Important Note: This document is a numerical example of how a single-line NIFA funding concept might work. It contains these assumptions, agreed to by the Committee on Legislation and Policy: (1) Base Year = FY 2011; (2) Upside split between competitive and capacity/infrastructure = 55% to 45%; (3) final disposition of programs/funding lines (as either capacity or competitive); (4) 22.5% of increase in capacity and competitive enhancement funds for 1890s, 1994s, Insular LGUS, and Small 1862s; (5) Increase 2A does NOT include the 22.5% capacity/competitive enhancement funds.

REDUCTION / INCREASE INPUT FIELDS	(\$Millions)>	Reduction	Increase 1	Increase 2	Increase 2A
	\$	100	\$ 100	\$ 500	\$ 500
CAPACITY AND INFRASTRUCTURE	FY 2011	Reduction	Increase 1	Increase 2	Increase 2A
Research and Education Activities					
Hatch Act ¹	236.334	236.334	246.834	288.835	304.077
Evans-Allen Program (1890s Research) ¹	50.898	50.898	53.159	62.205	65.487
McIntire-Stennis Cooperative Forestry ¹	32.934	32.934	34.397	40.250	42.374
Capacity Building Grants (1890 Institutions) ¹	19.336	19.336	20.195	23.632	24.879
Payments to the 1994 Institutions (Equity Grants) ¹	3.335	3.335	3.484	4.076	4.291
Native Alaska/Hawaiian-Serving Education Grants	3.194	3.194	3.335	3.903	4.109
Animal Health and Disease (Sec. 1433) ¹	2.944	2.944	3.075	3.598	3.788
1994 Institutions Research Program ¹	1.801	1.801	1.881	2.202	2.318
Resident Instruction Grants for Insular Areas ¹	0.898	0.898	0.938	1.098	1.156
Distance Education Grants for Insular Areas ¹	0.749	0.749	0.782	0.915	0.963
Ag and Food Science Facilities Grants for Insular Areas	0.000	0.000	0.000	0.000	0.000
Non-Land-Grant Universities Capacity Building Grants	0.000	0.000	0.000	0.000	0.000
Extension Activities					
Smith Lever Sections 3(b) and 3(c) ¹	293.911	293.911	306.969	359.202	378.157
Expanded Food and Nutrition Education (EFNEP)	67.934	67.934	70.952	83.025	87.406
1890 Institutions and Tuskegee Extension ¹	42.592	42.592	44.484	52.053	54.800
1890 Facilities Grants (Sec. 1447) ¹	19.730	19.730	20.607	24.113	25.386
Extension Services at the 1994 Institutions ¹	4.312	4.312	4.504	5.270	5.548
Renewable Resources Extension Act ¹	4.060	4.060	4.240	4.962	5.224
Special Capacity Enhancement Fund¹					
For 1890s, 1994s, Insulars, Small 1862s	0.000	0.000	10.125	50.625	0.000
CAPACITY & INFRASTRUCTURE SUBTOTAL	784.963	784.963	829.963	1,009.963	1,009.963
COMPETITIVE PROGRAMS	FY 2011	Reduction	Increase 1	Increase 2	Increase 2A
Research and Education Activities					
Agriculture and Food Research Initiative ²	264.470	199.524	292.153	402.885	443.070
Improved Pest Control	16.153	12.186	17.843	24.606	27.061
Sustainable Agriculture Research & Ed. (SARE)	14.471	10.917	15.986	22.045	24.243
Hispanic Education Partnership Grants ²	9.219	6.955	10.183	14.043	15.444
Higher Education Challenge Grants	5.643	4.257	6.233	8.596	9.453
Veterinary Medicine Loan Repayment Program	4.790	3.614	5.292	7.298	8.025
Aquaculture Centers (Aquaculture Grants)	3.920	2.957	4.330	5.972	6.567
Graduate Fellowship Grants	3.851	2.906	4.254	5.867	6.452
Sun Grant Program	2.246	1.694	2.481	3.421	3.762
Farm Business Management and Benchmarking	1.497	1.129	1.654	2.280	2.508
Multicultural Scholars Program	1.239	0.934	1.368	1.887	2.075
Critical Agricultural Materials Act	1.081	0.815	1.194	1.647	1.811
Joe Skeen Institute for Rangeland Restoration	0.981	0.740	1.084	1.494	1.644
Secondary/2-year Post Secondary ²	0.981	0.740	1.084	1.494	1.644
New Era Rural Technology Program	0.873	0.659	0.965	1.330	1.463

Alternative Crops	0.833	0.629	0.921	1.269	1.396
COMPETITIVE PROGRAMS	FY 2011	Reduction	Increase 1	Increase 2	Increase 2A
Extension Activities					
Pest Management	9.918	7.483	10.956	15.109	16.616
Youth at Risk	8.395	6.334	9.274	12.789	14.065
Farm Safety	4.853	3.661	5.361	7.393	8.131
Sustainable Agriculture ²	4.696	3.542	5.187	7.153	7.867
Indian Reservation Agents	3.039	2.293	3.357	4.629	5.091
Grants to Youth Organizations	1.780	1.343	1.967	2.712	2.983
New Technologies for Ag Extension (eXtension)	1.747	1.318	1.929	2.661	2.926
Rural Health and Safety Education	1.735	1.309	1.916	2.642	2.906
Food Animal Residue Avoidance Database	0.998	0.753	1.102	1.520	1.672
Youth Farm Safety Education and Certification	0.485	0.366	0.536	0.739	0.813
Women and Minorities in STEM fields	0.399	0.301	0.441	0.608	0.669
Integrated Activities					
Food Safety	10.978	8.282	12.127	16.724	18.392
Water Quality	8.982	6.776	9.922	13.683	15.048
Food and Agriculture Defense Initiative	5.988	4.518	6.615	9.122	10.032
Organic Transition Program	3.992	3.012	4.410	6.081	6.688
Regional Pest Management Centers	2.994	2.259	3.307	4.561	5.016
Methyl Bromide Transition Program	1.996	1.506	2.205	3.041	3.344
International Science and Education Grants ²	0.998	0.753	1.102	1.520	1.672
Regional Rural Development Centers	0.998	0.753	1.102	1.520	1.672
Special Competitive Enhancement Fund³					
For 1890s, 1994s, Insulars, Small 1862s	0.000	0.000	12.375	61.875	0.000
COMPETITIVE PROGRAMS - SUBTOTAL	407.218	307.218	462.218	682.218	682.218
DIRECTOR'S DISCRETION	FY 2011	Reduction	Increase 1	Increase 2	Increase 2A
Research and Education Activities					
Federal Administration	11.230				
Special Research Grants	2.838				
Extension Activities	8.548				
Federal Administration and Special Grants					
DIRECTOR'S DISCRETION - SUBTOTAL	22.617	22.617	22.617	22.617	22.617
	FY 2011	Reduction	Increase 1	Increase 2	Increase 2A
		\$ (100)	\$ 100	\$ 500	\$ 500
SINGLE NIFA BUDGET (TOPLINE) TOTAL	1,214.798	1,114.798	1,314.798	1,714.798	1,714.798

Footnotes:

1. Defined as capacity and infrastructure programs under section 251(f)(1)(C) of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6971(f)(1)(C)).
2. Defined as competitive programs under section 251(f)(1)(D) of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6971(f)(1)(D)).
3. Formulas for distribution of enhancement funds TBD.
4. Programs receiving mandatory funding such as Organic Agriculture Research and Extension Initiative, Specialty Crop Research Initiative, BEGINNING FARMER AND RANCHER DEVELOPMENT PROGRAM, and Agriculture Risk Management Education Program are not listed, but are defined as competitive programs under section 251(f)(1)(D) of the Department of Agriculture Reorganization Act of 1994 (7 U.S.C. 6971(f)(1)(D)).

Other programs receiving mandatory funding such as the BIODIESEL FUEL EDUCATION PROGRAM, and the BIOMASS RESEARCH AND DEVELOPMENT programs are not defined by the Department of Agriculture Reorganization Act of 1994.

Small 1862 Institutions (2007-2009 data set)

Listing of those 1862 institutions which received less than 1% of the discretionary funding (grant + formula \$s) based on the 3-year average (2007-2009). Figures from NIFA for the period 2008-2010 may be available later this month.

