

# A Needs Assessment for Outreach in the Detroit River Area of Concern's Trenton Channel

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## SUMMARY

We conducted a needs assessment with stakeholders of the Trenton Channel in the Detroit River Area of Concern to understand perceptions of the waterway and attitudes toward a proposed plan to clean up the channel's sediment contamination. Interviews were conducted with 35 individuals representing various groups, including, but not limited to, environmentalists, recreational enthusiasts, property owners, and city officials. Interviews were coded using qualitative content analysis, with six overarching themes emerging from interviewee responses. This report summarizes the following six findings and outreach implications: 1) The Trenton Channel is a recreational, aesthetic, environmental, and economic asset. 2) Stakeholders hope that the sediment cleanup will cause minimal community disruption, and many doubt the safety and effectiveness of the proposed project. 3) While legacy pollution continues to plague the channel, other threats loom that may not be addressed by a sediment cleanup. 4) Stakeholders anticipate that the project will provide some benefits, but many deem that it will ultimately have no effect on the community. 5) Bishop Park is a local asset that could be improved with better fishing access, fish spawning habitat, a marina, and a more naturalized shoreline. 6) Although there is no real consensus on best outreach methods for the future, the 2014 public meeting on the sediment cleanup was well-received. Findings will be shared with the Trenton Channel Outreach Team and used to inform outreach efforts on the proposed Great Lakes Legacy Act cleanup plan. They may also be used for wider AOC outreach efforts.

## INTRODUCTION

The sediment of our Great Lakes tributaries is a holding ground for significant contamination left behind by historic industrial discharges and municipal sewage practices. Instead of being carried off downstream like types of bacteria or fertilizer, large quantities of heavy metals and chemicals, such as mercury, PCBs, and PAHs, have remained near shore and in the riverbeds. This pollution threatens the health of once-thriving industrial communities as well as the fish and wildlife that live there. Many of these communities are designated Areas of Concern (AOC), a list of the most polluted and degraded places in the Great Lakes. With funding from the Great Lakes Restoration Initiative, the U.S. Environmental Protection Agency (EPA) is joining forces with local, state, and other federal organizations to clean up and restore AOCs.

The Detroit River runs 32 miles to link Lake St. Clair to Lake Erie and creates an international boundary. It became an AOC in the 1980s due to decades of poor environmental practices, which led to problems like restrictions on fish and wildlife consumption and degradation of benthos (the sediment-dwelling community of small organisms; Michigan Department of Environmental Quality, 2014). Contaminated sediment is at the root of some of these problems. To better understand contamination in the Detroit River, scientists recently compiled and summarized all existing sediment contamination data in the AOC. Part of their findings focused around the Trenton Channel, a fast-moving section of the Detroit River that separates the island of Grosse Ile from mainland Wayne County. The Upper Trenton Channel is one of the top sources of pollution in the river system due to its legacy of historic industrial and municipal practices. A sediment cleanup would be necessary to “delist” the Detroit River as an AOC (Friends of the Detroit River, 2014).

Sediment cleanups are made possible through the Great Lakes Legacy Act (GLLA), a

program administered by EPA that requires at least 35 percent of the cost to come from one or more voluntary non-federal sponsors (EPA, 2009). The GLLA program has completed 16 cleanups across the Great Lakes in places like Wisconsin's Sheboygan River, Indiana's Grand Calumet River, and Michigan's St. Marys River, remediating about 2.4 million cubic yards of contaminated sediment. Scientists and engineers are currently designing a cleanup plan under GLLA for 240,000 cubic yards of sediment in the upper portion of the Trenton Channel (Mucha, 2014). The project extends from the BASF Northworks property in Wyandotte to the Firestone property in Riverview. The voluntary sponsors thus far on the project include BASF, Arkema, and Union Carbide. If EPA secures a project agreement with partners to perform the designed cleanup, a project could take place as early as the end of 2015.

Environmental progress has been made since the AOC's first Remedial Action Plan was created in 1992. Successes include the completion of the Black Lagoon GLLA sediment remediation project in 2005 (EPA, 2014) as well as habitat restoration at Belle Isle's South Fishing Pier and Blue Heron Lagoon in 2013. Wildlife has begun to rebound, with species like great blue heron and mink commonly sighted near the Trenton Channel. Thousands of anglers flock to the channel in spring to enjoy walleye fishing, despite the restrictions on consumption.

