

DR. KATE KNUTH

## 100% Climate Adaptation and Resilience Agenda

Item	Amount
Technical Assistance and Capacity	Category Total: \$2,600,000/year ongoing \$20,000,000 one-time
UMN Climate and Weather Ready Extension	\$15,000,000 one-time and \$1,000,000/year ongoing
Agency Adaptation Staff	\$1,600,000/year ongoing
Mapping infrastructure climate risks and resilience opportunities	\$5,000,000 one-time
Resilient Communities	Category Total: \$200,000,000 one-time
Local Climate Action Planning and Implementation Grants	\$10,000,000 one-time
Resilient Communities Grants	\$175,000,000 one-time
Urban and Community Forests	\$15,000,000 one-time
Resilient Lands	Category Total: \$82,000,000 one-time
Soil Health Financial Incentives	\$30,000,000 one-time
Reforestation	\$25,000,000 one-time
Water Quality and Water Storage	\$17,000,000 one-time
State Forest Nursery	\$10,000,000 one-time
Emergency Preparedness	Category Total: \$137,000,000 one-time \$800,000/year ongoing
Disaster Assistance Contingency Account	\$100,000,000 one-time
Permanent Climate Disaster Fund for Farmers	\$20,000,000 one-time
Climate and Public Health Programming	\$800,000/year ongoing + \$17,000,000 one-time

#### Introduction

This year, Minnesota has the opportunity to make a big leap forward to prepare for the impacts of climate change. Smart investments in technical assistance and capacity building, resilient communities, resilient lands, and emergency preparedness will protect Minnesotans for years to come. Building climate resilience matters for Minnesotans because climate change is already affecting people's lives. Longer allergy seasons and reduced air quality make health worse, bigger rainstorms wash out roads and cause wet basements, farmers struggle with the stress of whiplash between droughts and floods.

All of these impacts – and more – are already bringing costs and consequences to Minnesotans. And Minnesotans are noticing. A recent poll by the Minnesota Climate Adaptation Partnership (MCAP) found that 76% of Minnesotans are concerned about climate change, and 83% want their state and local governments to do more to address climate change.

To address climate change, Minnesota needs to do two big things. We need to reduce greenhouse gas (GHG) emissions and we need to proactively prepare for and adapt to our changing climate.

By reducing emissions and adapting to climate change impacts, we make the "resilience gap" as small as possible. This gap should worry all of us. The less successful we are at reducing emissions, the more we will have to adapt and the more costly climate impacts will be. And a resilience gap that is too wide means a climate future in which it is not possible for all Minnesotans to thrive. Our solutions work to close this gap.

The 100% Campaign pulled together this 100% Climate Adaptation and Resilience Agenda to recommend smart climate adaptation and resilience investments in Minnesota. This agenda builds on the campaign's previous work, including the white paper we published in 2021 – Adapting to Minnesota's Climate: Policy Proposals for a Fast-changing State.

The investments in this agenda will position Minnesota to take advantage of the historic federal investments passed in the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA). We can use our historic state budget surplus to leverage this federal money to prepare Minnesota communities even more.

These recommendations are not a comprehensive list of everything Minnesota needs to do to prepare for climate change. Rather, they are a focused set of recommendations for the 2023 legislative session to help us take advantage of this unique opportunity to put Minnesota on a path to climate preparedness and resilience.

# Technical support and capacity building: ensuring communities have equitable access to climate adaptation resources

Communities across Minnesota are asking for technical support and additional staff capacity because they are already experiencing climate change impacts. Even more, communities want to take advantage of federal and state investments to build climate resilience. However, many local governments, particularly smaller ones outside the Twin Cities metro area, struggle to plan and apply for federal and state investments. For example, some communities are able to hire consultants to help; others are not. Communities also struggle to understand what adaptation and resilience solutions might work in their communities. Every community in our state deserves access to the climate data and technical support needed to prepare for climate change and secure federal and state money to do so. We need to invest upfront to make this happen.

