

State Climate Resources

Below is a list of potentially relevant data sources for defining focus and needs.

Title / Link	Source	Brief Description
GENERAL		
2021 Sustainability Factsheets	UM Center for Sustainable Systems	variety of data, charts and graphs on sustainability indicators, food, energy, materials, buildings, water, transportation & climate
EGLE Open Data	EGLE	various datasets/maps available for MI: EV charging stations, CAFOs, air quality, water infrastructure, oil & gas, etc.
National Historical GIS Data	NHGIS/IPUMS	The National Historical Geographic Information System (NHGIS) provides easy access to summary tables and time series of population, housing, agriculture, and economic data, along with GIS-compatible boundary files, for years from 1790 through the present and for all levels of U.S. census geography, including states, counties, tracts, and blocks.
EMISSIONS		
Greenhouse Gas Inventory Data Explorer	EPA	National/state-level emissions by sector
Michigan Stationary (Point) Source Emission Trends	EGLE Air Quality Division	Statewide emission trends from 1974-2019 for Particulate, Sulfur Dioxide, Oxides of Nitrogen, Carbon Monoxide, Volatile Organic Compounds, Particulate Matter <10 Microns, and Lead
POLLUTION		
Evaluation of Near-Road Air Pollution at Environmental Justice (EJ) and Non-EJ Communities in the Greater Detroit Area	EGLE Air Quality Division	Monitored several pollutants next to Highways I-96 and I-275 during 2016-2017. The pollutants were black carbon, ultrafine particles, toxic carbonyls, toxic metals such as arsenic and chromium, fine particles (PM2.5), CO, NO2, and benzene, toluene, ethylbenzene, and xylene. There were two monitoring locations: one in the environmental justice (EJ) community of Brightmoor, at Eliza Howell Park, and one in the non-EJ area of Livonia
2022 Ambient Air Monitoring Network Review	EGLE Air Quality Division	Examine Michigan’s ambient air monitoring network and recommend changes based on monitor history, population distribution, and modifications to federal monitoring requirements under the Clean Air Act
2020 Air Quality Annual Report	EGLE Air Quality Division	This report gives an overview of the air quality for 2020, specifically CO, Pb, NO2, O3, PM10 and PM2.5, and SO2

WASTE		
Annual Reports of Solid Waste Landfilled in Michigan	EGLE Materials Management	All landfills annually submit a report of the amount of solid waste received by the landfill during that year and, to the extent possible, the origin of that waste by county, state, or country
Waste Data System	EGLE	Tracks activities at sites regulated by the Solid Waste, Scrap Tire, Hazardous Waste, and Liquid Industrial Waste programs. WDS can provide information on ownership and operation of the site; the status of any required permits, licenses, registrations, or certifications; compliance status; authorized transporters; shipments of hazardous waste (manifest); and user fees
LAND & WATER		
2020 Forest Action Plan	DNR	high-level collaborative plan for management of all MI forests including current conditions and trends
Status of the Fishery Resource Reports	DNR	annual results of fishery surveys for bodies of water statewide
Forest products economy data	DNR	factsheets, reports, and tools on economic impact of MI and regional forest products
Wetlands Map Viewer	EGLE	map tool including statistical data for wetlands, historic and current
Monthly water balance estimates for the Laurentian Great Lakes from 1950 to 2019 (v1.1)	UM Center for Sustainable Systems	This data set contains a new monthly estimate of the water balance of the Laurentian Great Lakes, the largest freshwater system on Earth, from 1950 to 2019. The source codes and inputs to derive the new estimates are also included in this dataset.
CLIMATE & WEATHER		
State Climate Summaries 2022: Michigan	NOAA	figures on observed and predicted temperatures, precipitation, lake levels

Climate Related Program Evidence Samples

The following list provides AmeriCorps Environmental program evaluation studies across education, direct service, etc. that may be considered for potential evidence sources.

