



ENVIRONMENTAL JUSTICE IN IOWA

importance, value, & social impact toolkit





Iowa Environmental Council

This report was created in April 2024 by IEC's Environmental Justice team, funded by the Thriving Communities and Technical Assistance grant. We acknowledge that this work is ongoing, and we will never have a full grasp of Iowa's evolving environment. If you have questions, stories, or reflection on this work, we invite you to contact iecmail@iaenvironment.org.

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Land Acknowledgement

lowa is centrally located in the Midwest bordered by the Mississippi and Missouri Rivers. Although it now consists of over 80% farmland, the state was once predominately prairie, maintained only by Indigenous peoples and native wildlife.

IEC acknowledges that lowa resides on the traditional territories of the Osage, Sioux, Omaha, Meskwaki, Sauk, Winnebago, Missouria, Pawnee, Ponca, Otoe, Mangan, Hidatsa, and Black Hawk tribes. It is essential to include the original stewards of lowa in this strategy, honor their legacy as advocates for environmental justice, and include organizations that uplift Indigenous voices.



Defining Justice

"Whether by conscious design or institutional neglect, communities of color in urban ghettos, in rural 'poverty pockets', or on economically impoverished Native-American reservations face some of the worst environmental devastation in the nation." - Dr. Robert Bullard





The Environmental Protection Agency (EPA) defines environmental justice at the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

The impacts of air and water pollution, fossil fuel extraction and energy production, and climate change, and other environmental hazards fall disproportionately on Black and Indigenous people and other people of color (BIPOC). Policies that allow these health hazards and shift the impacts of environmental contamination away from majority white communities to communities of color perpetuate the structures of racism.

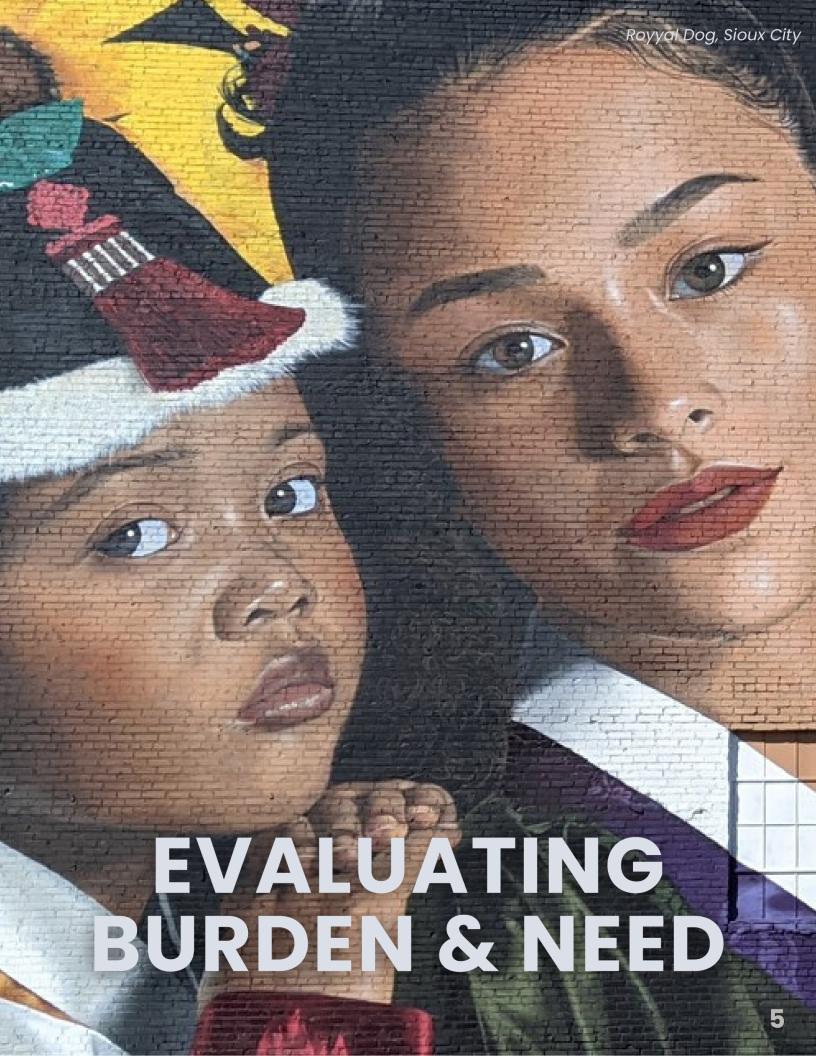


Valuing Justice

In 2021, the Environmental Protection Agency (EPA) conducted a study that showed disproportionate impacts of climate change and environmental degradation on socially vulnerable populations in the United States.

Key findings of the report include:

- Black and African American individuals are projected to face higher impacts of climate change as compared to all other demographic groups. For example, with 2°C (3.6°F) of global warming, Black and African American individuals are:
 - 34% more likely to currently live in areas with the highest projected increases in childhood asthma diagnoses. This rises to 41% under 4°C (7.2°F) of global warming.
 - 40% more likely to currently live in areas with the highest projected increases in extreme temperature related deaths. This rises to 59% under 4°C of global warming.
- Hispanics and Latinos have high participation in weather-exposed industries, such as construction and agriculture, which are especially vulnerable to the effects of extreme temperatures. With 2°C (3.6°F) of global warming, Hispanic and Latino individuals are 43% more likely to currently live in areas with the highest projected reductions in labor hours due to extreme temperatures. With regards to transportation, Hispanic and Latino individuals are about 50% more likely to currently live in areas with the highest estimated increases in traffic delays due to increases in coastal flooding.





