



Barriers to Fishing Access for Underserved Anglers

Literature Review and Interview Summary

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Executive Summary

Background

The Great Lakes Fishery Trust is an innovative funding source created in 1996 to compensate Michigan's residents for damages to the Lake Michigan fishery caused by the Ludington Pumped Storage Plant. The fishery trust provides grants to enhance access to shore-based fishing and foster a stewardship mindset in Michigan's residents. The GLFT commissioned a study to summarize and synthesize existing information regarding potential systemic barriers to shore-based fishing. This included an assessment of:

- Demographics of anglers in Michigan relative to the general state demographics
- Drivers of differences between the demographics of anglers and Michigan's population as a whole
- Barriers that exist that prevent demographic groups from angling that would otherwise be interested
- Actions and approaches other recreation funders or practitioners are taking to lessen barriers to natural resources generally or shore-based fishing specifically

Public Sector Consultants (PSC) explored these questions through a review of academic literature and professional reports and conducted qualitative interviews with core constituencies representing recreation managers, recreation funders, and people who fish.

Findings

The review found no single study has been conducted that explores each of these questions for shore-based fishing in Michigan. However, many studies have been conducted that speak to elements of these questions that collectively demonstrate that People of Color (POC) and women are almost certainly underrepresented as a percentage of anglers compared with their share of the general population. The literature review and interviews identified several barriers that contribute to this situation and opportunities to reduce these barriers.

Barriers

A wide range of barriers to fishing access were identified through the literature review and interviews. While these barriers were consistently identified, they should not be viewed as a comprehensive list, but rather as a starting point to enhance understanding among recreation funders and managers of elements that can limit equitable access to fishing and outdoor recreation generally.

- **A perception among historically excluded communities that outdoor recreation is “not for them.”** Interviewees shared that there is sometimes a perception among POC and people with disabilities that outdoor recreation is “not for them,” that it is actually “for able-bodied white men.” This is often attributed to a persistent lack of representation and opportunities for experiences in the natural resources community.
- **Access to information, equipment, and expertise:** Access to information, equipment, and mentors who are representative of historically excluded communities were identified as primary barriers to fishing. Frontline groups shared that these barriers are larger impediments than a lack of physical access to places to fish.

- **Access to places to fish:** While access to places to fish was identified by some respondents as a barrier, it was far more likely to be identified by resource managers than frontline groups. Frontline groups shared that, at the macro level, there is not a shortage of places to go fishing in Michigan—rather, the barriers are more likely to be the availability of those sites relative to where people live, lack of transportation to access sites that are in far-off locations, and site design that can exclude people with disabilities or is unwelcoming through inaccessible or exclusive educational materials onsite.
- **Personal safety:** Data available from a survey of Michigan residents shows POC were significantly more likely to report feeling unsafe because of other people. This data was supported through interviews with representatives of frontline groups who shared members of their demographic groups often do not feel safe in northern or rural Michigan.
- **Water safety:** Many respondents shared that there is disparity among white communities and communities of color when it comes to knowing how to swim. Many interviewees suggested that people who do not know how to swim are far less likely to go fishing, even from improved platforms, because of the associated risks of open water.
- **Systemic barriers:** Many respondents discussed a multitude of systemic barriers present in natural resource management. Respondents believed the demographics of users and managers to be similar—predominantly white and male. Some respondents also viewed the demographics of the natural resource community as not only uninviting, but also reflective only of concerns of people like them. Furthermore, some respondents shared that because management agencies are more responsive to existing users, which largely fund their work through user fees, and existing users are predominantly white and male, the priorities of other demographic groups are more likely to be overlooked, even if it is not the agency’s intent. Finally, the structure of many grant program requirements was identified by some respondents as a barrier to accessing funding that can support investments in under-resourced communities. These conditions culminate in an environment in which the natural resource community and historically excluded communities become “network poor”—lacking strong relationships and robust communications channels.

Actions

The core constituency interviews explored actions that funders and managers have already taken and sought advice from frontline groups on tasks that the recreation management and funding community could take to lessen barriers to equitable access.

- **Grant programming:** Respondents shared their views on elements that can support equitable access through grant programming. Interviewees spoke about layered barriers and the need to take holistic approaches to address multiple barriers because focusing only on one barrier at a time may have limited results. This could include:
 - Investing in mentors who are representative of excluded communities to support their work as fishing ambassadors, making fishing gear accessible, and supporting frontline groups to do their own promotions
 - Prioritizing the development of new fishing access sites where people live and considering the communities that would be served by the site

- Supporting universal design in site development
- Providing technical support when program requirements cannot be made less onerous
- **Engagement:** Respondents discussed the importance of meaningful engagement with historically excluded communities and emphasized the following:
 - Develop meaningful relationships with frontline groups
 - Engage in proactive grantmaking
 - Listen to and empower individuals who are already doing the work
 - Identify intermediaries that can help
- **Organizational change:** Though interviews were focused on fishing access and barriers to recreation, through the conversations, several organizational considerations emerged. While this information is valuable, it does not represent a comprehensive list of actions that organizations should consider to achieve broader organizational change.
 - Sustaining support among institutional leaders
 - Viewing equity as a structural issue for the organization
 - Allocating resources to support DEI goals
 - Updating program priorities, application, and review processes
 - Increasing diversity internally
 - Requiring DEI steps among grantees
 - Monitoring demographic information of applicants and grantees
 - Revising methods of promoting funding opportunities

