

Environmental Quality Commission

2026 Work Plan Submissions for Consideration

Susannah Shmurak

- 1) EMFs from wi-fi and cell towers
 - a. Mounting research is showing wireless radiation is harmful to human, animal, and plant health, examine what safeguards are in place and consider whether others should be added.
- 2) Address pesticide and herbicide use

Staff Response: While these are environmentally related topics, the City is asking the Commission to focus on tangible initiatives that align with or are derived from the City's Climate Action Plan, Strategic Plan, and Comprehensive Plan.

Commissioner Shmurak Comments: I would be interested in leading an initiative to assess where Northfield is with respect to current radiofrequency radiation sources and rules regarding placement of cell towers.

The EMF issue has largely been overlooked as something with a significant impact on public health and ecology. Because rules are lax/absent and rely on antiquated tests that use inaccurate assumptions about biological systems to set thresholds for electromagnetic radiation, no one is paying attention to the ever-increasing amounts of radiation we're exposing people -- especially children -- to. Many municipalities have adopted ordinances that set distance requirements for cell tower placement from schools and homes. I would like to develop a report for council so they may consider whether adopting an ordinance would benefit residents' health.

I wanted to share some more information to help others better grasp where the science is with this issue now. I'm hoping some of what's below could be included in next month's packet.

Hundreds of studies suggest that EMF have effects on the developments of certain cancers, cardiac issues, and fertility problems. Researchers are especially concerned about their effects on the developing brains of children. More details below:

The Federal Communications Commission (FCC) and the International Commission on Non-Ionizing Radiation Protection (ICNIRP) have largely relied on data from studies of a small number of subjects conducted in the late 1980s that used incorrect assumptions about biological systems to determine thresholds for electromagnetic radiation.

Foremost among these assumptions is that the only effect of concern from non-ionizing radiation is heat. ICNIRP issued safety guidelines developed in the 1990s were entirely based on thermal effects, that is, on whether radiofrequency radiation could heat things.

However, hundreds of studies looking at non-thermal effects have found numerous ways wireless radiation does in fact influence biological processes without producing any thermal effects. In a [2022 paper](#) published in the journal Environmental Health, the International

Commission on the Biological Effects of Electromagnetic Fields (ICBE-EMF) argues that “the past 25 years of extensive research on RFR demonstrates that the assumptions underlying the FCC’s and ICNIRP’s exposure limits are invalid and continue to present a public health harm.”

A [2023 paper](#) authored by scientists studying the effects of wireless radiation around the world outlines numerous additional “blind spots” in the current guidelines that “reflect a deep misunderstanding of toxicology, biology and medicine.” They explain: “Neither the fact that environmental RFR is non-ionizing nor that its levels are low preclude RFR action on living systems. Non-ionizing radiation does not act by ionizing but acts by direct action on electrons and protons.”

They also call out several ways the guidelines set in the 1990s misrepresent the ways these devices are actually used today, including distance from the body, presumed length and intensity of exposure and other methodological shortcomings.

The authors point to numerous studies suggesting that exposure to radiation similar to that emitted by cell phones increases risks of certain types of cancer and neurological disorders, damages sperm and increases oxidative stress.

Though regulatory limits have long assumed that low-frequency waves couldn’t damage DNA, a [recent meta-analysis](#) of more than 500 studies has found they can. Approximately half of the studies included found impacts on DNA from wireless exposure levels below the limits set by ICNIRP. They found some types of cells were more vulnerable to damage, especially reproductive, heart and brain cells.

Of particular concern to researchers is the possible [effects on children and fetuses](#) from exposure during times of critical brain development. Children’s skulls are thinner than adults, they point out, allowing RFR to penetrate more deeply into the brain. Further, children born since the proliferation of wireless devices will receive far greater lifetime exposure than those of us born in the previous century, so we can’t yet know about the long-term health impacts of spending one’s whole life surrounded by current amounts of RFR.

Because it’s not possible to create human control groups free of RFR exposure in a world so permeated by it, researchers rely on animal models, in-vitro experiments, and epidemiological studies, which skeptics note cannot definitively prove causation, as is true with other health issues where human subjects can’t be used for testing. Since definitive proof of harms to human health is impossible to get, regulators have resisted re-examining safety guidelines. The fact that many cancers and other health conditions can take decades to develop also means that we can’t yet have a complete picture of the epidemiological effect of RFRs at the population level.

