



Life After Delisting: Sustaining Environmental Stewardship in Michigan Areas of Concern

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April 2019

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by

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A practicum submitted
in partial fulfillment of the requirements
for the degree of
Master of Science
(University of Michigan, School for Environment and Sustainability)
April 2019

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ABSTRACT

Michigan's Area of Concern (AOC) program has made great strides in recent years with the influx of Great Lakes Restoration Initiative (GLRI) funding. As delisting increasingly becomes a reality for more AOCs it is imperative to identify from a programmatic perspective how to best prepare communities for long-term success beyond delisting. In recent years, the AOC program has encountered challenges with the speed of change, the program's narrow scope, a lack of long-term planning, and uncertainty about the roles of both the Public Advisory Councils (PACs) and the Michigan Office of the Great Lakes (OGL) moving forward. To address these challenges, this research provides recommendations for how the OGL can support PACs in creating mechanisms to continue the momentum of environmental stewardship up to and beyond delisting. The findings of this research and subsequent recommendations are a result of semi-structured interviews with PAC members from Michigan's 12 current and two delisted AOCs. This report, which is both informed directly by the voices of PAC members and considers the AOC program landscape across the entire state of Michigan, provides a comprehensive set of program-wide recommendations to the OGL.

Recommendations to the OGL include: (1) Facilitate dedicated "life after delisting" meetings with PACs, (2) Develop long-term delisting frameworks, (3) Create communication strategies intended to change negative public perceptions of the water bodies, (4) Increase OGL staff presence at PAC meetings, (5) Support PACs in building fundraising capacity, (6) Support local champions within PACs, (7) Assist PACs in developing a network of partners, (8) Institute a phased approach to delisting, and (9) Prioritize projects with potential for broader economic and social impact. Through the implementation of these recommendations, the PACs will be better positioned to sustain environmental stewardship and related community revitalization. This set of recommendations is applicable to other government programs wishing to integrate community perspectives and increase the durability of programmatic outcomes.

ACKNOWLEDGEMENTS

We acknowledge that this report is a result of the collaboration with, and support from, many mentors, colleagues, and friends. We would first like to thank our advisor Dr. Paul Seelbach whose passion for water systems in the Great Lakes basin is infallible. Thank you for sharing your academic and state government perspectives, pushing us to think about the complexities of the AOC program, and staying an involved advisor throughout the research process. Next, thank you to Dr. Julia Wondolleck for your integral role in our project in sharing your social science research expertise. You generously committed your time in guiding our research framework, providing feedback on each iteration of our report, and building our understanding of collaborative governance.

We are deeply appreciative for the financial support that enabled this research to be conducted. Thank you to the U.S. Environmental Protection Agency's (EPA) Great Lakes National Program Office for providing critical funding through the Great Lakes Restoration Act funds, which was administered by the Michigan Office of the Great Lakes (OGL). Additionally, we would like to thank the University of Michigan School for Environment and Sustainability (SEAS) for providing us with additional funding and rich course offerings, both of which contributed greatly to our research.

We also would like to thank the AOC staff at the Michigan OGL for proposing this project and engaging with us throughout the process. Thank you to Jon Allan for sharing your visions for the future of the Great Lakes with us, Rick Hobrila for sharing your knowledge and guiding our research, and AOC Coordinators Jennifer Tewkesbury, Melanie Foose, John Riley, and Stephanie Swart, for your openness to think critically, engage in discussion, and receive feedback about the AOC program. We were inspired by the dedication, passion, and expertise among the entire staff. Thank you for the important work you do every day and being so great to work with!

We are appreciative of Matt Doss from the Great Lakes Commission, for your consistent engagement during our research process. Your keen insight regarding the historical aspects of the AOC program, and knowledge of the various PACs enriched our overall understanding of the program and helped strengthen our analysis. Thank you to Drs. Joel Hoffman and Katie Williams from the U.S. EPA Mid-Continent Ecology Division for your insight into the AOC program. Your perspectives deepened our understanding of the community revitalization that has resulted from the AOC program. Our parallel researcher and SEAS student, Allison Voglesong Zejnati, was integral in our understanding of Great Lakes governance. Thank you for sharing your knowledge and guiding us throughout the entirety of the project. Your puns kept us smiling.

We are deeply grateful to all of the Public Advisory Council members from Michigan’s 14 Areas of Concern who took time to give us tours, sit for interviews, and share with us their deep knowledge of the AOC program. It was a privilege to meet all of you and hear about your strong commitment to better your communities. We are heartened and inspired to see the many people working together to protect the Great Lakes throughout Michigan. This research would not have been possible without your warm welcomes and openness to speak with us.

Lastly, we would like to acknowledge the following individuals who enriched our team’s understanding of the AOC program during the research process: Dr. Gail Krantzberg, Dr. John Hartig, Dr. Richard Norton, Jennifer Grieser, Timothy Bruno, Dr. James Grazio, and Jon Gee.

ACRONYMS

AOC	Area of Concern
BUI	Beneficial Use Impairment
EPA	Environmental Protection Agency
GLFP	Great Lakes Futures Project
GLRI	Great Lakes Restoration Initiative
GLWQA	Great Lakes Water Quality Agreement
IJC	International Joint Commission
OGI	The Office of the Great Lakes
NOAA	National Oceanic and Atmospheric Administration
PAC	Public Advisory Council
SPAC	Statewide Public Advisory Council
RAP	Remedial Action Plan
USPC	United States Policy Committee

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Chapter 1 – Introduction





1 - INTRODUCTION

This report provides an analysis of the United States Environmental Protection Agency’s (EPA) Great Lakes Areas of Concern (AOC) program for the Michigan Office of the Great Lakes (OGL). Based upon interviews with Public Advisory Council (PAC) members and other relevant stakeholders, this report provides recommendations for how the OGL can support environmental stewardship for AOCs up to and beyond delisting.

The OGL requested this research with the goal of exploring how best to continue the momentum of environmental stewardship from restoring heavily environmentally degraded Michigan AOCs up to and beyond delisting. Recognizing the opportunity to leverage the restoration progress made in AOCs, the OGL was interested in the ways in which they could support the PACs moving forward. Moreover, the OGL saw an important need to hear from the voices of the PAC members to gain valuable insight into their perspective on delisting.

Importance of the Great Lakes

Encapsulating the largest system of freshwater lakes on earth, the Great Lakes represent a vital natural resource to the individuals, institutions, and communities in the region. Its abundant freshwater and majestic biodiversity provide a backbone for the region’s economy, which is centered on recreation, innovation, and transportation. Unfortunately, many of the benefits of today’s Great Lakes economy are a result of historical industry and widespread infrastructure development throughout the 1900s that produced a legacy of significant environmental pollution. The industrial processes and accompanying waste products resulted in contaminated sediment, eutrophication, degradation of benthos, and loss of fish and wildlife habitat throughout the region. During this period, the severity of these challenges culminated in Lake Erie being declared “dead” after eutrophication led to massive fish die offs (Sweeney, 1993; Rafferty et al, 2009). It became clear that if no actions were taken, the lakes would be irreversibly damaged.

Creation of the Areas of Concern Program

The deteriorating environmental conditions of the 1960s and 1970s galvanized a wave of innovative regulatory policies intended to curb the ecological degradation in the Great Lakes region (Friedman et al., 2015). Two such policies, the first Canada-Ontario Agreement and the Clean Water Act, signed in 1971 and 1972 respectively, elevated the imperative to address water quality and resource management priorities on a basin-wide scale (US EPA, 2017). The Great Lakes Water Quality Agreement (IJC, 2012), adopted in 1972, further strengthened the existing

policy by providing a binational commitment between the United States and Canada to “restoring and maintaining the chemical, physical, and biological integrity of the Great Lakes Basin Ecosystem,” while also reaffirming the policies and directives established in the Boundary Waters Treaty of 1909. Amended in 1987, the GLWQA introduced innovative ecosystem approaches in addressing complex, multi-sector natural resource management challenges within the Great Lakes region. The GLWQA expanded upon the previous generation of regulatory policies and pushed the United States and Canada to prioritize more integrated and holistic restoration efforts (Hartig & Vallentyne, 1989).

One approach outlined in the 1987 amendments identified 42 (a 43rd was later added) geographically-defined sites in the Great Lakes Basin as Areas of Concern (IJC, 2012). Throughout the Great Lakes basin, the 43 AOCs span eight U.S. states and one Canadian province, representing "geographic areas designated by the Parties where significant impairment of beneficial uses has occurred as a result of human activities at the local level," as stated in the Annex 1 of the GLWQA 2012 protocol. Encompassing a range of beneficial use impairments (BUI), AOCs embody severely polluted areas with “chemical, physical, or biological” degradation. The AOC program developed from the notion that each site contains at least one BUI that is an extraordinary problem; a problem that is beyond the scope of less contaminated sites within the state. Many of the BUIs are the result of historical pollution legacies that have persisted in the environment, while a smaller number of AOCs experience ongoing pollution and degradation from current activity.

From their original designation in the 1987 GLWQA, “no specific, quantitative criteria for listing or delisting these areas were developed.” Moreover, even with the IJC issuing “general listing and delisting criteria in 1991, and the U.S. Policy Committee issu[ing] general guidance on the process for AOC delisting in 2001,” a continued lack of specificity and cohesive, structured management plan prevented the states and federal government from removing BUIs (USPC, 2001). The programmatic confusion existing in the early years of the AOC program implementation galvanized many PACs in Michigan to develop direct restoration initiatives through remedial action plans (RAP) that focused on reaching benchmarks for success. These restoration initiatives ultimately led to the creation of targets for delisting (Michigan Department of Natural Resources, 2018).

Recognizing the need for a renewed focus on restoring the Great Lakes through a comprehensive and coordinated approach, the Great Lakes states created “priorities” for restoration in the early 2000s, promoting efforts “under a shared, overarching strategy.” These efforts culminated in the Congressional appropriation of additional funds in 2009 to create the Great Lakes Restoration Initiative (GLRI). Emblematic of this increased prioritization to restore the Great Lakes, the GLRI has committed more than \$1 billion since 2010 toward investment in restoration and remediation efforts of AOCs in the Great Lakes region.

Supporting AOCs into the Future

Renewed by GLRI funding, the AOC program has moved closer to delisting more AOCs in Michigan. As this transition approaches, there have been issues with the speed of change as well as the structure of the program prompting the OGL to recognize the need to examine how they can best support the PACs moving forward.

One of the primary impediments to the AOC program's progress is the current structure, which lends itself to short-term thinking and actions. The state is focused on completing the program as it is defined, which promotes a cycle of acquiring money and completing projects. Delisting AOCs through the removal of BUIs is the current goal of both the EPA and the OGL. While removing BUIs is one measure of progress, this perspective does not encourage thinking about long-term outcomes, including how progress on restoration in the watershed will continue after delisting. Viewing success through short-term measures is not unusual for government agency programs; there is pressure to constantly check off boxes to show what has been accomplished. In practice, the success of the program as a whole will require longer-term thinking beyond delisting. The investment made in these communities should be honored by setting up a structure for continued momentum and success.

An emphasis on short-term thinking also leads agencies to overlook the broader community effects of the AOC program. Short-term planning lends itself to a focus on cleaning up solely within the boundaries of the AOC. While important to fulfilling the programmatic requirements, the benefits of the program also affect communities as a whole. A 2018 report by the Great Lakes Commission shows the impact that investing in Michigan coastal communities has with a three-to-one return on every federal government dollar spent (University of Michigan Research Seminar in Quantitative Economics, 2018). While AOCs exist at two scales, one within the boundaries of the actual AOC and the other at the broader community scale, only the former is given time and attention. The AOC program has lacked a focus on the broader communal effects. This has, in part, arisen out of uncertainty in how to approach AOCs that vary in demographics, values, scales of pollution, and geography. While vital to consider, a more cohesive programmatic perspective is warranted.

The speed with which change has occurred following the influx of GLRI funding has also led to uncertainty regarding future roles of both OGL and the PACs. There is uncertainty within OGL about what support role, if any, they should have once an AOC is delisted. At the same time there is uncertainty within PACs about what form their group will take after their AOC is delisted. As a result, there has been no clear communication from OGL about what can and should happen after delisting for the PACs, there is a lack of clarity about OGL's role supporting delisted AOCs in the future and, consequently, there has been little guidance from OGL toward helping PACs plan

beyond delisting. Uncertainty regarding the role and actions of the state up to and beyond delisting prevents necessary planning actions to take place as AOCs approach the prospect of delisting.

For many years the AOC program lacked both funding and staff to make any significant on-the-ground progress. Instead, PACs largely directed their energy toward creating “shovel ready” projects for when they found funding. This period of planning-and-waiting led people to believe that the AOCs would never get delisted. As a result, no comprehensive plans were considered for life after delisting. The influx of GLRI money in 2010 noticeably increased the pace of project design and implementation bringing many AOCs toward delisting. Stemming from this new funding opportunity is a sense of urgency from Congress to show progress that legitimizes the funding. AOCs now face increased pressure to delist and, in effect, lose access to program resources. At the same time, efforts to restore and protect the Great Lakes ecosystems are receiving greater attention with a growing societal concern for the environment.

While AOC cleanup efforts have accelerated in recent years, program goals have largely remained the same. The program’s heterogeneity across AOCs both in forms of public engagement and extent and types of cleanup, influences how projects are designed and implemented. Greater attention to how the program functions and consideration of “life after delisting” could have lasting implications for ecosystem-based management efforts in the Great Lakes. OGL recognizes the value of understanding how PACs perceive delisting and the implications of sustaining their work after delisting. Hence, there is a tangible need for OGL to understand the perspectives and challenges faced by PACs if they are to be addressed effectively.

Literature Review

Over the years, the AOC program has brought together members of the public and environmental practitioners in a cooperative manner that today serves as an exceptional model of ecosystem-based management (Holifield & Williams, 2019). Throughout this period, researchers have collaborated with these parties to develop lessons regarding what has and has not worked in order to assist practitioners and advisory bodies in their continued missions. Other work has shed light on the functional aspects of ecosystem-based management outside of the Great Lakes basin. Here, we conduct a brief literature review underscoring a few of the insights from this research and show how our report strives to contribute to this growing body of work.

The context in which practitioners view ecosystem-based management of the Great Lakes is important to the direction of their work and the work of their organizations. In the Great Lakes Futures Project (GLFP) of 2015, scholars and practitioners discussed the current trajectory of Great Lakes restoration. During this discussion, participants reached a consensus that the Great Lakes ecosystem is insufficiently managed due to (1) a decline in financial resources for monitoring policy outcomes and (2) governments not proactively addressing emerging issues which

disincentivizes innovative and forward-looking policy solutions. As noted in the GLFP, vertical fragmentation across governments did not fully take into account both top-down and bottom-up perspectives. Moreover, economic and environmental policies were not always linked and the priorities of managers and scientists were often misaligned. However, these discussions also posed the opportunity for a renewed focus by governments and the public to improve upon policy that serves the basin (Friedman et al., 2015).

Several principles emerged from the GLFP which recognized the Great Lakes Basin as a system of governance “characterized by shared power, many actors, ambiguity, complexity and flexibility.” These principles relate to (1) encouraging stewardship and connections across sectors, (2) adding a systematic focus on the relationship between the environment and the economy, (3) developing comprehensive indicators for the monitoring of policy outcomes, and (4) carrying out place-based visioning and planning that is legitimized by leadership (Friedman et al., 2015). Many of these principles are intrinsic parts of ecosystem-based management and are essential to environmental restoration (Hartig et al., 2018; Hartig, 2014). The GLFP was a rare and valuable chance for cross-disciplinary conversations to look at the wide-range of issues facing the Great Lakes and for these scholars and practitioners to share perspectives and begin to design opportunities to address identified barriers (Williams, 2015).

Another important aspect to management of the Great Lakes is the continued investment in long-term collaboration with local stakeholders who bring a breadth and depth of knowledge that is needed for management to maximize its impact. The ability for communities to both articulate a vision of restoration and revitalization and then work with government agencies to design and implement a plan is integral towards progress in the forms of a healthier environment and improved community well-being. Both practitioners and scientists desire a better understanding of the values society derives from our natural features in order to better protect and sustain what is most important to communities (Steinman et al., 2017).

More recently, the socioeconomic benefits of the entire Great Lakes Restoration Initiative have been shown to outweigh the costs several times over (University of Michigan Research Seminar in Quantitative Economics, 2018). In an earlier report for the Muskegon Lake AOC, the project’s benefits were even higher (Isely et al., 2017). These reports emphasize the importance of investing in Great Lakes coastal communities as well as the importance of maintaining progress in communities where investments have already been made. Still, a greater understanding of how society derives benefits from the environment at the local level that is informed by social and cultural values could help determine future restoration initiatives (Steinman et al., 2017). Our findings and discussion work to emphasize the values that AOC communities hold to help inform this future planning.

The idea of using the benefits communities derive from the environment to inform local planning has gained traction as a viable tool to support decision-making in Great Lakes coastal communities. These plans restore the benefits from ecosystems that communities have lost due to a “legacy of chemical contamination, habitat loss, non-point source pollution, invasive species,” etc (Angradi et al., 2016). Practitioners may find it helpful to draw on the fields of ecosystem services and structured decision-making as helping to provide a pathway for the feasible learning and implementation of these tools at the community level (Bolgrien et al., 2018; Williams et al., 2018; Yee et al., 2017). These decision support tools have the potential to support future AOC planning as well as broader local planning for continued restoration and revitalization throughout the AOC program and in other ecosystem-based management efforts. Moreover, practitioners may benefit from joining socioeconomic data with the mapping of final ecosystem service indicators to further inform restoration plans (Angradi et al., 2016).

The commitment of community members has played an indispensable role in the planning and implementation of restoration projects. To better understand how to maintain this participation, research has sought elements to the sustained participation of stakeholders within the AOC program, through surveys and interviews. These findings include four themes: (1) “Getting things done” through manageable tasks jointly prioritized by AOC coordinators and PACs while also acknowledging limitations within the program. (2) The presence of “committed and connected ‘champions’ and core groups” who bring needed skills, connections, strategy, and vision. (3) The ability for “connection with other AOCs” which provides the opportunity for the cross-pollination of ideas and practices. And (4) “making participation meaningful” by fostering relationships with other stakeholders and creating friendly environments for participation (Holifield & Williams, 2019).

Project Purpose

This project was undertaken at the behest of the OGL to help them understand current perspectives among PAC members about sustaining environmental stewardship up to and beyond delisting. The project team spent four months interviewing PAC members with these primary project objectives guiding our work:

- 1 - Identify the motivating factors for initial involvement and continued engagement in the AOC program
- 2 - Enable the OGL to better support PACs by recognizing what the members value about their communities
- 3 - Recognize challenges AOC communities perceive in the delisting process
- 4 - Assess community revitalization efforts happening in and near AOCs
- 5 - Understand the PAC members’ hopes for the future and their perspectives on success post delisting
- 6 - Evaluate the AOC program from the viewpoint of Michigan’s delisted AOCs
- 7 - Identify the OGL’s role in supporting PACs up to and beyond delisting

Methods

Semi-Structured Interviews

Semi-structured interviews were conducted with PAC members from each of Michigan's 14 AOCs, including the two delisted AOCs, to systematically address the report's primary objectives. The statewide scope of the research enabled us to identify patterns of similarities and differences across the communities existing within the Michigan AOC program. After recording and transcribing each interview, we used qualitative coding methods to generate patterns that emerged across our data set. A literature review combined with consultation of environmental practitioners helped inform both our interview framework and our analysis.

Interviewees among the 14 Michigan AOCs were identified with the help of OGL staff, who informed PACs of our project via email and provided us with PAC member contact information. A combination of focus group and individual in-person interviews were conducted. In a few cases, in-person interviews were not possible and phone interviews were conducted instead. During each interview, one research team member guided the conversation using the semi-structured interview framework, while the two other researchers actively listened, took notes, and provided supporting questions as needed. Each interview was recorded after receiving the consent of the interviewee(s) and stating our obligation to keep interviewee names anonymous in the final report.

The semi-structured interview framework was developed to create a meaningful and substantive dialogue that would address the objectives of the report. It was structured in a manner to be effective in situations with either focus group (2 - 5 participants) or individual interviews. Focus group interviews lasted approximately 1.5 hours, while individual interviews lasted approximately one hour. The semi-structured interview framework (Table 1.1) was approved by the University of Michigan Institutional Review Board in April 2018.

Data Aggregation and Analysis

Immediately after each interview, our research team compiled notes and observations into a research memo structured around the core interview framework questions. The lead student interviewers transcribed and qualitatively coded their recorded interviews. The coded interviews provided the foundation of our analysis by encompassing the themes that are displayed in the findings section of this report. We then updated the research memos using the coded interviews to produce research memo 2.0 versions for each AOC.

Using the research memo 2.0 versions for each AOC, we separated each core interview framework question into a separate document, which included an aggregation of the respective data for that particular question from every unique AOC interview. For example, we created a "delisting challenges" document focused on the core interview framework question: *What specific challenges*

do you foresee up to and beyond delisting? This document aggregated the responses to this particular question from all the interviews.

We produced the findings section of our report by first identifying themes from the aggregated data for each core interview framework question. Within each coded theme, we then generated sub-themes and integrated illustrative quotations from the interviews to support each sub-theme. After establishing a comprehensive list of themes and sub-themes for all the core interview framework questions, we created chapters within the findings section that are based on the report objectives outlined in Table 1.1. Based on the themes that emerged from our interviews, we developed a set of recommendations for OGL to consider.

Biases & Limitations

While we made efforts to interview a broad range of PAC members and related stakeholders in each AOC, the information gathered from the interviews ultimately came from a limited number of people. It is possible that these perspectives are not wholly representative of the communities or even the entirety of the PACs. We also only interviewed current PAC members and not former members who would also certainly have had relevant experience to contribute. Therefore, the findings of this report cannot be generalized to the entire group of PAC members within the state of Michigan.

We also had limited time to visit each AOC as part of this research. Therefore, the findings from this report cover a broad, high-level, perspective on the AOC program rather than focusing on the details of any single AOC. The level of engagement and time involved in the AOCs with the interviewees impacted how much they could tell us about their perspectives of the AOC program. The aim of the report is to give recommendations that improve the program as a whole from what was heard across the 14 Michigan AOCs. Consequently, broad connections were made between AOCs that may not apply to the circumstances of every AOC.

It is also necessary to acknowledge our biases in writing this report. The OGL requested this work and guided the research to focus on their relationships with the PACs. Both our contacts and the structuring of the research problem came from the OGL, which also framed the way in which our research took shape. Lastly, our perspective as graduate students at a research university lends both a new lens on the AOC program and inherently may miss some practical realities that only come from working within the OGL. This perspective may influence our recommendations. Despite these limitations and biases, we attempted to be as neutral and objective as possible when developing the findings, discussion, and recommendations for this report.

Chapter 2 explores PAC members' motivations for getting involved in the AOC program and what sustained their engagement. Chapter 3 examines what PAC members value about their community as well as how they have seen their community change in regards to the AOC work. Chapter 4

dives into the fears and challenges PAC members perceive regarding the delisting process. Recognizing successes, Chapter 5 explores economic, social, and environmental revitalization that has occurred in part due to AOC work. Looking toward the future, Chapter 6 addresses the PAC members' hopes for their communities and how they would define success beyond the programmatic definition of the AOC program. Chapter 7 includes reflections from the two delisted Michigan AOCs on the process of delisting. Chapter 8 navigates the role of the OGL in relation to the PACs, addressing challenges, and moving forward up to and beyond delisting. Finally, Chapter 9 synthesizes the findings and provides recommendations for the OGL based upon the literature review and our interviews with PAC members across Michigan.

Table 1.1: Semi-Structured Interview Framework

Objectives	Core Interview Framework Questions
<p>Motivations: Identify the motivating factors for initial involvement and continued engagement in the AOC program</p>	<ul style="list-style-type: none"> - What were your motivations for initially getting involved with the AOC program? - What has kept you involved with the AOC Program?
<p>Community Values: Enable the OGL to better support PACs by recognizing what the members value about their communities</p>	<ul style="list-style-type: none"> -What do you most value about this community? - How has your community changed throughout the period that the AOC program has been in place?
<p>Delisting Challenges: recognize challenges AOC communities perceive in the delisting process</p>	<ul style="list-style-type: none"> -What specific challenges do you foresee up to and beyond delisting?
<p>Revitalization Efforts: Assess community revitalization efforts happening in and near AOCs</p>	<ul style="list-style-type: none"> -What revitalization projects are happening within the community? - How have these revitalization projects benefited the community? (e.g Economic? Ecological? Social?)
<p>Future Hopes and Success Post Delisting: Understand the PAC members' hopes for the future and their perspectives on success post delisting</p>	<ul style="list-style-type: none"> -What are your hopes for the future of your community up to and beyond delisting? -What would success look like for your community post-delisting?
<p>Delisted AOCs: Evaluate the AOC program from the viewpoint of Michigan's delisted AOCs</p>	<ul style="list-style-type: none"> -What happened to the PAC post-delisting? -Was there a change in the community's perspective after delisting? -Do you have advice for working with the state and federal government? -What went well with the delisting process? -What did not happen during the delisting process that you wish would have happened? -Do you have any general advice for AOCs not yet delisted?
<p>Role of OGL: Identify the OGL's role in supporting PACs up to and beyond delisting</p>	<ul style="list-style-type: none"> -How would you describe the PAC's relationship with the OGL? -How could the OGL help you address delisting challenges? -How do you see the OGL's role as your AOC moves toward delisting?

Chapter 2 – Motivations





2 - MOTIVATIONS

To identify motivating factors for engaging with the AOC program, we asked interviewees about their initial motivations to join their PAC and about what has sustained their engagement over the years. Identifying motivating factors helped determine similarities and differences among Michigan's coastal communities that have encouraged public involvement in this voluntary program.

Our results broadly show that PAC members initially became involved because of a strong sense of place that includes connections to their community and environment. PAC members displayed a variety of personal and professional motivations for getting involved in the AOC program, with many referencing their profound environmental passion and commitment to stewardship. It was also apparent that PACs presented community members with the opportunity for leadership roles aimed at achieving meaningful environmental and social impact within their respective communities.

Building off of their initial motivations for getting involved in the AOC program, PAC members referenced their sense of pride in their community and local environment as particularly important for sustaining their engagement. Additionally, PAC members spoke to several individual and collective qualities that have enabled long term engagement. First, PAC members referenced a high level of perseverance that proved instrumental in sustaining member involvement, particularly during challenging periods in the program. Second, PAC members indicated a focus on collaboration as instrumental in accomplishing projects and keeping various parties engaged. Lastly, the opportunity for PAC members to establish and strengthen relationships with fellow community members and organizations served as an important element for long-term engagement.

Understanding these motivating factors are critical elements for potential AOC programmatic changes going forward and will enable the OGL to better implement public engagement strategies that account for the initial spark and long-term durability that are structured around core motivating factors. The following chapter has two sections. The first section expands upon motivations for engagement in the AOC program, and the second examines why PAC members stayed engaged in the AOC program. Primary motivations from across all AOCs are listed in order of most broadly represented to least. Under each motivation is a paragraph describing the nuances as well as supporting quotes directly from the interviews.

What were their motivations for getting involved in the AOC program?

Table 2.1: Motivations for getting involved in the AOC program

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Sense of Place	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Environmental Passion and Commitment to Stewardship		X	X	X	X	X	X	X	X		X	X		X
Professional and Personal Interests	X	X	X	X	X	X		X	X	X	X	X	X	X
Opportunity to make Environmental and Community Impact		X		X	X		X	X	X	X			X	
Perception of Environmental Degradation		X	X	X			X	X				X		X
Community Leadership	X	X					X	X			X		X	
Recognizing the Importance of the Environment to the Region		X					X	X				X	X	
Partnership Engagement							X	X						
Property Value Increase												X		

Sense of Place

Having a sense of place was a strong motivating factor for involvement in the AOC program. Many interviewees noted deep and profound connections to their local environment, resources, and community. Additionally, many recalled that their memories of growing up in the region and familial connections helped spark an initial interest in wanting to join cleanup efforts in the AOC program. Drawing upon these connections, the strong identities that interviewees have developed with their local environment were very apparent, with one interviewee remarking, “I like to say that this water runs in my veins.”

Connection to the Environment and the Resources -

For several interviewees, developing close personal connections to the environment and the local resources represented a critical motivation for being in the AOC program. For some, identity was clearly intertwined with the environment, as one interviewee spoke about their connection to region saying, “it’s where I am from. It’s part of me. It’s the watershed that I grew up in. It’s what needs to be restored. It needs us.”

The ability to develop strong personal connections to the environment and resources was apparent in how people viewed the impacts of the environment on their livelihoods. For example, “for me, being near or around the water is very important from a personal standpoint - spiritual or whatever - it’s a resource that has a lot of positive impacts on people and their psyche and their enjoyment of life.” By developing these deep connections individuals adopt environmentally-oriented interests that align with restoration efforts offered by programs, such as the AOC.

Several interviewees also spoke to the intersection of their environmental and recreation interests, seeing the AOC program as a mechanism to accomplish both. One interviewee mentioned that they “hunted and fished from an early age” and in describing how they became involved in the AOC program, they “just kind of fell into it because I was concerned about protecting some habitat that I used to hunt and fish.”

Connection to their Community and Region -

Several interviewees indicated powerful connections to their local communities and region. The friendships and regional identity that individuals developed to their local areas was apparent in nearly all of our interviews. As one interviewee described, “I live in the area. I love the area. I love the U.P., and the people don’t speak up for natural resources as often as you hear people speak up for business interests or something like that.” Often, we saw this regional identity become a profound sense of regional pride as individuals continued to work in the AOC program.

For AOCs located in smaller and more rural parts of the state, connections to local community took on added significance. The motivations for highly driven individuals to return to their communities and regions speaks to their strong regional identity and association with their local community members. As one interviewee noted, their desire to get involved in their home community post-college motivated their participation, “I was in school...and came back to my hometown and right away got involved in local things.”

Connection from Growing up in the Region -

Numerous interviewees recalled being introduced to the environment at a young age. These critical intrinsic connections with water contribute to a strong attachment to the local environment and are positive, tangible memories and a sense of place that they carried with them into adulthood.

In nearly all our AOC interviews, individuals fondly recalled experiences growing up in the region. As one interviewee noted, “I swam in the river as a kid. My grandparents’ home was right on the [river].” Other interviewees indicated the importance of spending time in their environment during their youth to develop a strong identity with the region and to figure out the things that personally motivated them.

Others spoke to the importance of connecting to the resources and environment in their youth because this growth period cemented a passion for environmental work and a lifelong motivation to protect the resources from future harm and improve them for future generations. One described this feeling as something “that’s part of many of us, a connection to the water in our youth that drives us on some level,” while another AOC interviewee passionately stated, “I grew up on the river. I knew the river. I worked on the river. So I had a pretty good understanding of the mechanics of the river.” Bridging together the importance of developing environmental passion during one’s youth and their connection to the local environment, one interviewee indicated, “my motivation was simple. I had built a house on the lake and, like I said, grew up there all my life and I didn’t want to see the lake dirty like it was and continue like it was.”