### UMN Climate and Weather Ready Extension - \$15 million one-time and \$1 million/year ongoing

The University of Minnesota (UMN) Extension is a well-respected network of community leaders and educators working across our state. For decades, Extension has connected Minnesota communities to research and technical assistance to make our communities better. Climate change is our next great state challenge. UMN Extension has been building the Minnesota Climate Adaptation Partnership (MCAP) for more than a decade. The MCAP Extension program is poised to be a go-to resource for partnering with communities on climate adaptation. But they need resources to scale up their climate and weather readiness program and to respond to requests for technical assistance already coming in from farmers, local units of governments and communities across the state. A \$3 million/year state investment will add Extension educators across the state with key climate preparedness expertise and create a grant program to leverage UMN faculty to do the climate adaptation research communities need to better understand their risks and to know what practical, place-specific solutions will work.

#### Agency climate adaptation staff - \$3.2 million (\$1.6 million/year)

Building staff capacity at state agencies will help prepare our government to provide urgently needed services for Minnesotans who are preparing for climate change impacts. We recommend creating nine additional staff positions within eight state agencies:

- Minnesota Pollution Control Agency: A staff person in GreenStep Cities to support
  city adaptation and resilience and an additional climate adaptation planner. A staff
  person to support inclusion of climate change in environmental review processes.
- Department of Natural Resources: A climate adaptation and resilience planner to support building climate preparedness as part of state land management
- Minnesota Department of Health: Additional staff person in the climate and health program to support continuity of this essential public health effort
- Minnesota Department of Agriculture: A climate resilience liaison to connect farmers with adaptation resources as they access MDA grant programs
- Minnesota Department of Transportation: An additional climate resilience planner to ensure state infrastructure investments are climate-ready
- Department of Public Safety: Homeland Security and Emergency Management: A climate preparedness liaison to work with counties to incorporate climate adaptation into all-hazard mitigation plans
- Department of Administration: An additional position in the Office of Enterprise Sustainability to build resilience into state government buildings
- Minnesota Management and Budget: A climate risk analyst to plan for the costs of climate change on Minnesota's budget, particularly focused on infrastructure

#### Mapping infrastructure climate risks and resilience opportunities - \$5 million

Minnesota does not yet have a good analysis of how climate change will impact state infrastructure and the costs for maintaining it in the years ahead. We can proactively address this gap in knowledge and preparedness through investing in mapping climate change risks on infrastructure and identifying opportunities to make our state's infrastructure more resilient to climate change impacts.

## Direct support for resilient communities: Helping local governments plan and prepare for climate change

Local governments are at the forefront of experiencing climate change impacts, but not every local government has the resources to plan and adapt without state government help. These investments build on the technical assistance recommended above to prepare communities even further.

#### Local climate action planning and implementation grants - \$10 million

Local climate action planning helps focus a community on what they need to do to lower GHG emissions and build resilience. While a few dozen cities and one county have developed climate action plans, most have not. A local climate action planning and implementation grant program will target one-time budget surplus to fill the local climate planning and implementation gap. This grant program should be paired with a more narrowly focused adaptation planning grant program for local governments. Communities should be allowed to apply for one or both at their own discretion.

#### Resilient Communities grant program - \$175 million

With overall climate action and adaptation plans in place, communities will still need support for project planning, predesigning, and proposing projects to manage stormwater, mitigate flooding, ensure service continuity of critical infrastructure like hospitals, and more. However, local governments do not have the financial resources to plan for and implement these projects without state help. The Resilient Communities grant program fills this project planning and implementation need.

#### Urban and community forests - \$15 million

Climate change means more hot days in summer. In cities, this heat is more dangerous because of the urban heat island effect. Urban trees reduce the impact of summer heat, lower cooling costs, and keep people healthier, reduce exposure to flood risks. Just at the time we need more urban trees, Emerald Ash Borer has decimated significant tree cover and trees are increasingly stressed by climate change impacts. We need to invest in urban forests. These investments will make sure local communities have access to trees and the forest services they need to keep these trees healthy.

## Resilient lands: Ensuring forest, prairies, and working lands are healthy as climate changes

We can take proactive action to build resilience into our state's forests, prairies, and working lands as climate change impacts ramp up. Proactive resilience-building results in multiple benefits including healthier rural communities, less stormwater runoff, improved water quality, and increased carbon sequestration. According to a poll by MCAP, 64% of Minnesotans think we should prepare for climate change by conserving our state's grasslands, forests, and wetlands.

