

Sense of Place Report

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Introduction

Sense of place is something anyone can feel or describe, and it is often what ties people to the communities they live in. Scholars Jorgensen and Stedman define sense of place as a complex system consisting of the beliefs about one's own relationship with a place, one's own feelings toward the place, and what is unique about the place (12). Crucial components of sense of place include place meaning and place attachment. "Place meaning captures the description of a place, often in relation to its role or presence in the community" (2). Place attachment captures the relationship one has with the landscape—the degree to which their needs are fulfilled and their identity is shaped (2; 14). It's necessary to understand the nuances between these two, but also important to note that they work in tandem with each other. For example, land management actions that improve the quality of the stream and change the place meaning may lead residents to view their stream more positively, and thus feel an increased sense of place.

Studies suggest that the degree of place attachment may determine one's decision to remain in the neighborhood, promoting resident retention within the neighborhood; likewise, a deeper place attachment has shown positive psychological benefits for residents (5; 15). This study will assess levels of place attachment among residents of Robin Creek through questions designed to understand the ways that participants interact with and/or emotionally respond to their local creek. Data that reveals the types of recreational activities that residents engage in at or near Robin Creek, for example, or evidence of community and/or family ties may suggest a stronger sense of place attachment to Robin Creek. It is also possible that these positive interactions work in a cyclical fashion to promote positive psychological benefits that strengthen an individual's desire to remain in the neighborhood.

Furthermore, both place meaning and place attachment may help determine the level of environmental stewardship in a community (4;7;9;15). This can mean that sense of place often leads to a sense of protection over the place one is bonded to, which can be a positive thing for a community if those feelings are directed at a specific cause, like the health of Robin Creek (13). When local residents are involved in city planning decisions, they will be more willing to work with Davenport land managers, compared to land managers making decisions first without consulting residents (10). Therefore, management would benefit from being sensitive to and cognizant of others' sense of place when seeking to encourage the caretaking of a landscape and incite sustainable behavior patterns within the community. As we have found with our qualitative interviews, there are people in the Robin Creek watershed who are passionate about protecting their creek, and would likely be enthusiastic about an opportunity to be involved with land management.

In this report, we will continue to discuss how and why sense of place is important and useful to scholars and decision makers. We've introduced the idea that it provides a direct link between the human and natural world, helping professionals understand why an ecosystem may be thriving or faltering, as we can see the impact sense of place has on social, economic, and environmental wellbeing. With our findings, we believe the city of Davenport may appreciate knowing how the creek is currently being utilized by its residents, whether there are any existing criticisms or suggestions regarding upkeep, if and how the creek contributes to a shared sense of belonging among residents, and, naturally, the ways in which the creek may detract or add to the values, identity, and goals of the city of Davenport.

Findings

We obtained our data by conducting seven interviews with community members who responded to our door-hanger advertising. They consisted of four female and three male homeowners, born between 1952 and 1990, and of various occupations, family size, and years living near the creek (Table 1). These participants have different demographics and experiences but all willingly signed up to share their knowledge and experience involving Robin Creek with our team. We created and followed an interview protocol and produced a codebook to help us categorize the data. The interview protocol and code book can be found in the appendices. Using our coded data, seven central themes about residents’ sense of place emerged: abundance of nature, activities, and wildlife, landscape degradation, values fulfillment, regional dependency, property and safety concerns, stewardship, and improvement in management (Table 2).

Table 1: Participant demographic data table

Participant Number	Gender Identity	Birth Year	Time Living Near the Creek (Years)	Rent or Own Home	Occupation	Number of Adults (In House)	Number of Children (In House)
1	Female	1981	14	Own	HS Science Teacher	2	1
2	Female	1990	5	Own	Stay-at-home Mom	2	2
3	Male	1957	29	Own	Retired	2	0
4	Female	1952	2	Own	Retired	1	0
5	Female	1962	21	Own	Sales Consultant	2	0
7	Male	1956	34	Own	Retired	2	0
8	Male	1972	2	Own	Advertising	2	0