### **Previous Research**

Decades of research describe the benefits of stakeholder involvement in environmental planning and management, including improved decision-making quality and relationship-building (Beierle & Konisky, 1999). Early involvement of stakeholders helps managers move away from the linear "decide, announce, defend" approach and encourages managers to learn from the community about the environmental problem in a local context. Projects like sediment remediation are no exception. A study in Norway revealed that citizens almost unanimously

agree that decision-makers should invest resources in communication and involvement before making decisions on remediation (Oen et al. 2010). The AOC framework lends itself to stakeholder participation with the requirement of public involvement for removing the stigmatized AOC title. Benefits of sediment remediation have been identified in previous studies, some making links to AOC delisting (Isely, Isely, & House, 2011; Lichtkoppler & Blaine, 1999; McMillen, 2003). As sediment remediation of the Trenton Channel is a necessary action for the Detroit River, stakeholder involvement will result in a community better informed to make decisions about delisting.

### **Purpose**

This paper reports on phase one of a two-part study to improve stakeholder involvement through a better understanding of local perceptions of contaminated sediment remediation in the Detroit River's Trenton Channel. The phase one qualitative assessment was conducted to understand: how locals relate to the channel and river; perceptions of contamination, the cleanup plan, and the benefits of remediation; and the effectiveness of past and current outreach efforts. Phase two interviews will take place post-remediation to compare perceptions. The findings will inform outreach for the Trenton Channel GLLA project and the broader Detroit River AOC.

## **METHODS**

### **Sampling and Data Collection**

This study draws from methods tested with stakeholder of the Sheboygan River AOC (McCoy & Morgan, 2012) and St. Louis River AOC (McCoy & Anderson, 2013). We conducted our study with stakeholders in Detroit River's Trenton Channel. We formed a majority of the study sample from the attendee list of a public meeting regarding the Trenton Channel cleanup plan. We performed a combination of in-person and phone interviews in the summer of 2014

with a 41 percent response rate for a sample of 35 people representing various stakeholders: property owners, Great Lakes-dependent business owners, environmental NGO representatives, boaters (motorized and nonmotorized), anglers, city and state officials, and concerned residents. Because the study sample was not randomly selected and does not contain representatives of all stakeholder groups for the Trenton Channel, this study is not generalizable to the entire Trenton Channel community. Rather, the study sample offers valuable, detailed insight into the perceptions of the represented stakeholders.

The interviews were semi-structured with 12 open-ended questions about the waterway (Table 1), with flexibility for interviewees to speak about the channel and/or river. Frequent channel users regard the waterway specifically as the “channel,” whereas the larger community thinks of it as part of the “river.” Questions were designed with insight from past studies (Braden, Patunru, Chattopadhyay, & Mays, 2004; McCoy & Morgan, 2012) to elicit personal anecdotes about residing near the Trenton Channel, how the waterway impacts daily life, and how the area has changed over time. The format allowed stakeholders to supply a level of detail from first-hand observation that would otherwise have been inaccessible to non-local members of the GLLA project team. All interviews were audio recorded with permission and lasted approximately 30 to 60 minutes. Researchers took notes during the interviews and transcribed the interviews immediately.

### **Data Analysis**

Researchers performed content analysis with a coding technique (guided by findings from past research) that allows for the formation of new codes when appropriate (McCoy & Morgan, 2012). Each researcher thoroughly read and highlighted the transcripts. They made

notes and coded the transcripts, consolidating codes of similar content into major themes. The coders compared themes and found that the separate analyses produced similar findings.

## FINDINGS AND IMPLICATIONS

**Finding #1: The Trenton Channel is a recreational, aesthetic, environmental, and economic asset.**

The Trenton Channel has a significant impact on local quality of life and provides multiple benefits to the community. Recreation was the most frequently mentioned value and includes water activities, such as fishing, swimming, boating, rowing, and kayaking, as well as activities on land along the waterway like biking, hunting, and park use. Fishing is particularly important to area residents and likely the most valued recreational activity. Many stakeholders fish regularly, and in the spring, fishermen travel from around the country to capitalize on the walleye runs in this world-renowned fishery. Fishing tournaments take place each year on the channel. (I = Interviewee quote)

I<sub>1</sub>: The Detroit River is a world-renowned walleye fishery in the spring. People from all over the country and different countries come here to fish.

