Michigan Statewide Comprehensive Outdoor Recreation Plan (SCORP) 2023-2027



Foundation for funding, platform for partnerships

This plan, was financed in part through a planning grant from the National Park Service, United States Department of Interior, under provisions of the Land and Water Conservation Fund Act of 1965 (Public Law 88-578), as amended.

Table of Contents

Summary – What is SCORP?	.4
State planning and project selection requirements	.4
SCORP general requirements	.5
Context and principles of the SCORP	.5
Section 1 – Introduction1	10
Section 2 – Goal of the 2023-2027 SCORP and key outdoor recreation strategies of the state1	14
Section 3: Outdoor recreation supply and demand in Michigan	21
Section 4: Key issues affecting outdoor recreation in Michigan4	1 5
Section 5 – Process and methods	52
Engagement and presentations	56
Appendices and references	57

Summary – What is SCORP?

Michigan's Statewide Comprehensive Outdoor Recreation Plan is a five-year strategic plan, required to access certain federal grants, that shapes investment by the state of Michigan and local communities in priority outdoor recreation infrastructure, land acquisition and programming.

It is designed to evaluate ongoing and emerging outdoor recreation trends, needs and issues, and to establish priority strategies for achieving outdoor recreation goals. The state and its local outdoor recreation partners use the SCORP as an ongoing framework and action plan for guiding their outdoor recreation management and policy decisions.

The SCORP is designed to be broad, serving as a guide for all outdoor recreation activities and communities throughout Michigan. It is flexible to allow for collaboration and strategic partnerships, to be adaptable to changing needs, and to be open to new ideas and strategies.

State planning and project selection requirements

Requirements for the Michigan 2023-2027 SCORP are outlined in the U.S. Department of the Interior National Park Service Land and Water Conservation Fund State Assistance Program Federal Financial Assistance Manual, Volume 71, effective March 11, 2021. The 2023-2027 SCORP builds directly on the prior SCORP (2017-2022), and seeks to meet the requirements by:

- Evaluating the demand and supply of public outdoor recreation resources throughout Michigan.
- Identifying capital investment priorities for acquiring, developing and protecting all types of outdoor recreation resources.
- Assuring continuing opportunity for local units of government and private citizens to take part in planning for statewide outdoor recreation.
- Coordinating all outdoor recreation programs throughout Michigan with common objectives and data.

In addition, Michigan is also required to develop an **Open Project Selection Process** that "provides objective criteria and standards for grant selection that are explicitly based on each state's priority needs for the acquisition and development of outdoor recreation resources as identified in the SCORP." Michigan's Open Project Selection Process is developed under a separate process but provides critical connectivity between the SCORP and Michigan's use of Land and Water Conservation Fund grants.

SCORP general requirements

The SCORP process must include opportunity for engagement from all segments of the state's population and must be comprehensive, in that it specifically:

- · Identifies outdoor recreation issues of statewide importance.
- Evaluates public outdoor recreation demand and preferences.
- Evaluates the supply of outdoor recreation resources and facilities.
- Identifies the state's strategies, priorities and actions for the obligation of its LWCF apportionment.
- Contains a wetlands priority component including a listing of those wetland types that should receive priority for acquisition and consideration of outdoor recreation opportunities associated with wetlands resources.

Context and principles of the SCORP

Throughout this SCORP, the authors and organizers have relied on a series of seven overarching principles, previously developed by the DNR, to help provide a structural framework for the topics discussed and an overarching framework for the 2023-2027 Michigan SCORP.

These principles include:

Accountability and good governance: The DNR is committed to being open, transparent, public-facing and accountable to the people of Michigan. Providing input is a primary driver for informed decision making within the department. The DNR offers a wide range of opportunities, both in person and through technology, for public awareness and involvement. In addition, nearly two dozen citizen-based boards, committees, councils and commissions hold their public meetings in open, inclusive forums and provide meeting content in a range of accessible formats.

When it comes to conducting business, whether through timber sales, mineral, oil and gas auctions or land acquisitions, easements and exchanges and issuing grants, the DNR engages in open and competitive processes to ensure fair transactions. Finally, the immense amount of spatial data that researchers, biologists, foresters and planners use in decision making is readily available online through the department's extensive mapping resources and open data portal.

Promotion: The DNR will endeavor to actively promote activities, opportunities and programs associated with public land resources and management throughout the state. recruiting, retaining and reactivating interest in traditional outdoor activities such as fishing and hunting, as well as remaining Relevant to changing needs and conditions remains a priority. Adapting to changing interests and seeking novel ways to communicate with a diverse user base are critical to ensuring all Michiganders can take full advantage of public land opportunities.



The DNR will leverage technology and adaptive equipment and seek out new opportunities for engagement so that anyone – all ages, abilities and walks of life – can connect with Michigan's great outdoors. This will be achieved through a variety of outlets, including in-person engagement, educational tools and social media. The DNR will also seek to maintain Michigan's nationwide reputation as a four-season destination through travel and tourism campaigns. Michigan's natural and cultural resources are among our state's greatest assets and make our state a wonderful place to live, work and play.

Public safety: The DNR is dedicated to protecting and serving the people, natural and cultural resources, and places in Michigan. Public safety is of utmost importance and priority and is accomplished through effective law enforcement and education.

The assurance that all the people of Michigan's diverse population will feel safe and secure while enjoying our public lands is a commitment of the DNR. Although public lands are used for a variety of purposes – from walking your dog or nature photography to fishing, hunting or operating an ORV – the public land base in Michigan ensures that there is room for everyone to safely enjoy their favorite activity.

Partnerships: The DNR strives to build strong relationships with diverse groups and organizations to further expand and extend opportunities to accomplish the DNR's mission and values. It is not possible for the DNR alone to conserve, protect and manage the natural and cultural resources of Michigan for current and future generations. Engaging and embracing ideas and feedback from a diverse set of partners is imperative for such a monumental effort to succeed.

Building strong partnerships that are based on open communication, trust, common values and goals and mutual respect is essential. The DNR is committed to working with all levels of partners, including existing partners at the international, tribal, federal, state, and local levels, while also expanding to engage with new and diverse entities.

Partnerships with nongovernmental organizations are especially critical to assist in accomplishing the work of protecting and managing the state's natural resources. And, finally, partnerships with the public in a variety of capacities, ranging from community scientists who identify invasive species to the "eyes in the field" reporters who are so important in protecting our resources, are invaluable in furthering the work of the DNR.

Public health: Michigan's public lands provide residents the opportunity to be physically active through outdoor recreation close to home and a space to mentally recharge and reflect. Hundreds of health studies have bolstered the fact that exposure to nature and spending time outdoors reduce stress, boost immunities, enhance memory, help with chronic pain, stimulate creativity and more. There are countless health benefits to time spent out of doors which make an investment in public lands an investment in public health.

Education: Michigan's public lands are packed with educational opportunities for children and adults alike. In every forest, bending stream and cliffside, there are whispers of the history of our land and the people who came before us. Responsible management, protection and interpretation of our resources open up the world of biodiversity and teach us the importance of conservation. Our public lands are a place for families, school groups and scholars to learn.

Diversity, equity and inclusion: The DNR is committed to the principles of diversity, equity and inclusion in administering and managing our public lands. The people of Michigan are diverse, dynamic and ever changing, and the lands and facilities we steward must reflect the wide range of experiences, geography and communities we serve.

Diversity is represented by lands and facilities that are geographically dispersed across the state to provide opportunities close to where people live and work. Public lands should offer a wide range of experiences from using developed recreation facilities to exploring wild spaces.

Equity involves offering reasonable opportunities to Michigan residents and visitors to experience public lands and pursue recreation. The DNR strives to remove barriers and embrace adaptive equipment and technology that create opportunities to use and enjoy public lands and provide recreational experiences to people of all abilities.

Confluence of States

The updated SCORP was developed in the context of a rapidly changing national landscape in which the outdoor recreation industry is seeking to play a larger role. In 2019, Michigan joined partner states that now number 14 in the Confluence of States, agreeing to champion four common principles outlined in the Confluence Accords.

Michigan agreed upon the following statement:

"We, a growing confluence of states with a shared passion for the outdoors and a commitment to cultivating a strong outdoor recreation economy, believe that outdoor recreation is core to the very character and quality of life we should all enjoy.

The outdoor industry is a powerhouse of meaningful job creation, and a driving force of our nation's economy. Our industry is an economic multiplier, creating a unique quality of life in rural and urban areas, attracting new businesses and professional talent to our communities. While each of our states is unique, our shared commitment to facilitating everyone's love of place through inclusion and diverse outdoor experiences has the power to unify communities, to bridge societal divides, and to improve the mental and physical health of all people." Michigan committed to detailed principles of conservation and stewardship, education and workforce training, economic development and public health and wellness that will be addressed in partnership with the outdoor recreation industry overall. Learn more at <u>confluenceofstates.com</u>.

The tenets of the Confluence of States were used to inform development of this SCORP, and the state's plan intends to drive alignment with these Confluence of States accords and their underlying principles, which read as follows:

Conservation and Stewardship

- Work with the public, private, and nonprofit sectors to advocate for conservation and stewardship of land, air, water, and wildlife, and for public access to them.
- Facilitate public-private partnerships to enhance public outdoor recreational access, infrastructure improvements and conservation efforts.
- Educate and empower the public on the importance and interrelatedness of a healthy environment, outdoor recreation and a vibrant economy.

Education and Workforce Training

- Engage with educators to support environmental and outdoor learning opportunities for early and lifelong outdoor activity, career development, and advocacy for outdoor recreation.
- Promote workforce training programs for technical training, skill mastery and business opportunities across the spectrum of outdoor industry careers.
- Promote interest, participation, and diversity in the outdoors for all, supporting opportunities for early and lifelong outdoor learning.

Economic Development

- Collaborate with all stakeholders to establish and improve sustainable outdoor recreation infrastructure and funding.
- Engage federal, tribal, state, and local governments, as well as local and regional economic development organizations to attract, retain and expand business and market the outdoor recreation economy.
- Address barriers to businesses' success in the outdoor recreation economy.

Public Health and Wellness

- Address social determinants of health by increasing outdoor recreation opportunities for people of all backgrounds and abilities.
- Partner with health and wellness stakeholders to determine shared values and common goals, build relationships and generate innovative partnerships to fulfill shared visions.
- Assist in quantifying impacts of access to outdoor recreation and related social determinants on healthcare outcomes and costs.

Section 1 – Introduction

The primary tool to assess various aspects of recreation throughout the state of Michigan for this SCORP is the 2021 Michigan Outdoor Recreation Survey. The full survey tool is contained in Appendix B, and results presented in regional summaries and a research report.

Survey administrators divided the state into 10 survey regions, based on geography and previously identified "prosperity regions," which included Detroit Metro, East Central, East, Northeast, Northwest, South Central, Southeast, Southwest, West and Upper Peninsula.

Topics addressed in the survey instrument included recreation participation by activity (frequency and duration), motivations and barriers to participation, recreation opportunities, information seeking and technology, land use strategy (proximity and access to recreation and quality), resources, physical fitness and activity, and demographics.

Additional reports providing significant value included net economic valuation of outdoor recreation and cost of illness saved through recreation. These reports are available in Appedix A and D.

The survey was designed to be:

Representative: A statistically valid sample of the general population of the state, not a poll of currently engaged recreationalists or DNR customers.

Repeatable: A standardized survey instrument and delivery system were chosen to insulate the tool against future changes to maintain relevance and enable collection of repeat information on a recurring basis – either every five years as part of the required SCORP update or more frequently, so trends can be more consistently tracked.

Richer: By collecting information about activities, frequency and duration, in addition to information about motivations and barriers to participation in outdoor recreation, the knowledge gained can be used as an input to a variety of useful models, such as the included Economic Valuation and Cost of Health Savings reports, and used for research purposes by partners and stakeholders.

It is the DNR's intention to post the full survey data on its website in the near future. The data will be posted on the DNR's website with a description of what it contains. This will be available for other interested parties (university researchers, local governments, etc.) to use to run models, inform local and regional plans and more.