1862 Institutions

University of Alaska
University of Connecticut
University of District of Columbia
University of Delaware
University of Hawaii
University of Maine
Montana State University
North Dakota State University
University of New Hampshire
New Mexico State University
University of Nevada
University of Rhode Island
Utah State University
University of Vermont
University of Wyoming

BAC Call to Action

112th Congress, No. 8 —September 26, 2011

Signatures Needed on Letter to Congressional “Super Committee” in Support of Maintaining Agricultural Research

Former NIFA Director Roger N. Beachy is spearheading an effort to obtain signatures on a letter to be submitted to the congressional "Joint Select Committee on Deficit Reduction," known informally as "The Super Committee" (<http://deficitreduction.senate.gov/public/>). The Joint Select Committee is charged with issuing a formal recommendation to the House and Senate on how to reduce the deficit by at least \$1.5 trillion over the next ten years.

The key paragraph of Dr. Beachy’s draft letter reads as follows:

"[W]e strongly urge you to support funding for research for food and agriculture as you develop overall budget proposals for the future. Recent studies have concluded that funding for research for food and agriculture needs to be increased steadily and significantly if future challenges are to be met. At a minimum, we request that funding in the current budget for agricultural research programs be maintained and that further cuts be avoided. Continued investment in science for food and agriculture is essential for maintaining the nation’s food, economic, and national security."

The Policy Board of Directors (PBD) of the Board on Agriculture Assembly (BAA) has, at the recommendation of the Budget and Advocacy Committee, agreed to sign onto this letter. (The letter in its entirety is reprinted after this message.)

The PBD urges all members of the BAA to sign this letter. Both institutional signatures and individual signatures are welcome. To sign on the letter, please contact Adam Fagen of the American Society of Plant Biologists (afagen@aspb.org) no later than October 15.

Thank you for your continued assistance on this and other important matters.

Beverly Durgan, BAC Chair

Frank Galey, BAC Advocacy Chair

XX October 2011

Dear XX:

We, the ## undersigned organizations and individuals are writing to strongly urge you to place a high priority on funding for research for food and agriculture as you carry out your important charge.

The success of the agriculture and food industry plays a significant role in the overall health and security of the U.S. economy and has been one of the few bright spots in recent years. In 2010, U.S. farms and ranches spent \$288 billion to produce goods valued at \$369 billion; the value of U.S. food and agriculture exports is expected to be more than \$140 billion in 2011, creating a record trade surplus of \$42.5 billion. Furthermore, the jobs of 21 million Americans depend on the vitality of the U.S. agriculture and food sector.

Investments in publicly funded research are critical for maintaining a successful agriculture and food sector. For every \$1 invested in publicly funded agricultural research, \$20 in economic activity is generated. Budgetary decisions made today have far reaching impacts, as the scientific research funded today will be responsible for enhancing the Nation's agricultural productivity and economic prosperity in the future.

Therefore, we strongly urge you to support funding for research for food and agriculture as you develop overall budget proposals for the future. Recent studies have concluded that funding for research for food and agriculture needs to be increased steadily and significantly if future challenges are to be met. At a minimum, we request that funding in the current budget for agricultural research programs be maintained and that further cuts be avoided. Continued investment in science for food and agriculture is essential for maintaining the nation's food, economic, and national security.

Thank you for your consideration and for your support of food and agriculture research.

Sincerely,

A handwritten signature in cursive script that reads "Roy N. Beachy".

Former Director of NIFA
President Emeritus, Donald Danforth
Plant Science Center

US-Canada Climate Change Think Tank Report

The Green Crop Strategic Research Network of McGill University and the Northeast Regional Association of State Agricultural Experiment Station Directors (NERA) co-hosted a US-Canada Climate Change Think Tank Meeting at Montreal, Canada, on June 28, 2011. This is a follow-up to the workshop in Syracuse, NY, held on August 19, 2010 that focused on agricultural adaptation to climate change in the Eastern United States and Canadian Provinces. The purpose was to catalyze and facilitate multi-disciplinary and multi-institutional research collaborations among Eastern US and Canadian universities, government agencies and the private sector. The Syracuse workshop was attended by approximately 35 key decision makers from academia and the public and private sectors, and resulted to a number of important collaborations.

The leadership of the workshop has maintained monthly conference calls to monitor and facilitate progress among the various partnerships. From this ongoing dialogue, a subgroup proposed the creation of a “think tank” to develop a longer term (2025) scenario for agriculture in this region given expected changes in climate and to identify options for successful agricultural adaptation in the region. Twenty deans/directors (see list below) from the Eastern US, including the Great Lakes region and Canada and senior level private executives attended the meeting on June 28, 2011 in Montreal.

The session started with three very informative presentations:

- “Climate Change and Agriculture – The Road Ahead” – Don Smith, McGill University
[\[http://www.nera.umd.edu/USCanadaThinkTank/DonSmith.pdf\]](http://www.nera.umd.edu/USCanadaThinkTank/DonSmith.pdf)
- “Plants and CO₂ – Will Rising Temperatures Trump CO₂ Fertilization on Crop Yields” – Bert Drake, Smithsonian Environmental Research Center
[\[http://www.nera.umd.edu/USCanadaThinkTank/BertDrake.pdf\]](http://www.nera.umd.edu/USCanadaThinkTank/BertDrake.pdf)
- “Preparing Northeast Agriculture for a Changing Climate” – David Wolf, Cornell University
[\[http://www.nera.umd.edu/USCanadaThinkTank/DaveWolfe.pdf\]](http://www.nera.umd.edu/USCanadaThinkTank/DaveWolfe.pdf)

These presentations served as context to develop a consensus around alternative future climate scenarios for the region. General agreement was reached concerning the following potential trends:

- A general warming trend in winter with higher winter lows leading to the potential of greater pest issues.
- Greater frequency of higher summer temperatures resulting in more heat stress on plants and animals.
- Greater precipitation in the spring and fall seasons with higher likelihood of flooding.
- No increase in summer precipitation resulting when coupled with higher temperatures and summer water deficits.

The group then identified two short term opportunities for collaboration in the region:

- Use of Farm Level Data – a proposal to utilize farm level data to analyze the impacts of climate change on agriculture. Stan Johnson and Don Smith will prepare a pre-proposal.
- Water Table Management – a proposal to develop alternative strategies to improve drainage and irrigation systems. It would also consider resulting needs and opportunities for new crops and cropping systems. Adel Shirmohammadi, Rob Gordon, Don Smith and Dave Wolfe will prepare a proposal by the end of the calendar year.

Other joint work products discussed include:

- Development of a webpage to provide a collective forum for dialogue on this issue.
- The need for recoupling plant and animal systems relative to nitrogen and water utilization.
- A joint initiative to seek support from the USDA and AAFC which will be initiated on the Canadian side by Rob Gordon and Richard Donald.
- Development of a one or two page core message that: frames the problem; identifies resulting opportunities for agriculture in this region; and describes the capacity of the institutions in this initiative to capitalize on these opportunities. A draft will be prepared by Dave McInnes.

Finally, Mike Hoffmann and Don Smith will prepare a summary document of the think tank discussions that can be used in advocating for additional support.

A Working Group was formed that will meet in late August via teleconference, to follow up on actions.

This group is composed of –

- Don Smith
- John Oliver
- Mike Hoffmann
- Arlen Leholm
- Steve Pueppke
- Dan Rossi

US-Canada Climate Change Think Tank Notes:

I. Developing Alternative Scenarios [2020-2030]

Issues:

1. Uncertain future or likely future
2. Audience – general society/public
3. People can reach out and touch – believable scenario
4. “Steward productivity of an acre of land forever”
5. Single most likely scenario – crop and animal production
6. Use farmers’ yield monitors, yield/weather/location data that farmers already have – give them a stake at what’s happening. This will also help them understand the scientists, and the scientists can design experiments around farmers’ base data. Use data that will appeal to the common farmer.

Almost all big farmers have yield monitors, GPS, etc. How do we utilize the data that the farmers already have?

If their data backs us up, it would be a great source of credibility.

There is a network of weather stations in the US and this could be used as well. The weather and yield data could be related.

This approach could be much more credible and would help give the farmers a sense of the potential impact of climate change on agriculture.