As evidence about the health risks of EMFs has mounted, several countries have altered regulations to protect their citizens, dropping limits to a fraction of those recommended by ICNIRP. While the guidelines used in the US set the limit for wireless radiation at ten million microwatts per square meter, Italy and Switzerland allow a maximum of only 95,000, roughly a hundred times lower.

The [Environmental Health Trust](#), founded by Devra Davis, a researcher who worked with the National Toxicology Program, has white papers, toolkits, and research summaries for anyone who wants to know more. The Environmental Health Trust sued the FCC and in 2021 [won in federal court](#). The ruling determined that the FCC has ignored scientific evidence and failed to provide a reasoned explanation that its 1996 regulations are adequate.

[This document](#) deals with ordinances some cities have enacted for guiding placement of cell towers.

Robert Hanson

1) 2026 making progress with Xcel to figure out solutions for our electric grid congestion

Staff Response: This initiative is already being monitored by staff in Engineering and Community Development. City staff have an ongoing relationship and dialogue with Xcel on this issue, as it affects many of the City's future projects. This isn't an initiative where the EQC could play an active role, since it falls under administrative responsibilities.

- 2) Supporting non-automotive transportation within Northfield. My original thought for this was promoting bikers, walkers, and runners to wear lights or reflective vests when outside in the dark. This makes it safer for them and for drivers by reducing collision risks. If other commissioners wanted, the scope could be broadened to look at other ways to encourage getting around Northfield without a car.

Mike Provanha

- 1) Establish a reusable cloth diaper bank (includes reusable diapers, bio-detergent, two 5-gal buckets with lids, and a water sprayer for toilet hookup)

Encouraging the use of reusable cloth diapers reduces landfill waste, conserves resources, and saves families money over time compared to disposable options. Establishing a city-sponsored diaper bank can help make sustainable diapering accessible to all families, especially those facing financial hardship. Such a program promotes environmental responsibility while supporting public health and equity within the community.

Match to Climate Action Plan/Strategic Plan/Comprehensive Plan: EE-6 Materials and Waste Reduction

- 2) Green roof project on city property or a program to promote such initiatives

Promoting and implementing green roofs can significantly enhance urban sustainability by reducing stormwater runoff, improving air quality, and lowering building energy costs. A green roof is a building roof partially or fully covered with vegetation and a growing medium planted over a waterproofing membrane, creating an engineered system with layers for drainage, filtration, and plant support. In addition to city-owned property implementation, municipal incentives, such as tax credits or grants, can encourage property

owners and developers to adopt this eco-friendly practice. Collaboration between city planners, architects, and environmental organizations ensures that green roof projects are both practical and impactful for community resilience.

Match to Climate Action Plan/Strategic Plan/Comprehensive Plan: Advanced Building Energy IN 1.2 Explore opportunities to be a test/demonstration community for alternative building design, materials, and land management with promise to reduce energy use, incorporate recycled materials, enhance natural assets, or educate others on innovative solutions

3) Add 3 more community gardens on city property

Community gardens provide residents with access to fresh, healthy produce while fostering social connections and a sense of shared purpose. They transform underused spaces into vibrant, green areas that support pollinators and improve neighborhood aesthetics. Additionally, community gardens promote environmental awareness, food security, and local resilience through hands-on education and collaboration.

Match to Climate Action Plan/Strategic Plan/Comprehensive Plan: EE – 7 Expanding Local Food Access, increasing community food production and access

4) Add more pollinator grasses and flowers on city-owned property by partnering with organizations like Prairie Restoration

Planting pollinator-friendly grasses and flowers on city property enhances biodiversity and supports essential species like bees, butterflies, and other pollinators. These low-maintenance landscapes reduce mowing frequency, conserve water, and beautify public spaces. By adopting pollinator-friendly practices, cities like Northfield can lead by example in promoting ecological health and environmental stewardship.

Match to Climate Action Plan/Strategic Plan/Comprehensive Plan: IN – 2 Transportation and Land Use, IN 2.3 Research and promote land management practices to encourage carbon sequestration through trees and soil

5) Outreach to residents about composting

Community outreach on composting helps educate residents about reducing food waste and turning organic materials into valuable soil nutrients. Workshops, demonstrations, and public campaigns can empower households to start composting at home or participating in local collection programs. By fostering awareness and participation, composting outreach strengthens community engagement and supports Northfield's sustainability and waste reduction goals.