Empowering modeling by state agencies and other stakeholders and partners provides greater context and application of data to support outdoor recreation. It can be the basis for comparative information about outdoor recreation to guide decision making and weigh investments at the state, regional and local levels. This is likely only the beginning of additional modeling and analysis using this data that could be undertaken at the state and regional levels.

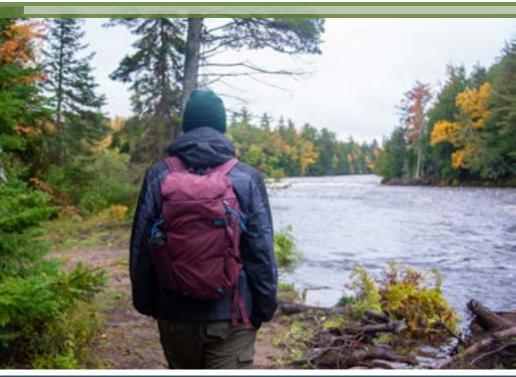


Regional: In 2014, the Michigan Legislature approved Gov. Rick Snyder's Regional Prosperity Initiative. The initiative encourages local private, public, and nonprofit partners to work collaboratively to create vibrant regional economies. The initiative divided the state into 10 regions. Capturing information at the state and regional level, based on the 10 "regional prosperity" service delivery boundaries, will support greater use and adoption by stakeholders and partners in related industries like economic development and tourism.

Conclusions of the survey informed the SCORP and included the following findings:

Recreation participation. Most Michigan residents have participated in some type of outdoor recreation activity within the past year. However, African American or Black residents and those who live in the Detroit Metro area are less likely to engage in recreational activities. Factors such as income, accessibility, age, and health may affect one's ability to participate.

Motivations to participate. Outdoor recreation is a healthy, readily available resource with numerous mental and physical benefits. Michiganders overall report that participating in outdoor recreation allows them to be close to nature, enjoy psychological benefits and break from their typical routines. Certain motivations, such as allowing oneself to practice culturally meaningful activities, and learning new skills, see significant differences between racial groups. Mental health benefits, however, are a generally agreed-upon motivator by all.



Land use strategy. Michiganders are generally happy with the availability and quality of recreation locations. However, more densely populated areas, such as Detroit Metro, are considerably less satisfied with the availability and quality of locations that are close to their home. There is an opportunity for the DNR and local communities to improve both the availability and quality of recreation locations in and around urban communities.

Resources. Michiganders are more likely to use and enjoy recreational resources that are easily accessible to a large audience, such as campsites with amenities, paved trails, and wildlife viewing areas. There is an opportunity to increase outdoor recreation participation by providing (and/or better maintaining) certain kinds of facilities, trails and outdoor spaces, as most Michiganders indicate they would be likely to use these areas if available in the future.

Information seeking and technology. Residents use a variety of informationseeking tools and resources. In instances where people are seeking available opportunities, visitor welcome centers and friends and family are key sources of information for many. Retrieving information verbally or from third-party sources has the potential to misinform or instigate problems. Technological tools could help mainstream information, deter confusion, encourage others to participate and play a larger role in outdoor recreation development.

Barriers to recreation. Several factors limit participation in recreational and outdoor activities, including a lack of time, too many crowds, poorly maintained recreation areas, financial issues, safety concerns, the lack of available public transit to facilitate outdoor recreation for those without personal vehicles and a lack of opportunities. Given the many positive outcomes related with participation in outdoor recreation, there is an opportunity to increase participation rates, as well as promote physical, mental and social health, by addressing common barriers.

Physical fitness and activity. Participating in recreation and outdoor activities has many positive impacts. Physical health is a primary motivator to engage in recreational activity. However, nearly half of Michigan residents do not engage in the recommended amount of regular physical activity. Promoting outdoor recreation is an easy way to increase and encourage overall health among all Michiganders.

In addition to the statewide outdoor recreation participation survey, a round of targeted focus groups was developed and hosted by local facilitators, with training and assistance from a consultant.

These forums were based on information in the preliminary results from the survey and designed to engage underrepresented groups with the explicit goal of augmenting the quantitative survey and generating more qualitative insights into the motivations for, and barriers to, enjoying and participating in outdoor recreation experienced by members of minority populations. The full report and an executive summary of these focus groups can be found in Appendix F.

Geofenced and publicly available user information derived from cellphones was explored as a means of understanding the accuracy and relevance of this new data source, and to test its application for parks planning, demographic analysis and marketing. Reports from the pilot project regions is contained in Appendix G.

Section 2 – Goal of the 2023-2027 SCORP and key outdoor recreation strategies of the state

In this plan, we seek to focus greater attention and provide more data on two key strategic objectives that were touched on in previous SCORP efforts: health and wellness and economic prosperity.

As such, the goal for the 2023-2027 SCORP is to **"ensure that Michigan's outdoor** recreation assets are equitably distributed, developed and managed to provide convenient and welcoming access to the outdoors for healthful, outdoor physical activity; and while sustaining our lands, waters and wildlife for current and future generations, drive broad-based economic and qualityof-life benefits to people and communities."

SCORP strategies for 2023-2027:

- Improve collaboration: Outdoor recreation stakeholders collaborate and cooperate to ensure that Michigan's recreation system meets the needs of residents and visitors.
- Improve and expand recreational access: Recreation opportunities are connected and accessible to residents and visitors of all backgrounds, abilities, means and geographic locations.
- Enhance health benefits: Outdoor recreation increases the physical activity and health of Michigan's residents and visitors.
- Enhance prosperity: Outdoor recreation advances economic prosperity and supports a high quality of life as well as talent retention in Michigan's communities.

Improve collaboration

Objective 1. Create more opportunities for cross-agency collaboration on recreation.

The SCORP is meant to be a guiding resource for all outdoor public recreation providers in Michigan. While each recreation agency develops its own goals and objectives, the SCORP is intended to capture common data, goals and objectives to support alignment among recreation providers. Common themes among all recreation provider plans are: protection of natural and cultural resources, access to recreation, maintenance and sustainability of recreation facilities, education and partnerships. Trail development has also been a common goal for recreation providers in recent years. In summary, each recreation provider serves the public and as long as recreation is accessible to the public, opportunities for collaboration and coordination should be encouraged and supported.

A fuller summary of the range of potential outdoor recreation collaborators is contained later in this document, in describing the outdoor recreation system of Michigan, and in maps in the appendices, specifically Appendix A.



In addition to these traditional recreation-providing entities, other partners in the transportation sector and the public health community have much to offer and should be engaged in state, regional and local conversations. Starting at the state level, the DNR, Michigan Economic Development Corporation (home of the Michigan Office of Outdoor Recreation Industry), Michigan Department of Transportation and Michigan Department of Health and Human Services will work on shared projects related to the health outcomes of access to recreation and nonmotorized (active) infrastructure. These state-level projects should be shared with regional and local partners.

Objective 2. Explore opportunities for regional analysis and connection to regional planning efforts.

Examples of existing and emerging opportunities for regional collaboration on parks, and integration with other regional efforts, include "RecreationShed" planning efforts being explored by the national forests; engagement of regional planning partners in Michigan through their required Comprehensive Economic Development Strategies, which must be updated at least every five years to qualify for U.S. Economic Development Association assistance under its Public Works and Economic Adjustment Assistance programs; and collaborate with the regional planning partners who work with the Michigan Department of Transportation to develop nonmotorized plans across the state.

Objective 3. Enhance data access and digital tools for measuring recreation use across management entities.

Several emerging digital tools are showing promise in the effort to employ our strategies for realizing the SCORP goal of providing more uniform, real-time insights into recreation demand across ownerships and management.

For example, as part of the SCORP, the DNR contracted with Cobalt Community Consulting to run pilot projects looking at several parks and recreation areas, using its Visitor 360 tool, which utilizes geofenced cellphone data collected and provided by a third party, ensuring anonymity of all data. These are provided in Appendix G.

Ten pilot sites were selected to provide a range of differing location characteristics and quality of existing data for comparison.

The sites included the Jordan River Pathway and Deadman's Hill in Antrim County, Belle Isle Park in Detroit, Tahquamenon Falls State Park in Luce and Chippewa counties, Waterloo Recreation Area in Jackson and Washtenaw counties, Ludington State Park in Mason County, Rose Lake State Game Area in Clinton and Shiawassee counties, Cannonsburg State Game Area in Kent County, Petoskey State Park in Emmet County, William Field Memorial Hart-Montague Trail State Park in Muskegon and Oceana counties and Duck Lake State Park in Muskegon County.

Graphs were produced showing visits aggregated weekly which illustrated peak visitation periods. As one example of how the data might be used, those graphs could then be compared between locations to see if peak times for park visits aligned. The Cobalt Community Research data could also be used to show where park visitors' visits originated. Using the data, visitor journey graphs could be produced not only showing where visitors came from, but also where they went after leaving the park.

As an example, 73.7% of visitors to the Rose Lake State Game Area in Clinton and Shiawassee counties were at home prior to their visit; 4.7% came from work 1% came from a Meijer store, 0.6% came from Michigan State University and 0.4% came from a McDonald's restaurant in Haslett.

After their visit, 72.3% returned home, 2.5% went to work, 1.5% went to Meijer, 0.5% went to Michigan State University and 0.4% went to a McDonald's restaurant.

Overall, the geofenced data pilot project was helpful in exploring a potential tool that public recreation managers could use to better understand users and how they move within and between recreation facilities. From the DNR perspective, key learnings included:

Current DNR visitation use counts/numbers are not perfect (dated multipliers employed, etc.) and the DNR would like to improve on current methods and is open to continued exploration of emerging data tools.

There is cost-effective value in geofenced data and analysis, like that provided by Cobalt in the pilot study, specifically for establishing use patterns, busiest times and locations and repeat visitors, which should continue to be explored. Geofenced, cellphone-derived data, like that provided by Cobalt, is not yet reliable enough to be considered a clear improvement adequate for consideration as an outright replacement for existing DNR visitation counts/numbers.

Another emerging digital tool that could enable greater collaboration is the Southeast Michigan Council of Governments' Southeast Michigan Park Finder. The tool shows park locations on a map of the region. Amenities for each park can be pulled up online by clicking on an icon for the park. Acreage for the park is also shown, as well as which entity owns or manages the park and who to contact about the park. Links are then available to find the park via Google Maps or to plan a trip to the park using the Turn off the App – Go Outside tool (TOTAGO).

Data compiled in the tool can also be filtered to show which parks offer certain features, like water recreation or trails and fitness, and enables trip planning. The TOTAGO trip planning tool provides quick facts on specific entities travelers might want to visit. For example, the High Banks Trail is shown to be a point-to-point hiking or walking trail, with a total distance of 6.2 miles and an elevation gain of 174 feet (53 meters). The difficulty of hiking the trail is rated as easy, and the time expected to complete the activity is two hours and four minutes.

Data can be filtered by activity, activity time, distance, difficulty and other parameters. The map showing the locations of the parks can be zoomed in or out for easier searches. A search blank also allows searching for sites by city or address. The tool is being used in other cities across the country.

Another potential model is the website <u>upnorthtrails.org</u>, which provides similar data assembly and trip planning guidance by consolidating information from a variety of public recreational trails owners, operators and management agencies into a single site. These are examples of collaboration on shared data, with the goal of empowering users with more information to support their outdoor recreation aspirations. Convening agencies and exploring existing and needed investment in data for similar tools and information collection and sharing at the regional and state level could enable these kinds of tools to be used in more jurisdictions across Michigan.

Improve and expand recreational access

Objective 1. Utilize SCORP survey and focus group data to better understand recreation demand, barriers and associated infrastructure needs at the regional level.

Data suggests that demand for recreation varies across the state, with water-based recreation popular in some regions and trail-based recreation more popular in other areas. Similarly, recreational activities can be analyzed by demographic to better match investments to demand for localities and users, and to better distribute uses across regions to meet demand and reduce stress on intensively used facilities and features.