Of the organizations that had taken greater action to address equity issues associated with their programs, many reflected on their motivations and highlighted that their missions call upon them to serve Michigan's people. These organizations emphasized that their missions would be unfulfilled if they were not serving all residents, and to serve all residents requires recognizing that inequities exist that need to be addressed. Furthermore, some respondents discussed national demographic projections that show the country will become far more diverse in the future. These respondents expressed the concern that if historically excluded communities remain excluded from natural resources and fishing that natural resource management itself would be threatened because user fees are the predominant method of funding resource management. Some went on to discuss how people protect what they care about and if minority communities continue to be excluded, against the backdrop of coming demographic changes, Michigan risks having declining public support for natural resource protection.

Background and Purpose

The mission of the Great Lakes Fishery Trust is to provide funding to enhance, protect, and rehabilitate Great Lakes fishery resources. Created to compensate Michigan residents for the lost use and enjoyment of fisheries resources of Lake Michigan resulting from the operation of the Ludington Pumped Storage Plant, the GLFT provides grants in the areas of fisheries research, habitat restoration, Great Lakes stewardship, and access to the fishery. The fishery trust's Access grants are generally focused around enabling anglers to fish from developed onshore sites, such as piers or platforms, and the program prioritizes building access points in areas where there is a high demand for fishing sites or an overall lack of public access.

The GLFT hired Public Sector Consultants to assess barriers to shore-based angling access to support the GLFT's diversity, equity, and inclusion goals. The assessment's purpose is to ground the GLFT's understanding of the barriers to equitable access and work previously completed by other organizations to inform the GLFT's future activities. The landscape assessment included two primary components: a literature review and core constituency interviews.

Literature Review

The literature review drew on several sources, including reports previously shared with the GLFT, Google Scholar searches, and searches of relevant sources' references in academic and gray literature. Due to the breadth of existing studies, it is possible that some sources may be excluded from this report. However, the sources used represent relevant available data and provide a comprehensive picture of current angler demographic characteristics and barriers to shore-based angling.

PSC researchers experienced limitations in the comparability of data among sources. Data from State Comprehensive Outdoor Recreation Plans (SCORPs) was used to study Michigan angler demographics; however, the 2017 and 2022 SCORPs were conducted using different methodologies, making comparison difficult. Data on anglers nationally is available on an annual basis through the *Special Report on Fishing*, published by the Recreational Boating and Fishing Foundation and The Outdoor Foundation, but the data reported varied slightly between 2017 and 2022 as well. Other studies of anglers, including those in academic literature, may not be comparable in time or geography. Due to these differences, there may be uncertainty around data implications, especially among older studies or studies that took place outside of Michigan. However, few studies of angler demographics and motivations are available nationally or in Michigan. By presenting the results of the available studies, the GLFT will have the best available information to inform the discussion of equity in access.

Longitudinal reporting on the demographics and motivations of Michigan anglers would have been ideal for this project, but there have been no studies of this kind. Using underlying survey data collected during the firm's initial research that informed Michigan's 2017 SCORP, PSC was able to draw demographic conclusions that were not described in the 2017 SCORP. The 2017 SCORP survey was designed to be demographically and regionally representative of the state, allowing the results to be projected out over the population of Michigan rather than only providing information about the people who took the survey. Inevitably, all surveys have some limitations that may skew results; however, the methods used represented the best available at the time and are considered reliable for understanding trends in Michigan residents' recreation preferences and experiences.

Findings

Research findings clustered in three areas: angler demographics (nationally and in Michigan), angler motivations and preferences, and barriers to angling or other outdoor recreation.

Angler Demographics

Several studies have investigated angler demographics, both within Michigan and across the United States. Because Michigan does not collect information on race or disability with its fishing license sales, those trends in fishing participation must be inferred from national survey data, Michigan demographic trends, and SCORP survey data. Michigan does collect age, gender, and location data with fishing license sales, and much of these data reflect national trends. Exhibit 1 shows selected demographic information nationally and for Michigan and how those compare to the angling population. These trends are explored further in the sections that follow.

EXHIBIT 1. Angler Demographics

	Percentage of National Population (2017)	Percentage of National Anglers (2017)	Percentage of Michigan Population (2017)	Percentage of Michigan Anglers (2017)
Asian	5.6	4	3.1	0.9
Black	12.7	7.7	13.8	4.9
Hispanic/Latinx	18.1	8.2	5.1	1.7
Native American	0.8	Not reported	0.53	2.7
White	72.3	77.9	78.4	83.5

Sources: U.S. Census Bureau 2017a; U.S. Census Bureau 2017b; Recreational Boating and Fishing Foundation and the Outdoor Foundation 2017; PSC analysis

National Demographics

Nationally, POC and women are less likely to fish than white men. These are long-standing trends, though women's participation has increased significantly over the past decade and stood at 37 percent of the angling population in 2022 (Recreational Boating and Fishing Foundation and The Outdoor Foundation 2022). In that same year, anglers represented 17 percent of the national population, and of this group, 79 percent were non-Hispanic white, 9 percent were Hispanic, 8 percent were Black, and 3 percent were Asian. About a quarter of anglers were over age 55 and another quarter were under age 17. The 2022 *Special Report on Fishing* also surveyed those non-anglers who were considering fishing and found that women, while representing 37 percent of anglers, represented 47 percent of interested non-anglers. Black interested non-anglers were also overrepresented relative to their share of the angling population, at 12 percent versus 8 percent (Recreational Boating and Fishing Foundation and The Outdoor Foundation 2022).

