

REGIONAL SUSTAINABLE DEVELOPMENT PARTNERSHIPS Fiscal Year 2018 Projects

SUSTAINABILITY-FOCUSED AND COMMUNITY-DRIVEN

The University of Minnesota Extension **Regional Sustainable Development Partnerships** (RSDP) connect **Greater Minnesota** communities to **University of Minnesota** (UMN) resources through sustainability projects. RSDP brings together local talent and innovation with University knowledge and resources.

Projects are supported by **community-driven** boards in **five Regions** of Greater Minnesota as well as through a statewide office based on the Twin Cities campus. This list presents projects active during Fiscal Year 2018 (July 1, 2017 – June 30, 2018), along with their **community and University partners**.

RSDP supports work in the following **four sustainability focus areas**. RSDP's energy programming is provided by the **Clean Energy Resource Teams** (CERTs).



Agriculture and food systems



Clean Energy



Natural Resources



Tourism & Resilient Communities

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Regional Sustainable
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By the numbers **2018**
Fiscal Year



5 Greater Minnesota Regions

128 community
projects



267 community
partners

130 university
partners



88 cities,
towns & tribal
communities

168 volunteers
Thank you!



7,625 volunteer
hours

(calendar year 2017)

96% Past project partners say RSDP produces
tangible outcomes for communities

"I have always appreciated the deep conversations and special attention given to each topic that is brought forward to the RSDP. You feel your concerns and voice are being heard and welcomed and considered."

- 2017 RSDP Partner Survey comment

rsdp.umn.edu



CENTRAL REGION

Executive Director: Molly Zins, zend0007@umn.edu

Learn more: rsdp.umn.edu/central

10 Plants That Changed Minnesota Teacher Workshops

FOCUS AREAS: 

UMN Landscape Arboretum, UMN CFANS, UMN Extension, MNHS Press, Northland Arboretum – Brainerd Brainerd & St. Cloud - The UMN Landscape Arboretum launched the “10 Plants that Changed Minnesota” public education campaign to build awareness of the crucial role plants played in some historic and economic factors that changed the course of our state. The project is expanding its reach through developing a series of teacher in-service trainings to be held across the state.

Big Trout Lake

FOCUS AREAS: 

UMN Biosystems Engineering, UMN Extension Water Resources, City of Manhattan Beach, Crow Wing County, Crow Wing Soil & Water Conservation District, MN DNR, Pine River Watershed Alliance, Whitefish Area Property Owners Association
Manhattan Beach - HWY 66 runs adjacent to Big Trout Lake and has a curb and gutter with direct stormwater flow into the DNR designated Cisco refuge lake. The research team identified the unique filtration system and specifications needed to protect Big Trout Lake. Local partners used the UMN students’ proposal, MN DNR research, and local water quality monitoring data to apply for and receive a \$310,000 Clean Water Fund Legacy Grant. With the filtration system now in place, the harmful stormwater runoff to Big Trout Lake and its unique wildlife and fish species has been drastically reduced.

Boys & Girls Club Community Garden

FOCUS AREAS: 

Boys & Girls Club of the Leech Lake Area, Leech Lake Band of Ojibwe, Cass Lake Family Center, Leech Lake Department of Resource Management, Cass Lake Food Shelf, Leech Lake Commodity Program, Cass Lake Senior Center, Minnesota Chippewa Tribes SNAP-Ed program, City of Cass Lake, Cass Lake School District, UMN Master Gardeners, UMN Extension SNAP-Ed, UMN Nutrition Education

Cass Lake - The Boys and Girls Club of the Leech Lake Area Community Garden is a hands-on classroom in healthy eating, Native American culture, traditional growing, gathering and harvesting practices.

Center for Small Towns – Connecting Students & Communities

FOCUS AREAS: 

UMN Morris – Center for Small Towns (CST), Cuyuna Lakes Chamber of Commerce, Minnesota Communities Caring for Children (MCCC) Tribal N.E.A.R. Sciences & Community Wisdom Project
Crosby, White Earth & Leech Lake Nations - CST and CRSDP are partnering to help support student-community projects that address locally-identified sustainability needs in towns across our region.

Community Wind/Solar Hybrid

FOCUS AREAS: 

UMN Morris Economics of Renewable Energy Systems, Becker County, City of Audubon, City of Frazee, CERTs, Juhl Energy, Sustainable Energy Fund Program, community members
Audubon, Frazee - Community Wind/Solar Hybrid conducted a feasibility study for the development of a wind/solar hybrid project for the cities of Audubon and Frazee. The study analyzed community costs, benefits and opportunities associated with the pilot project and provided a third-party review and appraisal of the risks and benefits to each community.

Conservation Corps serves Natural Resources Focus Area

FOCUS AREAS: 

UMN Extension, RSDP Natural Resource Work Groups, Conservation Corps of MN & IA
Brainerd - A Conservation Corps member is assisting the UMN Extension RSDP with its Natural Resources Focus Area. In 2018, the RSDPs are focusing on water-related projects in this focus area. Water projects include communities participating in We Are Water MN, as well as water recreation, water quality and soil health, and watershed planning efforts. The Corps member will gain professional experience as a team member, and will be introduced to community-based engagement, design and project development.

Cows for Clean Water

FOCUS AREAS:  

Cass County Farm Bureau, Pine River Watershed Alliance, Crow Wing River Basin Forage Council, Happy Dancing Turtle, Sustainable Farming Association, Natural Resource Conservation Service, Soil & Water Conservation Districts, Local grocers/resorts/restaurants/schools

Pine River, Crosslake - Cows for Clean Water investigated livestock production best practices and local market opportunities for sustainably-raised beef that protects water resources in Cass and Crow Wing counties.

Identified as a community priority by regional ranchers and watershed protection groups, local project partners are developing a business plan and potential next steps.

Deep Winter Greenhouse [NEW]

FOCUS AREAS:  

UMN College of Design Center for Sustainable Building Research (CSBR), Grampa G's Farm

Pillager - The UMN Extension RSDP's Deep Winter Greenhouse (DWG) demonstration and research is developing and refining an innovative solar greenhouse that enables Minnesota farmers to grow and sell local, fresh greens throughout the winter. Five DWGs are being built, one in each RSDP region, including Grampa G's Farm in Pillager. The DWG will serve as an educational and business-development resource for Central Minnesota growers and producers for years to come.

Deer Exclosure Literature Review [NEW]

FOCUS AREAS:  

Green Island Farm, UMN College of Food, Agricultural & Natural Resource Sciences

Wadena - The Deer Exclosure study partnered a UMN B.S. Plant Science student researcher with community partners to conduct a literature review of research-based information on deer exclosures for food production and agroforestry. The study focused on simple, low-cost wildlife exclosures and the critical role they play in the success of any gardener, landowner or small farmer wishing to expand food production near areas of deer habitat. The project team summarized the pertinent information on affordable deer exclosures and is developing a webpage to provide easy access for interested growers.

National Loon Center [NEW]

FOCUS AREAS:  

UMN Department of Applied Economics, UMN College of Design Center for Sustainable Building Research (CSBR), UMN Extension, National Loon Center Foundation Board, City of Crosslake, US Army Corps of Engineers, MN Department of Natural Resources, Brainerd Lakes Chamber of Commerce, National Joint Powers Alliance,

Central Lakes College – Small Business Development Center, Initiative Foundation, National Park Service Rivers – Trails & Conservation Assistance Program Crosslake - When the seed of the idea for the National Loon Center took shape, Crosslake community leaders turned to the UMN Extension CRSDP. The project team collaborated with several regional organizations and UMN partners to envision and create a community-design Masterplan and Economic Feasibility Study for the National Loon Center.

One Vegetable One Community

FOCUS AREAS: 

UMN Extension SNAP-Ed Megan Janssen, many communities hosting events

Little Falls - The purpose of this project is to start conversations about food and how communities support healthy lifestyles through local foods and gardening efforts across Northwest Minnesota called One Vegetable One Community. This started as an effort in 2017 and communities would like to see it continue in consecutive years.

Scholarships/ Sponsorships

FOCUS AREAS:    

CERTs Conference

Brainerd - Funds were available for scholarships and sponsorships for Central region residents. Community members were invited to apply for scholarships to participate in activities intended to increase their capacity to serve their communities.