Objective 2. Communicate the full portfolio of grants and funding available to communities to support outdoor recreation, including walking and biking infrastructure.

Funds available through MDOT, MDHHS and state and federal economic development programs should be packaged alongside traditional parks and conservation funding to provide communities and nongovernment organization partners with a full slate of opportunities to match local need.

Objective 3. Encourage long-term investments that address issues of technology, climate change and resiliency.

Long-term investments need to consider rapidly changing demands and stresses on the outdoor recreation assets. Examples include energy-efficiency investment to reduce wasted energy and expense; investments in solar and other renewable energy supplies to provide a buffer against energy demands and costs; and partnerships with private sector developers of new technologies to provide more rental and demonstration opportunities, such as electric off-road vehicles and in other equipment. This helps provide the public with opportunities to experience these technologies prior to their mass adoption and makes Michigan more relevant to the development and production of these technologies.

Enhance health benefits.

Objective 1. Model public-private partnerships and collaborations to activate and steward recreational assets and engage underserved youth in outdoor activity.

Funding, construction, and activation of recreation spaces is supported by public agencies, private philanthropic sources and private businesses. Examples of this abound, including a new pilot program sponsored by MDHHS in partnership with the Michigan Office of Outdoor Recreation Industry and mParks. With relatively small financial investments and a focus on public-private collaboration, in its first year, the program was able to help create or add spark to projects ranging from youth rock climbing in the U.P. to a Dirt School bike park and youth cycling program in Lansing

to kayaking in Ypsilanti. Such programs are finding strong support in places like New Mexico and Colorado and could be emulated in Michigan as well.

Objective 2. Improve interagency collaboration to measure and deliver public health benefits from additional investment in infrastructure and programs supporting outdoor physical activity.

State agencies, including the Michigan Department of Health and Human Services and Michigan Department of Transportation, are key partners in supporting the development of infrastructure and programs to support outdoor physical activity (such as sidewalks, bike lanes and paths and educational programs). To make smart investments, these agencies need to review survey data, better understand and collaborate to overcome common barriers to outdoor access, such as a lack of transportation, wayfinding signage, or critical gear and equipment, like accessible wheelchairs and kayak launches. The Michigan Department of Natural Resources, along with other state and local partners, will work with the Department of Health and Human Services over the next two years to develop common metrics to align programmatic goals and to benchmark and track public health outcomes resulting from these types of investments.

Enhance prosperity.

Objective 1. Use new modeling and data to communicate the economic value of outdoor recreation.

New data and models articulating the net economic value of outdoor recreation in Michigan (\$165 billion), with data on the value to residents by region of each of 45 different recreational activities, provide a new tool for understanding, communication and planning for recreation. Similarly, sharing the cost of illness savings in the state directly related to outdoor recreation participation (\$2.8 billion), with comparable regional and activity-specific insights, can help communicate the economic value of recreation in terms of quality of life and reduced health care costs resulting from investments in outdoor recreation opportunities that are both authentic to each region and based on data. See Appendices C and D for full explanations of the modeling and data supporting these estimates.

Objective 2. Support continued engagement with new users and identify gaps and barriers to outdoor recreation.

Data suggest that many people were motivated to go outside for recreation as a result of the COVID-19 pandemic. Efforts should be made to continue to identify, engage and retain these newer users to ensure they continue to participate and find ladders to increased enjoyment of and engagement with the resources and opportunities, as this larger base of outdoor recreation users provides a critical economic and community development opportunity for the state. Other segments of the population did not have the same motivation or opportunity to get outdoors, and SCORP data and other sources should be used to continue to identify and engage with these groups to better understand and overcome barriers to outdoor recreation.



Section 3: Outdoor recreation supply and demand in Michigan

The SCORP goals, strategies and recommendations outlined above were derived from an extensive multimonth effort to gather information about recreation demand and resources in Michigan. The primary source is the Michigan Outdoor Recreation Survey conducted by Market Decisions Research and summarized in Section 1 above. All data summarized here is included in the MDR full report (included in appendices) with supporting data.

Michigan's overall outdoor recreation participation rate is 95%. Eighty-six percent of Michiganders are involved in trail activities and "other" outdoor activities. Water activities logged 80% participation, snow activities 40% and wildlife activities 52%.

The top 10 activities by frequency were ranked (see appendix B), with the percentages of Michigan residents participating and total annual occasions of participating included. From this list, the top three, in ascending order, were visiting the beach but not swimming (60% – 49,959,236), going for a walk on local unpaved trails or paths (62% – 380,532,847) and going for a walk on local streets or sidewalks (80% – 1,156,390,531).

The top five motivations for participating in outdoor recreation were ranked with percentages of those agreeing with the reasons included.

The list, reproduced here in ascending order, included to have new experiences (80%), to exercise and be physically challenged (82%), to have time away from normal and life routines (89%), to feel better mentally and emotionally (93%) and to enjoy nature (94%). In similar fashion, the top five barriers to participating in outdoor recreation were ranked. This list, also in ascending order, included not having enough money for gear, fees and other nontransportation expenses (49%), concern about safety and crime in outdoor recreation areas (49%), recreation areas are poorly maintained (53%), recreation areas are too crowded (60%) and not having time (64%).

Michigander satisfaction with the **availability** of outdoor recreation expressed as a percentage of those agreeing showed 69% were satisfied with recreation availability within a 10-minute walk from their homes; 81% within a 30-minute drive and 82% more than a 30-minute drive away.

Michiganders were satisfied with the **quality** of outdoor recreation within a 10-minute walk (71%), within a 30-minute drive (81%) and more than a 30-minute drive away (83%).

The top 10 activities by frequency were ranked, with the percentages of Michigan residents participating and total annual occasions of participating included. From this list, the top three, in ascending order, were going for a walk on local unpaved trails or paths (80% –20,115,057), visiting the beach but not swimming (80% – 2,350,566), and going for a walk on local streets or sidewalks (82% – 38,849,145).

In a similar manner to the statewide headlines, various **regional top lines** from the data were derived across the 10 prosperity regions. For example, the top five motivations

for participating in outdoor recreation in northwest Michigan were ranked with percentages of those agreeing with the reasons included.

The list, reproduced here in ascending order, included to have new experiences (82%), to exercise and be physically challenged (86%), to have time away from normal and life routines (92%), to feel better mentally and emotionally (96%) and to enjoy nature (98%).

In similar fashion, the top five barriers to participating in outdoor recreation were ranked. This list, also in ascending order, included concern about safety and crime in outdoor recreation areas (38%), not having enough money for gear, fees and other nontransportation expenses (46%), recreation areas are poorly maintained (47%), not having time (47%) and recreation areas are too crowded (63%).

Northwest Michigander satisfaction with the **availability** of outdoor recreation, expressed as a percentage of those agreeing, showed 81% were satisfied with recreation availability within a 10-minute walk from their homes — much higher than the state's 69% satisfaction. Other data were more consistent, including 85% satisfied within a 30-minute drive and 86% satisfied with recreation availability more than a 30-minute drive away.

Northwest Michiganders were satisfied with the **quality** of outdoor recreation within a 10-minute walk (74%), within a 30-minute drive (84%) and more than a 30-minute drive away (84%).





These kinds of comparisons and even deeper dives into the data at the state and regional levels are also possible with the survey results. As an example, the data can differentiate between how likely Michiganders are to use paved or hard-surfaced trails and paths for walking or bicycling compared to unpaved or soft-surfaced trails and pathways or trails and areas for off-road vehicles.

The new methodology for this SCORP survey does not allow for direct comparisons of participation rates and activities with the 2018-2022 SCORP. However, the top five activities by frequency ranked similarly between the two data sets.

The top five outdoor recreation activities in the previous SCORP were as follows, in ascending order: visiting nature centers or historic sites, sightseeing and/or driving for pleasure, visiting parks or playgrounds, walking outdoors (including dog walking) and relaxing outdoors.

The top five outdoor recreation activities for this SCORP, using the new survey methodology, are as follows in ascending order: sightseeing and/or scenic driving for pleasure, visiting parks or playgrounds, visiting the beach but not swimming, going for a walk on local unpaved trails or paths and going for a walk on local streets or sidewalks.

As noted, robust regional comparisons and planning tools can also be made from the survey results. For example, the use of maps to make comparisons provides striking regional and statewide results at glance.

Looking at percentages of participation in water-, snow-, trail-, and wildlife-related activities by region shows trail-related activities are most important in the Upper Peninsula and in northwest Michigan.

In addition, snow-related activities are most important in the Upper Peninsula and the northern two-thirds of the state, aligning with the parts of the state that receive the most consistent snowfall.

Water-related activities scored highest statewide in northwest Michigan, while wildliferelated activities ranked highest in northeast Michigan.

Economic value of outdoor recreation in Michigan

This survey effort has produced the first state economic value of participation in outdoor recreation participation overall and by activity.

Net economic value measures the economic value of outdoor recreation (or the benefits received by an individual or group who participates in outdoor recreation) using a consumer surplus approach.

Consumer surplus is defined as the economic value of a recreation activity above what must be paid by a person to enjoy it. At the individual level, the net economic value of a recreation activity is measured as the maximum amount an individual is willing to pay to participate in the activity minus the costs incurred in participating. It is important to note that it is not a measure of direct spend, but an estimation of the maximum value of participating in a specific outdoor activity for an individual.

The total net economic value of outdoor recreation in Michigan was estimated at \$165 billion. (See appendix C for a white paper on complete methodology to calculate total.)

The top five activities, ranked by economic impact were as follows in descending order: going for a walk on local streets or sidewalks (\$25.5 billion), bicycling on unpaved paths or trails (\$18.2 billion), bicycling on paved streets, paths or sidewalks (\$16.2 billion), day hiking on nonlocal, unpaved trails or pathways (\$13.2 billion) and going for a jog or run along paved streets and sidewalks (\$12.2 billion).

Finishing out the bottom five of the top 10 in descending order were wildlife viewing and/or photography, including birding (\$11 billion), off-road motorcycling, all-terrain vehicle riding or four-wheeling (\$8.9 billion), going for a walk on local unpaved trails or paths (\$8.4 billion), fishing on lakes or ponds (\$5.4 billion) and visiting parks or playgrounds (\$4.9 billion).

The **total net economic value of outdoor recreation** on a regional level can also be determined from the survey results. Using northwest Michigan as an example again, the total for that region was estimated at \$6.2 billion.

The top five activities, ranked by economic impact, in ascending order included bicycling on unpaved trails or paths (\$509 million), bicycling on paved streets, paths or sidewalks (\$539 million), wildlife viewing and/or photography, including birding (\$570 million), day hiking on nonlocal, unpaved trails or paths (\$716 million) and going for a walk on local streets and sidewalks (\$858 million).

Health impact of outdoor recreation in Michigan

The survey method in this SCORP has provided the first state cost of illness savings for Michigan overall and by activity.

The health benefit of outdoor recreation in Michigan was calculated based on the cost of illness savings that could be attributed to the physical activity resulting from outdoor recreation activities. See Appendix D for the full report on the methodology used to generate this estimate.

The **outdoor recreation estimator tool** estimates cost of illness savings for eight primary illnesses including breast cancer, colon cancer, stroke, ischemic heart disease, depression, dementia, diabetes and hypertensive heart disease.

The estimator models the relationship between behavioral changes, changes in physical activity exposure and the resulting health outcomes. The savings presented are based on the "one-trip baseline" analysis, which means we set the "minutes of moderate (vigorous) activity" per week at zero for each activity. In other words, assume that this is the only physical activity the person engages in, net the underlying activity embedded in the model.

The total annual health cost of illness savings in Michigan due to the health impact of outdoor recreation was estimated at \$2.8 billion.

The top five activities, ranked by annual cost of illness savings for Michigan was as follows in ascending order: day hiking on nonlocal, unpaved trails or paths (\$200 million), going for a jog or a run along paved streets and sidewalks (\$291 million), bicycling on paved streets, paths or sidewalks (\$313 million), going for a walk on local unpaved trails or paths (\$414 million) and going for a walk on local streets or sidewalks (\$927 million).