I<sub>2</sub>: Seriously, in April you can walk across the channel on the boats. There are hundreds of people out there. And the reason is it's the picture perfect spawning habitat.

The channel is also heavily used for motorized and nonmotorized boating for pleasure and fishing. A number of local boat and yacht clubs are in the area, each with considerable membership. Rowers utilize the channel for practices before sunrise every day, and rowing regattas are regularly held on the channel. Kayaking is becoming significantly more popular in recent years. While some residents swim in the channel, most believe the current is too fast to swim safely and presents a drowning hazard.

I<sub>3</sub>: Anybody that values water sports – boating, fishing – it’s a real positive thing to have the water here. If we can clean it up, it’s even better. But I would say right now even now with the contaminated sediments it’s still viewed as a positive attribute and helps with property values.

I<sub>4</sub>: The Wyandotte Boat Club – crews have been rowing on this stretch of river since 1870, which is amazing. ...the first club house is just a couple blocks down, so we’ve always maintained our presence right along this stretch.

Even those residents that stay landside gain value from the channel’s natural aesthetic, with almost every stakeholder mentioning this as a positive attribute. The channel is generally regarded as beautiful. The water is clear and provides opportunities for viewing natural scenery. However, derelict industrial sites, most notably the former McLouth Steel plant, are seen as major eyesores that are detrimental to the channel and community.

I<sub>5</sub>: It’s kind of a hidden gem.... When it [a hydroplane race] brings people from outside the region into the area, they’re stunned. My wife’s not from this area originally and she says, “.... Really, it’s such a beautiful place. Close your eyes, don’t look at the abandoned steel mill, and it’s a beautiful place.”

Also contributing to the natural beauty is the variety of fish and wildlife around the channel. Eagles, ospreys, herons, and other birds, as well as turtles and small mammals like mink and muskrat, are regularly sighted. While some stakeholders enjoy the wildlife incidentally, others actively engage in wildlife observation. The amount and diversity of wildlife in the area has improved significantly over the past few decades and continues to do so.

I<sub>6</sub>: There’s really good wildlife.... All our industry down here is dead. It’s folded up and gone. So what we’re left with is your project trying to clean up the pollution, but we are rebounding in the wildlife department.

I<sub>7</sub>: We had seven eagles out here on the ice picking off ducks... the amount of wildlife out here is just amazing. Hawks – we’re in a migratory pattern for hawks... But to see that many eagles at once, I thought I was in Alaska.

Finally, the Trenton Channel provides economic benefits for the area. It enables the commercial transport of coal to support the local power plants. Stakeholders enjoy watching the

freighters come in and unload their cargo. The channel also creates an economy for local businesses like fishing supply stores and boat and kayak rentals. Stakeholders also appreciate the historic importance of the channel's past industry, and see opportunities for future development.

I<sub>8</sub>: ...not only for recreational enthusiasts, people who are buying kayaks, who are buying rowing shells, who are buying fishing boats, who are buying bait, who are buying fishing rods, pleasure boaters. If the economy's good people are gonna get back out in their boats, and they're gonna wanna swim out here... Great Lakes shipping is starting to pick up, which is really good.... There's a lot of pluses to the river economically. A lot.

I<sub>9</sub>: People like to watch the freighters, so it brings people down to the waterfront. ...we really enjoy when the freighters come in, just watching how the tugs work and push the freighter up against the wall and everything, I think it's great.

#### *Outreach and Management Implications*

- Outreach should clearly and effectively communicate the expected short- and long-term impacts of a cleanup on each of the channel's identified values: recreation, aesthetics, wildlife, and the economy.

#### **Finding #2: Stakeholders hope that the sediment cleanup will cause minimal community disruption, and many doubt the safety and effectiveness of the proposed project.**

While most stakeholders express support for any effort to improve the quality of the Trenton Channel, there are serious concerns regarding the efficacy of the project's engineering controls and the long-term impacts of the project. Stakeholders are concerned that dredging will "stir up" contaminated sediment in the water, causing problems locally and downstream. Many are skeptical that the proposed controls will be effective in preventing the downstream flow of sediment. Because of the channel's strong current, several stakeholders do not believe that a silt curtain, a typical measure used to control turbidity, will work. They claim that the Black Lagoon, a previous sediment cleanup on the channel, is a poor project for comparison because the Black Lagoon was not exposed to the channel's fast current.

