

Southeast Iowa Sierra Club



STRATEGIC CONSERVATION & COMMUNITY RESILIENCE PLAN

2021-2024

Southeast Iowa Sierra Club (SEISC)

The Southeast Iowa Sierra Club (formerly the Leopold Group) is based in Fairfield, Iowa, and represents eight counties – Jefferson, Henry, Van Buren, Wapello, Davis, Des Moines, Lee, and part of Louisa.





We do not inherit the earth
from our ancestors,
we borrow it from our children.

- *Native American Proverb*



The Sierra Club is the most enduring and influential grassroots environmental organization in the United States. Founded in 1892 by John Muir, it now boasts 3.8 million members and supporters, with Chapters in all 50 states. The Southeast Iowa Sierra Club (SEISC) is one of eight Groups that comprise the Iowa Chapter. SEISC represents some 450 members across eight counties.

As we have in the past, the Southeast Iowa Sierra Club will continue to support the Iowa Sierra Club Chapter in lobbying for effective and lasting environmental legislation, while we pursue conservation and resilience efforts at the community level.

At the local level we have been focusing our activities within the City of Fairfield and Jefferson County. We will continue to do so and as we build a successful climate resilience model, we will then expand our efforts to the eight surrounding counties.

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The Southeast Iowa Sierra Club's actions are guided by the following:

MISSION

Our mission is to engage our Southeast Iowa community in better understanding, appreciating and protecting nature.

GOALS

1. Mitigate the impacts of climate change and build a more resilient Fairfield community.
2. Transition to 100% clean, renewable energy resources.
3. Restore vitality to our wildlands, wild waters and wildlife.
4. Transition to zero waste through thoughtful consumption, waste reduction and redirection.

BUILDING A CLIMATE RESILIENT COMMUNITY

City of Fairfield, Jefferson County

A Community Partnership Initiative led by Southeast Iowa Sierra Club



Theme 1:



CLIMATE RESILIENCE

THEME 1:

Climate Resilience

GOAL: Mitigate the impacts of climate change by reducing energy consumption and greenhouse gas emissions; and build a more resilient Fairfield community.

So what's the problem?

We invite SE Iowa, as a contributor to GHG emissions, to take a role in reducing its contribution to climate change by reducing greenhouse gas emissions and increasing opportunities for carbon sequestration. This is a necessary and attainable goal through which our community can realize cleaner air and water, cleaner energy, greater health benefits, and economic prosperity. The long-term cost of not doing so will have far greater impacts on Iowa businesses, farms and individual citizens.



Why is this a priority?

Action needs to be taken at the city and county level, along with the broad support of the community, to commit to a path forward for incrementally reducing and eliminating greenhouse gas emissions from our built environment and infrastructure. By creating a *Climate Resilient Community*, we are contributing to the global effort to reduce greenhouse gas emissions, while updating and improving our infrastructure, providing green jobs for the future and cleaning up our environment.

THE PROJECT:

6. IMPLEMENTATION
meeting targets for GHG emissions

5. DECLARATION
Making the commitment to a climate resilience plan

1. CULTIVATION
Listening to & sharing with community about climate concerns

4. COMMUNITY ENGAGEMENT
Creating a Sustainability Task Force

2. EDUCATION
Advancing knowledge about climate science

3. FORUM
Examining climate wise models of practice

Proposed Project Outcomes:

- Commitment to creating a Climate Resilient Community
- Development of a climate mitigation & resilience plan
- Development of carbon neutral targets
- Realization of economic benefits for our community

Theme 2:



CLEAN, RENEWABLE
ENERGY

THEME 2:

Renewable Energy

GOAL: Incremental transitioning of Fairfield and Jefferson County to 100% clean, renewable energy by 2050.

So what's the problem?

Global climate disruption, caused by the build-up of greenhouse gases in the atmosphere, threatens to devastate our planet and way of life. As our climate continues to heat up and the impacts of that warming grow more frequent and severe, farmers and farm communities will be increasingly challenged. The only way to avoid the worst effects of climate disruption will be to transition quickly to a 100% clean and renewable energy economy.



Why is this a priority?

All non-renewable sources harm the planet when they're converted into energy, emitting greenhouse gas emissions and disrupting our natural climate cycles. Renewable energy from natural sources such as sunlight, wind, and hydropower, can't be depleted. Clean, renewable energy is reliable, cost effective and environmentally friendly as well. Moving towards 100% renewable energy sources can reduce costs to the consumer, create jobs and contribute to upgrading our infrastructure.