The results can also be derived for each of the 10 prosperity regions in Michigan. Continuing to use northwest Michigan as an example, the total annual cost of illness savings was estimated at \$31.2 million.

The top five activities ranked by associated annual cost of illness savings were as follows in ascending order: day hiking on nonlocal, unpaved trails or paths (\$6.1 million), going for a jog along paved streets and sidewalks (\$8.5 million), bicycling on paved streets, paths or sidewalks (\$9.5 million), going for a walk along local unpaved trails or paths (\$12.2 million) and going for a walk along local streets or sidewalks (\$28.2 million). From a public health perspective, the survey revealed numerous highlights. Among them:

- Twenty-seven percent of Michiganders report recreating more than before the coronavirus pandemic.
- Walking had the highest energy expenditure and cost of illness savings of all reported activities.
- Forty-eight percent of respondents spend four or more hours per week being physically active outdoors.
- Safety, crime, cost and feeling unwelcome were the top four barriers to participation in outdoor recreation.



• The top motivations to participate in outdoor recreation were to enjoy nature (94%), feel better mentally and emotionally (93%), have time away from a work or life routine (89%) and to exercise and be physically challenged (82%).

These types of results can help administrators work toward improvements and other activities to address concerns and capitalize on benefits. An example would be the Safe Routes to Parks Accelerator.

This competitive federal program provides technical assistance to awardees to support a team of cross-agency staff from a state's departments of transportation, health and natural resources work together to improve safe, convenient and equitable walking and biking routes to parks and open spaces, establish sustainable processes for crossagency collaboration, and implement projects and programs that better support local communities' parks access needs.

Full data compendium as an Excel workbook

It is the DNR's intention to make available the full set of survey results in the form of a data compendium, which is a Microsoft Excel workbook that contains overall and detailed results for each question of the survey. Results for each question are presented in a separate sheet labeled by the question number. A table of contents is also included in the data compendium. In addition, the table of contents contains clickable links to each question.

For ease of navigation, each sheet of the data compendium includes a clickable "back to table of contents" link. In the data compendium, in addition to overall results, those for each question are broken down by respondents' demographics, including age, gender, level of education, etc.

As one example of the data that can be revealed using the data compendium, looking into the data set for "participating in outdoor recreation allows me to practice culturally or religiously meaningful activities," the results indicate under "race/ethnicity" that this activity is more statistically important for American Indian, Alaska Native or Native American respondents, compared to other races or ethnicities. Further delineations can be made for age, gender, etc.

Michigan's outdoor recreation system

Home to the Great Lakes and millions of acres of public land resources, Michigan offers a fantastic array of world-class outdoor recreation opportunities, ranging from traditional pursuits like hunting, fishing, camping, boating, skiing and snowmobiling to relatively newer activities that have emerged or gained traction over the past several years, including stand-up paddle boarding, fat-tire biking and adventure racing.

Recreation opportunities may be found in hundreds of state-managed parks, recreation areas, forests, campgrounds and trails. In addition, Michigan boasts more than 30 federally managed parks, lakeshores, heritage and historic areas, scenic trails, forests, wilderness areas, wildlife refuges and marine sanctuaries, as well as thousands of community playgrounds, parks, trails, nature preserves and beaches.

Some of these facilities are highly developed with modern infrastructure, while others, like Michigan's nearly 150 state forest campgrounds, are more natural, rustic and remote places.

These valuable outdoor recreation assets are located across the state, in rural communities as well as in the hearts of some of our urban centers. Every community in Michigan is within 50 miles of a state park or recreation area, and even closer to local and regional parks or recreation spaces.

The following descriptions provide a summary of each recreation provider type in Michigan.

Cities/townships/villages. Cities, townships and villages are responsible for the operation and maintenance of city-, township- and village-owned parks and facilities. These may also include nature preserves, nature centers, community centers and public water access sites. In addition, cities, townships and villages may also provide public recreation programming which may include but is not limited to classes, youth sports and special events all using outdoor public recreation facilities.

City, township and village recreation assets are often maintained and developed though park millages, public works budgets or grants. A requirement for state and federal grant applications is often a five-year recreation plan.





Counties. Much like cities, townships and villages, counties operate and maintain county-owned parks and facilities. These facilities may also include nature preserves, nature centers, community centers and public water access sites. Generally, county park systems provide public park space for outdoor events and activities, which may also include natural-resource-based programs. County systems are typically maintained and developed through park millages and grants. A requirement for state and federal grant applications is often a five-year recreation plan. In addition, parks are also part of a countywide strategic plan which includes goals and objectives for all county departments.

Recreation authorities. Recreation authorities are large regional recreation providers that may span several cities, townships, villages or counties and are typically funded through a millage. While local recreation providers may exist within a recreation authority district, the recreation authority may be responsible for specific recreation components including sports programming and operations of large regional parks, campgrounds, sports facilities and or natural areas. Recreation authorities are organized through an agreement between multiple municipalities and school districts. They are eligible to receive state and federal grants and therefore often have a five-year recreation plan. An example of a large recreation authority in Michigan is Huron-Clinton Metroparks, which operates and maintains parks in southeast Michigan spanning five counties.

School districts. Public school districts operate and maintain sports fields, courts and facilities primarily for organized sports; however, several districts often share their fields with local recreation providers through an operating agreement. As such,

school grounds become an integral part of a community's outdoor recreation fabric. Agreements with local recreation providers and the mission to provide quality public education allows school districts to uniquely qualify not only for recreation grants but also for education grants that may also support recreation.

State. The state of Michigan is responsible for millions of acres of public land open to recreational use. The state's portfolio is diverse, ranging from sand dunes to urban parks. While the SCORP is the guiding umbrella for these facilities and serves as the state's five-year recreation plan, each DNR division has its own strategic plan. Specific recreation programs also have their own strategic plans, like the Michigan DNR Trails Plan, for example. While these plans drill down into specific objectives for each type of recreation, it is clear the common themes between each plan reflect the DNR's mission. The state also provides grants that enable development, acquisition, maintenance and protection of outdoor public recreation facilities.

Federal. The federal government is responsible for millions of acres of public land open to recreational use in the state of Michigan. National forests, national lakeshores and national parks all exist within the state and are operated by the United States Department of Agriculture- Forest Service. The federal government works with state and local governments to provide recreation-based opportunities through grants and partnership agreements.

Non-profit organizations. Natural resource-based nonprofit organizations provide access to recreation and protect natural resources across the state. Often, these organizations are land conservancies. Land conservancies can own property open to the public for recreation use and operate, maintain and enforce conservation





easements for the protection and enjoyment of natural resources. While each nonprofit organization has its own mission, such missions often align with those of other recreation providers and can lead to exceptional partnerships to provide quality outdoor public recreation experiences.

Maps of these recreational assets throughout the state are contained in the appendix A.

Michigan wetlands and outdoor recreation

The 1986 Emergency Wetlands Resources Act (Public Law 99-645, S. 303) requires states to address wetlands protection in their five-year SCORP documents. The SCORP wetlands component must:

- Be consistent with the National Wetlands Priority Conservation Plan developed by the U.S. Fish and Wildlife Service.
- Be based on consultation with the state's fish and game management and wetlands protection agency or agencies.
- Include a description of priority wetlands planning and funding under the Land and Water Conservation Fund program.

This section of the SCORP reviews the benefits and types of wetlands in Michigan, the status of Michigan's wetlands resources, recent planning and funding efforts, and new initiatives and priorities.



Overview of Michigan's wetlands resources

Michigan's wetlands statute defines a wetland as "land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh."

Michigan has many types of wetlands including bogs, fens, deciduous swamps, wet meadows, emergent marshes, vernal pools, wet prairies and conifer swamps. Wetlands play a significant role in the health and existence of other natural resources of the state, such as inland lakes, ground water, fisheries, wildlife and the Great Lakes.

The statute recognizes the following benefits provided by these areas:

- Flood and storm control by the hydrologic absorption and storage capacity of wetlands.
- Wildlife habitat by providing breeding, nesting and feeding grounds, as well as cover for many forms of wildlife, including migratory species, and rare, threatened or endangered wildlife species.
- Protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.
- Pollution treatment by serving as a biological and chemical oxidation basin.
- Erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
- Sources of nutrients in aquatic food cycles, nursery grounds and sanctuaries for fish.

These benefits, often referred to as wetland functions and services, play a vital role in recreation, tourism and the economy in Michigan. This wide range of ecosystem services contributes to the well-being of Michigan's residents and visitors. There is a diversity of outdoor recreation opportunities afforded by wetlands, including fishing, wildlife viewing, waterfowl hunting, and boating and paddling.

Status of Michigan's wetlands resources

In 2014, the Michigan Department of Environmental Quality (now the Michigan Department of Environment, Great Lakes, and Energy) completed an analysis of the status and trends of Michigan's wetlands and published its "Status and Trends of Michigan's Wetlands: Pre-European Settlement to 2005" report (MDEQ 2014).

This project used wetland inventories from 1978 to 2005 to analyze changes in wetlands over the last 30 years in Michigan. The report indicated that Michigan currently has approximately 6.47 million acres of wetlands statewide, or approximately 60% of the wetlands that existed at European settlement.

The rate of wetland loss has declined dramatically since the passage of Michigan's wetlands protection law in 1979. Wetland loss has not been uniform across the state due to significant geographical differences, ecosystem variability of the Great Lakes coastline, urban centers and other physical, biological and chemical factors.

Of the wetland loss that has occurred in Michigan since European settlement, 66% of lost wetlands were in the southern Lower Peninsula, 20% located in the northern Lower Peninsula and 17% located in the Upper Peninsula.



Of the overall wetland losses in Michigan, most of these were emergent wetlands and forested wetlands, with fewer losses of scrub shrub or aquatic bed type wetlands. These wetland losses were primarily due to agriculture or other types of development that either removed the wetland from the landscape through filling or draining or altered hydrology functionally changing its wetland type.

There were new wetlands created over time, but many were open-water ornamental or recreational ponds on residential lots. These wetland "gains" have not replaced the vegetated wetland communities or the wetland functions and values on the landscape where losses have occurred.

Michigan's wetland resources continue to be depleted at a rate that, while slowing, is still faster than efforts to restore or create wetlands. Areas with historic wetland losses are still struggling with the consequences of that loss (e.g., water quality issues, flooding and flashy streams and loss of wildlife). Michigan's wetlands continue to face increasing and new threats, including agricultural development, urban development, invasive species and climate change.

Habitat quality and acreage continue to be affected due to invasive species (e.g., phragmites, reed canary grass, glossy buckthorn and mute swans), pollution and development. Global demands for food, fuel and space affect the availability of land for conservation. For example, increasing market demand for food and biofuel is driving the conversion of wetlands and grasslands habitat to agriculture.

In addition, climate change has the potential to affect Great Lakes water levels, interior wetlands, precipitation events and water temperatures. Public funding for conservation has decreased and federal funding for wetlands programs continues to be in jeopardy due to program cuts.

Finally, social and demographic changes, including continuing urbanization of the North American population, are creating generations of people who are increasingly disconnected from the outdoors and wildlife, and who, as a result, may have less of a wetlands stewardship ethic.

Wetlands planning and protection efforts

Michigan's wetlands statute recognizes the important benefits provided by wetlands and their vital role in recreation, tourism and the economy. Over 30 years ago, Michigan was the first state, and remains one of only three states, to have received authorization from the federal government to administer the federal wetland program.

Because of this approval, wetlands, lakes and streams permits issued by EGLE under state law also provide federal approval. Part 303 regulates filling, draining, dredging or maintaining uses in existing wetlands that are connected or contiguous to an inland lake, pond, river, stream or one of the Great Lakes, that are greater than 5 acres in size, or determined to be essential to the preservation of the state's natural resources.