Match to Climate Action Plan/Strategic Plan/Comprehensive Plan: EE – 6 Materials and Waste Reduction, E 6.3 Conduct a campaign to reduce contamination of recycling and composting to ensure higher quality end products

6) Educate residents on the benefits of Ames Dam removal

Community outreach on the removal of the Ames Dam and the revitalization of the riverfront with partnerships with Clean River Partners, MN Department of Natural Resources, MN Pollution Control Agency, and more. The removal of the Ames Dam will allow for natural vegetation and wildlife to proliferate in the area. The use of grants to revitalize the riverfront area post removal would enhance the area aesthetics and recreational use for residents and tourists alike.

Match to Climate Action Plan/Strategic Plan/Comprehensive Plan: EE – 5 Travel Engagement, EE – 2 Sustainable Tourism and Marketing

Bruce Anderson

- Continue educational/promotional campaign focused on home energy efficiency and electrification and EV adoption. The State of Minnesota plans to FINALLY roll out what they are now calling the "[Save Energy Minnesota](#)" program bundling state and federal rebates for home energy efficiency and electrification in early 2026. This warrants building on the 2025 work plan item related to this with regular promotion of these opportunities.
- As Rob suggested in his email this morning, he and I discussed working on addressing the roadblock to solar development in the Northfield area by partnering with Xcel on battery storage options to address grid congestion issues.
- Education campaign on the climate change implications of agricultural practices and dietary choices, perhaps with one or several forums/panel discussions focused on growing the local food economy, growing your own food, natural and edible landscaping, and greenhouse gas emissions associated with various diets (omnivore, vegetarian, vegan, flexitarian, pescatarian, etc.). Could partner with [Cannon Valley Grown](#) and the [Cannon River Sustainable Farming Association](#).

Janet Petri

1) I think that initiative #2, “Community Engagement Campaign: Energy Efficiency, HVAC Contractor and Homeowner Education”, should be continued. Reviewing what we did in 2025:

- On 11/17 we had a workshop that provided homeowner education on electrification, efficiency, etc., and the rebates that are currently available.
- We did tabling at Riverwalk and at Earth Day, where we shared this type of information for homeowners. -
- In October there was a presentation to educate HVAC professionals.

We hear that there WILL be rebates available through the MN Dept of Commerce. These have been much delayed, but they are still expected (??) to come through. The following is from the MN Dept. of Commerce website:

“Current update (12/2/2025): Save Energy Minnesota has not launched yet. Minnesota is waiting for formal approval from the federal Department of Energy to launch our program. Due to ongoing uncertainty during the federal government shutdown, we are delayed in launching the program. “ <https://mn.gov/commerce/energy/consumer/energy-programs/save-energy-mn.jsp>

– Therefore, I think that in 2026 we should be prepared to do further outreach and information sharing regarding electrification and home efficiency opportunities for homeowners. This could include workshops, tabling at events and at Riverwalk, and social media. Perhaps outreach through KYMN and newspaper LTEs. What is the best way to reach people in 2026?

One goal, in my opinion, would be to reach people who meet the income guidelines for the rebates through HOMES and HEAR. (Assuming that the funds eventually do get released.) I am not a member of Rotary, but my understanding is that RCAT has tried to reach out to lower income homeowners, and has found it challenging to get engagement.

2) Education and outreach to promote native gardening and rain gardens. I am impressed that both rain gardens and native landscaping made it into the takeaways and priorities. How could we promote these goals? Here are some thoughts:

- We could promote the “lawns to legumes” program.
- We could have a workshop, or several workshops, about gardening with native plants.
- How could we support, learn from, &/or promote the work of the local “Wild Ones” native gardening chapter? Wild Ones (<https://wildones.org/>) is a national nonprofit organization that “promotes native landscapes through education, advocacy and collaborative action.” The local chapter (Wild Ones SE MN Prairie Partners Chapter) does excellent work. They have a full schedule of educational meetings for 2026, plus plant sales. Perhaps some of us could meet with leaders of the chapter, and discuss how we could support their work. Could we help their information reach a broader audience? For instance, many people have heard of “native pollinators”, but I suspect that not all

that many know how they could change their gardening and lawn maintenance to support pollinators.