Solar Schools

FOCUS AREAS: 

Region Five Development Commission, Leech Lake Tribal College, three area school districts, TenKsolar, Rural Renewable Energy Alliance, National Joint Powers Alliance, UM graduate student Humphrey School of Public Affairs: Master of Science in Science, Technology and Environmental Policy, UMN undergraduate student B.A.Sc. Information Technology, minor in Economics Pine River, Pequot Lakes, Staples - The Solar Schools project brought together Leech Lake Tribal College, school districts, regional organizations, utility companies and UMN students to install several solar arrays on schools across the region and to document the project case study. The team conducted surveys and interviews, gathered data, and compiled information on best practices for building collaboration and moving toward implementation in a project of this significant scope and scale.

Tourism Center Collaborative Staffing

FOCUS AREAS: 

CRSDP Tourism work group members & project partners, UMN Tourism Center

Brainerd - All RSDPs are supporting Tammy Koerte, UMN Tourism Center Extension Educator, for one day per week for two years to help coordinate Tourism and Resilient Communities work groups in all regions; build relationships among regional work groups and key partners; advance a future vision for the focus area; and connect strategic partners, resources and opportunities across Minnesota.

Tourism Lodging Workforce Study [NEW]

FOCUS AREAS: 

UMN Extension - UMN Tourism Center, Grandview Lodge, Black Pine Beach Resort, Madden's on Gull Lake, Cragun's Resort, MN Department of Employment & Economic Development, Explore Minnesota Tourism Walker, Nisswa - The Tourism Lodging Workforce Study researched workforce challenges and developed recommendations for a long-term strategy to maintain sustainable tourism as part of the region's economy. This study provides a qualitative view of the current and future workforce challenges facing the tourism sector, examining regional models, and developed recommendations for a long-term, sustainable strategy to maintain tourism as part of the region's economy.

Wright Park Redesign [NEW]

FOCUS AREAS: 

UMN Center for Urban & Regional Affairs – Community Assistantship Program, UMN College of Design Center for Sustainable Building Research (CSBR), UMN Morris – Center for Small Towns, City of Fergus Falls, PartnerSHIP 4 Health, Beautiful Fergus Falls, Springboard for the Arts Fergus Falls

Fergus Falls - Fergus Falls Wright Park Redesign paired community leaders with UMN College of Design staff and a UMN graduate student to re-envision this important community green space and connection to the riverway. The community design process engaged city leaders and elected officials, business owners, educators, community organizations and citizens to create the park master plan and recommendations to move toward implementation.

CENTRAL CERTS

Central Minnesota Habitat for Humanity [NEW]

ENERGY FOCUS AREAS: 

Renewable Energy

Backus - Rural Renewable Energy Alliance (RREAL) - Nearly half of American adults experience housing insecurity at some point in their lives due to unpredictable rent prices, moving and lack of access to

affordable housing. RREAL is working with Central Minnesota Habitat for Humanity to make solar energy more accessible and reduce electric bills for a new Habitat homeowner. Every effort made to help reduce energy costs for low-income families is key to the affordability of owning a home.

Crosslake Lutheran Church 31.32kW DC Grid-Tied Roof Mount PV System [NEW]

ENERGY FOCUS AREAS: 

Renewable Energy, Energy Efficiency

Crosslake - Solar power, our first source of light and warmth, is the next essential step for Crosslake Lutheran Church toward responsible environmental and fiduciary stewardship. The intent is to conserve the natural environment and be financially responsible serving the church and community. The solar panel system will have optimal southern roof exposure and will be visible from Route 66, the most highly trafficked thoroughfare in Crosslake. Eighty-seven (87) solar panels will produce 31.32kW to save an estimated \$4,223 yearly. Estimated payback is 17 years.

LED Lighting for Library [NEW]

ENERGY FOCUS AREAS: 

Energy Efficiency

Brainerd - Discovery Woods School, ISD 4198 - The school is a public charter located in an historic school building in the city. The school was built in 1940 and has been through multiple renovations but has not been upgraded in many years. Library space has old fluorescent tube lighting that is irreplaceable and many tubes are burned out. The project will replace the lighting with new energy efficient LED lights to provide a more welcoming space as well as educate families about the benefits of LED lighting.

Leech Lake Band of Ojibwe Solar Master Plan [NEW]

ENERGY FOCUS AREAS: 

Energy Efficiency, Renewable Energy

Cass Lake - Leech Lake Band of Ojibwe will develop a Solar Energy Master Plan for all primary Tribal facilities. This Master Plan effort will, for all subject tribal government facilities: (1) collect annual energy use data, calculate EUI and performance evaluation against ENERGY STAR/B3 peers; (2) evaluate the viability of solar PV; (3) develop a detailed solar PV concept design, calculate annual energy generation possible, and develop preliminary project budgets; (4) develop a Solar PV Master Plan report summarizing all findings, identifying Tribal economic development potential of solar PV development, and propose a solar implementation plan for Tribally owned facilities.



NORTHEAST REGION

Executive Director: David Abazs, dwabazs@umn.edu

Learn more: rsdp.umn.edu/northeast

10 Plants That Changed Minnesota Teacher Workshops

FOCUS AREAS:

UMN Landscape Arboretum, UMN CFANS, UMN Extension, MNHS Press, Northland Arboretum – Brainerd Cloquet - The UMN Landscape Arboretum launched the “10 Plants that Changed Minnesota” public education campaign to build awareness of the crucial role plants played in some historic and economic factors that changed the course of our state. The project is expanding its reach through developing a series of teacher in-service trainings to be held across the state.

Economic Impact Study Lake Superior & Mississippi Railroad on Duluth [NEW]

FOCUS AREAS:

UMN Duluth Bureau of Business & Economic Research, Friends of Western Duluth Parks & Trails, Lake Superior & Mississippi Railroad

Duluth - The purpose of the study is to inform stakeholders of the current and potential economic value of various western Duluth rail and trail configurations.

Farm-2-Families Event [NEW]

FOCUS AREAS:

UMN Extension, Sustainable Farming Association Greater Mille Lacs Chapter

Aitkin - The Farm-2-Families event is designed to link local farmers with local and seasonal families in the Aitkin area. The goal of the event is to boost awareness and vitality of the local agriculture and agro-tourism economy.

Conservation Corps serves Natural Resources Focus Area

FOCUS AREAS:

UMN Extension, RSDP Natural Resource Work Groups, Conservation Corps of MN & IA

Duluth - A Conservation Corps member will assist the UMN Extension RSDP with its Natural Resources Focus Area. In 2018, the RSDPs are focusing on water-related projects in this focus area. Water projects include communities participating in We Are Water MN, as well as water recreation, water quality and soil health, and watershed planning efforts. The Corps member will gain professional planning experience as a team member, and will be introduced to community-based engagement, design and project development.

Deep Winter Greenhouse

FOCUS AREAS:

UMN Extension, UMN College of Design Center for Sustainable Building Research (CSBR), CFANS, Organic Consumers Association

Finland - Provide project support for construction expertise and outreach/education for participants in the RSDP Deep Winter Greenhouse (DWG) Campaign project. Host DWG open houses in Finland with project partner Organic Consumers Association.

Grand Rapids Farmers’ Market Aggregation [NEW]

FOCUS AREAS:

UMN Extension, Grand Rapids Farmers’ Market, Renewing the Countryside, Minnesota Farmers’ Market Association, Get Fit Itasca, SNAP-Ed

Grand Rapids - Develop an aggregation site at the Farmers Market so that the market will be able to buy from its vendors and sell to larger buyers like schools, hospitals, etc.

Grand Rapids Public Utilities Commission (GRPUC) Integrated Value Community Solar Garden Project [NEW]

FOCUS AREAS:

UMN Extension, Grand Rapids Public Utilities, Itasca Clean Energy Team, Itasca County community members
Grand Rapids - GRPUC is interested in creating a community solar project that is of value to its customers, its operations, and to the broader Grand Rapids community. GRPUC is issuing a request for proposals for a consultant to provide technical assistance with designing a plan for a community solar project that incorporates energy storage, GRPUC’s current demand response programming, and potential micro grid resiliency within the community.

Meeting the Challenge – Zone 3 Gardening [NEW]

FOCUS AREAS:

UMN Grand Rapids Research & Outreach Center, Itasca County Master Gardeners, Itasca County Community Education, KAXE Radio

Grand Rapids - Community educational event with keynote on climate change and breakout sessions covering many aspects of home gardening.