Table 2: Overview of central themes

Theme	Description	Supporting Statements
Abundance of Nature, Activities and Wildlife	Species in area, wooded area, green space, buffer/barrier from urban environment, activities available to all	<p>“It’s like a sanctuary for humans as well as animals.” (Participant 4)</p> <p>“It’s just the beauty and a natural habitat for a myriad of species.” (Participant 4)</p>
Values Fulfillment	Activities related to and qualities of the creek personally enjoyed, a desire for community interaction	<p>“I think that people who live right there appreciate the fact that there is something more to do around Robin Creek.” (Participant 7)</p> <p>“I notice when I walk through the woods that you almost can’t hear any of the traffic, and so you can really...commune.” (Participant 4)</p> <p>“So there's mushroom hunting, we can often go and find just different kinds of bugs and flowers that are just wild.” (Participant 2)</p>
Regional Dependency	Employment opportunities influence decision to move to the area; proximity of residence to place of employment; work experiences directly involved with the creek	<p>“I moved here for employment opportunities” (Participant 8).</p> <p>“I liked the community and I enjoy the city. My job is here.” (Participant 1)</p>
Landscape Degradation	Noticeable, negative impact on the surrounding landscape including: litter, erosion, drought, water quality, flooding, steep	<p>“One thing with Robin Creek back there is the shore, the banks are pretty eroded.” (Participant 1)</p> <p>“The occasional flooding like I said, it comes up so high that it washes a bunch of debris up to our road and, you would think it'd almost wash the road out but it comes up over it.” (Participant 5)</p>
Property & Safety Concerns	The effects that flooding, erosion, drought, losing bank, open sewage/leaking, clogged creek, negative wildlife interaction have on residents and their property	<p>“Over the 20 some years we’ve been here in this house, it has completely flooded over our road and into our yard. Our yard sits way back but it came up more than halfway to our house.” (Participant 5)</p> <p>“The one side of what is called Robin Creek is all filled. It is sharp edged concrete, broken wire.” (Participant 3).</p> <p>“There's open sewage down in there. You don’t want to let your children down in there.” (Participant 3)</p>

Improvement in Management	Areas that residents identified as needing improvement with their local government: communication, organization, consistency, recommendations	<p>“I just wish I knew more about the resources this area had to offer, like if we were able to -- I don’t know, I haven’t done the research to find out if that’s something that the city would help us with or if it’s a project we take on on our own.” (Participant 2)</p> <p>“I think if we had some kind of park ambassadorship like they have in other communities, if they could tap into that, I think there would be people that would be interested as long as there was some guiding force to organize it.” (Participant 4)</p> <p>“I think the city, you need safety equipment to be able to clean up parts of the creek because it’s so, it’s so deep and so woody.” (Participant 4)</p>
Stewardship	Personal actions taken by respondents and/or their neighbors to maintain the health of the creek or counteract harm to the creek	<p>“I get five full bags of trash out of there. I pick up trash and litter every day.” (Participant 3)</p> <p>“We did some water quality testing on the creek.” (Participant 1)</p> <p>“I volunteer for a local off-road bike club to build and maintain bike trails in the area, specifically at the dog park.” (Participant 7)</p>

All participants described Robin Creek and the surrounding area as an important part of the local ecosystem, a haven that provides an abundance of greenspace, wilderness, and nature to support a variety of recreational activities nearby such as bike riding, running, or dog walking to name a few. Robin Creek is also home to an abundant wildlife scene, offering nutrition and shelter to species like deer, raccoons, birds, squirrels, chipmunks, hedgehogs, rabbits, foxes, and more. One participant's words captured the group’s consensus; “It’s like a sanctuary for humans as well as animals” (Participant 4).

The natural landscape and services that the watershed provides opportunities for residents of the community to engage in behaviors or reflection that fulfill personal values (11). Several participants expressed shared values like appreciation for peace and solitude, engagement in

joyful movement, respect for nature and the natural environment, and interaction with the community. Appreciation for the natural surroundings can be seen with the 71% strong agreement to the statement, “The creek positively impacts my community” (Figure 1).

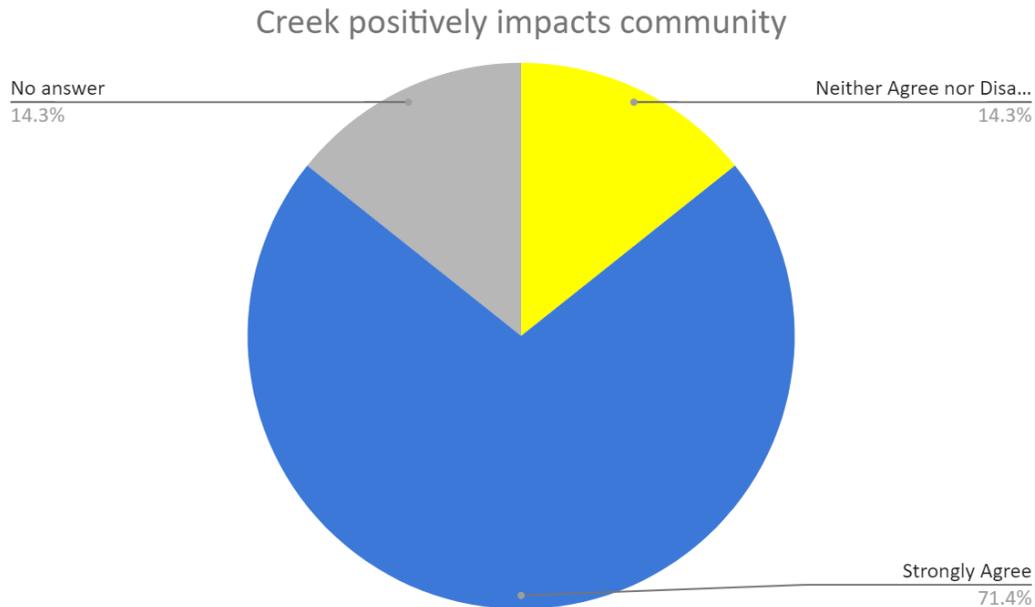


Figure 1: Opinions on the statement, “The creek positively impacts our community”

