NORTH CENTRAL REGION
WATER NETWORK

North Central Region Water Network
Request for Applications
2015 Extension and Capacity-Building Seed Funding

About the North Central Region Water Network

The North Central Region Water Network is a 12-state collaboration between Extension water resource professionals and university, federal, state, NGO and industry partners, The Network is funded by the North Central Region Extension Directors, based on over a decade of USDA-NIFA funded water programs, and anchored by a core team of Extension-appointed state coordinators. The Network strives to:

1. Increase connectivity and learning between university professionals and partners across a diversity of water-related disciplines and roles
2. Build capacity of universities to address multi-state water-related issues and opportunities
3. Generate measurable economic, environmental, and social impacts in the short and long-term, with a focus on watershed planning and the following key issues:
    a. Nutrient and manure management
    b. Sustainable water supply
    c. Climate change & adaptation
    d. Soil health
    e. Land use and development practices
    f. Aquatic invasive species prevention and management
    g. Youth water literacy and stewardship

The Network is providing a small number of competitive multi-state seed grants to facilitate progress toward these goals.

Eligibility

Lead applicants must have an Extension appointment/assignment at a land-grant institution in the North Central Region. Eligible lead institutions include: University of Illinois, Purdue University, Iowa State University, Kansas State University, Michigan State University, University of Minnesota, University of Missouri, University of Nebraska-Lincoln, North Dakota State University, The Ohio State University, South Dakota State University, and University of Wisconsin. Lead applicants may enlist co-applicants and partners from other institutions and organizations to both receive funds and contribute cash and in-kind resources. We strongly encourage engagement of 1890 and 1994 land-grant institutions, as well as federally designated Hispanic Serving Institutions in the North Central Region.

Purpose of this Request for Applications and Award Size

The purpose of this request for applications is to support the goals of the North Central Region Water Network. A maximum of $100,000 will be awarded, with each award being up to $30,000. It is anticipated that three to six awards will be made for 2015.

All proposals must:

1. Include at least three states.
2. Address North Central Region Water Network goals, including one or more of the seven key water-related issues listed above.
3. Show the potential to demonstrate and document transformative impact in water-related programming or Extension's capacity to address water-related issues.

Three types of proposals will be considered:

1. Planning Projects – The purpose of planning projects is to do one or more of the following:
    a. Prepare for competitive funding opportunities.
    b. Work with partners to plan Extension programs or related applied research that could be funded through contracts or other non-competitive funding mechanisms.
    c. Develop a plan for expanding a high quality Extension program to address needs of additional states in the North Central Region.
2. Program Delivery Projects – The purpose of program delivery projects is to conduct new multi-state Extension programming for which a plan for multi-state work already exists.
3. Professional Development for Extension Professionals to Improve Water-Related Extension Programs – A study sponsored by the Extension Committee on Organization and Policy (ECOP) identified key characteristics of 21st Century Extension professionals by reviewing Extension job postings, surveying Extension Directors/Administrators and conducting focus groups with outstanding Extension professionals. The purpose of these projects is to enhance technical (related to water quality and quantity issues) and supporting program delivery skills of Extension professionals identified by the study's Advisory Committee as "emerging" to address a specific water quality programming need. Please see Appendix A for the list of identified program delivery skills and attributes. More information on the study can be found at: The Skills and Attributes of 21st Century Extension Professionals.

Application Format and Contents

Total application pages will not exceed 10. The cover letter, budget, and letters of support will not count against the 10-page limit. Font size must be at least 12 point, with margins of at least one inch in all directions and line spacing not exceeding six lines of text per vertical inch.

Contents should include:

1. Cover page
    a. Title
    b. Date
    c. Project director and co-directors, including preferred contact information for each
    d. Signatures and dates from Extension State Water Coordinators in participating states
2. Abstract (400 words or less)
    a. Problem/opportunity
    b. Beneficiary audience, approach and solution
    c. Deliverables and outcomes/impacts
3. Introduction
    a. Context
    b. Problem or opportunity
4. Response
    a. Beneficiary audiences
    b. Approach/methods
    c. Alignment with water-related plans and priorities such as:
        i. Mississippi River Gulf of Mexico Watershed Nutrient Task Force and state-level nutrient strategies
        ii. Great Lakes Restoration Initiative
        iii. The Red River Basin Commission
        iv. Groundwater conservation in the High Plains aquifer
        v. The APLU Natural Resources Roadmap
5. Project deliverables, timeline, outcomes/impacts, and how they relate to Network goals. Please be sure to indicate how Extension capacity to address water resource issues will be strengthened.
6. Logic model or concept map that includes:
    a. Inputs
    b. Outputs
    c. Outcomes
    d. Clear relationship between outputs and outcomes

    For useful program planning and logic model information and templates, please see the University of Wisconsin-Extension Program Development and Evaluation resources. Moderate evaluation support will be provided to all successful applicants.
7. Partners and their roles, including engagement of the following if applicable to the project:
    a. Multi-state committees engaged in research and extension activities pertinent to the project. See Appendix B for a list of multi-state committees engaged in activities that are either directly or indirectly related to water resource management. If there are no pertinent committees, please indicate this.
    b. 1890 and1994 land-grant institutions. See Appendix C for a list of 1890 and 1994 land-grant institutions in the North Central Region.