THE PROJECT:

5. IMPLEMENTATION
path forward for meeting energy targets

1. CULTIVATION
listening to & sharing with community about transitioning to clean, renewable energy

2. EDUCATION
advancing knowledge about energy science

4. DECLARATION
making the commitment to reaching incremental renewable energy targets

3. FORUM
examining community-wide renewable energy success stories

Proposed Project Outcomes:

- Understanding by the community of the economic and environmental benefits of transitioning to renewable energy sources
- Development of a plan that sets incremental renewable energy targets for 2035 and 2050
- Implementation and realization of economic, environmental and job benefits for our community.

Theme 3:



RESTORING VITALITY TO OUR NATURAL ENVIRONMENT

THEME 3:

Restoring Our Environment

GOAL: Restore vitality to our wildlands, wild waters and wildlife in order to receive the benefits of ecosystem services, carbon sequestration and the recreational and aesthetic value of our natural resources.

So what's the problem?

SE Iowa's loss of key ecosystems, specific habitats, and associated wildlife is fairly well documented. Only 1/10th of 1% of Iowa prairie lands are remaining; 95% of Iowa's wetlands have been converted to other uses; only 8.43% of Iowa remains forested. And, as of 2019, there were 622 water segments in Iowa that are considered "impaired". In addition to the loss of each of these habitats, we are seeing the loss of related flora and fauna at an alarming rate.



Why is this a priority?

SE Iowa has an abundance of State Parks, Wildlife Refuges, Forest Preserves, Wetland Refuges and Reserves, Prairie Land Parks and Restoration areas. Many of these areas are in need of restoration, maintenance, active management and in need of enhanced exposure to the public to increase an understanding of their value. By restoring our environment we are bringing back the ecosystems and ecosystem services that are vital to the survival of the planet and our own quality of life.

THE PROJECT:

6. VALUE
ecosystem services,
flora and fauna
restored

1. ENGAGING VOLUNTEERS
in restoring Lamson Woods

2. EDUCATION
on the importance
of rivers and
wetlands

5. ADVOCACY
on actions needed
to protect our
wildlands, wild
waters and wildlife

4. APPRECIATION
of the value of soil as a
living ecosystem and
the flora and fauna it
supports

3 PRAIRIE LANDS
protect and
maintain local
remnant pieces of
prairie lands

Proposed Project Outcomes:

- Restored and maintained balance of Lamson Woods
- Key threats to river wetland areas are addressed
- Prairie lands are re-established and restored
- Realization of economic benefits for our community
- Ecosystems services restored, soil life systems are enlivened, flora and fauna flourishes

Theme 4:



TRANSITIONING TO ZERO WASTE

THEME 4:

Transitioning to Zero Waste

GOAL: Transition to zero waste through thoughtful consumption, waste reduction and redirection

So what's the problem?

Over consumption impacts are damaging air, water, land and all life forms – including that of humans, even in SE Iowa. The increase in global industrialization is proportionately related to the increase in waste. Concurrently, as the human population increases, we are faced with limited resources from the environment. Yet we live with a linear model where all products end up in a landfill, rather than a circular model which uses few new raw materials and sends no waste to landfills.



Why is this a priority?

Zero waste is a whole systems approach whereby material will be used until the optimum level of consumption. The management of all resources by means of responsible production, consumption, reuse and recovery of all materials without burning them or discharging to the land or water, requires changes in regulations, human behavior, technology and the economy. Zero waste strongly supports sustainability by protecting the environment, reducing costs and producing additional jobs in waste management.

THE PROJECT:

5. REALIZE BENEFITS
to the economy and community health through smart consumption and waste reduction

4. REDUCE WASTE
by implementing a model for smart consumption, waste reduction and redirection

1. UNDERSTAND
current consumption and waste management systems

2. IDENTIFY
a range of waste stream alternatives for eliminating and redirecting waste

3. BUILD A MODEL
for Fairfield and Jefferson County that moves us towards zero waste

Proposed Project Outcomes:

- Identify waste stream alternatives including redirecting, repurposing, repairing, reusing and reducing waste
- Develop a zero waste model for Fairfield and Jefferson County
- Realize waste reduction, economic and health benefits for our community



ANNEX

How SEISC's Strategic Plan Complements the Fairfield Forever Plan

As indicated in the table below, the Southeast Iowa Sierra Club's strategic plan complements many of the goals and policies found in the City of Fairfield's *Fairfield Forever* plan. Below you will find a brief description of each of the four thematic priorities found in the SEISC's strategic plan. Each thematic description is then followed by the goals (indicated by a "G") and policies (indicated by a "P") found in the *Fairfield Forever* plan that are complementary to the SEISC's strategic plan.