I<sub>10</sub>: A number of people we talked to do not believe the silt curtains will hold any of the PCBs away from the rest of the current, which moves about five miles an hour.... That would be maybe a detriment rather than an advantage to bring up dredgings.

I<sub>11</sub>: I know there's a number of people that think, "Just leave them alone because they're kind of buried, and now we're gonna come in and stir things up and cause problems." ...I'm of the opinion we should clean it up so that way we have a better overall ecosystem.

Similar concerns exist regarding the transportation and disposal of the contaminated sediment, and stakeholders want details on the process as soon as possible. They want reassurance that the cleanup will not simply move the problem elsewhere. The potential use of the Confined Disposal Facility is also a concern for those who frequent the Point Mouillee State Game Area and worry about exposure to the contaminants.

I<sub>12</sub>: There are a couple people who were worried about where will the dredgings go and if we're just moving a problem from one place to another. So I think the materials are supposed to end up at Pointe Mouillee in some contained ponds. I don't know if people understood if those are truly well-contained.

Stakeholders are skeptical of how much the contractors will prioritize quality and safety during dredging operations. They request that the agencies maintain an adequate level of project oversight to ensure that the dredge operators properly remove the contaminated sediment without negatively impacting the channel. Stakeholders are also concerned about remaining industrial sites like McLouth Steel and remediated sites like Grassy Island along the river. They do not believe that these have been adequately addressed. Similarly, the effectiveness of a sand cap at Bishop Park is questioned by a few, as they believe the fast current and large boats will wash the sand cap downstream, creating a need for future projects.

I<sub>13</sub>: So what is the oversight process like? Is it just like periodic checks? ...there would need to be someone there 24/7 – all the time – while they were out there supposedly doing what they were supposed to do to ensure that this is done right. That's one of the biggest setbacks as far as getting contractors to do anything.

I<sub>14</sub>: Have you stopped the contamination that you're trying to clean up? Or is it still contaminating? Otherwise you're just going through the motions and you clean it up today and it's messed up, just like a child. You clean their room today, and next thing you know, it's messed up again tomorrow.

I<sub>15</sub>: Bishop Park is located downstream from a power plant that could bring in possibly some ships to unload material... Any time you have propeller wash, a sand cap is useless. It will wash it out. All a sand cap does is give a lot of work for consultants to monitor it year after year. It's cheaper to clean it the first time and get done with it.

Because the channel is such a valuable resource and contributes to quality of life in the area, stakeholders want to ensure that the project is completed safely and effectively, and that the project will cause no harm. The channel and river have improved dramatically since the 1960s with regards to cleanliness, water clarity, and wildlife, and some stakeholders do not perceive a need for further cleanup. Any potential negative impacts of the project will be viewed harshly. Another concern is the disruption of recreational activities and wildlife while the project is underway, particularly to rowing, fishing, kayaking, and fish spawning. Stakeholders wish to be notified of the location and duration of any potential disruptions to ensure that they can safely perform their regular activities.

I<sub>16</sub>: People are looking at it and saying, "We love where we're living. We love the condition of the water. We love the recreation...." Why are you going to come and maybe make it bad? Maybe leave well enough alone.

I<sub>17</sub>: Would anything be affected during the cleanup? Would fishing be affected? Swimming in the water? Boating in the water? Are there things that they won't be able to do while the cleanup is taking place?

### *Outreach and Management Implications*

- Stakeholders need to be assured of the safety in each step of the cleanup process. Outreach must explain how the engineering controls will be effective in the fast current of the channel. The Black Lagoon should not be used as an example in this regard. Sediment cleanups exposed to a similar current and topography would be more appropriate.

- Outreach materials should include a timeline of the project and a map of the project area, along with information on potential disruptions and safety concerns for river users during the cleanup.
- Stakeholders should be given the opportunity to meet the contractors. The oversight process and the contractors' experience should be explained in plain language.
- Outreach should show that there are no significant sources of pollution to the project area.