3) Goal: Increase native groundcover and native plantings in city parks.

I would love it if there was more native planting in city parks, or maybe even just native groundcover in areas under trees in city parks. I think that would look good, if properly managed, and it would be good for native pollinators, and for the birds that depend on those native pollinators (=insects) to feed their nestlings. (“Songbirds as little as chickadees require some six to nine thousand caterpillars to raise a brood of nestlings.” - Doug Tallamy). However, I know that if such areas aren’t managed well, they become full of invasives such as buckthorn. Is there a way this could be an appropriate goal; how could this be doable?

4) Goal: Reduce invasive species in city parks, and provide education for homeowners re: invasive plants

This is a pretty obvious follow-up to Goal #4.

- How do we reduce (I don’t dare say “eliminate”) invasive species such as buckthorn, garlic mustard, and more? One answer is, do what the Friends of Hauberg Woods do (<https://www.facebook.com/p/Friends-of-Hauberg-Woods-Northfield-MN-61564976252889/>)
- Can this work on other city natural lands, for instance along the river between Northfield and Dundas, Lashbrook Park, etc.?

Should our education outreach re: native plants include information about some of the invasive species, how to recognize them, and how to control them?

George Kinney

I, too, have thought the addition of trees to parks would be a topic to take on. A few years ago (earlier EQC gig) I drove to many of the parks with Lefi Knecht and scoped out areas we thought would be goodland for some trees, to reduce mowing and to help with climate change/evaporative cooling, etc. At this time, I'd add considering fruiting trees as understory, such as serviceberry and hickory and so forth. Additionally, I'm not sure what is allowed in the floodplain of the river, and whether we have any restrictions on adding or removing trees and shrubs from areas of the floodplain.

Ava Podracky

- 1) Water quality as its own, not put with water conservations. So focusing on the water quality of Northfield and like the manganese levels.
- 2) Invasive Plants

Kimberly Haroldson

- 1) Curbside composting city wide.
- 2) Organics in all of Northfield schools, daycares, and assisted living. Educate teachers, staff and children.
- 3) Pay as you throw trash (charge for trash only, price includes recycling, yard waste, and organics). Make the cost significant between the smallest bin and larger ones. St Louis Park and Minneapolis do this, currently implemented by Bloomington and it's on Edina's radar.
- 4) All events hosted by the city of Northfield should be a Zero Waste Event. Pass this before a Zero Waste to-go ordinance is implemented.
- 5) Pass and implement a Zero Waste to-go packaging ordinance. (All to-go items such as cups, lids, to-go containers, cutlery, straws ect shall be reusable, recyclable, and or compostable). Work with Usefull. They are at Carleton and St Olaf for reusable containers and cups. Before a ZW to-go ordinance is implemented, there needs to be city wide composting . If restaurants/businesses choose a compostable option there needs to be organic collection at a city wide level. We don't want them placed in the recycling or trash bins. Education on why we need a ZW to go ordinance. Work with Waste Wise.
- 6) Every other week garbage pickup as a service option.
- 7) Charging 5 cents for single use bags. Duluth, Edina, and Minneapolis charge for single use bags. Education on why we should charge 5 cents for single use bags.
- 8) Textile recycling. Ridwell or Retold in Northfield. Grants for this so the cost is not a hindrance?
- 9) Education to residents on what can be recycled and composted. Start a Recycle leader (advocate, expert) program and an Organics leader (advocate, expert) program. Train residents on what can be recycled and composted. The idea that neighbors listen to their neighbors telling them as opposed to the city doing it. Create a presentation and a kit to bring along with example items. I currently have one made and happy to share it.
- 10) Toys to check out at the Northfield library, aka a toy library.
- 11) Encourage/ educate on cloth diapers. Do Good Diapers services the cities with Lakeville being the furthest south they service. The last time I talked with the owner they would need 4-7 families to sign up for them to come to Northfield. Up front costs may be a hindrance?
- 12) Meatless Mondays/ Meat Free Fridays in Northfields schools.
- 13) Swap Events
- 14) Apartments in Northfield required to recycle, regardless of the size.