Michigan's wetland plan identifies the following long-term strategies for protection of wetland resources:

- Maintaining a short-term goal of achieving no net loss of wetland acreage, function and public value and a long-term goal of increasing the quantity and quality of Michigan's wetlands through restoration and management.
- Protecting Michigan's remaining wetlands through implementation of an effective and efficient regulatory program and maintaining administration of Section 404 of the federal Clean Water Act.
- Assessing and monitoring the quality and quantity of Michigan's wetlands to improve wetland protection, management, and restoration.
- Working with partners to identify and develop methods to improve protection, management and restoration of Michigan's Wetlands and advance public understanding and connection to Michigan wetlands.
- Protecting and restoring Great Lakes coastal wetlands and other rare wetlands.

In addition to Michigan's Wetland Program Plan, the North American Waterfowl Management Plan was updated in 2018 with an emphasis placed on the integration of waterfowl populations, habitat and social values (NAWMP Committee 2018). Conservation partners in Michigan are revising the North American Wetland Management Plan Michigan Implementation Strategy by stepping down the Upper Mississippi/Great Lakes Joint Venture's waterfowl habitat conservation strategy to reflect this integration of waterfowl, wetlands and people.

Joint ventures were established across North America to assist in plan implementation. Michigan is located within the Upper Mississippi/Great Lakes Region Joint Venture. The 2007 implementation plan and associated bird habitat conservation strategies for these regions set goals for wetland, grassland, forest retention and restoration in Michigan to meet desired population levels for breeding and nonbreeding waterfowl in the Upper Mississippi Great Lakes Joint Venture.

These acreage goals are divided into several different wetland community types. Importantly, Michigan accounts for a large portion of the emergent wetland retention and restoration objectives for the joint venture (UMGL JV 2007, UMGL JV 2017). In 2016, the Michigan Office of the Great Lakes released Michigan's Water Strategy, a 30-year plan to protect, enhance and sustainably manage Michigan's water resources. The plan was developed based on a collaborative process to obtain broad, diverse input and highlights key actions for government, tribal governments, nongovernmental organizations, industry, academia, local communities and individuals to protect and enhance one of Michigan's water resources.

The water strategy features nine action areas, including one to protect and restore aquatic ecosystems, which identifies the importance of protecting and restoring wetland function; recognizes the significant ecological and tribal importance of wild rice wetlands; and prioritizes coordination, planning and implementation of invasive species control for management of wild rice. This section of the water strategy also highlights statewide prioritization of hydrologic connectivity restoration, groundwater resources management and building resiliency into riparian systems.

Wetlands funding

In addition to Land and Water Conservation Fund support, there are several primary funding sources for wetland conservation that have been successfully secured in Michigan.

Most of these funds can be attributed to diverse and strategic DNR partnerships that have resulted in the restoration, enhancement and protection of wetlands across large landscapes.

One of these key funding partnerships for wetlands conservation is the North American Wetlands Conservation Act, which celebrated 30 years since passage in 2019. Nationally, the act benefits the economy by translating over \$1.7 billion in federal funds into at least \$3.5 billion in additional economic activity in the United States, serving over 2,900 projects affecting more than 30 million acres since 1991.

Michigan has received 56 North American Wetlands Conservation Act grants between 1987 and 2022, which have conserved or enhanced over 64,000 acres of wildlife habitat (wetlands and associated uplands). More than \$21.8 million was secured through these grants and matched by over \$67 million of nonfederal funds from partners.

The Great Lakes Restoration Initiative is another federal funding opportunity which uses the Coastal Program, Great Lakes Fish and Wildlife Restoration Act and Sustain Our Great Lakes Program opportunities to target the most significant ecosystem issues in the region, including invasive aquatic species, nonpoint source pollution, habitat restoration and contaminated sediment.

The Great Lakes Restoration Initiative is an Environmental Protection Agency-led program that aims to protect, maintain and restore the chemical, biological and physical integrity of the Great Lakes. Restoration of wetlands and other habitats is an initiative focus area. Between fiscal year 2015 and fiscal year 2018, initiative investments protected or restored over 52,000 acres of coastal wetlands across the Great Lakes.

Competitive initiative grant funds have been available through the EPA, the U.S. Fish and Wildlife Service and other federal agencies since 2010. Michigan state agencies, nongovernment organizations and local governments have been very successful in securing several initiative grants since 2010.

Michigan's Conservation Reserve Enhancement Program offers a key opportunity to protect wetlands on private lands. Administered by the U.S. Department of Agriculture's Farm Service Agency, the program provides financial and technical assistance to landowners willing to voluntarily implement conservation practices to benefit water quality, minimize soil erosion and provide wildlife habitat.

Since 2000, the state of Michigan has partnered with the Farm Service Agency, private and public conservation organizations, universities and farm landowners with a goal of enrolling 80,000 acres of filter strips, wetland restorations, riparian buffers, field windbreaks and grass plantings.



State funds are used to provide financial incentives and technical assistance to participating landowners and leverage federal funds. The program targets nonpoint source pollution resulting from crop production with goals to reduce sediment and phosphorus entering rivers by 52,000 tons annually, sequester 60,000 metric tons of carbon and stop 105,000 tons of nitrogen from entering streams each year.

Eligible farmlands are located in Saginaw Bay, River Raisin, Lake Macatawa and the Western Lake Erie Basin watersheds, covering all or parts of 30 counties in Michigan. The program was recently revamped and reinstated in 2022.

The DNR's annual spring breeding waterfowl survey has shown an increase in waterfowl observed per square mile, compared to adjacent non-Conservation Reserve Enhancement Program areas, in both the Saginaw Bay and River Raisin watersheds. This demonstrates that the program likely has a positive impact on waterfowl abundance.

The U.S. Department of Agriculture's Natural Resources Conservation Service administers a Wetland Reserve Easements program under the Agricultural Conservation Easement Program, which provides technical and financial assistance to private landowners to help conserve wetlands and their related benefits for future generations.

Eligible land in Michigan includes farmed or converted wetlands that can be successfully and cost-effectively restored while maximizing wildlife habitat benefits. Priority is also given to projects near other wetlands, programs that provide habitat for state or federal threatened or endangered species, and/or programs located in a joint venture primary focus area.

The Natural Resources Conservation Service develops plans to restore enrolled wetlands and protects the enrolled land with either a permanent or 30-year easement. Since 1998, 454 contracts have conserved 40,600 acres of wetlands and associated uplands.

The U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program works with landowners to voluntarily restore and enhance fish and wildlife habitat on their private (nonfederal/nonstate) lands.

Working in partnerships with other conservation agencies and organizations, the service may provide technical and financial assistance to landowners when their goals align with Partners for Fish and Wildlife Program goals. The program primarily works within defined focus areas to improve wetland, grassland, young forest and coldwater stream habitats to benefit migratory birds, native pollinators and other species with declining populations.

In total, between 2017 and 2021, conservation partners in Michigan have used \$23.1 million in federal funds and \$75.8 million in nonfederal funds to permanently protect, conserve or enhance over 21,000 wetland acres, nearly 35,000 forested acres, and 17,000 acres of grassland (over 73,000 total acres of wildlife habitat). Many of these acres in state, federal or nongovernmental organization ownership are publicly accessible for outdoor recreation.

New wetland initiatives and priorities

There are many new and continually evolving partnerships surrounding the conservation of inland and coastal wetlands in Michigan.

In 2010, at the beginning of the Great Lakes Restoration Initiative program, the cooperative Great Lakes Coastal Wetland Monitoring Program, was launched by Central Michigan University. This is a large collaborative effort between more than 18 universities and state and federal agencies, including the Michigan Department of Environmental, Great Lakes, and Energy, across the Great Lakes basin.

This effort monitors Great Lakes coastal wetland plants and animals, habitat and water quality to provide information on coastal wetland condition using fish, birds, calling amphibians, wetland vegetation, aquatic macroinvertebrates and water quality.

A partnership called the Great Lakes Coastal Assembly was formed in 2019 following the disbanding of the Upper Midwest and Great Lakes Landscape Conservation Cooperative's Coastal Conservation Working Group. The assembly brings together federal, state (including the DNR and EGLE), international, tribal and private conservation groups focused on protecting and restoring the critical Great Lakes Coastal Zone areas. One of the primary priorities of the assembly is conserving integrity and function of coastal systems, including wetlands.

In 2019, amendments to Part 303, Wetlands Protection, of the Natural Resource and Environmental Protection Act, 1194 PA 451, as amended created a program to facilitate voluntary wetland restoration projects in coordination with state, federal, tribal and nongovernmental agencies and organizations specializing in wetland restoration and conservation. The goal of the program is to enhance coordination, consistency and operational procedures and improve and streamline the permitting process to facilitate a net increase in wetland functions and services.

Generally, a voluntary wetlands restoration project involves activities whose purpose is to restore lost functions and services in altered, degraded or former wetlands. Many areas that are ideal wetland restoration candidates are regulated under state law and require a permit from EGLE before restoration activities can begin. Floodplains, partially drained areas that are still wetlands, and agricultural drains that are intermittent or seasonal streams are examples of areas where restoration activities likely require permitting by EGLE.

The DNR and EGLE, in partnership with wetland restoration practitioners, have developed a streamlined permitting program to specifically process voluntary wetland restoration projects that meet certain criteria. (For the specific statutory language pertaining to the VWR program, see Section 30312f of Part 303, Wetlands Protection, Natural Resources and Environmental Protection Act).

EGLE has developed a robust Minor Project Category for wetland habitat restoration and enhancement to help streamline the voluntary wetlands restoration permitting process. The program has facilitated the restoration and/or enhancement of over 1,300 acres of wetland between its inception in 2019 and 2022.

Importance of outdoor recreation

Michigan's expansive outdoor recreation system includes these public lands and waters, with activities and infrastructure ranging from playgrounds and ski resorts to sidewalks and skateparks. Together, they provide critically important social, health, economic and environmental benefits to our residents, and continue to attract state residents and out-of-state and international visitors.

The necessity of these opportunities was put front and center during the coronavirus pandemic. People went outside for health (both physical and mental), connection and social interaction, and the impacts of increased parks visitation and participation in recreation continues to have ripple effects on natural resources and recreation gear supplies.

Meanwhile, workforce needs have challenged the industry and recreation access disparities for many segments of the population, long a concern, came into sharper focus during the pandemic.

A massive influx of historic funding from the federal government for infrastructure and in response to the pandemic's economic challenges will allow Michigan to work to address a nearly half-billion dollars' worth of backlogged repairs and upgrades to recreational facilities and assets and launch new one-time local grant programs to augment long-standing funding from sources such as the Michigan Natural Resources Trust Fund and the Land and Water Conservation Fund.





Even so, the demand for additional investment outstrips the funding, and difficult decisions continue to be made to effectively prioritize investments.

Through the data and insight that we have gained in developing our survey findings, we remain convinced that knowledge is power. Providing more consistent and robust information about Michigan's recreation supply and demand – and making that information available to a wider set of partners and collaborators – is key to creating better partnerships and improving outcomes.

This SCORP seeks to focus greater attention than previous reports on health, wellness and economic prosperity, with a goal to ensuring that Michigan's outdoor recreation assets are equitably distributed, developed and managed to provide convenient and welcoming access to the outdoors for healthful, outdoor physical activity.

For the purposes of conducting the 2021 Michigan Outdoor Recreation Survey research, a list of 45 specific of outdoor recreation activities was developed based on a variety of similar outdoor recreation participation studies, including the Outdoor Foundation's national outdoor participation report, the previous Michigan SCORP and other state and national examples.

This list was crafted specifically to include traditional forms of outdoor recreation but also included activities such as walking on local neighborhood sidewalks, which are critically important to health and well-being and are among the most common types of outdoor activity.

In these instances, and for all activities, we also sought to learn more about the motivations for the activity, as well as the types of locations and amenities preferred for these activities, such as paved sidewalks or natural surface trails, to better connect the demand for recreation to current supply and plans for investments in recreation-supportive infrastructure.

Analysis of "outdoor recreation demand" from this survey was conducted in a variety of ways to allow some comparisons to national data sets and some limited trend analysis from previous Michigan surveys.

