Building Resilient Rural Communities

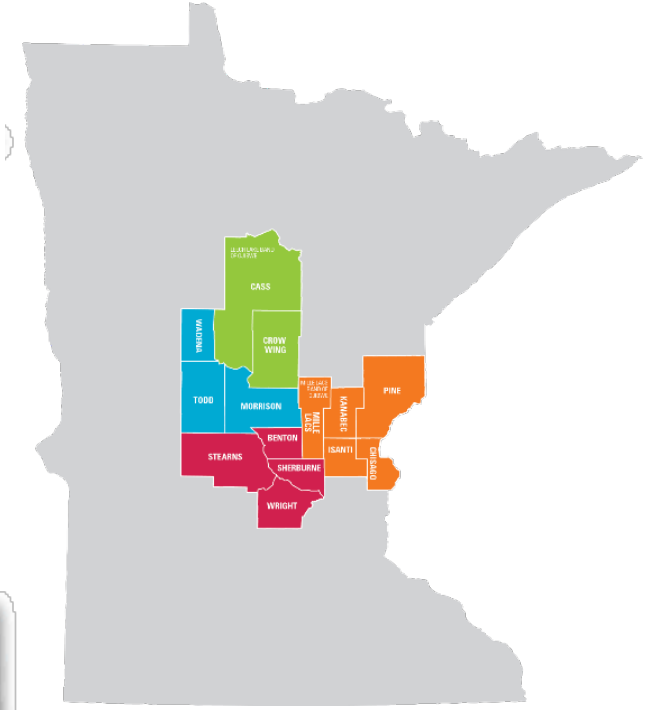
Initiative FOUNDATION

WELCOME

September 23, 2025

Serving the Region Since 1986

- **780,000 residents**
- **12,000 square miles**
- **163 communities**
- **14 counties**
- **2 Native nations**



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OUR MISSION

To empower people throughout Central Minnesota to build a **thriving economy, vibrant communities** and a lasting **culture of generosity**.

OUR VISION

Economy:
We have an abundance of talented people and job-creating enterprises that contribute to economic growth and vitality.

Community:
We are a region of robust, highly engaged communities where people choose to live, work, give and play.

Generosity:
People across our region give generously of their time, talent and resources.

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Community Resiliency

Resilient

Ability to adapt and thrive in the face of challenges and adversity.

Community Resilience

- Capacity of a community to prepare for, withstand, and recover from adverse events.
- Ability to bounce back from setbacks, maintain social cohesion, and effectively navigate difficult times.

Why Community Resilience Matters

Growing threat of extreme weather which can impact:

- Water systems
- Energy grids
- Local economy
- Community members

Extreme Weather

- How has extreme weather already impacted your community?
- What challenges have you or your community experienced in preparing for or responding to these events?

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What can we do to help build community resiliency?

