WINONA COUNTY CLIMATE DIALOGUE STATEMENT FOR OUR NEIGHBORS

We are 18 residents of Winona County who met for 3 days to consider changes in our local weather and climate and the impacts of those changes on our community's economy, energy sector, water resources, insurance, public health, and agriculture. Based on testimony from subject matter experts and group discussion among incredibly diverse individuals with a wide range of viewpoints, we've changed our own views to find common ground, creating the following list of challenges the community is facing, opportunities to remain resilient and vibrant in the face of those changes, and actions residents and our whole community can take now to begin responding to changes.

Evidence suggests that Minnesota's climate and weather are changing more rapidly and more dramatically than many other parts of the country, including through increasing temperatures and more extreme weather events. These changes will have a real measurable impact on our overall economy, our environment, fish and wildlife habitat, health, insurance rates, and more.

Individually and as a Winona County community, we need to take action by working together to prepare for the future. We need to educate ourselves, our neighbors, and our elected officials to face challenges and pursue opportunities together. By doing so, we can ensure Winona County remains vibrant, resilient, and prosperous into the future.

TOP CHALLENGES

- 1. Adjusting farming practices and other rural and urban land management to be adaptable to more frequent extreme weather events while remaining lucrative and having a positive impact on the environment.
 - Across the Midwest, annual precipitation has increased (up to 20% in some locations), leading to more frequent and higher magnitude flooding. Consequences include degrading water quality and infrastructure, increased spread of disease, and the introduction of toxic chemicals into the water supply.
 - Supporting agricultural best management practices, including balanced planting and crop diversity, and encouraging plantings of perennials, and buffers on private and public land can improve water quality and reduce sediment runoff.

INDIVIDUAL ACTIONS:

- \circ $\,$ Take personal responsibility: Ensure home, business, and farm practices that protect both the quantity and quality of our waters.
- Let your voice be heard: Advocate for a balanced approach to land and water management, one that ensures water equality.

- Consider home, business, or public space strategies to promote water retention instead of runoff such as semi-permeable parking and walkway surfaces, rain gardens, native plantings, and protecting your nearby storm sewer from taking in pollutants and debris.
- Support and develop land use policies that prepare for extremes: Limit development in floodplains, the overuse of water supplies, and other activities that will increase costs for everyone. Physically or financially, flooding and water scarcity will affect all of us.

- 2. High intensity precipitation events may lead to short-term increases in water temperature, higher magnitude flooding, erosion, runoff of sediments and pollution, and degraded stream habitat for coldwater fish and other aquatic invertebrates.
 - Degraded water quality and water infrastructure are more likely to spread disease, mold, and other pollutants and introduce toxic chemicals to the water supply, especially during extreme weather events.
 - Water is a priceless resource.
 - INDIVIDUAL ACTIONS:
 - Go fishing! Money from trout stamp sales is critical for mitigation and management.
 - Support sustainable agriculture and land use practices.
 - COMMUNITY ACTIONS:
 - Look to new opportunities for agricultural production that lessen the impact on the environment.
 - Slow runoff, increase infiltration, and improve efficiency of water use.
- 3. Technology changes quickly. To be knowledgeable about current energy technology, individuals and organizations must know what energy issues to address first and what technology to use.
 - Local organizations, like the Southeast Clean Energy Resource Team (CERTs) and others, can provide community members with resources to help successfully implement energy project ideas.
 - Tax credits for clean energy and solar were recently extended to help offset the cost of clean energy adoption in the US and clean energy is a quickly developing market experiencing triple digit growth in recent years.

INDIVIDUAL ACTIONS:

- Identify best available energy technologies: CERTS can help explore projects that would work for your farm or business and provide you with one-on-one assistance in developing a project. Use the Clean Energy Project Builder to increase exposure to your clean energy project and connect with other clean energy projects. Have your home assessed for energy best practices through an energy audit.
- Find financing/funding for clean energy projects: Options include pursuing Property-Assessed Clean Energy Financing (PACE) option. PACE provides a loan up-front, with repayment occurring over anywhere from 5-20 years on property taxes. You can also push your community to participate in the Guaranteed Energy Savings Program (GESP), which provides comprehensive technical and financial assistance to state agencies, local government units, school districts, and institutions of higher learning to reduce the knowledge and finance barriers to implementing energy efficiency projects.

- Pursue Guaranteed Energy Savings Plan (GESP), which provides financial and technical assistance for public retrofits and distributed energy generation.
- Milk The Savings, Dairy Energy Efficiency Program: CERTs can walk farmers through the possibilities for farm energy efficiency upgrades, as well as answer questions about improved energy efficiency. Additionally, CERTs can help farmers consider options for renewable energy.