**Finding # 3: While legacy pollution continues to plague the channel, other threats loom that may not be addressed by a sediment cleanup.**

Although the cleanup is focused on removing legacy pollution, a number of stakeholders worry about ongoing pollution sources from the Rouge River and industrial sites upriver. Particular concerns are that modern sources could recontaminate the remediated areas of the channel and render the cleanup effort moot. Combined sewer overflows (CSOs) are another major threat. Detroit's aging sewer system leaks waste material into the river after heavy rainfalls on a regular basis. In the interviews, stakeholders frequently brought up CSOs first when discussing contamination even though the cleanup is not designed to address CSOs.

I<sub>18</sub>: We hardly get a year that goes by without somebody doesn't dump some 55-gallon drum of waste oil in the Rouge River and it all shows up in the system...Even now, on the Trenton channel, most of the industry's gone but... they've got all kinds of stuff going on there because of these spills.

I<sub>19</sub>: Most of the problems that resulted in the sewer have been addressed with the exception of CSOs. ...the storm water situation has been engineered with such little forethought that every time we get a couple inches of rain the river turns into a sewer.

Stakeholders have a lot to say regarding the negative aesthetics of the channel's shoreline, with a particular emphasis on lingering industrial blight. The former McLouth Steel operation is a serious eyesore on the river and contributes to the "downriver" stigma that many believe surrounds the Trenton Channel.

I<sub>20</sub>: We are downriver. We are the forgotten sister of southeast Michigan. Everyone likes to dump on us, and we have some beautiful sites along here but this ugly connotation of being *downriver*.

I<sub>21</sub>: The channel...is the armpit of the state – one of the more positive euphemisms that's been put out about it.

I<sub>22</sub>: I would say one of the biggest negative things that's been in place for over 30 years – and I thought in my lifetime I'd see it come down – is the old McLouth Steel facility. If that came down, property values on West River Road in Grosse Ile would probably go up 10 percent overnight. That's just a big eyesore and ...visually it dominates the Trenton Channel.

In the context of habitat restoration, stakeholders note the presence of invasive species like phragmites, mute swans, zebra mussels, and round gobies. The potential spread of the Asian carp is a major threat to fishing in the area. Other threats to quality of life on the channel include fluctuating water levels and limited access to boat launches and green space.

I<sub>23</sub>: ...this is an invasive species...it's put into a category where we can't utilize it as fishing persons, but it wasn't brought in here by us... things that are brought into the river because of the poor regulations and the poor enforcement of ships and the stuff that they bring in. So those are the things that have a tendency to probably harm the river. And there should be more regulation...

I<sub>24</sub>: Humbug Marsh looks nice if you're not a biologist, but if you look at Humbug Island it's covered in buckthorn – it's just a convention for invasive species.

### *Outreach and Management Implications*

- It is important to focus on the actual scope of the proposed cleanup and emphasize the parameters of the restoration work. Ensuring stakeholders have a clear understanding of the expected results of the cleanup is vital. If residents expect comprehensive repair of all perceived threats to the river, they may well be disappointed.
- Sharing this local insight with agencies and community organizers may help bring about important non-sediment-related improvements through more appropriate channels and funding sources.

**Finding # 4: Stakeholders anticipate that the project will provide some benefits, but many deem that it will ultimately have no effect on the community.**

When asked what would change the most as a result of the project, about a third of the stakeholders responded confidently that it would change nothing. They believe that the channel is already doing pretty well and that, with time, it is improving on its own regarding wildlife and general appearance. Stakeholders are skeptical that the contamination is causing significant harm because fishing opportunities in the channel are plentiful and wildlife populations seem to be increasing. The channel is deep, and they believe the contamination is well below the surface. There is a general sense that if there are any changes, they will be under water and out of public view or mindset; the public will be far removed from any benefits. Rather, they would like the government and community to prioritize other projects, such as the remediation of the highly visible McLouth Steel property, believing that such work would have a more direct community impact.

I<sub>25</sub>: I don't think anything would change. I really don't know how much the heavy metals that are left on the bottom are affecting anything. Honestly, I really don't know, but to me it seems like they're in place, they're probably buried under layers of sediment already, and to me it almost seems like it could be even a waste of time.

I<sub>26</sub>: I don't think it would appear different. I think you'd have to know the science of what was going on in the river to appreciate it.

I<sub>27</sub>: Of the type of restoration you're talking about? Where you're taking the contaminants out of the bottom?  
Zero! I hate to say it. Like I say, nobody notices unless you do something that they can see. And the water looks clean to me.