The land grant colleges have extension people and they could help coordinate the data collection.

Without the ag producers behind us, we will be late getting things going. Farmer based data would have a lot of credibility.

Perhaps we could get the equipment manufacturers to collect some additional data

There are research opportunities here for better genetics, pest management, etc.

We need to communicate that there are positive impacts here in our region.

7. Extension should be involved in making strategic decisions
8. Other stakeholders - Risk industry, policy makers, academia
9. Focus on Northeast US-Canada
10. Systems perspective, sustainability of agro-ecosystems
11. Consider downsizing of institutions, but look at new generations of leaders and emphasize the need for climate change specialists when hiring new faculty. We need the capacity to support actions. We see a lot downsizing happening now in the US Land-grants.
12. Common view of scenario – best at adaptation and mitigation, capacity, what are the threats? It is not easy to move varieties and systems from one region to another

- farther north. There is an assumption that things are manageable, that we have backup stocks and that low-price foods will be maintained.
13. The Northeast has positive effects from climate change – increased moisture/temperature/growing season
 14. The positive impacts of climate change are in our region so we have a huge obligation to use this to our advantage and to everyone's benefit
 15. Erosion of the Land Grant mission, with declining federal support in spite of past success.
 16. Shift from commodity production, e.g. dairy. There are major social challenges to address
 17. We need to think about how to position the arguments regarding the positive attributes of climate change and what our region can contribute. We need to think about food security and national security angles.
 18. US advocacy/marketing group for experiment stations – We can ask them to help when we have the right message
 19. Focus on opportunities now – identify what private companies and farmers can do now and influence policy at the same time
 20. Bite-size manageable actions:
 - a. Partner with private sector (maybe foundations too) as state and federal government budgets are ham-strung. Look for other sources of funding
Focus on opportunity to partner with the private sector and leverage the expertise that we have.
 - b. Strategic hires to complement each other's institutions – build strategic alliances for private-public good
 - c. Have a working model for international cooperation (US-Canada). Federal governments have to be brought on board. Create a model that climate change has no border so the federal governments will see the value. The politicians need to see a working model to show what we need to do today to deal with future. Are there models in other countries, maybe Australia?
 - d. Opportunities to influence policy- Canada and US Farm Bills
 - e. Future scenario – project forward 10 or 15 years, what happens? What does the scenario mean, what do we recommend?
 - f. If there is a Northern migration - do we have capacity to meet those challenges?
 - g. Agree on temperature and rainfall metrics - There are general warming trends happening based on historical data, but more in the winter, and on the ends of the growing seasons. More rainfall due to extreme events so more flooding. No increase in summer rainfall but increase in summer temperatures. Pest issues will shift. What does this scenario mean for crops that cannot be economically irrigated?

Precipitation will be higher. More summer droughts but not long term. There will be larger summer water deficits. Look at the payoff for addressing these and establish priorities.

- i. Pest issues, including weeds and diseases, will increase.
- ii. Strategy is to minimize risk to farmers – alternate crops, double cropping
- iii. Plant breeding – flood/stress tolerant
 - New varieties will be released by seed companies
 - Nitrogen fixing crops
 - Perennial grains
- iv. Land grants have the answers

For wet springs do we need new crop varieties, plant more shallow, and/or change planting densities?

There are other technological possibilities – such as microbe to plant signals
A lot of the seed companies are selecting for stress tolerance now, most are focused on the major crops. Corn and wheat will be seriously impacted.
We need to be looking at N fixing crops, but these have not had the big investment in terms of long term genetics (forages)

- h. Look at the communication piece. People are talking about climate change but we are not making progress. We need to improve communication and perhaps do research on the communications piece. We have done a good job of articulating what the issues are but we need to think about what can be done about this. Natural events have forced producers to make the adaptations needed.
- i. We need to move on this now!!
 - i. Cost effective measures - adaptable actionable items that farmers can do now
 - ii. What can universities do now? How are we going to adapt?

21. If we take these measures in this region, we will have positive global economic impact.

II. Critical Next Steps:

Joint work products:

- Best management practices on how to put together an effective collaboration
- Need compelling “why”

1st output - Climate Change: Use of Farm Level Data [see attached proposal by Stan Johnson]

- Who else should be at the table?
 - National Weather Service
 - Companies – John Deere, retailers, etc.
 - IP
 - Anchors – CAPI and NCFAR
 - Universities – use Extension to mobilize data gathering
- Champions – Don Smith (Canada), Stan Johnson (US)
- Funding- possibly private (equipment) manufacturing sector
- Timeframe – 6 mos. (consider Farm Bill)
 - Product – pre-proposal (who are partners, what are their contributions)
 - Feasibility of crops across the region (corn, soybean, fruit tree/apple)
- Run Stan’s project and another based on assumptions (Stan’s project results should confirm these assumptions)

2nd output - Water table management paper

- Manage planting window and manage drought period
- Alternative crops and double cropping, cropping systems
- Focus on forecast and scenarios
- Regional DCM estimates to 2030 – not done for entire Canadian region, need reliable data sets and for NE US - fractured sets of data available
- What are ideal crops based on scenarios?
- What are ideal workable fixes for farmers – design decision tools for producers? There are existing tools in the Northeast, but production economics is lacking.
- Irrigation and drainage systems – case study to develop decision-making tool
- Include meat-producing industries?
- Use data from past research and existing data, and use these to build models
- Scientists working on moisture/water mgt., stakeholders and use this group
- Mobilize key water people in the Northeast – build common scenarios, identify challenges
- Organize a forum so experts can form teams to write proposals for funding.
- New faculty hires can take lead

- Champions – Adel Shirmohammadi and Dave Wolfe (US), Rob Gordon and Don Smith (Canada)
- Timeframe – concept paper by late Fall, and hold Forum early spring 2012
- Northeast ASABE (American Society of Agricultural and Biological Engineers (ASABE) – have them work with Adel and Rob at their meeting. 3rd output - Develop a climate change website
- ask experts to contribute to this collective forum.
- People sharing actual farm situations and experts giving advice. (Check if there may be an existing e-Xtension project) .
- The website will report on recent events on climate in the region to provide a quick and useful guide for farmers/producers.
- When you consider water use you can also consider animal waste, nitrogen use efficiency, N use in feeds, re-coupling crop and animal systems, and efficient N and C management.

4th output – Joint US-Canada paper on Climate Change

- Feed efficiency – crop production are interrelated
- Dairy – important in the NE, relate livestock with water use, nutrient use
- Animal genetics re-nitrogen efficiency
- Recoupling animal and crop production
- How can institutions partner? – formally organize this bi-national consortium of Land-grants, universities, and private sector – come up with a network mechanism that can be federally funded by US-Canada – 5M or 20M program? Research, knowledge translation focus. 3-5 year plan to have better understanding of what’s happening in region, then use that consortium to make a pitch to federal partners.
- Look at Euro model or other existing models – (D. Wolfe suggested Zambia and Indonesia studies but these are geared towards disaster response)
- Have bite-size doable actions
- Proposal to determine how much, provide details then approach federal agencies.
- There’s value in having a large group of US-Canada high-level network and make federal agencies aware of this group
- Local food production, retail, jobs/employment creation
- Joint US-Canada initiatives, ex. Water quality, forestry, Taste of Place (VT & Quebec)
- Paper to be drafted (by the end of summer) by Don Smith (Canada) and Mike Hoffmann (US)

5th output - Communication/message to respective federal agencies and others to gain political support (communiqué) 1-2 page paper.

- What should message contain? The core message is that we are in a dire situation and what we're going to do – what's unique in our region (re-increasing temperature but with sufficient moisture) challenges and opportunities. Play the population card that the Northeast US and Canada have significant urban populations compared to other regions. We have more diversified and more productive agriculture, and climate change opportunities can lead to employment/job creation.
- Need to deliver message now that budget cuts are happening
- Richard Donald and Rob Gordon will work on a Canadian communiqué
- Dave McInnes – will draft a 1-2 pager --- Importance of agriculture in rural economic development and food security, challenges of changing climate and the solution (connect to local food supply/processing), advocate for more investment in ag. research, cross border cooperation, stakeholders, farms, BMPs, risk management, policy influence, public awareness, recoupling of crop and animal industries.