8. Resource leveraging and sustainable funding: briefly describe resources leveraged. Planning and Program Delivery Projects must also describe plans for securing resources to continue work after seed funding ends. Proposals that document at least a 1:1 cash match, or a comparable combination of cash and in-kind match will be reviewed more favorably than projects that do not document match. Proposals that leverage non-Extension resources will be reviewed more favorably than those that rely solely on existing Extension funds (e.g. salary) as match.
9. Literature cited
10. Budget and narrative, including cash and in-kind match (see Appendix C for budget template).
11. Two or more letters of support from project partners and/or beneficiaries.

Proposal Submission and Notification

- Please submit your applications no later than **December 3, 2014, 5pm CST via e-mail** to:
    1. Rebecca Power: rlpower@wisc.edu
    2. Martha Martin: mlmartin3@wisc.edu
    3. Extension State Water Coordinators in participating states
- Signatures and dates from Extension State Water Coordinators in participating states must be on your application cover page.
- Use the budget template provided. If you choose to use another budget format, consult with the Regional Director (Rebecca Power, rlpower@wisc.edu) prior to submitting.
- Submit all application components, including budget and letters of support, in a single pdf file named: *Projectdirectorlastname_firstname_year.pdf* (e.g. smith_jane_2014.pdf)
- Applicants will be notified of review results no later than **January 7, 2015**.
- The allowed project period will be from the time successful applicants are notified through **January 8, 2016**.

Funds Disbursement

Successful applicants will request funds through invoices to the University of Wisconsin-Extension. Lead applicants will send invoices to Rebecca Power, North Central Region Water Network. Successful applications will not result in a formal contract or grant. Funds should be housed in a segregated account and are to be spent in accordance with federal guidelines for Smith Lever-formula funds and within the scope of the accepted budget. General purpose equipment, tuition reimbursement, and indirect costs are not allowed.

More instructions will be shared when successful lead applicants are notified.

Review Criteria

The following criteria will be used by reviewers to evaluate and select applications for funding. Criteria will be applied as appropriate to the type of application (Planning, Programming, or Professional Development).

1. To what extent will the project address one or more of the following key issues, either as stand-alone issues or though watershed planning:
   a. Nutrient and manure management
   b. Sustainable water supply
   c. Climate change & adaptation to handle both flooding and drought situations
   d. Soil health
   e. Land use and development practices
   f. Aquatic invasive species prevention and management
   g. Youth water literacy and stewardship
2. To what extent will the project support or integrate with existing multi-state plans and priorities, such as those associated with:
   - Mississippi River Gulf of Mexico Watershed Nutrient Task Force and state-level nutrient strategies
   - Great Lakes Restoration Initiative
   - The Red River Basin Commission
   - Groundwater conservation in the High Plains aquifer
   - The APLU Natural Resources Roadmap
3. To what extent will the project increase multi-state connectivity and learning among university professionals and partners?
4. To what extent will the project strengthen existing or create new collaborations between university researchers and extension educators?
5. To what extent will the project build capacity of universities to address multi-state water-related issues and opportunities, including:
   - Expanding successful extension programs to additional states
   - Generating new funding for extension programming through competitive grants, contracts for services, or fee-based programs?
4. To what extent will the project leverage institutional and financial resources outside of the university in the short and long term? Proposals that document at least: a 1:1 cash match, a 3:1 in-kind match, or a comparable combination of cash and in-kind match will be reviewed more favorably than projects that do not document match. Proposals that leverage non-Extension resources will be reviewed more favorably than those that rely solely on existing Extension funds (e.g. salary) as match. Match is not a requirement to submit.
6. To what extent will the project generate measurable economic, environmental, and social impacts in the short and long-term? Special consideration will be given to projects that have the potential for transformative impact on water-related programming or Extension's capacity to address water-related issues.

Appendix A

Selected Emerging Skills and Attributes of 21st Century Extension Professionals*

1. Conduct robust needs assessments (engage stakeholders), focus on key emerging issues, prioritize and align programming.
    a. Engage audiences representing emerging demographics, strengthen our cultural competency.
2. Strengthen engagement with learners and partners to facilitate co-learning and co-discovery of new knowledge.
    a. Develop high-level facilitation and conflict resolution skills.
    b. Creative problem-solving strategies or processes.
3. Define and pursue Extension scholarship.
    a. Develop innovative, engaging learning experiences using a variety of methodologies including technology
    b. Evaluate innovative learning methodologies and assess effectiveness with current and new audiences.
    c. Conduct applied, translational research to facilitate knowledge transfer.
    d. Impact assessment
4. Develop and apply innovative resource generation strategies (beyond grants and fee revenue).
5. Improve marketing, public relations, branding, and public value skills.
6. High emotional intelligence and collaboration skills.