About a third of the stakeholders believe there will be benefits, but had difficulty describing them in the interviews, referencing the invisibility of the problem. They were uncertain about how much of an impact a cleanup would have, using vague phrases like "it can't

hurt,” or reducing it to one piece of a large effort to restore the river. A few stakeholders asked the interviewer to describe which benefits are likely instead of answering themselves (see Table 2 for a comprehensive list of FAQs from interviewees about the cleanup) or gave the caveat that the project will be beneficial only if it is performed safely.

I<sub>28</sub>: Um, I don't know - not sure. I think it's the out-of-sight, out-of-mind thing, that maybe people's confidence will be improved.

I<sub>29</sub>: Recognizing that the Trenton channel is the most polluted part of the river, it benefits the whole system when it's clean as long as it's done in a thoughtful organized way.

The remaining stakeholders are excited for the project and anticipate concrete benefits. The most direct connections between the project and the community are improvements to fish, perceptions of the channel, and water quality. Removing the contamination will create better fish habitat, helping to boost populations and make fish more fit for consumption. The community currently views the river bottom as toxic, and a cleanup could improve perceptions of the channel and prevent contamination from mixing into the river in the future. A few stakeholders also anticipate improvements to quality of life, property values, and the economy.

I<sub>30</sub>: For fish, for the ecosystem. It'll eliminate things that can accumulate within the ecosystem and animals in the ecosystem, so I think those are the real benefits.

I<sub>31</sub>: I think after it gets cleaned up there'll be more fishing and recreation. People won't have that image like, “Oh, it's the Detroit River.”

### *Outreach and Management Implications*

- Because of the uncertainty and skepticism toward project benefits, outreach should prioritize the communication of benefits and not assume that the community warmly welcomes the project. Since stakeholders used many sight references when describing the lack of benefits, outreach tools that provide visual explanations to help stakeholders “see” the value will be beneficial.
- Above all else, outreach must clearly communicate best management practices and other methods

that ensure the safety of the project and prohibition of significant sediment flow downstream.

Otherwise, communication of benefits will be irrelevant.

- Since benefits anticipated by stakeholders have also occurred at other GLLA sites, outreach should expand upon the similarities between past sites and the Trenton Channel to help stakeholders understand what benefits can occur.

**Finding # 5: Bishop Park is a local asset that could be improved with better fishing access, fish spawning habitat, a marina, and a more naturalized shoreline.**

Bishop Park is highly valued by the community and gets significant use throughout the year due to its fishing pier, handicap-accessible kayak launch, and walkways overlooking the water. Despite the variety of activities available, stakeholders generally agree that the biggest community value comes from fishing access on the pier.

I<sub>32</sub>: They fish. They launch boats. They kayak. They do everything down there. Picnic, fish – there’s nothing they don’t do down there.

I<sub>33</sub>: Gets used a lot for fishing. That fishing pier is always busy.

Even though stakeholders enjoy the park as is, they suggest improvements to the fishing experience with the installation of underwater fish habitat and spawning beds, removal of snags near the pier, and pier expansion to accommodate more anglers. A few stakeholders mentioned that the City of Wyandotte is currently exploring the implementation of a transient marina.

I<sub>34</sub>: It’d be a great place to put habitat because then when people are there to recreate and fish, then there’s going to be fish there.

I<sub>35</sub>: They really want to put a public marina in there.... There are a lot of restaurants and bars, and there’s nothing for boaters to come along to except for private marinas. If boaters could tie up there and have a couple of beers and something to eat, it would be a huge great thing for downtown Wyandotte...

About half the stakeholders indicate a preference for a more naturalized shoreline at Bishop Park. Most of the channel’s western shoreline is privatized and hardened with sheet piling and

fencing. This encourages undesirable wave action and turbidity and contributes to an industrialized aesthetic in some sections. Stakeholders express interest in a vegetated shoreline that allows for water views. However, this also causes safety concerns for stakeholders, who fear that a natural shoreline without fencing might encourage the public to recreate near the water's edge and hazardous current. In addition, some fear ice scour could decimate a newly installed shoreline habitat. Hardened features like riprap or sheet piling could be incorporated for protection.

I<sub>36</sub>: I like the natural shoreline. It provides cover for fish and provides spawning opportunities for fish. They don't particularly like seawalls because natural shoreline dissipates energy from boat wakes, where a sea wall just changes the direction of it. It keeps the water pretty turbid.