Next Steps - Maintain dialog – continue meeting, monitor progress of group,

- Build partnerships to help address cutbacks, joint investments, issue of food security – what is our solution, addressing move from demand to supply in a constrained industry. We should be able to link back our climate change strategies to answer this question. Monitor yield assessment, water management, recoupling, economic/employment implications. Send joint message with challenges and opportunities of climate change.
- Budget issues – need to influence policy.
- Put together list of potential private sector partners for Stan's project - USDA/NIFA will require matching for proposal. How much are partners going to put in? Plan is to leverage what partners will put up, will help gain more credibility. Issue that we need to deal with if we expect to generate federal funds.
- A Working Group to follow up on actions was organized, composed of –
 - Don Smith
 - John Oliver
 - Mike Hoffmann
 - Arlen Leholm
 - Steve Pueppke
 - Dan Rossi
- A call will be arranged in late August for the Working Group's first meeting.

**List of Participants - US-Canada Climate Change Think Tank
Montreal, Canada, June 27-28, 2011**

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Cornell University



McGill

Feeding Our Great Cities: Climate Change and Opportunities for Agriculture in Eastern Canada and the Northeastern US

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CLIMATE CHANGE

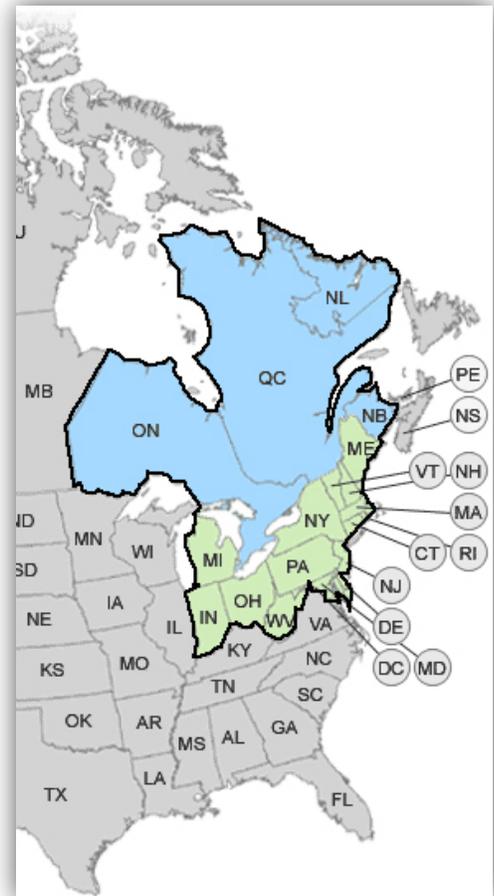
The climate is changing—it is getting warmer, and the evidence is all around us. Springs are arriving earlier, summers are longer and hotter, and winter temperatures are warmer. In the Northeastern US, lilacs, grapes and apples are blooming earlier,¹ and plant hardiness zones have shifted northward.² The average annual temperature in the Northeast US has risen 1.0°C (1.8°F) over the last 100 years. Winter temperatures have risen even faster, as much as 2.4°C (4.4°F) in the last 30 years. Consistent with a warmer and moister atmosphere, we are also observing more severe weather—storms, hail, wind—and shifts in precipitation patterns.³ The decade 2000-2009 was the hottest recorded ever,⁴ and the trajectory is set for the average global temperature to continue to warm into the future—1.8° to 4.0°C (3.2 to 7.2°F) by 2100 with smaller increases near the equator and greater at the poles. With its more northerly latitude, the increase across Canada is expected to be 5° to 8°C (9° to 14.4°F).^{5,6}

The anticipated increases in temperature along with changes in precipitation patterns and greater variability in the weather have profound implications for agriculture and the security of our food supply. Although Eastern Canada and the Northeastern US will face challenges because of climate change, this region will also be presented with enormous opportunities. With adequate precipitation and overall warmer conditions,⁷ a more intense and diverse agriculture is on the horizon if we adapt to changes and begin to plan strategically for the future.

To set the stage and begin to lay the groundwork for a warmer future, a group of Canadian and US public and private agricultural sector leaders have engaged in a dialogue to catalyze and facilitate multi-disciplinary and multi-institutional research collaborations among universities, government agencies and the private sector. These dialogues were aimed at helping agriculture adapt to a warming climate between now and 2025 and to also lay the foundation for the years beyond when the challenges will greatly intensify. The respective organizations have the capacity to respond to the challenge before us, but partnerships are essential to help ensure that we leverage our collective ability to contribute to the needs of the region.

AGRICULTURE'S ECONOMIC VITALITY

Agriculture in the region is a major industry. Across the 15 states in the NE US (see map) there are nearly 374,000 farms comprising 26.4 million hectares (64.5 million acres) of farmland generating a total value of agricultural products of over \$38 billion per year.⁸ In Eastern Canada, the six provinces have 100,000 farms with 10 million hectares (25 million acres) of cropland and total gross farm receipts of almost \$20 billion.⁹ Agriculture in the region is diverse including extensive vegetable production, dairy and related field crops, ornamentals and fruit. In aggregate the annual farm-gate value across the region is approximately \$58 billion. Agriculture is a major economic engine, employing hundreds of thousands of people, helping maintain the viability of rural landscapes, preserving open space and the environment, and helping to feed our great cities. The economic impact is multiplied many times once the wholesale and retail sectors are added in. In New York City for example, over \$30 billion is spent annually on food.¹⁰ In Canada, sales for food manufacturers in Ontario and Quebec were \$32.0 and \$19.5 billion, respectively, in 2010.¹¹ A warming climate will bring change to agricultural and food systems locally, regionally and internationally and the impacts will not be uniform. Challenges faced in some regions may result in opportunities for others.



For example, changes in patterns of winter snowfall and spring snowmelt in the western US mountain ranges will likely reduce the availability of irrigation water for some agriculture in California—the source of 50% of fruit and a good portion of the vegetables for the US.¹² This will be further exacerbated by the intensifying competition for water resources between the urban and agricultural sectors. In Alberta, the Peyto glacier, one of many glaciers feeding small rivers flowing out of the Rocky Mountains used to irrigate crops, has lost 70% of its mass during the past few decades.⁶ Increasing temperatures in California are of concern to the future of the grape and wine industry but warmer winters and a longer growing season open up opportunities to grow a wider range of high value, less cold tolerant varieties in the Northeastern US and Eastern Canada. These examples depict challenges to agriculture in other regions of North America, but at the same time opportunities for agriculture in this region.

Weather vs. Climate: What is the Difference?

Weather is the atmospheric condition (e.g., temperature, precipitation, humidity, wind) at any given time or place. In most places, weather is highly variable and can change from hour to hour, day to day, and season to season. In contrast, climate refers to long-term “weather averages” such as the average number of heat waves per year over several decades. The World Meteorological Organization considers the statistical mean and variability of factors such as temperature and precipitation over a period of three decades to evaluate climate trends, but climate can refer to other periods of time, sometimes thousands of years, depending on the purpose.

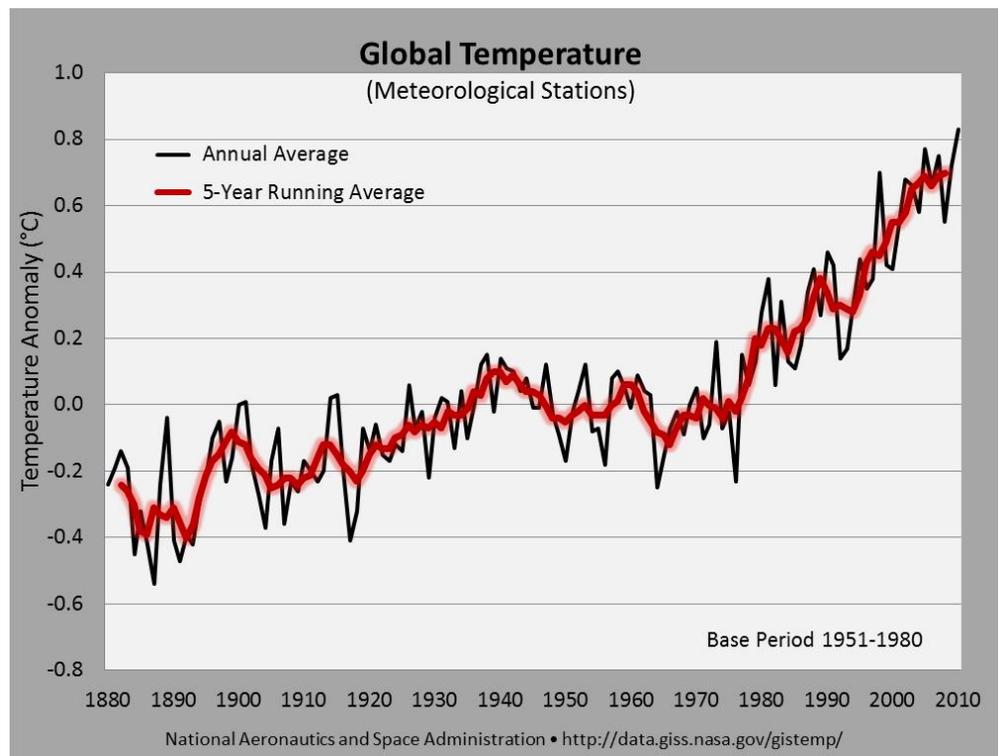
Figure on page 3 reflects global temperature trends 1880-2010