Michigan Demographics

A temporal analysis of Michigan fishing license data available from 2000 through 2014 showed total angling participation hovering between about 11.5 percent and about 12.7 percent of the population (Michigan Technological University n.d.). This analysis represents the most comprehensive demographic study readily available of people who purchased fishing licenses in Michigan. While the Michigan Department of Natural Resources (DNR) has more recent license data available, no comprehensive analysis has been conducted. Participation varied widely among counties, with inland, urbanized, and southern counties generally having lower rates of participation than coastal, rural, and northern counties. For example, 9.7 percent of men in Washtenaw County held fishing licenses in 2014, while almost 54 percent of men in Montmorency County held fishing licenses in the same year (Michigan Technological University n.d.). Between about 3.7 and about 4.9 percent of women in Michigan fished between 2000 and 2014, compared to about 18.8 and 21 percent of men. However, men's participation in fishing dropped by about 3 percent between 2009 and 2011, while women's participation declined by only about half a percentage point in the same time period. In 2014, the final year of the study, women made up about 20 percent of anglers in Michigan (Michigan Technological University n.d.).

A DNR report on angler demographics from 1995 to 2004 already showed aging trends in the Michigan angler population and found that fewer younger anglers were being recruited into the sport. The retention rate for teenaged anglers was 45 percent in 2003–2004, while retention rates for older adults were about 67 percent in the same years (Dann et al. 2008).

The 2017 Michigan SCORP survey data provide a window into the racial demographics of anglers in the state. The survey suggests that, of all Michiganders who said they fished at least once in 2016:

- 83.5 percent were white
- 4.9 percent were Black
- 1.7 percent were Latinx
- 2.7 percent were Native American

Looking at participation within each demographic group, instead of across groups as above, gives a slightly different picture of who reported going fishing in Michigan. About 47.5 percent of all white Michiganders reported going fishing at least once during the previous year, compared to 42 percent of Native American Michiganders, 32.4 percent of Latinx Michiganders, 22 percent of Asian Michiganders, and 21.4 percent of Black Michiganders. One challenge with surveys conducted for SCORPs is they sometimes better identify the recreation aspirations of residents than actual user rates. These figures likely better represent the demographics of Michigan residents who are interested in fishing than those who purchased fishing licenses because there is substantial variation in these figures and actual sales of fishing licenses.

It is important to note that the three studies cited on Michigan anglers predate the COVID-19 pandemic, which saw an increase in outdoor activities of all kinds. However, data from the *2022 Special Report on Fishing* suggest that this increase may be temporary, showing 2022 angling participation rates declining back to 2020 levels from their high in 2021 (Recreational Boating and Fishing Foundation and The Outdoor Foundation 2022). However, current data still show several key insights regarding likely demographics of Michigan anglers.

First, anglers in Michigan are more likely to be white than in the nation as a whole. To some extent, this reflects Michigan's population, which has a higher proportion of white residents than the U.S., but some data suggest that anglers of color are underrepresented even compared to their percentage of the Michigan population. For example, the SCORP showed a Black angling participation rate of more than 2.5 percent below the national rate, despite the proportion of Michigan's Black population being larger than in the U.S.'s as a whole. In addition, demographic trends in Michigan's counties suggest that counties with higher percentages of white residents have higher fishing participation rates, with the lowest fishing participation rates found in urbanized counties in the southeast, which have higher percentages of residents of color. Second, anglers in Michigan are aging. While many still pursue fishing into their retirement years, it may become more physically difficult for them to do so as they get older, and accessible options could become increasingly important (Valdez et al. 2019). Finally, there are likely relatively large populations of women and people who are Black in Michigan who are interested in fishing but do not fish.

Angler Motivations and Preferences

A few studies have examined racial and gender differences in angler motivations and preferences. While these studies are geographically limited, they suggest that different demographic groups of anglers may fish for different reasons and in different environments. For example, one team of researchers found that anglers who preferred developed fishing sites (such as platforms and walkways) were more likely to be nonwhite minorities, female, and older than the general fishing population, whereas white, male, and younger anglers preferred undeveloped sites (Valdez et al. 2019). Another study found that white anglers were more likely than those of other races to value being in nature and escaping stress as a part of their fishing experience (Hunt and Ditton 2001). Black male anglers in one study were more motivated by catching many fish, catching large fish, and keeping the fish they caught than their white male counterparts, and nonwhite anglers in another study harvested more of the fish they caught compared to white anglers (Hunt, Floyd, and Ditton 2007; Roop, Poudyal, and Jennings 2021). Women were more likely to harvest the fish they caught than men and were more likely than men to cite fishing for food as a motivation (Schroeder et al. 2006). Most anglers reported fishing in small groups with friends or family, but POC and women were especially likely to cite the social benefits of fishing as a motivation (Recreational Boating and Fishing Foundation and The Outdoor Foundation 2022; Hunt and Ditton 2002; Schroeder et al. 2008; Kuehn, Dawson, and Hoffman 2006).

