

February 7, 2013

Dr. Helene Murray
Chair, MISA Search Committee
University of Minnesota
1991 Buford Circle
St. Paul, MN 55108-1013

Dear Dr. Murray:

I am very enthused about the opportunities provided by the University of Minnesota School of Agriculture Endowed Chair in Agricultural Systems. I am providing the work plan below with hopes of applying my experience and skills in systems analysis and sustainable agriculture to positively impact the implementation of living covers in the Minnesota region. For me, this would also be a chance to reconnect with the people and agriculture of Minnesota, where I spent nearly five enjoyable years obtaining M.S. and Ph.D. degrees in agronomy. The agricultural systems focus is particularly appropriate for me, not only because of my long-standing interest in use of a systems approach, but also because I first learned about systems thinking while doing my Ph.D. at University of Minnesota. While pursuing my doctorate, I was part of a farming system project team that conducted open-ended interviews with farm families in southwest Minnesota on the challenges they faced. That time period taught me that the solutions to agricultural problems are complex and that progress depends on understanding the entire system, rather than relying on reductionistic thinking.

In the 25 years since I finished my doctorate at Minnesota, I've learned agricultural policy by working on the House of Representatives Agriculture Committee and at USDA headquarters, conducted research on alternative cropping systems, and delivered many education and outreach programs on crop diversification and the need to improve farming system sustainability. I have significant experience with cover crops and more recently with biomass crops. I've served as a regional and national director with the USDA Sustainable Agriculture Research and Education (SARE) program, been a faculty member and nonprofit executive, and had a chance to work on agriculture policy at the state and federal level. One of my real joys has been learning from farmers and getting a chance to help them with their efforts to improve their sustainability. It has also been rewarding for me to help many off-farm landowners figure out new opportunities for increasing diversification and stewardship of the land they hope to sustain and improve.

In thinking about what I might be able to contribute to help with farm conservation and diversification in Minnesota, it seemed a natural fit to consider working with the Green Lands, Blue Waters program. After some conversations with Richard Warner about what I could contribute to this program, I developed the proposed work plan that follows. My overall goal will be to contribute to the mission of the Green Lands, Blue Waters program in a way that helps catalyze market-based innovation in delivery of living cover conservation practices.

Project Work Plan

The initial objective for my project will be to evaluate how farm service providers can be induced by market-based incentives to provide contract services for planting living covers. I will focus my activities on cover crops but will also identify where parallel opportunities exist to have contractors provide seeding of perennial living covers, including conservation buffer strips, native forages or pastures, and biomass plantings. A particular audience for this information will be absentee or non-operational farmland owners who have the interest but not the knowledge of how to implement living cover conservation plantings on their farmland.

For my endowed chair project, I will start by meeting with several Green Lands, Blue Waters consortium partners and other relevant leaders and thinkers at University of Minnesota and agency offices in Minnesota. This will be an opportunity to better identify, through systems analysis, some of the barriers and opportunities that exist to move forward with increased adoption of living covers in Minnesota, particularly cover crops. I expect to then proceed with a combination of face-to-face and phone interviews with current and potential contractors who can provide conservation plantings. Examples of such contractors important for cover crops are aerial applicators and ag input companies with high clearance sprayers that can be adapted for seeding over the top of standing corn and soybeans late in the growing season. Other possible contractors are those with specialized drill seeders that can do a good job of planting cover crops into residue or handling native perennial seed for biomass, forage/pasture, or conservation buffer plantings. I think there is also an opportunity for motivated farmers to be entrepreneurial in providing custom seeding services with cover crops and other living covers.

Part of the challenge of getting these service providers off the sideline and into the game of establishing living covers is to provide market-based incentives to them. I have currently been managing a survey of corn and soybean farmers on the subject of cover crops, and one of the questions is on what they would be willing to pay for having someone else plant a cover crop for them (above and beyond the cost of the seed alone). Preliminary survey results from over 400 farmers is showing they would be willing to pay up to \$25 per acre to have the cover crop seed planted for them. This type of information needs to be communicated to individuals and companies who can do cover crop seeding, along with guidance on contracting and setting up price structures for their fee-based services. My understanding is that at least one of the Green Lands, Blue Waters working groups is developing some price structure guidelines that may be helpful in this regard.

Along with the issue of financial incentives, there is the issue of matching up seeding contractors with farmers and particularly absentee landowners. I have often had calls or questions at meetings from non-farmers who own farmland and want to implement conservation practices but feel unsure how to start. They have told me that the person farming their ground is not able to do the conservation plantings they desire, either for lack of equipment, knowledge, or available time. I believe there is a real opportunity to better connect landowners and farmers themselves with the people and companies that could help with planting cover crops and planting perennial covers. Potentially this could be addressed in part by developing some web-based directories of companies and individuals that can provide custom planting services in selected areas of Minnesota.