North Shore Neighbor to Neighbor Peer Learning Program [NEW]

FOCUS AREAS: 

UMN Extension, Sugarloaf: The North Shore Stewardship Association, North Shore Forest Collaborative, MN DNR, USDA Natural Resources Conservation Service, USDA Forest Service, Lake County SWCD, Cook County SWCD Schroeder - Support for a program where neighbors are encouraged by other neighbors to discuss their ideas for restoration of their lands, share information, learn from each other, and help each other with forest restoration.

One Vegetable One Community

FOCUS AREAS: 

UMN Extension SNAP-Ed Megan Janssen, many communities hosting events
Cloquet - The purpose of this project is to start conversations about food and how communities support healthy lifestyles through local foods and gardening efforts across Northwest Minnesota called One Vegetable One Community. This started as an effort in 2017 and communities would like to see it continue in consecutive years.

Range Recreation Civic Center (RRCC) Impact Study [NEW]

FOCUS AREAS: 

UMN Extension, CERTs, Curl Mesabi, Iron Range Tourism Bureau, RRCC Powers Board
Eveleth - Produce an economic impact study of the RRCC and determine the feasibility of creating a long range RRCC energy plan.

Scholarships/ Sponsorships

FOCUS AREAS:    

CERTs Conference
Duluth - Funds are available for scholarships and sponsorships for Northeast region residents. Community members are invited to apply for scholarships to participate in activities intended to increase their capacity to serve their communities.

Sustainable Development Research Opportunity Program (SDROP)

FOCUS AREAS:    

UMN Duluth CLA's Center for Sustainable Community Development, UMN Duluth Office of Sustainability, NERSDP, & numerous local groups & UMN Duluth students
Duluth - SDROP provides UMD students an opportunity to work closely with a variety of Northeast Minnesota communities on various sustainable development projects. Students gain the valuable research and project design and implementation experiences that only "real-life" community projects can provide, and community

partners benefit from community service provided by quality students.

Thriving with Nature

FOCUS AREAS:  

UMN Extension, UMN Duluth, Cooperation Station, Lloyd K. Johnson Foundation, Cook County Community Members, Cook County Lions, Master Naturalist Karen Kobey
Grand Marais - Partner with UMN Duluth graduate student and undergraduate class to 1) design a play-scape, 2) build a play-scape, 3) provide a community workshop on nature play, and 4) implement nature play program.

Tourism Center Collaborative Staffing

FOCUS AREAS: 

NERSDP Tourism work group members & project partners, UMN Tourism Center
Duluth - All RSDPs are supporting Tammy Koerte, UMN Tourism Center Extension Educator, for one day per week for two years to help coordinate Tourism and Resilient Communities work groups in all regions; build relationships among regional work groups and key partners; advance a future vision for the focus area; and connect strategic partners, resources and opportunities across Minnesota.

NORTHEAST CERTS

AmeriCorps Legacy Building Solar Project

ENERGY FOCUS AREAS: 

Energy Efficiency: Renewable Energy
Duluth - The AmeriCorps Legacy Building seeks to rewrite the narrative of unaffordable housing for community service volunteers. The inaugural cohort of Resilience Corps VISTAs will redevelop a condemned property in Duluth's lowest income neighborhood into a sustainable single-family cooperative home to provide a permanent and affordable housing option for AmeriCorps members. To demonstrate adaptive reuse of structures, a deep energy retrofit will be completed with a 3 kW solar PV system. This project will be undertaken to create a model which can be replicated as a prospective solution for other communities facing similar housing and energy challenges.

Bois Forte Weatherization Project

ENERGY FOCUS AREAS: 

Energy Efficiency
Nett Lake - The Bois Forte Housing Department will work with a contracted technician who will install weather stripping, caulking and window coverings in up to 50 homes of the elderly and disabled on the Bois Forte reservation. The supplies for the weatherization will be

provided by the Bois Forte Tribal Government. The project will be shared widely and the Bois Forte Housing Department will provide educational tools on weatherization throughout the duration of this grant.

Field-North Woods School Forest (FNWSF) Trail Lighting

ENERGY FOCUS AREAS: ☀

Energy Efficiency, Renewable Energy

Cook - This project aims to build a trail system and light the FNWSF trails with solar lights. This will allow for night-time skiing and trail hiking. The project has been in the works for four years. The school forest started out with an agreement between Field Township and ISD 2142. The project will be shared with others through the usage of the trail system, education and a brochure that describes the FNWSF system.

Healthy Homes – Healthy Neighbors Initiative

ENERGY FOCUS AREAS: ☀

Energy Efficiency, Renewable Energy

Duluth - The Healthy Homes – Healthy Neighbors Initiative is directed at building capacity in northeastern Minnesota to address housing stock conditions and resident behaviors that negatively impact the efficiency of buildings and health outcomes of residents. The holistic approach will convene cross-sector partners, jointly develop aligned energy, housing and health assessments of properties and resident concerns, leverage funds from multiple sources to target appropriate interventions, and serve as a model for programs across Minnesota.

Renewable Mountain Iron

ENERGY FOCUS AREAS: ☀

Renewable Energy

Mountain Iron - Mountain Iron looks to deepen the community's solar energy commitment by identifying top opportunities and developing project concepts for their implementation. This effort will: (1) identify community-wide rooftop solar potential; (2) evaluate the viability of solar PV and develop a detailed solar PV concept, calculate annual energy generation, and develop project budgets at the top 20 solar sites; (3) conduct a site feasibility, selection and concept design effort for a community solar project; and (4) develop a report summarizing all findings, identifying local economic development potential of solar PV development, and include a proposed solar implementation plan for city-owned facilities.

Salem Lutheran Church LED Conversion

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Mahtowa - Salem Lutheran Church, along with the neighboring community center it operates, Salem's Mahtowa Hall, are lit by approximately 202 incandescent and fluorescent bulbs. The church is seeking to reduce its carbon footprint and reduce energy use and costs while inspiring other churches, organizations and homeowners to do the same.



NORTHWEST REGION

Executive Director: Linda Kingery, kinge002@umn.edu

Learn more: rmdp.umn.edu/northwest

10 Plants That Changed Minnesota Teacher Workshops

FOCUS AREAS:   

Mary Meyer, UMN Landscape Arboretum, UMN CFANS, UMN Extension, MNHS Press, Northland Arboretum – Brainerd

Fergus Falls, Moorhead & Thief River Falls - The UMN Landscape Arboretum launched the “10 Plants that Changed Minnesota” public education campaign to build awareness of the crucial role plants played in the historic and economic factors that changed the course of our state. The project is expanding its reach through developing a series of teacher in-service trainings to be held across the state.

A New Vision for Downtown Thief River Falls [NEW]

FOCUS AREAS: 

UMN College of Design Center for Sustainable Building Research’s Virajita Singh, UMN Humphrey School of Public Affairs’ Joe Polecek (student), Thief River Falls Chamber of Commerce, Downtown Development Committee, City of Thief River Falls, Visit Thief River Falls Thief River Falls - The Thief River Falls Downtown Development Association was formed in 2015 for the purpose of revitalizing the downtown community to support current businesses and to encourage new business development. The “New Vision for Downtown Thief River Falls” project develops a master plan of our downtown with the goal of creating a unified, welcoming environment. Recommendations include pedestrian-friendly street crossings, greenery, updating storefronts, purchasing new light poles and signage.

CERTs Stakeholder Mapping [NEW]

FOCUS AREAS: 

UMN Crookston Software Engineering, Daniel Thiede, CERTs, NW CERTs Team

Crookston - Crookston student intern creates a stakeholder map using Kumu.io representing steering team members involved in the Clean Energy Resource Teams (CERTs). The stakeholder map allows CERTs staff and steering team members to easily connect around specific strategies and technologies.

Conservation Corps serves Natural Resources Focus Area

FOCUS AREAS: 

UMN Extension, RSDP Natural Resource Work Groups, Conservation Corps of MN & IA

Crookston - A Conservation Corps member will assist the UMN Extension RSDP with its Natural Resources Focus Area. In 2018, the RSDPs are focusing on water-related projects in this focus area. Water projects include communities participating in We Are Water MN, as well as water recreation, water quality and soil health, and watershed planning efforts. The Corps member will gain professional experience as a team member, and will be introduced to community-based engagement, design and project development.

Deep Winter Greenhouse Construction Oversight

FOCUS AREAS: 

UMN College of Design Center for Sustainable Building Research’s Dan Handeen, Bemidji Community Food Shelf Farm’s Hannah Klemm, Candy Barlow, Jack Judkins, Mary Mic

Bemidji – Dan Handeen provides project support, construction expertise and outreach/education for participants in the RSDP Deep Winter Greenhouse (DWG) Campaign. Bemidji Community Food Shelf hosts a DWG open house at its newly constructed DWG.