Strategic planning to adapt to the changes is critically important if we want the agricultural sector to thrive and help meet the food needs of Boston, Montreal, New York, Philadelphia, Quebec, Toronto and the other cities and rural areas in the region—116 million people in total which is 74% of the Canadian and 30% of the US population.

THE CHALLENGE

Put simply, agriculture will no longer be business as usual. More uncertainty and risk will become the norm. Growing seasons in Eastern Canada and the Northeastern US will become longer and warmer with a greater frequency of high summer temperatures putting stress on plants and animals, and warmer temperatures during the winter. The latter will allow more insect and weed pests to survive year to year.⁶ The greater variability in weather is expected to result in more crop flooding interspersed with more periods of drought—in other words, more extreme weather. All of this poses challenges for agriculture.

What was witnessed in 2011 may be typical of upcoming years—cool, wet springs followed by hot, dry summers. The cool wet spring resulted in late planting of many crops, some so late they had to be abandoned or replaced by alternative crops of lesser value. Some planted fields were drowned out. Cutting, drying and harvesting of hay crops was especially challenging. In addition, wet, cool conditions fostered plant diseases and often delayed herbicide and fertilizer applications. The hot, dry conditions that followed can reduce crop yields. Each day over 30°C (86°F) results in a 2% loss in corn grain yield. Tomato fruit yield drops when temperatures exceed 30°C (86°F) and milk production by dairy cows decreases with excessive heat.¹³



THE OPPORTUNITY

Despite these challenges there are enormous opportunities for this region. Because of adequate water and longer growing seasons, there is an opportunity to grow new crops and new varieties. For example, winter canola, historically difficult to grow because of cold winter temperatures, now has the potential to be a new and economically important crop for use as food-grade cooking oil. Longer-season varieties of field corn have the potential for higher yields. Double cropping (the practice of growing consecutive crops in one year) will become more viable and offer greater economic returns to farmers. Private and public plant breeding programs have an opportunity to develop new crop

varieties that are more tolerant of heat, drought, and pests and can take advantage of elevated levels of CO₂—the changing conditions we expect to see in the region.¹⁴

Taking advantage of the changes makes good business sense for agriculture, but providing the answers to a long list of rapidly evolving questions will be critically important. For agricultural producers, timing of investments will be everything. With increasing variability in precipitation, when should farmers invest in irrigation equipment or install more field drainage tile to address excess water? With rising summer temperatures, when should dairy farmers invest in improved ventilation or cooling systems? With warmer winter temperatures, when should fruit growers switch to new varieties that are less tolerant of extreme winter cold? With longer seasons, what is the optimal planting date as well as expected date of harvest? These questions need to be answered from a multitude of perspectives—not just agronomic and economic, but also social and environmental.

The evidence for climate change

The climate is warming due to human activity, primarily the burning of fossil fuels that releases enormous amounts of greenhouse gases into the atmosphere. The evidence:

- Atmospheric CO₂ has increased from 270 ppm to 390 ppm today, the highest in 650,000 years.
- Global temperatures have increased since the late 1800's and most of this increase has occurred since the 1970's. The ten warmest years on record have occurred in the past 12 years.
- Sea levels are rising—in part due to glacial ice melting and in part to expansion of seawater as it warms. The rate of sea level rise in the last decade is nearly double that of the last century.
- Glaciers are retreating up-slope almost everywhere and Arctic sea ice has declined rapidly over the last several decades.
- Since the beginning of the industrial revolution, the acidity of ocean surface waters has increased by about 30% as CO₂ emitted by human activity is absorbed into the oceans.
- Wild plants flower in the Northeast about 12 days earlier than a century ago and birds migrate north earlier as well.

Along with adapting to the changes, agriculture also has the opportunity to mitigate climate change through practices such as improved energy use efficiencies, conversion of waste streams to energy, improved fertilizer and manure management, increasing soil organic matter (carbon) through reduced tillage and cover cropping, and perhaps even application of biochar as a soil amendment. Many of these mitigation practices make good business sense, offering benefits on-farm as well as through the entire food system.

REGIONAL EXPANSION

On balance—weighing the challenges and opportunities—with careful strategic planning and investment, agriculture in the region is well positioned to expand and diversify. As other regions of North America and around the globe face serious challenges, it opens up new opportunities for the Northeastern US and the Eastern Canada with its abundant water and longer growing seasons. Being home to many great cities and over 116 million people, the region also has unparalleled markets that

could be supplied with more regionally produced fresh market and processed products—meeting the demand for more locally produced food and helping to address food security concerns. The region is positioned to meet the demand for a lower carbon footprint food supply, resulting in new job creation and economic development opportunities.

It is an understatement to say that the rate at which change is occurring is a concern. But the time to act is now. The following recommendations for action originate from the joint US-Canadian dialogues. Our focus is on near-term actions to be taken between now and 2025 that will help ensure that the region is able to take full advantage of the opportunities now emerging. To succeed we need to modify or redirect agricultural research and outreach priorities in the public and private sector to keep pace with the rapidly changing conditions. We also need to lay the groundwork for the longer-term—the decades beyond 2025 when the challenges will intensify even more.

- Partnerships are critical: The Canadian-US collaboration is intended to be a working model of how countries and organizations from the public and private sector can partner to effectively address the challenges and opportunities associated with climate change.
- Farm-level impact of climate change needs to be documented to identify trends and new research questions, helping to set priorities.
- Improved on-farm water management is a high priority. With fluctuations ranging from drought to flooding, improvements in drainage and irrigation technologies are needed. Existing proven technologies need to be implemented and new technologies explored.
- New crops and cropping systems best adapted to the emerging conditions need to be developed and deployed.
- Plant and animal production systems need to be recoupled.
- New and better decision-making tools based on sound economics are needed for farmers. For example, farmers will need to know when it is economically justified to install more drainage tile or irrigation equipment.
- Communication strategies that convey the challenges and opportunities of climate change need to be enhanced and directed at the agricultural community as well as decision and policy makers. Producers need to be kept up-to-date on the latest adaptive tools to help their operations remain competitive and viable.
- An increase in public sector investment in climate change related research and education is imperative.

CONCLUSION

We face one of the greatest challenges ever. A warming climate is a global issue, affecting all people and the life support systems they depend on—natural and human managed. Agriculture has the opportunity to help mitigate the challenge as well as adapt to the changes that will occur. Agriculture in Eastern Canada and the Northeastern US is ideally positioned to take advantage of the near-term changes in climate—adequate water resources and longer and warmer growing seasons, allowing for an expansion and diversification of the agricultural commodities grown. Add to this enormous and diverse markets, encompassing our many great cities and rural communities, and we have the basis for an expanded, more sustainable local food system. We also have the capacity to stay abreast of the change thanks to the research capacity at our universities and private sector institutions.

REFERENCES AND ADDITIONAL READING

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At time of publication (September 2011) US and Canadian dollars were considered equal in value.