Title / Link	Source	Brief Description
Advances in Community Measurements Webinar	AmeriCorps	Objectives from Webinar: Discuss framework for understanding dimensions of community and neighborhood measurement, describe methods for delineating the community as a unit of analysis and some of the practical aspects of community data collection, review and discuss community neighborhood measures, and work on a case scenario.
Effective AmeriCorps-Funded Environmental Stewardship Programs	AmeriCorps	Blurb: Among the interventions and national service programs AmeriCorps has funded in the environmental stewardship area, those with positive results from high-quality, independent, and rigorous impact studies, as assessed through external systematic evidence reviews are featured in this brief. All featured interventions are AmeriCorps State and National-supported Programs
Local Initiatives Support Corporation (LISC): Bridges to Career Opportunities	AmeriCorps	The Bridges to Career Opportunities (Bridges) model is a multi-component intervention that assists adults who are underemployed or unemployed in advancing in a career and obtaining a living wage. Bridges has four components of services. The bridge component provides contextualized basic skills education, career planning, and occupational skills training. The other three components of Bridges services compose LISC’s Financial Opportunity Center® (FOC) model, which bundles financial coaching and education, income support services, and employment services. The integrated bridge and FOC services—the Bridges model—is intended to assist adults with low incomes or low skills earn industry-recognized credentials that can enable them to obtain jobs in career pathways leading to financial stability and economic well-being.
Impact Evaluation Report 2021: Washington Conservation Corps Restoration Methods	Washington Department of Ecology-AmeriCorps	Study Goals: The goal of this impact evaluation was to assess the effectiveness of different Washington Conservation Corps restoration methods spanning a four-year period. This study uses a design with randomized control to ascertain correlations between site treatments and plant survival. The site treatments applied to native plant live stake are Plantskydd® deer repellent application, blue tube installation, and a reference (control).
The Efficacy of AmeriCorps Weed Treatments in Montana State Parks, 2019 Impact Evaluation, Montana State Parks AmeriCorps	Montana State Parks- AmeriCorps	Blurb: The Montana State Parks AmeriCorps Program is an environmental service program of Montana Fish, Wildlife & Parks that promotes healthy, active, and environmentally aware communities by enhancing park land, enriching educational opportunities, increasing volunteerism, and improving community outreach in state parks. Montana State Parks AmeriCorps members educate and engage park visitors about the threat of noxious weeds to parks, public lands, and the state
Scaling Programs with Research Evidence and Effectiveness	AmeriCorps	Scaling Programs with Research Evidence and Effectiveness (SPREE) is a process that provides insights into conditions that can help identify and support effective interventions that are ready to be scaled. Foundations can apply SPREE to help them and their grantees scale successfully.

Public Allies External Impact Evaluation	Data You Can Use and the Urban Institute- AmeriCorps	Purpose: The report summarizes the results of an external evaluation conducted by Data You Can Use (DYCU) and the Urban Institute (UI) as a requirement of the AmeriCorps Public Allies program supported by the Corporation for National and Community Service (CNCS). It follows a presentation on the methodology and findings related to the impact of Public Allies on the organizational capacity of host agencies, as well as discussion and review by stakeholders and the research partners.
Great Basin Institute- Nevada Conservation Corps- Evaluation Report 2019-2020	Center for Program Evaluation Community Health Services University of Nevada, Reno- AmeriCorps	Study Goals: The goal of this study is to evaluate the impact and efficacy of wildfire fuels reduction on reducing wildfire risk for Nevada’s public lands. A pre-post quasi-experimental design (QED) study was conducted with a matched comparison group. The QED compared mean changes in fire regime condition class from pre-treatment to post-treatment for 35 project sites and for 35 untreated comparison sites.
2019 Public Lands Service Coalition Partnership Impact Evaluation Interim Report	The Corps Network- AmeriCorps	Study Goals: The goal of this study is to examine the impact of TCN’s participating AmeriCorps conservation corps programs as well as the impact on hosting agencies’ capacity. The primary outcome-related goals are to determine whether there is evidence that TCN’s host partners demonstrate higher levels of engagement, efficiency, and environmental stewardship than similar non-hosting agencies. The comparison group comprised USFS and State Parks units that use alternative methods (e.g., agency crews, volunteer groups, contractors) and the treatment group comprised sites utilizing AmeriCorps
Impact Evaluation, EarthCorps Restoration Methods	EarthCorps- AmeriCorps	Study Goals: The goal of this study was to assess the effectiveness of EarthCorps restoration methods. The evaluated intervention focused on green infrastructure development needed to decrease pollution in Puget Sound watersheds around Seattle. Intervention activities included restoration work at select sites around the region, as well as installation and maintenance of engineered green storm water infrastructure and community education efforts.
Scaling Programs with Research Evidence and Effectiveness	AmeriCorps	Blurb: Scaling Programs with Research Evidence and Effectiveness (SPREE) is a process that provides insights into conditions that can help identify and support effective interventions that are ready to be scaled. Foundations can apply SPREE to help them and their grantees scale successfully.
Cover Crop Champions: Linking Strategic Communication Approaches with Farmer Networks to Support Cover Crop Adoption	<i>Society & Natural Resources</i>	UM SEAS study of effective farmer outreach through NWF's Cover Crop Champions program

<u>Evidence of Effectiveness in AmeriCorps-Funded Programs</u>	AmeriCorps/Mathematica	Evaluation by Mathematica commissioned to assess effectiveness of AC programs and consider possibilities of scaling proven interventions