Fertile Sand Hills Master Plan [NEW]

FOCUS AREAS: 

UMN College of Design, City of Fertile, Aggasiz Environmental Learning Center (AELC)

Fertile - Conduct community engagement process and develop a master recreation and environmental awareness plan for the Fertile area, with primary emphasis on the AELC and river-related recreation. The process will result in designs, drawings and site plans to facilitate engagement of the public and partners in implementation of project priorities identified in the master plan.

Growing Together Internships

FOCUS AREAS: 

UMN Extension's Noelle Harden, Randy Nelson, Immigrant Development Center, FARRMS, Growing Together, New Farmer Task Force's Verna Kragnes Moorhead - Immigrant Development Center, in partnership with FARRMS, Medina and UMN Extension, will increase the number and sustainability of Red River Valley's emerging farm enterprises through internship opportunities, education and mentoring. A four-stage farmer-training model will include experience working in a Growing Together community garden as a beginning step for those who may have little experience in (northern) agriculture. Utilizing a community organizing model to recruit and support new farmers in the Fargo/Moorhead Metro area, at least 50% of the trainees will be new Americans, women, veterans, socially disadvantaged or developmentally disabled adults.

Lake Bemidji State Park Nature Play [NEW]

FOCUS AREAS: 

UMN College of Design, Friends of Lake Bemidji State Park

Bemidji – The Friends of Lake Bemidji State Park seek assistance in at revamping its current playground to enhance the connection to nature. A natural play and experience space will strengthen the opportunity for children and adults to connect to nature and foster a feeling of stewardship for public places.

Leech Lake Boys & Girls Club Garden [NEW]

FOCUS AREAS: 

UMN Extension, Leech Lake Boys & Girls Club
Cass Lake - Teaching eating nutritious foods, keeping fit and forming positive relationships results in a healthy lifestyle for Club youth. With a specific focus on the Native American culture, and historical traditional growing, gathering and harvesting practices, Club members learn the important lesson of community and self-sustain abilities.

One Vegetable One Community

FOCUS AREAS: 

UMN Extension SNAP-Ed Megan Janssen, Polk, Norman, Mahnomen Public Health, North Country Public Health, many communities hosting events
Crookston - The purpose of this project is to start conversations about food and how communities support healthy lifestyle through local foods and gardening efforts across Northwest Minnesota called One Vegetable One Community. This started as an effort in 2017; 38 communities participated.

Scholarships/ Sponsorships

FOCUS AREAS:    

CERTs Conference, Red Lake Nation Food Summit, Riverland Tourism Conference, Crookston Students for Sustainable Development
Crookston - Funds are available for scholarships and sponsorships for Northwest region residents. Community members apply for scholarships or sponsorships for educational activities.

Spindle Pruning Apple Trees in High Tunnel

FOCUS AREAS: 

UMN Extension Horticulture, Chuck & Barbara Schulstad Mentor – This research evaluates the impact of spindle pruning on apple tree production in high tunnel environment. This is a longitudinal study designed to address yield, quality (including reduction of pesticides) and economics as well as better usage of water and fertilizer components through the high tunnel system.

Tourism Center Collaborative Staffing

FOCUS AREAS: 

NWRSDP Tourism work group members & project partners, UMN Tourism Center
Crookston - All RSDPs are supporting Tammy Koerte, UMN Tourism Center Extension Educator, for one day per week for two years to help coordinate Tourism and Resilient Communities work groups in all regions; build relationships among regional work groups and key partners; advance a future vision for the focus area; and connect strategic partners, resources and opportunities across Minnesota.

Visit Bemidji Tourism Profile [NEW]

FOCUS AREAS: 

UMN Tourism Center, Visit Bemidji, Headwaters Regional Development Commission
Bemidji - Conduct a 12-Month Visitor Profile Study with a projected timeline of 16-18 months under the direction of the UMN Tourism Center. The interceptor study will aim to achieve a target of at least 400 usable surveys per quarter/season. Site surveyors will intercept and interview adult travelers at designated sites, asking questions from a two-page survey instrument.

NORTHWEST CERTS

Automatic Benchmarking for Public Buildings

ENERGY FOCUS AREAS: 

Energy Efficiency

Warren - Because the City of Warren owns and operates its own electric utility rather than using an outside utility provider, the city has unrestricted access to monitor its energy usage data to assist with its benchmarking efforts to track building energy usage. As a result, this makes the

City of Warren's public municipalities a viable candidate for either interval data benchmarking using one of two vendors or to have a custom program application be created to best track energy usage and meet benchmarking expectations (tools that will be explored during this project).

Bemidji Community Food Shelf (BCFS) Building Lighting Upgrade

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Bemidji - The BCFS is a faith-based organization that distributes food to over 3,000 qualifying families in Beltrami County and the Bemidji School District. Its location in the Bemidji Industrial Park is comprised of an office area, a large shopping area and a warehouse, which together make up 12,480 square feet. BCFS wants to replace its existing florescent lighting with LEDs and add motion sensors in the bathrooms and warehouse. Lighting in coolers and freezers will also be upgraded.

City of Barnesville Solar Garden

ENERGY FOCUS AREAS: ☀

Renewable Energy

Barnesville - Barnesville Municipal Utilities plans to install an 80-panel solar array near our Barnesville Community Garden during 2018. The Barnesville Community Solar Garden will provide a simple, convenient and cost-effective way for our customers to participate in solar generation. Customers will be given the opportunity to purchase the output from one or more panels for a 20-year period. While the energy created will not directly power the customer's home, on an annual basis the customers will receive a credit on their electric bill based on the output of the system.

Harmony Natural Food Cooperative Lighting Upgrade

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Bemidji - Harmony Natural Food Coop will upgrade existing lighting with energy efficient LEDs. Existing T-8 fluorescent and compact fluorescent lamps (CFL) nearing the end of their lifespan will be replaced (rewired/re-ballasted by an electrician) with 351 new LED lamps. This project is part of a comprehensive approach to Harmony's commitment to reducing our energy use and our greenhouse gas footprint through building envelope and energy efficiency improvements, renewable energy, and community/business education and outreach. This project will reduce annual electricity consumption by approximately 24,581 kWh (18.3 metric tons of CO₂).

Minnesota Energy Resource Corp (MERC) LIW Administration

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Bemidji - This project focuses on weatherization-related items for low-income families' homes. Measures include: attic and wall insulation, air sealing, mechanical replacements, furnace clean and tunes, rim-joist insulation, crawlspace insulation, programmable t-stat, client education, pipe insulation and safety items like CO alarms, exhaust fans and dryer vents.

Northwest CAP LED Lighting Project

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Badger - Replacing T-12 lighting fixtures and incandescent bulbs at Northwest Community Action (NWCA) office building with LED bulbs and fixtures will cut their energy bills an estimated \$2,772 a year. Project results will be shared with local media outlets and with people who come into the office for assistance. NWCA helped over 1,200 families with fuel assistance last year, and offers a number of other services that clients come into the office for. A handout will also be developed to show the savings of using LED lighting.



SOUTHEAST REGION

Executive Director: Okey Ukaga, ukaga001@umn.edu

Learn more: rsdp.umn.edu/southeast

10 Plants That Changed Minnesota Teacher Workshops

FOCUS AREAS: 

UMN Landscape Arboretum, UMN CFANS, UMN Extension, MNHS Press, Northland Arboretum – Brainerd Rochester - The UMN Landscape Arboretum launched the “10 Plants that Changed Minnesota” public education campaign to build awareness of the crucial role plants played in the historic and economic factors that changed the course of our state. The project is expanding its reach through developing a series of teacher in-service trainings to be held across the state.

Cedar Lake – Lake Management Action Plan [NEW]

FOCUS AREAS: 

UMN Center for Urban & Regional Affairs, Cedar Lake Ambassadors of Rice County
Cedar Lake - Cole Reagan, UMN graduate student in Water Resource Science, has been studying Cedar Lake on behalf of the Cedar Lake Ambassadors of Rice County. Since 2010, Cedar Lake has been identified on the MNPCA Impaired Waters report. This project is focused on creating an actionable, research-based lake management plan to bring about meaningful improvement in the water quality, ecological habitat and overall health of the lake.