#### Soil health financial incentives - \$30 million

Minnesota's farmers can build climate resilience through healthy soil practices like cover cropping, continuous living cover, and rotational grazing. Minnesota should invest in helping farmers transition to these farming practices. This request includes funding for the Forever Green Initiative, including market development and grower incentives.

#### Reforestation - \$25 million

More trees in Minnesota will help sequester carbon and build resilience into our landscapes by slowing down stormwater and improving water quality.

#### Water quality and water storage - \$17 million

Minnesota is already experiencing bigger rainstorms, and we need to prepare our lands to make sure our state's water quality improves. This investment will ensure the Board of Water and Soil Resources can make smart water investments in communities across the state.

#### State forest nursery - \$10 million

Reforestation, both for urban trees and state forests, means we need more and more kinds of trees. We need to invest in our state forest nursery to make sure it is ready to help us build climate resilience in Minnesota's forests.

## Emergency preparedness: With increasing extreme weather and more health risks, Minnesota needs to get ready

Minnesota needs to prepare for more disasters and increased public health threats as climate change ramps up. This means making sure our emergency management systems are fully funded in anticipation of these emergencies. The state of Minnesota needs to proactively prepare to offer fiscal support to communities to respond and recover when disaster strikes.

#### Disaster Assistance Contingency Account Funding - \$100 million

Minnesota is lucky to have a Disaster Assistance Contingency Account, which is used to help communities across the state respond to and recover from disasters. This account is a smart climate adaptation policy. We can build resilience by putting part of our state's budget surplus into the account to prepare for future disasters.

#### Permanent Climate Disaster Fund for Farmers - \$20 million

Minnesota farmers bear significant risk from increased extreme weather that comes with climate change including droughts, floods, and derechos. We recommend making a permanent fund that farmers can access when disaster strikes. The fund would be based on the 2022 drought relief funding program with more permanence like the Disaster Assistance Contingency Account. In addition, priority should be given to farmers who lack access to current crop insurance programs. When accessing funding, farmers should receive information about climate resilience practices and how to access incentives for improving climate resilience.

### Bolster climate and public health programming - \$1.6 million (\$800k/year) + \$17,000,000 one-time

The Minnesota Department of Health has a longstanding, effective climate and public health program, but its federal funding is not as secure as is needed. The Covid-19 pandemic makes it even more clear that bolstering the capability to prepare for increased public health risks from climate change will pay dividends for years to come.

### What is the 100% Campaign?

The 100% Campaign is bringing Minnesotans together – people just like you – who believe we need an equitable clean energy future for everyone in our state.

With both organizational partners and individual endorsees, the 100% Campaign is grounded in the idea that "to change everything, we need everyone". We are organizing a cross-sector, statewide, multi-racial, intersectional campaign to build an equitable clean energy economy that works for everyone in Minnesota.

We believe that Minnesotans must act now to ensure our well-being for generations to come. To do that, we must:

- Transition to safe, clean, locally-made energy solutions at scale and as quickly as we can.
- Create solutions that work for all Minnesotans across race, gender, class, and place
- Encourage public and private investments, expand worker training, and create new energy solutions that save us money
- Strengthen all communities that are impacted by pollution or the transition away from fossil fuels

#### About Dr. Kate Knuth

Kate Knuth, Ph.D., is the Founder of Democracy and Climate LLC, which provides policy, strategy, and research consulting at the intersections of democracy and climate change. She is a sustainability scholar who researches transformation and climate citizenship. Dr. Knuth was the first Chief Resilience Officer for the City of Minneapolis and led a leadership program at the University of Minnesota.

She previously served as a Minnesota State Representative and as a Citizen Member of the Minnesota Environmental Quality Board. Dr. Knuth holds a Ph.D. from the University of Minnesota, a M.Sc. from Oxford University, and a B.A. from the University of Chicago and was a Fulbright Fellow in Norway. She serves on the neighborhood association board of the Minneapolis neighborhood where she lives with her family.