* More information on the study can be found at: The Skills and Attributes of 21st Century Extension Professionals.

Appendix B

Multistate Research Projects and Committees Applicable to
North Central Region Water Activities Organized by Region

Projects are organized into 2 main categories: Direct and Indirect. Direct projects directly relate to water management and issues in the projects focus. The indirect classification means water is not the center issue at study but that water impacts are part of the study in some aspect either large or small.

List of committee types and abbreviations:

Committee Types	Abbreviation
Multi-state Research	NC, NE, S, or W only
Coordinating Committee	CC
Development Committee	DC
Extension and Research Activity	ERA

Projects that **directly** apply to water management organized by region:

Project Number	Title	Link to Participants Directory
North Central (NC)		
NC1182	Nitrogen Cycling, Loading, and Use Efficiency in Forage-Based Livestock Production Systems (formerly NCT-196 and NC-189)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=10916
NC1186	Water Management and Quality for Ornamental Crop Productions and Health	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12296
NC1187	The Chemical and Physical Nature of Particulate Matter Affecting Air, Water and Soil Quality (NCR174)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12136
NC1189	Understanding the Ecological and Social Constraints to Achieving Sustainable Fisheries Resource Policy and Management	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13136
NC1190	Catalysts for Water Resources Protection and Restoration: Applied Social Science Research	http://lgu.umd.edu/lgu_v2/homepages/home.cfm?trackID=13236
NCERA217	Drainage design and management practices to improve water quality	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11396
Northeast (NE)		
NE1038	Hydropedology: Genesis, Properties, and Distribution of Hydromorphic Soils	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11436
NE1045	Design, Assessment, and Management of Onsite Wastewater Treatment Systems: Addressing the Challenges of Climate Change	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12376
NE1438	Hydropedology of Vernal Pool Systems	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=16317

South (S)		
SDC358	Quantification of best management practice effectiveness for water quality protection at the watershed scale	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=16016
SERA006	Methodology, Interpretation, and Implementation of Soil, Plant, Byproduct, and Water Analyses	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14556
SERA043	Southern Region Integrated Water Resources Coordinating Committee	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15676
WEST (W)		
W2128	Micro-irrigation for sustainable water use	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11236
W2170	Soil-Based Use of Residuals, Wastewater and Reclaimed Water	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=10996
W2190	Water Policy and Management Challenges in the West	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11237
WERA103	Nutrient Management and Water Quality	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12156
WERA1012	Managing and Utilizing Precipitation Observations from Volunteer Networks	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15498
WERA1020	Western Region Multistate Coordinating Committee on Water Resources	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14536
WERA1022	Meteorological and Climate Data to Support ET-Based Irrigation Scheduling, Water Conservation, and Water Resources Management (from WDC18)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13976
W_TEMP3128	Scaling Micro-irrigation Technologies to Address the Global Water Challenge	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=16476
W_TEMP3170	Beneficial Reuse of Residuals and Reclaimed Water: Impact on Soil Ecosystem and Human Health (formerly W2170)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15936
W_TEMP3188	Soil, Water, and Environmental Physics Across Scales	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=16636
W_TEMP3190	Management and Policy Challenges in a Water-Scarce World	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=16396

Projects that **indirectly** apply to water management organized by region:

Project Number	Title	Link to Participants Directory
North Central (NC)		
NC1034	Impact Analyses and Decision Strategies for Agricultural Research	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13317
NC1178	Impacts of Crop Residue Removal for Biofuel on Soils (formerly NC1017)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11016
NC1179	Food, Feed, Fuel, and Fiber: Security Under a Changing Climate	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=10917
NC1195	Enhancing nitrogen utilization in corn based cropping systems to increase yield, improve profitability and minimize environmental impacts (NC1032/210)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12896
NCCC211	Cover crops to improve environmental quality in crop and biofuel production systems in the Great Lakes and Upper Mississippi basins	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12236
NCERA013	Soil Testing and Plant Analysis	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13276
NCERA059	Soil Organic Matter: Formation, Function and Management	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13316
NCERA180	Precision Agriculture Technologies for Food, Fiber, and Energy Production	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13196
NCERA221	Turfgrass and the Environment (was NCERA192)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13837
NCERA_TEMP003	Soil and Landscape Assessment, Function and Interpretation	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15996