However, the definitions and activities characterized as "outdoor recreation" were primarily chosen to provide a more repeatable way to measure outdoor recreation participation in future SCORP efforts, and to provide a more robust set of dependable participation data to empower specific modeling and data analysis around health and economic value, which were only hinted at in previous SCORP iterations. These studies are included in the appendices.

As was noted in prior plans, outdoor recreation can be used in a variety of ways to achieve a range of community goals including improved public health outcomes and economic vibrancy. It is important to understand how, where and why people are recreating outdoors to identify strategies and map future direction for investments and programs to support outdoor recreation activity in Michigan.

Building on pilot efforts in the previous SCORP, this plan also seeks to focus greater attention and additional data collection, modeling and analysis to document the connections between outdoor recreation and associated health, wellness and economic prosperity.

With more robust information in hand, we envision the SCORP facilitating additional partnerships to ensure that Michigan's outdoor recreation assets are equitably distributed, developed and managed to provide convenient and welcoming access to the outdoors for healthful, outdoor physical activity.





Several key issues were identified as affecting outdoor recreation in Michigan, including inequitable access and opportunity, use pressure and technology demands, collaboration and communication, long-term funding and service delivery, and climate change and sustainable resources.

Inequitable access and opportunity

Outdoor recreation access is important for healthful, physical activity.

According to "The wellness benefits of the great outdoors," an online U.S. Department of Agriculture Forest Service article by Andrew Avitt, being outside in green spaces supports an active and healthy lifestyle, which has shown to increase life expectancy, improve sleep quality and reduce cancer risk.

"The physiological response to being outside in nature is real, and it's measurable," said Michelle Kondo, a research social scientist with the USDA Forest Service's Northern Research Station. "There are many physical and psychological benefits of nature that scientists have observed, which can better help us understand how nature supports wellness in the body, mind and community."

Many of the benefits afforded to us by green spaces partially results from more opportunities to be active. Being in outdoor green spaces can increase a person's motivation, too."

For example, some studies have shown that natural outdoor environments in urban spaces are more enticing for physical activity and are more likely to motivate people to exercise, leading to higher levels of fitness, the article said.

Studies also show that being outside in nature is relaxing, reducing our stress, cortisol levels, muscle tension and heart rates – all of which are risk factors for cardiovascular disease, according to the article.

The Forest Service cited other health benefits of being outdoors in green spaces: "There are many mental wellness benefits associated with being outside in green spaces, such as lower risk of depression and faster psychological stress recovery. Studies have shown that being in nature can restore and strengthen our mental capacities, increasing focus and attention.

... Access to nature can benefit entire communities such as reducing environmental stressors commonly found in cities: air pollution, noise and heat. Cleaning and greening of vacant lots have been shown to reduce overall neighborhood crime by 13% and reduce nearby residents' feelings of depression by 41%."

Michigan residents struggle with various health concerns, with 7,900 people dying prematurely in the state each year. The life expectancy for a Michigan resident overall is 77.5 years of age.



According to 2022 County Health Rankings, published online by the University of Wisconsin's Population Health Institute (<u>countyhealthrankings.org</u>) for Michigan, 36% of the state's adult population is obese and 25% of the population is physically inactive. These percentages compare to 30% and 23% respectively for the top-performing states across the country.

Eighteen percent of the state's residents is in poor or fair health; 13% is in frequent physical stress and 17% is in frequent mental distress. The prevalence of diabetes in Michigan is 10% and 21% of the state's adult population smokes or drinks excessively.

Regular physical activity is associated with a reduced risk of many conditions that affect our physical and mental well-being, including heart disease, stroke, hypertension, Type 2 diabetes, depression and anxiety. Despite these benefits, nearly half of adults and less than one-third of children in Michigan meet the recommended amounts of physical activity, according to the Centers for Disease Control and Prevention.

The prevalence of inactivity varies greatly within and between counties throughout Michigan. In 2020, nearly a quarter of Michigan adults (24%) self-reported being physically inactive. When broken down by race, 31% of Black adults reported being physically inactive in comparison to 21% of white adults (Behavioral Risk Factor Surveillance System 2020).

These disproportionate rates of physical activity are consistently reported throughout the state in communities of color and low-income communities.

Levels of physical activity are attributed to a variety of reasons, from time, motivation and cost to much more complex issues like systemic racism, zoning policies, community design, safety and access.

These factors and the environments in which we live, work, learn, play and age serve as key barriers, or facilitators, to being physically active.

Recent studies, including one by Rowland-Shea, et al., in 2020, have shown that rates of obesity, diabetes and heart disease are lower in communities that are more walkable. In addition, communities with increased walkability have improved mental health, reduced greenhouse gas emissions and higher economic activity.

Walkable and active-friendly communities make physical activity easier and more accessible by providing opportunities for active transportation and/or leisure-time physical activity. Despite the benefits of well-designed communities, Black, Latin, Asian, Native American and low-income families are less likely than white families to live in walkable communities and have access to outdoor spaces.

In Michigan, 85% of Black families and 90% of low-income families live in a naturedeprived community, in comparison to 15% of white families and 47% of middleincome families. Nature-deprived communities are those that have more human disturbance than the state average. (Rowland-Shea et al., 2020)

Michigan residents also experience demographic and economic pressures evidenced through age and income disparity. Seventeen percent of the state's children are in poverty.





Using data from the U.S. Census Bureau's 2019 American Community Survey, <u>Patch.com</u> produced an article on income disparity in Michigan, compared with the rest of the country.

"Based on the Gini coefficient, a measure of income inequality based on the distribution of income across a population, income inequality varies considerably across the United States," the article said.

The Gini coefficient is a scale from 0 to 1, where zero represents perfect equality and 1 represents the highest possible level of inequality. Nationwide, the Gini coefficient stands at 0.481.

According to the October 2021 article, the Gini coefficient in Michigan is 0.463, lower than the national average but 25th highest among all 50 states.

"Across the state, the average income among the top 20% of households by earnings stands at \$201,676. The cohort accounts for 50.0% of all income earned in Michigan. Meanwhile, the average income among the bottom 20% of households by earnings is just \$13,976, accounting for 3.5% of all earnings statewide," the article said. "Causes behind rising inequality are complex and varied. A report published by the National Bureau of Economic Research ties the rising disparity to a range of economic factors, including globalization, technological advancement, a stagnant minimum wage, and the decline of labor unions."

According to a June 2019 article from Blue Cross Blue Shield in its MI Blues Perspectives, Michigan is one of the most rapidly aging states in the country. "By 2050, the percentage of residents aged 65 and older is expected to reach 22%, compared to only 15% now. And the proportion of people aged 85 and older is expected to more than double – from 2.2% in 2015 to 4.8%," the article said.

"With the increasing age of the population, higher demands will be placed on the health care system, which could prove challenging without enough younger workers to handle the load."

These are good reasons to work on ways to improve the health and wellbeing of Michigan residents, and increasing participation in outdoor recreation would be an important step forward.

"We have long recognized the need to build quality recreational spaces closer to the state's population," Ron Olson, chief of the DNR Parks and Recreation Division, said in a news release.

The DNR has begun land transactions that will lead to the development of a state park in Flint in Genesee County, the only one of Michigan's 83 counties to have no lands managed by the DNR. Gov. Gretchen Whitmer announced plans for this park in July 2021.

The state park, supported by up to \$30.2 million in federal and state investment, will be constructed on a former industrial site, providing residents and visitors with green, recreation space as well as opportunities to explore the site's history.

The Mott Foundation, Genesee County and the city of Flint have also dedicated funding to development of the new state park.

"Parks are pillars of our local communities and economies," Gov. Whitmer said in a news release announcing the development. "Through the pandemic, park attendance reached historic highs as people went outdoors to unwind and connect with their loved ones."

That's especially true in Michigan's great cities, which have been disproportionately impacted by COVID. This new park in Flint is a multigenerational investment in the community that will support small businesses, create jobs and give people a space to enjoy with friends and family."

Use pressure and technology demands

Like elsewhere in the world and across the nation, the coronavirus pandemic has taken a tremendous toll on Michigan. As of Sept. 28, 2022, there had been more than 2.8 million cases reported in the state, with more than 38,600 deaths, according to Michigan Department of Health and Human Service statistics.

Along with the toll on physical health, there were numerous associated impacts felt by Michiganders.

In terms of the outdoors and recreation, restrictions and health advisories against gathering in public in closed quarters helped lead many to head to the outdoors for opportunities to get fresh air and exercise, especially at places like parks, trails and recreation areas.

For the DNR, this effect also produced significant increases in numbers of hunting and fishing license purchases, along with sales of the Recreation Passport, which visitors need to access state parks, rustic campgrounds, boating access sites and other areas. For example, the number of men who purchased a fishing license increased from 869,155 in 2019 to 937,959 in 2020, while fishing license purchases for women rose from 222,013 in 2019 to 272,055 the following year.

Recreation Passport sales for fiscal year 2019 increased by 5.7% in fiscal year 2020. Cumulative sales through September during fiscal year 2020 jumped by 14% in the same time period the following fiscal year.

Increased numbers of men and women purchased hunting licenses, too. In 2019, 573,488 men and 64,806 women bought hunting licenses in Michigan. The next year, those figures increased to 600,543 and 74,103, respectively.

In a 2021 special report, the Outdoor Industry Association said that "amidst the COVID-19 pandemic restrictions, more Americans have turned to the outdoors, some for the first time and others for the first time in many years."

These new outdoor participants represent an unprecedented opportunity to grow and diversify the outdoor community. But to capitalize on this opportunity, we need to better understand these participants.

In Michigan and elsewhere, people sought a renewed connection to places, opportunities to enjoy time in nature alone or with friends and family and getting outside with a new appreciation for space to exercise and avoid crowds.

With many people kept at home from jobs, it might be logical to think workers had much more free time to pursue outdoor recreation during the pandemic. However, most people questioned about their activities during the pandemic said they experienced the same or even less leisure time.

The increases in outdoor recreation were said to be based more on what opportunities were open and available locally and perceived as safer. Going forward, positioning outdoor recreation as a place and opportunity to socialize and connect with friends and family will help outdoor recreation providers keep new users engaged.

Impacts of increased use and changing technologies

Beyond these impacts, underlying changes were taking place affecting outdoor recreation and the ability to provide its necessary gear, equipment and spin-off industry provisions, like gas, food and lodging.

Outdoor recreation is part of a diverse and large economy, a fact that was punctuated by the pandemic.



According to data from the U.S. Bureau of Economic Analysis, people sought to purchase boats and bicycles that were unavailable due to supply-chain snarls and workforce hiring and retention problems. This complicated the occurrence of greater demand in many areas.

In small towns and at rustic trailheads, visitors found services unavailable or unable to keep up with demand. A Trust for Public Land and Outdoor Foundation study revealed that outdoor recreation opportunities were not equally available to everyone.

It might seem that almost everyone was going outdoors more often during the pandemic. However, that statement is a generalization. Still, the impact of many people heading to the outdoors with new or renewed interest produced significant negative impacts to park natural resources and threatened valuable ecosystems and special habitats.

The National Park Service at Pictured Rocks National Lakeshore initiated a first-ever park entrance fee to help fund upkeep and repairs to park resources. Annual visitation climbed from 858,715 in 2019 to 1.2 million in 2020 and 1.3 million in 2021.

At Porcupine Mountains Wilderness State Park, long lines and overcrowded parking lots kept visitors waiting to see signature attractions like the Lake of the Clouds. Attendance there at Michigan's largest state park grew from 414,485 in 2019 to 586,558 in 2020 before receding to 555,522 in 2021.

The ripples from these circumstances even made their way to the more rustic and backcountry parts of Michigan's recreation system. New provisions to require reservations for campsites in the backcountry at the Porcupine Mountains and Craig Lake State Park –Michigan's most remote state park – were initiated either before, during or after the pandemic to help reduce impacts to park resources and curb problems like erosion and trampling of sensitive plants.

Beyond these effects, a confluence of changes has helped create new and additional challenges for recreation providers.