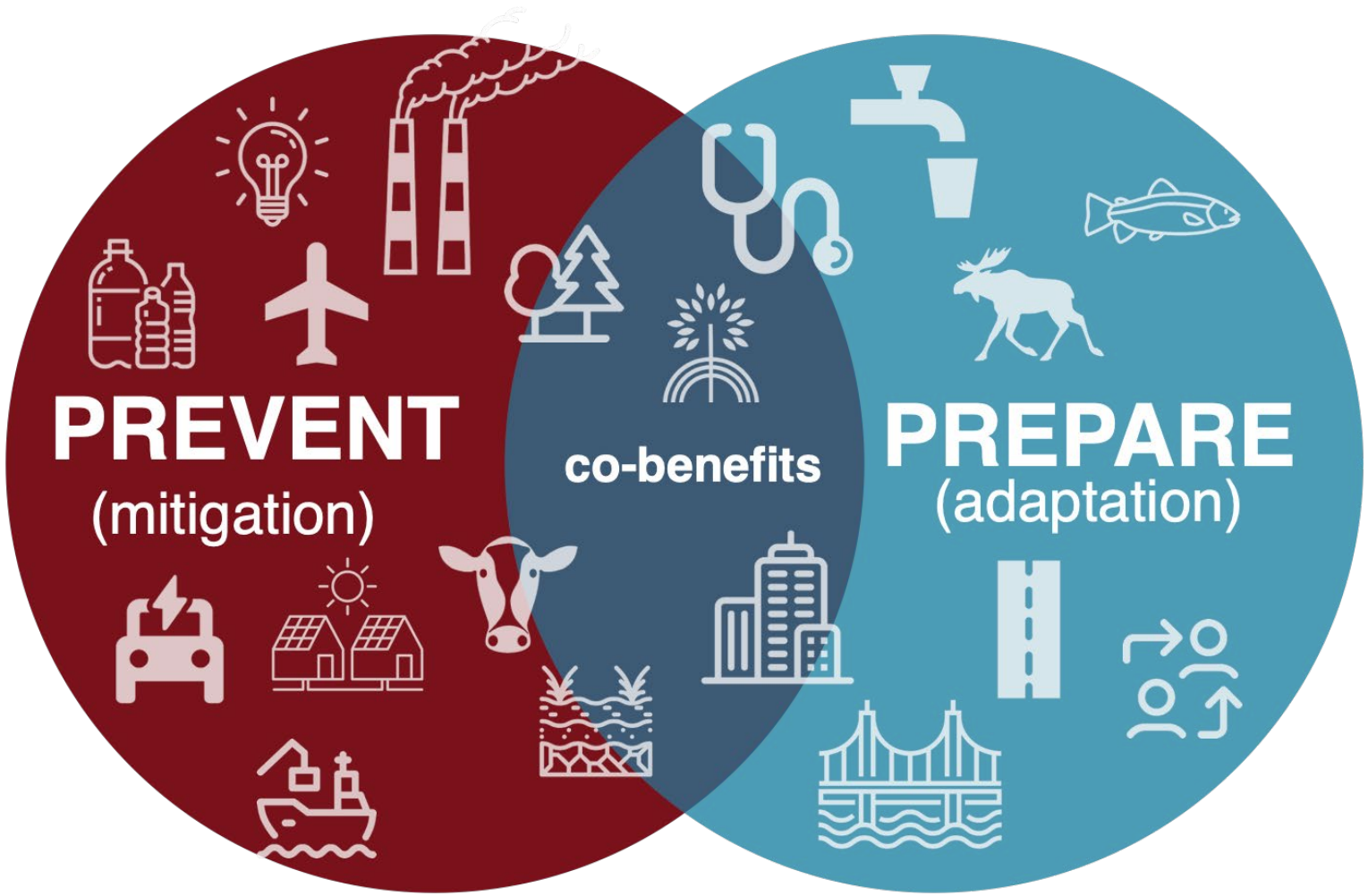
Integrated Systems

- Community
- Energy
- Water

Strengthen relationships between different sectors

- Community education & engagement
- Strengthen local infrastructure
  - power, water, transportation
- Support vulnerable populations
- Emergency communication plans

