

PEOPLE

OPPORTUNITY

NATURE

BELONGING

Statewide Health Assessment

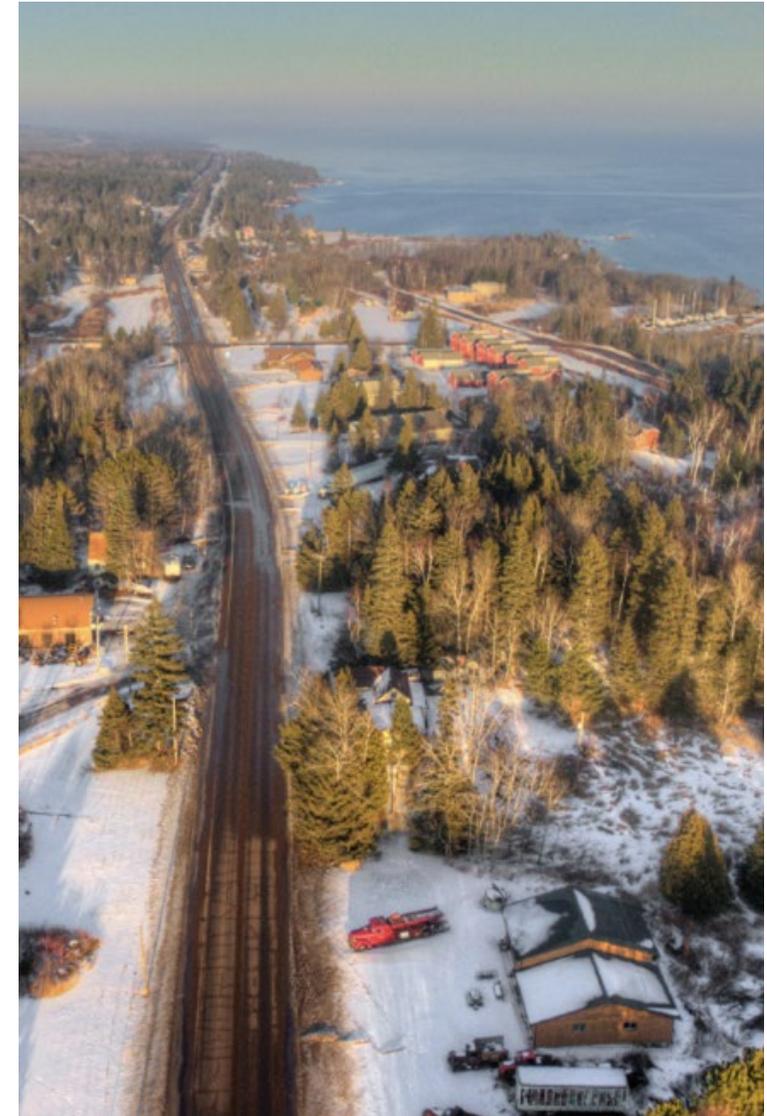
Environmental Health | Lecture 3: Nature

In this Lecture

- Introduction
- Environmental Justice
- Climate
- Air
- Water
- Food
- Recreation
- Tree Canopy Policy

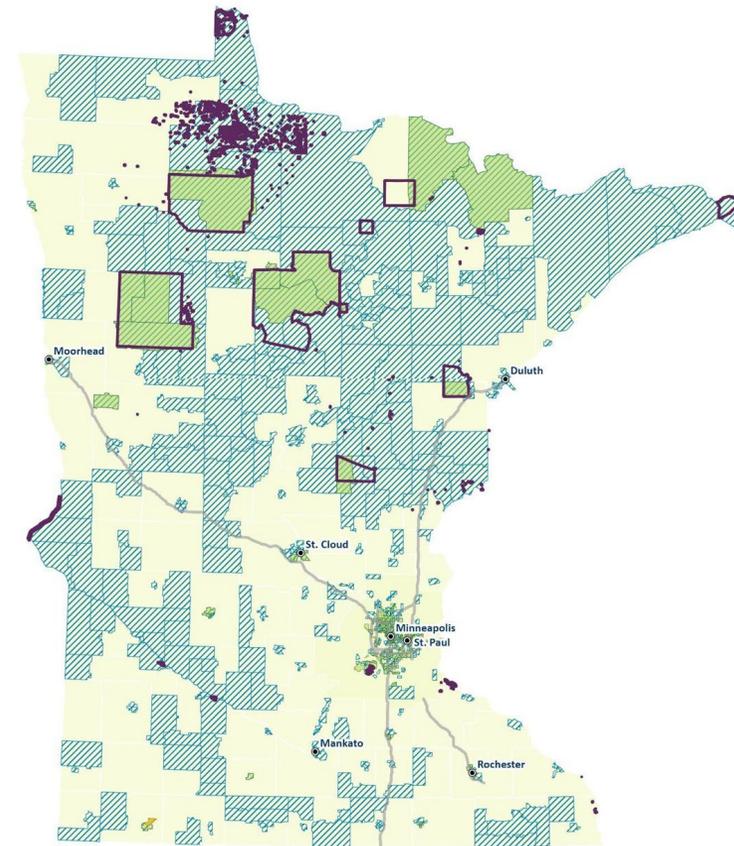
By the end of this lecture you will:
Understand how nature impacts
environmental health