Conservation Corps serves Natural Resources Focus Area

FOCUS AREAS: 

UMN Extension, RSDP Natural Resource Work Groups, Conservation Corps of MN & IA
Rochester - A Conservation Corps member will assist the UMN Extension RSDP with its Natural Resources Focus Area. In 2018, the RSDPs are focusing on water-related projects in this focus area. Water projects include communities participating in We Are Water MN, as well as water recreation, water quality and soil health, and watershed planning efforts. The Corps member will gain professional experience as a team member, and will be introduced to community-based engagement, design and project development.

Deep Winter Greenhouse Construction Support

FOCUS AREAS: 

UMN Extension; UMN Institute on the Environment; MnDRIVE Global Food Ventures; MnDRIVE Robotics, Sensors, & Advanced Manufacturing; AgriBank Farm Credit Bank; Compeer Financial; AgCountry Farm Credit Services

Lake City - The UMN Extension RSDP’s Deep Winter Greenhouse (DWG) demonstration and research is developing and refining an innovative solar greenhouse that enables Minnesota farmers to grow and sell local, fresh greens throughout the winter. Five DWGs are being built, one in each RSDP region. One of those DWGs is at Lake City Catholic Workers Farm. The DWG in Lake City will serve as an educational and business-development resource for Southeastern Minnesota growers and producers for years to come.

Food Access Mapping for Latinos in SE MN [NEW]

FOCUS AREAS: 

UMN Humphrey School of Public Affairs, UMN Center for Urban & Regional Affairs, Latinos En Accion (LEA), City of Minneapolis Public Health Department

Dodge Center - The goal of this project is to address the challenge of food access by understanding the needs, experiences and constraints that Latino populations in Southeast Minnesota face to reach healthy and culturally relevant food. The project aims to investigate the availability, accessibility and capacities that Latinos have in reaching food that is nutritious, affordable and culturally relevant, by conducting fieldwork in southeastern Minnesota. The goal of this project is threefold: (1) to generate questions that provide an understanding of the needs, constraints and experiences Latino families face in accessing food; (2) to develop an innovative data collection method based on participatory mapping techniques; and (3) to conduct a pilot study using the food mapping data collection tool.

LiDAR Training [NEW]

FOCUS AREAS:  

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS); UMN Department of Soil, Water & Climate; Board of Water & Soil Resources; MN Department of Natural Resources; MN GEO Land Management Information Center; US Geologic Survey; MN Department of Agriculture; US Army Corps of Engineers; MN Information Technology Services Southeast Region - Minnesota LiDAR Training will provide GIS technicians from federal, state, county, local and private organizations the tools they need to successfully utilize LiDAR data. Basic concepts will be covered for recent hires and those that need review, and the first-ever advanced session will be offered in the state.

Red Wing Holiday Stroll: Economic Contribution & Visitor Profile [NEW]

FOCUS AREAS: 

Red Wing Downtown Main Street, UMN Extension Red Wing - The Holiday Stroll is held on the day after Thanksgiving in Red Wing. The Fair has existed for 15 years and has been growing. It serves as an opportunity for the community to gather and celebrate the beginning of the holiday season. It also draws visitors, and their spending, into the community. Retailers in downtown Red Wing benefit, as do the vendors selling items at the event. Red Wing Downtown Main Street is interested in learning more about the event. Who attends? What aspects of the event are most enjoyed? What aspects of the event could use improving? How much money is spent during the course of the event? How does the event contribute to the economy?

Root River Market Survey [NEW]

FOCUS AREAS: 

Root River Market, UMN Morris Center for Small Towns Houston - Survey for the local grocery store to learn more about how it can serve members and non-members. The project will include sending out three mailings including a postcard, survey and follow-up survey. The goal is to send mailings out to the school district which is approximately 500 households.

Scholarships/ Sponsorships

FOCUS AREAS:    

CERTs Conference
Rochester - Funds are available for scholarships and sponsorships for Southeast region residents. Community members are invited to apply for scholarships to participate in activities intended to increase their capacity to serve their communities.

State Park use by Latino Residents Study

FOCUS AREAS: 

UMN Center for Urban & Regional Affairs – Community Assistantship Program, UMN Department of Bioproducts/Systems Engineering, UMN Humphrey School of Public Affairs, UMN Tourism Center, Hispanic Advocacy & Community Empowerment through Research (HACER)
Mankato, Owatonna, Dodge Center, Rochester, Austin - Park visits provide public health and social benefits. They also reduce health and public resource access disparities between Latino and Caucasian populations. The goal of this project is to understand the needs, experiences and constraints Latino populations in Southeast Minnesota face in visiting state parks. Project findings will inform a wide range of actions: outreach campaigns, in-park programming design, collaborative planning processes, and the provision of amenities that may encourage Latino populations to visit state parks by meeting their needs.

Straight River Phosphorous Study

FOCUS AREAS: 

UMN Department of Bioproducts & Biosystems Engineering, Steele County Environmental Services, MN Pollution Control Agency
Straight River - SERSDP is providing funding to engage UMN research faculty, staff and graduate-level assistance to help address a data gap with regard to nonpoint sources of phosphorus loading to the upper Straight River so that pollutant reduction actions can be most effective. By identifying and targeting contributing sources, activities can be prioritized and measured.

Tourism Center Collaborative Staffing

FOCUS AREAS: 

SERSDP Tourism work group members & project partners, UMN Tourism Center
Rochester - All RSDPs are supporting Tammy Koerte, UMN Tourism Center Extension Educator, for one day per week for two years to help coordinate Tourism and Resilient Communities work groups in all regions; build relationships among regional work groups and key partners; advance a future vision for the focus area; and connect strategic partners, resources and opportunities across Minnesota.

SOUTHEAST CERTS

Castle Community (former armory)

ENERGY FOCUS AREAS: 

Energy Efficiency

Rochester - A group of private investors is purchasing the former armory building from the City of Rochester and planning an adaptive reuse of this historic structure. The

“Castle Community” (as the development is named) will incorporate a restaurant, bookstore, art gallery, art studios and public commons space into the renovation project. The scope of the renovation will be limited to an estimated \$1,200,000; however, the owners are interested in making sound energy-conscious design decisions. The seed grant will help defray the expense of hiring either a third-party energy modeler or expanding the scope of services of the mechanical designer to assist with energy efficiency decisions and recommendations.

City of La Crescent Public Facilities LED Lighting Upgrade

ENERGY FOCUS AREAS: ☀

Energy Efficiency

La Crescent - The City of La Crescent Green Team/Green Step Program plans to upgrade 22 inefficient outdated exterior light fixtures to new LED lighting technology. The LED lighting improvements will be made to local parks, streets and the water plant. The Green Team will also conduct educational activities that demonstrate how LED technology/lighting replacement can reduce energy consumption and maintenance costs.

Demonstration Electric Vehicle (EV) Charging Station

ENERGY FOCUS AREAS: ☀

Energy Efficiency, Renewable Energy, Additional Technologies

Red Wing - The City of Red Wing will install a demonstration twin plug EV charging station within a public parking ramp. This will serve four parking spaces and will fill a gap in the EV charging infrastructure map along the southeast corridor.

New LED Street Lights

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Lanesboro - This small city is very unique to Southeast Minnesota. It's defined not only by the individuals who call it home but also by the visitors who enjoy a stroll through the city by use of the Minnesota DNR bike trail system, city events or staying for the weekend at one of the local bed and breakfasts. There are only 29 street lights in the entire city, but they are outdated, consume a lot of energy, and are expensive to keep up every year. This project will facilitate replacing them with energy-efficient LEDs.

Promoting Solar PV at Prominent City & School Sites in Faribault

ENERGY FOCUS AREAS: ☀

Renewable Energy

Faribault - Faribault recently adopted an Energy Action Plan that identifies cost-effective strategies to conserve energy and use clean energy. An objective of the plan is to use prominent buildings as models for clean and efficient energy. This project involves development of an

action-oriented Solar PV Master Plan that will provide the impetus to implement solar PV at key city and school sites in Faribault. It will also serve as a model that will inspire similar actions in other public and private facilities throughout the community.

Rochester Faith & Solar Coalition

ENERGY FOCUS AREAS: ☀

Energy Efficiency, Renewable Energy

Minneapolis - Minnesota Interfaith Power and Light (MNIPL) has expanded its presence in recent years by building regional networks in the northern (Duluth) and southeastern (St. Peter) parts of Minnesota. These networks have focused on accelerating adoption of solar power, especially within faith communities. We are seeking a grant to support a bid to build a similar coalition in Rochester. We began laying groundwork for the Rochester Faith & Solar Coalition in fall 2017 with a kickoff that attracted almost 30 participants from several groups. We will continue raising awareness and assisting faith organizations in navigating the decision-making process for rooftop solar or community-based solar in 2018.