- 4. The annual cost of an average homeowners' insurance policy in Minnesota increased 310% (\$368 to \$1140) from 1998 to 2012 due to extreme weather events. Premiums are still not high enough to cover all paid claims.
 - There is a clear relationship between patterns in extreme weather events such as hailstorms and floods and increases in insurance claims in Minnesota.
 - Across the Midwest annual precipitation has increased (up to 20% in some locations), with much of the increase due to more high intensity rain events. This leads to more frequent and higher magnitude flooding.
 - Minnesota is one of two states in the US without a high-risk home insurance pool to spread risk proportionately among homeowners whose homes are at greater risk for extreme weather events.
 - Fewer than 1% of Minnesota's one million households purchase flood insurance

INDIVIDUAL ACTIONS:

- Support policy in Minnesota that allows insurances companies to create high-risk insurance pools to spread risk evenly among policyholders who make multiple weather-related claims within a short period of time.
- Reduce fraud and curtail the rising cost of damage repairs in insurance claims by developing relationships with local, trusted contractors.

- Address knowledge gaps: Promote awareness of "storm chasers" (who charge more than is necessary for repairs after storms); identify local, trusted contractors; and promote education about policy that allows insurances companies to create high-risk insurance pools.
- Prepare for extremes: Limit development in floodplains, the overuse of water supplies, and other activities that will increase costs for everyone. Physically or financially we will all be affected by flooding and water scarcity

TOP OPPORTUNITIES

- 1. Local development of clean energy can reduce the state's dependence on imported energy, which costs about \$16 billion/year.
 - Support is available. Tax credits for clean energy and solar were recently extended. Local organizations, like CERTs, can provide community members with resources because technology changes quickly.
 - The clean energy economy is growing. Clean energy jobs increased by 78% in MN in that last 15 years, compared to overall job growth of 11%. The average wage for a sustainable energy job is 42% higher than the average state wage.

INDIVIDUAL ACTIONS:

- Through "Renewable Energy for Greater Minnesota," Clean Energy Resources Teams (CERTs) can help explore projects that would work for your farm or business, identify potential funding and financing options, and provide you with one-on-one assistance on developing a project.
- Consider utilizing the Property-Assessed Clean Energy Financing (PACE) option. PACE provides a loan up-front, with repayment occurring over anywhere from 5-20 years on property taxes. This eliminates much of initial cost burden, and allows a more manageable payment plan for many participants.

COMMUNITY ACTIONS:

- Pursue Guaranteed Energy Savings Plan for public retrofits and distributed energy generation to receive comprehensive technical and financial assistance for state agencies, local government units, school districts, and institutions of higher learning to reduce the knowledge and finance barriers to implementing energy efficiency projects.
- Participate in the Minnesota GreenStep Cities program. 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.
- 2. 'Balance Watersheds': Drained lands and impervious urban areas must be offset by best management practices (BMPs) and ecosystem restorations aimed at slowing runoff and storing water (infiltration, wetlands, floodplain connectivity, etc.)
 - Flood protection infrastructure must be designed for extremes. Unprotected areas need infrastructure designed to withstand flooding.
 - Investing in quality water systems now will allow SE Minnesota to respond quickly and effectively in the event of extreme weather.

INDIVIDUAL ACTIONS:

- Take personal responsibility by assessing your land and practices; getting technical and financial assistance if needed; and ensuring home and business use protects both the quantity and quality of our waters.
- Let your voice be heard: Advocate for a balanced approach to land and water management one that ensures equality in water allocation.

- Support organizations that provide local assistance, like NRCS, SWCD, MDA, and watershed groups.
- Participate in the Minnesota GreenStep Cities program.
- Develop land use policies that strengthen water quality and invest in infrastructure improvements.

- 3. Adopting agricultural best management practices and planting perennials can reduce nutrient, soil, and water loss while maintaining production and profitability.
 - Encouraging balanced planting in urban and rural environments, promoting crop diversity, and using forages instead of or in addition to corn and soybeans reduces runoff.
 - Buffer strips could significantly improve water quality and remove sediment from Minnesota water.
 - These practices could help reduce the spread of diseases, mold, and other pollutants through runoff, floods, and other extreme weather events.

INDIVIDUAL ACTIONS:

- Plant pollinator habitat, native plants and prairie grasses, and/or rain gardens on your personal property, considering applicable local statutes.
- o Pursue grants or other financial assistance to help implement best management practices.

COMMUNITY ACTIONS:

- Develop land use policies and practices that strengthen water quality, invest in infrastructure improvements, and support beginning and existing farmers in looking to new opportunities and adopting new practices.
- Support programs that provide assistance (NRCS, SWCD, MDA, watershed groups) that aid in production and profitability for agricultural producers.
- 4. Southeastern Minnesota should strive for healthy, responsible land use practices especially with agriculture and mining. Healthy shorelines and streams are more resilient to flood events.

INDIVIDUAL ACTIONS:

- Support state policies that promote healthy land use and natural resource management, support investment in infrastructure improvements, and advocate for land use policies that strengthen water quality.
- Assess your private land and practices and implement agricultural best management practices/perennials where needed.

- Seek technical and financial assistance to assess public land and practices on a community-scale.
- Support research, outreach, and education among farmers and consumers, allowing farmers to adopt new practices.