- “Our health is shaped by our connection to and interactions with the natural environment.”
- Human health and well-being correlates with our relationship with nature



Environmental Justice

- Communities of color are disproportionately exposed to environmental dangers and upheld by policies, practices, and structures
- Community members for environmental justice - North Minneapolis
- Minnesota has created “environmental justice areas”



Environmental Justice Areas by Criteria

- At least 35% of people reported income less than 200% of the federal poverty level
- 40% or more people of color
- Federally recognized Indian Tribes
- At least 40% of people having limited English proficiency

mn MINNESOTA POLLUTION CONTROL AGENCY

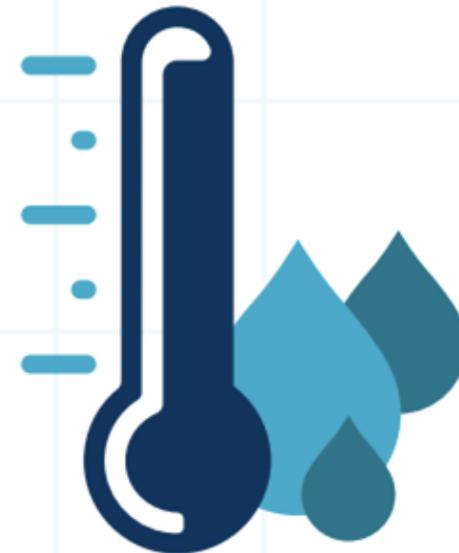
Environmental justice areas in MN, 2023

Climate



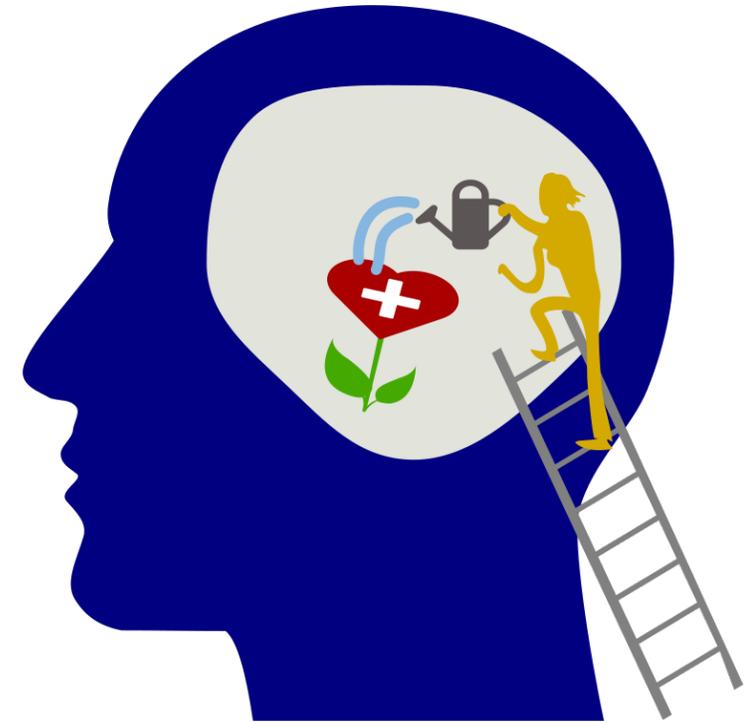
- Many climate changes have occurred in our state.
- Many health effects have surfaced due to those changes.
 - Some populations are more vulnerable to the effects of climate change.

