Date: April 6, 2017

To: The Northfield City Council

From: The Environmental Quality Commission

RE: Strategic Planning Priorities

The EQC has identified climate/energy as our top priority. An Energy Working Group (created by the EQC) has recommended that the City develop a Climate Action Plan, and we agree. As we envision it, a Climate Action Plan would focus not only on energy but would serve as a comprehensive framework for pursuing the six major aspects of environmental quality that we highlight below:

1) Climate/energy:

The City has been committed to coordinated action to address climate change at least since 2005. The 2008 Report of the Mayor's Energy Task Force endorsed the goal of "carbon-free by 2033." The City continues to pursue that goal, as reflected in the 2008 Comprehensive Plan, participation in the Greensteps program, and the Complete Streets Initiative. Developing a Climate Action Plan is the next logical step.

Therefore, our major recommendation is that the Council resolve to create a Climate Action Plan, which will serve as an environmental "master plan" aimed at promoting community resilience. A Climate Action Plan should focus on setting concrete, achievable goals for reducing greenhouse gas (GHG) emissions and outreach to the Northfield community. Broad participation is key. A comprehensive, inclusive approach to addressing climate change can protect and enhance Northfield's quality of life.

How will climate change affect Northfield? The 2013 National Climate Assessment Report by the U.S. Global Climate Research Program provides guidance about how SE Minnesota's climate will change.[1] This report concludes that we can expect:

- The average temperate will rise by 5 degrees Fahrenheit, from the current 46-50 degrees to about 55 degrees F. Most of the warming is expected to happen in winters and summers. Warmer temperatures can lead to increases in diseases born by mosquitoes and ticks, as well as increased air pollution and disruption of ecological and agricultural systems.
- Trends in annual precipitation for southeast Minnesota are highly uncertain (only southwest Minnesota is expected to become drier). But we can expect more extreme rain events, which will lead to more flooding and may affect soil erosion and water quality.
- Heat wave intensity and frequency will also increase, putting stress on human and ecological health.

We should also expect continued volatility and gradual increases in the price of fossil fuels, particularly since there is some possibility that state or national government will eventually tax carbon emissions.

---

[1] *National Climate Assessment Report, Jan. 2013. Prepared by the U.S. Global Climate Research Program,* http://www.globalchange.gov/what-we-do/assessment.

Renewable energy already competes price-wise with fossil fuels and should continue to become more affordable over time.

These trends indicate that Northfield should focus on increasing its reliance on renewable energy, increasing energy efficiency, developing more diversified approaches to managing stormwater run-off and flood control, and improving the quality and resilience of the urban habitat.

2) **Water resources:** Flood control and protecting our river and streams both require attention to reducing stormwater run-off during extreme rain events. The City's rain garden and rain barrel program is on-going, but we can and should do more. The Climate Action Plan should give special attention to this subject, which promises to be a challenging one.

3) **Urban Habitat protection and enhancement**: Climate change, invasive species, and pests like the emerald ash borer are major threats to our urban habitat. Current efforts to protect that habitat include the asset management plan developed to enhance the urban forest (a goal of the 2008 Comprehensive Plan) and recent efforts to improve pollinator habitat. Those strategies are valuable, but we believe that Northfield needs a more comprehensive plan for managing the urban habitat. We hope that the climate action planning process will produce a shared vision for our urban forest and natural lands.

4) **Transportation:** Create a more pedestrian and bike-friendly community consistent with the City's Complete Streets policy and the Safe Routes to Schools initiative. This includes the need to improve transportation options for people with limited mobility, which could fit into a Climate Action Plan, perhaps calling for improved public transportation options.

5) **Waste Management**: Waste is a significant source of GHG emissions, from transportation and from landfills or incinerators. Waste *reduction* is a major element in waste management, thus our primary initiative on this front is the composting program. Methane emissions from the landfill are also of concern. Although not under City jurisdiction, the community might support action better to manage those emissions under a Climate Action Plan.

Community outreach: Research clearly demonstrates that public support and engagement is critical to the success of any environmental management initiative. Developing the Climate Action Plan should be a broad-based effort that engages the whole community. Northfield is fortunate to have a wealth of organizations already working toward sustainability, as well as a wealth of relevant expertise.

Creating Northfield's Climate Action Plan will be an easier task if we draw on the substantial body of resources already assembled by the Energy Working Group, including a draft Resolution, sample planning frameworks, and studies of other cities' planning and data management strategies. The Energy Working Group continues to gather information about baseline GHG emissions, costs, community partners, and innovative policies. Their involvement allows the EQC to be well-prepared to support this ambitious and necessary effort.