Building a Competitive Future for Invasive Plant Species Research in the Northeast [as of 9/26/2011]

USDA Beltsville Agricultural Research Center Campus, Maryland
March 21-22, 2012

Throughout the northeastern U.S., research scientists and extension professionals from land grant universities and experiment stations are actively involved with programs focused on invasive plant species. There is excellent potential that these research and outreach efforts by our land-grant institutions can be greatly enhanced and leveraged by coordination at the regional level.

The USDA and other federal agencies emphasize and encourage a multidisciplinary approach to research through greater collaborative efforts not only between different institutions but also between different disciplinary groups (e.g., biophysical sciences and social sciences). This includes an enhanced integration of research and extension efforts for solving many of the challenges that fall under their purview.

The design of this forum is one that emphasizes multidisciplinary networking. Our purpose is to bring together active scientists from multiple disciplines and land grant functions in a think tank approach to define opportunities for regionally coordinated research and extension programming in support of invasive plant species management in the northeast. Specifically, the goal will be to define those areas most likely to provide opportunities in the near future and begin to prepare teams of individuals for aggressively pursuing extramural funding associated with these defined areas. It is anticipated that a logical first step in this process will be the development of one or more multistate projects.

Agenda:

Wednesday, March 21 – Holiday Inn, College Park

5:00 pm – 7:00 pm Registration and reception

Thursday, March 22 – USDA-ARS-BARC Building 5, Room 021

7:00 am – 8:00 am Registration and breakfast

8:00 am – 8:10 am Welcome, introduction of forum's purpose, history of how we got here

8:10 am – 8:45 am Multistate projects in the Experiment Station system.

How they work, opportunities to use them for establishing collaborative teams, need for integration (federal requirement; competitive grant reality)

8:45 am – 9:45 am Invasive plant species overview (to include research and extension efforts, funding landscape, who is doing what where)

Introduction and overview from both the biophysical science perspective (speaker 1) and social science perspective (speaker 2)- including examples of possible multidisciplinary collaborative opportunities. (We may want to find two scientists from each perspective that are currently working together and instead of two talks it becomes one team talk. If this cannot be done, then I would suggest each speaker be a scientist that has done invasive plant species research within their respective expertise, but now has embraced a more multidisciplinary perspective/approach.

9:45 am – 10:00 am Break

10:00 am – 10:30 am A challenge and a couple of examples

Leaving the comfort zone (5-10 min intro that focuses on the need to leave a comfort zone of a narrow perspective to become piece of a solution). Example of a success story or two (need not necessarily be invasive plant spp based since the goal here is to highlight effective team-building etc).

10:30 am – 12:00 pm Breakouts

Divide participants into groups comprised of a maximum number of different disciplines (e.g., ecology, molecular biology, physiology, breeding, management/control, social sciences, etc.) and functions (research, extension). Discussions will be driven by specific questions developed by planning group.

12:00 pm – 1:00 pm Lunch

1:00 pm – 2:00 pm Report of the groups

2:00 pm – 3:00 pm Reflection panel

Panelists (NIFA, NSF, USFS, APHIS, EPA, etc.) to reflect on what they've heard thus far via their participation and to provide some visioning on where they think funding opportunities are likely to go and how the northeast can best prepare itself.

3:00 pm – 3:30 pm Summary thoughts of how to continue the conversation/approach

3:30 pm Adjourn

Notes:

Experiment Station (NERA) and Extension (NEED) Directors and faculty advocates will need to strongly encourage and strategically select participation because a PI will not necessarily see their specific area of invasive plant species highlighted in a talk title. The idea is to push the idea that collaboration beyond that which has happened in the past needs to be expanded to cross major boundaries.

Northeast Food Systems Initiative

The Northeast Food Systems Initiative is primarily a NEED driven program and follows the discussions that occurred during the Joint Summer Session in Mystic, CT. The expected outcomes of this initiative are:

1. Develop a strong CAP's grant proposal around the area of specialty crops that builds on the competitive advantage of the Northeast states.
2. Engage the Northeast land-grant universities and other potential partners in defining a comprehensive proposal that combines strengths in local food systems, ethnic and other niche markets, Good Agricultural Practices (GAPs), global food security, sustainability, and human nutrition.
3. The proposal should have a strong component on the human dimensions associations with adoption of local food systems.
4. The team should also consider supply chain issues, agro-tourism possibilities, rural development, network science, demographic shifts, food deserts, and urban-rural connections.
5. The proposal should be developed with extension as the lead but include strong research and/or resident education objectives.

A number of faculty have been engaged in this effort. It is being led by three NEED Directors – Dennis Calvin, Nick Place and Bill Hare.

A forum has been scheduled for this December on the ARS campus in Beltsville, MD. A reception will be held on the evening of December 7 and the actual forum will occur on December 8. NERA will co-sponsor the forum.



NORTHEAST MULTISTATE ACTIVITIES COMMITTEE

Report and Recommendations

September 26, 2011

Chair, Jon Wraith (NH)

Members: Kirby Stafford III (CT-NH), Tim Phipps (WV), Gary Thompson (PA) and Bob Schrader (NEED)

1. Request approval of proposal for a Coordinating Committee NE_temp1882 - Nanotechnology Risk Assessment, 10/2011 to 2016

Action: Recommends approval of proposal to form a Coordinating Committee.

Concerns were expressed about the limited number of participants who have joined through NIMSS. Clarification was given by Advisor Fred Servello that nanotechnology risk assessment is a newly emerging research topic so “the community of scientists in our institutions is still not well established”. This Coordinating Committee, hopefully, will serve as the vehicle to attract these specialists. The MAC members felt that this is an important area. A member noted that “nanoparticles have been and are being used in many products without knowing what the risks may be”. Although it might require some time to develop broad interest, additional participation is expected. The proposal is recommended for approval and will be allowed to start with a small group. The technical committee will be requested to report to MAC after the first year as to the degree of interest generated by this multistate activity through increased participation.

2. Request approval of Request to Write a Proposal entitled, “Collaborative Potato Breeding and Variety Development Activities to Enhance Farm Sustainability in the Eastern US” [Renewal of NE1031], 10/2012 to 9/2017. Also attached is the Midterm Review by Advisor Kirby Stafford III.

Action: Recommends approval of Request to Write a multistate project proposal to replace NE1031. It was also noted that based on Advisor Kirby Stafford’s midterm review, it appears that the noted problems with technical committee carry-through are being taken care of and the Advisor supports continuation of the project.

3. Consideration of Mid-term Review of NE9 - Conservation and Utilization of Plant Genetic Resources submitted by Advisor Tom Burr.

Action: MAC commends Advisor Tom Burr for his informative midterm evaluation report and his administrative leadership of this important and productive committee.

4. NRSP Review Committee Report

The following have been discussed at our spring and summer meetings. Our Directors will be voting individually per station at the Experiment Station Section Meeting on Sept. 27.

- NRSP_temp1 NIMSS 5-year proposal
- FY2011-12 Off-the-Top Funding for NRSPs 1-3-4-6-7-8-9

5. 2012 NERA Planning Grants Program

Action: MAC supports continuation of the planning grants program. Some revisions were suggested as follows. They have been incorporated in the revised version of the 2012 NERA Planning Grants RFP (see below).

- including a copy of the assessment sheet that MAC uses in evaluating the proposals along with the RFP. [The evaluation criteria were added to the RFP, instead of attaching the assessment sheet.]
- clarify that these are research projects/funds and the extension aspect applies to stakeholder input and subsequent application aspects of the research project
- minor correction -- Add a comma and delete so from the following sentence: As the funds come from the NERA operational budget so they cannot be used to pay F&A., and we reimburse only the actual expenses.

2012 NERA Planning Grants Program

The Northeastern Regional Association of State Agricultural Experiment Station Directors (NERA) announces the next round of its regional competitive planning grants program. These grants are to be used to organize Northeast researchers and Extension educators around teams to develop new mission-oriented, cross-disciplinary, multistate problem-solving programs. The programs are to be primarily research focused and needs driven but include a clearly defined outreach component. They must focus on new and promising research collaborations or integrated research and extension activities that bring together specialists in diverse fields to apply complementary approaches to work on an important well-defined problem. Proposals in support of programs that are forward looking/anticipatory are especially encouraged.