Solar Ready Albert Lea

ENERGY FOCUS AREAS: ☀

Implementation, Outreach or Education

Albert Lea - The City of Albert Lea seeks to understand the feasibility of solar energy for all primary government buildings located within the City. This effort will, for all subject city and county facilities: (1) collect annual energy use data, calculate EUI and performance evaluation against ENERGY STAR/ B3 peers; (2) evaluate the viability of solar PV; (3) develop a detailed solar PV concept design, calculate annual energy generation possible, and develop preliminary project budgets; (4) develop a project report summarizing all findings, identifying local economic development potential of solar PV development, and include a proposed solar implementation plan for City owned facilities.

Winona Area Weatherization Installers Pool

ENERGY FOCUS AREAS: ☀

Energy Efficiency

Winona - Minnesota State College Southeast will gain the skills necessary to incorporate Building Performance Institute (BPI) Air Leakage Control (ALC) Installer training into its curriculum. Local contractors will also receive ALC training through the grant. Currently there are no BPI ALC certified contractors in the Winona area, which may stop residents from utilizing some utility rebates.



SOUTHWEST REGION

Executive Director: Anne Dybsetter, adybsett@umn.edu

Learn more: rsdp.umn.edu/southwest

10 Plants That Changed Minnesota Teacher Workshops

FOCUS AREAS:   

UMN Landscape Arboretum, UMN CFANS, UMN Extension, MNHS Press, Northland Arboretum – Brainerd Lambertton - The UMN Landscape Arboretum launched the “10 Plants that Changed Minnesota” public education campaign to build awareness of the crucial role plants played in the historic and economic factors that changed the course of our state. The project expanded its reach through developing a series of teacher in-service trainings that were held across the state.

Catalyzing a District Heating Project [NEW]

FOCUS AREAS: 

UMN Morris Office of Sustainability, Morris Area Public Schools, Stevens Community Medical Center
Morris - This project supported a feasibility study/cost-benefit analysis for the purpose of connecting Morris Area Public Schools and Stevens Community Medical Center to the heating plant at UMN Morris to form a district-heating-and-cooling system. The proposed system would allow the school and hospital to tap into green steam generated at the UMN Morris Heating/Gasification Plant. This study and report provide information about the lifecycle cost and potential savings that could be gained from implementing a district-heating solution.

Connecting Students & Communities

FOCUS AREAS:  

UMN Morris Center for Small Towns, RUSC Kinship Partners, Unspoken Voices, many community partners
Morris - This funding helps make it possible for the Center for Small Towns to offer opportunities for communities to apply to have UMN Morris undergraduate students assist with projects. Many of these projects take place in the Southwest region. In fiscal year 2018, students provided coordination and communication for a mentorship program. They also helped administer and evaluate a performing arts program that brings anti-bullying experiences to area schools.

Conservation Corps serves Natural Resources Focus Area

FOCUS AREAS: 

UMN Extension, RSDP Natural Resource Work Groups, Conservation Corps of MN & IA
Willmar - A Conservation Corps member will assist the UMN Extension RSDP with its Natural Resources Focus Area. In 2018, the RSDPs are focusing on water-related projects in this focus area. Water projects include communities participating in We Are Water MN, as well as water recreation, water quality and soil health, and watershed planning efforts. The Corps member will gain professional experience as a team member and will be introduced to community-based engagement, design and project development.

Deep Winter Greenhouse Campaign [NEW]

FOCUS AREAS:  

UMN College of Design Center for Sustainable Building Research, Alternative Roots Farm, Sustainable Farming Association, Local contractors & businesses involved in construction
Madelia - The UMN Extension RSDP’s Deep Winter Greenhouse (DWG) demonstration and research is developing and refining an innovative solar greenhouse that enables Minnesota farmers to grow and sell local, fresh greens throughout the winter. Five DWGs are being built, one in each RSDP region. One of those DWGs is at Alternative Roots Farm in Madelia. The DWG in Madelia will serve as an educational and business-development resource for Southwestern Minnesota growers and producers for years to come.

Hmong Community Center [NEW]

FOCUS AREAS:  

UMN College of Design Center for Sustainable Building Research (CSBR), Project Uniting Southwest Hmong (PUSH), Southwest Minnesota Housing Partnership, City of Tracy, City of Walnut Grove, Walnut Grove Economic Development Association, Tracy Economic Development Association, Community members, local growers & local youth

Tracy - Project Uniting Southwest Hmong (PUSH) is a steering committee of thoughtful individuals primarily in the Hmong community that seek to make a positive change within their Southwest Minnesota region. PUSH leaders worked with the College of Design Center for Sustainable Building Research (CSBR) to create a design for a new community center that would provide a

gathering place as well as spaces for food growing, a farmer's market, arts and culture, community education, and more. After a community engagement process in the Tracy and Walnut Grove area, partners developed a master plan that reflects community input, recommendations for the center's program offerings, and specific architecture and landscape design recommendations.

LIDAR Training [NEW]

FOCUS AREAS:  

UMN College of Food, Agriculture, & Natural Resource Sciences (CFANS) Department of Soil, Water, & Climate, Local GIS officials and community members
Morris, Marshall - LiDAR data provides highly accurate information about elevation and landscape, which can be used for natural resources and land management projects. Current LiDAR training curricula are being expanded with input from around the state, and two 2-day trainings will be offered in Southwest Minnesota in 2019 for GIS technicians from federal, state, county, local, and private organizations. The trainings will include the first-ever advanced sessions to be offered in Minnesota.

One Vegetable One Community

FOCUS AREAS: 

Grant County 4-H, Meeker County Public Health
Elbow Lake, Litchfield - One Vegetable One Community starts conversations about food and how communities support healthy lifestyles through local foods and gardening efforts. This started as an effort in 2017 and communities would like to see it continue in consecutive years.

Peoples of the Waters [NEW]

FOCUS AREAS: 

UMN College of Liberal Arts Department of American Indian Studies, UMN College of Design Center for Sustainable Building Research (CSBR) & Heritage Studies & Public History, "Milanesian" community members, Lower Sioux community, Upper Sioux Community, Community developer Bob Ryan
Milan - People of Micronesian/Pacific island background now living in Milan, MN, are revitalizing traditional knowledge of watercraft and waterways. Working with faculty at UMN Department of American Indian Studies, this project supported meetings with the Upper and Lower Sioux Dakota communities and consideration of cultural and historic themes for designing a traditional Micronesian canoe house on Dakota lands.
Approximately 50 community members from Milan visited UMN campus to see the Native Canoe Program.

Productive Perennials Demonstration [NEW]

FOCUS AREAS:  

UMN Extension Center for Agriculture, Food & Natural Resources, Forestry, & Master Naturalist program, Community member/property owner/Master Naturalist Kim Rockman, Prairie Ally Outdoor Center, Project Food Forest, Southwest Youth Services (Magnolia/Luverne), Community members
Luverne - In spring 2018, SWRSDP supported planting of fruit- and nut-bearing perennials as a demonstration buffer along a stream at the site of the new Prairie Ally Outdoor Center in Luverne. The project also provided planting supplies such as weed mat and fencing for a food forest, resulting in fruits and vegetables being made available for harvest by community members. Educational events will allow community members to learn about the demonstration project.

Robotics Solar Array [NEW]

FOCUS AREAS: 

West Central Research & Outreach Center, UMN Morris Office of Sustainability, Morris Area Public Schools Robotics Team, UMN College of Food, Agriculture, & Natural Resource Sciences (CFANS), Otter Tail Power Company
Morris - A 7- to 8-kW solar PV system will be installed on the grounds of Morris Area High School. Electricity savings at the school will provide ongoing funding for the high school robotics team, and performance data from the solar array will be used by science teachers for renewable energy labs. High school students, with help from the Morris Model team of UMN Morris students, will hold public solar informational meetings.

Scholarships/ Sponsorships

FOCUS AREAS:    

UMN Morris Student Garden & Energy Interns, Minnesota Farmers Market Association, Residents of Southwest Minnesota attending CERTs Conference, Youth attending University on the Prairie
Willmar - Funds are available for scholarships and sponsorships for Southwest region residents. Community members are invited to apply for scholarships to participate in activities intended to increase their capacity to serve their communities. In fiscal year 2018, scholarships supported attendance at Minnesota Farmers Market Association spring conference, Clean Energy Resource Teams Conference, and University on the Prairie.