Among these, park visitors and outdoor recreationists are becoming more and more varied requiring more and better accommodations. Technologies are emerging that are creating the demand for powering and supporting things like electric bikes and boats and expectations of digital connectivity and the ability to work remotely are plaguing outdated systems in place at federal, state and local recreation facilities across Michigan.

Digital trip planning, including ride and other "sharing community" activities, produce expectations of availability of Internet and Wi-Fi services, even in remote areas.

An example of the opportunities and challenges confronting the state's recreation system involved the rollout of electric vehicle charging stations at Michigan state parks beginning in May 2022.

Approximately 15 electric vehicle charging sites are planned for state parks and a state fish hatchery over the next few years. As part of a partnership with Adopt a Charger and electric vehicle automaker Rivian, these EV charging stations will help encourage sustainable travel across our state and help reduce local air pollution.

The EV charging stations are part of the Lake Michigan circuit of EV charging infrastructure and are free to use. Aged infrastructure needs to be upgraded at several of the state parks on the circuit to accommodate the upgrades, slowing the rollout of the charging stations.

Despite these challenges, efforts are becoming increasingly coordinated, and new technologies are helping move Michigan's outdoor recreation system into the future. DNR Director Dan Eichinger touched on this in a news release about the EV charging stations rollout.

"This project will not only benefit Michigan in the near term but will also pay dividends far into the future as we move toward a sustainable energy future," Eichinger said. "From these EV charging stations, to installations of solar arrays that power fish hatcheries and other facilities, to building with mass timber and our innovative carbon sequestration development, we are working to improve the environment as we update our own portfolio."

Another issue affecting Michigan's outdoor recreation system is the need for increased collaboration and communication. This was highlighted during the coronavirus pandemic with closures of facilities and activities among numerous

agencies, including federal, state and local partners.

The DNR was one agency that worked continuously to update its webpages and other public-facing messaging to keep people properly informed. This was difficult to do as developments in the pandemic and associated restrictions changed swiftly.

Some facilities closed entirely while others remained open partially. The eagerly anticipated Memorial Day weekend opening of state parks and campgrounds in 2020 was delayed, frustrating the public.

In a WOOD-TV report from April 30, 2020, DNR Parks and Recreation Division Chief Ron Olson said, "The DNR is working to put procedures in place to protect campers and staff, but the stay-at-home order has caused delays."

According to Olson, many yearly preparations like getting picnic tables and bathrooms ready would not be able to start until after the stay-home order was lifted.

Earlier that month, the Tippy Dam Recreation Area in Manistee County was closed until further notice due to high numbers of visitors, lack of proper social distancing and people traveling long distances to reach the park.

DNR customer service centers and field offices were closed until they eventually opened on a limited basis as the pandemic continued. Restrictions were in place at one time or another on boating, dispersed camping and other activities.

Grant program funding was also put on hold in many cases during the pandemic, forcing recipients to postpone or cancel work and projects scheduled for completion during the pandemic.

Even without the pandemic challenges, some smaller communities have expressed their lack of matching funding and resources to apply for grants. Some similar economic concerns surfaced during a public land manager survey.

The 25-question, web-based survey was modeled after a Nevada outdoor recreation survey and modified for Michigan opportunities. The survey email was sent to stakeholders, including representatives of federal, state, local and tribal governments and institutions such as universities, corporations and land conservancies. The email was developed via SoGo survey and distributed with GovDelivery. A total of 53 responses were received.

When asked about ways to improve outdoors recreation opportunities in Michigan, one land manager suggested "providing local municipalities grant funding for deferred maintenance and not just building new facilities."

Another said, "making the window of opportunity open longer and to provide assistance in applying for funding more easily, with the help of advocates presenting the grant opportunities" and "maybe tutorials."

Just 26% of the land managers surveyed said their current staffing levels were adequate to meet the organization or agency's needs for outdoor recreation.

Depending on topic, the land managers rated variably the following issues as "very significant": instability of agency or organization's budget (34%), lack of a dedicated funding source (32%), insufficient resources to fund the agency or organization's budget (34%), lack of funding for partnerships with volunteer and/or youth organizations (17%), insufficient user fee revenue (13%) decrease in tax revenue in recent years (17%) and outdoor recreation not a funding priority (9%).

When asked which of the following issues related to outdoor recreation, parks, open space, waterways, etc., is the most significant hurdle for their organization or agency to overcome, the highest percentage (28%) said insufficient resources to fund the entity's budget.

On the upside, cooperation and coordination have led to development of some highend tools to improve outdoor recreation development. One example is the work of the Southeast Michigan Council of Governments, which has developed a plan for recreation, as well as tools like the Southeast Michigan Park Finder and the Turn Off The App – Go Outside information resource for easier access to outdoor recreation opportunities.

According to the SEMCOG website, "Southeast Michigan's parks, trails, waterfronts and protected lands highlight unique natural landscapes and provide year-long opportunities to be active and enjoy outdoor recreation.

"The Parks and Recreation Plan for Southeast Michigan was developed to ensure that the region's recreation system meets the quality of life, health and accessibility needs of its residents and visitors, as well as local and regional economic development and environmental priorities."





In a July 2021 SEMCOG "Act Regional, Think Local," blog post titled "The New Future of Parks, Trails and Recreation," planner Tyler Klifman outlined several steps communities and organizations should take to ensure that all people in southeast Michigan share in "the many ways that parks, trails and recreation provide essential services and infrastructure that advance equity, resiliency and well-being."

The list included investing in parks as a social determinant of health, engaging diverse users with inclusive programs, amenities and a welcoming atmosphere, expanding the quality and quantity of recreation opportunities in the places people live, providing equitable access to regionally significant parks for public transit, walking and biking networks, and supporting climate resilience with sustainable development and environmental conservation.

During development of this SCORP, a high-level review was conducted of comprehensive economic development plans from each of the 10 prosperity regions. Two regions have applied for major federal funding from the Build Back Better program, specifically for outdoor recreation economy and innovation.

Communities around Michigan are engaging in more collaborative conversations as outdoor recreation is increasingly being viewed through new lenses, such as health and economic prosperity.

Regional economic development strategies and federal grants that reference efforts to leverage and diversify outdoor recreation as a key economic driver have become

more prevalent. Due to the pandemic's impact on driving recreation participation and purchasing, these efforts are often framed around outdoor recreation for economic recovery and innovation, highlighting the need for greater interagency collaboration, networking and research to best leverage and understand the intersection of impacts and infrastructure related to outdoor recreation and its role in local and regional economies.

To gain a better view of this trend, Comprehensive Economic Development Strategies from the regional planning agencies in the state were reviewed with an eye toward the role of outdoor recreation in these plans.

These strategies are a cornerstone of the U.S. Economic Development Administration's programs. They serve as a means to engage community, leverage the involvement of the private sector and establish a strategic blueprint for regional collaboration.

A Comprehensive Economic Development Strategy provides the capacity and building foundation by which the public sector, working in conjunction with other economic actors (individuals, firms and industries) creates the environment for regional economic prosperity.

Regions must update their Comprehensive Economic Development Strategies at least every five years to qualify for EDA assistance under its Public Works and Economic Adjustment Assistance programs.

The strategies from all 14 regional partners were reviewed, and all made some reference to the importance of outdoor recreation to local and regional prosperity and quality of life.

Several had more explicit recommendations related to the development of a more robust and diversified outdoor recreation economy, such as the draft strategy from the Region 2 Planning Commission (Jackson, Hillsdale and Lenawee counties).

That particular comprehensive strategy has a strong orientation toward outdoor recreation for talent attraction, including an assessment of recreation amenities, including outdoor endurance events, such as gravel bike racing and a proposed rebrand. The strategy of the Central Upper Peninsula includes, under the goal of building a resilient regional economy, sub-goals such as developing a strong and sustainable travel, tourism and recreation economy.

Similarly, there were several federal grant opportunities that drove proposals from Michigan regions. Three, in particular, warrant consideration for the way they focused on regional outdoor recreation industry innovation as a fundamental strategy.

They included:

 Kent County's "West Michigan Outdoor Recreation Regional Growth Cluster" application to the Build Back Better Economic Development Administration Phase 1 funding round. Though not funded, this application had many features and strategies in common with the Central Upper Peninsula model, in which the community expressed a desire to repackage its recreation assets into a multicounty outdoor industry workforce assessment and effort to define and differentiate the region as an "outdoor recreation innovation hub," leveraging other sectors, including manufacturing, education regional small business and innovation accelerator/incubator concepts.

- Western Upper Peninsula's application to the Economic Development Administration's "Travel, Tourism and Outdoor Recreation" grant program for a tourism impact analysis with the University of Michigan Economic Growth Institute. This grant was funded, and notably has a specific task to "better understand [how] the economic impacts of tourism, existing and startup manufacturers of specialized products, including outdoor recreation equipment, may be incentivized to develop operations in the region and other nearby areas that extrapolate the results of the analysis. The Western Upper Peninsula Planning and Development Region will engage with the Michigan Office of Outdoor Recreation, which is tasked with growing outdoor recreation industries, including related manufacturing, throughout the state.
- Central Upper Peninsula Planning and Development's "Upper Peninsula Outdoor Recreation Innovation District" Build Back Better Phase 1 proposal, which was also not funded but was intended "To leverage our region's unique strengths by developing a high-functioning ecosystem of collaboration in support of an innovative outdoor recreation industry, the growth of which will lead to aboveaverage-wage jobs in technology, manufacturing and science, while creating a more sustainable and equitable future for the region."

Another highlight in planning and coordination efforts was the Huron-Manistee National Forests'"Sustainable Recreation Reimagined" strategic planning process, with findings published in March 2022.

According to the resulting planning document:

"In 2020, the U.S. Forest Service staff at the Huron-Manistee National Forests initiated a strategic planning process to anticipate conditions that would likely impact recreation planning across the two forests in the next five to 20 years. The result of that planning process is a Sustainable Recreation Plan that will influence future planning and provide a forward-thinking lens for Huron-Manistee National Forests' staff to consider for decisions on resource allocation, infrastructure development, recreation amenities and forest-wide policies."

To help facilitate the planning process, staff from the Forest Service sought planning assistance from the National Park Service's Rivers, Trails and Conservation Assistance Program, which provides technical assistance to government agencies, tribal governments, nonprofit organizations and community groups that are planning outdoor recreation or natural resource conservation projects in local communities.

The project team and partners from the national forests framed the planning discussion around four key themes that would likely impact environmental, social or cultural considerations five to 20 years in the future. The themes included outdoor recreation trends, changing visitor demographics, climate change and public health.

The development of the Sustainable Recreation Plan was influenced through three

planning milestones, which included multiphased stakeholder engagement, a Forest Leadership Team workshop and the development of the final planning document.

The Huron-Manistee National Forests Sustainable Recreation Plan, titled "Recreation Reimagined," reinforced and supported the goals and direction of Michigan's 2023-2027 SCORP.

Through multiple workshops and planning discussions, the Forests' Leadership Team identified the following strategic goals to guide future recreation planning within the Huron-Manistee National Forests:

- Develop intentional policies for access management at developed and dispersed recreation sites.
- Embrace partnerships, collaboration and shared stewardship.
- Make the Huron-Manistee National Forests public lands that are relevant to the entirety of the American people, ... now and in the future.

Long-term funding and service delivery are expected to remain challenges heading into the future for Michigan's outdoor recreation system, despite some recent significant contributions.

Recent allocations of one-time funding, largely stemming from coronavirus pandemic response measures, will provide a great deal of help, but will not solve problems long-term.

The Building Michigan Together Plan, signed into law in March 2022, included \$250 million in federal relief program funding to help tackle the backlog of critical infrastructure needs in Michigan's state parks system. This historic investment puts in motion a targeted effort to repair, replace or modernize the core components of state parks and trails.

The funding won't solve every challenge, but will help address aging historic structures, camping facilities, parking lots, restrooms, water and sanitary systems and other vital amenities – projects that will solidly position state parks, trails and campgrounds to continue delivering the world-class outdoor recreation and visitor experiences that bring people back, year after year.

