



GREAT RIVER GREENING

Strategic Vision for 2030

Mission: To inspire, engage and lead local communities in conserving and caring for the land and water that enrich our lives.

Who We Are: Minnesota's leader in nature-based climate solutions through land restoration.

What We Do: Restore resilient landscapes, address biodiversity loss, and sequester and store carbon through community-based stewardship.

Why We Do It: The effects of climate change on ecosystems and individuals are being felt now. To protect Minnesota's natural systems and habitats, we need to make a meaningful impact in this decade.

Impact: Healthy, adaptive habitats for wildlife, pollinators, plants, and people. Cleaner water and increased ground water storage. Lower emissions through carbon sequestration and storage.

Values

SCIENCE-LED: We lead with a scientific approach, grounded in data-driven best practices and the expertise of our trained ecologists.

COMMUNITY: We commit to a collaborative, community-focused approach, one rooted in mutual, mission-based goals. We bring people together to steward Minnesota's land and water.

PARTNERSHIPS: We build strong, community-based partnerships, from our staff and Board of Directors to volunteer groups, donors, municipalities, vendors, schools, and the State of Minnesota. Minnesota's land and water are shared natural systems, and we rely on the support of individuals and groups to protect them.

EDUCATION: We educate communities of all ages through a hands-on approach to create passionate, informed environmental stewards.

ENVIRONMENTAL EQUITY: We acknowledge that historic and present-day inequities have created systemic barriers of access to natural systems and green spaces for communities of color, indigenous peoples, and lower-income communities. We therefore intentionally incorporate diversity, equity and inclusion (DEI) goals into both our communal work and internal organizational development. Our full DEI plan may be read [here](#).

Situation

Climate change is the greatest challenge of this decade. There are clear connections between climate change and changing patterns in extreme weather like heatwaves, heavy precipitation, and droughts. Average global temperature has increased roughly 2°F since the 1880s. Minnesota's average annual temperature has increased by nearly 3°F since 1895.

What can we expect? More extreme weather. Minnesota is getting warmer and wetter, with the 10 combined wettest and warmest years on record all occurring after 1997. In addition to extreme weather, planting zones are shifting, impacting the health of habitats throughout Minnesota. These changes have increased the risk of disease and pest infestations.

The effects of climate change on ecosystems and individuals are being felt now. To protect Minnesota's natural systems and habitats, we need to make a meaningful impact in this decade.

Next Steps

Minnesotans are ready for action to mitigate the effects of climate change:

- 76% report being concerned about climate change.
- 62% of Gen-Z are hopeful that society will do enough to reduce the most severe impacts of climate change.
- 64% think we should prepare for climate change by preserving and conserving Minnesota's grasslands, forests, and wetlands.

Through mitigation and adaptation to prevent further warming and prepare for environmental changes, Great River Greening is uniquely positioned to address the effects of the climate crisis in Minnesota.

What are nature-based climate solutions?

Nature-based climate solutions protect, sustainably manage, or restore ecosystems to increase carbon storage or avoid greenhouse gas emissions in landscapes and wetlands. Through nature-based climate solutions, we can improve and adapt land in Minnesota to mitigate the effects of climate change while improving the long-term resilience and health of habitats throughout our state.

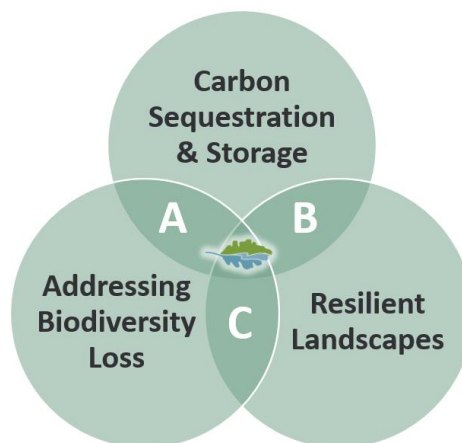
Using nature-based climate solutions to build and preserve healthy, adaptive habitats that can withstand the effects of climate change will have an enormous impact for wildlife, pollinators, plants, and people in Minnesota.

Great River Greening's Pillars of Impact

To achieve our vision of healthy, climate change resilient ecosystems throughout Minnesota, Great River Greening will lean into the practices and projects that can truly impact our shared climate future.

Our land-based restoration will center on three pillars of impact:

- Restoring resilient landscapes
- Addressing critical biodiversity loss
- Increasing carbon sequestration and storage



Environmental Stewardship

Our goal is to nurture environmental stewardship in all that we do, restoring land, water and wonder in the context of community.

Conserving healthy, climate change resilient ecosystems throughout Minnesota requires a committed, knowledgeable population that is empowered to care for our shared natural systems. Great River Greening meets this need by partnering with communities to increase environmental connection, teach environmental restoration, and implement a variety of nature-based climate solutions.

Tactics

Great River Greening will utilize a variety of tactics to implement our work within our pillars of impact. These tactics may change based on science-based best practices as we focus on our 2030 vision.

A: Adaptive Planting, reGreening, and Reforestation:

Adaptive Planting: This is the process of planting species of plants originally native to other zones of the US and allow them to become acclimated and established in a new area, also known as assisted migration.

reGreening (restoring land to its natural state): This is the process of returning developed or farmed land to its natural landscape. reGreening can include large scale projects as well as smaller projects such as turf conversion in urban settings.

Reforestation: This is the process of replanting an area with trees, which can be done within degraded woodland, old farmlands, or in lands being restored to natural states.

B: Tree Canopy, Biochar, Sustainable Agriculture:

Tree Canopy: This work is focused primarily on urban heat islands, planting trees to improve the canopy in areas with little to no cover. It can also be done in rural areas in conjunction with reforestation. The Tree Canopy tactic also covers work related to sourcing saplings and trees for canopy or reforestation work and may include the construction of gravel beds to grow bare root trees from saplings. This work could also include adaptive planting to support tree migration.

Biochar: This is the process of burning biomass waste produced through restoration work using kilns instead of open pile burns. Through these kilns, the char stores 50-80% of greenhouse gases that would have been emitted during open pile burns and creates a carbon and ash product (biochar) that goes back into the soil, improving soil health.

Sustainable Agriculture: This is our work with farmers, educating and building community around sustainable agricultural practices such as silvopasture (grazing animals on woodlands), planting cover crops, and planting perennial grains such as Kernza and Winter Camelina.

C: Pollinator Corridors, Ecosystem Management:

Pollinator Corridors: This is the creation of new pollinator habitat (occasionally on formerly developed land) or the restoration of degraded prairies to create pollinator habitats. This could include adaptive planting to support plant migration. These corridors are especially important to pollinators as a hopscotch matrix to migrate between larger natural restored systems.

Ecosystem Management: This is the process of assessing an ecosystem, developing a plan, implementing, and supporting long-term stewardship. This work could include components of many of the tactics as needed and can be conducted on all habitats including prairies, wetlands, woodlands, urban parks, and savannas.

Strategic Vision for 2030

Great River Greening's vision for 2030 is healthy, climate change resilient ecosystems throughout Minnesota. By leaning into our three pillars of impact and inspiring the current - and next - generation of environmental stewards, we will build climate change resilient ecosystems that not only survive extreme weather, but provide healthy, adaptive habitats for wildlife, pollinators, plants, and people.

We can't do this work alone. Minnesotans have demonstrated their support of nature-based climate solutions through their community-based stewardship of our projects. Together, we will work to create a more resilient Minnesota that can adapt to and mitigate the effects of climate change in our shared communities.