Connection through Family -

Similar to growing up in the region, many interviewees indicated family relationships providing the opportunity for deeper connections to their local place. For some, raising a family has brought an increased level of importance to both care for their local resources and find ways to address environmental challenges. As one interviewee noted, “now I’m raising a family here in this community, and it makes it a little bit more important to correct those issues.” Family has also provided individuals an opportunity to establish new memories and create relationships with the resources in their local area, as one interviewee noted, “my husband and I fish in the river and I have always had a strong interest in protecting the environment.”

Another interviewee spoke to their responsibility as parents to foster positive environmental connections for their children and families. The realization that this is the life and region their children will interact with was a powerful motivating factor to become actively engaged in environmental cleanup efforts. “Now I’m raising [a family], I consider this my home now...having kids I realized it’s their home...It’s the only home that they’ve ever known.” Further, one interviewee who had been involved for several decades in the cleanup process spoke to their initial desire to have a clean resource for their immediate family. “...when this whole process started, I was hopeful that the lake would be cleaned up and there would be a nice place to live and raise my family, like it is right now.”

Professional and Personal Interests

Professional and personal interests were key motivating factors for getting involved in the AOC program. Often, professional interests included some degree of personal interests and motivations, but this was not always the case. Professional interests include motivations for pursuing a particular job which can broadly encompass factors like finding a new job, looking for an increase in salary or responsibilities, switching to a new geographic location, etc. Personal interests on the other hand, can motivate individuals outside of the professional sphere that provide a glimpse into the particular personal interests of an individual.

Differences between Paid Professionals and Volunteer Members -

Several AOCs include both paid professionals and volunteer members that have invaluable roles for the success of the AOC program. Often, the initial push for environmental cleanup efforts in AOCs has come from volunteer members who have donated their time to environmental issues that they are particularly passionate about. One interviewee noted, “I’ve always been interested in the environment and the natural world.”

AOC restoration efforts have also been greatly enhanced by the presence of paid professionals, who contribute invaluable expertise enabling PACs to accomplish their goals. However, initial motivations for these paid professionals often diverges from the motivations of volunteer members, in that they become involved in AOC program through funding potential and career opportunities, not necessarily solely out of core environmental passion. This difference is represented with a variety of paid professionals, whether they work for watershed councils that oversee the fiduciary component of the PACs for the AOC, or serve as consultants working with the PAC on projects. It is important to note that in responding to what has kept paid professional engaged with the AOC program over time, funding continues to play an important role, even if their environmental interests and motivations align with those of the volunteer members.

Description of Job Responsibilities -

Several interviewees discussed their roles and job responsibilities within the scope of the AOC program as their motivation for initially becoming involved in the program. For some interviewees, including non-paid members of the PAC, motivations revolved around a professional responsibility to an agency association with the AOC. These agencies included a variety of state, private, or watershed councils that involved a variety of individuals to address the AOC challenges. These individuals were not necessarily disengaged from environmental issues within their communities, however, their initial motivations to participate in the AOC program resulted from more professional motivations than a personal drive to restore the local environment.

Core Environmental Interests -

For many interviewees, especially those who joined as volunteer members on the PAC, the ability to engage their core environmental interests through a statewide program offered the chance to increase their impact and contribute to meaningful restoration initiatives with like-minded individuals. For some, the opportunity aligned with their environmental background, as one interviewee noted, “I have been an environmental professional for over 25 years.”

Passion for Education -

The opportunity to contribute as an educational resource for other individuals in the community was another motivating factor tying to the personal and professional interests of several interviewees. One PAC member noted that their involvement in the AOC program represented a great supplement to their professional and personal interests in environmental education, particularly as a way to engage students with conservation projects, bridging their personal and professional interests using the program. “I first saw [the program] as an opportunity to get students involved.” Understanding the importance of continued education for younger generations, several interviewees saw the AOC program as a mechanism to articulate the long-term need for environmental restoration for their communities.

Opportunity to Contribute Professional Expertise to Benefit the Community -

Several interviewees saw their investment in the AOC program as not only worthwhile of their personal time, but also as an opportunity to provide the larger community with their expertise. As one interviewee indicated, “I thought as a university person that I teach all the science classes, I teach all the biology classes, and that I would have an expertise that some people wouldn’t have in those committees.”

Additionally, for some AOCs the complexity of the issues remains extremely high and some view their involvement as a way to “use my position and knowledge of the township to preserve what was good environmentally.” One interviewee also noted how “most of the issues are complicated technical issues and we needed somebody who had that background, not just lay people.”

Lastly, some interviewees found it challenging to separate their professional and personal interests in becoming involved in the AOC program. “It’s hard if you’re very focused on something in a research capacity for a while, it’s hard to separate professional from personal interests because it is a very interesting site and the history that [was described], it’s very unique from a contaminated sites perspective.”

Commitment to Environmental Stewardship

Having long-term environmental passion and a commitment to stewardship was an important motivating factor for many of Michigan's AOCs. Bridging one's connection to their local environment and professional and personal interests, the AOC program has provided a unique forum for individuals with environmental background and stewardship interests to participate in meaningful change for their communities. As one interviewee simply put it, "I care about what is happening" and this sentiment is representative of the long-term environmental perspectives and recognition of the importance of stewardship that have shaped public engagement with the AOC program.

Intrinsic Connection to the Environment -

For several interviewees, having an intrinsic connection to the environment was a critical reason for being a passionate environmental steward. Carrying this intrinsic connection to the environment through personal and professional endeavors, one interviewee indicated that, "one of the things I've learned is the appreciation, or the need for understanding...that you are part of a biological system. Humans are not above and beyond that, but we are taught that."

Embracing Stewardship as a Youth -

For some interviewees, their deep environmental passion and commitment to stewardship developed from transformative, visceral environmental experiences in their youth. By developing this passion at a young age, several interviewees adopted strong commitments to protect and steward resources in their communities. One interviewee recalled, "I can remember as a kid, taking my canoe down the River. We used to have five paper mills. The water would sometimes be brown, sometimes red, sometimes green. I can remember taking my canoe paddle and these big rafts, we used to call them paper rafts would bubble up. They would be somewhat solid, and if you took your canoe paddle into this floating mass, you'd turn it over and it was the worst Sulphur smell you ever wanted to smell. I think that's what got me started in the environmental field."

Environmental Ethic -

Other interviewees discussed their background in environmental activism, with one individual stating, "my motivation was that I'm, amongst other things, an ecologist and a proud activist and environmentalist and so I thought this fits in very well with the type of community outreach things I was doing at the time." The AOC program provided a unique forum for several interviewees to utilize their environmental activism to promote environmental well-being on a larger stage.

Additionally, the AOC program offered some the opportunity to participate in a program that aligned with their environmental ethics (e.g. how certain interviewees have chosen to live their lives by incorporating environmental perspectives). One interviewee suggested that "most people

got connected early because they had a particular interest and developed a passion and in ends up being an important part of how they conduct their lives.”

Many participants became involved in the AOC program in order to promote their environmental stewardship and satisfy their intrinsic connection to earth and its resources, particularly water and wildlife. Often, environmental interests were associated with degrees in environmental-related fields, further contributing to members honing their understanding of and commitment to addressing environmental issues. The opportunity to have critical environmental issues and interests brought to light through the AOC program galvanized many of the interviewees to participate.

Opportunity to Make Environmental and Community Change

Several interviewees were motivated to join the AOC program because of the opportunity to make meaningful environmental and community changes. Viewing the AOC program as an effective mechanism to address these changes, interviewees emphasized their ability to bring greater resources and attention to important issues that they had identified in their respective communities.

Improving One’s Local Community -

The motivation to improve community wellbeing was an important motivating factor for joining the AOC, as it afforded the opportunity to make those changes. As one interviewee noted, “we’re from here, we live here, we play here, we raise our families here. There are a lot of people in positions like mine that just want to see the area to be a good place to live and work.” Another interviewee spoke to the community commitment to improve the environment. “It was all the grassroots concern about the environment. Making the lake better. Everybody felt the lake was worth saving. There was a real solid commitment about restoring the lake.” One interviewee viewed the AOC work as an important mechanism to attract people to their community, noting “here’s a big interest in being a part of [improvement]. We want to attract people here. The people who live here want to be able to go out and enjoy the lake as well.”

Opportunity through Actions and Solutions -

For some, they viewed the AOC program as a unique way to get directly involved with actions and solutions to environmental problems within their communities. As one interviewee said, “one day you wake and say, ‘I want to get involved in something’ and it sucks you in.” Several interviewees revealed were eager to get involved in public service and make direct changes, something that the AOC program provided.

Stemming from a shared public-service mentality, many interviewees indicated an inspiration knowing they could contribute to the solution. Some pointed to grassroots efforts within their local

community as critical to providing the avenues for environmental and community impact. One interviewee mentioned that, “it’s inspiring to know that we, I can be part of the solution, helping these projects in what capacity that we can.” Some framed their motivations around the collective strength of the group to problem solve complex issues. “We are not looking for somebody to just point a finger at, we are problem solving. If there’s something that gets identified by this group, we are going to do what we can to try and solve it.”

Recognizing a Need to Turn Things Around -

In the presence of considerable environmental damage, many interviewees seized the opportunity to participate in efforts that would restore the health and well-being of the environment and community. Spurred by negative perceptions of what had happened to their local environment, one interviewee noted, “when I went away and came back, things were all destroyed and I said this is not right, so...I tried to get things turned around.”

Another interviewee remarked on the precious environmental resources that individuals and communities can lose if they are not protected. “We packed up the kid and drove back across the country and got to a place that I did not recognize, because it was not rural Michigan anymore, it was suburbia Michigan. And that opened my eyes to what you can lose.”

Re-energizing Restoration Efforts -

For some interviewees, their involvement in the AOC program originated from a need to re-energize and re-organize restoration efforts, which had been lagging prior to the AOC program and in some cases during the AOC program’s early implementation. One interviewee “got involved with the AOC because it was kind of stagnant and not going anywhere as far as the delisting process.” Some of reorganization tactics included bringing new voices and perspectives to the table, and better engaging with decision-makers and state/federal agencies. In the absence of state and federal direction, some AOCs took it upon themselves to provide that direction, with one interviewee noting, “the existing PAC was kind of stagnant...there was really no direction from the state or EPA...it just kind of took a reboot and reorganization.”

Perception of Environmental Degradation

Concern about environmental degradation was a powerful motivator for several interviewees to get involved in the AOC program. Considering most interviewees indicated strong environmental interests, the presence of environmental damage produced visceral reactions, especially upon seeing physical deterioration to the river (i.e. dead fish, trash, erosion).

Shock at the Environmental Deterioration -

For several interviewees, the shock of seeing trash and other forms of pollution on the sides of the river was a powerful motivating factor for getting involved in restoration efforts. One interviewee recalled, “it’s the walking along the trails when you see piles of Styrofoam and plastic bottles and everything else. After rain, it’s a real visual.” Speaking to how poor the environmental conditions became in the AOCs, one interviewee captured their early shock when describing, “I stood at the end of the street with my mouth hanging open in shock. I had never seen such a wretched mess in my life - I mean even the carp were dead. And there was just this 40 foot wide band of dead vegetation and dead fish...then said this is how it always is.”

One interviewee noted how their shock at seeing the environmental damage made them want to leave their area entirely. “I just remembered gasping out on the water, all the industry in the smoke and the smell of the paper and I thought, ‘I never really wanted to come back.’”

Environmental Issues Close to Home -

The presence of environmental degradation in their local community was another important factor motivating restoration efforts. For one interviewee, “the creek is just a couple blocks from where I live and played as a kid and it was pretty nasty as a teenager...it would be neon green colored...you could see it, you could smell it. But it wasn’t right.”

For others, the recognition that pollution was happening right in their communities spurred a greater sense of responsibility and desire to participate in the restoration. For one interviewee, their motivations seemed to resonate from seeing the pollution firsthand. “You don’t know how much you might care about the river until somebody dumps a million gallons of oil. It’s much more dramatic. And in a way which catalyzed people in terms of which side are you on?” Personal experiences also contributed to an awareness of the environmental challenges facing communities with one interviewee noting, “wherever you lived in town, just about everywhere was affected [by pollution]. It’s been part of that process of having that awareness, because of personal experience.”

Opportunity to be a Community Leader

The opportunity to be a community leader motivated several interviewees to become engaged in the AOC program. PAC members often have a concerned citizen mentality, and the prospect of engaging in a leadership role addressing important community issues has considerable appeal and prominence for engaged community members. For one interviewee, AOC work has enabled them to expand their leadership skills, noting, “my interests grew as time went on and I’ve learned a heck of a lot from being involved in this. I think it’s helped me in being a - not in just being an advocate for the such issues, but also an educator in this area.”

Providing a Critical Voice for issues -

Several interviewees saw their AOC engagement as an opportunity to be a vocal leader for important issues in their communities. For one interviewee, “I got involved so that I could be that kind of voice in the PAC and ask ‘well what about this?’ and ‘have we thought all those different aspects through and talked with all the different stakeholders?’”

Alignment of Professional and Personal Leadership -

Other interviewees saw their involvement stem from an alignment of professional and personal leadership interests. By participating in a program that offered opportunities and growth in both of these areas, one interviewee “felt like I could lend my expertise and voice to advancing those things and that was really my motivation.” Another interviewee “I was looking at ways that I could use my position and knowledge of the township to preserve what was good environmentally.”

One interviewee spoke to the added benefits of working for a company that shared their personal environmental and community values. “I enjoy working for this company because we have a strong core value of environmental stewardship and we also have a strong core value of being a good community partner - we’re a decades-long member of the community.”

Being an Information Resource for the Community -

The opportunity to serve as an important information resource for environmental issues and other community concerns was a strong motivator for several interviewees. Some credited the existence of an effective lead group or watershed council in creating legitimacy and trust among partners and the community. One interviewee referenced, “the watershed council, my predecessor, helped develop a DEQ and EPA approved watershed management plan. I think being that sort of lead group in that planning effort gives you a lot of legitimacy and shows your leadership ability.”

Another interviewee noted that “people in government agencies, people in local agencies, people in the local community -- they look to [the local watershed council] as a source of information and guidance.” The opportunity to contribute expertise through these respected and valued information resources to benefit the communities resonated with several AOCs.

Recognizing Water’s Importance to the Community

Several interviewees were motivated to become involved in the AOC program from “a personal recognition that the resource is so important to the region.” Recognizing a particular resource’s importance often developed through personal experiences growing up, living in, and interacting with their local environment. Water (e.g. rivers, streams, and lakes) represented the most common and shared natural resource of value across the AOCs.

Water Quality Affects Everything -

Maintaining high water quality standards for communities was a particularly strong motivator for certain interviewees, who recognized “water quality is number one. We get our drinking water from the Great Lakes...the rivers and streams that come through the county and to me have always been important.”

Another interviewee relayed the importance of maintaining healthy water quality, as it affects every aspect of the community and it therefore vital to protect for current and future generations. “I feel strongly about the health of the population, the health of the region, the economy of the region. Just about anything you can think of is in in one way or another affected by water quality. It’s not just a recreation issue. It’s not just a drinking water issue...it’s all tied to the health of the water quality.”

Public Awareness of Water Assets -

For one interviewee, their motivation “had to do with the watershed itself and with planning or preparing for better outcomes in local development and then also for outreach and engagement to raise public awareness for our water assets.” Similarly, becoming involved with the AOC program through the local watershed council enabled one interviewee to continue “working with the public sector, working with the communities, helping communities understand the importance of preserving and protecting water resources.”

Opportunity to Collaborate with Partners

The opportunity to better collaborate with partners and agencies motivated some interviewees to become involved with the AOC program from the outset, especially those who had previously been engaged in environmental restoration initiatives with prior knowledge of the local environmental issues. The AOC program offered the chance to improve communication and collaboration among various partners, with one interviewee remarking, “you get inside the circle, and then you get to communicate better, and hopefully collaborate with partners and they get to understand you a little bit better and you get to understand them.”

In addition to collaboration, some interviewees aimed to strengthen existing partnerships and engage new ones with restoration efforts through the AOC program. One interviewee was inspired that “there’s a big collaboration between all of these municipalities to help support and reduce the risk for environmental cleanup.” Another interviewee acknowledged their interest in engaging various partners by stating, “I’ve been playing a bit of a buffer between the private sector, especially the more commercial aspects for industrial use, and users in the watershed, including the state, EPA and everybody else.”

Increased Property Value

One interviewee noted that when they first started working on the PAC, current members were primarily property owners motivated to pursue restoration efforts that would increase property values in the region. As this interviewee stated, “when I first joined, it was property owners. They wanted [the lake] covered. They wanted a seal of approval and were going to sell it for lakefront property.”

What factors sustained their engagement?

Table 2.2: Factors that sustained their engagement

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Potential for Collaboration and Relationship-Building	X	X	X	X	X		X	X					X	X
Perseverance and a Commitment to Progress	X	X	X	X	X			X			X		X	
Sense of Pride	X		X	X	X		X	X			X			
Funding Increase from GLRI	X	X	X		X		X				X		X	
Leadership and Organizational Structure		X		X	X		X	X						X
Dynamic Nature of Involvement	X													

Potential for Collaboration and Relationship-Building

Most AOCs spoke to the importance of establishing a collaborative atmosphere with strong partnerships as a mechanism for keeping members involved in the AOC program. Many interviewees noted that in addition to fostering external partnerships through the AOC program, relationships and collaboration among various PAC members has been a critical factor to staying involved in the program.

Close Relationships among PAC Members -

Several interviewees spoke to the close connections they had been able to develop with other PAC members as especially instrumental in their continued engagement in the AOC program. Speaking to the values and hard work of PAC members that has enabled progress, one interviewee noted, “we have a good base group here as far as our working group in the AOC that coordinates everything. It’s a testament to the people that we are working with that we are able to get so much done.” Another interviewee recalled their excitement at going to PAC meetings and their appreciation “to work with the diverse amount of people who are dedicated to this project.”

Another mechanism that has enabled PAC members to establish strong bonds is through the Statewide Public Advisory Council (SPAC) meetings. In particular, these statewide meetings have allowed PAC members from different AOCs to interact with one another. Describing the influence of SPAC in staying involved in the AOC program, one interviewee remarked, “when I go to SPAC, I’ve seen these people for 20 years, and they are kind of like another family, and I have this family here. So that is a reward to me, that I have this family that I work with that has this common passion, this interest.”

Identifying Shared Interests -

Several interviews indicated that being around like-minded individuals with shared interests was critical to their continued involvement in the AOC program. Many of these shared interests seemed to originate from local environmental issues yet the AOC program also seemed to offer community members the opportunity to discuss wide-ranging issues. As one interviewee noted, “it’s about all the environmental issues locally. There are other issues going on in the community that will be brought to the attention of the public too, so [PAC meetings] are a good public awareness forum for people who have similar interests as you as well.” Beyond discussing the shared interests in meetings, several interviewees indicated that a common vision among PAC members that was particularly helpful for restoration projects. “My neighbors, fellow workers, some them were on the PAC - it was kind of like everybody was interested in seeing this whole process evolve and [see the lake] get cleaned up.”

Collaborating through Agency Partnerships -

Establishing collaborative efforts among local, state, and federal partners enhanced AOC program projects and provided a solid foundation for coordinated strategies. For several interviewees, the presence of effective coordination and collaboration motivated them to stay engaged in the AOC program. One interviewee made a determined effort to re-engage partnerships and that in doing so, “we learned and start to coordinate our efforts better.”

Perseverance and Commitment to Progress

Perseverance and a commitment to progress were important factors for many interviewees in sustaining their long-term engagement with the AOC program. Drawing on an action-oriented mentality, several interviewees relayed a sense of ‘getting things done’ as critical to staying motivated to continue working on projects for years at a time.

Focusing on Action -

One of the important attributes for keeping members engaged was having a focus on action and fostering feelings of accomplishment. One interviewee noted that, “it’s pretty frustrating when...it’s just another study, another plan and it’s going to sit on a shelf and collect dust and you don’t feel like you got anything done. I feel like every month when we meet as a council we get things done.”

Motivation to See Progress and Success -

For others, their motivation to stay engaged resulted from wanting to see progress and success in the AOC. For many, they envisioned a time down the road in which they could celebrate their hard work and accomplishments, with one interviewee sensing that point in the process. “And now, every day we are seeing that change that we were hoping would someday happen.”

One interviewee described the importance of having success in a program like the AOC. “I would say that success is one of the things that keeps people...[it] makes you come to the next meeting.” For other interviewees, progress and success have kept people engaged because they “all have a vested interest in the next phase.”

Inherent Value in the Work -

Several interviewees noted the inherent worth and value in restoring their environment; therefore, they continually engaged in projects that could benefit the environment and the community. “I’ve stayed involved in it because I want to see this finished and be able to pat myself and a lot of other people on the back. You know ‘hey this is worth doing.’”

Resourcefulness and Determination in the Face of Challenges -

Several interviewees referenced their resilience and commitment, particularly during periods in the AOC program when limited progress was happening. One interviewee noted that even in the presence of amazing project potential, the ability of the PAC to persist through challenging periods was integral to making the projects a reality. “There was a handful of us involved until the 2010 GLRI funding came about, and all of a sudden there were a lot more people...it’s a true tribute to the handful of people that did stay involved, even though there was not a lot of money to do stuff.”

Several interviewees noted the daunting nature of restoration work early on as a challenging factor in keeping folks engaged; the sheer technical aspects of restoration represented a significant barrier, however the AOC program drew committed community members who persisted in finding solutions early on and that played a critical role in advancing the program to the point of delisting. “Some of the AOCs spend a lot of money and don’t get a lot of results. We have done so much with so little for so long that I think we can do almost anything with nothing...we’ve put programs together with absolutely no money at all, and we would ask local businesses to come and support clean ups in some of our efforts.”

One interviewee noted early on how community members and government agencies did not fully understand the issues, with some even questioning whether it was possible to clean up a body of water. “Originally, people just didn’t even think that you could clean up a water body...that it would even be possible from a technical standpoint from a cost standpoint.” Their resourcefulness in finding solutions kept a number of parties engaged who otherwise may have left to process.

Persistence over a Long Period of Time -

Many interviewees embraced the likelihood early on that the restoration and remediation would be a long term process, requiring high levels of perseverance and involvement, particularly during tough periods. The success of projects throughout the AOC work has also been critical to long-term progress and in getting community members to keep coming to meetings, with one interviewee noting, “we have been able to do a lot of wonderful habitat projects now, but we wouldn’t have been in a position to do that if we hadn’t persisted through those down times.” Part of the challenge early on had been recognizing that the issues were going to persist for a long time and one interviewee noted that “there were a lot of people that were of the opinion that this was just a two or three-year process - that we just ID things, and as soon as we ID the problems, then they all magically go away.”

One interviewee proudly described their stubbornness and commitment to seeing measurable change through their involvement as important pieces to their continued involvement in the program. “It’s that strong belief and a commitment to the process because I was involved with it so long. That is what kept me it.” Another interviewee similarly shared their commitment from the start by saying, “we are in it for the long haul, and now we are getting closer to the end.”

Sense of Pride

While one’s sense of place sparked initial involvement in the AOC program, developing a strong sense of pride was a common theme represented by the interviewees for their sustained engagement in the program. Similar to sense of place, PAC members indicated close connections

to their local community, including the natural environment and people. As one interviewee noted, “there is pride in being where we are from.” Drawing upon this pride, many interviewees spoke to their desire to make meaningful change within their communities as a point of emphasis for their continued involvement in the program.

Pride in Making a Difference -

Stemming from their initial motivations for joining the AOC program, interviewees noted a desire to change their community as particularly integral to maintaining focus and involvement during their work with the AOC program. One interviewee noted, “it was just the desire to make a difference where I live...this was a way to actually make a difference.” For another PAC member, their continued involvement has come from “a desire to make a change and see some positive outcomes.”

Pride in their Commitment to Stewardship -

Several interviewees emphasized their strong commitment to stewardship, particularly in their local communities, as a critical factor for staying involved in the AOC program, with one interviewee noting commonalities among people in the program. “I think the common thread of people in the AOC program is that they have to have the commitment, and passion, and stewardship of the areas they live in.” Interviewees often cared deeply about giving back to their communities and making an impact at the local level, and they viewed the AOC program as an effective way to engage in stewardship initiatives with other like-minded community members who are “passionate. Passionate about the environment. It’s something that they actually care about.”

Pride in their Home -

Similar to their motivations for initially becoming involved in the AOC program, many interviewees noted their sense of place and deep regional connections as integral to their long-term engagement, particularly during challenging periods in the AOC programs (e.g. periods with low funding, limited PAC membership). One interviewee mentioned that their involvement resulting from growing up in the area and having buy-in above all else. “They grew up in the area, they are part of the AOC, they have a buy-in to it and that has what’s kept them going. It wasn’t because of the money.”

For another interviewee, their continued engagement stemmed from wanting to have a healthy environment for future generations in the place where they grew up and currently live. “I think that these people just - they’ve grown up here, they want to see that their home is healthy and keep it that way for future generations.”

Funding Increase from GLRI

The influx of funding from GLRI created newfound project momentum and shifted the focus in Michigan AOCs from project planning to implementation. The funds were also critical in sustaining engagement from PAC members who finally had the opportunity to use new funds to implement their project ideas.

Creating Project Momentum -

Several interviewees noted the funding increase from GLRI helped restart projects that were previously stagnant, which helped motivate PAC members to continue engaging in restoration efforts. “I think the big thing that really helped things start moving again was the GLRI funding - having that available. I just think it really did grease the skids and get things moving again. I think many of the things that have been accomplished in this AOC and others wouldn’t have been possible without that.” Another interviewee described the GLRI funding as a “catalyst with accomplishing a lot of these delistings and BUI removals.”

Shift from Project Planning to Implementation -

GLRI funding also enabled projects to move from planning stages to implementation in a very short period of time. This shift motivated several long-time PAC members, who had been heavily involved in the planning process to stay engaged and carry out the implementation aspects of the projects. As one interviewee noted, “it was phenomenal just the change that happens over such a short period of time going from when I first came on, where we’d meet periodically and just kind of discuss things, but I got the feeling that we were just kind of discussing many of the things that had already been discussed for many, many years. Once the projects could be funded, once they got the agreements in place, things just kind of took on a life of their own. We started moving very rapidly toward delisting.”

Leadership and Organizational Structure

Many AOCs noted the importance of having effective PAC leadership and organizational structure for their long-term involvement in the AOC program. Some of the associated benefits for sustaining member engagement result from a valued leadership presence, clearly defined agendas, and dedicated staff.

Having a Local Leader and Clear Agenda -

Several interviewees referenced local leaders as a critical element to designing and implementing PAC goals and strategies. For instance, effective PAC leadership enabled clear plans to be relayed to members, which in turn reinforced long-term commitments and participation. Many

interviewees also noted that having organized leadership committed to local issues enabled PAC members to see their value and how their efforts contributed to the larger restoration initiatives in the watershed. As one interviewee noted, leadership enabled PAC members to see that they are “the driving force behind the efforts and the progress that has been made.”

Having a Dedicated and Paid Staff Coordinator -

The presence of a dedicated and paid staff coordinator has enabled several PACs to strengthen their organizational elements, thereby creating an atmosphere for sustaining engagement. In particular, some of binational PACs noted the benefit of having a dedicated RAP coordinator for their particular AOCs. Having a paid professional to organize PAC meetings appears to be a crucial element for a number of AOCs that might otherwise struggle with organizational aspects of the PAC. “I think that oftentimes community groups tend to dissolve or not meet as often if they don’t have that person that’s kind of helping them lead the way...this group has been together since the 1980s. That’s pretty huge and I don’t know if that would happen if there wasn’t a funded RAP Coordinator throughout the process.”

As one interviewee noted, the benefits go beyond scheduling meetings and organizing agendas, but include important relationship-building qualities. “From a more programmatic standpoint, or function or structure, we’ve had a full-time coordinator at the office for over 10 years now...There is something to be said about that. I think you establish these relationships, they know who to call, they know you are going to return their phone calls so you can be at their meetings.”

Dynamic Nature of Involvement

One interviewee indicated the dynamic nature of roles and responsibilities as being important for their continued engagement in the AOC program. Speaking to this dynamic nature, one interviewee said, “everyday I’m literally doing something different and working on a different issue.” This excitement regarding the variety of work can support sustained motivation for some AOCs.

Conclusion

PAC members had multiple reasons for getting involved in the AOC program, but one of the most common themes for initially getting involved was a strong sense of place. Sense of place was often represented by one's interactions with the natural world, their community, and their family history. Continuing to build on a strong sense of place, many interviewees spoke to a profound sense of pride in their local areas as a critical factor for sustaining their involvement in the AOC program over the years.

Throughout our interviews, we heard many stories with salient memories of the environment stemming from experiences during the PAC members' youth. Growing up near bodies of water allowed PAC members to develop a close relationship with natural resources spiritually and through recreational activities. Having a strong connection to place created an urge to protect places and activities they love. In turn, their strong connections motivated them to become actively involved in the AOC program to work on protection efforts. Experiences from youth also created a desire to protect the area for future generations so that they can experience the environment in the same ways as the interviewees.

Within each AOC, the high level of environmental degradation has been apparent and visible for many decades. PACs have created a platform for community members to take action in countering the legacy of pollution. The PAC as a platform has brought people together who have similar professional and personal interests related to restoration work. Once members joined the PAC, it was the partnerships and community collaboration opportunities that were a primary reason they stayed involved. Bonding over shared interests, PAC members became close with one another over the years and were able to connect many different organizations throughout the community. During the 30+ years of the AOC program, perseverance was necessary and members who stayed part of the restoration process described a strong commitment to progress. They had dedicated many years and wanted to see success at the end of all their hard work. With the influx of GLRI money they finally started to see the fruits of their labor. Their pride in their work was evident throughout our interviews with PAC members throughout the state of Michigan.

Chapter 3 – What is Valued about the Community





3 – WHAT IS VALUED ABOUT THE COMMUNITY

To establish what is valued most about the communities that encompass the AOCs, interviewees were asked both what they valued most about the community and what changes they had seen since the cleanup efforts. These questions not only determined similarities among coastal communities, but also aided in our interpretation of why community members voluntarily participate in the PACs as many motivations stem from what they value about the community.

While none of the themes below state “sense of place” specifically, all of what is valued contributes to an overarching sense of place. One interviewee exhibited a special bond with the location and articulated a sentiment of “coming home” every time they return to the area. Our results further indicate that an appreciation of the natural environment in its many forms is an important value shared among PAC members and was often associated with one’s initial interest in the AOC program. Moreover, PAC members referenced their particular AOC’s geographical uniqueness (e.g. urban or rural settings) as a deeply held value of their communities and local pride. Beyond the natural environment and geographic uniqueness, PAC members valued opportunities for both outdoor recreation and social and environmental community engagement.

Building off of what they value most about the communities, PAC members noted that prominent changes to their communities have included an increase in access and engagement with the resource -- often either a river or lake. PAC members also indicated that beyond the noticeable environmental improvements, an increase in access and engagement has enabled communities to perceive the resource in a different light, while expanding their overall knowledge of the environmental issues that have affected their particular area.