1. CLIMATE RESILIENCE	
SEISC'S GOAL: Mitigate the impacts of climate change by reducing energy consumption and greenhouse gas emissions; and build a more climate resilient Fairfield community.	
<i>As greenhouse gas emissions continue to rise, climate change will continue to accelerate. Even if emissions were to stop today, the climate would continue to change for some time as the Earth's system responds to the warming already underway. It makes sense to anticipate changes and act now to minimize future economic and social risks. This concept is basic to emergency management, with the idea that being proactive by building resiliency, rather than reacting to something that has already happened, provides both social and economic cost savings.</i>	
<i>Through a coordinated commitment between city and county government, and by building stronger alliances between residents, schools, businesses and community-based organizations, we can identify community-based solutions to both mitigate and adapt to the impacts of climate change. From replacing city and county vehicles with clean, renewable energy cost saving vehicles; to enacting climate resilient building codes for new construction; to building out of electric vehicle charge stations; and improving weatherization of buildings. A Climate Resilient Community is built around a commitment to promoting infrastructure plans that transition us to clean energy, addresses the changing climate, creates jobs, and remedies the negative legacy of the past.</i>	
FF CATEGORY: Infrastructure	
G1	Maintain the City's Infrastructure to Support Health and Growth of the Community
P2	<i>Consider incorporation of energy efficiency and long lifecycle construction methods and technologies as part of infrastructure replacement and improvements</i>
G2 Be Prepared to Protect and Recover From Natural Disasters	
A1	<i>Study and advance plans for disaster resiliency and recovery</i>
FF CATEGORY: Land Use	
G3	Promote Sustainable Development Practices
FF CATEGORY: Housing	

G3	Increase and Support Housing Development
A4	<i>Adopt a building code for new construction that ensures safety, sustainability and energy savings</i>
FF CATEGORY: Natural Resources	
G1	Continue to Prioritize Environmental Protection within the Fairfield Community
P1	<i>Encourage sustainable practices in land use</i>
P2	<i>Build on Fairfield’s identity as a premier model of community-led sustainability</i>
G3	Promote and Encourage Fairfield Residences and Businesses to Adopt Sustainable and Green Practices
P2	<i>Encourage incorporation of energy saving features in renovations, new developments and building expansion</i>
A1	<i>Explore the possibility of hiring a sustainability coordinator to implement sustainability goals and policies</i>
A3	<i>Identify a timelines and plan to incorporate electric car plug-in stations throughout Fairfield</i>
2. CLEAN, RENEWABLE ENERGY	
<p>SEISC’S GOAL: Incremental transitioning of Fairfield and Jefferson County to clean, renewable energy.</p> <p><i>The Sierra Club’s “Ready For 100” campaign advocates for an equitable and affordable energy system powered by 100% clean, renewable energy by the year 2050. Communities leading the transition to 100% clean, are using renewable sources of energy like wind, solar, and battery storage.</i></p> <p><i>It is time for our community of Fairfield to pursue the solutions needed to develop a strong, healthy, resilient community. Renewable energy is cleaner, healthier, and more affordable than dirty fuels like coal— and it creates family-sustaining jobs, lowers energy bills, and is available now.</i></p> <p><i>Since 2012, more than \$166 million has been invested in solar using the state’s solar investment tax credit. Iowa’s utilities, such as Cedar Falls Utilities and Farmers Electric Cooperative, have built solar arrays to rapidly transition away from fossil fuels while creating substantial benefits for local communities. Cities like Des Moines, Cedar Rapids, and Dubuque are in the process of developing extensive sustainable energy plans that will both benefit taxpayers and combat climate change. Universities, including Luther College, Grinnell College, and Maharishi University of Management are implementing significant renewable energy installations. Growing numbers of Iowa farmers, businesses, and homeowners are installing their own solar and wind projects and reaping substantial financial rewards. We’re committed to working with Fairfield in ensuring the transition to 100% benefits everyone in our community.</i></p>	
FF CATEGORY: Public Facilities	
G3	Expand Community Services and Amenities as Population Grows
A3	<i>Explore the possibility of becoming a municipal utility to provide lower cost and renewable energy to residents and businesses</i>
FF CATEGORY: Natural Resources	
G1	Continue to Prioritize Environmental Protection within the Fairfield Community
P3	<i>Continue to support private and community-led renewable energy expansion</i>