Northeast (NE)		
NE1010	Breeding and Genetics of Forage Crops to Improve Productivity, Quality, and Industrial Uses	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=1314
NE1041	Environmental Impacts of Equine Operations	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11196
NE1044	Whole farm dairy and beef systems: gaseous emissions, P management, organic production, and pasture based production	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12116
NE1046	Management of Annual Bluegrass on Golf Courses: Improved Practices for Maintenance, Pest Control, and Viable Techniques for Transition to More Desirable Grasses	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12876
NE1049	Community Health and Resilience	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13996
NE1335	Resource Management in Commercial Greenhouse Production	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15416
NECC1013	Strategies to Evaluate and Mitigate Ozone Impacts on the Structure and Function of Vegetation	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13736
NECC1312	Northeast Coordinating Committee on Soil Testing	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15896
NEERA1002	Adaptive Management for Improved Nutrient Management	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11316
NE_TEMP2144	Poultry Production Systems and Well-being: Sustainability for Tomorrow	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15899
NRSP003	The National Atmospheric Deposition Program (NADP)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=10416
South (S)		
S1032	Animal Production Systems: Synthesis of Methods to Determine Triple Bottom Line Sustainability from Findings of Reductionist Research	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15636
S1048	Assessment of the Carbon Sequestration	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11096

	Potential of Common Agricultural Systems on Benchmark Soils Across the Southern Region Climate Gradient	
S1054	Bio-based Fibrous Materials and Cleaner Technologies for a Sustainable and Environmentally Responsible Textile Industry	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14296
S1055	Biology, impact, and management of soybean insect pests in soybean production systems	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14636
SCC083	Quantifying the Linkages Among Soil Health, Organic Farming, and Food	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12576
SERA017	Organization to Minimize Nutrient Loss from the Landscape	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15716
SERA020	Southern Conservation Tillage Systems Conference	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11876
SERA025	Turf (IEG-16)	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15836
SERA042	Enhancement of Leadership Capacity to Address Global Issues in the Food Systems through Coalition Development	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14896
WEST (W)		
W1012	Improving ruminant use of forages in sustainable production systems for the western U.S.	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11816
W2004	Marketing, Trade, and Management of Aquaculture and Fishery Resources	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11456
W2045	AGROCHEMICAL IMPACTS ON HUMAN AND ENVIRONMENTAL HEALTH: MECHANISMS AND MITIGATION	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12596
W2082	Evaluating the Physical and Biological Availability of Pesticides and Contaminants in Agricultural Ecosystems	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12276
W2188	Characterizing Mass and Energy Transport	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=11596

	at Different Vadose Zone Scales	
W3133	Benefits and Costs of Natural Resources Policies Affecting Ecosystem Services on Public and Private Lands	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14376
W3147	Managing Plant Microbe Interactions in Soil to Promote Sustainable Agriculture	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14876
W3185	Biological Control in Pest Management Systems of Plants	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14316
WCC1008	Rangeland Education Across Institutional Borders	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15396
WERA011	Western Regional Turfgrass Research	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13596
WERA027	Potato Variety Development	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12256
WERA102	Climate Data and Analyses for Applications in Agriculture and Natural Resources	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=12536
WERA1008	Rangelands West Partnership	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=13016
WERA1014	Intensive Pasture Management for Sustainable Livestock Production in the Western US	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=15556
WERA1018	The Social-Ecological Resilience of Rangelands in Working Landscapes	http://lgu.umd.edu/lgu_v2/homepages/member.cfm?trackID=14616

Appendix C
1890 and 1994 Land-grant Institutions in the North Central Region

1890 Institutions

Lincoln University, Jefferson City, MO
Central State University, Wilberforce, OH

1994 Institutions

Bay Mills Community College, Brimley, MI
Cankdeska Cikana Community College, Fort Totten, ND
College of Menominee Nation, Keshena, WI
Fond du Lac Tribal and Community College, Cloquet, MN
Fort Berthold Community College, New Town, ND
Haskell Indian Nations University, Lawrence, KS
Keweenaw Bay Ojibwa Community College, Baraga, MI
Lac Courte Oreilles Ojibwa Community College, Hayward, WI
Leech Lake Tribal College, Cass Lake, MN
Little Priest Tribal College, Winnebago, NE
Nebraska Indian Community College, Macy, NE
Oglala Lakota College, Kyle, SD
Saginaw Chippewa Tribal College, Mt. Pleasant, MI
Sinte Gleska University, Mission, SD
Sisseton Wahpeton Community College, Agency Village, SD
Sitting Bull College, Fort Yates, ND
Turtle Mountain Community College, Belcourt, ND
United Tribes Technical College, Bismarck, ND
White Earth Tribal and Community College, Mahnomen, MN

Appendix D

North Central Region Water Network Budget Template

To access the budget template, please see: http://northcentralwater.org/?p=2131