Understanding what is valued and perceived community changes are important insights for the OGL to consider as AOCs approach delisting. In particular, a long-term strategy that supports continued progress would benefit from incorporating and acknowledging what is valued about the community from local community members, who will be tasked with continuing the work beyond delisting. The following themes, listed from most prevalent to least, all encapsulate what interviewees valued about the community and how they have seen their communities change during the AOC program.

What do they value most about their community?

Table 3.1: What they value most about the community

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Natural Environment	x	x		x			x	x	x	x	x	x		x
Outdoor Recreational Opportunities		x	x	x		x		x	x	x	x	x		x
Community Engagement		x	x		x	x		x	x			x		x
Geographical Uniqueness - Urban	x	x		x	x									x
Geographical Uniqueness - Rural									x	x	x	x		
Employment Opportunities										x				x
Academic Opportunities											x	x		

Natural Environment

Whether described as a specific part of the environment, such as the water, or more generally, such as the ecological uniqueness of the area, almost all interviewees valued the natural environment within their AOC. There was an overarching expression of appreciation for the natural elements in each community.

Connection of Natural Environment to Identity -

A deep connection to the natural environment within and around the AOCs was formative for many interviewees in establishing identity for themselves and their community. Community identity was particularly evidenced in the aesthetic of communities through their use of fish and water symbols throughout the towns.

Proximity to Bodies of Water -

Water, in particular, frequently came up in responses with one interviewee responding to what they valued saying simply, “The blue, blue water.” Interviewees valued that the water transcends county lines. Proximity to waterfront, particularly the Great Lakes, is highly valued across many AOCs.

Water access both on the rivers and lakes is also very valuable for the community. Interviewees spoke to water being something to highlight within the community as people can easily pull over and see it as a unique visible feature. Interviewees spoke to having a sense of ownership and care for the lake resources. Bodies of water also provide scenic beauty when a community is in close proximity, which is valued by the people we spoke with.

Wildlife and Habitat -

Some interviewees mentioned that the ecological uniqueness of the watershed is worthy of being restored. “Both [lakes] are drowned River mouth Lakes, that we are part of is really something special. It’s got the whole transition from the big lake in to [the smaller lake] and then into the wetlands and up into the watershed so it is really a diverse habitats that is certainly worthy of restoration.” Participants also spoke to valuing the wildlife present within the communities and the culture that surrounds the wildlife. For example, sturgeon are highly regarded in one of the AOCs and the annual Sturgeon Festival is an event unique to their community.

Beauty of Environmental Landscape -

Overall, the natural landscape was described by many as breathtaking. “Well, I think the natural environment is the number one here. We have so many great things like the landscape if you had even a few days to travel around, it’s just breathtaking if you go up the shores of Lake Superior and even Lake Michigan here you’ve probably seen some of the shoreline as you’ve come up.” One community spoke to valuing the amount of snow they received (300+ inches). Beauty of the natural environment was also discussed through interviewees’ fascination with the geology, topography, and habitat was abundant among interviewees with one stating, “I’m not biased, but it’s the best place in the world! It’s beautiful. You’re surrounded by Lake Superior, you have a very unique geology and topography and habitats. You have a big mosaic of many natural habitats so - and a lot of species, it’s an important migratory corridor.”

Outdoor Recreational Opportunities

Outside of inherent appreciation for the natural environment, outdoor recreational opportunities and public access to water in order to take part in recreational activities, were most widely valued by interviewees. Recreational opportunities were mentioned by interviewees in both rural and urban AOCs. The type of recreational opportunities included biking, hunting, fishing, swimming, boating, and snowmobiling.

Restoration Leading to Recreation -

There is a growing recognition in the communities of the opportunity to highlight the newly restored areas as an opportunity for recreational activities. Interviewees value having these

recreational opportunities, particularly related to water, available in their communities. Oftentimes, restoration projects created more access to the water to be used for recreation.

For AOCs within a city, having access to the river or lake resources is greatly valued. When recreational opportunities were created after the cleanup, it allowed for even more public access to the water areas because groups were prioritizing the access. For example, bike paths were implemented in some AOCs, allowing for a different perspective on the geography of the area. “One of the better things that was done in both of the lakes...was that they built the bike path around the lake so that the restoration areas are very accessible to the public and I can go out of my building and go for a walk on the bike path and I can see the restoration, the wildflowers everything is very publicly accessible, so not only has ecology been restored but restored in a manner that is very visible to the community. So one time people would not think of going to the lake and now people go to the lake to ride bikes and we have a nature preserve that was an old foundry disposal site, it has a beautiful Boardwalk and handicap fishing, one of the few places for handicap fishing on [the lake].”

Four-Season Recreation -

The ability to recreate in all four seasons outdoors was frequently mentioned in interviews. “There are so many things for recreation to do between downhill and cross-country skiing in the winter, and snowshoeing and snowmobiling. And in the summer there’s all kinds of hunting activities and fishing for all different types of migrations of fish. And camping of course.”

Tourism through Recreation -

Beyond being enjoyed by the community, outdoor recreation was valued as an important way to bring in tourism to the area. “Fishing is a big thing for a lot of people. Hunting is a big deal for people. I think our chamber of commerce, our tourism people, are missing a really big opportunity with not emphasizing more of the quiet sports too.” There is a recognition that the outdoor industry brings a lot of tourism with one interviewee stating, “...the industry here is really the natural aspect of the whole area...you know people come up here for biking and hiking and camping and fly out of here to go to Isle Royale and have their backpacking experience and all of that kind of stuff.” Fishing tournaments and Pure Michigan campaigns have been valued for bringing tourism. “When the dissolved oxygen...could sustain... a fish community there were... sports fishing organizations in the area to stock walleye...Now this is one of the hot spots for fishing... And all of a sudden it is a destination... The city chose to cooperate and work together [when DNR sued] to maintain the system that keeps the river clean and to me that is a tremendous investment that you can make.”

Community Engagement

Interviewees valued the strong community engagement evidenced by partnerships within the community, an active watershed council, and sense of active stewardship within the community. Interviewees value the natural environment, but also recognize the importance and value of the human element saying, “I mean it’s the environment and the natural setting, but also in equal measures the community and the people”

Strong Social Infrastructure -

This included the presence of environmental education and outreach opportunities, consistent stewardship work from community members, and a sense of pride for the efforts to address pollution. Consistent stewardship within the social infrastructure is a key value, “The community is a really strong community, so they like to get together and work on those environmental issues, which is really refreshing.”

Critical Partnerships for Cleanup -

Having community engagement led to more critical partnerships developing, perseverance in the long time span the cleanup work takes, and the presence of a variety of skills to tackle the dynamic problems within the watershed. “I could see even on the council the activities that were happening in the community. Shifting traditional ordinances... So there's that mindset of making small changes.”

Geographical Uniqueness - Urban

Valuing the uniqueness of the geography of each AOC was mentioned in almost every interview. We contrasted responses between urban and rural AOCs as to what they valued geographically. Hence, the rural and urban AOCs have been split into two separate themes. It is important to note the value all interviewees spoke to in recognizing their unique geography despite their location being urban or rural.

Proximity to Natural Areas -

For more urban AOCs, a frequent musing was the juxtaposition of living in an urban area yet having access to an abundance of parkland as well as proximal rural farmland, lakes, and coastline. Interviewees mentioned the surprise that people often have that an urban area has so many natural resources available and how they valued, “Showing people that there is so much more to the area than just the city.” Unique habitats and natural spaces within an urban setting can help to change perceptions of the community, foster an appreciation of the resource, and harness a better understanding of the history of the area. As one interviewee reflected, “Once I learned all the stuff

was right here in my backyard, I was like why on earth are we not appreciating it more, and I think this region was settled because of the water and the industry is here because of the water, the pollution is here because of the water that drew the industry.”

Unique Features -

Some interviewees also mentioned the uniqueness of having the freighters going through their waterways on a daily basis and valuing that as part of their cultural identity. Another unique feature mentioned is the bridge going to Canada. There are only a handful of locations that connect from Michigan to Canada and this creates a unique value to certain communities.

Geographical Uniqueness - Rural

Small-Town Lifestyle -

For the more rural AOCs, the small town lifestyle was greatly valued. Interviewees noted that the lifestyle in their community is different than the big city life and it’s something that they know and appreciate. They described the community as tight-knit and their families and jobs as central pieces of their living experience. Some interviewees mentioned the value of safety that comes with being in a small town. Other unique benefits included fewer pressures of development for rural communities, “Honestly, that remoteness is great. I mean from my point of view environmentally, we don’t have the pressures that you have on the east coast or the west coast, but it’s a trade-off always.” Also, interviewees mentioned valuing that there can still be a diverse population despite them being a small rural area saying, “You have everything from redneck conservatives to communist liberals and everything. Finnish socialists group was up here. So you have all kinds of diverse - the small group that we have, we are not typed, you cannot type us because we are so diverse.” Lastly, they stated that small towns are a good place to raise a family. “We moved here because it is a quaint little town. It is on the lake, it is very pedestrian friendly, it has bike trails in all of this. So it kind of meets that quality of life of small downtown, very tight community.”

Employment Opportunities

A couple interviewees spoke to valuing that their communities are business friendly and want people to continue to see more opportunities available saying, “We’re a tourist town, but you could also say that we’re a business friendly town. We want to entice small, start-up business to...we have some industrial property and we would like for that to happen.” There is pride in work-related opportunities such as steel plants providing numerous jobs, but they also noted that they have been hit recently with downsizing from tariffs. Value in the diversification of job opportunities was also discussed.

Academic Opportunities

A couple interviewees recognized the value of academic opportunities within their community and described the university area as a special place where important environmental research is happening. The campus is in a nice location both for attendees and for the environmental research to take place. They also spoke to the value of having a top research institution within a small community and the contributions that can have to the AOC work.

What AOC-related changes have they seen in the community?

Throughout the AOC program’s 30 + years change was hard and often took a long time. When an identity such as, “legacy of pollution” is attached to a community it can take more than just physical restoration projects to lose the stigma. Below are AOC related changes that interviewees discussed.

Table 3.2: AOC-related changes seen in the community

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Access to and Engagement with Water	X	X	X	X				X			X			
Perception of the Resource	X	X			X			X		X	X			
Increase in Public Knowledge of Issues	X			X				X						
Pride in Environmental Changes	X			X							X			
Environmental Improvements			X		X									X
Quality of Life		X									X			
Economic Benefits	X	X												
Ripple Effect of AOC Projects											X			

Access to and Engagement with Water

The restoration done through the AOC program has given communities new access to the water resources. “These restoration projects are having a huge impact on people starting to recognize what a resource the river is, because for one thing there are a lot more places where they can see it and be on it” This has resulted in new engagement with the water in the communities and has a domino effect of also promoting stewardship of the water.

New Recreation -

With new access to the water comes new recreational opportunities. “...now people are walking up and down and people are riding their bikes and going fishing and swimming...people are connecting with the water in ways that they did not have access or weren’t able to do before” Another interviewee stated, “Recreational development and more kayak access and things like that are becoming more and more popular here. Now that the water is clear people want to get in and use it. And they want to know that they are doing development of those kinds of recreational amenities in a way that will not harm the environment.” Many AOCs also now have fishing competitions that are bringing both locals and tourists to the water. The fishing tournaments have created a new economic driver for these areas.

New Engagement with the Water -

AOC cleanup work has created opportunities for families to forge new relationships with and have access to the resources. Many interviewees discussed the idea of their communities now “facing the water” rather than being turned away from it, which has allowed for more people to access and engage with the water. Reflecting upon past engagement with the water, one interviewee mentioned, “I think having seen the difference in the river through my lifetime...nobody ventured out on that river unless they were drunk or had a death wish.” There is now increased engagement and connection of friends and families to the water, which can engage younger generations and subsequently promote stewardship. People have always been drawn to the water, but restoration efforts to create accessibility have made these places destinations.

The community is viewing the water in a much more positive light and will continue to form meaningful relationships with the water as new areas of the river are discovered as they are restored. “Some of these projects have helped drive greater interest in places you would not expect about protecting water quality, because it’s allowed a lot of underserved areas to have a new connection to the water, because so many of these rivers were highly urbanized.”

Especially for interviewees who have lived in the AOC before the cleanup took place, the newfound engagement and access to the water is quite different. For example, one interviewee mentioned, “I grew up [here]. I was gone for 17 years, so there was a big part of my life where I never really came back to see it changing, but I never went to the waterfront ever. We had so many

other options for recreation that we went the other way, but considering how significant [the river] is and my kids go to the waterfront a lot now, so I think that says a lot about how the use is changing.”

Perception of the Resource

Interviewees spoke to restoration efforts in a largely positive sense, expressing that since the cleanup efforts people have increased their appreciation and positive perception of the water. Perception is changed by people seeing and interacting with the river more than they did prior to cleanup efforts. The electorate representing AOCs has also gained a better appreciation of the water resource in their community and have subsequently become more educated for policy making.

Recognition of Proximity to Natural Areas -

There is more broad recognition now that metropolitan AOCs are so close to many acres of natural areas and beautiful water resources.

Generational Shifts -

Many interviewees spoke to the generational change in the perception of the water. Young people now do not associate the water resource with pollution as much as their parents or grandparents because they haven't lived through the pollution. “A lot of communities are more educated. I'm talking about elected officials and appointed officials and also their staff are much more educated about the opportunities that are before them for protecting and preserving and restoring the natural resources in their community.”

Understanding of Restoration -

Interviewees spoke to an increased understanding of the restoration work by the public. For instance, there was a period early on where the public was afraid of the river. The public initially feared that toxins would be released during cleanup. That fear has now dissipated. People see the water and the river as an “incredible asset” and something that everybody can enjoy. There is pride in reconnecting to water and having a sense of ownership in protecting it for the future, which has led to renewed hope in the communities.

Prior to the AOC work the problems of pollution were known, but people thought that not much could be done to address them. Transition to today and people believe that this kind of transformation of an area can be done. “...it's kind of nice having that one that's so accessible to the public because if you are going to show people around here in the area what's possible I think the attitude before was -- people knew there were some major problems on the river, but there really wasn't much of an idea that anything could be done about it. So this was just the price we

had to pay for the economic development in this area and now people know that, no we don't have to live with that, there are things that can be done."

Restoration projects that are accessible to the public can act as a showpiece for a region and help change the perception of the water. One interviewee described it as, "People can bring visitors from out of town there and it is something to be proud of. I think that people are realizing that this water that surrounds us here, both in the river and in the bay shore, is an incredible asset and that we are incredibly fortunate to be living with it. There are things that we can do to take care of it to make sure that we can enjoy it and that our children and grandchildren and everybody else can enjoy it too."

Increase in Public Knowledge of Issues

Interviewees mentioned that there is now greater environmental awareness and stewardship within the public. This has been a shift from the historical perspective of, "You didn't know any better back then because you grew up in the that, you didn't know the difference. We have black and white pictures in the 1930s and 1940s of kids swimming right over top of CSO outfalls and they don't know the difference and they are dying left and right and getting diseases and they don't make the connection." Nowadays people are taking note of issues and knowing who to call when they see something. "Well, people see that stuff now, people are down at the lake and they call the Institute when they see algae scum on the beach, people are going down to the beach and they were much more aware if they see foam, a sheen underwater..." They also mentioned that beginning to overcome the pollution legacy and recreate the identity of the community has been a change and how they were amazed that the legacy is starting to turn around toward a more positive identity.

Pride in Environmental Changes

A couple AOCs spoke to the pride they feel after the cleanup efforts. Referring to a DNR study in the 1970s and how far the community has come one interviewee stated, "There were no live fish in the lower half of the river, none, they could not find any - when the DEQ or the EPA did a study, not one fish was located." After cleanup efforts, they now have pride in being seen as equals to those who live near the cleaner parts of the river. Some spoke to the sentiment of "downriver folks" wanting the perception of their area to change and to be seen as equals and not just the recipients of pollution. One way the pride was shown for the positive AOC related changes in the community was through a timeline one AOC had made that chronicled the historical environmental perspective of the area. This is now hanging prominently in their office and was one of the first things they showed us when we conducted the interview. Interviewees spoke to the fact that no matter what a

community member is interested in, the river connects everyone. Pride in the water is a unifier across boundaries. There has been a change in attitude, prior to GLRI people knew there was pollution but felt it could never be cleaned up, now more people are drawn to the water as a point of pride and a recognition of the water as an asset.

Environmental Improvements

Communities are noticing changes in the biodiversity present within the watershed saying, “You see bald eagles now flying up and down through the area...and herons and egrets.” New fish species not previously in the upstream environments are making their way back. The community has gone from historical pollution to environmental improvements. When interviewees were younger there were real, tangible visual issues that existed due to the pollution, but now they are much improved. One example from an interviewee was that there is no longer sludge in the river. With an improved environment, they do not need to leave their community to go do recreational activities and people are no longer afraid to go near the water. “I used to drive miles and miles up north to go kayaking and canoeing, and now when you can do it right in your hometown, that makes it even better.”

Waterfront dynamics are visible changes in many communities. Less visible, yet still important, is that monitoring shows that changes are happening within the sediment too. For a minority of interviewees, they haven’t seen any changes to the community as a whole from the AOC program, but they have noticed the physical changes such as oil bubbles no longer in the water. Water quality has improved for many AOCs. This can be seen through the data collected from the water. Now that water quality is improving, one of the interviewees mentioned that the focus was moving toward air quality.

Quality of Life

Interviewees mentioned that there has been an overall increase in cleaner resources which has resulted in a higher quality of life for the community. “It’s definitely a cleaner, safer, higher quality of life environment issue and I think that is a tribute to a lot of restoration projects that have taken place.” Some specific ways they mentioned increasing the quality of life includes safety and the ability for the river to provide sustenance again for the community. “We now have a lot of whitefish coming up the Menominee River, which we never used to and whitefish is good eating fish! They have the big muskies now, which are as long as the table or longer and people like that sort of thing. So the river has always been a very beneficial river.”

Economic Benefits

Restoration has also allowed for new water related businesses such as a canoe livery. Growth is spurring investment in the communities. The cleanup has also been a benefit to political and community leaders who now “sell” the concept of river cleanup as a revitalization tool for community development and growth. Although they are not yet delisted, the interviewees noted that, “It’s already providing economic benefits throughout the watershed!”

Ripple Effect of AOC Projects

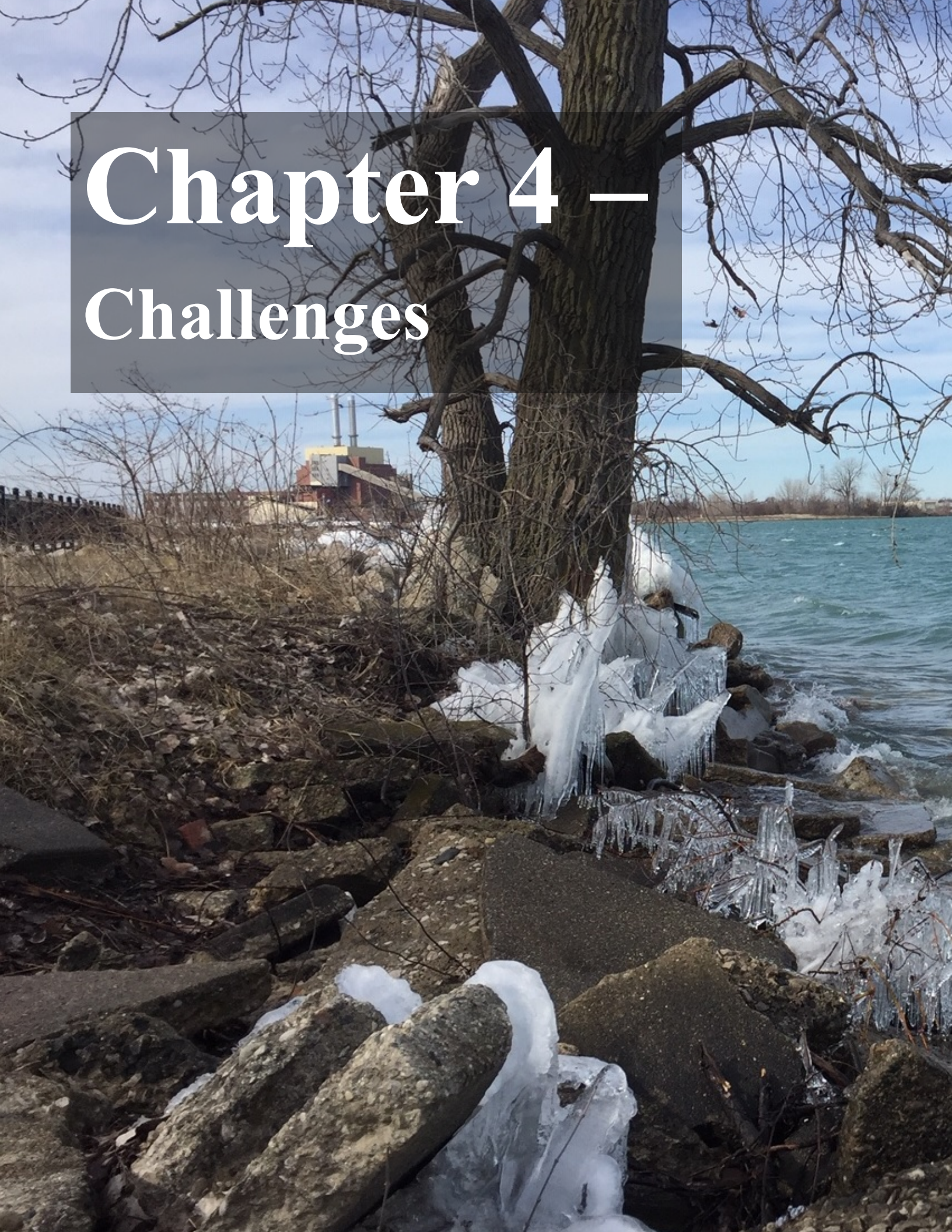
A theme that was only specifically mentioned in one interview, yet is still important, is that of the ripple effect of the AOC projects to adjacent communities. Improvements that are being done are now often outside the scope of the AOC, but the work needed the initial AOC push and work done now is seen as an added bonus from AOC push. The interviewee mentioned that it was good to be listed as an AOC because it spurred action within the community. “A lot of things that are being done in [harbor] are actually being done by the community. They are outside the scope of the delisting effort. They’ve taken these things on, but they would not have taken them on if we hadn’t made our effort first.”

Conclusion

Overwhelmingly, interviewees spoke to highly valuing the natural environment within their communities. For many, the natural environment is formative in the establishment of identity as individuals and as a community. The natural environment also serves as a foundation for another area valued about the communities including four season outdoor recreation opportunities, which have increased through AOC restoration projects. Engagement by community members in environmental projects and groups was also valued by PAC members. A majority of PAC members mentioned factors related to the geographical uniqueness that being located close to the Great Lakes or connecting bodies of water provides. This was true for both rural and urban AOCs. All of these factors contribute to a deep sense of community and desire to make an impact to protect the aspects of the community PAC members value.

The changes in the community as AOC restoration work was completed largely center around the increased access that people now have to the water. Access allows for new recreational opportunities, builds new appreciation for the water within communities, and creates new engagement opportunities with the water. Access also enables a change in the long-held perception of the water as polluted. When community members are able to interact and use the water, they come to realize for themselves that it is being restored. The AOC program has helped to change this perception and has increased water literacy within some communities through educational efforts. People are now learning about the issues and taking pride in the changes that have been made. Moreover, new economic opportunities have arisen from the AOC work and communities are embracing this newfound “blue economy.”

Chapter 4 – Challenges





4 – CHALLENGES

We asked PAC members about the fears and/or challenges they are experiencing and foresee regarding the delisting process. Understanding the fears and challenges enabled us to gain insight to the current and future core issues perceived by PAC members who have been integral to carrying out the AOC program.

Across all Michigan AOCs, it is apparent that some fears and challenges can be addressed quickly, while others will take a longer time. Many of the fears and challenges mentioned in interviews related directly to the identified issues that spurred this research. A common thread was the belief that once an AOC is delisted, it is not completely cleaned up and work needs to continue. Stemming from this belief are fears and challenges about preparing and dealing with the uncertainty of the future.

Other broadly represented challenges regarding the delisting process include: (1) maintaining PAC engagement and community involvement up to and beyond delisting; (2) losing critical project funding; (3) changing public perception of the AOC; (4) embracing the complexity of environmental issues; and (5) addressing emerging issues and future threats to the watershed. One interviewee noted a broadly shared challenge, “it’s not just at the point of delisting. There is that transition period that leads up to delisting that I think they may not be thinking about all the various aspects of what can be happening within a local AOC during that transition period.”

Identifying the fears and challenges of PACs in regard to the delisting process allows OGL to structure the process toward delisting in a way that directly addresses the PACs’ uncertainties. Oftentimes, when a process is caught up in getting work done, those involved in the project do not take the time to identify what uncertainty may lie in the future. Recognizing similar fears and challenges across all the AOCs allows for programmatic changes to be made to address the issues on a larger scale. The ability for OGL and PACs to stay adaptable is important as new and unexpected challenges regularly arise.

One PAC member stated in response to the challenges they face, “Three things: Obstruction, and the polluter, and money.” The following discussion expands upon challenges and fears across all 14 AOCs in order from most to least prevalent. Within each challenge are distinctions in how the challenges were discussed in interviews.

What are their fears and/or challenges regarding the delisting process?

Table 4.1: Fears and/or challenges regarding the delisting process

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Diminishing PAC Engagement	X	X	X	X	X			X		X	X			X
Loss of Funding After Delisting	X	X	X				X	X		X		X		X
Nature of Environmental Issues as Complex and Long Term	X				X		X			X	X	X		X
Public Perception of the AOC		X		X				X		X	X	X		X
Emerging Issues and Inherent Future Change to Watersheds		X	X					X			X			X
Limitations of AOC Program Boundaries		X			X			X				X		
Maintenance of Projects		X		X	X									
Remoteness and Ruralness of AOC											X	X		X
Political Pressure Causing a Rush to Delist								X		X				X
Losing Relationship with OGL										X	X			X
Determining the Future Structure and Function of the PAC	X	X												
Complexity and Intricacies of Process for Bi-State and Bi-National Programs											X			X
Slow Pace of Governmental Bureaucracy								X			X			
Losing the Public Voice Component of PAC		X												
Prioritizing Short-term Economic and Political Gains over Environmental Prospects											X			
Interface between Restoration of Shoreline Projects and Brownfields								X						
Siloed Nature of Government System														X
Lack of Preservation for Historical Relics												X		

Diminishing of PAC Engagement

A majority of AOCs are facing diminishing PAC engagement. This creates a domino effect where reduced PAC engagement leads to reduced PAC capacity, which in turn causes a loss of momentum in cleanup efforts.

Losing Momentum -

There is a fear among AOCs that they will lose momentum with the watershed restoration work once they are delisted and PAC members are no longer formally engaged. Interviewees spoke to wanting to keep strong partnerships to ensure that environmental restoration progress can continue in a collaborative manner. Some interviewees spoke to wishing the state would stay as a partner in some manner even after delisting to help prevent the loss of momentum. Partnerships will be critical as AOCs navigate next steps. There is a concern that “delisting means walking away” for PAC members. Maintaining momentum will be a challenge, especially as funding is uncertain and cleanup efforts become less apparent and tangible. It is harder to generate interest and involvement when the issues do not have as direct an impact on people’s use of the water.

Loss of Member Engagement After Delisting -

An important part of continuing momentum includes continuing engagement with the PAC in whatever iteration of the group exists post-delisting and PACs recognize the challenge in sustaining membership for the group up to and through delisting. There is a fear that engagement may drop off if members feel that the program was abandoned, the PAC is not clearly defined, or the lack of incentives exist. There is a fear of reverting to degraded conditions because of this. They want to make sure the contamination, “never happens again.”

There is a challenge as AOCs near delisting because removing BUIs gives a false sense of the problem being over, so people may not see the need to participate any longer in the PAC. “I think what’s happening right now is that as we’re getting closer to delisting and we have fewer issues that we’re dealing with, we’re going to lose a lot of people because it doesn’t seem - there doesn’t seem much of anything to accomplish left.” “So by and large I think we’ve got what we’re going to get out of it. I think there’s this feeling among an awful lot of people of, ‘let’s get it done.’” In reality, the work is never completely finished and there is an identified need to continually engage citizens on water issues to maintain and grow the support for cleanup and restoration. Current members recognize this and recognize the importance of sticking with the work, “I wish there was more individuals out there that would step up and I could get less involved, but I’m afraid I’m stuck with this and I don’t want to see it fade away, so I’m probably going to continue to be involved after we’re delisted one way or another.”

Small PAC Size -

PACs' capacity to finish projects can also decrease due to the current small size of PACs. Too few members also leads to a lack of diversity in perspectives. The interest in being part of the group has waned over time. "One of the things that we've struggled with in the last 10 years is we have a very small PAC...we only technically meet once a year and that's just to reappoint the chairperson. A lot of times we're doing that just on a telephone conversation though because there's only 5 or 6 of us on the committee. It would be nice to just have a better diversity of people. Different expertise, or even just different thinking, you know - maybe we're missing something!"

Engagement Hurdles -

One group of interviewees discussed that PAC capacity issues stem from a combination of aging problems, reduced engagement, lack of backbone organizations to lean on post-delisting, and a multitude of political hurdles. The interviewee thought that part of the lack of interest stemmed from the nature of the issues going from having a specific focus to a broader focus that makes it harder for people to get excited about. Generally it is challenging nowadays to get people to come to meetings and become engaged in community work. "People are often reluctant to go to meetings. You can get everything in your smartphone, you can sit at home and do a netflix or something like that. It's really too bad because it's when you can get people together that you can begin to exchange ideas or you can hear some ideas that people have and it makes you wonder, 'whoa where did they get those ideas'." "I find that it's difficult because, again, people are so busy with their lives, and then having a meeting in the evening is good because they're off work, but then they're tired, so sometimes it's hard to get people to come out. So unless they have that real passion, they won't be coming out."

Interviewees identified the lack of "excitement" in cleanup work as being a primary hurdle to engagement saying, "I think that it has gotta be some type of people that have a long term vision and long term commitment to the community. Because there's a lot of the work isn't all that glamorous and some of it isn't even all that exciting. I think the end result is exciting beyond words, but it is because you've had to kind of slog through the mud all this time to get there. The idea of being able to say, "hey we did it!" is going to be very exciting. It takes longer term commitment."

For new people at meetings, they may feel left behind in what role they are supposed to play. "You've got younger people there, but you need those people to feel like they are needed to be a part of it, and right not there isn't a lot of that. You go to meetings and it's just a bunch of acronyms and people that have been doing this for so long that even the new people walking in are kind of clueless...they can't really figure out what's going on or figure out what is their role in this."

Lack of Youth Recruitment-

Regarding youth recruitment, one AOC emphasized that there is often a lack of knowledge or understanding of the past. Younger generations are not as connected to the legacy of contamination.

Fostering an inclusive table that has a variety of demographics including youth is very important to success after delisting, but is a challenge. One interviewee asked “How do we not let the same things happen again?”, referencing an earlier comment that time heals all wounds, but it critically important to not forget the wounds so that progress continues and does not regress. “But the group is suffering an age problem of getting young people. You know, that is one of the biggest challenges. If you guys can figure out ways to get younger people involved in stuff, that’s the key thing. Because we have got a lot of people in our group who are well meaning and have put in a lot of time, but they’ve gotten old and tired.”