Sustainable Agriculture Case Studies

FOCUS AREAS: 

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS) Center for Integrated Natural Resources & Agricultural Management (CINRAM), Sustainable Farming Association, six farms in Southwest Minnesota

Clinton, Granada, Lakefield, Madison, Montevideo, Redwood Falls - An online/mobile tool will allow farmers access to a database of sustainable agricultural practices with an emphasis on soil health. The project will promote farmer-to-farmer learning using both case studies and in-person connections, with the goal of greater adoption of sustainable practices.

Tourism Center Collaborative Staffing

FOCUS AREAS: 

SWRSDP Tourism work group members & project partners, UMN Tourism Center

Willmar - All RSDPs are supporting Tammy Koerte, UMN Tourism Center Extension Educator, for one day per week for two years to help coordinate Tourism and Resilient Communities work groups in all regions; build relationships among regional work groups and key partners; advance a future vision for the focus area; and connect strategic partners, resources and opportunities across Minnesota.

SOUTHWEST AND WEST CENTRAL CERTS

Atrium Hi-Rise Parking Lot Lighting

ENERGY FOCUS AREAS: 

Energy Efficiency

Worthington - The existing parking lot lights will be replaced by LED lighting, and additional new parking lot lights will be added, also LED. The replacement lighting will decrease electrical usage and with the added LED lighting, the parking lot will be well lit for tenant and visitor safety and will consume less electricity than existing lighting.

Blower Door Pre & Post Tests

ENERGY FOCUS AREAS: 

Energy Efficiency

Slayton - Southwest MN Housing Partnership (SWMHP) recently began to offer blower door testing as a line of business when new building code regulations went into effect that required testing on all new single family homes. This data has provided useful information to identify potential issues with the energy efficiency of a home and to understand how our homes measure up when we are using green standards. Through this grant we will conduct pre and post blower door testing on a

minimum of 15 single family homes or small rental developments.

Brownton Community Center Light Replacements

ENERGY FOCUS AREAS: 

Energy Efficiency

Brownton - The Brownton Community Center was built in 1993 and the lighting is original. Ballasts are now beginning to burn out. This grant will allow replacement of all fixtures and lights in the Community Center, which will ultimately be more energy efficient. Many people use the building every year and can learn about the benefits of LED lighting.

Financial Modeling of Solar PV & Battery Storage Systems for Dairy & Swine Farms

ENERGY FOCUS AREAS: 

Renewable Energy, Additional Technologies

Morris - The capital cost of solar PV has significantly declined in the last decade. Livestock farms are prime candidates for installing solar due to high energy consumption on-site, a load matched well with the generation curve, and the availability of roof space and land required. However, due to varying policies, the financial viability of solar PV in Minnesota is highly dependent on which utility serves the farm. This project seeks to address the specific financial viability of solar PV on West Central Minnesota swine and dairy farms by modeling the impact of rates, incentives and the addition of storage.

In Home Education Course & Energy Saving Applications

ENERGY FOCUS AREAS: 

Energy Efficiency

Marshall - This project will provide one-on-one education with 20 or more homes to improve their understanding of how they can lower their energy bills through conservation. There will be a survey of clients' knowledge in energy savings and installation of energy-saving devices, such as LED bulbs, pipe wrap, low-flow shower heads and weather stripping. Clients will be assessed for their eligibility for conservation programs that United Community Action Plan (UCAP) administers, working with the utility providers to replace worn-out appliances with ENERGY STAR appliances.

LED Lighting Upgrade

ENERGY FOCUS AREAS: 

Energy Efficiency

Jackson - Federated's Jackson headquarters plans to upgrade to LED lighting inside and out as follows: 225 T8 tube lights in 26 rooms, halls and meeting rooms; 20 wall packs and lantern lights / high pressure sodium; 15 mercury vapor lights in warehouse to LED; and upgrade 23 mogul-base CFLs in the cold storage warehouse.

New London-Spicer Schools Lighting Systems Retrofit

ENERGY FOCUS AREAS: ☀️

Energy Efficiency

New London - There are many ideas as to what light level is required for security lighting in a parking, walking or driveway areas of the school district. This project would allow the school district to conduct a lighting analysis, Energy Analysis and Visual Simulation (lighting design) to predict a lighting system performance based on professional design parameters. This will help the school district determine the probable cost and energy savings of upgrading the district's outdoor and parking lot and building lighting to LED lighting and begin the installation of LED lighting in the High School parking lot and building exterior.

North Mankato Police Station Energy Savings

ENERGY FOCUS AREAS: ☀️

Energy Efficiency

North Mankato - The North Mankato Police Station is upgrading its existing lighting, 75 total fixtures, to energy-efficient LEDs. This project includes the replacement of three exterior metal halides and 72 interior T8 fluorescents. This building experiences high volumes of traffic from community members and includes a community room where meetings and community events are held often. Making the switch to more energy efficient lighting can reduce annual costs by over \$2,000 and energy usage by over 18,000 kWh.

Solar Panel Project for Courtyard Outdoor Classroom

ENERGY FOCUS AREAS: ☀️

Renewable Energy

Cold Spring - This project aims to install solar panels in the Courtyard Outdoor Classroom space between the ROCORI High School and Middle School buildings. There is an existing pollinator garden, some native grasses and a greenhouse, and Principal Mark Jenson would like to see solar panels installed to provide power for lighting or watering, as well as an education opportunity for students and staff. This project will fund a feasibility study and inspection to determine how best to proceed.

Solar-Powered Welcome Sign

ENERGY FOCUS AREAS: ☀️

Renewable Energy

Windom - Windom has two solar-powered welcome signs installed in 2012 that have experienced a number of reliability issues and are currently not in operation. A solar representative has identified the various reliability issues with costs to correct. The CERT Seed Grant will enable the city to correct the reliability issues, while at the same time provide a case study for others to learn what to avoid in design and updating.

Solar-PV on Morris High School for the Robotics Team

ENERGY FOCUS AREAS: ☀️

Renewable Energy

Morris - A 7- to 8-kW solar PV system will be installed on the roof of the Morris High School. Electricity savings at the school will be used to provide ongoing funding for the robotics team and performance data will be made available to science teachers for renewable energy labs. High school students will hold public solar informational meetings with help from the Morris Model team.

Upper Sioux Community Round House Energy Efficiency Project

ENERGY FOCUS AREAS: ☀️

Energy Efficiency

Granite Falls - The Upper Sioux Community has one remaining public building that does not have energy efficient lighting installed. This project will include a lighting upgrade that will save over \$500 in costs per year. This project will launch a community-wide education component on energy efficiency through creative outreach, engaging both youth and adults and tapping the cultural resources and values of the Dakota people.



STATEWIDE PROJECTS

Statewide Director: Kathy Draeger, draeg001@umn.edu

Learn more: rsdp.umn.edu

Building Supply Chain Networks to Increase Access to Markets for UMN Specialty Crops

FOCUS AREAS: 

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS) Green Lands Blue Waters, UMN Carlson School of Management Grow North/Gary S Holmes Center for Entrepreneurship, Sustainable Farming Association, Riverland College

Austin, Mahanomen - RSDP is leading a new collaboration among a cross-disciplinary team of UMN researchers, farmers, culinary professionals, food processors and food/ag businesses to build supply chains to increase access to UMN new or improved specialty crops. Over the course of this grant, RSDP will develop internal and external supply chain resources, host cross-disciplinary networking events for UMN researchers, host statewide supply chain convenings and evaluate the resources and value of the events.

Community Based Social Marketing with Somali Grocery Stores: In-store Interventions to Address Food Security & Diabetes Management [NEW]

FOCUS AREAS: 

UMN Extension Center for Family Development, UMN Epidemiology & Community Health, UMN Masonic Children's Hospital Pediatric Endocrinology, UMN Healthy Foods Healthy Lives, UMN College of Food, Agricultural & Natural Resource Sciences (CFANS); UMN Applied Economics, MN Department of Health, Pierz Foods

St. Cloud, Waite Park, Willmar - Planning grant to develop a Healthy Foods Healthy Lives Faculty Research Grant that studies in-store interventions by partnering with Somali-owned grocery stores.