Mitigation & Adaptation

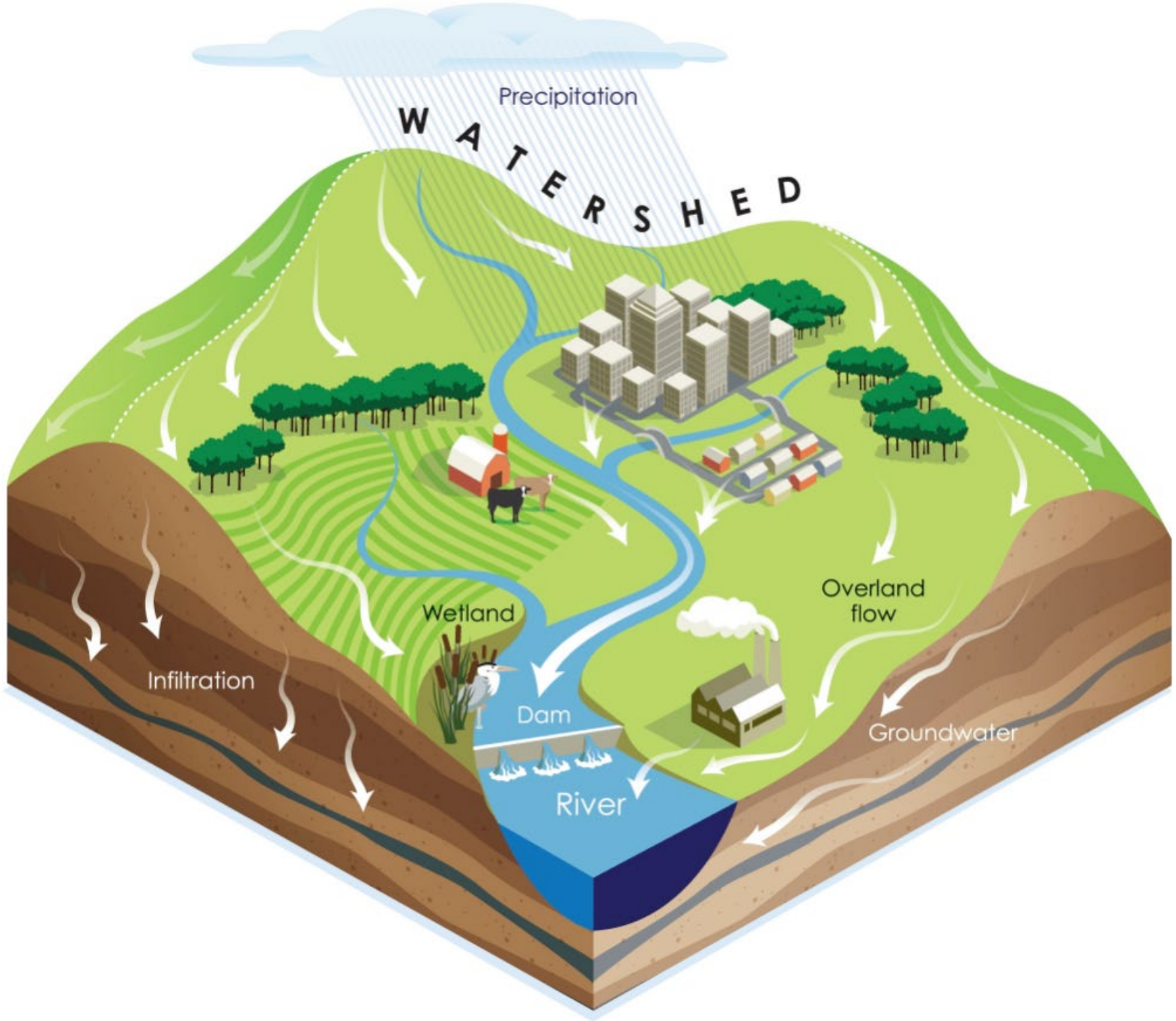


Mitigation:
preventing climate change by reducing emissions

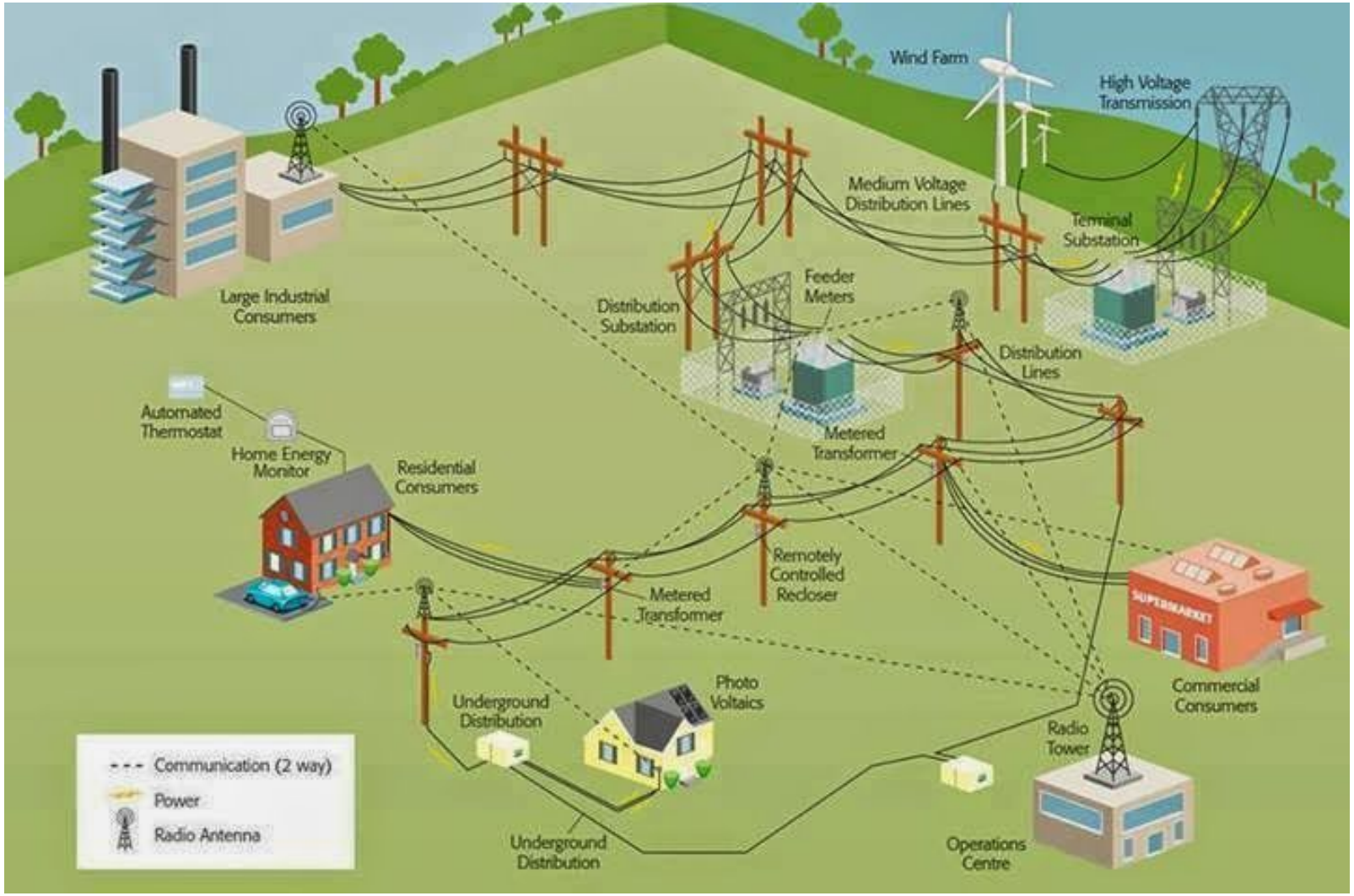
Adaptation:
preparing for impacts of climate change