PAC members especially notice the lack of youth involvement at SPAC meetings, “I go to the SPAC meeting and it’s the same thing and it’s all, we’re all older, and we worry that if one of those persons leaves, that is absolutely cripples that PAC, because they lost the engine. They certainly lost the tire and won’t be able to move very much.”

Lack of First Nations/Native American Engagement -

One PAC mentioned that it can be hard to engage with First Nations and Native Americans within their community. There is lack of representation from these groups in making decisions about the future of the water. The decision making style and connection with the water differ between the indigenous and non-indigenous groups, which can cause friction. Lack of representation from an important voice is challenging as it leaves a gap of both knowledge and power in decision making.

Loss of Continuity -

Losses in continuity of both PAC makeup and continuity with OGL were identified as a challenge in continuing work into the future. There is a feeling of PAC members who have been involved for many years that they are ready to be finished with the whole project. Lack of engagement makes interviewees think that there won’t be a PAC group moving forward. “I hate to say it, but I don’t. I think we’ve had such a drop off.” Historically, PACs have served in the role to actively engage with the public over the years. Who will take over that important work if there is no longer a PAC? Community groups might dissolve if they do not have a distinctive leader such as a PAC or RAP Coordinator.

Loss of Funding After Delisting

Loss of funding after an AOC is delisted was a commonly shared fear. One interviewee described their thinking on the point, “That’s the number one concern, that the funding is going to disappear for the AOCs.”

Discontinued Access to GLRI Funds -

Approximately a third of GLRI money is designated specifically for AOC cleanup work, and PACs fear that they will not be able to continue restoration projects once they are delisted because they will no longer have access to these funds. There is a fear about the transition from direct to indirect funding as the AOC moniker is taken away. “We are going to be moving away from all these directly funded AOC projects to more of what I would call indirect funding. They’re still going into the AOC, but they are not going to through the local organization.”

The PACs feel that they will be competing with all of the other coastal communities who are all applying for the same pots of money and will not stand apart. “My fear is that if there isn’t funding coming in on some level for something, that this is all going to be for naught. There might be a handful of dedicated communities that get it, but communities are pretty hampered right now.”

Reliance on Short-Term Grant Funding -

For organizations who largely rely on grant funding, it is inherently difficult to have conversation about the long-term state of the river. In order to create long-term plans, groups need secure funding. The reliance on grant funding emphasizes the short-term thinking when working toward delisting. Grant funding also takes a lot of time administratively. This prevents groups from getting work done or PACs need to budget for staff time, “It’s so hard to keep something going when you are just struggling for funding. You spend half your time writing grants and talking to funders and trying to promote it and less time actually doing the work and getting the volunteers out there and using the data.”

For AOCs that have looked toward more long-term grant funding, such as local community foundations, they have run into the connection challenges trying to get their community foundation to fund environmental issues instead of social issues, which they had traditionally focused on. “We have a really strong community foundation here, but they have been investing in a lot of social issues and it’s pretty amazing with the AOC right here in their backyard how little is invested in the environment.”

Reliance on Government Funding-

One AOC spoke to the need to diversify funding sources as they move forward toward delisting and not be so reliant on state resources for projects or organization capacity. PACs have become reliant on the funding sources available through OGL and GLRI. They desire a new source of sustainable funding and question how they can get to that point. “How do we become more sustainable? Can we get a different source of funding? Whether it’s foundational support, our own foundation or what I call sugar daddy’s.” One interviewee perceived that other organizations and causes have people in government who will lobby for money towards their cause, whereas the PACs feel they will be on their own.

Uncertainty in Future Funding Mechanisms -

PACs spoke to not knowing how to find funding once they are delisted. There is uncertainty of future availability of resources and how the funding works once the AOC is delisted. The interviewees had questions about where the “pot” of money would go that is currently earmarked for AOCs after AOCs continue to be delisted, “I think as more and more of the 14 in Michigan get delisted, is that pot of money just totally going to dry up and go elsewhere or is it going to be utilized within the confines of the AOC or the delisting process? So I guess we don't know that answer.”

There is hope that revitalization will eventually lead to a base of local maintenance funding, but until the economic base is created there will be a significant need for continued Great Lakes funding by governments and foundations. On top of that, there is a realization that budgets are going to face new priorities as effects of climate change continue. There is a desire to know where the money and support will come from going forward, if not from the AOC program. “Delisting is kind of a scary process because everybody is used to, I don't want to say a lot of money but there's been a reasonable amount of funding put forth. Very consistent funding. What's your deal when you're not eligible anymore, what do you do afterwards?”

Lack of Money for Research and Monitoring -

PACs recognize that no money means no funding for research and therefore no awareness of emerging issues or the ability to track the current problems and improvements. There is a desire to continue research on what is happening in the bodies of water to prevent a contaminant issue from growing, “...that's a major concern of this funding disappearing is that no one is studying it, so it's not a problem until it's a big problem.” The cost of determining what needs to be done is very expensive, “First the research to try to decide what needs to be done and then to do what needs to be done, all that's going to take a lot of money.” There doesn't seem to be much government funding toward research either. “With this present climate of research and government - and that's where it's [money] is going to have to come from, government support, it's just that I don't think it's there and that's the tragedy of the whole thing.”

Expense of Large Scale Sediment Remediation Projects -

Interviewees spoke to the massive funding needs for sediment work and a renewed focus to get sediment work completed. The cost of large scale projects are a barrier to delisting with comments such as, “There's all kinds of things that could happen if there was an investment” and “The problems are technical problems that we need a better solution for - they are technical and industrial problems. So that's where I go back to if you have the money to start doing things, testing things, or remediating things, that's where you're actually going to solve the problem.”

Nature of Environmental Issues as Complex and Long-Term

For some AOCs the nature of the problem is so complex and long term that they feel as though they will never delist. This constitutes both a challenge to overcome and a fear when it comes to discussing the prospect of delisting. This impedes planning and can create a sense of hopelessness.

Complex BUIs -

Once the “low-hanging fruit” BUIs are complete, PACs are left with the more complex BUIs to deal with. “We’ve done a lot of the habitat work and we’ve done some great projects, but it’s just the tip of the iceberg...the river is not going to turn off the lights and walk away.”

For example, PACs spoke to sediment contamination as an ongoing issue that will continue for 10+ years and referred to it as “the so-called elephant in the room.” This is not the low-hanging fruit that the state has been working to get done. Even though cleanup efforts are happening, one interviewee noted that kids still cannot play in the sediment along the shoreline for fear of contamination.

Benthos is another tricky BUI to deal with because it is not aesthetically pleasing and is somewhat hidden from the public, so it doesn’t get primary attention and is hard to garner support for. Benthos is a direct offshoot from contaminated sediment and is the indicator of an issue as opposed to the impairment itself. Degradation of benthos is the most costly but least visible BUI to remove, but it is very important to river health.

Combined Sewage Overflows -

Combined Sewage Overflows are an example of a perpetual problem in some AOCs due to lack of maintenance and that will continue to be an issue even when the AOC is delisted if proper maintenance is not put into place. There are also challenges with exemptions related to CSOs. For example, the EPA gave exemption to CSOs in Detroit, so Detroit doesn’t have to follow the clean water act. This makes it difficult for those living downriver of Detroit who have to deal with what flows into their water systems.

Long Term Issues -

A few interviewees believe they will never see delisting within their lifetime. Some solutions that have been presented would take years to occur. “I mean the day that I’m out of a job because the [river] is restored would be absolutely wonderful, but there is so much work that needs to be done, so many complicated projects, not to mention the other issues with changing people's minds about how to manage property.”

In one case, if no human intervention was implemented, it is estimated it may take 800 years for the bottom of the body of water to be covered naturally by incoming sediment and start containing

life again. For others, the extent of the pollution is still uncertain even after all the studies that have been done over the years. Little is known about the true nature of the pollution. “They are finding surface contaminants all over the place, barrels - they don’t know what’s in them, some of the barrels are empty - what was in them? We don’t know.”

Expense of Complexity -

Sometimes the complexity and sheer size of the damage to the area comes with a large price tag that no funder is willing to support. This becomes a challenge for a PAC to continue on, when they have solutions that cannot be funded. “So they have put dampers on different things that we have looked at doing just because they can’t really do - so when you get all of this information and we see what the problem really is and we look at trying to solve that problem or those problems and you find out the tag - the price tag on that is going to be really high, who do you go to?”

Public Perception of the AOC

Public perception of the AOC varies widely throughout the affected communities in Michigan. For some members of the public there is great concern for the polluted state of the body of water. For others, they may not be aware of the issues or agree with the science that led to the decisions about the severity of the issue. Both of these perspectives present challenges to PACs as they work toward delisting and both perspectives also reflect the need for clear and effective communication to the public about the AOC work.

Disconnect Between Progress and Public Perception -

Often there is a disconnect between the progress of the restoration efforts and the public’s perception of what has been done. The public may not be up to speed on what cleanup work has happened and still perceive the AOC to have issues. This stems from both a disconnect in the relationship between the cleanup projects and environmental health as well as ineffective communication to inform the public on how the AOC has improved.

One AOC mentioned that their watershed council did a public survey to gauge the perception of the cleanup efforts. They found that it is difficult to engage the public in a full understanding of what the projects are doing and discussed that the public did not make the connection between an increase in the diversity of fish species and an overall healthier environment. The public still has a fear of contaminants even in areas where they have been cleaned up. Lack of awareness within the public sphere is challenging. In another AOC there have been events in the community related to the river that do not acknowledge the AOC program explaining, “...when they had their big program last year with the walleye festival down there, I even wrote a letter in the paper and said, ‘You know, all of this didn’t just magically happen. The local agencies really are what pushed this and worked this through and we owe a debt of gratitude for that.’” This is problematic for garnering

support from the community for future work and getting the message out. Yet another example are AOCs conducting projects that take place below the water's surface. Without visible change some community members remain oblivious to large scale AOC projects that are happening.

Internal Disagreements on Impact of Public Outreach -

Community support of cleanup efforts is lacking in some AOCs, which creates challenges for momentum. As one interviewee stated, "Community support would be very hard to get." For this specific AOC, there was a disagreement within the PAC on the importance of spending time and energy on public outreach.

Some interviewees saw the positive side of public outreach to increase knowledge of the issues and clear up any misunderstandings about the issues explaining, "...there are certainly some people and it's been my experience too that they just aren't going to care and you aren't going to convince them to care one way or another, but again with my experience it does seem like there are enough, or a large proportion of the population who just doesn't know, so I do think there is a role for increased public awareness through education." Referencing historical examples of misunderstanding of the issues, another interviewee said, "What sticks in my mind is that I was just in the library going through archives and when they last had the public comment period on the Superfund activities, they had to archive all these negative letters. I saw them and there was just a lot of misunderstanding of the issue and what wanted to be done."

On the other hand, PAC members discussed a skeptical view of the impact of public outreach, "I'm at, okay great I'd be fine if we taught it in the schools up here, but so every person knew - but it's not going to make any difference because there just aren't that many people here who have any ability to do anything and even if we got a petition for every single person - are we going to get money?" There is a sense that the public outreach just doesn't matter and that people are not willing or do not care to understand the technicality of the issues. "We could do a constant update, like twice a year do public hearings and say, 'here's what's going on' and give people a forum, but it's not going to solve the problem." Despite this, PAC members say the OGL is continually pushing them to work on communication efforts when they really would rather get down to focusing on the issue of pollution. "I spent a couple of years dealing with the OGL and they kept wanting us to do outreach, and do communication, and put on seminars, and we did all kinds of programs and we still don't really know without doing some testing and doing some pilots how to solve the problem."

Lack of Coverage by Local Press and Media -

Local press and media not covering or misrepresenting environmental concerns presents challenges to changing public perception. For one community, the local newspapers are largely run by politically conservative owners who tend to ignore environmental concerns. The interviewees were frustrated by this, as they need the media outlets to let people know what

projects are happening. For small communities, this is the danger of having a single primary media source from which the public gets their information. As one interviewee sees it, “One of the things that is a bit of a hurdle is the local newspaper. We only have one. And it’s not the best newspaper in the world, you know, it’s all the - I like to switch that little phrase around, ‘it’s all the news that’s not fit to print.’ I think they could do a better job making people more aware.”

Lack of Public Understanding -

If the public isn’t aware of the issues and what needs to be done, then it not only leads to poor engagement with the general public, but it also creates a response to environmental issues that is reactive rather than proactive. Yet, it is in the best interest of the communities to be proactive. “Well I like to push them on this idea of being proactive rather than reactive. That it’s cheaper to go that way. It’s safer, it’s sounder, it’s more conservative.”

One interviewee exemplified this by explaining the need to educate the public on the benefits of soft shoreline versus the predominant idea that all shorelines need to have hard edges to protect against storm surges. In planning for the future, PACs must deal with increasing public awareness to garner support for project implementation. It can be difficult to communicate technical scientific jargon to a lay audience in a way that they will understand and care about an issue. Expressing frustration, one interviewee said, “They’ve got a glazed look on their face, because you might as well be talking in a different language”. Another interviewee described it as, “If it’s killing things at some level then you know at some level the aggregate is probably not good for us either, but a lot of people just aren’t there with the science and that also is like to me a problem with communication.”

The lack of visibility of some of the issues also leads to a misunderstanding of what is happening. “Below the water, the dredging, the coal tar, the paint sludge stuff. The average person they don’t like it, but they don’t really pay attention to it because it’s not there to see.” Therein lies the issue of an area “looking clean” when in actuality there is still cleanup to be done below the surface of the water, “It’s really interesting when lakes look clear, look beautiful, look blue, people just don’t associate - if you can’t see the pollution it’s hard to make that connection and we’ve been seeing that at other AOCs that have - sediment is the only thing that they need, have left on their issues to clean up. It’s really hard to see that the sediment on the bottom of the river is polluted when the rest of the river looks beautiful, so getting that public engagement piece has been difficult.”

Apathy toward Continued Restoration -

There is a fear that the public will become apathetic toward restoration once the AOC is delisted. Once the BUIs have been removed and the delisting celebrations happen, will the public be as committed in continuing restoration projects?

Overcoming the Stigma of Pollution -

It is difficult for the public to get past the associated stigma with the polluted AOCs. For some AOCs, this stigma is enforced by warning signs placed around the area. These signs strongly influence public perception and are having a ripple effect on the economy of the area. “And no one is looking, no one cares, and of course the big problem then - the health department has had us put signs all along there about the fact that you should not eat the fish there...so now people can't sell their property for what they paid for because the word is out.” The signs also have a negative effect on the use of the area, “Now they're putting signs up - the property values have fallen, people don't want to go swim there, people don't boat there much.”

Even in cases where a Fish Tumor BUI was removed, interviewees spoke to fisherman still not fishing in the area, “There wasn't a lot of fishing and activities in the AOC for the next 10 years after, you know, because the fear of the PCBs, just the unknown and [the question of] ‘did they get it all?’.” If AOCs are truly to work toward revitalization, they will need to develop ways to overcome the stigma surrounding their body of water.

Dichotomy in Public Perception -

One AOC talked at length about the dichotomy in community perception between those who think there is a problem and those who think the problem has been exaggerated. The dichotomy is especially apparent among property owners along the lake. “I think there is a vast difference in people's opinions about whether or not [the lake] is a problem and how much of a problem it is. So my feeling is it's a very big problem. I don't like it, I wouldn't let my kids swim in it.” The interviewees described community members who view the pollution warnings as a bother saying, “Well some people just feel like it's fine. Like, ‘we've always swam there and we're fine. There's no problem here, it's not pollution, it's fine’. It's like it's sort of a bother that people are saying it's a problem. I just think that depending on who you talk to, there is huge variation in how bad it is here.”

Some believe this dichotomy stems from a lack of knowledge about the severity of the issue, while others believe it lies in the difference between folks who grew up in the area using the lake and those who have moved up since, “We talked about a dichotomy between those who were born and raised here and have family go back to the [previous] era and then people like me and others who came up here and don't have that long family history, so we see it in an entirely different light about what we're looking at”. Those who have grown up in the area don't see any direct evidence of the negative effects of the pollution, so don't believe that it is an issue. One PAC member described it as, “...because Dad used to say it or Granddad used to say it - and again, they lived among it and they grew up with it, and ‘I don't have any warts’, ‘I don't have another head growing out of my shoulder’, you know, ‘Aunt Helen is 93 for crying out loud! So what are you talking about?’”

Emerging Issues and Inherent Future Change to Watersheds

Watersheds are in a constant state of flux as new contaminants enter, invasive species appear, climate change exacerbates stressors, and areas continue to develop. This becomes a challenge for PACs as they determine how to plan for life after delisting. They recognize a need for structures to be put in place now to be prepared to manage emerging issues and the change that is inherent in the future of their community. Stated broadly by one interviewee, “The issues and the problems in the river aren’t going to go away when the AOC is delisted.”

False Sense of Accomplishment -

A false sense of accomplishment stems from the “fix it” mentality that is currently prevalent throughout the AOC program. Interviewees found it challenging that the program seemed to be structured to bring the AOC to a false ideal standard and that it didn’t take into account the changes that would occur after delisting. PAC members have a pragmatist perspective that problems in the bodies of water will still exist beyond delisting. “Are we obligated forever for areas to look exactly like that? It’s a watershed - it’s gonna change over time.” Contamination will continue to flow from upstream to downstream and new issues will emerge. “We have removed a number of the dams so now the water is fresher, it’s moving, it’s aerated. But that still doesn’t remove the contamination that is coming down, the phosphorus and the ammonia that is coming down from the upstream. That’s a huge issue for us to face.”

There exists a desire to build flexibility into the program to address issues that arise. AOCs in a post-delisting landscape face new problems and are going to need new solutions as the nature of the problem will require different strategies. How are PACs supposed to deal with emerging pollution problems without the support of the agencies? This is a looming fear for many as they look toward life beyond delisting. PACs want to make sure the river doesn’t degrade and that there is a structure in place to deal with emerging contaminants. “We want to make sure that the environment doesn’t degrade, especially with emerging contaminants of concern and new development as well.”

Invisibility of Emerging Contaminants -

As the program is currently structured, there are no plans in place to deal with emerging contaminants after delisting. The contaminants may not be visible and there may not be monitoring that catches the contaminants in time. “I think just making sure that there’s something in place to deal with emerging contaminants of concern. That’s my number one concern. Especially because you can’t see a lot of them.” These contaminants will have effects on many aspects of the watershed including fish. “I think those kind of things that we can’t see, but you know they’re being incorporated into fish tissues and we know that it’s a big issue globally. There are organisms that are eating plastic and not their food in the sea.”

Limitations of AOC Program Boundaries

Interviewees spoke to the limitations they feel by the focus by the AOC program of staying within the established AOC geographical boundaries, when in reality many of the issues exist on a larger watershed scale. Oftentimes the solutions lay in addressing the issues from a watershed perspective rather than on a “project by project” basis. Limitations of boundaries also refers to the boundaries set on requiring projects to only address BUIs.

Scale of Impact -

The scale of the impact of the legacy pollution is much larger than the boundaries of the AOC would suggest. The interviewees spoke to the need to reframe the vision of the work to shift from project scale to watershed scale. “What is the long-term, what is life after delisting, what’s the long-term prospect for this? I would argue that for something like a watershed, you’ve got to look at it from the watershed scale and not necessarily the project scale.”

Doing this would lead to making more connections and having a scalable impact with their proposed solutions. As one interviewee stated, “We don’t benefit from just having this limited area to look at.” They framed the difference as a “project scale” being good for identifying the source of a problem whereas a “watershed scale” can begin to get at multi-faceted, complex issues needed to continue the work.

Some interviewees feel that the boundary of the AOCs is not enough to encompass the actual issue of pollution. “So in some ways I think maybe the definition of the AOC problem is not big enough for what the problem is.” There is a question of if the cleanup efforts should just be focused on the designated AOC or the entire watershed. “Do we just want to look at [the lake] or do we want to look at the [whole] watershed? Which are two different things and we’re talking about this or this. There’s much discussion on that and not much agreement on which way it should go.”

Defining Scope of Projects -

It can be challenging to define the scope of the projects if a cause of pollution is located outside of the AOC boundaries, yet it has a great effect within the AOCs. Challenges are associated with the whole watershed perspective as it makes the management techniques more difficult to navigate. Also, the AOC boundary designation defines the area where issues can be addressed through the AOC program, so anything that needs work and is not within the boundary cannot be addressed with AOC program support. For example, one AOC spoke to contaminants of groundwater being an issue, but because they were not within the body of water defined by the AOC program, the PAC could not focus on cleaning them up. “There are so many solvents and plating chemicals and things that were going into the groundwater. There are ground water issues that still exist in our community. If [the solvents and chemicals] don't make it into a body of water they really are not part of our AOC clean up criteria.”

Limits of BUIs -

In many cases, the PAC is part of a larger group effort to do watershed level cleanup. Hence, the group often desires to work on projects that are connected to the river, but not necessarily within the AOC program. It has been tricky to be limited to issues that fall under the AOC program rather than be able to work on other issues related to the river, but are not directly related to the BUIs. The challenge lies in the BUIs limiting the type of work that the PACs can do. For example, in one AOC, aquatic invasive species are a big issue and affect the fishing in the area, but are not a focus of the AOC program, so the PAC cannot get funding to work on those issues.

Maintenance of Projects

The ability to conduct maintenance on projects was identified as a continual challenge for AOCs. One AOC spoke to the fact that there is currently some money for short term maintenance, but not a lot. There is currently a two year maintenance guarantee in many of the contracts for projects and long term plans for future maintenance without a guarantee. When the plan is only set for two years, there is a legitimate question of what is next, “What’s life after 2 years after delisting?” A lack of maintenance and monitoring plans could lead to a regression in all of the work that has been accomplished.

Demand of Invasive Species Control -

Some interviewees had concerns over operations and maintenance of habitat restoration sites, specifically when it comes to invasive species removal. For example, the PAC was concerned that they would not be able to keep up with Phragmite maintenance in their habitat projects. Invasive species, such as Phragmites, need constant management to keep up with their growth and allow for native species to establish themselves. If habitat restoration projects do not have committed maintenance and monitoring plans there is a fear about losing progress.

Role of Responsibility -

For one AOC with a watershed council, they were challenged by determining what their role was in the maintenance of projects and whether or not they should be putting together volunteer groups to do the work that is needed. “Delisting of the AOC only means we are just as polluted as anywhere else in the Great Lakes, so it’s not like the work is done when the AOC is delisted.”

Remoteness and Ruralness of AOC

Some AOCs in Michigan are located in very remote, rural places. This presents unique challenges, including their distance from OGL's office in Lansing. The PAC members from these AOCs perceive that they are occasionally forgotten due to their distance from OGL saying, "We're at the far end of Michigan, so people way down in Lansing don't think much about the U.P. as much as they should" and "I would like to see a lot more attention." Their distanced geography can create a loss of connection between the PAC and OGL.

Fewer Opportunities -

Interviewees observed that they think the Michigan DNR has done less education and communication outreach with their location because of the distance. Beyond education and communication, interviewees mentioned the fear that their remoteness will make less funding available to them, with more focus being on the more urban and industrialized AOCs. There is a belief that the urban AOCs will compete better for the available funds rather than remote areas that may have fewer funding opportunities. "I think on the downside for us is our population is really, really, small so even if it is a problem - a big problem - if it was down by Detroit, I think there would be attention, but because it is here, it's just not, it's low on the radar screen." Being a remote location also creates transportation difficulties for people to get to the area while also making it difficult to transport sediment out of the area for cleanup efforts.

Prejudice -

Interviewees also spoke to a feeling of prejudice from people in the Lower Peninsula against "Yoopers". "When we're looking for money and we're going downstate looking for - you know, there's prejudice. Do we know what we're talking about? So you have a PhD and you work at Michigan Tech - hey you're not an electrical engineer or mechanical engineer, so give it up." There is a strong perception by interviewees in the U.P. that people have a negative stereotype of them. "They see the UP as redneck, dumb, we talk funny, we say odd things, like 'ya, you betcha' and whatever and 'hey', we're always saying 'hey', and the UP is preserved for recreation for people from downstate and we're really dumb and stupid backwards, but it's nice that, you know, -- interact with them because they're 'bringing civilization with them'. I've been to meetings downstate where the attitude - I get furious at the attitude of downstate people with the UP." This is seen at meetings they attend downstate as well as a general attitude from people they interact with.

Political Pressure Causing a Rush to Delist

The sense that OGL is rushing to delist certain AOCs as a result from increased pressure from the EPA creates uncertainty among PAC members. AOCs are feeling the political pressure to delist that stems from the hierarchical structure of the program. Interviewees spoke to the pressure of agencies to show that their money is creating outcomes, “I watched how White Lake was handled and I think it is a priority to delist. For the purpose of delisting to say all that political money was working...Your water is clean enough. We want to delist you.” There is a fear of pushing too fast to meet deadlines from congress and not doing the work properly and fully. “There is starting to be more of a push like, ‘okay we need to wrap things up’. It’s not a great thing to hear, right? Yes, we want to get things moving, but we want to do it properly.”

Losing Relationship with OGL

PACs are concerned about how their relationship with OGL will change once they are delisted as AOCs. The AOC program has been in place for over 30 years and during that time many PACs have developed a close relationship with OGL and have relied on the resources they provide through communication, guidance, and funding. It is a challenging prospect to envision their work without OGL.

Being Forgotten -

One PAC discussed fears of being “forgotten” by OGL/the state once they are delisted, saying, “You don’t want to be forgotten either after the delisting is done.” Interviewees spoke to the desire to want to annually have someone to connect with to answer questions they have and provide assistance. “We won’t be special anymore.”

Lost Communication -

There is a fear that PACs will not continue to be kept in the loop on what is happening regarding watershed restoration in Michigan. It hasn’t been clearly communicated by AOC Coordinators whether or not there will be a communication structure in place between OGL and the PACs after delisting. “After the fact I think it’s going to be much harder to get their attention. Not because they don’t want to, but they’re going to get pulled away on other things.”

Small Communities Especially Reliant on Regulatory Agencies -

One small, rural community described that they rely on regulatory agencies for cleanup efforts. They do not have a network of other organizations (watershed groups, non-profits, etc.) in the area to do the work needed. When asked what their network is like to carry on with some of the work, all of the interviewees responded with “mostly the regulatory agencies”. They need to keep that

relationship to continue with work. It will be challenging to lose the support of an agency that has led them through this process for so many years.

Maintaining Momentum -

The presence of paid employees at the state level who are working with the AOC communities is seen as a critical component to keeping certain discussions and processes going. Although there has been some paid staff with PACs over the years, it has primarily been the paid agency employees who have kept the process going. One interviewee described it as, ““The other huge thing we’re going to lose is a lot of support from the agencies. I don’t want to say they ran the show, they ran the PAC, but pretty much they did. They had the paid employees that could do a lot of the work, not only the work they had to do for their agency, but the work that had to be done for the PAC - the committee.” t is important to have these roles to ensure long term commitment, because it is hard for volunteers to stay engaged and focused without the committed personnel. “The biggest issue is coming up with some sort of core group that is always going to be there. As [other interviewee] said, it was kind of nice having the agency support because they could help stabilize that core. If they aren’t going to be there that’s going to be the challenge in maintaining the group.”

Determining the Future Structure and Function of the PAC

Two AOCs spoke to the challenge of not knowing what the future structure and function of the PAC will be. They recognize that the PAC won’t exist in its current form because they will not have anyone to advise, but many wish to see it fill a role in continuing the efforts. There have been minimal planning efforts or discussions regarding the future structure of the PACs. One interviewee’s view on what they perceive to be OGL’s goal for the future of the program is, “Long-term, I believe it’s to get rid of the whole program. Let’s get everything delisted and we can just put the shutters on this thing and close it up, put it to bed. Mission accomplished.”

Complexity and Intricacies of Process for Bi-State and Bi-National Programs

There is also a challenge when it comes to the complexity of a bi-state or bi-national presence as different agencies have different goals and processes, creating a complex approach to problem solving. Overall there is friendliness between states and provinces, but the variation in goals can be challenging. This is further complicated by the presence of EPA and other federal partners that have different levels of accountability and hierarchy. The complexity slows down progress within the AOCs.

Difference in Processes -

There are distinct differences in the Canadian and U.S. AOC Programs and this creates challenges when trying to navigate cleaning up a shared body of water. For example, a few Canadians who were interviewed expressed concern about the U.S. delisting first because they want it to be a process that happens together. “They [EPA] were concerned that - they want to make sure that it’s done together”, so both sides have to be ready. This concern could stem from the perception that the American side is more action driven, while the Canadian side is more research driven. “I find that the American side is more action driven, so they have these big projects, they complete them, and then they can redesignate the BUI. Where I find the Canada side is a bit more research driven, so not necessarily action driven, but just monitoring and making sure that we’re comparable to non-AOC areas.” “On the American side you’ll have a list of action items and once those are done you consider it ready to delist - whereas on the Canadian side there is an assessment that is usually done and only if the assessment passes then it is considered okay to delist, even though you’ve done the action items that you felt were necessary.”

Slow Pace of Governmental Bureaucracy

Contrasted with the feeling of moving too quickly toward delisting, two other AOCs mentioned the challenge of the slow pace of governmental bureaucracy. As is the case with other government programs, the slow pace at which change happens is a challenge for the PACs wanting to get projects done. This is especially apparent with the multiple levels of government involved with the AOC Program and within the permitting process to get work done. There is frustration when it takes a long time to get a permit to remove an issue that is continually polluting a waterway. The speed at which cleanup needs to happen is not equivalent with the speed the permits are given. “They [WI & MI DNR] both had to deal with the EPA out of Chicago and such, and that’s just the way it is. The EPA was where the federal people, so all of that slows various decisions down and slows progress down a little bit.”

Losing the Public Voice Component of PAC

One AOC identified loss of the PAC voice in the process as a large concern. They spoke to the delisting mentality that is currently driving the progress of the program and feel as though the desires and hopes of the local community members are getting drowned out. This goes against a key component of the process which is working with public input to make decisions. A loss of public voice is recognized not only in the larger scheme of the program, but within PAC meetings to as more and more members join out of professional allegiance rather than civic duty. If a member is affiliated with a professional entity, then they are biased to push toward work that stems

from that perspective rather than truly listening to the other PAC members saying, “It’s hard to get a man to understand something when his job requires that he not understand it.”

Prioritizing Short-term Economic and Political Gains over Environmental Prospects

One interviewee indicated that some members of the PAC pander to the business community at the expense of long-term environmental vision. This is a challenge because it slows progress and prevents positive, impactful environmental change.

Mining Interests -

Prioritizing short term economic gains has been evident for one specific AOC through mining projects near the river. MDEQ has granted a new sulfide mine project permits upriver 150 feet inland which threatens to disrupt the lives of local inhabitants and the environment as well as damage the local economy from downstream pollutant runoff. Moreover, this project is in conflict with the extensive remediation and restoration the river has seen over the last two decades. “Particularly in light of the program that now you’re look at because we’ve had thirty years or so of the AOC work very near finishing it all up, and now they’re planning a sulphide mine that is 150 feet away from the shore of the river, it just doesn’t make sense.” There is concern that the progress that the AOC program has made and the attention it has highlighted in terms of the extensive damage environmental pollution can have hasn’t transferred to preventing other environmental damage.