I<sub>37</sub>: I'd be really careful; I've seen an example of people trying this a little further down the channel.... Because the current is so strong, if you attempt to build a beach to plant stuff or whatever, what will happen is the ice in the wintertime will scour that beach away - will scour any plants you put on it.

While a couple stakeholders were able to provide in-depth explanations of how to enhance Bishop Park's habitat and uses, most recommendations, although eager, were fairly vague. Stakeholders asked a lot of questions about the design of the sand cap around Bishop Park and were uncertain if their suggestions were even technically feasible. For example, a few recommended putting gravel and boulders on top of the sand cap for fish spawning, while others claimed that open water was preferable since rocks would sink right through the sand.

#### *Outreach and Management Implications*

- Because Bishop Park is highly valued in its current state, we recommend that the project minimize disruption to recreational activities in the short-term and allow for the continuance of all activities in the long-term. Enhancements to the park should only add to the park, not detract from it.

- Because of the prevalence of fishing in the channel and unanimous support for increased fishing opportunities in the park, we predict that stakeholders will appreciate the expansion of fishing access throughout other areas of the channel.
- Stakeholders should have a strong voice regarding which uses and types of habitat are prioritized; we recommend the creation of a formal stakeholder committee. This will allow for thorough, collaborative discussions of the feasibility of different types of enhancements, resulting in more informed decisions.

**Finding # 6: Although there is no real consensus on best outreach methods for the future, the 2014 public meeting on the sediment cleanup was well-received.**

A majority of the stakeholders found the 2014 public meeting on the cleanup to be informative and effective. While some wish that the meeting had covered project specifics in greater detail, many found the information easy to understand and were impressed by the number of people who showed up and participated in the discussion. Stakeholders suggest that this outreach strategy will be met with similar or greater attendance in the future. They also acknowledge that not all citizens are necessarily inclined to attend public meetings, and meetings could benefit from being advertised to a larger audience.

I<sub>38</sub>: Yeah, [the public meeting] certainly gave the opportunity for the public to voice their opinion. We had some fishermen that were pretty upset, you know different groups. It certainly was advertised well. We had a good showing. The place was packed. It was good. The more information the better. Anything, you know, before they do start the dredging, the next phase, someone could come to a city council meeting, and do a presentation, because our council meetings are televised on local cable and that'd be good outreach for the project.

I<sub>39</sub>: The meeting was well-attended, I thought there would be 30 people but there were a lot of people there – filled the room, almost.... But what about the average guy? He's not into recreation. He's into property values, looking at the water, and raising his family. He has no concern about it – that's the person I believe you have to reach.

Aside from additional public meetings, there is no consensus on which method of outreach will be most effective for keeping the community informed about the proposed cleanup project. Local newspapers, cable TV, social media sites, council meetings, and physical signage are potentially effective information channels. Several stakeholders involved with local government or community organizations have directly volunteered the resources at their disposal or suggested whom to contact to arrange outreach efforts in the future (Table 3).

I<sub>40</sub>: We've got cable stations - our own cable department, so we can do some of the community access shows. We have facilities you could use. We've got council meetings every day. We've got a number of media we could use. We've got these electronic signs in the city. We've got an active Facebook page, so that's all the social media you could possibly want. We have a newsletter that goes out...there's a zillion ways to reach people.

I<sub>41</sub>: Well everybody's busy... And like you said if you could have an ongoing dialogue with people on social media and...with maybe local municipalities and that will then be on local cable TV. We have wonderful resources nowadays that people can keep talking instead of having to have giant meetings, which they might not be able to make.

### *Outreach and Management Implications*

- Public meetings are particularly effective in raising awareness of and generating interest in the cleanup project, and future meetings would potentially be very well attended.
- Social media may be an effective way to provide regular project updates to a large audience. Communicators could partner with pre-existing local social media channels like city Facebook pages or Twitter feeds to spread their message to citizens already following these accounts.
- Based on the wide variety of responses regarding the best outreach methods, a multi-channel strategy that incorporates several different outreach tools would likely be most effective.
- A number of officials and community leaders enthusiastically offered the use of their resources to help with outreach efforts related to the project. Communicators should follow up on these offers

in order to reach a wider audience and foster positive relationships with these stakeholders and the groups they represent.