Credit: University of Minnesota Climate Adaptation Partnership

Role of a healthy watershed



Electrical Grid



Resilience Hubs

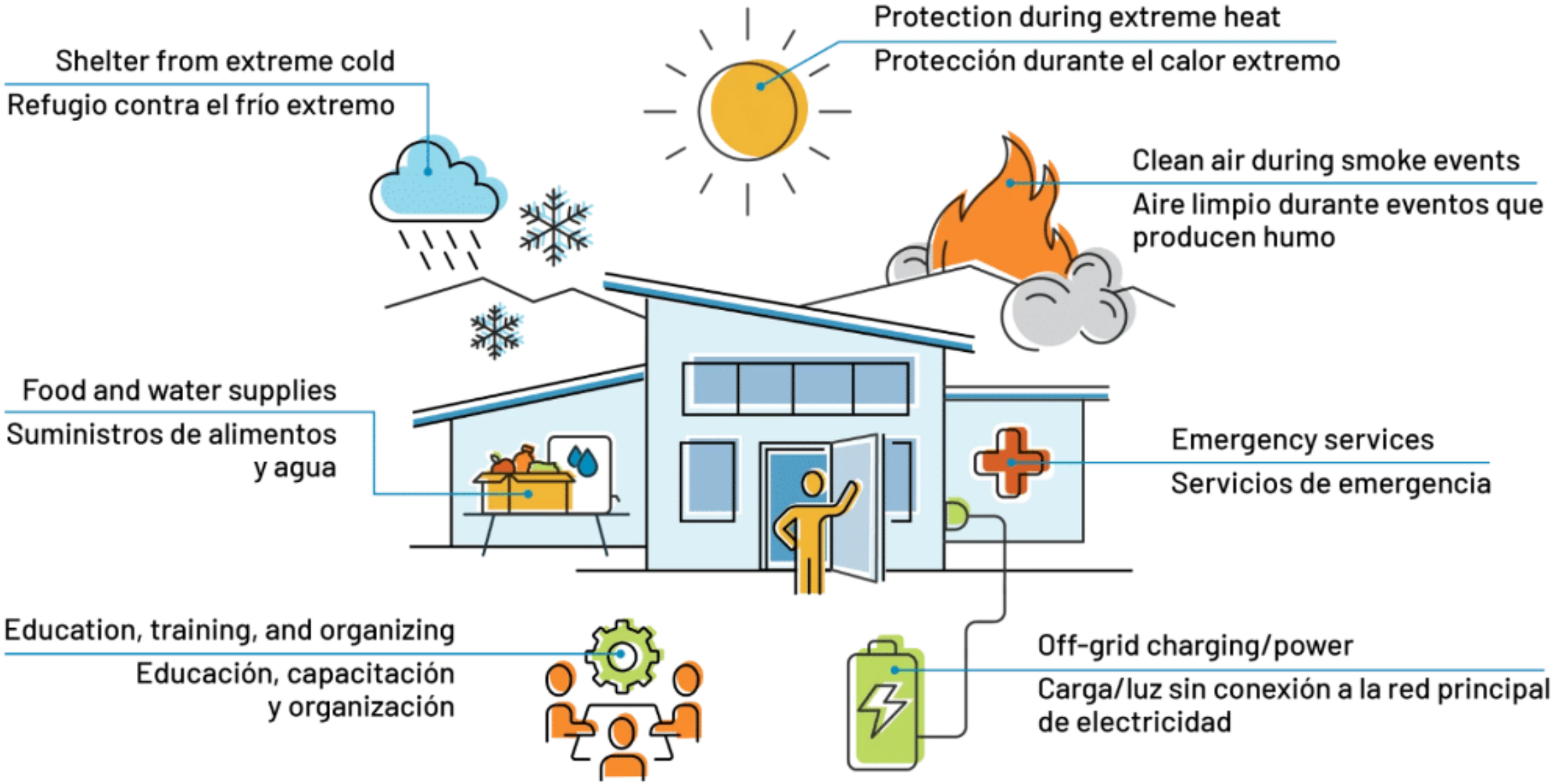
"Resilience hubs are energy efficient, community-serving places that have the resources and connections needed to support community members both in moments of crisis and in the everyday."