Barriers to Angling Participation

Research showed anglers of color and female anglers often faced different barriers to fishing than white men, and for anglers of color, discrimination and safety were concerns. Pollution was also a concern in some areas, which is especially important in light of the fact that anglers of color were more likely to harvest the fish they caught (Schroeder et al. 2008; Beehler, McGuinness, and Vena 2001).

The National Park Service surveyed park users and nonusers in 2018 in a study focused on racial and ethnic diversity in the national parks. They discovered several barriers to park visitation that were more prevalent among POC than white populations. Black and Hispanic nonvisitors were more likely than white nonvisitors to agree that "there aren't good transportation options for me to get to a national park," "I don't share the same interests as people who visit national parks," and "national parks are unpleasant places for me to be" (National Park Service 2019). Similarly, the 2022 SCORP found that lack of equity

and inclusion, racism and discrimination, and safety were the top barriers preventing POC from participating more in outdoor recreation (Michigan Department of Natural Resources 2022).

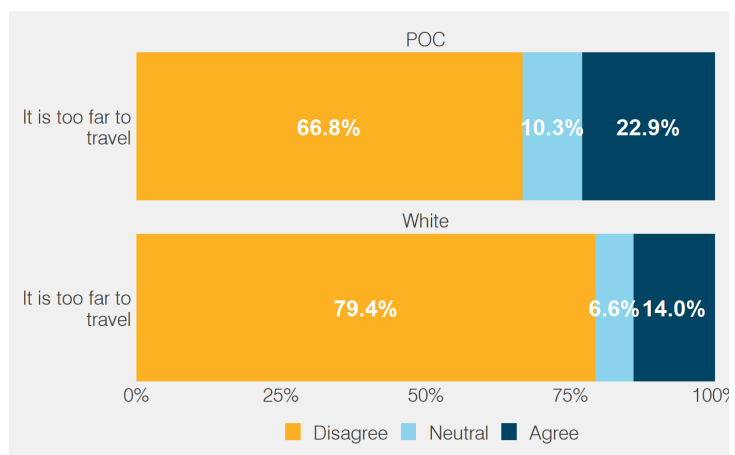
2017 SCORP

The 2017 SCORP survey asked participants about a broad range of barriers to outdoor recreation. Answers to some of these questions reflected the geography of Michigan, perceptions of being safe and welcome, and disability status. Interviewers asked respondents if they agreed or disagreed with each statement about why they did not participate more in outdoor recreation. Responses to several of those statements are shown in Exhibits 2 through 5. In each case, the differences in response types between groups shown are statistically significant.

Distance to Recreation Areas

POC reported distance as a barrier to outdoor recreation more frequently than white respondents (Exhibit 2). This difference could have been due to the fact that rural areas in Michigan have higher percentages of white residents who live closer to outdoor amenities, like public land, that are more common in rural areas. It could also show disparities in recreational access between majority-white and majority-POC urban areas.

EXHIBIT 2. Distance as a Barrier to Participation in Outdoor Recreation

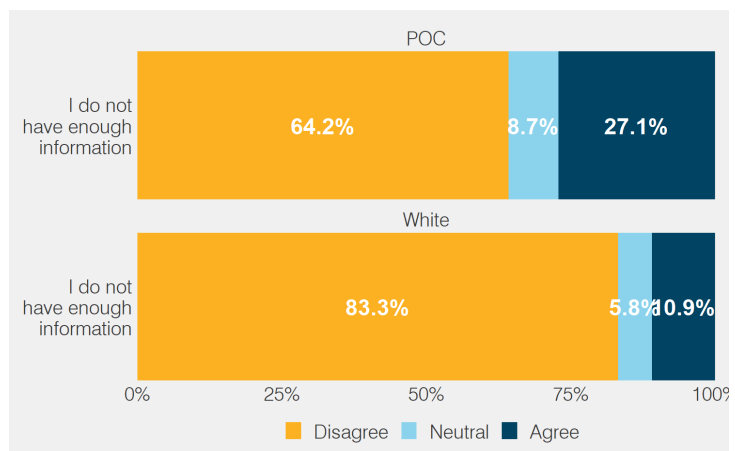


N = 358 POC; 1,192 white

Access to Information

POC also reported lacking information about outdoor recreation at higher rates than white respondents, including information such as where to go fishing, license requirements, or how to fish (Exhibit 3).