Another example of important one-time funding is \$200 million in federal money allocated to Michigan that will be used for improvements at local parks across the state. That funding was announced by Gov. Gretchen Whitmer in July 2021, and appropriated by the state Legislature in spring 2022.

"Local parks are a critical part of the network of recreational opportunities throughout Michigan," said DNR Director Dan Eichinger. "People just want good parks, and they don't usually care who manages those parks provided the work is done well.

"Our local community partners do an outstanding job, and we continue to support their work through a variety of means, including our Recreation Passport grant program, which provides a portion of money generated by state parks to local communities for their park development. This new (funding) program would generally be modeled on our Recreation Passport grants to help local communities develop the recreational assets they need for the next generation."

Challenges confronting this funding land managers call a "once in a lifetime opportunity" include coordinating construction and improvement development projects amid deadlines for using the federal money, increased costs of tools and materials, demand for workers outstripping supply and supply chain delays producing a limited availability of important building resources.

In the Land manager's survey, respondents indicated several strategies have been employed to address limited-occurrence funding and budget shortfalls. The responses and associated percentages of managers who have used the tactic include those who:

- Relied on additional volunteer services (66%).
- Reduced services or staff (57%).
- Accepted sponsorship or donations (53%).
- Increased user fees (21%).
- Held fundraisers (13%).
- Employed other strategies (13%).
- Increased property and/or sales taxes (4%).
- Used a bond measure (6%).

Other challenges wait on the horizon for Michigan's outdoor recreation system, including impacts to the state's natural resources by climate change and damage and destruction caused by numerous invasive species.

As climate changes, Michigan's ecosystems and natural resources are expected to be affected in various ways.



In some places, the climate will warm allowing some species to extend their geographic range to some parts of the state once too cold for their habitation. In other cases, the warming may work in opposite fashion by contracting the range of some more northerly species, like moose, to move farther north into boreal forests. Michigan's current moose population was reintroduced to the region with an airlift of moose from Canada to the Upper Peninsula in the mid-1980s.

The changing climate is also expected to affect fisheries. Creeks and streams that warm significantly may no longer be habitable by coldwater species like brook trout. In these cases, fisheries managers are likely to shift the focus of their stocking efforts to species more comfortable living in relatively warmer waters.

Climate change will also likely affect recreation patterns. As the climate warms, less snowfall is expected, which will negatively affect winter snow sports like snowmobiling and skiing. Conversely, warming in the shoulder seasons may extend the primary use season into the spring and fall months.

Since the sea lamprey moved into the Great Lakes through the Welland Canal in the 1830s, the number of invasive species to negatively affect natural resources in Michigan has increased steadily.

According to an internet post by the National Oceanic and Atmospheric Administration, the sea lamprey invasion had devastating impacts on fisheries. The canal connects lakes Ontario and Erie and forms a key section of the St. Lawrence Seaway.





"Within a decade, they had gained access to all five Great Lakes, where they quickly set to work predating on the lakes' commercially important fishes, including trout, whitefish, perch and sturgeon. Within a century, the trout fishery had collapsed, largely due to the lamprey's unchecked proliferation," the article said.

The Great Lakes Fishery Commission coordinates control of sea lamprey through a range of means, including barriers, traps, lampricides and sterilization of males. The work is still ongoing at significant cost and effort, at the same time natural resource protection and conservation agencies are being challenged by a wide range of invasive species that typically out-compete native species for food with few, if any, predators.

From feral hogs and rusty crayfish to mute swans, zebra mussels and the emerald ash borer to spotted lanternflies, Japanese knotweed, Eurasian milfoil, didymo and more, the list is extensive and continues to grow.

The impacts of these destructive nonnative species and diseases can affect natural resources as well as agricultural crops, firewood supplies and other things important to our economies and lifestyles.

Land managers, including staff at the DNR, have worked hard to enlist the help of outdoor recreation users and others to help contain or slow the spread of these species.

According to the DNR's invasives species webpage, "When invasives take hold, they change native ecosystems. Invasive species are difficult, sometimes even impossible, to eradicate. Once invasive species become established, the work to remove them and restore natural systems is costly and time consuming. Preventing the spread of invasive species is the easiest solution to the problem. You can make a difference!"

Section 5 – Process and methods

A core team was assembled to develop the SCORP as an interagency collaboration, including DNR staff along with the Michigan Department of Health and Human Services, Cardiovascular Health, Nutrition and Physical Activity Section. Several meetings with Michigan Department of Transportation staff also reinforced the opportunity to share data and plans related to walking and biking (active) infrastructure to support outdoor recreation access.

SCORP core team members included:

- Ashley Bradshaw, MPH Michigan Department of Health and Human Services, Cardiovascular Health, Nutrition and Physical Activity Section.
- Rachel Coale communications representative, DNR Forest Resources Division.
- Kip Conley Procurement Services, DNR Finance and Operations Division.
- Alexis Hermiz former diversity, equity and inclusion officer, DNR Executive Division.
- Brad Garmon, Director, Michigan Outdoor Recreation Industry Office.
- Dustin Isenhoff specialist, DNR Marketing and Outreach Division (now with DNR Wildlife Division).
- Matt Lincoln planning analyst, DNR Parks and Recreation Division.
- Dan Lord Grants Management Section manager, DNR Finance and Operations Division.
- Lindsay Ross grant coordinator, Grants Management, DNR Finance and Operations Division (now with MDOT).
- Scott Whitcomb director of the Office of Public Lands, DNR Executive Division.

Support was also provided by:

- Christie Bayus Program manager: Land and Water Conservation Fund, Marine Safety and Recreation Passport grant programs, DNR Finance and Operations Division.
- Debbie Jensen park management plan administrator, DNR Parks and Recreation Division.
- John Pepin deputy public information officer, DNR Executive Division.
- Emily F. Pomeranz, Ph.D. human dimensions research specialist, DNR Wildlife Division.

2021 Outdoor Recreation Survey

Market Decisions Research was contracted by the DNR through a competitive selection process to conduct a statewide outdoor recreation survey in Michigan. The goal of this survey was to help the DNR better understand and assess several aspects of participation in outdoor recreation across the state and within 10 designated "prosperity regions."

The resulting 2021 Michigan Outdoor Recreation Survey was representative of the state of Michigan's resident population ages 18 and over, weighted for demographic variables, and included recruitment and sampling of key demographic groups such as racial and ethnic minorities.



Sampling relied on two sources: an address-based sample and an online panel sample. The instrument included questions about recreation participation, motivations to participate, recreation opportunities, limiting factors, information seeking and technology, as well as physical fitness and activity.

Data collection took place from Oct. 1, 2021, to Jan. 2, 2022. A total of 3,030 surveys were completed for this study, exceeding target returns and providing a margin of error of 2% for statewide data and 6.9% for most regional data.

Early survey information was presented at three regular monthly meetings of the Michigan Association of Regions, and on two monthly calls with staff from the three Michigan National Forests units managed by the U.S. Department of Agriculture. Both groups were provided copies of the draft survey data compendium with a request for feedback and discussion. Additional presentations were made to regional planning commissions on request, and to the local parks management agencies of southeast Michigan at their invitation, and feedback and insights were incorporated into SCORP planning efforts.

Preliminary survey information was presented to a group of researchers from Michigan State University's recreation, economics and community sustainability programs, and the researchers were provided the entire data compendium with a request for feedback and discussion. Discussion of the data over the course of two meetings provided valuable insights that were incorporated into the SCORP planning effort.

Public land manager survey

Forty-seven public land managers from across Michigan participated in an online survey, answering various questions about outdoor recreation, funding for outdoor recreation and other topics.

The breakdown of entities participating included local units of government, including counties, cities, townships, municipalities and recreation authorities (66%), federal agencies (19%), land conservancies or land trusts (6%) and other (9%). The respondents did not include any state agencies, tribal governments or public or private institutions, including universities or corporations.

Of 44 entities responding to the question, 75% said their organization or agency had planning documents that guide decisions related to the use/management of parks, trails, open space or other land or water managed for outdoor recreation.

The average time taken to complete the survey was about 16 minutes. Surveys were completed from April 25 through June 6, 2022.

Qualitative diversity focus groups

An additional SCORP data collection process explicitly sought the perspectives of predominantly Black, Indigenous, and people of color communities. This research process took a participatory approach as it sought to gather insights and perspectives from BIPOC communities.

Key to this process was collaborating with local community facilitators who partnered with Emergence Collective to recruit participants, develop the focus group protocol, facilitate the focus groups and make sense of the data.

Using existing research from the 2021 Michigan Outdoor Recreation Survey, which was conducted by Market Decisions Research firm, the SCORP project team identified information gaps and regions to prioritize in this data collection process.

A snowball sampling process was used during focus group participant recruitment. Community facilitators helped start the process by sharing the invitation with residents who lived in the identified regions, prioritizing the racial identities of BIPOC community members who we wanted to center in this process

A total of 86 individuals participated in eight focus groups held across Michigan, including two focus groups in the Detroit area and Grand Rapids and one each in Detroit area's Arab-American Community, the Flint area, the Saginaw area, and one focused specifically on the Indigenous community. The information gathered through the conversations is included as a final report in the Appendix F.

Geofenced cellphone data pilot

As part of the SCORP, the DNR contracted with Cobalt Community Consulting to run pilot projects looking at several parks and recreation areas, using its Visitor 360 tool, which uses geofenced cellphone data collected and provided by a third party, ensuring anonymity of all data. These are included in Appendix G.

Ten pilot sites were selected to provide a range of differing location characteristics and quality of existing data for comparison.

The sites included the Jordan River Pathway and Deadman's Hill in Antrim County, Belle Isle Park in Detroit, Tahquamenon Falls State Park in Luce and Chippewa counties, Waterloo Recreation Area in Jackson and Washtenaw counties, Ludington State Park in Mason County, Rose Lake State Game Area in Clinton and Shiawassee counties, Cannonsburg State Game Area in Kent County, Petoskey State Park in Emmet County, William Field Memorial Hart-Montague Trail State Park in Muskegon and Oceana counties and Duck Lake State Park in Muskegon County.

Engagement and presentations

A series of SCORP data presentations and engagements with stakeholders have taken place from October 2021 through September 2022. These forums held in virtual or in-person formats include:

Michigan Natural Resources Trust Fund Board (in person)

Outdoor Adventure Center, Detroit Oct. 20, 2021

Michigan Outdoor Recreation Advisory Council (in person)

June 22, 2022 (Ashley Bradshaw and Brad Garmon) Rockford

Eastern Upper Peninsula Regional Planning and Development Commission (virtual presentation, in-person meeting) July 27, 2022

Semi-Wild Resource Committee (Southeast Michigan Council of Governments

Huron-Clinton Metro Parks Authority, City of Detroit, Wayne and Oakland counties) Aug. 23, 2022

Michigan Department of Transportation (virtual)

August 2022 (Ashley Bradshaw) and September 2022 (Lindsay Ross)

Michigan Natural Resources Trust Fund Board (in person)

Bay City Oct. 19, 2022 Public comment period

A draft SCORP was published and made available for public comment from Nov. 10 through Dec. 1. Comments were accepted via email. A total of 71 emails were received through public comment, with some offering more than one suggestion.

All comments were reviewed and considered for updates to the final SCORP. Many of the comments focused on the need for additional amenities like biking and water trails, pickle ball courts and improvements to Wi-Fi and accessibility features.

These comments were forwarded to various applicable DNR divisions for further consideration. Some of the comments focused directly on edits to the draft SCORP. In those instances, proposed edits or updates were considered, and in several cases, incorporated into the final draft.

Appendices and references

Appendix A: Public Recreational Land Maps Appendix B: 2021 Outdoor Recreation Survey Report and Data Appendix C: Net Economic Value White Paper Appendix D: Cost of Health Savings White Paper Appendix E: Public Lands Manager Survey – Complete Appendix F: Diversity and Inclusion Focus Groups Report Appendix G: Emerging Digital Data Sources Pilot Studies





Foundation for funding, platform for partnerships **Michigan.gov/DNR**