~ *Minnesota Interfaith Power & Light*

Key Features

- Solar + battery backup
- Cooling/warming centers
- Communications
- First aid stations
- Food/water storage
- Accessible & welcoming design

Credit: Urban Sustainability Directors Network, n.d.



Credit: Community Environmental Council

Resilience Hubs

	NORMAL/STEADY STATE ("BLUE SKIES")	DISRUPTION	RECOVERY
PROGRAMMING	Promote community preparedness, well-being, economic vitality, trust-building.	Meet community needs: refrigeration, charging, information, medical supplies, communications, etc.	Support long-term recovery. Operational base for residents.
RESILIENT DESIGN	Physical space accommodates programming.	Resilient building withstands extreme weather and accommodates peak programming demand.	Include necessary spaces to meet new recovery programming and planning, in addition to steady state activities.
OPERATIONS	Personnel and resources to support programs.	Enhanced personnel, augmented by volunteers. Government agencies coordinate relief efforts and distribute emergency supplies through the hub.	Prepare for a second wave of disruption or support a return to steady state.
COMMUNICATION	Consistent communications, build presence and trust.	Facilitates emergency communications through trusted community channels; partners with government.	Facilitate community planning and communication about recovery.
POWER	Solar and battery storage reduces utility costs, reduces emissions, and may provide energy grid support.	Resilience hub can "island" to provide back-up power.	Reconnect to the grid, resume normal power operations.

Credit: Department of Energy & Environment, n.d.

Community Resilience Hub

- Identify a potential location in your community.
- What features would it include?
- Who would it serve?
- Who needs to be at the planning table?

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Community Mapping

Community Mapping:

Seeing the Full Picture

Identify various aspects of your Community

- Places, people, organizations, services, needs

Highlight

- Strengths (what's working well)
- Challenges (gaps and needs)

Vulnerability Mapping

Identify vulnerable populations

- Limited mobility
- Elderly
- Language
- Mobile homes

Focus on Strengths & Resources your Community already Has

Asset Mapping: *Building from Strengths*

Community Asset Mapping

Community Strengths & Needs

- Identify where assets intersect with needs

Look for Proximity Opportunities

- May be able to address some needs with these assets

Identify Gaps with no nearby assets

- These may need external support

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THANK YOU!

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Resources

Resilience Hubs

- Co-creating climate resilience hubs for MN communities | UMN Climate Adaptation Partnership
- Resilience Hubs - Minnesota Interfaith Power & Light
- Resilience Hubs - USDN: Urban Sustainability Directors Network
- Resilience Hub Collaborative
- What is a Community Resilience Hub? — Future of Small Cities Institute
- USDN_ResilienceHubsGuidance-1.pdf
- Resilience Hubs | Build Resilient Communities Today — Climate Resilience Consulting | Adaptation Strategy & Resilience Planning Services
- West Street Recovery - West Street Recovery
- Resilience Hubs Support Communities Across the U.S. | Homeland Security
    - Resilience Hubs Across the U.S.