Interface between Restoration of Shoreline Projects and Brownfields

One AOC discussed the many challenges that arise at the interface between shoreline projects and brownfields. Ownership and accountability of the site as well as stigmas surrounding the reuse of brownfield areas can cause issues in moving forward with restoration. It can also prevent creative solutions for revitalization because it can limit the uses of the sites. “The struggle with clean up sites is what do you do with it after it is cleaned up. Even if it has the stigma of a Brownfield if there is a lot of money involved and businesses do not like to build on a Brownfield. With a housing development you are pretty limited because you don't want kids to go up and dig a hole In the backyard and dig up something.”

Siloed Nature of Government System

One interviewee spoke to the challenge to get to delisting because there are silos within the governmental system related to the delisting process saying, "...not all branches of government and city are connected very well. They should be working together and they do tend to, but it doesn't always work in practice. So it is important to have groups that are kind of like the watchdog and help to be on the lookout for things and be there to communicate things. That's the nice thing about PACs is they can communicate to different agencies."

Lack of Preservation for Historical Relics

Interviewees of one AOC compared how people view history in the East Coast vs. the U.P. They perceive that on the East Coast people care about history and go to great lengths to preserve it, but in U.P. people do not see the value in history; the public is generally ok with tearing down mining relics. A large part of this difference in attitude is that folks involved with mining are often reminded of the negative aspects that led to current economic struggles by having to see the historical mining equipment, "I talk to people and they say, 'Get rid of it - it's a dump'." People who remained living in Houghton after the mining industry was largely shut down are the miners and the people who left after the mines were shut down were the mine owners. This created a wealth disparity in the area. "I really heard a lot of people saying, 'get rid of it', 'tear it down', 'I don't want to remember--', I mean the family history and the family stories and all, they hated the mining companies, so everything with the mining companies they despised."

Conclusion

As AOCs near delisting, there are many uncertainties surrounding what the process of sustaining environmental stewardship will look like. Challenges include the potential for loss of momentum in accomplishing cleanup efforts, a loss of AOC specific funding, and what mechanisms will be in place to deal with monitoring for emerging issues. Another challenge is the boundaries through which the AOC program limits what issues the PAC in its current iteration can focus on. As other pressing issues arise in communities, the PACs want to be able to focus on those as well as the designated outcomes of the program. Once AOCs are delisted, the PAC members are unsure of what capacity they will have to deal with emerging issues as well as maintenance of projects. The perceived loss of a relationship with the OGL and uncertainty surrounding what the PAC group will look like, leads to many unknowns regarding addressing challenges up to and beyond delisting.

Chapter 5 – Revitalization





5 – REVITALIZATION

We asked interviewees about important revitalization projects that have occurred as a result of the AOC program. To more holistically understand PAC member motivations, what is valued about the community, and perceived challenges regarding the delisting process, we wanted to frame these responses in light of AOC projects that have occurred. In particular, we asked about revitalization projects, which shed light on the current project priorities and their resulting effects on the community, while also indicating what sort of revitalization benefits the PAC members would like to see into the future.

Our results show that revitalization efforts can encompass economic, social, or environmental foci, however considerable overlap exists and it is important to note that many of these projects are ongoing, with their full potential yet to be realized or quantified. Aspects of economic revitalization have included projects that spurred tangible and durable economic growth within AOCs, often leading to increased local investment and business expansion. Beyond general environmental improvements, elements of environmental revitalization have included projects that targeted shoreline restoration and expanded community cleanup efforts. Interviewees also noted considerable revitalization that have resulted from AOC projects, often increasing community connectivity to the resources and improving perception on the local environment. Social revitalization has also greatly benefitted from expanded public accessibility to the environmental resources. It is important for the OGL to recognize that communities view revitalization as a critical process towards sustaining continued economic, social, and environmental improvements.

What revitalization projects are happening in the community?

Table 5.1: Revitalization projects happening in the community

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Economic Revitalization	X	X	X	X	X					X	X			X
Environmental Restoration			X	X	X			X			X	X		X
Social Revitalization	X	X	X	X						X	X			

Economic Revitalization

Many local and regional economic benefits have occurred in communities during the AOC program. Many interviewees noted that AOC restoration projects have helped spur tangible and durable economic growth, complemented by increased investment in the local economy. This has led to a number of direct and indirect economic benefits from AOC restoration projects, including added improvements regarding environmental and social revitalization.

Increased Local Investment and Home Ownership -

Through restoration efforts, a new wave of economic revitalization, driven by local investment and home ownership, is becoming more common in AOC communities. AOC restoration projects have created numerous opportunities for increased local investment in communities from business and individuals. In particular, the AOC program has changed the perception of and accessibility to the environment within particular communities, leading to a greater desire to invest in economic opportunities within AOCs. A more positive view of the environment and ability to interact with the environment (as discussed in more detail below) has attracted new business and homeowners to AOC communities.

One of the primary ways that AOCs have experienced economic revitalization is through investment by new homeowners, who are noticing desirable living situations in previously environmentally degraded areas. As one interviewee noted, “If you talk to realtors right now, there aren’t a lot of vacant homes” and another interviewee indicated that, “people are moving into houses on the shoreline...I think people feel more comfortable doing that because they know so much has been done.” Another AOC remarked the powerful effects of economic revitalization being represented by better capturing the economic potential of vacationers to their communities; through restoration efforts, vacationer are now becoming permanent residents, greatly enhancing local investment opportunities. As one interviewee noted, “What we see at the city is a lot of times the business startups will be people that vacationed here for years. They vacationed here, they loved it here, they either retired here and brought their small business with them or moved or moved their small business here.

The local investment in community development and small business expansion leading to rising homeownership has also contributed to a higher tax base and more durable financial market. These two elements, resulting from local investment, are expected to help sustain new revitalization efforts and spur additional economic growth into the future.

Benefits from Multi-Use Structures -

Several interviewees noted the presence of multi-use structure, such as river walks, as particularly important economic drivers that function to benefit all three aspects of revitalization (economic growth, social cohesion, and environmental restoration). Multi-use structures provide new and

ample recreation opportunities for the public, appealing real-estate sites for small businesses, and enhanced aesthetic values. All of these factors contribute to multi-use benefits for citizens, the public, and private sector. Several PAC members indicated a desire to expand their waterfront boardwalks to act as a multi-purpose investment in waterfront activities.

Updated Infrastructure -

Infrastructure projects in AOC communities have greatly contributed to economic revitalization. While many infrastructure projects do not get directly funded through the AOC program, several interviewees noted the indirect infrastructure improvements that have occurred in concert with AOC restoration work, linking environmental progress to economic progress.

Positive perceptions from updated infrastructure have produced tangible benefits for the community, "...as far as positives we have a lot of our infrastructure updated including our treatment facilities. We have a newer school system, and we have a newer hospital. These are key components to make a community thrive. If you have these things, then I think you can entice professional people to come do professional jobs like medical or engineering." Another interviewee mentioned how "historic buildings have been revamped" over the course of the AOC program, especially in recent years.

Embracing New Forms of Outdoor Recreation -

One of the major economic benefits from AOC restoration projects has come from embracing new forms of outdoor recreation, often the result of improved waterways and shoreline access. For many AOCs, one of the more noticeable changes has been an increase in water sports activities; particularly kayaking, canoeing, and fishing. One interviewee referenced positive economic impacts, "If you look at the [fishing] derby itself...from the time say 15 years ago when they started it until now it brings in they figure, about \$3,000,000 annually in the community for that weekend, just with people buying groceries, gas, hotels boat rental fees...I don't think that would have happened [without AOC cleanup]."

Other AOCs have similarly seen economic benefits from recreational opportunities spurring local businesses to developing new partnerships. For one AOC, "the walleye [festival] got us a lot of attention. The marinas have been very cooperative." Along with the economic progress, several interviewees spoke with pride regarding the positive changes seen in their communities, including one AOC that now has "the largest kayak manufacturer in the world headquartered on the lake." Another AOC described the profound changes in use and perception resulting from the restoration work, with one interviewee remarking about their local water resources, "now it's just loaded with fisherman, depending on the seasons" or "...at different times they'll have 15-20 kayakers just milling around in the river and people might not have felt as comfortable doing that 20-25 years ago in the river."

Municipal Planning for Long-Term Economic Revitalization -

Another benefit seen from economic progress in AOC communities is the emphasis on planning for long-term economic revitalization. Recognizing that revitalization produces tangible economic benefits, many interviewees noted that cities and planners are increasingly incorporating revitalization strategies into long-term initiatives, especially as cities come to embrace new forms of recreation as a critical revitalization tool. One interviewee also noted how benefits from aligning of downtown economic development with restoration. “All that downtown development was happening at the same time as the shoreline redevelopment. They were really aggressive about reusing brownfield development money.”

The prospect of future economic growth has even prompted some cities to invest in equipment, with one interviewee indicating that, “...we bought some lab equipment so we could run all of the tests in house and now we utilize all of that lab equipment for the statewide beach E. coli and test it here every summer.”

Environmental Restoration

Many interviewees indicated improvements through environmental restoration. Speaking to the ecological uniqueness that exists in their particular community, interviewees mentioned restoration efforts focused on restoring impaired environmental aspects. Moreover, environmental restoration appears to be the critical element enabling positive economic and social revitalization, as seen by its importance in reshaping community perspectives on the environment and resources. Linking environmental restoration to economic and social factors, many interviewees mentioned how improving the environment can lead to measurable positive changes for the community as a whole. In this way, they noted the potential for environmental restoration to provide community-wide, holistic benefits at regional scales.

Restored Habitat Projects and Shoreline Improvements -

Some of the more common restoration projects happening in AOC communities involved restoring nearshore and shoreline habitat. These projects are particularly appealing because they can produce visible, aesthetic benefits and align with city and private interests in restoring and sustainably developing shoreline areas around lakes or rivers. Concerning the benefits to fish in the region, one interviewee remarked, “...of course the fish passage. That’s been huge.” Another interviewee noted, “there were nine miles of restored habitat...and that has led to the revitalization of public spaces and kayak launches.”

Considering habitat projects align well with multi-use elements, environmental restoration projects can effectively engage the public in the process. For one interviewee, they will “...continue to develop that channel area, that’s our biggest hope for things that you know, communities can be

involved in and see on the ground the thing is - the railroad track along that channel and developing more trails and whatever it might be in the wetland area along that whole channel.”

Linking Environmental restoration to Community Involvement -

Beyond tangible environmental improvements, environmental revitalization has re-energized local community members to better appreciate and protect their region’s unique ecology and resources. Projects have “brought a lot of attention over what restoration can bring to a community”, and it enables the local community members to “start trusting in the river more. It’s not a place to avoid. It’s not an unsightly, industrial eyesore, it’s becoming very attractive in many parts and so people are willing to go out there and venture into it. So when I see that, I think ‘oh yeah, we’ve done something here’.”

Additionally, environmental revitalization has enabled environmentally-focused groups the opportunity to discuss issues that they are particularly passionate about, as one interviewee noted, “it’s really exciting and gives an opportunity for groups like us to really weigh in and provide comments when it comes to the environment, so that’s really exciting.”

Community Cleanup Efforts -

One of the more ubiquitous environmental revitalization strategies adopted by various Michigan AOCs has been community cleanup efforts. Often, these involve engaging the public in community events that connect them to the environment and show measurable progress, such as organizing volunteers to clean up the local waterfront. “We’ve had an annual cleanup that gets some nice attention too from people.”

Social Revitalization

In addition to the numerous positive impacts from economic and environmental revitalization, many interviewees spoke to the social revitalization that has occurred as a result of the AOC program. This social revitalization has led to a more connected and engaged community with positive perceptions of their local environment. In particular, social revitalization in AOC communities has engaged new groups in the restoration process and greatly improved the public accessibility to the environmental resources, with one interviewee stressing that they “want people to see [the river] and be on it” as a way instill those new connections.

Increased Accessibility to the Environment -

One of the most prominent changes to AOC communities has been a changing social dynamic from an increased access to the aquatic environment. People are now able to interact with the

resources in their communities in new ways, whether it's through recreation, family outings, or volunteering.

Changing Public Perception of the Environment -

A common challenge across Michigan's AOCs has been the negative perceptions held by the public regarding the environment. For one interviewee the interaction with the environment brings an added benefit of inspiring people to care about protecting their resources and this can counter previously held negative perceptions. "Anything that be done to maintain and expand access, public access, to the river is going to help. Because if people are down there getting involved - on the river - they are going to care more about it and they're going to be more willing to get involved with things about it." Enabling the public to become more aware of the restoration efforts is critical to bringing about this change.

One interviewee mentioned watershed council and PAC-driven efforts to connect towns and cities along waterways in the AOCs, thereby enhancing the social cohesion and connection to the environment. Further, several interviewees discussed the benefit of expanded water recreation activities on social dynamics within the AOCs. Another interviewee spoke to the presence of multi-purpose festivals that

Connecting Communities to the Resources -

Several interviewees noted how revitalization efforts have helped engage previously underserved and geographically detached neighborhoods and communities to their local natural resources. For other AOCs, the social revitalization extends into underserved communities and engaging Native American representation.

One AOC spoke to a Water Towns initiative that is helping connect distinct communities along the river corridor in their watershed to one another. This connection has been critical in helping inspire change and share successful revitalization strategies. It also has helped show previously detached communities the importance of interconnectedness in that they all share the same resource and should collaborate to protect it for future generations.

Conclusion

Revitalization within a community includes the added social, economic, and environmental benefits that give new life to an area. Through asking this question, we focused on how the work of the AOC program attributed to the revitalization of the surrounding communities. We found that economic revitalization included increased local investment and homeownership after cleaning up the pollution. Moreover, new forms of water recreation such as kayaking and fishing tournaments were possible with increased access to the water and higher water quality. Restored habitats and shoreline have shown how restoration projects can positively benefit community involvement and engagement. Accessibility has connected community members to the water, which in turn has begun to change the public perception beyond that of legacy pollution. It is the hope of many PAC members that some type of group will continue into the future to ensure that revitalization continues to grow in conjunction with the presence of environmental stewardship.

Chapter 6 – Successes and Hopes





6 – SUCCESSES AND HOPES

We asked PAC members about their perspectives on what success for their communities would look like post-delisting. This enabled us to better see how their motivations for engaging in the program and current project focus aligns with and supports their long-term goals. Additionally, we asked interviewees about their hopes for the future of their communities beyond delisting. Considering delisting is on the horizon for numerous Michigan AOCs, we recognized the need to ask about the PAC members' long-term vision for the community, especially areas where they would like to see continued progress beyond delisting.

Across Michigan AOCs, PAC members broadly indicated a healthy environment would be a success for their communities post-delisting. Further, many interviewees noted that success would include an increased appreciation of the local resources by the public; and a recognition that the resources (e.g. water) are inherently connected to revitalization efforts.

As AOCs approach delisting and look toward the future, PACs expressed a multitude of hopes for their communities. Several PACs expressed that progress and community well-being would benefit, and in several cases depends on, an effective PAC. Therefore, PACs expressed hope that their PACs transition into an environmental/community organization post-delisting that can oversee continued revitalization and environmental stewardship efforts. Moreover, PAC members indicated their hope that the broader community embraces increased ownership and responsibility for protecting the environment post-delisting; this includes a focus on having increased access to be able to interact with the environment. PACs also emphasized their hope that collaborative cleanup efforts continue post-delisting, with communities strengthening current partnerships and establishing new ones.

Understanding how PAC members view success for their communities post-delisting and their hopes for the future of their communities is critical for framing a long-term revitalization and environmental stewardship strategy. In order for OGL's role to be most effective up to and beyond delisting, it will be necessary to integrate local perspectives of success and hopes for the future of the communities. The following chapter begins with themes surrounding success for the communities post-delisting and then transitions into themes centered on hopes for the future of AOC communities.

This question encouraged PAC members to discuss future prospects for their AOC. They reflected on aspirations for their organization after delisting, how environmental cleanup might proceed and on the role and importance of community support in these efforts.

What would success look like for your community post-delisting?

Table 6.1: Success for the community post-delisting

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
The Community's Perception of the Water Shares an Intrinsic Link with Revitalization	X	X		X	X			X		X	X			X
Careful Planning will Allow for Restoration to Continue after Delisting	X	X	X	X	X	X		X			X			X
A Healthy Environment Assessed with Explicit Metrics	X	X			X			X		X	X			X

The Community's Perception of the Water Shares an Intrinsic Link with Revitalization

Interviewees noted that part of the success of the AOC Program entails their community seeing their waters as clean and appreciating this resource for its aesthetic and recreational value. PACs also noted the opportunity to continue and expand on their efforts to cultivate the relationship a community shared with the water.

The Community Views the Water in a Positive Light-

Interviewees describe success as their respective community moving past the historical stigma of polluted water. "It's come a long way, so it's - trying to get them to see that this is a great thing that we have here, not the negative association with it being polluted." A place ought to become perceived as desirable to live in, in other words, "Changing that attitude and having people say, 'This is a really great place to live and have a family.'" This change in perception enables people to enjoy the water through recreation and contributes to revitalization. "Well, success is more people using the lake, more people enjoying the lake. And where people have access and appreciation for the lake. And we are certainly moving in that direction." One PAC described a submerged sediment remediation project as a success for the community after people started to fish from a previously contaminated area. "When the cleanup was happening, people were afraid

of the river, they were afraid to swim in the water, they definitely like I said, didn't eat fish out of the river, and now the way they feel about it, they are much more positive about the river. And they are fishing like crazy!"

The Public Feels a Sense of Ownership for the Water -

PACs describe success as the public taking on a collective sense of ownership for the health of a restored or partially restored water body. "Success now is communicating that success." In other words it is important for communities and the public to "recognize and increase their sense of pride for the place." Interviewees noted that public outreach is an excellent means to foster community understanding. There are opportunities for the public to learn about various projects, for instance one interviewee reflected on a project to protect sturgeon habitat, "When you explain folks the reason, they get it. I was shocked when I found out how important our little river is here to the sturgeon population of the entire Great Lakes. It's huge!" A community that values this resource over the long-term is essential to convince decision-makers to invest their own resources into restoration work. "You have to have ongoing communication and outreach, because one of the biggest problems is if you don't continue to engage the community - community officials come and go quickly from elections - and if you don't have that ongoing conversation, you are going to lose a step. The quicker that people can figure out and find a way that communication is ongoing, the better off for life after delisting."

Careful Planning will Allow for Restoration to Continue after Delisting

Many interviewees discussed that work started under the AOC Program would be much more likely to continue if PACs proactively design a thoughtful plan for this purpose. Such plans could guide PACs in the formation of new partnerships and more generally help create a shared and useful vision for their organization to work from.

Defining Common Goals -

Interviewees describe the need for PACs to create new goals that are complementary with their partners and therefore allow work to continue in a collaborative manner. "I think having some collective goals with our agency partners would be a success." Several PACs mentioned that they feel it is imperative that relationships are sustained through consistent engagement with existing partners after delisting. "I think you have to have continued engagement with community officials, community planning, project development, and restoration." Moreover, PACs may have to make a concerted effort to clarify the purposes of these relationships given the need for new goals after delisting. One PAC described the idea as ensuring partnerships maintain a "common theme," "The partnerships where you have a common theme...just trying to help successfully work together to the same goal."

Proactive Crafting of a New Plan

Interviewees describe the significance of having a robust plan. “You gotta have a goal, you’ve gotta have a plan.” A plan is fundamental for a group to sustain itself and successfully implement its goals. PACs attribute a measurable amount of their past successes to having developed comprehensive RAPs. One interviewee described parts of their PAC’s plan after delisting as including recommendations for partnerships, providing guidance for organizational processes, and describing new goals and objectives. “There are a lot of recommendations in it of the kinds of things that we need to do to keep the area of concern from backsliding and to do just more of what we should do as a watershed group beyond area of concern topics. If that group can sustain themselves and continue to meet regularly and implement that plan then that is a success. And the plan itself recommends partnerships in education and stewardship and new plans that we may need.”

A Healthy Environment Assessed with Explicit Metrics

PACs understand that success comes from an environment that is clean and healthy. PACs have a strong desire to see this vision come to fruition but also recognize that simple ways to measure such an achievement are not always immediately evident.

Delisting is Evidence-Based -

Interviewees consider delisting a success if it is done in a transparent and evidence-based manner. “Success is really having everything delisted from a science based perspective, with evidence. It’s actually monitoring the fish tumors ongoing and measuring sediment quality data too.” There is a demand for public report cards that illustrate environmental health. Interviewees also note that monitoring is imperative to inform any need for future projects. “We need to monitor, see if what we did made the changes that we wanted to see, and if not, we need to go back and pick some more projects. For us it’s not just ticking boxes and walking away, it’s doing the follow up monitoring.” Interviewees wish to see their water resource free of debris and contaminants, “Success will be when the water is free and clear of that kind of debris and any sort of leaching from the groundwater surface water interface.” PACs desire to see their resource both restored from a visual and scientific standpoint but also demand reassurance that a community will have the resources to stand up and protect their resource if and when new issues are discovered. “It’s actually monitoring the fish tumors ongoing and measuring sediment quality data too. Success for me would be to have assurance that we still have a forum to deal with the existing and emerging issues as well.”

Performance is Measured by Outcomes-

PACs note that a healthy environment is a measure of success. However there is a desire to see AOC Program progress measured explicitly through project impacts as opposed to funds directed at any given project. There is concern among several interviewees that the AOC Program is moving

toward delisting some areas in a manner that does not necessarily consider what is in the best interest of the environment and communities it serves. One interviewee expressed a desire to OGL to shift measures of performance from inputs, such as money spent on a given project, to project outcomes. “Results need to be measured by outcomes, not by how much money is spent or how quickly it was done.” Such a shift, if done properly could produce a more holistic view of the program, in which the multi-dimensional benefits of projects are illustrated to the government and the public. Moreover, outcome-based performance metrics could facilitate similar projects by allowing projects to serve as models for effective ecosystem-based management.

What are their hopes for the future of their community?

Table 6.2: Hopes for the future of the community

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
PACs Transition and Continue to Function as Effective Environmental Organizations After Delisting	X	X	X	X	X	X		X				X		
Ensure Collaboration Around Ongoing Environmental Cleanup			X	X	X	X	X	X		X	X			X
Environmental Restoration Enables Significant Benefits to Quality of Life		X	X			X	X	X				X		X
A Community Feels an Increased Sense of Responsibility for Their Environment the More They Interact With and Understand It	X	X	X	X	X	X	X	X		X				X

PACs Transition and Continue to Function as Effective Environmental Organizations After Delisting

PAC members commonly expressed a desire to see work to restore the environment continue even after an AOC is officially delisted. However, interviewees also recognize the fundamental resources and programmatic basis the AOC Program lends to these efforts. Therefore, there is a desire to see find new means to replace and build upon the Program in a deliberate and practical manner.

Realize New Sources of Funding -

PACs find themselves with the capacity to implement “shovel-ready” projects but recognize that with delisting comes a loss of significant program funding. “Once we are delisted, we will not have those available to us, we have started this year trying some different grants.” PACs are therefore exploring new funding options including external grants, membership fees and engagement with local businesses. One interviewee described the importance of proactively building relationships with grantor organizations early so they exist when they are most needed. “We have always written other grants... you have to stay in the game, you cannot just all of the sudden come back and say, hi, we are not an AOC anymore. Can we come play now?”

Transition to a Sustainable Environmental Organization -

PACs are exploring options for how to transition their organizations after delisting. A number of PACs are considering taking on the role of watershed council as a viable way to maintain their efforts. “I hope that we do form some kind of watershed group and the positive things can keep moving. There are certain issues someone needs to continue to address or they’re going to go back to where they were.” PACs view their ability to transition as a reflection of a community’s support that is integral to carrying out their mission. “Knowing that there is a strong foundational support, and the support of business for a [watershed initiative network] makes me think that we are on the path to make this a more livable place.”

Such a transition could open the door for new partnerships, alternative sources of funding, and an overall better chance to improve the environment and communities. In some instances PACs are already functioning arms of watershed-scale organizations. “The Watershed Partnership will continue because the whole purpose of that Watershed Partnership to the PAC was to make it a little bit larger.” Another interviewee described the opportunity for their PAC to continue meeting after delisting. The prospect has “not at this point been talked about at all, but if the watershed council could fill that role as administrator and setting up the meetings and organizing that, the partners would still stay involved, especially if they thought there was a way to get some funding out of it for projects.”

Develop and Maintain a Clear Mission -

PACs hope to maintain and build on their existing organizational capacity after delisting. “We’ve built up the capacity of these local non-profits, how do we maintain that capacity, or even further expand that capacity beyond the GLRI and the AOC program?” Multiple interviewees mentioned that delisting should have little effect on their organization’s ability to carry out its mission. “We are not done by any means. This is going to be another leg, another separate section as we continue to move forward. It’s not going to change what we do it all.”

However many interviewees note that the development of a clear mission as integral to their organizational capacity. One interviewee mentioned their watershed council should recommit itself to the goals of the PAC after delisting. The Watershed Council “committed themselves as part of their mission to maintain the communications and strategy for the PAC and it’s my opinion that they should continue on in that role.” Moreover, PACs recognize the urgency of planning for delisting.

Ensure Collaboration Around Ongoing Environmental Cleanup

PACs frequently brought up the essential nature of partnerships in moving environmental cleanup forward. Most projects are cross-governmental and merit the input of multiple stakeholders from the public and private sectors. PACs in their present form serve as both a table for these groups to convene around and as a voice for their communities. PACs recognize the importance of planning for the future so they may continue to effectively engage these stakeholders in a collaborative manner.

Build Partnerships -

PACs see an opportunity for greater stakeholder involvement from local governments, environmental groups, fishing and angler groups; as well as in some instances American Indian tribes and in the case of Canadian AOCs, First Nations. In one AOC, a interviewee described their relationship with a local First Nation government, “They have been very helpful and beneficial. I think they actually serve as a role model to a lot of us. They’ve come over because it’s part of their heritage involved with the River, the beginning of their tribe, or their nation. So yeah, they’ve been active and will continue to be active.” The PAC serves as a table for diverse intellectual capital to come together and work on different problems. “It’s much more the partnerships than the community as a whole. There’s a network of people who either have responsibilities or personal interests or other capable backgrounds.” Multiple PACs mentioned the value and opportunities presented by having a working relationship with local government. “The city recognizes the people come here for the lake. There has been a lot of stakeholder involvement organized by the PAC.” “We’ve got a pretty decent mayor now so we can be more progressive with [environmental work].”

Interviewees also hope for greater involvement of the private sector, both industry and small business. “[Dow chemical] is finally owning up to things and doing work that is voluntary and not forced which is a little bit more helpful.” “There are business people whose livelihood depends on the water...their whole ability to sell the property and things depends on the quality of the lake. We are going to get more stakeholders involved.”

Interviewees also recognize partners in local academic institutions, and relevant state and federal agencies that are in the vicinity of the AOC. “We are fortunate here because we have had NOAA take an interest in the Watershed...And I think as a group that gives us additional hope for the future.” “We are partnering with the State Parks Commission, and the Fisheries and Wildlife Service.”

Better Coordinated Cross-Governmental Efforts -

PACs hope that federal, state and local government learn to better connect spending with efforts that have the most meaning to communities. “I would really hope that those efforts are coordinated and take a holistic approach,” said one interviewee. There is a hope that completed larger scale restoration will act as a “jumping off point... to the smaller scale work that needs to be done.”

One PAC has taken steps to directly provide a set of government practitioners with comprehensive cross-governmental legislation relevant to the AOC Program. “We think it is relevant to have the people at the conservation authority to have the local legislation, municipal and federal and provincial legislation that protects different aspects.” This action may create a useful resource to the government as they move forward.

Solicit Community Input and Create a Plan -

Multiple PACs have begun to plan for delisting through structured planning workshops in partnership with municipal or regional planning groups. Such workshops are helpful in clarifying and aligning the interests of a community, including those of partner organizations. “We did a strategic planning workshop, where we invited in all these groups from various organizations...we identified lots of interrelated items. Partnerships is the biggest key on that.”

Planning workshops have allowed one PAC to “codify their insight and detail it as a plan format so that we can, if we see a particular problem like barrels or need for more habitat, or culverts, if we see a grant opportunity that is our support.” By asking for input on specific issues from a diverse set of stakeholders, workshops can effectively shed light on shared interests and at the same time foster community support for the actions of the PAC. “We need to get everybody on the same page because we have recreational needs, the needs to restore and maintain resources, need to continue with our commercial port activities. And then we have a lot of residential stakeholders right here that live very close to the shoreline and more residential development was on the horizon for the shoreline too.” One interviewee described the workshop structure as asking a community straightforward questions with the assistance of people with relevant knowledge. “We held four

different meetings... and we focused on each one of these for topics at each, just one at a time.” “We had different speakers, experts, talk about, we did all of these maps and everything... and we had those clickers.” “We asked people the same four questions in each meetings, ‘What do you think, do we have enough?’ ‘Is the quality right?’ ‘Are they located in the right places?’ ‘Are they accessible?’”

These planning workshop successfully clarified interests in a way that will give groups reason to collaborate on future projects. “We found out people want everything here. They like the mixed-use feel. People’s interests complied well with what the city had already laid out in their master plan...We found recreational users and environmental folks really need to work together. Because we want the same things mostly.”

Environmental Restoration Enables Significant Benefits to Quality of Life

Environmental restoration has many associated human benefits. PACs hope that economic development in their communities and ongoing restoration efforts are coordinated and carried out in a complementary fashion that maximizes human-welfare.

The Environment is a Priority in Local Decision Making -

Interviewees hope that local decision-makers are able to balance the economic needs of the community with environmentally sound design. One interviewee mentioned that “It is mixing the recreation and economic benefits of clean water and access to the water resource. So it is a mixture of getting people on or near the river, creating infrastructure, and economic development on the river water.” Interviewees noted how economic development on the water can take place in a way that preserves the environment and leads to greater connectivity of a community through the reuse of old infrastructure, “Greenways can also help connect older urban communities to the waterfront.” And also by employing green infrastructure, “Green infrastructure is big because it is so multifunctional. It improves water quality and it’s fish and wildlife habitat.” An interviewee mentioned the importance of designing projects that are resilient to more frequent and intense storm events caused by climate change. “We are seeing increased intensity of storm events having some damage along the shoreline. And I’m talking built infrastructure as well as softer shorelines.”

Improvements in the Environment is Intrinsicly Linked to Quality of Life -

Interviewees noted how a healthy, functioning environment is important to the well-being of their communities. One PAC described the fundamental need for clean water for a healthy life and also how those water same waters can support a functioning ecosystem that a community can then rely on and enjoy for generations. “If you don’t have the water, can’t drink the water, can’t use the water, then we cannot live here.” “When your water is clean and the fish are here and waterfowl come

back and recreational opportunities are generally better than what they used to be. That is a higher quality of life and I can pass that on to my kids and my grandson now.”