A further challenge is making sure that potential service providers have the information they need on equipment, seeding rates and dates, appropriate species, varieties, and seed mixes, and other factors affecting successful establishment. I think this is where the communication with Green Lands, Blue Waters consortium partners will be particularly valuable, as many of them are already providing field tours and other education programs that can help train these potential contractors. If needed, as an agronomist experienced with cover crops and other conservation plantings, I am also prepared to help identify and organize material that will be of help to these contractors, and perhaps participate in webinars or on-the-ground trainings that will include the audience of service providers who can do contract seeding.

Another key outreach and networking effort I would like to pursue is to identify and reach some of the larger farmland managers who work with multiple absentee landowners in Minnesota. It has come to my attention that some of these land managers collectively manage farms for their clients that add up to tens of thousands of acres. It is my impression that most of these land managers are not as familiar with the opportunities and benefits of cover crops and other living covers as they could be, nor are they likely to be familiar with service providers who could do

conservation plantings on their clients' land. I will plan to meet face-to-face with some of the land managers administering Minnesota farmland and also talk with individuals who network with these managers. Here again there may be value to provide web-based directories of service providers who can do custom conservation seeding, and to familiarize these farmland managers not only with the service provider directories but also the questions they should be asking of these service providers and appropriate pricing structures for services.

My exact work plan will be heavily influenced by the results of initial conversation with Green Lands, Blue Waters (GLBW) consortium partners and other leaders in Minnesota. I will use those early conversations to do some system-based assessment and formulate a more detailed action plan. However, a tentative timeline for my activities is as follows:

- April-June, 2013 Engage with GLBW consortium partners and other Minnesota ag leaders through face-to-face meetings and follow-up phone calls, focusing on how to catalyze innovation and incentives with cover crops and other living covers.
- June, 2013 Develop a detailed action plan for the remainder of endowed chair activities based on initial assessment of barriers to increased adoption of cover crops and other covers, with a focus on service providers and landowner issues.
- July-Oct., 2013 Identify and connect with both service providers who can do contract seeding, and with farmland managers who impact large acreages, dialoguing with them on benefits and issues related to establishing cover crops and related living cover practices. Communicate with GLBW consortium partners on education and outreach strategies to better reach these audiences.
- Nov.-Dec., 2013 Collaborate with consortium partners in making sure that appropriate information on practices and pricing structures is available to both contractors and the farmers and landowners who can benefit from those services. Compile directories of relevant service providers who can do contract seeding for selected regions in Minnesota. If appropriate, contribute to web-based written materials and/or education efforts such as webinars.
- Jan.-March, 2014 Facilitate participation of key contractors, farmland managers, and GLBW consortium representatives from Minnesota in a national symposium on cover crops and soil health that I will be chairing, to be held February 2014 in Omaha, NE. This event is being funded by SARE and the Howard Buffet Foundation; we expect to cover most costs for participants. Conduct follow-up with consortium partners on how networking will continue with service providers, land managers, and absentee farmland owners in Minnesota. Provide a final report and recommendations, and if appropriate, deliver a University of Minnesota seminar on project activities and the ongoing challenges in catalyzing increased adoption of cover crops and living covers.

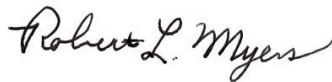
Budget and time period

A total budget of **\$24,000 is requested**, with \$16,500 in compensation for time on endowed chair activities, \$7,000 for travel, and \$500 for incidental meeting expenses, such as photocopies. My proposed time commitment to the chair activities will be approximately 220 hours during the period **April 1, 2013 to March 31, 2014**. Although I am proposing a 12-month activity period, I anticipate completing the majority of the work in calendar year 2013, with a few key follow-up activities in early 2014. Travel funds requested are to cover an estimated 20 days of travel,

including 20 hotel nights averaging \$100/night (subtotal \$2000), meal per diem at an estimated \$40/day for 20 days (subtotal \$800), two round trip flights from St. Louis to Minneapolis-St. Paul at \$300 each (subtotal \$600), and mileage expenses of approximately \$3600 (based on four driving trips to St. Paul from Columbia and visits to Green Lands, Blue Waters consortium partners in various parts of Minnesota and Iowa, and possibly one or two adjacent states). Of time devoted to the chair activities, approximately 80% of time will be spent in Minnesota or visiting consortium partners in adjoining states and the other 20% spent in Missouri conducting interviews by phone, working on preparing presentations, scheduling meetings and interviews, and conducting other communications. The travel to Minnesota will include two visits of a week each (one in spring and one in fall) and approximately four shorter multi-day trips.

My thanks to the MISA board and search committee for consideration of this application. I am excited about the opportunity to once again do some work in Minnesota and hopefully contribute to the mission of the Green Lands, Blue Waters program while fulfilling the goals of the endowed chair program. If I can answer any questions about myself or the proposed project activities, please contact me by phone at 573-881-4718, or email myersrob@missouri.edu.

Sincerely,

A handwritten signature in cursive script that reads "Robert L. Myers".

Robert L. Myers, Ph.D.