While we will not have a specific focus to this year's round of proposals, we ask that you keep in mind the AFRI priority areas:

- Keep American agriculture competitive while ending world hunger
- Improve nutrition and end child obesity
- Improve food safety for all Americans
- Secure America's energy future through renewable biofuels
- Mitigate and adapt agriculture to variations in climate

Proposals (not to exceed **three** single spaced pages) will be due on **November 22, 2011**. The NERA Multistate Activities Committee will review the proposals and make recommendations for funding to the NERA Directors. Final decisions will be made by December 15, 2011. Funding up to \$10,000 will be available to support transportation and meeting expenses to bring the team together. As the funds come from the NERA operational budget, they cannot be used to pay F&A., and we reimburse **only** the actual expenses. The funding will be available to the teams for a maximum of one year from the date of the award notification. The funds will be administered by the Office of the NERA Executive Director and can only be used to reimburse actual expenses. Unused funds will be returned to our pool for future planning grants.

Proposals for planning grants should include:

- Mission and goals of the proposed program
- Justification for the program relative to stakeholder needs and potential for sustained external funding
- Activities to be engaged in by team members towards a more complete definition of the program
- Timetable for completion of the planning activities and preparation of a competitive proposal
- Team members from two or more Northeastern State Agricultural Experiment Stations and an explanation of their roles on the team
- Team leader with a demonstrated track record of leading cross-disciplinary and/or multi-institutional collaborations
- Budget for planning activities not to exceed \$10,000

An expected outcome of a planning grant will be a proposal submitted to the National Institute for Food and Agriculture in response to the FY2012 or 2013 RFA's or other funding sources specified in the proposal. Grant recipients will be expected to provide a written report at the end of the grant period and subsequent periodic reports on the status of resulting proposals.

The specific criteria that will be used to evaluate proposals are:

- Addresses an important need in the region
- Stakeholder supported justification
- Consistent with goals of competitive funding programs of USDA, NSF, NIH, etc.
- Potential for sustained funding
- Clearly defined activities
- Integrated research and extension activities
- Realistic timetable
- Team members appropriate to proposed activities
- Team leaders with demonstrated track record
- Leveraged support
- Overall quality of proposal

In order to provide guidance and feedback from the previous rounds of grant proposals, the following are some of the reviewer comments on those proposals:

- Goals not well defined
- Not clear what specific major compelling issues will be addressed
- Priority not well established
- Needs not clearly justified by stakeholder support; did not identify specific clientele being served
- Planned specific research and extension activities not well defined
- No specifics on what activities are being planned – what are the key approaches to be used
- Strategy of individual proposal development and then consolidation not clear
- Proposed collaboration not well described
- Deliverables not clear
- Potential for sustainable funding not clear

Please submit planning grant proposals by c.o.b. on **November 22, 2011** to Rubie Mize at rgmize@aesop.rutgers.edu.

2008-2011 NERA Planning Grant Summary (as of 7/14/2011)

<u>Number</u>	<u>Proposal Title</u>	<u>Team Leader/Institutions</u>	<u>Funding Status</u>	<u>Results</u>
NE0807	Biochar as a Beneficial Soil Amendment in Agriculture —Development, Performance and Environmental Impact	Joseph Pignatello, CT-AES [Cooperators: CT, MA, ME, NY, VT]	Budget = \$10,000 Expenses = \$1,928.37	USDA(CSREES)/US DoE BRDI preapplication proposal, Biochar – A High-Value, Recyclable Co-product for Environmentally Sustainable Biofuels Production: Development, Performance and Environmental Assessment (\$4.0 million requested), not approved but subsequent proposals prepared. A \$5 million gift has been received.
NE0901	Addressing Research and Extension Needs of the Emerging Cold-Climate Wine Industry in the Northeast and Upper Midwest	Timothy E. Martinson, Cornell [Cooperators: CT, MA, MN, NH, NY, PA, VT, WI]	Budget = \$10,000 Expenses = \$8,789.61	USDA-NIFA SCRI CAP proposal, " Northern grapes: Integrating viticulture, winemaking, and marketing of new cold-hardy cultivars supporting new and growing rural wineries" (\$2.5 million); includes NY, CT, MA, VT, IA, MI, ND, SD, IL, MN, NE, WI
NE0905	Integrating Pest Management and Pollinator Protection in Insect-Pollinated Specialty Crops	Kimberly Stoner, CT-AES and Anne Averill, UMASS [Cooperators: CT, MA, ME]	Budget = \$9,900 Expenses = \$1,922.81	USDA-NIFA SCRI grant award "Pollination Security for Northeastern Fruit and Vegetable Crops," (\$3.5 million); includes NH, MA, ME NY and CT. Also Connecticut Conservation Innovation Grant from the Natural Resources Conservation Service (\$75K)
NE0906	The Role of Cultural Specialty Crops in Providing Food Security and Entrepreneurship Opportunities for Refugee and Emerging Ethnic Farmer Populations in the Northeast	Jane Kolodinsky, UVM [Cooperators: DC, VT]	Budget = \$10,000 Expenses = \$508.60	

2008-2011 NERA Planning Grant Summary (as of 7/14/2011)

NE1005	Addressing the Nutritional and Reproductive Research and Extension Needs of the Organic Dairy Industry in the Northeast	David H. Townson, UNH [Cooperators: CT, NY, USDA-ARS, Penn Dutch Cow Care Vet. Practice, NE Organic Dairy Producers Alliance NODPA]	Budget = \$10,000 Expenses = \$4,322.31	USDA-NIFA OREI grant award "Assisting organic dairy producers to meet the demands of new and emerging milk markets" (\$2.8 million); includes NH, ME, NY, VT, PA(ARS). A planning grant for \$75K was also received.
NE1008	Healthful Berries: Improving Marketing for Northeast Berry Crops	Mary Ellen Camire, UMaine [Cooperators: MA, NJ, NY, VT]	Budget = \$8,740 Expenses =	
NE1104	Evaluating, Maintaining and Enhancing Managed Honey Bees and Bumble Bees in Insect-Pollinated Specialty Crops in the Northeast	Nicholas W. Calderone, Cornell [Cooperators: CT-NH, DE, MA, ME, Beekeepers: D. Mendes and D. Hackenberg]	Budget = \$9,900 Expenses =	
			Total expenses = \$17,471.70	Total awards/gifts = \$13,950,000

Agenda Brief: ESCOP National Research Support Project Review Committee

Date: September 27, 2011

Presenter: Ralph Cavalieri/Daniel Rossi

Background Information:

1. Committee Membership:

- Chair
 - Ralph Cavalieri (WAAESD)

- Delegates
 - Abel Ponce de Leon (NCRA)
 - Jon Wraith (NERA)
 - Clarence Watson (SAAESD)
 - Kirkland Mellad (ARD)
 - Tom Bewick (NIFA)
 - L. Washington Lyons (Cooperative Extension)

- Executive Director
 - Arlen Leholm (NCRA)

- Executive Director/Executive Vice-Chair
 - Dan Rossi (NERA)

- Representative
 - Don Latham (Stakeholder (CARET))

2. Meetings

The NRSP Review Committee met on June 6, 2011 by conference call.

3. NRSP Proposals Recommendations

- NRSP-1 Research Planning Using the Current Research Information System (CRIS and NIMSS)
Recommend approval of project proposal for 2011-2016

4. NRSP 2011-12 Budget Request Recommendations

<u>Project</u>	<u>2010-11 Funding</u>	<u>2011-12 Request</u>	<u>2011-12 Recommended</u>
NRSP-1	\$0	\$50,000	\$50,000
NRSP-3	\$50,000	\$50,000	\$50,000

NRSP-4	\$481,182	\$481,182	\$481,182
NRSP-6	\$150,000	\$150,000	\$150,000 ¹
NRSP-7	\$325,000	\$325,000	\$325,000 ²
NRSP-8	\$500,000	\$500,000	\$500,000
NRSP-9	\$175,000	\$175,000	\$175,000 ³

5. Committee Leadership

Abel Ponce de Leon will be recommended as the incoming Chair of the NRSP-RC. He would replace Chair Ralph Cavaliere on October 1, 2011. Arlen Leholm will replace Dan Rossi as the Executive Vice-Chair and will provide administrative support to the chair. Mike Harrington will be the incoming Executive Director-Member, as the next rotation of leadership will be from Western region.

Action Requested: Approval of NRSP-1 proposal and FY2011-12 budgets for all NRSPs.