Interviewees also noted how thoughtful restoration of the environment can improve human connectivity and how the water resource itself is a common thread through many communities. “The river is a ribbon that connects all these communities, and that among the things that will make it better are obviously the cleanup and maintaining. But also maintaining it as a true river system.” The same interviewee notes that communities work to bring people to the water but that true restoration means that toxins are removed and river waters are allowed to flow unobstructed. “There are a variety of efforts, some communities more successful than others to have river walks, river parks, festivals that you can actually navigate from the headwaters to the water. And that requires not being in the process of cleaning up toxins and requires accessibility and it requires removal of the dams.”

Restoration and Public Access Lead to Economic Development -

PACs hope for greater improvements in the quality of life within their communities as a result of restoration efforts. Interviewees see an opportunity for downtown beautification that attracts tourists and recreators. “I hope they continue the beautification aspect of the downtown area because on the world stage it’s a beautiful place for tourism and for the locals to enjoy too. I think the more they do that the more people will be out on the river.” Interviewees note how waterfront development can have the ancillary benefit of bringing more recreators. “I hope that they continue to develop the waterfront in terms of making it a better investment in terms of recreational uses.” One PAC describes how waterfront restoration allowed for a popular campground that attracts tourism and benefits local businesses. “Twenty years ago - twenty five years ago - if you had put that campground down there people would not have felt as good about being by that water.”

Another PAC describes more recent residential shoreline development and the value that derives from living by the water. “So yes you can live on the lake, you can live close to the lake, our downtown has changed over the years. You want residences to be able to have access along the shoreline for living.” “We want to keep it a fishing lake for tournament fishing. We want people to be able to put their sailboats on there.” Another PAC described their desire for greater public access and the benefits that creates for recreators and small businesses. “I’d like to see us get more public access and more areas that people can get in through our parks into the river to enjoy fishing and kayaking and canoeing.”

A Community Feels an Increased Sense of Responsibility for their Environment the More they Interact with and Understand it

There are different ways to foster a community's value for their environment. When people interact with and enjoy the environment they also gain a newfound sense of appreciation for it. PACs expressed a desire to provide more of these opportunities and in turn build community support for a healthy and accessible environment.

Sense of Ownership -

PACs hope that communities embody a sense of ownership and continue to act as vocal advocates for the health of the water. "I would definitely hope to see that the community still has a strong tie-in with making sure that the river is healthy." One interviewee noted a high priority is for people to appreciate the resource, "Our water is swimmable, and drinkable, and so I think they are not gonna know if we are an AOC or not, but at least we will hope they have a better appreciation for the resource." Several PACs noted the value of people talking about and interacting with the resource through all manner of events and activities. "It is important to have people get out on the water and realize we all have a part in this." "You can clean up the tires in [the water], the trash that has been thrown in. So you have those days and those are good opportunities to clean up."

A major goal of some PACs is to connect people to one another and their environment so that "people have a better understanding of how they impact the environment." "If you can connect people and make them change their thinking from 'oh that's a sewer over there to oh, that's a creek. It's a river I can kayak on, I can learn about the animals.' It connects people in a way that thinking about sewers isn't how you get people excited."

Greater Public Access -

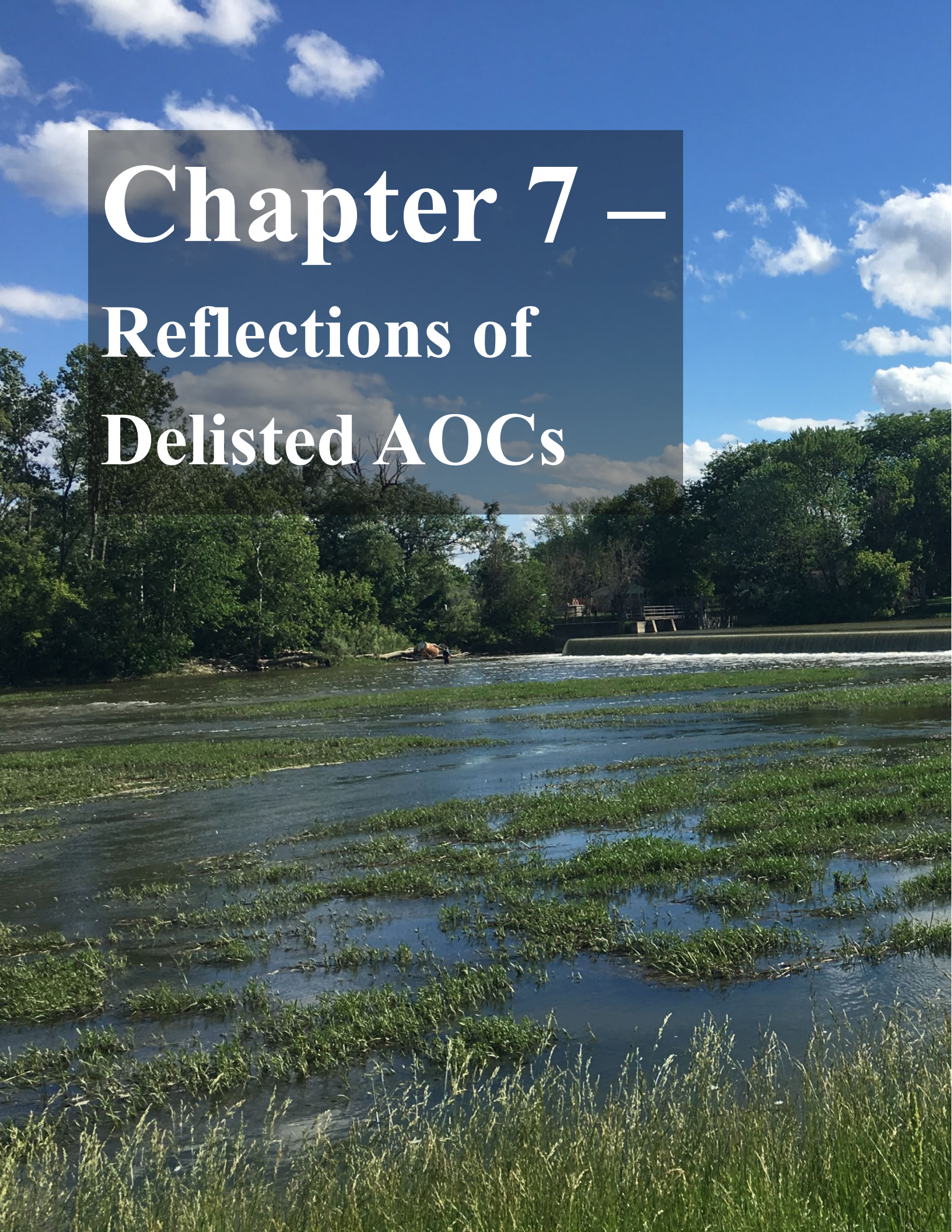
PACs note that public access is essential for fostering stewardship of the water. One interviewee described the sense of care that interacting with the resource can bestow on a community, "Without being able to get in the water, touch it, feel it, we are not going to appreciate it or understand it or want to protect it. So we need to ensure that we still have plenty of different types of public access."

Celebration of History -

PAC view delisting as a chance for stakeholders to come together and celebrate the work that's been done. "I think it's kinda one of those things that will help finalize that healing process." "It's exciting to show that we've done all this work and we've come so far, so being able to celebrate that huge accomplishment [is exciting]." To some PACs delisting is an opportunity to garner publicity and support for ongoing environmental work. "I think that once we are delisted there could be a lot of publicity around that and getting more support from the local community."

Conclusion

As PAC members look toward the future, they identified their hopes for what their community will look like as well as hopes for the state of the environment. They also reflected upon what their definition of success was beyond the programmatic definition of successful removal of all BUIs in order to delist. For the PACs, success entailed community members viewing their water as clean and having an appreciation and a sense of ownership for it. They hope for sustained environmental stewardship after delisting through the continuation of a PAC-like group. Another overarching theme of success was that a clean environment, that continued to stay clean, was an ultimate success. A clean environment equates to a higher quality of life and an increase in the economy for everyone in the region.

A scenic view of a river with a dam and lush greenery under a blue sky with clouds. The river flows from the background towards the foreground, where it is partially obscured by dense green vegetation. In the background, a dam structure is visible, and the sky is filled with scattered white clouds.

Chapter 7 – Reflections of Delisted AOCs



7 – REFLECTIONS OF DELISTED AOCs

During interviews with the two delisted Michigan AOCs, White Lake and Deer Lake, we asked a series of separate questions aimed at understanding their perspectives on the delisting process. Beyond gaining general insight regarding the delisting process, these interviews examined how the process of delisting went, the current structure of the PAC post-delisting, what the delisted AOCs wish had happened during the delisting process, and what advice the delisted AOCs have for current AOCs as they approach delisting.

The delisted AOCs indicated challenges in maintaining both PAC member engagement and PAC structure post-delisting, while also acknowledging the general sense of relief and accomplishment in reaching the point of delisting. Regarding advice for the future, the delisted AOCs mentioned collaboration, project management, a focus on progress, and navigating bureaucracy as important factors for success post-delisting. Having a positive relationship with the AOC coordinators also facilitated effective communication, and goal setting during the process.

By interviewing the delisted AOCs, we developed a more in-depth understanding of how previous PACs approached and dealt with the delisting process. Answers to these questions are not only informative for the OGL moving forward, but also are constructive for current AOCs as they plan for next steps up to and beyond delisting. Moreover, the perspectives from the delisted AOCs proved invaluable in helping frame our recommendations for the 12 remaining Michigan AOCs.

What happened to the PAC post-delisting?

“So yeah, we just don’t exist anymore.”

PAC Disbanded

Interviewees spoke to the challenges in maintaining PAC momentum and engagement beyond delisting. In particular, interviewees expressed the struggles in sustaining their PACs absent a mechanism or long-term goals post-delisting. One interviewee noted a sharp disappearance of the PAC after their celebratory delisting event, mentioning how “Senators and the big wheels from the DEQ came up here and we had a little get together, a little ceremony out at the boat [launch], and everyone went home, the lake was delisted, and everyone just went *foof*! Non-existent anymore.”

For another interviewee, there did not seem to be a reason to continue meeting as other parties were in place to do the work of monitoring for emerging issues. “People just don’t - they care

about the lake, but nobody thinks that we have to have some sort of organization where we have all these meetings - I mean what are we going to do? Keep an eye and make sure everything is being done right? Well, Cliffs has to do that because of the consent judgment and the EPA and the DEQ, everybody has to be monitoring the lake and what's going in there." Within the group interviewees mentioned that there was never any animosity about the PAC disbanding. They recognize that if the lake starts degrading again, there are clear lines of communication with OGL for the PAC to email and call.

Sense of Relief and Accomplishment while Acknowledging Meeting Fatigue

Interviewees noted the immense sense of relief and accomplishment shared among the PAC as a result of delisting. One interviewee noted their personal excitement in getting to this point after decades of hard work and meetings to address the issues. "I just felt really relieved that it was done. Everything was all done. I get down there [the lake] every morning and I look down there and the lake is beautiful, there's loons, there's eagles, and everything like that. Often I think that I'm very glad we did what we did, but I don't have to hold any more meetings with people." Interviewees emphasized how this sense of completion contributed to a recognition of meeting fatigue and an ensuing drop off in motivation to continue devoting the hours and attending meetings, especially with the core problems having been addressed.

Aspirations to Transform into a New Organization

Facing critical questions about the form and function of a PAC post-delisting, some interviewees noted aspirations to maintain the group's core efforts in some fashion. Speaking to the challenges in maintaining group momentum post-delisting to prevent the PAC from disbanding, one interviewee mentioned a personal determination "to grab the reins and keep [an] Association going, but to be perfectly honest with you, I just haven't done it. I haven't even made any effort to do anything." Even with the recognition that it "would be beneficial to have a lake association", interviewees indicated a struggle to continue the PAC's efforts absent of a mechanism to keep members engaged in the process.

Was there a change in the community's perspective after delisting?

Embracing Environmental Stewardship and Education

For White Lake, interviewees noted significant changes in the community's perspectives on environmental stewardship and education throughout their time in the AOC program. In particular, one interviewee noted a clear generational shift, with grade school students establishing stronger connections to the local environment through increased educational opportunities and school

stewardship projects. “Yes I would say you can see a generational shift happening, I think Environmental Education and natural resource education is a bigger part of Grade school education. There are a lot of teachers even traditional teachers that are doing a lot of projects around the community.”

Lack of Public Awareness throughout AOC Process

Deer lake, on the other hand, spoke to the limited public awareness and participation that their AOC experience throughout the restoration efforts up through delisting. As one interviewee noted, “Deer Lake could have gotten delisted without anybody knowing.” Considering Deer lake’s relative isolation, small size, and lack of local residents, public participation and outreach was never a critical element of the restoration efforts. “A lot of this went on without about 90% of people not knowing what was going on. All they knew is that there is a new sewer plant and the lake was getting cleaner.”

Do they have advice for working with the state and federal government?

Value Collaborative Efforts

Interviewees emphasized the importance of recognizing the value of collaborative efforts in the AOC program. In order to address the complex environmental challenges facing the AOC communities, there is a need to work with state and federal partners to develop effective strategies and implement solutions. One interviewee mentioned their particular relationship with the OGL as not too significant, instead relying on the AOC coordinator’s efforts to relay important information and serve as the link between the federal/state and local efforts.

Identify Project Management Tasks

Interviewees stressed the importance of developing effective project management tasks as particularly critical to working with state and federal agencies. One interviewee noted the importance in identifying “common goals and working towards them on agreed to timelines that were both considered reasonable, but aggressive. Regular check-ins, accountability, taking some risks on both sides of the fence.” By approaching projects in this manner, interviewees indicated the ability to align agendas and goals among state, federal, and local stakeholders. In order to foster effective project management skills, interviewees suggested hosting collaborative project management training and skills development workshops.

Focus on Progress

Along with identifying effective project management tasks with federal and state partners, several interviewees noted the importance of sustaining progress in the program to keep local, state, and

federal partners motivated. One interviewee noted that challenging environmental problems can sometimes suffer from analysis paralysis, with the relevant stakeholders struggling to move forward with clear solutions in the face of these challenges.

Understand How to Navigate Bureaucracy

Interviewees spoke to the importance of understanding how to navigate bureaucracy. They perceived that state and federal agencies can be disincentivized from effective policy implementation as a result of their standard operating procedures and reliance on GLRI funding. Hence, PACs must learn to work efficiently within the processes set by state and federal agencies to make progress toward delisting.

What went well with the delisting process?

Relationships with the AOC Coordinator

Interviewees spoke to the effect that their relationship with the AOC Coordinators had on getting their AOC delisted. They mentioned that their most recent interactions with the AOC Coordinators have been very positive. Positive relationships with the AOC Coordinator made work move along more quickly and efficiently with interviewees saying that during the delisting process their AOC Coordinator was action-oriented, got things done, and worked to find solutions and timelines for all parties. “When [the AOC Coordinator] came along everything was kind of getting ready for the final stages of it and boom it just happened very quickly after that.” Emphasizing the importance of who is in leadership positions, interviewees spoke to the fact that the work and coordination with AOC coordinators and the EPA that happened in 1 year may have taken 10+ years with different and weaker leadership and partnerships.

Creative Use of Funding

During the Great Lakes Restoration Initiative, the Deer Lake PAC spoke to needing to stretch for what type of projects the money could be used for. For small cities like Ishpeming, there is not a lot of tax money to be spent on upgrading the storm sewers, so the EPA and OGL worked with the PAC to articulate a need and access funds. “We had a lot of good support from our political counterparts both in Washington and down in Lansing and the OGL Coordinator was also instrumental on making sure people understood why this atypical project was and should be eligible for the GLRI funding.” GLRI money also prevented Cliffs from suing the city because they had money to work with to fix issues. “If the GLRI funding hadn’t come around, we [Cliffs] would have had to have sued the city to spend money they didn’t have” This highlights the need for support and advocacy for AOCs, particularly for those who are more rurally based, for a successful delisting process.

Partnerships

Partnerships were a key aspect to the process of delisting. One beneficial partnership in particular was between Cleveland-Cliffs mining company, the city of Ishpeming, and the Deer Lake PAC. Interviewees described it as a collaborative “baton handoff” from Cleveland-Cliffs to the city during the AOC program, stressing that the partnerships helped make the delisting process smoother. Cleveland-Cliffs provided funding as well as technical expertise. One Deer Lake PAC member described it as, “Cliffs did a lot of work. Our PAC did a lot of work, but you know we were just a bunch of people on there - a mine foreman, a teacher, a lawyer, and all these other people, but we’ve had a lot of good scientists working with the Cliffs people.” Working in collaboration with the industrial entity who caused many of the pollution issues, expedited the process of delisting.

Clearly Defining the Problem

Clearly defining the problem that led to the BUIs in the AOC was a necessary step in working toward delisting. Working in tandem, Cleveland-Cliffs and the Deer Lake PAC identified the problem and brought technical experts into the discussions for how to address the problem. One interview emphasized that, “It probably shouldn’t be lost how much work went into defining the problem and understanding what the issues were.” Until the issues can be accurately characterized in an AOC, it is hard to plan for steps moving forward.

Industry Taking Responsibility

A unique aspect of the Deer Lake AOC is the way in which Cleveland-Cliffs worked with the PAC and city to work on cleanup efforts. Referred to simply as, “Cliffs”, this mining company is viewed as part of the neighborhood as they have provided jobs for Ishpeming for many years. Early on they took on a leadership role in helping to clean up the mercury pollution that had resulted from Cliffs’ laboratories. When asked about why Cliffs led the efforts the interviewees described a company culture that, “promotes uplifting the local community”. They also spoke to the fact that unlike other businesses, there is a practical implication that it is not viable to move a mining company away from where the resources are located, so it is favorable to have good relations with the surrounding community.

It is important to note that it was not a simple route that led to Cliffs helping. Ultimately, the state handed Cliffs a judgement giving them two options, as described by the interviewees, to either “sue the city or work with the city.” “We chose the help route, but it was a really interesting tension between us and the city of Ishpeming, where if they didn’t meet the deadline that was in here, we were going to have to sue them to get them to take care of it. Hopefully you don’t find that in a lot of AOCs where people are put into that position because it made things tense, or contentious at

times, because companies can work at a pace that local governmental units can't. It's hard for them to keep up sometimes."

Ultimately, Cliffs is seen as a caretaker of the city. They understand that being a "Yooper" is a special identity and that Ishpeming is home for many people with strong ties to the area. The presence of the mine is embraced by the community and provides high paying local jobs. There are now legally binding agreements in place to stop future environmental degradation of Deer Lake. As one interviewee described it, "The way Cliffs just kind of kept ownership of making sure that things are going to stay like they are forever. The dam is going to be kept in good shape and working and there will never be any more development around Deer Lake, which I love because I live there."

PAC Meetings

Interviewees from White Lake spoke to the importance of public PAC meetings in the process of delisting saying, "Public meetings bringing in speakers seem to be one of the elements that was always really successful because you were bringing in somebody to talk about the issue or specific to the issue you have in the community." PAC meetings were viewed as an opportunity for communication about issues facing the AOC and a space for members of the public to be informed about the progress that was being made.

What did not happen during the delisting process that they wish would have happened?

Quicker Process

Interviewees spoke to their desires that the delisting process had gone more quickly. As with many government programs, bureaucracy slows down the process of getting work accomplished. Interviewees described it as, "not agonizing how long it took, but certainly interesting". Once GLRI money came into the picture the work moved much more quickly.

Better Management Earlier in the Process

By the time Deer Lake was delisted interviewees were happy with the management of the AOC program, but expressed that the process was slowed by management early on. Interviewees also mentioned a negative feedback cycle, referring to staff at OGL and other federal and state entities involved with AOC program saying, "The other thing I've heard some people muse on is that you can get into a negative feedback cycle where certain parties - let's say you have staff in the OGL, where you'll have progress on delisting an AOC that they've been working on for five years - and it's not necessarily in their best interest to have it delisted. They might want another two, three years of, 'We could look at this more, we could continue to examine it', when maybe a consensus

is forming that it's generally understood well enough that we could delist this if we did x, y, and z." If there is disagreement between the OGL staff and the PAC it can slow down progress toward delisting. "I think you could have an enthusiastic local group that could be stymied by someone who it's not in their best interest to - or they don't see it as in their best interest to delist."

Interviewees mentioned that they could have benefited from better program management and transparency and believe that this slowed down the delisting process. Some interviewees inferred that slowing down the delisting process created job security for government employees saying, "That's what happened for a while here with some of our BUI removals, and I'm not going to mention any names or anything like that, but there was a couple of people who worked at the DEQ who just kind of - 'I'm going to be retired in a couple years, let's see if we can just kind of drag this on'. Maybe I shouldn't talk like that, but it actually happened."

Clarifying BUIs and the Community's Role in Cleanup

As the AOC program started, interviewees spoke to wishing there had been more clarification in what the different aspects of the program were and what role the community had in addressing them. "I think the interesting part of transitioning through the AOC process was that I don't even think the DNR or DEQ knew what that meant. They said, 'here are the 14 beneficial use impairments' and I would say that it is Muskegon Lake and White Lake that helped to drive what that meant. When we talk about toxic sediment, what does that mean? So there was a long transition of clarifying that. But also the education piece of what does it mean for a community because it wasn't readily apparent." Defining the BUIs and establishing a clear process for how the community should address the problems helped create action steps for moving forward.

Public Meetings and Outreach After Delisting

In regards to ongoing and emergent issues within the bodies of water, interviewees spoke to the lack of continued public meetings and outreach from the OGL after delisting saying, "What are the big issues still going on with the lake are nutrient issues...What is lacking is exactly what [Interviewee] just mentioned, which is some of those community meetings and the outreach components." There is a desire to have follow up efforts in place after an AOC is delisted.

Support in Budgeting Resources for Delisting

Interviewees mentioned how it was difficult to budget for resources that were going to be needed after delisting. So many funding resources and people's time were going into the projects needed to get up to delisting that there were not resources in place to support the continuation of work after delisting. Part of the support in budgeting resources could come from a change in funding from the state. Interviewees mentioned the perception that the reactionary rather than investing in prevention measures saying, "The problem is the current structure of governmental leadership does not recognize the environment until it is a reaction. There is no prevention. The system is

backwards. In regards to the effort given for resource management...I don't think there is funding from the state going towards leading a program that is like watershed group formation.”

Do they have any general advice for AOCs not yet delisted?

Work on Positive PAC and OGL Dynamics

Interviewees gave advice to eliminate bickering among PAC members and eliminate bureaucracy where possible. They also spoke to the importance of creating better partnerships across the AOC program to share best practices, such as at SPAC meetings.

Recognize that the AOC Program is Part, Not All, of the Solution

Interviewees indicated that problems discussed at SPAC meetings were often bigger than just the AOC and noted that it is important for folks to realize that the AOC is only part of the solution and process to recovery. Once an AOC is delisted, there is still work that will need to continue to be done.

Implement Better Management Practices

Strong management practices were emphasized as the key to a successful and efficient delisting process. An interviewee from Cliffs described it as, “We [Cliffs] have project managers and every project manager has a schedule and a budget, weekly or bi-weekly calls, you ask everyone what their progress is and you hold them accountable to the deadlines and they all work toward a schedule with milestones. I think many state and federal level projects and then coordinating with the local PACs, that having agreed to schedules and check-in calls and there’s no accountability really - but you could at least publicly embarrass people on a phone call, which works for some. I think that’s what [AOC Coordinator] and [EPA Coordinator]...that’s what they did, they did project management, and having people agree to timelines and deadlines and having a process for accountability, that can help any project and delisting should be treated like a project.”

Interviewees suggested that PACs bring in a competent project manager to help with budgets. They also advised that OGL could set aside money for project management training for OGL staff and/or PAC member leadership saying, “Maybe that means that staff who you normally wouldn't send to project management training - have some money set aside in the budget to get people the skills to manage their projects. And empower them too, to be satisfied that a good answer is okay and that they don’t have to have perfect answers.”

Invoke Frequent Communication Between PAC & OGL

Interviewees spoke to the benefit of frequent communication between the PACs and OGL, whether through a phone call, emails, or in person meetings. Having frequent communication keeps everyone on the same page and ensures that progress is being made.

Resist “Analysis Paralysis”

Interviewees advised that people working within the AOC Program should develop a satisfaction that good answers and solutions are okay. Oftentimes people can over analyze an issue and they should work to resist “analysis paralysis”.

Develop Clear Metrics

When designing cleanup projects, it is important to focus on defining clear metrics in connection to BUI removal. Clear metrics will increase efficiency and clarity surrounding the delisting process.

Plan for the Future

Interviewees stressed the important of goal setting and looking toward the future emphasizing that reaching delisting does not mean the work is done. “Well you have to clean up. Clean up to what [standard]? And the standard is that you were no more polluted than any other, which for the state and the government is a fine definition but for the community, why would you want to be only as polluted as any other lake?”

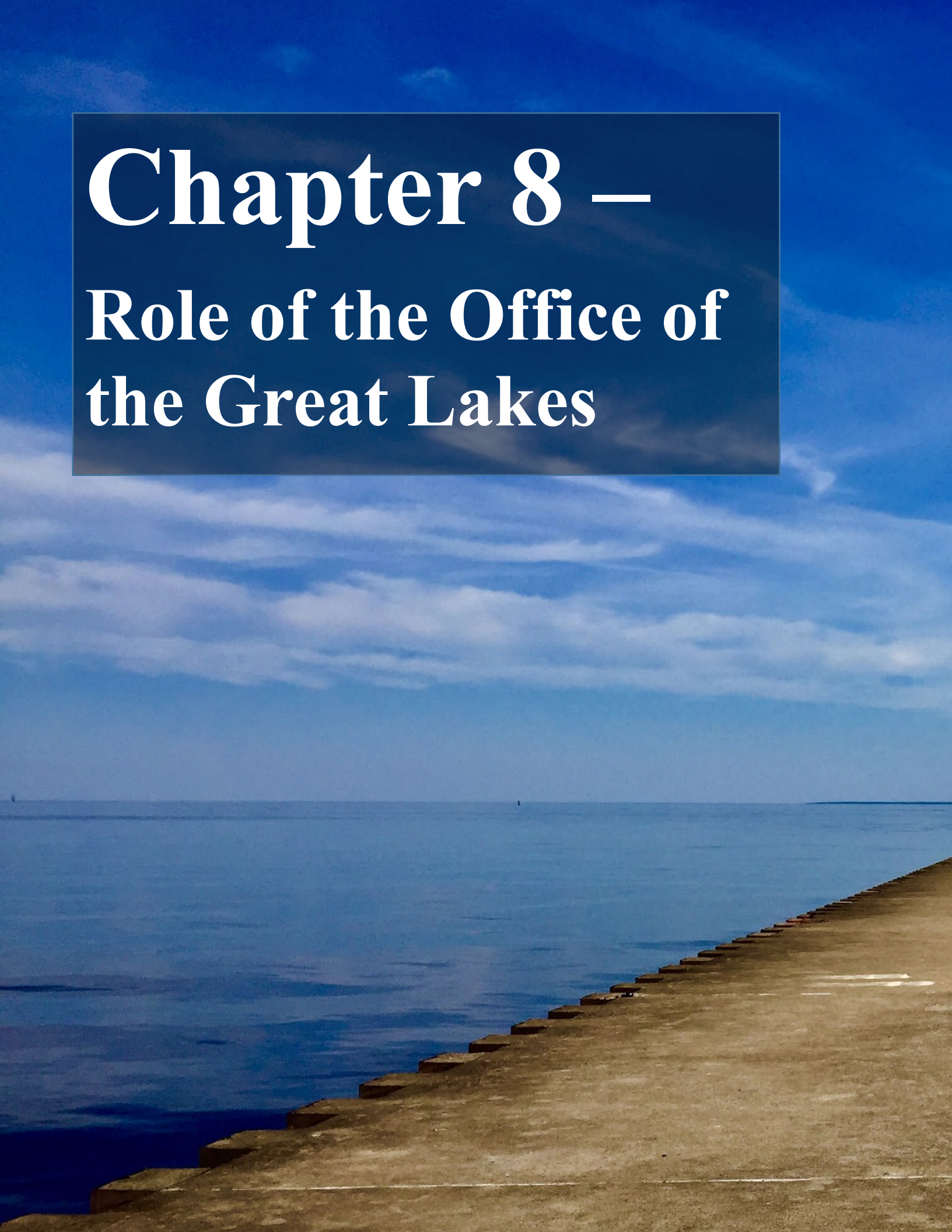
Agree on Goals and Recognize Shared Interests

For groups that have a variety of stakeholders working together, it is important to have agreed upon goals and recognize shared interests of the group. This prevents the group from getting bogged down in unnecessary bickering and gives focus to meetings. Recognizing the importance of goal setting for bringing diverse perspectives together, one interviewee stated, “If you have a goal nobody cares where you are from...and once these goals have disappeared...people drifted back to their little worlds because there is not the focus anymore.”

Conclusion

Interviewing former PAC members of delisted AOCs was important to gain a perspective from PACs that had already been through the process of delisting. We wanted to see the current status of the PACs and found that they had disbanded in both cases, despite aspirations to transition into a new form of the group. Even though a new iteration of the PAC never emerged, the interviewees spoke to a sense of relief that all of the meetings were over as well as a sense of accomplishment for reaching delisting. Answers varied on whether there had been a change in the community, with White Lake noticing changes and Deer Lake speaking to a lack of public awareness. This could be due to the nature of Deer Lake being less integrated into the nearby city of Ishpeming whereas Montague and Whitehall surround White Lake.

In terms of advice for other AOCs, both discussed the importance of collaboration, strong project management, staying focused on progress, and understanding how to navigate bureaucracy as the primary elements to focus on while moving toward delisting. In terms of what went well with the delisting process, the delisted AOCs spoke positively about their relationships with their AOC coordinators, the creative use of funding to tackle necessary projects, partnerships, a clearly defined problem, and the ability for industry to take responsibility. Overall they wish it could have been a quicker process, that the early years would have been managed better, that the program had clearer expectations, and that there was support post-delisting for emerging contaminants. Deer Lake and White Lake both stressed the importance of staying positive, improving communication, goal-setting, and developing a plan for the future as issues that current AOCs should focus on as they move toward delisting. The insight from these two AOCs was very important to take into account for how environmental stewardship can be sustained through the delisting process.



Chapter 8 – Role of the Office of the Great Lakes



8 – ROLE OF THE OFFICE OF THE GREAT LAKES

As AOCs near delisting, our final series of questions aimed to understand the future role of the OGL from the local perspective. We asked PAC members about: (1) their current relationship with the OGL, (2) how the OGL could help PACs address identified fears and/or challenges regarding the delisting process, and (3) the role of the OGL moving forward up to and beyond delisting. Local perspectives around the role of OGL helped to inform how the OGL could better support and prepare PACs for continued progress post-delisting.

Our results indicate that most PACs consider the relationship with the OGL as largely positive, while highlighting the essential functions that the OGL provides for programmatic success. Many PACs noted effective two-way communication and information sharing between the local and state efforts. When asked about how the OGL could help PACs address the perceived fears and/or challenges with delisting, PACs indicated several important areas including planning for post-delisting, stronger communication and more consistent presence from the OGL, and an increased commitment from the OGL in support of PAC efforts. In addition to addressing identified challenges, PACs broadly indicated that the OGL's role moving forward should include helping the PACs (1) create a delisting framework and/or roadmap, (2) identify alternative funding resources, (3) assist in partnership development, (4) change public perception of the resources, and (5) engage and recruit members of the public.