Minnesota warmed by **3.0° F** between 1895 and 2020. Annual precipitation increased by an average of **3.4 inches.**²⁵⁰



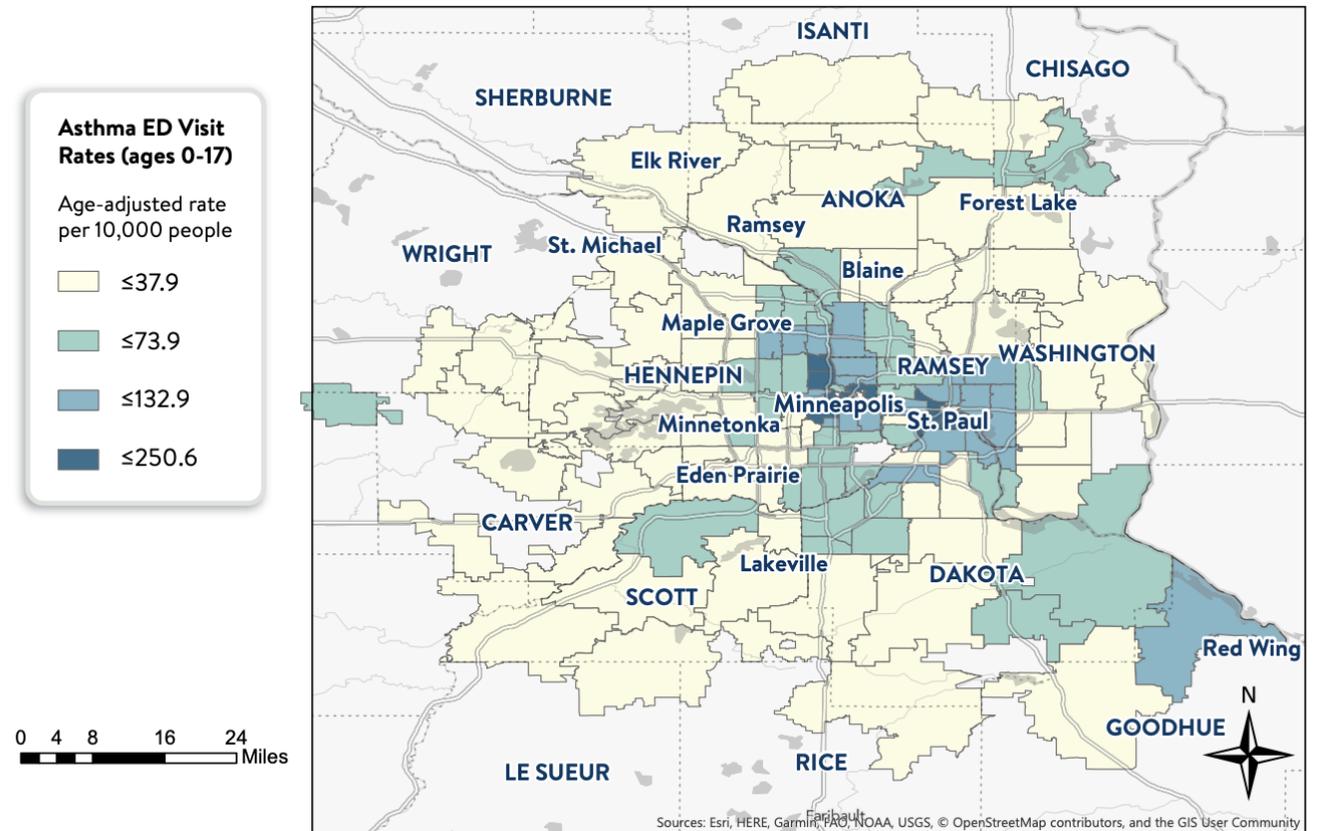
Mental Health

- Climate change impacts mental health and well-being.
- Climate change can contribute to many losses such as water shortages or loss of habitat for native plants and habitat (Minnesota Department of Health, 2024)
- Some populations are at higher risks for negative mental outcomes due to disaster caused by climate change (Minnesota Department of Health, 2024)