EXHIBIT 3. Information as a Barrier to Outdoor Recreation

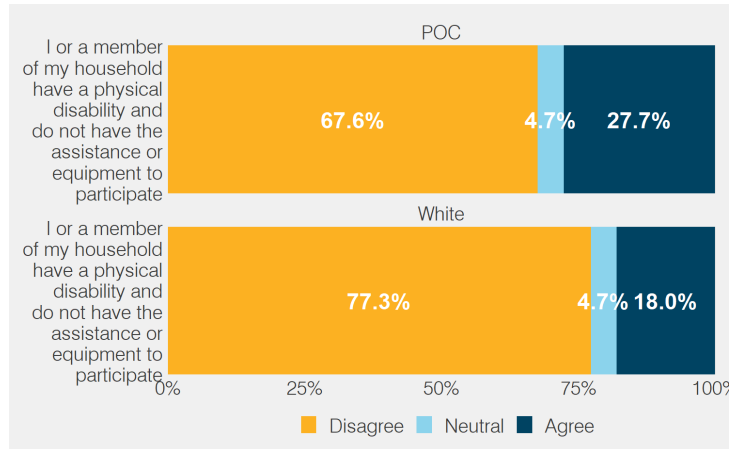


N = 358 POC; 1,192 white

Physical Disability

Over a quarter of POC cited physical disability as a barrier to engaging in more outdoor recreation (Exhibit 4). Disability can make it harder to get into the outdoors at all and can be exacerbated by a lack of universally accessible design in outdoor amenities and information about where universally accessible amenities are located.

EXHIBIT 4. Disability as a Barrier to Outdoor Recreation

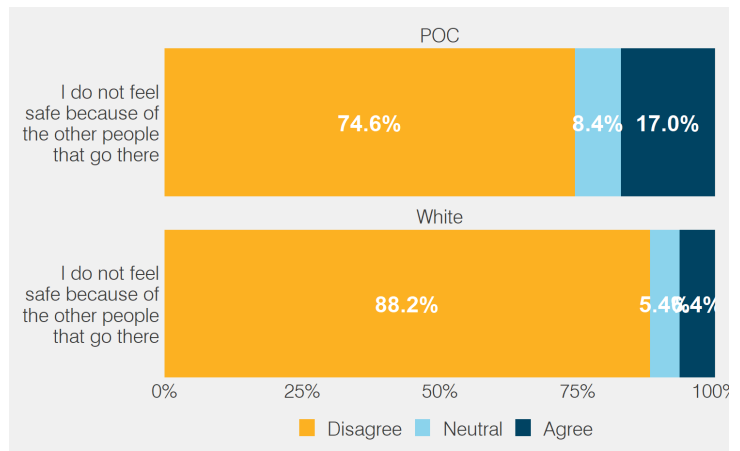


N = 358 POC; 1,192 white

Physical Safety and Feeling Welcome

Finally, while the majority of POC and white respondents reported feeling safe in outdoor spaces, POC were significantly more likely to report feeling unsafe because of other people (Exhibit 5). When broken down by gender, women of color were the most likely to feel unsafe, at 17.4 percent agreement, followed by men of color at 15.9 percent agreement, white women at 7 percent agreement, and white men at 5.6 percent agreement. The survey also included a statement about feeling unwelcome or uncomfortable, with similar results.

EXHIBIT 5. Safety as a Barrier to Outdoor Recreation



N = 358 POC; 1,192 white

Key Takeaways from Literature Review

The literature review suggests that POC and women are almost certainly underrepresented as a percentage of anglers compared with their share of the general population in Michigan. While this review cannot come to definitive conclusions about why, it uncovers some contributing factors: differences in angling values, differences in geography and transportation options, differences in information availability, and differences in the perception of safety in outdoor spaces. Women of color are particularly likely to feel unsafe engaging in outdoor recreation, reflecting their status as marginalized both according to race and gender. While much of the data and literature cited focuses on outdoor recreation generally instead of fishing in particular, there is little reason to believe that fishing is substantially different from other activities in terms of the barriers that would-be participants might face.

Core Constituency Interviews

Building off and expanding upon the literature review, PSC conducted ten qualitative interviews with people representative of core constituencies of recreation managers, recreation funders, and people who fish, to better understand:

- Barriers to equitable access to fishing opportunities specifically, and outdoor recreation generally
- What actions other entities have taken to address these barriers
- What frontline representatives feel should be done to reduce barriers

To enable a more candid discussion, the interviews were treated as confidential, such that responses were not attributed to an individual. After completing the interviews, PSC analyzed the results to identify common perspectives and relevant points of consideration. The GLFT-PSC team is grateful to the following individuals who participated in the interviews and provided their time and talent to support this work. The interview guide is provided in Appendix A.

- Artina Carter, Chief of Diversity, Equity, and Inclusion, Huron Clinton Metroparks
- Brad Garmon, Director, Office of Outdoor Recreation Industry, Michigan Economic Development Corporation
- Dan Lord, Assistant Division Chief, Finance and Operations Division, Michigan Department of Natural Resources
- Bob Lukens, Community Development Director, Muskegon County
- Joel Lynch, Chief of State and Local Assistance Program Division, National Park Service
- Scott Norris, Chair, Accessibility Advisory Council to the Michigan Department of Natural Resources
- Tina Nowakowski, Director of Communication and Strategic Partnerships, Michigan Parks and Recreation Association
- Mark Van Putten, (retired) Chief Executive Officer, Wege Foundation
- Tepfirah Rushdan, Founder; Djenaba Ali, Co-chair, Black to the Land Coalition
- Sergio Cira Reyes, Founder, Latino Outdoors—Grand Rapids

Most interviewees had limited familiarity with the GLFT and provided comments geared toward fishing access and outdoor recreation as well as recreation management and funding generally rather than having specific views about the GLFT. The GLFT should be mindful in interpreting these results to recognize that it is a limited sample and respondents spoke from their own experiences. While the results are

informative and trends emerged that have the potential to inform programming and operations, the GLFT should recognize that the individuals who participated in the interviews are not representative of entire demographic groups. The information provided should prompt further reflection by the GLFT and support ongoing engagement with core constituencies to determine which actions the GLFT may prioritize to advance its goals of better supporting equitable fishing access.