It is important to note that at least one group of interviewees felt they were too early in the process of delisting to even think about what OGL could do moving forward. Others had never contemplated what support they might need from OGL and were not prepared to answer the question. Interviewees expressed interest in thinking about OGL's role and the interview question may have spurred considerations of future planning. The lack of planning and thinking about the future is emblematic of a culture immersed in completing projects.

Understanding how the PACs view the role of the OGL up to and beyond delisting is critical for an effective and durable strategy. Moreover, these series of questions provided an opportunity for the PACs to give input on the OGL's role to a neutral audience. Oftentimes the community in which a government agency is working does not have this opportunity as they may be within a rigid top-down hierarchy or do not feel open to directly discussing the agency's role. Federal and state government entities have invested in the AOC communities and should take steps to minimize any backsliding. Hence, it was important for this research to hear from the interviewees on their thoughts for how OGL could support them moving forward and further enable restoration work to continue.

How would the PACs describe their relationship with the OGL?

Table 8.1: The relationship of the PAC with the OGL

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Two-way Communication is Essential to a Good Relationship				x		x		x		x	x			x
OGL Provides Essential Support to Community-Level Efforts			x			x	x	x		x	x			
OGL could Improve Information Sharing		x			x	x					x	x		x

Two-way Communication is Essential to a Good Relationship

PACs described the value in having a good working relationship with OGL as well as certain aspects of communication that help PACs feel respected and treated as an equal player in the AOC Program.

OGL Coordinators Practice Good Information Sharing -

PACs feel respected when Coordinators are responsive to their questions and communicate with them on a regular basis. One PAC (when describing their relationship with government practitioners) said, “It’s very good. What I really liked is that we had outstanding state representatives, outstanding MDEQ people and outstanding federal people so I can call them up at any time and get answers to questions. We just have really good communication.” PACs describe how communication has improved over time with consistent staffing. These improvements help PAC members to feel heard and provides an opportunity for OGL to address concerns expressed by the PAC.

Several PACs mentioned how they valued their Coordinator’s readiness to share information and keep one another up to date. “I think [our coordinator] has been very open and very patient. I think he has been very open and has been very willing to provide the information that we’ve asked for.” “They keep us up to date. Very receptive to anything that we would need from them. Good relationship. The way it should have been from the beginning.” Another PAC expressed their

appreciation of having their Coordinator at meetings in person, “So communications have been very easy and as a matter of fact we always have someone from the agencies at our meetings, so it’s not like we even have to call somebody when we have a need. The person is there when we’re discussing the need. Actually, we’ve probably gotten a little spoiled because they go ahead and take charge of looking into it for us.”

Moreover, this communication has improved relationships and fostered shared understandings between OGL and the PACs. Such understandings allow PACs to better empathize with the goals and limitations of OGL. Exemplified in one statement. “I think they're doing the best they can do with some restrictions on politics and money. I also think on the other side of the coin that they have as good a possible relationship with the EPA Great Lakes National Program Office.”

OGL Works Side-By-Side with PACs -

Due to the nature of the AOC Program PACs work on relatively equal ground with the OGL coordinators. One interviewee noted this helps, “create accountability because it’s not top-down, bottom-up.” Interviewees commended OGL on its programmatic approach of “not talking regulatory things, just talking ‘how do we move forward?’” Interviewees noted the value in voluntary environmental restoration, which led to better outcomes than past regulatory attempts at remediation, including one instance where regulatory intervention only “got everyone up in arms,” including the community whose jobs were threatened by the costs of remediation to a major local employer.

SPAC is an Opportunity to Share Lessons Learned -

The SPAC serves as a useful forum where PACs are able to share knowledge and help advise each other on overcoming barriers that a given PAC may have dealt with in the past. An interviewee described some of the merits of having the SPAC, “Having a statewide organization where all of the AOCs can get together and share ‘What is a good design?’ ‘What is a good design for taking out rubble? What is a good experience for making soft shore line?’ Discussing successes and problems on projects. ‘How do you get more Community involvement?’ All those kinds of things I always thought the SPAC meetings were really good.”

OGL Provides Essential Support to Community-Level Efforts

PACs described a few of the resources OGL lends them. OGL helps introduce new partnerships that sometimes lead to creative and long-term projects. Moreover, the presence of OGL imparts a certain organizational credibility to PACs themselves.

OGL Facilitates Partnerships -

PACs noted that OGL provides introductions with other agencies and helps lend PACs the legitimacy that then allows them to form new working partnerships. “It’s basically introductions. They have contacts. Just being resourceful in that way. That’s been very helpful.” Specifically, OGL has worked to enable creative partnerships with other government agencies and the PACs. “[OGL] is really valuable in connecting us with some of the right agency folks, like within state government, and even federal government.”

PACs describe these partnerships as essential to their ability to do their work, “We couldn’t do it without DEQ and without the Office of the Great Lakes, we couldn’t do it without USFWS and all those different agencies.” One interviewee noted the open and transparent nature of these relationships with their PAC, “It is like a three way partnership. Federal, state and local, it feels pretty equal. We all have a role and we all include each other in major decisions. Questions even before we come to a decision, keep each other in the loop.”

OGL Advocates on Behalf of the AOC -

PACs see coordinators as important voices who lend credibility to AOC Program efforts. One interviewee described this role, “(S)he is really good at being at the table and representing the AOC specifically. I would say the OGL and AOC coordinators have had a much stronger presence and involvement than our EPA task force leads.”

OGL Legitimizes the Role of PACs -

PACs note the importance of OGL recognizing their role and thus lending them the credibility to function effectively. One interviewee mentioned the value in receiving written acknowledgment from the state of their organization’s role in the AOC Program. “It was important for us from the beginning... to get concurrence in a letter from the state agency saying that we recognize you as a public advisory council for this program. So it was important for the public to know that what they are doing has an official role and that it is recognized, you know?”

OGL could Improve Information Sharing

Several PACs desire more frequent and structured communication from their respective coordinators. Interviewees wish to ensure that OGL is invested in the success of the AOC Program. Moreover, some PACs are concerned that their interests do not fully align with those of OGL. Specifically, there is concern from PACs that delisting could happen before certain issues they value highly have been adequately addressed in their eyes.

More Frequent Communication and Project Updates -

Some PACs desire improved communication with their respective Coordinators. Interviewees mentioned the value in regularly calling in to meetings when unable to attend in person. “If (s)he would like to attend more meetings (s)he is more than welcome to do that. Not just in the meetings that are relevant to what (s)he’s trying to delist at the moment.” “We see our coordinator more in the grocery store than we do in the meetings!” This attendance demonstrates to PACs a clear acknowledgement that they are a valued part of the program and more generally improves the working relationship between the PACs and OGL. One interviewee voiced their frustrations on the matter, “What the taste that leaves in the mouth of those folks is they don’t care. That the impression is the OGL doesn’t care if they can’t cover staff time.”

Need to Clarify Targets for Delisting -

PACs note a concern over pressures to delist. PACs expressed a desire for OGL to clarify delisting criteria and want to ensure they are included in decisions to remove BUIs. Some PACs are hesitant to remove BUIs, “They see the data in front of them look great, but some of them are still hesitant at the meetings to vote on it and say, ‘yeah we think it should be delisted’ because they’re afraid that once the box is checked off there is never any more funding.” One interviewee noted the political nature of delisting, “I think (s)he gets the push from upper management to hurry up and delist things. They all do.” Moreover, PACs desire that OGL systematically clarify program goals in general and recommit itself to outcomes that go beyond delisting. “It became this bartering back and forth -- how many projects do you need to be able to delist? It almost seems like whatever gets done or doesn't get done doesn't matter at this point.” PACs are not expressly opposed to the prospect of delisting but feel it is important that the process is transparent and defensible.

How could OGL help PACs address their fears and challenges regarding the delisting process?

Table 8.2: How the OGL could help PACs address fears and challenges

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Post-Delisting Planning	X	X	X		X					X	X	X		X
Funding Concerns	X			X	X					X	X			X
Stronger Communication and more Consistent Presence	X	X								X	X	X		X
Public Education and Community Engagement		X			X			X		X	X			X
Commitment to Supporting PAC Efforts	X			X	X		X	X				X		
Commitment to Continued Social, Economic, and Environmental Revitalization		X	X		X			X				X		
Commitment to Continued Monitoring				X						X	X	X		
Integrate AOC into City Management Plans								X				X		X
Improve State Agency Cross-Organizational Structure												X		

Post-Delisting Planning

Asking “what does our future look like?” was a common sentiment shared across the Michigan AOCs. Many interviewees indicated a lack of planning and general uncertainty regarding the delisting process. In order to address this gap in planning for life after delisting, the AOCs suggested a number of areas that OGL should address.

Developing a Delisting Framework for the Future -

As many Michigan AOCs approach the delisting process, there is a need to plan for the future , which includes a number of critical questions for how the PAC will continue to address

environmental challenges when they are no longer in the AOC program. One interviewee, recognizing the need to have a clear plan going forward yet uncertainty about how to accomplish it remarked, “I think we know that it’s needed. I don’t think we have a really clear concept of what - or how we are going to go about doing it.”

In order to address these uncertainties, several interviewees indicated the need for a framework or management plan that outlines clear steps post-delisting. “This needs a management plan...even if you just do this water body, you need a management plan.” It is clear that without adequate attention devoted to developing a management plan, high levels of uncertainty will remain within the PAC.

Hosting Collaborative Visioning Sessions -

Several interviewees suggested that structured visioning exercises with OGL would be extremely beneficial to helping chart a path up to and beyond delisting. One interviewee noted how collaborative sessions function to “gather ideas and discuss things, and sometimes you could do one of those facilitator things and put stuff on paper and everybody puts green dots or red dots and who wants to put more this or more that and then you take the set of priorities from it.”

Another benefit of collaborative visioning sessions is that the PAC and OGL would produce a shared vision for the delisting process based on the needs of the local community, which would likely contribute to a more durable plan for the AOC post-delisting. For some interviewees in AOCs that are still years away from delisting, collaborative visioning sessions with state and federal government agencies are critical to enable early preparations for the next stage in the process. One interviewee mentioned that while they are “a year or two away from delisting, we have to figure out what to do.”

Some PAC members indicated a need to have discussions internally with their PACs first and then coordinating with OGL to figure out a plan for the future. One interviewee stated, “we would like to host a workshop just among the members so that we can do a brainstorming session over a long period of time. It hasn’t happened yet, and I think we’re still feeling that we have a long way to go for delisting...we’d still like to absolutely plan for it and try to talk to the government agencies about the plan of what it could become.”

Clarifying the PAC’s Role Post-Delisting -

For several AOCs, there is a pressing concern over the PACs role post-delisting. Critically, PACs are unsure about what will happen to their group post-delisting, with one interviewee asking, “Do we disband? Do we join another organization?”

Another interviewee acknowledged that “it’s going to be a whole different makeup of this group and what we can get accomplished and what we can’t because [OGL] has been the glue holding

us together really.” For some AOCs, they recognize that OGL’s influence and presence plays a critical role in maintaining the PACs and keeping the community members engaged in the program, something which will be threatened during the delisting process. PACs have served an important function for the restoration efforts while providing an opportunity to bringing the community together to discuss important community-wide issues, particularly those that involve environmental degradation. One interviewee suggested that “Maybe the title of PAC has to change, or maybe you have to come up with a new name for once it’s delisted...maybe a new name would spur some interest.”

Further, even though some AOCs acknowledge the changing nature of PAC and OGL roles post-delisting, several interviewees associate the benefits of the PAC beyond just public participation in the AOC program, but rather as an integral space for community members to come together and discuss issues. As one interviewee expressed, “I don’t think any members want to see it disbanded...as someone who lives in the community and cares about the environment, it’s such a valuable forum to come and hear what’s going on locally.”

Finally, some of the long-term AOCs want to see the state return to a more active role in PAC membership, noting, “Back in the day...the state played a more active role in appointing membership.”

Sustaining Progress and Embracing Opportunities -

Several interviewees indicated a need to incorporate strategies for sustaining progress into their long-term post-delisting management plans. For many AOCs, planning for sustained progress is in the best interest of both the local communities and OGL, with one interviewee suggesting that OGL “has a vested interest too in doing that because they want to see things continue. They don’t want to see all this money spent, and this work put in, only to have it all deteriorate.”

However, the mechanisms to sustain this progress have not always been apparent, with several AOCs questioning long-term strategies at the state level for ensuring that progress continues for the communities in the AOC program. There has been a feeling that OGL has had misplaced priorities through the implementation of the program, emphasizing the initial stages at the expense of developing durable and adaptable long-term plans that incorporate local efforts. One interviewee acknowledged that “[OGL] was really always focused on starting and somehow magically there was going to be a way to have it sustained locally.”

In sustaining progress locally, one AOC believes that OGL should embrace “opportunities to try really novel things - it’s a highly impacted site already and in some ways that is an opportunity to think outside the box and what can we do with this.” In this way, several AOCs view the next stages of the AOC program as opportunities to implement innovative strategies for sustained progress as communities delist.

Embracing the Watershed Perspective -

As part of post-delisting planning, one interviewee indicated a desire for OGL to better account for the watershed scale and a systems perspective in addressing their challenges. Some AOCs are geographically large, and incorporating strategies that address the entire watershed, along with connecting waterways, will produce more effective and durable solutions that better contribute to water health in the region. PAC members also recognized delisting from the AOC program set the stage for the emergence of broader-based watershed environmental groups in communities.

Funding Concerns

The persistent challenge of funding restoration projects remains a primary concern for AOCs as they both approach delisting and envision mechanisms to sustain progress post-delisting, prompting one interviewee to ask the simple question of “how to achieve funding?” Additionally, funding concerns encompass important administrative functions that enable many PACs to operate effectively, with one interviewee expressing concern that without substantial funding (e.g. GLRI money), “many of these CAC or PACs become debating societies. People come in just to talk about issues”, and there will be limited potential to implement project ideas.

Providing Consistent Administrative funding Post-Delisting -

Several AOCs with larger PACs have paid administrative staff that provide critical administrative support that helps maintain PAC structure and organization. Several interviewees noted the challenges in supporting paid staff positions through a grant-based funding structure, advocating instead for OGL assistance in finding a more stable and durable funding mechanism. One interviewee noted the importance of having “somebody paid to do something. That was their job. That was important to have. You could only volunteer so much.”

For some PACs, especially those that are binational, there is a desire to maintain local RAP coordinators even while acknowledging the high cost of these positions for governments to maintain. As one interviewee mentioned, “it would be a huge asset to have a local RAP person and it is a lot of money for the government.”

Interviewees also expressed how administrative support on the PAC has enabled them to not get bogged down in meeting logistics and agenda-setting, allowing them to instead focus on devising new projects and restoration initiatives. Having paid staff, therefore, enables a separation of responsibilities that may be particularly important to maintain as AOCs delist and need to devote time and resources to finding alternative funding.

Finding Additional Sources of Funding -

Several interviewees expressed the need to identify mechanisms for finding alternative sources of funding post-delisting as they anticipate the likely loss or severe reduction of state funds through PAC-support grants. Even with the current funding sources, one interviewee acknowledged that going forward, “we need GLRI money. We need big money...PAC support grants are too small.”

Some interviewees suggested that OGL could help compile a comprehensive list of local, regional, and federal funding sources that PAC members should consider. Regardless of how the list develops, several interviewees would like to see OGL more engaged in discussions related to alternative funding sources. One interviewee stressed, “It would be really important for [OGL] to be involved in the process, especially if the PAC does start to chart that course towards delisting and into the future. It would be nice if they were involved and maybe help to brainstorm ideas of where the funding could come from and the PAC feel like [OGL] is going to be involved afterward.”

Adopting more Flexible Project Funding Strategies -

Some AOCs would like to see OGL adopt more flexible funding strategies that enable PACs to use grant funding for community engagement events, which will likely become more important as delisting approaches. One interviewee noted, “our funds are very restricted to those projects and delivering outcomes that we promised in our grant contract...but it doesn’t give a lot of freedom to address issues as they are needed, to reach out to the community, to have regular community watershed wide meetings.”

Stronger Communication and more Consistent Presence

Many AOCs noted a concern regarding continuing communication and interactions with OGL post-delisting, especially considering the important role that OGL AOC coordinators have with their individual PACs. As the conduit for information sharing between state guidance and initiatives, and PAC on-the-ground restoration and outreach efforts, AOC coordinators represent a critical link for communication and expectations between OGL/Federal agencies and the public, and there are concern that delisting will hamper these efforts. As one interviewee noted, “how are we going to continue having the high level of communication and sharing among groups, even if the mechanism which drew us together has expired.” Several interviewees would like to see increased participation of the state at community engagement events. They feel this would help the PAC connect restoration efforts to the general public, which is an important long-term engagement component.

Clarifying Post-Delisting Communication Expectations -

In order to address the broad uncertainty of what communication will look like between the PACs and OGL post-delisting, several interviewees expressed a need to clarify communication

expectations and protocols. Several AOCs indicated significant frustration with a lack of clarity and timeliness regarding OGL responses to current inquiries, and there are concerns that these issues will persist and likely worsen post-delisting. Several interviewees maintained that clarity on the part of OGL's communication strategies post-delisting would help address these uncertainties.

Sustaining Engagement Up to and Beyond Delisting -

In addition to clarifying communication expectations, several interviewees expressed a desire for continued OGL presence up to and beyond delisting. Maintaining some level of communication is desired by a number of PACs, as one interviewee noted, "...even if it's just a phone conversation with the AOC person that would be in charge to just touch base annually if there are issues that arise...they would at least be able to help you if you found future hotspots."

However, other PACs went further and expressed a desire for OGL to establish even stronger associations with the PAC, or subsequent community group, post-delisting. As one interviewee indicated, "we want someone from the OGL to maintain a very close relationship with the friends group, which I presume will be replacing the PAC." Having the right point-person in place from the state level was common sentiment among PACs, "...so long as we keep all of that necessary regular work going along when all of a sudden we find a problem and we have the right people to talk to still. [We're] pretty proactive."

Additionally, as PACs recognize delisting is on the horizon, several interviewees expressed a lack of adequate engagement from OGL that has contributed to feelings of detachment from the state's delisting agenda. One interviewee suggested that, "One of the things [to improve communication] would be that the liaison between the OGL and PAC should be very committed and very participative. We go long, long periods of time with no good contact, so even if they just came in by speakerphone once a month, that they were there and that they cared and that you felt more rapport - there would be a better energy. It has improved, but it could be so much better if we actually did have a point person that was there every month." It is important to note that several interviewees mentioned considerable engagement improvements with OGL under Jon Allan's leadership.

Support information Sharing among Partners -

Interviewees expressed challenges in losing critical linkages to partner organizations. PAC members noted that multi-agency collaboration has been critical in addressing complex environmental problems. For some PACs, OGL has played an important role in initiating and maintaining partnerships to address these problems, with interviewees expressing a desire to see OGL's support in facilitating partnerships continue post-delisting.

Public Education and Community Engagement

One of the persistent challenges regarding the AOC program has been highlighting successful projects and cleanup efforts to the general public, thereby educating community members on the progress that has been made. Public in the AOCs often carry negative perceptions of the environment, with one interviewee noting “in the 1970s, we were the most polluted river in the state and they didn’t find a single living fish in the river from the mouth of the river all the way up to Pontiac, which is like 60% of the river. And look where we are now.” Interviewees see an opportunity for OGL to help shape a new public perspective on the environmental conditions in their community. One interviewee stated, “How do we hook somebody?” to recognize the progress that has been made.

Increase Public Awareness of Restoration Efforts -

Interviewees indicated that the general public is often not only unaware of the AOC program, but also that cleanup efforts have greatly improved the conditions of the resources in their community. As one interviewee noted, “...if they could help with, still I go back to that public perception of our area because it still exists out there. We need to get the people to come back to our areas and not be afraid of using the water and being on the water and in the water and eating the fish. A lot of people who were here in the 90s are still here and a lot of the people remember what happened.”

Interviewees recognize the importance of public awareness in galvanizing environmental stewards within the community, and would like the OGL to help address these general public perception gaps regarding the restoration efforts. However, new stewards need to understand and be exposed to what measures have been done as part of the restoration. “Engage the public so that the public understands that they have done some significant work and now is the time for the public to be good stewards.” Another PAC member noted, “it would be nice if in some way the DNR could funnel more education and public awareness into [delisting]. Periodically having people make presentations or periodically have a presence at something like the walleye festival where people get down to those spots.”

Focus on Educating Youth -

Interviewees expressed a desire for the OGL’s assistance in youth education initiatives, recognizing the critical role that future generations will have in sustaining progress as local environmental stewards. As one interviewee noted, “those kids grow up...but if we aren’t supporting them throughout their adolescence and into their young adult lives...and that they see this as something that’s not just a science experiment, but life. This is life.”

Several interviewees recognize that they will not be around to protect their local environment forever and that before they leave, they “will start to generate more interest and those champions, those younger champions, and the lights won’t ever go off, even when we are all gone.” Another

AOC shared a desire for OGL to help the PACs address this youth engagement challenge, “because we are not going to be here forever. We are not going to be the ones to continue - which is part of the importance of public education.”

Local Media projects and Marketing Materials -

Several interviewees see an opportunity for OGL to help address public education and community engagement gaps through localized media projects and marketing. One interviewee suggested linking the delisting efforts with statewide initiatives like Pure Michigan, while another see social media playing a key role in educating the public, suggesting “more online stuff would be useful and helpful...more Facebook stuff.”

One AOC suggested creating an online video series with OGL’s help that highlights the positive environmental changes that have resulted from the AOC program. Regarding the video series, “there would be interviews of people, champions, people who are benefitting from the resources that are restored. Little kids fishing with their parents, their friends, because now they can eat the fish...People want to have a successful thing in their life that is what I want to be a part of.” In addition to a video series, several AOCs suggested the state invest in progress brochures that are used by other state agencies to promote restoration efforts.

Commitment to Supporting PAC Efforts

Several interviewees expressed a desire for OGL to reaffirm and strengthen commitment to supporting PAC efforts. AOCs expressed a desire that their local efforts be recognized and valued, especially considering the voluntary nature of the program, and that local groups are critical in designing and implementing restoration projects and outreach/education initiatives.

Value Local Knowledge and Perspectives -

Several interviewees would like to see OGL better appreciate the vast local knowledge and perspectives of the PAC members. As one interviewee put it, “what can OGL do to help us connect with those communities? We are the community; we’re the people who live here; we’re the people who know it; we are the best to be the connection to OGL at these different areas.”

In addition to being seen as a critical resource for local knowledge, several PACs would like OGL to more directly address the value in having community members involved in the restoration process. These discussions prompted one interviewee to say how important it is to recognize “the value of having us around, in maintaining that stewardship, that awareness, and the promotion of positive things.”

Reduce Pressures on Small Organizations -

Several PACs noted that their small organizational size poses limits on what they are able to accomplish. In particular, several interviewees feel OGL sometimes expects too much from the PACs considering the modest funding that is being received and how this creates enormous pressure on a small organization or mostly volunteers. One interviewee noted, “we are expected to help with facilitating public engagement, help with getting the information out to the angler and getting the right people to the table, and forming committees. That is taxing on a small organization when they are not receiving any funds.”

In order to address these pressures, one interviewee suggested that OGL adjust their compensation protocol for PACs. They would like OGL to “be the voice for the local groups saying we need to compensate people for their time.”

Commitment to Continued Social, Economic, and Environmental Revitalization

Recognizing the challenges for sustaining progress post-delisting, interviewees would like to see a stronger commitment from OGL in addressing long-term social, economic, and environmental revitalization. One interviewee indicated, “there is going to need to be a clear connection and broader recognition that the environment and the economy are not mutually exclusive. It’s really going to have to be triple bottom line.”

Due to the presence of emerging issues that demand different approaches than solely focusing on restoration projects and other issues with more limited complexity, one interviewee would like to see OGL “make a social and economic commitment to maintaining and extending the restoration opportunities. We can’t just stop with one restored stream. We have to keep going and we have to do what we can to overcome the urbanization that has contributed to the degradation of our resources.”

Commitment to Continued Monitoring

PAC members indicated the importance of continued monitoring and data collection post-delisting, especially since funding for monitoring projects has consistently been a challenge to obtain. Monitoring is critical for assessing the long-term effectiveness of various restoration projects. Since AOCs consist of particularly complex environmental challenges, monitoring projects up to and beyond delisting will be important long-term ecosystem and community health. Therefore, as AOCs approach delisting, there are rising concerns that it will be very difficult to fund monitoring

projects and that this drop-off will negatively impact the ability to make further assessments and management decisions.

To combat monitoring concerns, interviewees emphasized that continued monitoring and data collection are important opportunities for OGL to assist PACs in assessing restoration strategies and sustaining progress. Interviewees noted the expensive nature of long-term monitoring projects, particularly those that involve fish and invasive species, referring to the process as, “monitoring. The expensive analysis. That’s one of the critical things. It’s not something that the PAC is able to do and it’s not something that the member communities are able to do.”

Finally, some interviewees stressed that due to the complexity of environmental issues in their AOCs, there will likely still be a need for data collection into the future to better understand the problems. As one interviewee said, “There’s a need for actual basic data collection even still, but people don’t like to hear that. They get the sense that we just keep studying this thing...I do think it’s important that we do try to find things that produce visible results.”

Integrate AOC into City Management Plans

As AOCs near delisting, interviewees noted the importance of collaborative efforts with local municipalities that could integrate restoration projects into existing city plans thereby avoiding funding uncertainties/challenges that come with delisting. Additionally, downtown revitalization plans would benefit from having committed and knowledgeable PAC members contribute to city revitalization efforts through coordinated strategies. One interviewee indicated a desire to see examples from the state of previously successful integration efforts. “It’s good to work into the city plan, it’d be nice to see more of that. Seeing examples from other communities would be really helpful...examples of other cities that have integrated the area of concern into the downtown revitalization process.”

Improve State Agency Cross-Organizational Structure

One AOC indicated a need for better information sharing and collaboration within the state agencies internally to benefit the environment. They worry that progress and actions will suffer due to siloed nature of government and that current government agencies are only looking at certain pollutants rather than considering the whole ecosystem. As one interviewee noted, “[Agencies] don’t talk to one another...there’s all this political baggage amongst them, the DEQ could probably do a lot more to go across their organization structure on projects like this.”

How do they see OGL’s role going forward as they approach delisting and beyond?

Table 8.3: How PACs see the OGL’s role going forward

	Detroit River	Clinton River	River Raisin	St. Clair River	Rouge River	Saginaw Bay	Kalamazoo River	Muskegon Lake	White Lake	Manistique River	Menominee River	Torch Lake	Deer Lake	St. Marys River
Support in Creating a Future Framework and Roadmap Toward Delisting	X	X		X	X						X			X
Transparency in Information Sharing				X			X	X			X	X		X
Funding Support and Identification	X	X			X			X			X			
Assist in Partnership Development		X	X	X		X						X		
PAC Engagement and Recruitment		X	X								X			X
Support for Continued Monitoring			X		X						X	X		
Changing Public Perception of Water through Communication Efforts	X	X								X	X			
Restructuring OGL’s Programming		X			X						X			
Increasing Education Efforts	X	X										X		
Address Environmental Justice Issues							X							
Better Understanding of Remote Interaction with AOCs											X			

Support in Creating a Future Framework and Roadmap toward Delisting

Interviewees would like to see OGL support PACS and watershed councils in identifying what steps are needed to move toward delisting and who will fill what roles in that process. If a watershed council is present in a community, OGL could also help them define what their role and steps should be once the AOC is delisted. Below are subtopics of what was suggested be included in the framework. These roadmaps would be forward thinking and be proactive rather than reactive

in nature (a difference from how delisting plans currently are formulated). Interviewees spoke to alleviating fear of the “PACs fading away” if a plan was in place and the desire for preparations to be in place in advance of delisting occurring.

Identify Funding Sources -

A roadmap of the future will help AOCs maximize funding and create a community development plan. A well-written plan that is referred to as a tool by its writers could contribute to lasting implications for communities.

Refocus Priorities and Deadlines -

OGL could help AOCs refocus priorities and deadlines needed for delisting. Roadmaps toward delisting could be developed at SPAC meetings to allow PACs to work alongside other PAC members in the state. A visioning exercise was suggested as a way to reframe the PAC goals and group vision. Interviewees stressed the importance of having dedicated meetings for discussing life after delisting, whether that is in PAC meetings or SPAC meetings. “I think it would be good if we were to seriously start talking about that [Life After Delisting], to have dedicated meetings just for that because otherwise it just gets lost in everything else.”

Identify Steps and Future Expectations -

A document that lays the groundwork for delisting is necessary and would be much like the role of the RAPs in the early stages of the AOC program. “Sometimes I feel that unless I sit down and draft something, it’s not gonna happen, because they [OGL] have so many things they have to deal with and other AOCs, and they are not getting the message from the higher up that it’s a priority.” OGL could help design that document that goes line by line to identify future expectations and goals to set a direction. This would be in response to interviewees saying, “we need a plan!”.

Clarify Roles and Goals -

OGL needs to provide a description of the roles of agencies beyond delisting. This topic was brought up in multiple interviewees as a desire for clarity of program direction and vision as AOCs move toward delisting and plan for work beyond. Clear direction would ensure that PAC volunteers felt like they were contributing to a program with a larger purpose and overall vision. PACs could pass this direction on to community members who participated in stewardship activities and restoration projects.

Transparency in Information Sharing

Interviewees spoke to the need for more deliberate information sharing from OGL through frequent visits and outreach by AOC Coordinators. Some interviewees inferred that this one-on-

one meeting time would be more effective than SPAC meetings, yet they also saw the value that SPAC meetings had for providing an opportunity for OGL to give information to all of the AOCs at one time. Transparency in information sharing would increase the accountability of the state to the PACs.

Point Person Post Delisting -

Interviewees spoke to the value of having a point person within OGL moving forward with whom they could communicate. If OGL had a liaison who specifically handled questions from delisted AOCs it would aid in the feeling of support and reassurance moving forward. They describe this role as, “I would hope it would just be some type of point person that we know who it is that we need to go to if we need help or advice or whatever.” The ability to maintain a close relationship with the office after delisting would maintain trust between the agency and the community and help ensure that AOCs do not feel abandoned.

Increase Local Presence -

A few AOCs would like the OGL to attend more local PAC meetings to establish a more consistent presence stating, “Send someone to our meetings and ask specifically, what are you folks doing, how can we help you? Yes if you go to a room full of other AOCs I’m not going to say it is a total waste of time, but it’s not enough of value to suit my time.”

One AOC suggested that having a local representative as the AOC Coordinator instead of someone from a different part of the state would be beneficial so that they are more acutely aware of the problems. Presence is important to fully understanding local issues and building trust within the community. “Yeah, like [the AOC Coordinator] really tries, but I feel like they don’t have that relationship. Sometimes when it comes to a Public Advisory Council, they don’t necessarily trust government, so I think having more presence would be better. And just having a better understanding of the local concerns. Because [they do] have an understanding, but if [they are] not here you’re never going to really....”