Twin cities metro asthma emergency department visit rates by ZIP code, 2016 - 2020

- Poor outdoor air quality leads to negative health outcomes
- Disproportionate health impacts for vulnerable populations
- Increases in air alerts impacts populations with conditions such as asthma



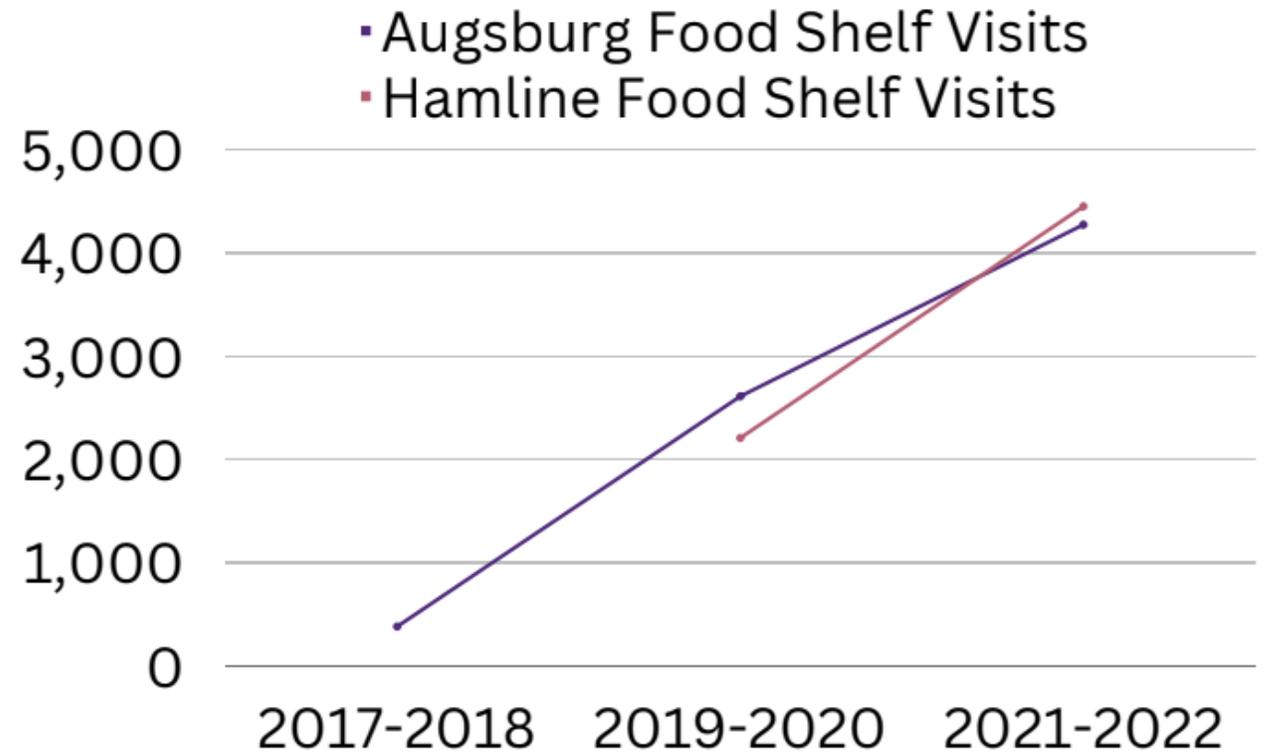
- Clean water is essential for not only human life but wildlife as well
- Threats to clean water access impact health significantly
 - Nitrogen
 - Lead
 - Per- and polyfluoroalkyl substances
 - Arsenic

In Minnesota,

1.1 million people rely on private wells and are responsible for testing and maintaining them.²⁷⁷



- Food insecurity - The connection between the SHA and college students
- Accessibility to nutrient-dense foods



- Minnesota offers many recreational strengths such as parks and trails
- Physical activity decreases risks of adverse health outcomes