Interview Themes

Throughout the interviews, several themes emerged around respondents' motivations to sustain organizational change, observed barriers to fishing access, and actions that have or could be taken to lessen those barriers, which are summarized below.

Motivations for Change

- **Unfulfilled missions:** Multiple respondents representing other funders and government agencies reflected on their respective missions, all of which revolve around serving the people of Michigan, a smaller region of the state, or in the case of the National Park Service, the country. The organizations that have taken larger steps toward addressing inequity in their programs believed that their missions would be unfulfilled if they aren't serving *all residents*, and serving *all residents* requires a recognition of inequities that exist, followed by a commitment and meaningful action to address those inequities.
- **Changing demographics:** Some respondents also highlighted demographic projections that show nationally the proportion of white, non-Hispanic people will be less than 50 percent of the population by 2050. As of 2022, this trend already became true for children—for the first time, the proportion of white, non-Hispanic children was less than half of the population of all children in the country (U.S. Census Bureau 2023a; U.S. Census Bureau 2023b; U.S. Census Bureau 2023c). For these interviewees, these projections underscore the need for natural resource management to be inclusive to serve all people. Furthermore, with this demographic shift, some respondents noted that protection of and funding for natural resources could be threatened as the dominant user base (white men) declines, given that natural resource management is predominantly funded by user fees in Michigan.

Barriers to Equitable Access

A wide range of barriers were identified by respondents, and as one interviewee shared, “there are too many barriers to hold them all in your mind,” with that perspective, the following summary should be viewed as a starting point for consideration and does not represent an exhaustive list of all barriers that should be considered.

- **A perception among historically excluded communities that outdoor recreation is “not for them.”** The interviewees, particularly those directly representing historically excluded communities, shared that there is sometimes a perception among POC and people with disabilities that outdoor recreation is “not for them.” Rather, outdoor recreation is “for” able-bodied, well-off white people, particularly men. Because of these cultural connotations, there can be fewer entry points into outdoor recreation. This is exacerbated by the overall lack of representation within the fishing and natural resources community. For communities outside of the white male demographic

group, the lack of representation in leadership roles within institutions, and in programming and outreach activities is uninviting to other groups. Similarly, even the language around “outdoor recreation” can be limiting—excluded communities may not identify as “outdoors people” or “outdoor recreationists” but may share that they enjoy being outside.

- **Access to information:** Many of the interviewees shared that the greatest barrier to fishing access is having access to information in an easy-to-use, culturally competent way. This included:
 - Where to go fishing
 - How to purchase licenses
 - How to follow regulations
 - What fish are safe to eat and in what amounts

Many interviewees noted that while information is available on government websites, it can be difficult to find and navigate, and the information is not conveyed in a way that is representative or inviting to underrepresented communities, which can contribute to the feeling that individuals in these communities are unwelcome.

- **Access to expertise:** Throughout the interviews, respondents shared that fishing is a more technical pursuit compared to other forms of recreation and requires some specialized knowledge to be successful. For underrepresented groups, even for those who are interested in fishing, there is often not access to expertise that is reflective of the community. Without a mentor who is representative of the community, underrepresented groups indicated that they can feel unwelcome, furthering the notion that fishing and outdoor recreation are “not for them.”
- **Access to equipment:** Many respondents discussed the high cost of entry for fishing for a person interested in trying the activity for the first time. While people may be interested, buying the equipment can be a significant barrier for those who are not sure that they will continue with the sport.
- **Access to places to fish:** Throughout the conversations, respondents talked about barriers to accessing places to fish and focused on three themes: location/availability of sites, transportation to sites, and site design.
 - **Location/availability of sites:** Representatives from frontline community groups shared their perspective that there is an ample supply of places to go fishing and that the greater barriers are not having information of where to fish, knowledge of how to fish, and the equipment to do so. Recreation managers, however, were much more likely to identify the need to develop more public access and focus that investment where people live. Notably, many of the fishing locations that frontline representatives in southeastern Michigan said they do enjoy were funded by the GLFT, including Belle Isle, Milliken State Park, and the International Wildlife Refuge.
 - **Transportation to sites:** Transportation was routinely identified as a barrier to equitable access. Many interviewees shared that some people do not have the resources to travel within their own region, let alone across the state to the Lake Michigan basin, to go fishing.
 - **Site design:** The physical design of sites can also shape the relative accessibility of fishing opportunities. Respondents discussed the need for sites that embrace universal design principles, culturally competent signage and onsite educational messaging. Respondents also shared that multiple-language signage can be a positive action but multiple language signage absent other

holistic approaches may have limited results. For example, developing multiple-language signage may address one barrier, but if people still lack access to mentors and fishing equipment they still face barriers and may continue to be unlikely to fish.