G3	Promote and Encourage Fairfield Residences and Businesses to Adopt Sustainable and Green Practices
A2	<i>Continue to install solar roof panels on all city buildings</i>
G5	Continue to Support Private and Community-led, local, renewable energy expansion
FF CATEGORY: Economic Development	
G1	Explore New Areas of Growth and Development Around Fairfield
P2	<i>Continue to support renewable energy-related businesses in Fairfield</i>
3. CONSERVATION OF HABITATS AND ECOSYSTEMS	
<p>SEISC’s GOAL: Restore vitality to our wildlands, wild waters and wildlife in order to receive the benefits of ecosystem services, carbon sequestration and the recreational and aesthetic value of our natural resources.</p> <p><i>Our local forests such as Lansom Woods, prairies such as Nady Lands, and marshes such as Cedar View Wetlands require on-going management, and in some cases restoration. Restoration involves assisting the recovery of an ecosystem that has been degraded, damaged or destroyed, typically as a result of human activities.</i></p> <p><i>Through successful ecological restoration we will see improvement in the biological diversity of degraded habitats, increased populations and distribution of rare and threatened species, and enhanced landscape connectivity. Restoration and management also realizes secondary benefits to the environment by improving water quality important to a state with a disproportionate number of impaired waters, as well as increased carbon storage capacity to help mitigate the impacts of climate change.</i></p> <p><i>Not only does restoration and management serve the environment itself, but also increases the availability of environmental goods and services that contribute to the improvement of human well-being, as well as providing opportunities for education and recreational enjoyment.</i></p>	
FF CATEGORY: Land Use	
G4	Preserve Important Ecological Areas to Prevent Flood Damage and Storm Water Issues
FF CATEGORY: Natural Resources	
G1	Continue to Prioritize Environmental Protection within the Fairfield Community
P1	<i>Encourage sustainable practices in land use</i>
G2	Preserve and Enhance Key Environmental Features in the Community
P1	<i>Preserve areas with significant tree cover throughout the planning area as development or redevelopment occurs</i>
A1	<i>Adopt a stream buffer ordinance to provide a 100 ft. buffer around type-1 perennial streams</i>
A2	<i>Update watershed protection overlay zone ordinance to coordinate with stream buffer ordinance</i>
FF CATEGORY: Parks & Recreation	
G4	Provide Recreation Programming for Different Age and User Groups in Fairfield

P1	<i>Collaborate with outside organizations to provide additional programs and gathering space for youth and teens</i>
FF CATEGORY: Community Character	
G4	Ensure New Development Enhances the Quality of Life in Fairfield
P2	<i>Protect the important ecological features that surround Fairfield such as tree cover, stream corridors and wetlands</i>
4. MOVING TOWARDS ZERO WASTE	
SEISC's GOAL: Transition to zero waste through thoughtful consumption, waste reduction and redirection.	
<p><i>Zero Waste refers to waste prevention as opposed to managing products that end up as waste and require disposal. It is a whole systems approach that targets a change in the way materials are produced and flow through a community, ultimately resulting in no waste.</i></p> <p><i>There is no question that government regulation is needed to influence industrial choices over product and packaging design, manufacturing processes, and material selection. If not mandated by government, choices by retailers and consumers in favor of zero-waste-friendly products can influence changes in production of materials.</i></p> <p><i>To prevent material from becoming waste, the public must be educated in how to reduce waste and redirect potential waste successfully. Zero waste strategy may be applied to businesses, governments, industrial sectors, schools, homes and to communities as a whole. Eliminating waste decreases pollution, reduces landfill needs, reduces green house gas emissions, reduce waste disposal costs, and can also reduce costs due to the reduced need for raw materials.</i></p>	
FF CATEGORY: Public Facilities	
G1	Establish a Safe, Clean and Visually Appealing Community
A1	<i>Install recycling bins around public places.</i>
P1	<i>Continue efforts to promote community clean up to decrease littering and improve recycling</i>
FF CATEGORY: Natural Resources	
G3	Promote and Encourage Fairfield Residences and Businesses to Adopt Sustainable and Green Practices
P1	<i>Encourage the recycling, reusing, and reducing of plastics in city buildings and local businesses</i>
A4	<i>Works with local businesses to establish a business recycling program</i>

A special thanks to Carole Simmons and Steve Taylor for use of their photos found throughout this document.



There is immense power when a group
of people with similar interests get
together to work toward the same
goals.

- Idowu Koyenikan



Southeast Iowa Sierra Club

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