

Climate-Smart Community Profile: Grand Rapids, MI



Located on the Grand River in western Michigan, Grand Rapids is the second largest city in the state with a population of nearly 775,000. Furniture construction, health care, information technology, and automotive industries make up the bulk of the city's economic activity. The city sits on the banks of the Grand River (although the rapids for which it is named no longer exist) and experiences a humid continental climate: summers are very warm and humid, winters are cold and snowy, and autumn/spring are brief and mild.

Cities and towns across the United States are preparing for and responding to the impacts of climate change, a process known as climate change adaptation. Grand Rapids is using a variety of nature-based approaches to protect people and property that also confer adaptation value for wildlife and habitat areas. Grand Rapids is particularly concerned with preparations for **increased flooding, threats to water quality, extreme heat, ecosystem degradation, and invasive species.**

Climate Planning Activities

- 2002: Grand Rapids updated its **Master Plan** to include green initiatives such as sustainable building requirements, habitat connectivity, and open space expansion.
- 2010: Grand Rapids signed on as one of **eight inaugural cities** in ICLEI's Climate Resilient Communities Program. These cities have committed to making their communities more sustainable and resilient in the face of climate change.
- June 2011: City finalized **comprehensive Sustainability Plan** to manage economic, social, and environmental resources. The plan will be implemented by 2015, and includes numerous climate adaptation and mitigation strategies. **Progress on the plan** has been impressive in the first year, including completion of 25% of environmental goals and partial progress on 68%.



Implementation of Adaptation Activities

Tree Canopy Initiative ([Sustainability Plan](#))



- High percentages of paved surfaces cause urban areas to absorb and retain more heat, increasing temperatures of the city and surrounding areas in what is known as the “urban heat island effect (UHIE). These changes create problems for both wildlife and people living in cities. Grand Rapids plans to increase tree canopy to offset the UHIE.
- Status: In-progress. Plantings have begun in parks across the city, but have yet to meet target goals of 37.5% canopy increase.
- The City is working with the [Urban Forest Project](#) to distribute information about tree planting to the public, including opportunities to participate in both public and private plantings.

Water Quality Improvements ([Sustainability Plan](#))

- Poor water quality threatens human and wildlife health and undermines the ability of natural systems to adapt to climate change impacts.
- The City seeks to establish full compliance with all current water quality regulations by eliminating sewer overflow points, increasing the number of green roofs, integrating permeable paving surfaces, and many more strategies.
- Status: In-progress. Water quality indexes have improved notably and compliance with many regulations has been achieved, but infrastructure strategies are still being implemented.



Habitat & Ecosystem Protection ([Sustainability Plan](#))



- Climate change is expected to alter ecosystems at the most basic levels, decreasing habitat and overall functionality of natural systems.
- The City seeks to increase number and diversity of tree plantings to provide more habitat, and is also planning to increase open space for habitat and migration corridors.
- Status: In-progress. Tree planting initiatives have begun and open space expansion initiatives are still in the planning stage.

What's helping Grand Rapids?

- An excellent, proactive approach led by the [Office of Energy and Sustainability](#)
- A thorough Sustainability Plan strengthened by accountability from consistent and thorough progress reports
- Partnership with ICLEI and other environmental non-profits focused on local governments



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