¹ The approval of the proposal and FY2010-11 budget for NRSP-6 was on condition that the Committee developed a plan for commercial users to pay for the services. A report from the NRSP-6 leadership outlined success in obtaining \$25,500 in donations from the private sector and plans to seek out additional funding for 2011-12. The NRSP-RC accepted this approach as a good faith effort in obtaining private sector support and recommends continued funding for FY2011-12.

² With the caveat that if funds equal to or less than this amount become available to NRSP-7 through a Congressional special grant or equivalent funding mechanism during FY2011-12, that amount will not be distributed to NRSP-7 from Hatch MRF.

³ The approval of the proposal and FY2010-11 budget for NRSP-9 was on condition that the Committee secured matching funds for FY2010-11 and provided assurance of matching funds for FY2011-12. The NRSP-9 Committee provided evidence of a one-time commitment \$150,000 by the National Research Council and another \$25,000 for each year of the project in funding committed by the University of Kentucky. The NRSP-RC feels that these commitments are illustrative of the good faith effort on the part of NRSP-9 to meet the matching requirements and recommends continued funding for 2011-12.

Potential Issues/Topics for Best Practices Sessions

- Hatch project management; ie project development & review, reporting, budget distribution mechanisms (NERA 3/07)
- Effecting change, keeping institutions agile, replacing unproductive tenured staff (NERA 7/07)
- Allocation of space; ie office, lab, greenhouse, field, etc. (ESS 9/07)
- Re-directing non-productive or unnecessary faculty research programs (re-treading/re-training). (ESS 9/07)
- Estimating costs of raising and managing research animals and implementing per diem charges; decision processes, transition, oversight, etc (NERA 3/08)
- Budgeting for new faculty hires (including start-up and spousal hires); unique start-up packages, inter-college spousal hiring, funding start-ups, etc (NERA 7/08)
- Managing significant budget reductions; i.e. selective vs. across-the-board, prioritization, creative funding mechanisms, etc. (NERA 3/09; ESS 9/08)
- Relationships with State Departments of Agriculture (NERA 7/09)
- Institutional and Regional Responses to Budget Reductions (NERA 9/09)
- Managing High Cost Agricultural Research Facilities (ESS 9/09)
- Positioning NERA Institutions and Scientists for the New AFRI RFP (NERA 3/10)
- Adoption of a "*culture of sustainability*" in our institutions (NERA 3/10)
- Encouraging collaborations (NERA 7/10)
- Coordinated Regional Research on Invasive Plants (NERA 9/10)
- Documenting Impacts, How and Why (ESS 9/10)
- How do we want to handle dairy support in the region? (NERA 3/11)
- Intellectual Property: How It is Handled and the Role of Experiment Stations (NERA 3/11)
- Sustainable Campus Operations (ESS 9/11)
- Structuring University-Wide Centers and Institutes; Issues and Solutions (ESS 9/11)
- Flexible budget and resource allocation methods; ie historical, competitive, programmatic, etc.
- Hiring and supporting mid-level administrative leadership; ie department heads, research center directors, etc.
- State-level leadership in major research program areas; ie identifying & supporting faculty leaders, relationship with department heads & college administration, degree of administrative load, etc.
- Pesticide and toxic waste management on outlying research stations; ie compliance, disposal, personnel training, etc.
- Increasing and managing grants and contracts; ie training and motivating faculty, proposal writing support, post-award management, etc.
- Indirect cost recovery; ie commodity groups and state agency grants, use of college portion, etc.
- Developing integrated, interdisciplinary "centers of excellence"; ie establishment & funding, leadership, member vs. non-member, etc.
- Research faculty technical support; ie appropriate level, sharing technicians, partial salary, etc.
- Developing true multi-state partnerships in research.
- Working with our commodity groups for funding research.
- Design and use of external advisory councils.
- Encouraging a culture of publishing in peer-reviewed journals.
- Ensuring research stands behind the extension recommendations, especially when the recommendations are referred to in state rules and policy.
- Research websites and tying R, T, and E together.
- Leading the local experiment station to actively initiate and engage in new initiatives.

- Flexible research support for departments/units; ie new funding models, dept/unit leaders help develop model.
- Department Advisory Councils; forming council, composition, training, management, getting meaningful feedback.
- Faculty performance expectations; ie publications, grants, teaching, etc.
- Hatch, McIntire-Stennis, and internal competitive project review processes; ie new/renewed Hatch & M-S project review, internal RFPs, decision processes, etc.
- Ensuring laboratory security in university settings; ie compliance policies, access, oversight, etc.
- Decommissioning outlying stations; ie decision process, local public relations, stakeholder communication, faculty/staff reassignment, etc.
- Estimating the costs of managing and supporting greenhouse research and implementing greenhouse or bench charges; decision processes, transition, oversight, etc.
- Hiring and supporting faculty across state lines; MOUs/MOAs, funds management, P&T decisions, reporting lines, program support, etc.
- Purchasing, maintaining and managing shared equipment; oversight, use scheduling, cost sharing, etc.

**2012 North Central and Northeast Joint Summer Session
Hilton Burlington, 60 Battery Street, Burlington, VT 05401
July 8-10, 2012**

Draft Agenda [as of 9/21/2011]

**Sesquicentennial of the Land Grant Act - 150th Anniversary of the
Passage of the Morrill Land-Grant Act (July 2, 1862)**

Date	Location	Event
July 8, Sunday:		
9:00am – 3:00pm	Burlington	Tour of Intervale and Cheese Caves
3:00-5:00pm	Hilton Room #	NERA Multistate Activities Committee Meeting
5:00-6:00pm	Hilton Room #	NERA Executive Committee Meeting
3:00-5:00pm	Hilton Room #	Registration
6:00-8:00pm	Hilton Room #	Opening Reception Brief Welcome – Dean Vogelmann Historian/Actor - ???
July 9, Monday		
7:00am	Hilton Room #	Breakfast and Registration
8:00am	Hilton Room #	Welcome Remarks – University of Vermont [Hosts] Dean Vogelmann
8:15am	Hilton Room #	General Session Speakers – Under Secretary for Research, Education and Economics Dr. Catherine Woteki [TBC] Cornerstone [TBC]
10:00am		Break
10:30am	Hilton Room #	Joint Session Presenters – Federal, University, Private perspectives Federal – NIFA University - Univ. of Vermont Interim President Dr. A. John Bramley Private – DuPont, Wegmann’s, Ben & Jerry’s, Green Mountain Coffee Bi-National - US-Canada Climate Change Partnership
12:00	Hilton Room #	Lunch – USDA Secretary Vilsack [TBC]
1:30pm	Hilton Room # Hilton Room # Hilton Room # Hilton Room # Hilton Room # Hilton Room #	Breakouts - approx. 20 persons in each group Group A Group B Group C Group D Group E Group F
3:15pm		Break
3:45pm	Hilton Room #	General Session – Group Reports and Discussion
5:00pm		Adjourn for the Day
5:30pm	Seaport	Boarding the Spirit of Ethan Allen III
6:00-9:00pm	Spirit of Ethan Allen III	Sunset Dinner Cruise Cake and Celebratory Toast to the 150 th Land Grant Anniversary
9:00pm		Return to Hilton

July 10, Tuesday		
6:30am	Hilton Room #	Breakfast
8:00am	Hilton Room # Hilton Room # Hilton Room # Hilton Room #	Joint Meetings: approx. 30 persons in each group NC and NE Deans/Admin. Heads NC and NE CARET Delegates NC and NE Extension Directors NCRA and NERA Directors
10:00am		Break
10:30am	Hilton Room # Hilton Room #	Section Meetings: approx. 15-20 persons in each group NC Deans/Admin. Heads NE Deans/Admin. Heads NC CARET NE CARET NC Extension Directors NE Extension Directors (NEED) NCRA NERA
12:00pm		Lunch
1:30pm [During this time CARET may meet with AHS.]	Hilton Room # Hilton Room #	Section Meetings: approx. 15-20 persons in each group NC Deans/Admin. Heads NE Deans/Admin. Heads NC CARET NE CARET NC Extension Directors NE Extension Directors (NEED) NCRA NERA
3:15pm		Break
3:45pm	Hilton Room #	General Session – Joint Session Follow-up
4:45pm		Adjourn