Community Mapping, Engagement, Project Design

- The Community Mapping Toolkit | Rethink the Village
- Community Co-Design | Destination Medical Center
- Home Page | Kansas Leadership Center

HOW TO BUILD A CORSI-ROSENTHAL BOX

The Corsi-Rosenthal Box is an affordable DIY air-cleaning system made with simple materials found in hardware stores. The box fan pulls air through the filters on the sides and blows out clean air. It is proven to reduce indoor exposure to airborne particles, including those containing the virus that causes COVID-19. The box can also decrease the levels of other particles in the air, such as dust or wildfire smoke.

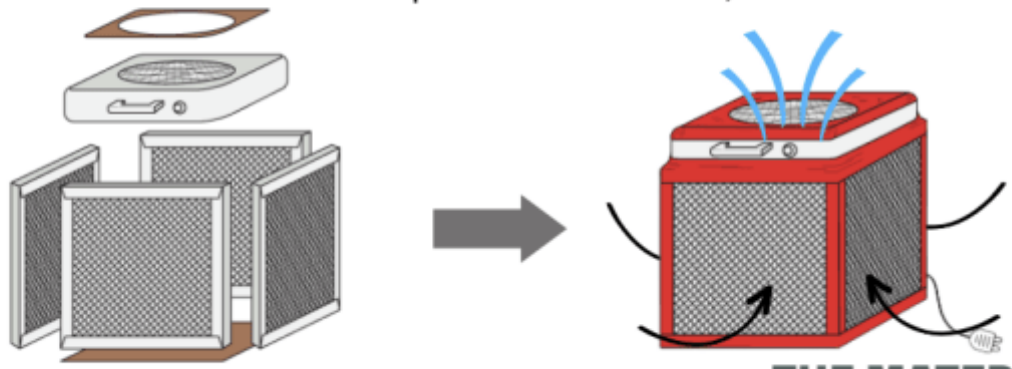


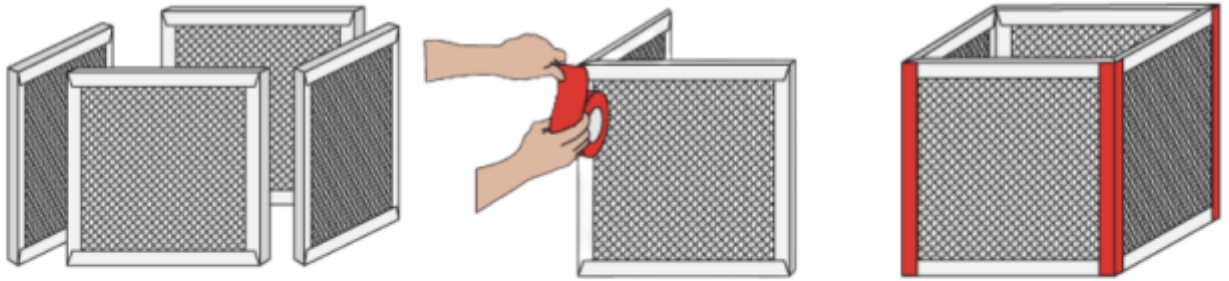
Illustration by Amanda Hu

- Filters can last up to a year
- Keep away from walls and corners

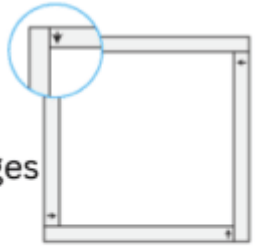
THE MATERIALS

- 4 Filters: 3M MPR 1900 (20" x 20" x 1" or 20" x 25" x 1") or MERV 13 (20" x 20" x 2" or 20" x 20" x 1" or 20" x 25" x 2" or 20" x 25" x 1" [2-inch preferred])
- Lasko or Mainstays 20-inch Box Fan
- Scissors, Utility Knife, Duct Tape

THE CUBE



- Arrange the filters to create a symmetrical structure
- Ensure the arrows are pointing inwards
- Duct tape the four edges
- Vertical orientation of the pleats is preferred



THE BASE

Credit: The Corsi-Rosenthal Foundation