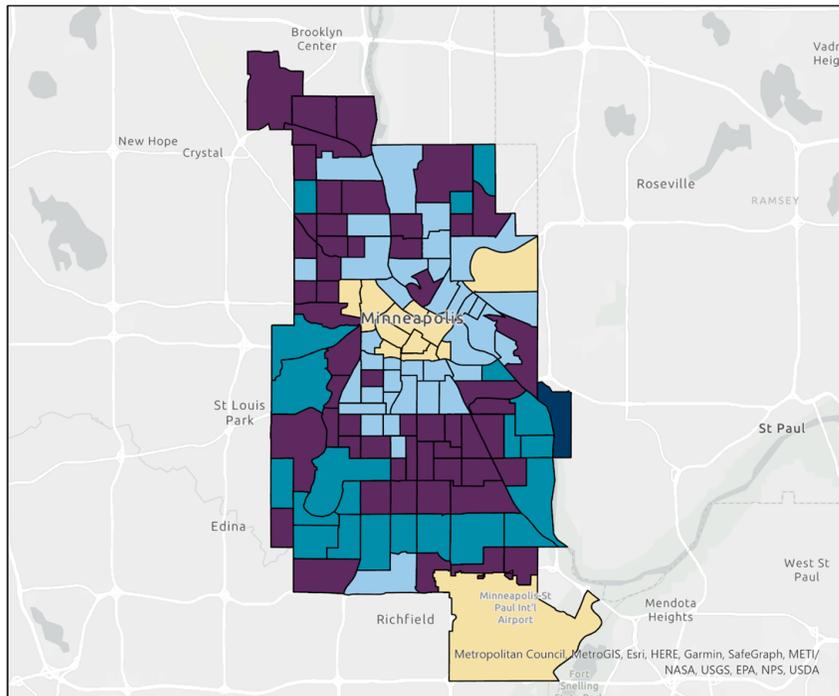
IN 2020...

90.3% of Minnesota adults lived within half a mile from a park, compared to **77.5%** in 2015.²⁹⁸



Tree Canopy Cover

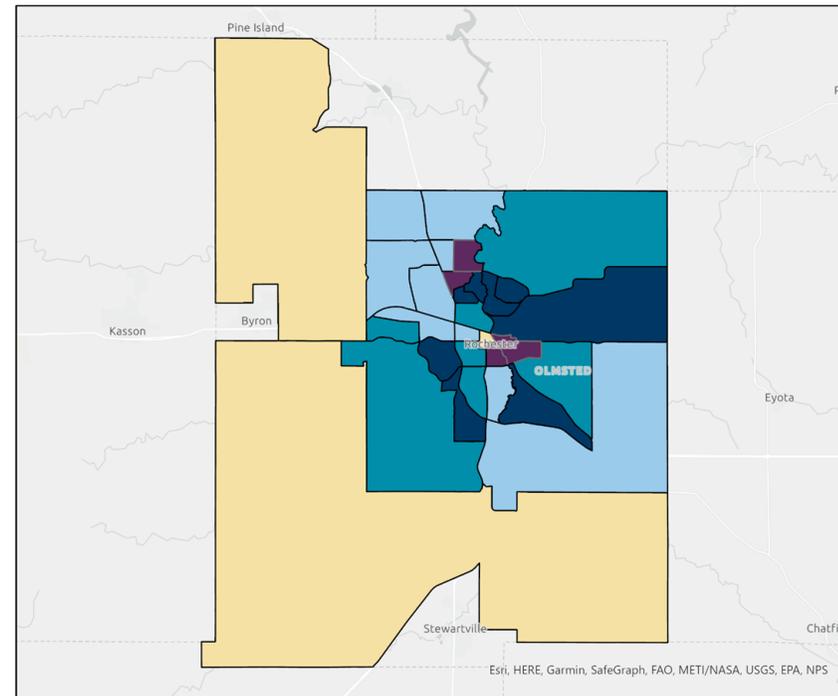
Tree Cover for Minneapolis



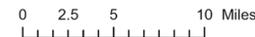
Credits: Google Environment Insights Explorer



Tree Cover for Rochester



Credits: Google Environment Insights Explorer



Conclusion

- Many things in our natural environment affect our health
- **Q:** How do you think the Tree Canopy Cover policies contribute to structural change to improve health?





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Healthy Minnesota
Partnership

m DEPARTMENT
OF HEALTH

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