One interview suggested that it there used to be more incentive for agency members to come to meetings saying, “It has changed a little bit now but at one time State agencies had to have public support. They had to turn in something and said these are the public meetings that I went to. So it was in vogue to come to those meetings...yes it was authentic, they were coming in and providing good information. They were true stakeholders in the meetings.”

Improve Communication -

PACs would like to improve communication with OGL upper management. One way communication can be improved is through the structure of reports from the OGL to the PAC. One PAC suggested that OGL should work on building trust by not leaving unaddressed comments in

reports. Also, the facilitation of technical expertise would help PACs understand what is happening with the cleanup efforts.

Funding Support and Identification

One of the key challenges and fears facing PAC members is the lack of funding once the AOC is delisted. “You can write as many reports as you want and write as many feasibility studies, and concept designs, but at the end of the day, it’s just gonna sit on the shelf because we don’t have the money to fund the actual project, so what’s the point?”

Beyond pushing for more GLRI money for the Great Lakes Basin as a whole, interviewees made some key suggestions about how OGL could support them with funding moving forward.

Assistance with Federal Grants -

One suggestion toward future funding is help writing large federal grants. Federal grants were seen as a way to make new partnerships and secure funding that will last past delisting. Oftentimes federal grants can be burdensome and onerous for a small organization or group. OGL could provide workshops or assist in guiding PACs through the process.

Identifying Alternative Funding Sources -

Beyond federal grants, interviewees would like support from OGL in identifying alternative sources of funding. PACs have limited time and resources, so suggestions for alternative funding from OGL using their broader network are welcomed. A toolkit for funding opportunities was suggested as an SPAC topic, so that all AOCs could get the information together.

Interviewees see OGL has having connections and access to information about funding opportunities that local PAC members do not have saying, “Especially when it comes to funding, not so much getting funding from those agencies, but they have access to different types of funding that most of us don’t have. We don’t get it on a daily basis. One thing, if funding is going to be necessary to carry on any of these projects, finding places where you can get that is going to be essential. So I think guidance in that regard is going to be essential from either state.” Funding is essential to maintaining momentum and progress. OGL could make an impact by providing guidance to PACs in terms of what funding they could access.

PAC members also felt that they didn’t have time to do a thorough search of funding resources for themselves saying, “Unfortunately, a lot of life including our local [PAC] here revolves around money and I certainly don’t - or any of our individual members aren’t going to have time to be out hunting for funding and all of that help you need to get that and implement it, so I think this group,

unless we're getting some kind of help from some agency, it's going to be real tough down the line to continue as something."

One interviewee suggested that OGL could look toward communities that already have a functioning, well-funded watershed group such as the Huron River Watershed Council and examine what pieces of their structure could be replicated in AOCs. "They would be good for the OGL to look at, like how do they exist?"

Assist in Partnership Development

Interviewees often discussed how OGL could work with PACs to help foster and develop partnerships with other stakeholders or groups that would be supportive of watershed work in the future. Using their established contacts and connections, OGL could aid in building relationships between stakeholders. Continuing help with creating these connections will enable stronger networks moving forward to continue watershed work. Assistance in identifying key community stakeholders would help with developing a plan. The state has an opportunity to create "some mechanism to keep the local communities involved...I think they can do it without a lot of cost at all."

Transitioning from a "PAC" -

Interviewees identified the need for partnerships to be formed in order for work to continue because the purpose of the PAC is to get the AOC delisted. Hence, there won't be an identified purpose of the PAC post-delisting, so they will need to form a new group that could be strengthened by partnerships with existing organizations. "Form follows function. If the function of this group is to try to get an area delisted, it is very hard to see that organization continuing. We have conservation organizations, talk about hunting and fishing and boating. All the municipal folks have plenty of stuff to do. Extension offices, SeaGrant. We are performing one slice of one effort. DNR, DEQ will still exist, but we won't have that scarlet letter of the watershed."

Local Government "Buy-In" -

One interviewee mentioned that OGL could help with local government buy-in. In this way the monitoring efforts could be passed from the state government to the local government to continue engagement in restoration projects. Interviewees recognized the importance of multiple partnerships alongside local government saying, "I guess the other local governments and agencies involved are always going to be part of that, so the city and municipalities who are really involved, conservation authority. There are non-profit organizations, naturalists - things that are - so I think if they can all kind of stay working together then that would help as well as having a tie-in with the universities is really important."

Watershed Group Connections -

An obvious partner for AOCs would be the watershed groups in their communities if they are not already connected with them. If a watershed group does not exist within the community, then connecting the PAC to communicate with a well-functioning watershed group or “friends of” group elsewhere to gain insight into a framework to work within post-delisting. (working toward a ‘friends’ or ‘watershed’ group)

Connecting Research Entities -

OGL can help connect research entities who are doing work on other part of the systems that could affect the BUIs. Instead of having siloed research efforts, they could combine to create a more significant research impact.

PAC Engagement and Recruitment

Interviewees spoke to the need to engage the public more with the PAC through recruitment and diversification of interests and perspectives. They noted the need for support from OGL in, “Actively recruiting more citizens at large to the PAC...who are interested and knowledgeable and want to be involved.” They would like OGL to help them recruit younger members and more diverse members. At the same time, there were some concerns expressed at the public’s perception of state government agencies in this current political climate and how that might affect any engagement efforts coming from the state.

While the debate of whether it is OGL’s role or the PAC’s role to engage new PAC members was heard throughout the interviews, a handful of members did feel that it may be better coming from the local watershed councils instead. The state could help current PAC leaders pass the torch to new folks with long-term vision and commitment for the community.

Foster a Public Minded PAC Ethos -

Interviewees spoke to the need to foster a more public minded PAC rather than individual stakeholder interests. “I think there are too many people on the PAC that wear too many different hats now, and they are not always interested in speaking for the environment or for the public because of other hats that they are wearing.”

Promotion at Public Events -

Recruitment could be done by OGL helping with festivals and tournaments related to the water. For example, bass fishing tournaments or county or city program or festival on the riverwalk up and down with small tents and vendors.

Support for Continued Monitoring

AOCs mentioned wanting state support for continued monitoring efforts to ensure that new and emerging issues do not go unnoticed. The interviewees also wondered who they would report their monitoring data to once they were no longer listed as an AOC as continuity in data collection is very important. “I think that we’re going to need some help and everything putting those things together in coming up with a monitoring process that we can rely on. Also, as we monitor and gather information - who do we report it too? Who is interested in this kind of information? If you just monitor and it doesn’t go anywhere, people lose interest in that pretty fast.”

Incentivize Monitoring -

It was suggested that OGL could have a monetary rewards system in place for AOCs that do develop volunteer monitoring programs to incentive this key component to continued success. The importance of monitoring was emphasized to ensure that the work keeps moving forward.

Changing Public Perception of Water through Communication Efforts

OGL could help with changing the public community perception about the water now that there have been cleanup efforts. This shift in mentality would include changing how the public views the environment and creating support for projects that enhance the environment.

Support of K-12 Water Literacy -

One suggestion was for OGL to support emphasizing water protection as a life ethic in K-12 literacy courses. “I just hope we get an increase environmental knowledge and stewardship, a lot of times we call it Great Lakes literacy. But I think it has to be really fundamental, and I hope we get more students who understand that and are taught that those things in the K through 12 program.” Education can be present within the schools with help from the OGL. OGL can help the PAC integrate the restoration and local history into the local schools to address youth gap problems.

Consistent Marketing Tools -

A common topic discussed was the idea of OGL creating consistent marketing tools to be used across all of Michigan’s AOCs. Canada and Wisconsin were mentioned as good showcases of having “scorecards” or “report cards” on cleanup efforts. These documents help set deadlines for projects as well as help PACs communicate with the public about what work is being done in order to shift the public’s perception of the water. A consistent template is key in marketing to change public perception and OGL could create that template.

Another suggestion from an interviewee was using marketing and media more effectively. They discussed how positive the “Pure Michigan” campaigns had been for certain locations in Michigan and how these could be used to promote delisted AOCs too. Referencing the Pure Michigan campaign they said, “This year we’ve got 20 [billboards] and our local tourist council has gotten into the billboards and they’re doing them on their own. Advertising the [local] area. We’ve seen a huge influx of people since we started doing that marketing.” In order to change the public perception of the water, OGL could also be working with the media to publicize the restoration efforts that have happened in the AOCs. Some interviewees also suggested that it would be useful for OGL to connect with local news agencies to change perception within the immediate community.

Reframe “Life After Delisting” Positively -

Using vocabulary that has a positive connotation can be a way to reframe “life after delisting”. OGL could use these terms, which interviewees see as denoting watershed planning and forward thinking versus recovery from pollution. “Life after delisting can be called placemaking and blue economy. A green infrastructure...you are an area in recovery. So you become an area involved in placemaking, and that’s planning. That’s watershed planning.” Through using these terms, OGL can work to instill a sense of forward thinking and motion rather than the idea of recovering from the past.

Restructuring OGL’s Programming

Consider restructuring the mission or structure of programming for OGL after the majority of AOCs have delisted. Particularly, they questioned whether or not OGL is structured to help communities that are working toward redefining themselves after a legacy of pollution saying, “Like any other government agency, I’m not quite certain how they will be valued once the program goes away. Will their strategy shift to another problem? I don’t know if they are necessarily set up for placemaking and watershed planning.” There were questions as to how OGL will fill these program and skill gaps and if the expertise of the staff was able to account for these aspects.

Incentivize Communication Post Delisting -

Echoing some of the challenges that interviewees mentioned, they would like to see OGL incentivized to do communication and outreach with AOCs once they are delisted. Currently, the OGL’s role in the AOC program does not include supporting PAC groups once they are delisted. One interviewee described it as, “[The AOC Coordinator] works for DEQ. They are not a planner, they are not invested, unless it’s part of their job, to try and keep communication going. I mean what is the incentive unless the OGL decides to recreate themselves or reinvent themselves to make life after delisting a part of their mission?” It was suggested that the state could develop

operations and maintenance support within the AOC program with specific stipulations for delisted AOCs.

Increase Cross- and Inter-agency Collaboration -

OGL could work on more cross- and inter-agency collaboration. Collaboration between government agencies would help to get work done more quickly for AOCs that are nearing delisting. They see conflict at the state level, with confusion among different agencies. This conflict can prevent full use and maximization of funding resources from the state to restore and protect the environment. One specific example of this was the AOC and the stormwater program conflicting. “These programs don’t work together...even though they were in the same office in [a nearby city], they didn’t know what each other was doing, and they are so complementary of each other. It’s just so frustrating to have this one doing this and this one doing that, and they work in the same office in the same agency. Why don’t these two programs have any sort of relationship?”

Increase Structure & Accountability -

Other restructuring suggestions included finding a balance between regulatory and non-regulatory aspects of the program. While there are good things to the AOC Program being non-regulatory, there needs to be a balance between regulatory and non-regulatory so that there is structure and accountability. “The lights will stay on if the OGL can do a better job of blending the regulatory approach with the AOC volunteer stuff.”

Increasing Education Efforts

Increasing education was mentioned by interviewees in a variety of ways ranging from educating politicians to educating PAC members. OGL has the expertise as an agency on water-related issues and could bolster their role in providing and supporting education efforts.

Continuing “Water Schools” -

A current program that interviewees would like to see continued is the education of electorates through the idea of “water schools”. This program was also discussed at OGL’s engagement summit this past summer. Water schools educate elected officials on the importance of water and issues related to water. Having these programs in place creates longevity of knowledge on issues related to water within the political system and communities. This was seen as a very good program that OGL can keep doing, pushing, and growing.

Empower PACs to Educate -

It was also suggested that OGL could educate PACs by giving them tools for talking to the media, legislators, and other organizations. This would help PACs to engage a broader public and more

easily engage with policy makers. Again, consistency is key for how AOCs across the state talk with the public and legislators to create a bigger change. Receiving advice on how to do this from OGL would help achieve that.

Address Environmental Justice Issues

Environmental justice issues are inherent in areas that have legacy pollution. While there is an apparent lack of addressing environmental justice specific issues throughout the AOC program, it was brought up by interviewees. One interviewee stated the universality of environmental issues by saying, "...and it's not that only whites enjoy nature because that isn't it. The contact with the land in the nature is pretty universal. It's not just the justice, it's the fullness of participation. Of our whole community. It is pretty universal. And I feel that lack."

Inclusive Signage -

In one case there is a need to have signage along the river telling people not to eat the fish in multiple languages. They noted that many minorities rely on fishing for subsistence and if they are not able to read that the fish are not safe to eat then they are disproportionately affected by the pollution. "Most important part about this is that it's happening right now and that there are people who are fishing in [the river] and they take those fish and they eat them and they share them with their families. And a lot of those people do not read or speak English... and interacting with state agencies on this, it's not that they aren't trying to help, it's just agonizingly slow to get anything done. Cleaning up the river is not going to happen quickly enough to keep hundreds of little brown children from eating PCBs for their entire childhoods and that is very upsetting to me."

PAC Diversity -

OGL could work at incorporating environmental justice into the various facets of the AOC program as there is also a notable lack of diversity among many PACs. This was mentioned by an interviewee who stated, "...and you go to an SPAC meeting and maybe from Detroit and Flint you can see some brown places faces but you go to an environmental meeting [here] and it is middle class white people." A lack of representation from voices in the community who are experiencing direct effects of the legacy of pollution does not work toward equitable solutions.

Better Understanding of Remote Interaction with AOCs

One AOC discussed that those who are geographically distanced from Lansing see a need for OGL to better understand the difficulties and barriers as they move forward in creating a delisting plan. They want the delisting plan to specifically state ways in which the barriers of remote AOCs will be addressed.

Conclusion

As the AOC program has changed over the past 30 years, so has the role of the OGL. Moving forward, how they might best support PACs up to and beyond delisting is unclear. To gain insight, we discussed the PAC members' perception of the OGL's role. First we asked about the PAC's current relationship with the OGL. For many, they viewed communication as strong between the two groups. Others saw ways in which communication could be improved through more frequent communication and clarification in the process toward delisting. Throughout Michigan, the OGL's role was seen as essential in supporting the communities through facilitation of partnerships, advocating for PACs, and legitimizing the role of PACs.

In terms of helping PACs address perceived challenges, interviewees spoke to the need for more dedicated planning sessions, support in identifying new funding sources and building funding capacity, a more consistent presence at PAC meetings, helping to engage and educate the public, a stronger commitment to supporting PACs, advocacy for the areas, and a shift in programmatic focus. These directly correlate with many of the challenges PACs discussed earlier in the interviews. PACs recognize the capacity and leadership of the OGL and the power that comes with that to create change.

Chapter 9 – Discussion and Recommendations





9 – DISCUSSION AND RECOMMENDATIONS

Although Michigan’s AOC program has made great strides in recent years with the influx of GLRI funding, as delisting increasingly becomes a reality for more AOCs it is imperative to identify from a programmatic perspective how to best set up communities for success in life beyond delisting. Our results demonstrate the importance of PAC members’ emotional connection to their home. Throughout the interviews, we heard anecdotes and descriptions of the strong sense of place interviewees felt. While this was not altogether surprising, it should not go unexamined nor unattended. The OGL needs to recognize PAC members’ deep ties to their communities and ensure that local knowledge is truly being valued in the decision making process. For the community members who are involved in the PACs, restoration and remediation projects have long lasting impacts that go beyond the transactional perspectives of an agency employee or consultant. Voluntary citizen PAC members join for reasons beyond the AOC program itself. They have persevered (some for many years) to see the completion of projects out of a deep sense of personal connection. Not only do they have emotional connections and value-based intrinsic motivations, the attributes they identified regarding what they value about their community all connect with the work the AOC program has accomplished. The communities value everything from outdoor recreational opportunities to the natural environment itself and the communities will work to keep protecting these long after delisting occurs. Recognizing this, the recommendations below suggest ways to propel communities toward creating a structural foundation from which local environmental stewardship will continue.

Beyond motivation through emotional connections, the AOC program has also created groups of dedicated community members who are able to connect and address water resource issues with other like-minded individuals. Our results highlight the importance of having a platform for communities to address their environmental goals and visions. It would be unfortunate to lose these already established dedicated groups of community members if transitional planning is not implemented prior to delisting. This emphasizes the importance of investing in the process now to continue the momentum into the future. PACs hold valuable institutional knowledge of the restoration process as well as local knowledge that cannot be replicated. Our findings vividly show the deep connections and desire for stewardship efforts of the PAC members, highlighting the key qualities of an ideal group of people to continue work after delisting. Acting as a community forum, in many cases the PAC meetings allow the public to share issues and accomplish projects. The positivity that stems from this forum complements their pride in the restoration work. The PAC has given an opportunity for many community members to take leadership roles and make a real impact within their community.

Although there are uncertainties about the next iteration of the PACs post-delisting, our findings show an underlying desire across the state of Michigan for these groups to continue in some

capacity to sustain progress that has been made throughout the AOC program. PACs would like to see processes put in place to create and sustain an organizational entity that can advance environmental stewardship beyond delisting. Along with future iterations of the PAC, there is also hope that as access to the water continues to increase the public will continue to strengthen their bond with the resource.

Despite the desire of dedicated community members for the environmental work to continue, there are significant challenges they face as they look toward life after delisting. Among the key challenges recognized by interviewees, lack of community member engagement with the PACs, loss of funding after delisting, the ability to deal with complex or emerging issues, and inherent issues of working with government agencies emerged from our findings as the most prominent. These are no small hurdles and it will take a deliberate, guided, collaborative planning process to address them as AOCs reach delisting.

In light of these challenges, PAC members offered suggestions for the OGL's role moving forward up to and beyond delisting. They described their desire for a formalized structure and planning process for what needs to happen to get to delisting and also how to put pieces in place for a successful continuation of work post-delisting. In order to have effective planning they primarily wish to see the OGL (1) Strengthen communication, (2) Have a larger presence at PAC meetings, (3) Develop structure and plan process, and (3) Be a reliable source of guidance post-delisting.

It is important to frame these suggestions in light of how the PAC members view their relationship with the OGL and the current role OGL fills. PACs view the status of their relationship with the OGL as essential to achieving their goals. PACs that have a positive perspective on their relationship with the OGL are typically the AOCs that have made the most progress. Alternatively, PACs that feel communication is lacking with the OGL are often further from delisting. Both of these points stress the importance of the OGL reflecting upon their role in relation to the PACs and identifying areas where they could strengthen the relationship.

The OGL advocates on behalf of the PACs for their needs and it is important to have two-way information sharing through clear channels. The PACs also see OGL's role as facilitating critical partnerships between the PACs and outside organizations. This not only works to legitimize the role of the PAC, but also strengthens the networks of PACs to work toward continued stewardship and revitalization in life after delisting. Moving forward, PACs see the OGL's role as guiding them in creating a future framework, identifying resources (both funding and partnerships), increasing transparency in communication, framing communications to address negative public perception of the water, and continuing their overarching advocacy for clean water and equitable access to water throughout the state. Our recommendations include ways in which the relationship between the PACs and OGL can be strengthened.

Across the majority of AOCs in Michigan, we found examples of strong revitalization happening. This indicates that the AOC work goes beyond the original purpose of the BUIs and catalyzes larger-scale community-wide economic and social impact. Revitalization efforts indicate that communities are acknowledging and taking ownership of their unique coastal identity. Celebrating that identity will have lasting ramifications for environmental, economic, and societal aspects of their community.

For the AOC program, success is officially defined as removing all BUIs in order to delist. Yet, through our findings, we found that for most AOCs success goes far beyond this definition. Success is defined as: (1) continued restoration beyond BUIs; (2) a positive shift in perception of the water at a community level; (3) establishing a mechanism for continued momentum; and (4) an overall healthy environment. This is indicative of their desire to look at success from a holistic perspective versus the short-term focus that the state and federal agencies currently emphasize. Recognizing a broader definition of success allows for the connections to be made between individual projects and how the projects are impacting the communities as a whole.

Lastly, organizations with an interest in the AOC program must attend to the fundamental human aspects that are at the center of sustained environmental stewardship as well as the programmatic elements. Practitioners can consider a combination of both tangible factors, for example governance infrastructure, and more intangible factors, such as sustained commitment from leadership and an effective process in better understanding and implementing ecosystem-based management (Wondolleck & Yaffee, 2017). These distinct and interrelated factors are integral to functional ecosystem-based management, as they weave together the pieces of management programs and influence the processes that contribute to decision making. Throughout our interviews, many interviewees touched on a wide range of meaningful ideas that convey real implications for the AOC program. The ideas we heard from PAC members spoke to both tangible and intangible elements of the program. We hope the interpretation of these findings help practitioners and community members to more easily reflect upon their efforts and continue to collaborate well into the future.

In preparing AOCs for delisting, we have identified five focus areas that the OGL can use to structure their role moving forward and create an effective delisting process that leaves communities ready to continue watershed work. We propose that by focusing on the following five areas, the OGL can best support AOCs up to and beyond delisting: Planning process for delisting, role of the OGL, communication, funding, and connection to revitalization.

Recommendations

Based on findings from our interviews, observations of the Michigan AOC program, and a review of the existing literature, we propose the following recommendations for the OGL to best support PACs up to and beyond delisting. The recommendations directly address key challenges to delisting and beyond as identified by PACs. We also provide a series of critical questions that the OGL should consider in order to best address the recommendations.

Challenge

As PACs face a future beyond delisting, they recognize that a failure to effectively dedicate time now to post-delisting planning meetings will stress the short-term transition out of the AOC program and inhibit long-term progress and revitalization potential.

Recommendation

Facilitate ongoing dedicated “Life after Delisting” meetings with each PAC

To effectively engage PACs and the OGL in post-delisting discussions, we suggest the OGL dedicate meetings with each PAC that solely address life after delisting. There is a need for both immediate and ongoing meetings that focus on what life after delisting will look like. Moreover, the OGL should start having these meetings with PACs as soon as possible so that planning can be most effective. It is in the best interest of the OGL, as the state agency responsible for AOC program progress, to account for the long-term well-being of Michigan AOC communities and should therefore take an active and leading role in facilitating these specific one-on-one meetings with current AOCs. Additionally, the OGL should build life after delisting discussions into SPAC meetings to allow for collaborative sharing of best practices among AOCs.

Questions to consider

- How will the OGL structure these meetings with the PACs? Where will the meetings take place and who will participate?
- How would the OGL prepare internally prior to these meetings? Would additional training and/or skills be necessary in meeting facilitation?
- What priorities should the OGL set for the meetings?
- How will follow-through and accountability be enforced among the parties?
- What preparation would the OGL need from the PAC for these meetings to be successful?

Challenge

The prospect of AOCs sustaining local environmental stewardship faces an uncertain future if no comprehensive long-term community vision is established. In order to maximize the investments of the AOC program, it will be critical to design a post-delisting vision that supports local values and provides the foundation for continued stewardship and revitalization. Michigan's AOC communities embrace unique coastal identities, and pursuing delisting without accounting for these deeply held personal connections would likely undermine long-term progress and reduce public commitment.

Recommendation

Develop a comprehensive long-term community delisting vision framework

The OGL should facilitate the development of a comprehensive long-term community delisting vision and impact framework in conjunction with each Michigan PAC. As part of the PACs' desire to have a formalized structure and planning process for delisting, the OGL must work with them to develop a framework that focuses on long-term progress, shared priorities, and collaborative approaches between state and local efforts. This framework should outline a clear vision with both achievable measures and action steps toward community revitalization and sustained progress after delisting. The framework must also preserve and reflect core community identities and local ownership of the resources.

Questions to consider

- How will the OGL design an effective facilitation process for the framework?
- How will the state, federal and local actors implement their vision, through time, in a collaborative manner?
- What level of detail should the OGL and PACs adopt regarding action steps?
- Who should be involved in the planning process?

Challenge

AOC communities often struggle to both convey restoration progress to the broader community and alter firmly held negative perceptions of the local environment. Elevating the progress and widespread community benefits from the AOC program has been challenging to initiate and will likely become more difficult once AOCs delist if effective communication strategies are not implemented.

Recommendation

Create communication strategies that convey major remediation and restoration progress to change public perception/stigma of the area

The OGL should develop a comprehensive communication strategy to change negative public perception of the AOCs, by highlighting the successful restoration projects and demonstrating overall community benefits as a result of the AOC program. Elements of a successful communication strategy include developing a unified approach to highlight successful past projects, and illuminating what future projects are coming. Additionally, the strategy should clearly convey the reasoning behind a BUI removal, including the associated observed and expected ecological and community benefits.

Leveraging state outreach resources (e.g. financial, communications skills, partnerships) would assist PACs in both reframing the public's perception of the AOC and developing a long-term community commitment to the protection of their local environment. The OGL should also spotlight events that publicly celebrate AOCs delisting in order to spur further public engagement in the process. Beyond an organized communication strategy and celebratory events, the OGL should partner with local newspaper outlets and media channels to promote the positive work being done in the community. Other actions the OGL could take to reframe public perception are expanding and strengthening interpretive signage and establishing a Michigan AOC report card template to track progress across the state.

Questions to consider

- What are the most effective mediums to communicate with the public?
- What resources would the OGL be able to put toward a revamped communication strategy?
- Who will be conducting the communication strategy (both from the state and the local community)?
- How will the OGL and PAC coordinate communication with outside partners and community groups?

Challenge

PACs recognize the dual challenge of maintaining consistent communication with the OGL up to delisting as well as beyond delisting. Therefore, supporting mechanisms for effective and reliable two-way communication between the OGL and PACs will be increasingly important as AOCs move toward delisting.

Recommendation

Strengthen communication and presence at PAC meetings

The OGL should reevaluate their communication practices and expectations with the PACs up to and beyond delisting. Part of this reevaluation should include clarifying appropriate current communication channels with each PAC, and determining the frequency of OGL and PAC interaction post-delisting. Strengthening communication between the OGL and PACs includes having a consistent presence at PAC meetings and identifying a state point-person for post-delisting. In order to be successful, we propose the OGL adopt a shared long-term communication strategy with PAC members that addresses core issues relating to consistency, reliability, and a mutual understanding of expectations.

Questions to consider

- What capacity is OGL willing to extend to PACs for continued communication with delisted AOCs?
- How will the OGL determine an appropriate point-person for sustained communication?
- How can the OGL and PACs institute an effective process to reevaluate communication strategies moving into the future?

Challenge

In order for AOC communities to continue making progress post-delisting, PACs recognize the need to identify alternative funding sources beyond AOC program support. However, the methods to find what sources are available and the process of applying for them is unclear.

Recommendation

Support PACs in building fundraising capacity and connect PACs with potential post-delisting funding sources

The OGL should assist PACs in building their organizational fundraising capacity, so that they have the requisite skills to obtain post-delisting funding. The OGL should also develop an assessment of the funding landscape that exists locally, state-wide, and federally for continued progress beyond delisting. The OGL should initiate discussions about alternative funding with PACs to allow PACs to more easily pursue external funding sources. Additionally, the OGL could offer letters of support for PACs that choose to pursue alternative funding in addition to offering grant-writing resources (e.g. in-person training sessions). It will be important to bring in new individuals with fundraising and grant-writing expertise so that PACs can effectively target alternative funding sources outside of PAC-support grants from the OGL.

Questions to consider

- What funding sources are available for PACs after they are delisted?
- What resources for matching funds exist in the AOC communities?
- How will the OGL best prepare PACs to gain important grant-writing skills beyond delisting?

Challenge

The Michigan AOC program has benefitted from the efforts and consistent engagement of passionate, local champions, who have played key roles in advancing their communities toward delisting. The OGL and PACs face a challenging future in sustaining progress if key local leaders and environmental stewards disengage and remain outside of the revitalization process.

Recommendation

Identify and support local champions to carry on the progress

Prior to delisting, the OGL should identify and recruit critical community leaders within each PAC who might be able to operate in an effective, long-term community revitalization role. These individuals should be dynamic and engaging leaders, have well-developed community networks, be trusted by the community at large, and aspire to create transformational and durable change. Additionally, the OGL should provide appropriate support through leadership and management training for these community leaders.

Questions to consider

- What are effective ways to identify additional local leadership?
- How can the OGL better leverage already existing dynamic leaders within AOCs?

Challenge

The OGL has played an important role facilitating partnerships between the PACs and outside organizations. These partnerships have enabled the PACs to better address complex, emerging environmental issues in their local areas, and legitimized the role of the PACs in the community. As AOCs near delisting, PACs recognize the challenge in both continuing to develop and maintaining partnerships to address these complex issues.

Recommendation

Assist in partnership development to implement a network that can address emerging challenges and uncertainties

The OGL and PACs should prioritize creating collaborative processes for engaging community partners in long-term environmental stewardship plans. To this end, OGL could leverage their state-wide connections and resources to strengthen relationships with local businesses and academic institutions. This would help PACs identify critical local and city resources that can incorporate already existing revitalization initiatives into long-term stewardship plans. Combining the efforts of multiple community organizations would strengthen the network that are in place to deal with emergent problems into the future.

Questions to consider

- How will the OGL identify community partners that can contribute to long-term management plans?
- How might the OGL encourage local governments to address new issues?

Challenge

PACs have provided a critical platform for community members to engage in impactful community and environmental restoration initiatives. Continued environmental stewardship beyond delisting will depend largely on sustaining community engagement in the PAC, particularly once the AOCs delist. Therefore, the pace and timing of AOC delisting presents a key challenge going forward in keeping PAC members involved.

Recommendation

Institute a phased approach to delisting to avoid PAC engagement drop-off

The OGL should adopt a phased approach to delisting that addresses key timing concerns noted by PACs regarding the delisting process. By strategically separating the delisting process into phases, the OGL can identify potential transition issues and better prepare PACs for a post-delisting future with reduced state support. We suggest that a phased approach build in a transition period leading up to delisting and the year following delisting. Our findings show that PACs would like to see community engagement in future revitalization initiatives continue after delisting. A phased approach would enable the OGL and PAC to work together in identifying and creating appropriate community groups and/or environmental organizations that can support continued environmental stewardship and revitalization.

Questions to consider

- How will the OGL facilitate a phased approach?
- What mechanisms will be in place to address potential issues that come up during a phased approach?

Challenge

In recent years, Michigan AOCs have successfully leveraged funding for a variety of environmental restoration projects, accelerating the pace of BUI removals. With delisting approaching, PACs recognize the need to focus on larger-scale projects that address economic and social impacts as well as environmental. However, a challenge exists in the prioritization of projects that are solely for the removal of BUIs rather than creating impact on a broader level.

Recommendation

Prioritize projects with potential for community-wide economic and social impact

As part of the transition toward delisting, the OGL should develop a mechanism for increasingly prioritizing projects that incorporate community-wide economic and social impacts. In doing so, they should intentionally connect with partners and other projects to enhance the benefit they have to the greater community instead of viewing community benefits simply as a byproduct. In order to establish a criteria for socio-economic benefits in deciding projects, the OGL should compile a list of metrics for what success looks like within AOC communities, similar to the new multi-stakeholder Blue Accounting initiative.

Questions to consider

- How will the OGL measure economic and social impact?
- What other partners should be involved in this process?
- What other government agencies or partners will be needed to adjust project priorities?

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