- **Personal safety:** Representatives of frontline groups shared that many people within their communities do not feel safe or welcome in northern and rural Michigan. When focusing their actions on introducing more POC to outdoor recreation activities, frontline leaders shared that they generally hold large events to achieve safety in numbers and often stay within more urbanized areas.
- **Water safety:** Many respondents, including frontline groups, funders, and managers, shared that there is a high degree of disparity between white people and communities of color in the proportion of the population that knows how to swim. Furthermore, these respondents believed that people who do not know how to swim are generally less willing to fish, even from shore or improved platforms, because of the associated risks from open water.
- **Systemic barriers:** Respondents noted that there are many systemic barriers embedded within the institutions that support outdoor recreation in Michigan. For example:
 - Michigan’s predominant system of recreation funding is largely driven by existing users, which may create a more insular community. Significant portions of conservation and recreation funding in Michigan are driven by user fees, as a result, respondents felt the focus of the DNR often caters to those users rather than those who do not currently participate.
 - Many respondents discussed the legislative and programmatic requirements associated with private, state, and federal funding sources, noting that they may be well intentioned but can create barriers for under-resourced communities. Examples identified include match requirements, development of a five-year recreation plan to be eligible to receive funding, and long-term maintenance requirements. Furthermore, the “pre-work” necessary to compete in those programs, such as community engagement, planning processes, engineering and design, grant writing, etc., is often beyond the reach of communities with fewer resources. Respondents observed that these requirements often result in wealthier, predominantly white communities that can afford these tools and services receiving a disproportionate amount of recreation investment.
 - Some respondents also highlighted the insular nature of the natural resources community can result in an environment where underrepresented communities and those in leadership positions in natural resources management are “network poor” with each other. Because of the barriers described above, there are not well-established pathways between excluded communities and structurally advantaged groups, exacerbating the challenges of removing the barriers.

Actions

Throughout the course of the interviews, PSC explored actions that funders and managers have already taken and sought feedback from frontline groups on tasks the recreation management and funding community could consider to reduce barriers to equitable access. Potential action areas fell into three general themes: grant programming, engagement with core constituencies, and organizational change.

Grant Programming

Respondents discussed the following actions that could be taken within grant programs focused on fishing access.

- **Take a holistic approach to lessen barriers.** As one respondent shared, “the first barrier is identity (people like me don’t fish), the second barrier is information (I don’t know where or how to fish), then the third barrier is equipment (I don’t have the stuff I need to fish), and the fourth barrier is visibility (you need to promote the experience).” This respondent went on to share that strategies that seek to reduce barriers need to address each of those components and strategies that address only one of them will have limited success. In their words, “organize rather than advertise.”
 - **Invest in mentors that are representative of excluded communities.** Many respondents discussed the importance of cultivating and supporting mentors that are reflective of excluded groups and supporting their work to lead fishing education experiences.
 - **Invest in programs that make fishing gear accessible.** Respondents discussed the potential benefits of establishing fishing gear libraries at public access sites in tandem with expanding systems to let people buy or receive a free fishing license at high-use recreation sites. Furthermore, respondents discussed the benefits of providing fishing gear that people can keep as part of educational events.
 - **Provide funding to frontline groups to do their own promotions.** Some respondents from frontline groups talked about the importance of using social media to promote their activities and through imagery show people enjoying outdoor recreation to help address identity barriers.
- **Prioritize development of fishing access where people live and consider the communities that would be served by the site.** Many respondents discussed the importance of bringing recreation amenities and educational activities to people by investing close to home rather than bringing people to recreation amenities by investing in locations far from where people live.
- Some respondents encouraged funders and recreation managers to include an assessment of which populations would be served when investing in new fishing access sites. For example, assessing whether the site will serve a community with high rates of people with disabilities or people who historically lack access to fishing opportunities.
- **Support universal design in site development.** Many respondents discussed the importance of embracing universal design in site development to expand the accessibility of recreation amenities to more people. This included physical design and educational materials installed onsite.
- **Support culturally competent outreach and educational strategies.** Some respondents shared their view that government agencies are often not effective communicators with the public in general or excluded communities specifically. These interviewees discussed the potential benefits of investing in more inclusive and culturally competent outreach and education strategies, potentially by nongovernmental organizations.
- **Provide technical support when program requirements cannot be made less onerous.** Some respondents noted that traditional funding sources that support investments in recreation amenities, such as the Michigan Natural Resources Trust Fund, the Recreation Passport Grant

Program, and the GLFT's Access to the Great Lakes Fishery, require a certain level of capacity necessary to complete the "pre-work" to be able to submit a proposal that is funded and successfully administer it. Some respondents discussed the potential opportunities of providing access to technical support and funding early-stage project planning work to increase access in communities with fewer resources that traditionally do not receive grant funding.

Engagement

Respondents discussed several elements related to engagement with excluded communities that could help reduce barriers.

- **Develop meaningful relationships with frontline groups.** Several respondents talked about the importance of relationship building with communities and leaders that funders and managers seek to serve. Respondents recognized the convening power of funders which can be leveraged to build relationships and community between and among frontline groups, funders, and recreation managers.
- **Engage in proactive grantmaking.** Many respondents discussed the importance of proactive grantmaking to excluded groups by soliciting proposals from groups that are already engaged in the work. This step recognizes that many of these groups are network poor and may feel unwelcomed in the more traditional natural resources and funding community.
- **Listen to and empower individuals who are already doing the work.** Interviewees highlighted that there are already people from excluded groups that are serving as mentors and ambassadors for fishing and outdoor activities and discussed the potential benefits of providing funding to support their work.
- **Identify intermediaries that can help.** Some respondents noted that some industry associations and companies within the recreation industry have already taken greater action than government institutions to advance equity goals and suggested that there may be opportunities to partner with these entities.