Conditions in Iowa

Nationwide, the findings of the 2021 EPA report are staggering, but IEC was curious to apply this information to conditions in Iowa. In 2024, IEC released the Iowa Environmental Justice storymap, serving of an analysis of demographics, pollutants, and burdens in Iowa using data from the Climate and Economic Justice Screening Tool (CEJST). The storymap evaluated four metrics of environmental justice:

ENERGY

Energy burden highlights the average household annual energy cost in dollars divided by the average household income. This burden is indicative of communities where electricity, internet access, and transportation may be entirely inaccessible or inequitably distributed. Areas of greatest concern are shown in dark purples.

AIR QUALITY

Fine inhalable particles with 2.5 or smaller micrometer diameters present a host of health consequences often inflicted on communities near CAFOs or industrial areas. Areas of greatest concern are shown in dark reds and oranges.

AGRICULTURE

Agriculture is the cornerstone of lowa's economy, but yield losses are expected to increase as climate change worsens. The rate of agricultural loss is evaluated by agricultural value and its proximity to hazard risks. Areas of greatest concern are shown in dark greens.

FLOODING

Flood risk is represented by areas with high potential of future flooding events occurring in the next thirty years from tides, rain, riverine and storm surges. Areas of greatest concern are shown in dark blues.



Mapping Iowa

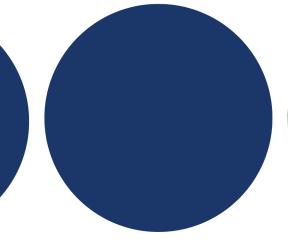
The Iowa Environmental Council is committed to leveraging data that outline the real challenges Iowans face every day and we work strategically with impacted communities to empower them to serve Iowans with the greatest need. These maps provide insight on the communities in Iowa that are suffering the greatest environmental burdens, and the type of burden in which they face.

To be defined as a disadvantaged community, communities must suffer from an environmental burden, such as energy burden or flood risk, and be disadvantaged either through poverty or demographic indicators, such as race or immigrant status. These indicators are key considerations for guiding IEC's environmental justice strategy, and are established in the CEJST which informed these visualizations.

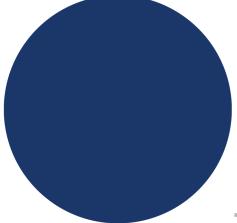
The following map showcases the areas with a combination of highest environmental burdens, including energy burden, flood risk, elevated particulate matter, and agricultural loss, coupled with sociographic data, including race and poverty status. These are IEC's areas of greatest concern.

View the storymap here:





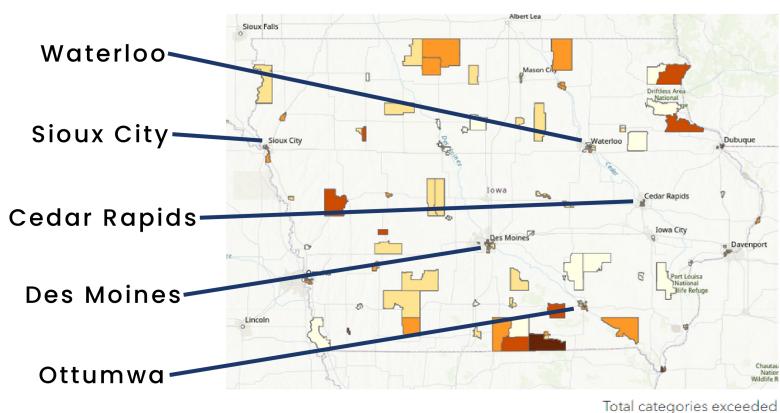






Target Communities

Within our CEJST considerations mapped, IEC then identified five communities to focus our environmental advocacy. These include **Waterloo**, **Sioux City**, **Cedar Rapids**, **Des Moines**, **and Ottumwa**. Each community exceeded multiple environmental justice indicators, prompting IEC staff to identify ways in which we can help address their unique conditions. Other communities, such as Storm Lake, Council Bluffs, Keokuk, Dubuque, and Davenport also showed high indicators of environmental burden.







Resources for Advocates

Advocating for lowa's just future requires community, thoughtfulness, and accurate measurements for success. IEC's **lowa Energy & Infrastructure Funding Hub** has resources for individuals, businesses, non-profits, and local governments seeking to navigate the billions of dollars in grants and rebates, especially proposals targeting historically disadvantaged communities. IEC staff are regularly updating the Hub to incorporate new funding opportunities.

The Hub also features information on the Biden Administration's Justice40 Initiative. The initiative commits at least 40% of the benefits of clean energy and climate investments will go to historically disadvantaged communities. With hundreds of billions of dollars in the Inflation Reduction Act and Bipartisan Infrastructure Law, this is an historic moment for groups like ours to work with partners and ensure all lowans benefit from these investments.

ENERGY & INFRASTRUCTURE FUNDING HUB







EJ Partner Organization

The **Heartland Environmental Justice Center**, serving as EPA's Region 7 Environmental Justice Thriving Communities Technical Assistance Center, is a coalition organization led by Wichita State University that covers Iowa, Nebraska, Kansas, and Missouri.

The Center helps communities develop their ability to participate in environmental justice and energy justice decision-making, find and apply for grants, and engage with the private sector to be part of energy and infrastructure project design and development. As a primary representative for lowa, our work hinges on targeted community engagement, applied research, tool development, and community assessments.

As a representative for the state of lowa, IEC's role in the center is to help connect disadvantaged communities with a funding network, technical assistance professionals, and educational guides. IEC staff look forward to attending upcoming conferences and listening session to better establish these connections. View www.heartlandej.org for more information.