## **CONCLUSION**

The qualitative analysis of the Upper Trenton Channel community interviews provided six key findings and implications. These findings offer valuable insight into local concerns about and attitudes toward the Trenton Channel and Detroit River, including its value as a recreational, aesthetic, environmental, and economic asset and the importance of its preservation and enhancement through a cleanup project. While many stakeholders doubt the safety and effectiveness of the proposed project, all hope that it will cause minimal community disruption. Although legacy pollution is a major concern on the channel, other threats to human and environmental health exist on the river that may not be addressed by a sediment cleanup. A sediment cleanup and consideration of these community concerns may help bring attention to the area and create momentum to address remaining or emerging threats. While many stakeholders deem that the cleanup will ultimately have little to no effect on the community, others anticipate that the project will provide some benefits to the area through improved perceptions of the channel and healthier fish populations. Bishop Park was identified as a local asset that could be improved with better water access and recreational amenities. The 2014 public meeting on the sediment cleanup was well-received, but there is currently no consensus on best outreach methods for the future.

Implications were provided for each finding, including suggestions for outreach and community engagement. This information will be used to improve outreach at the Upper Trenton Channel site, as well as to inform future outreach efforts on the Detroit River and other Great Lakes AOCs.

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## APPENDIX

Table 1. Interview Questions

1. Tell me about the Trenton Channel.
2. What do you use the channel for? How often?
3. What do you value the most about the Trenton Channel?
4. What are the biggest problems/threats currently facing the channel?
5. Tell me what you know about the plans to restore and clean up the Trenton Channel.
6. Imagine that a restoration and cleanup took place in the channel. What would change the most as a result?
7. Now I'd like for us to talk about certain aspects of the channel. I'd like to get your thoughts on each of these in their current state. (After they respond, prompt with the question – and do you think [said aspect] will be affected by a cleanup and restoration? How?)
  - a. Aesthetics (or beauty) of channel
  - b. Channel's effect on quality of life
  - c. Channel's effect on property values
  - d. A place for fish and wildlife to live and grow
  - e. Water depth
  - f. Channel's effect on the local economy and likeliness of new development
  - g. Access to the channel
8. Cleanup plans are currently exploring the option of putting a sand cap along Bishop Park because dredging is not technically feasible between the pier and the shoreline. If you could help design the project, what types of habitat and uses would you prioritize?
9. Have you received any information regarding the cleanup or habitat plans of the Trenton Channel? Where did you receive it? Was it easy to understand?
10. What is the best way for the community to be informed about plans to restore and clean up the channel?
11. Any suggestions on whom else I should talk to?
12. Is there anything else you'd like to say about the channel or the cleanup and restoration plans?

Table 2. Questions posed by the interviewees and the number of people who posed them

<u>Questions from the interviewees</u>	<u># People</u>
What recreational activities on the water will be affected during the cleanup?	10
What is the timeline?	10
What are the expected benefits of the project?	7
How are you going to prevent the contaminated sediment from flowing down river?	7
How will the dredge spoils be transported?	7
What is the threat of the contaminants in their current state?	6
Where will the dredge spoils be disposed?	5
How will fish and wildlife be impacted?	5
Have the sources of contamination to the project area been stopped?	5
What is the cleanup plan?	5
What kind of contractor oversight will there be?	5
What are the sources of contamination to the project area?	4
Where will the dredging take place?	3
What are the short-term impacts to aesthetics?	3
What are the contaminants?	2
How is the project being paid for?	2
How safe are the fish to eat currently?	2
Will the dredging equipment be lit?	1
How is this project connected to the greater Area of Concern?	1
What does the contractor hiring process look like?	1
What is the plan if the controls that prevent sediment from flowing downriver malfunction?	1
Will there be buoys marking the dredging zones? If so, what color?	1

Table 3. Organizations identified by interviewees as important outreach audiences or partners

Alliance of Downriver Watersheds  
 Detroit Green Task Force  
 Detroit Greenways Coalition  
 Downriver Walleye Federation  
 DTE Energy Co.  
 Friends of the Detroit River  
 Greening of Detroit  
 Grosse Ile Nature & Land Conservancy  
 International Wildlife Refuge Alliance  
 Lake Erie Percid Management Advisory Group  
 Lake Erie/Lake St Clair Citizens Fishery Advisory Committee  
 Michigan Department of Community Health  
 The Detroit Riverwalkers  
 Wyandotte Boat Club