Deep Winter Food Production in the North Central Region [NEW]

FOCUS AREAS: 

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS) Horticulture, UMN Extension Community Vitality, Bemidji Community Food Shelf, Organic Consumers Association, Grampa Gs Farm, Alternative Roots Farm, Lake City Catholic Worker Farm, USDA SARE

Bemidji, Finland, Lake City, Madelia, Pillager - Conduct horticultural research trials for DWGs; conduct interviews of DWG producers to develop enterprise analysis; conduct production training workshops.

Deep Winter Greenhouse Initiative

FOCUS AREAS:  

UMN Extension, UMN College of Design Center for Sustainable Building Research (CSBR's Dan Handeen), UMN Institute on the Environment (IonE), MnDRIVE Global Food Ventures, Alternative Roots Farm, Bemidji Community Food Shelf, Grampa Gs Farm, Lake City Catholic Worker Farm, Organic Consumers Association, Sustainable Farming Association of Minnesota, Hmong American Farmers Association (HAFA), White Earth Land Recovery Project, MN Department of Agriculture, Paradox Farm, United FCS, AgStar Financial Services, AgCountry Farm Credit Services, AgriBank, Compeer Financial, MnDRIVE Robotics, Sensors, & Advanced Manufacturing

Bemidji, Finland, Lake City, Madelia, Pillager - RSDP is collaborating with producers and organizations throughout Minnesota. Community partners built UMN-designed Deep Winter Greenhouses (DWGs) – one in each RSDP region – to grow crops as well as participate in research and outreach events for the public for a period of three years. RSDP is also working to complete DWG training workshops at each of the five prototype DWGs and with HAFA and White Earth, as well as to develop a DWG production manual.

Developing Multi-Use Naked Barley for Organic Farming Systems

FOCUS AREAS: 

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS) Agronomy & Plant Science & Food Science & Nutrition, craft brewers

St. Paul - Organic farmers need viable crops that work within their system and have strong market demand. This grant works nationally to develop a multi-use hullless barley for organic systems as well as spur market development and demand for the crop.

Farm to Rural Grocery to Wholesale (Backhaul Project)

FOCUS AREAS: 

UMN Extension; UMN College of Food, Agricultural & Natural Resource Sciences (CFANS); UMN Applied Economics; UMN Horticultural Science; West Central Research & Outreach Center Morris; UMN Extension Community Vitality; Baker's Acres; Mason Brothers; Big Stone Garlic; Bonnie's Hometown Grocery; USDA AFRI Clinton, Wadena - RSDP is leading this integrated research and extension project that aims to develop, and pilots the feasibility of, a new model for small and medium-sized crop producers to access wholesale markets. The Farm to Rural Grocery to Wholesale (F2G2W) model leverages the existing network of rural grocery stores and their wholesale suppliers to backhaul locally grown produce on emptied wholesale trucks for redistribution through wholesale markets.

Food Safety Modernization Act (FSMA) Produce Safety Rule Farm Food Safety

FOCUS AREAS: 

UMN Extension, MN Department of Agriculture Monticello, St. Cloud - Provide educational outreach on the new FSMA Produce Safety Rule to small and medium size produce farmers in the state of Minnesota.

Premium Minnesota Garlic: Increasing Market Access, Improving Production Practices & Supply Chain Networks

FOCUS AREAS: 

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS) Agronomy & Plant Science, Sustainable Farming Association
Howard Lake - Sustainable Farming Association, in partnership with RSDP, will work with farmers throughout Minnesota to improve production practices and market access for Minnesota-grown garlic.

Winter Camelina: New Cash Crop Opportunities for Sustainable Sugar Beet Production

FOCUS AREAS: 

UMN College of Food, Agricultural & Natural Resource Sciences (CFANS) Agronomy & Plant Science & Soil, Water & Climate, USDA - ARS
Waseca - Winter camelina is a new winter annual crop in development within the Forever Green Initiative. This grant will work with sugar beet farmers to research the viability of camelina within sugar beet rotations, quantify the economics of this new system, and establish supply chain connections to bring this new crop to market.

STATEWIDE CERTS

CERTs Core Funding

FOCUS AREAS: 

Legislative appropriation via the Minnesota Department of Commerce, Division of Energy Resources. Additional core partners include: Southwest Regional Development Commission, Great Plains Institute, The Minnesota Project

Statewide - To advance CERTs' mission to connect individuals and communities with the resources they need to identify and implement community-scale energy efficiency and renewable energy projects across the State of Minnesota.

Clean Energy Job Board

FOCUS AREAS: 

Statewide - The MN Clean Energy Job Board is a tool that job seekers can use to find jobs in the energy efficiency and renewable energy fields, and that employers can use to post their latest openings. All jobs are focused on the implementation of clean energy in Minnesota, and are not related to advocacy or policy.

Connecting Low-Income Communities to Efficiency & Renewable Sources (CLICERS)

FOCUS AREAS: 

Minnesota Department of Commerce

Statewide - Connecting Low-Income Communities to Efficiency and Renewable Sources (CLICERS) is an effort geared toward developing strategies to lower household energy burden, particularly utilizing solar energy, that are data driven, based on best practices nation-wide, and based upon local stakeholder input. CERTs has assisted the MN Department of Commerce with initial data gathering, interviews and a series of stakeholder meetings targeting identification of high-value opportunities to lower the energy burden of low-income households.

GreenStep Cities/Tribal Nations

FOCUS AREAS: 

Minnesota Pollution Control Agency, Great Plains Institute, League of Minnesota Cities

Statewide - Minnesota GreenStep Cities is a voluntary challenge, assistance and recognition program to help cities achieve their sustainability and quality-of-life goals. This free continuous improvement program, managed by a public-private partnership, is based upon 29 best practices.

MN Solar Pathways

FOCUS AREAS: ☀️

Minnesota Department of Commerce, Great Plains Institute

Statewide - This project facilitates collaboration to find least-risk, best-value strategies to support the realization of Minnesota's 10% by 2030 solar electricity goal and set the stage for further solar deployment.

Property Accessed Clean Energy (PACE)

FOCUS AREAS: ☀️

Saint Paul Port Authority

Statewide - CERTs staff work across the state giving presentations and educational information about PACE to county commissioners and local municipal leaders, with the goal of activating a joint powers agreement to make PACE financing available in their jurisdiction so that businesses can use it for energy efficiency and/or renewable energy projects.

Renewable Energy for Greater Minnesota

FOCUS AREAS: ☀️

U.S. Department of Agriculture (USDA)

Statewide - CERTs is working with Minnesota farmers and rural small businesses to identify opportunities for energy efficiency in order to maximize the potential benefit of any renewable energy systems. Working statewide, the project will help prioritize renewable energy options that align with the farm or business operations and connect potential projects with resources and tools – like USDA Rural Energy for America Program (REAP) funding – to move forward on project implementation with a focus on solar (photovoltaic and thermal), biomass and small wind.

Savings Watts & Drops

FOCUS AREAS: ☀️

Statewide - Saving Watts and Drops includes two tracks: (1) Saving Watts and Drops Fundraisers helps Minnesota community and youth groups conduct fundraisers with plug-and-play energy and water saving products in collaboration with their electric or natural gas utilities; (2) Saving Watts and Drops Bulk Buys helps cities and other similar community-level organizations distribute plug-and-play energy and water saving products for free or at a low cost.

Scaling up Clean Energy Deployment across Minnesota

FOCUS AREAS: ☀️

McKnight Foundation

Statewide - This funding supports scaling up clean energy project deployment across Minnesota by developing community capacity to implement projects, cultivating innovative community connections, and expanding the use of CERTs as a technical assistance and resource hub.

Solar Possible

FOCUS AREAS: ☀️

Great Plains Institute, Office of Enterprise Sustainability

Multi-region - The Solar Possible initiative offers state agencies, local governments and schools in Xcel Energy electric territory in Minnesota the opportunity to procure solar through a joint Request for Proposal process.

SolSmart

FOCUS AREAS: ☀️

Great Plains Institute

Statewide - SolSmart is a national program that provides free technical assistance with addressing local barriers to solar energy development. In collaborating with partners, CERTs has supported Chisago and Stearns Counties and the cities of Austin, Grand Rapids, Hutchinson, Pine City, Rochester and St. Francis with participation in and advancement toward designation through SolSmart.

Wood Heat for Poultry

FOCUS AREAS: ☀️

Viking Company, Minnesota Department of Agriculture

With support from the Minnesota Department of Agriculture and in partnership with Agricultural Utilization Research Institute, CERTs and a poultry farmer collaborated to test a commercially-designed 1.65 MMBtu wood chip furnace.