Organizational

The interviews focused on fishing access and barriers to recreation; however, a number of organizational considerations emerged in conversation. While this information is valuable, it may not represent a comprehensive list of actions organizations should consider to achieve broader organizational change.

- **Sustain support among institutional leaders.** Organizations that have taken greater action to achieve equitable outcomes shared the importance of support and direction from internal leaders, particularly among executives and board members.
- **View equity as a structural issue for the organization.** Respondents representing groups that have taken greater action to achieve equitable outcomes discussed the importance of recognizing that diversity, equity, and inclusion (DEI) goals are a pervasive structural concern for the organization that requires proactive attention to achieve progress.

- **Allocate resources to support DEI goals.** The organizations that have taken greater action to achieve equitable outcomes discussed the importance of allocating significant resources in terms of staff and board member time and money to engage in efforts that result in meaningful organizational change. These efforts can include reviewing and revising policies and practices, enhancing engagement efforts, and engaging consultants to support the processes.
- **Update program priorities, applications, and review processes.** Respondents discussed the importance of reviewing program priorities and policies, applications, and review processes to reflect more equitable and inclusive outcomes. As one example, multiple interviewees discussed grant opportunities that apply the same processes to grants of all sizes rather than scaling requirements based on the size of the grant. As one funder stated, “we are starting to ask the question of what can we do less of.”
- **Increase diversity internally:** Respondents discussed the importance of monitoring and increasing diversity within the organization, including board, advisory and review groups, and staff.
- **Require DEI steps among grantees:** Some funders and managers shared that they require grantees to have DEI policies and have provided grants to organizations to develop these policies. Additionally, some funders have required applicant organizations to include DEI plans in all grant applications. Notably, some respondents also aired concern that such requirements create a new barrier that may skew funding to higher-capacity organizations that have the resources to develop these plans and policies and may further result in decreasing funding to groups where DEI elements are inherent in their work even if they have not articulated it through written policies.
- **Monitor demographic information of applicants and grantees.** Some respondents shared that they require grantees to provide demographic information as part of the application so that performance as a funder can be monitored.
- **Revise methods of promoting funding opportunities.** Multiple respondents discussed the importance of reviewing the methods and mediums through which funding opportunities are promoted to ensure they are available, inviting, and culturally competent to excluded communities.

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Appendix A: Interview Guide

The Great Lakes Fishery Trust (GLFT) provides funding to enhance, protect, and rehabilitate Great Lakes fishery resources. Staffed by Public Sector consultants and established by settlement agreement to compensate for the loss of fish from the Ludington Pumped Storage Plant on Lake Michigan, the trust primarily focuses on funding projects in the Lake Michigan basin. Among other priorities, we fund projects to help people access fishing sites on the Great Lakes or their connecting waters and to educate K–12 students on fishing and Great Lakes stewardship. Together, we budget about \$500,000 every year toward these two programs. We have recently begun a project to help better understand barriers to fishing among underserved and marginalized communities and are exploring actions the GLFT could take to begin to address some of those barriers.

As part of that research, we are conducting interviews with funders, management agencies, and stakeholder groups to discuss their perspectives on these barriers and related initiatives. The results of these interviews, in addition to other research, will be presented in a report to GLFT leadership. We will maintain confidentiality throughout the interview and reporting process, and will not attribute statements made in the interviews to an individual without that person's permission.

Questions for Frontline Groups

1. To help ground our discussion, would you tell us about what your organization does?
2. What is your role at your organization?
3. From your research or your experience, what barriers do you see to participation in fishing or other outdoor recreation for People of Color, women, people with disabilities, and other underserved populations?
4. What do you think funders or recreation management agencies should do to address or mitigate those barriers?
5. From your research or your experience, what are funders or management agencies like the Department of Natural Resources or your county parks organization doing to address barriers to outdoor recreation for underserved communities?
6. Which of those initiatives have been particularly successful or unsuccessful? Why?
7. What obstacles have you or your organization experienced when advocating to include underserved communities in outdoor recreation?
8. Is there anything else you think we should know?

Questions for Funders and Agencies

1. To help ground our discussion, would you tell us about what your organization does?
2. What is your role at your organization?
3. From your research or your experience, what barriers does your organization recognize to participation in fishing or other outdoor recreation for People of Color, women, people with disabilities, or other underserved populations?
4. What is your organization doing to address or mitigate those barriers?
5. What motivated your organization to take those steps?
6. What obstacles has your organization encountered in attempting to address barriers to outdoor recreation for underserved communities?

7. Are there any initiatives that your organization has taken to address barriers to outdoor recreation that have been particularly successful or unsuccessful? Why?
8. What else do you think could be done to address or mitigate those barriers and enable more individuals from underserved communities to take part in fishing or outdoor recreation?
9. Is there anything else you think we should know about your organization's efforts to make outdoor recreation more accessible to underserved populations?



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