Most participants also shared personal details that suggest a degree of regional dependency. For example, employment opportunities and proximity to work is a common variable that influences whether or not one chooses to live and stay living near Robin Creek. Some interviewees moved here for a job position and some were nearby and relocated for a new position. All, however, felt it important to mention their employment status to help explain why they value the area.

Yet, all participants observed instances of degradation around and along Robin Creek. These observations consisted of evidence of erosion and flooding, the effects of seasonal drought, perceived negative impacts on water quality, anthropogenic litter, barriers in

accessibility to particularly wooded areas of the creek, and more. Participants had varied responses in their own perception of whether or not the creek is clean, with most people remaining neutral at 28.6% (Figure 2). One participant had several examples of flooding damaging her property over the 20 years she has lived in Davenport saying, “It comes up so high that it washes a bunch of debris up to our road and, you would think it'd almost wash the road out but it comes up over it” (Participant 5). She noted that this flooding is a somewhat regular occurrence, leaving the residents to clean up the area surrounding Robin Creek after these floods.

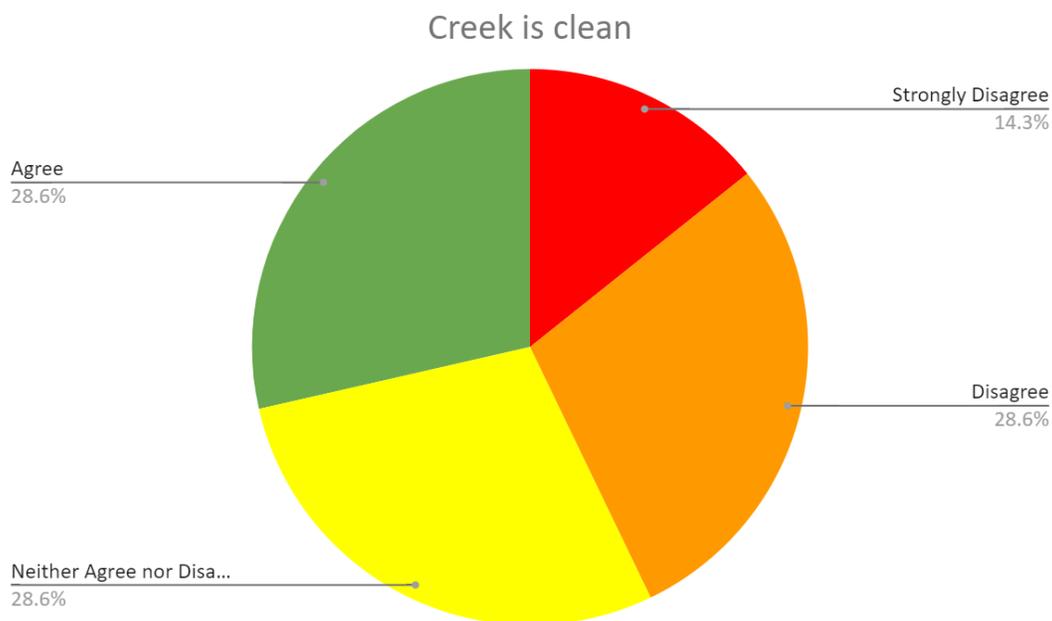


Figure 2: Opinions on the statement, “The creek is clean”

Many of these physical observations about instances of land degradation resurfaced in the form of complaints and concerns from participants. One resident noted, “There's open sewage down in there. You don't want to let your children down in there” (Participant 3). As homeowners, participants worry about the implications that land degradation may have on their personal property, general safety, and overall health of the watershed.

The participants' collective concern for the health of the creek manifests itself through individual acts of stewardship. Several participants reported collecting trash from along the river out of a desire to preserve the health and respect the natural state of the creek. A majority of participants assume a personal level of responsibility for conserving the creek (Figure 3). For some, this personal investment in the caretaking of the creek spans even further than collecting litter; one participant recounts "we did some water quality testing on the creek," (Participant 1) and another shares "I volunteer for a local off-road bike club to build and maintain bike trails in the area, specifically at the dog park" (Participant 7).

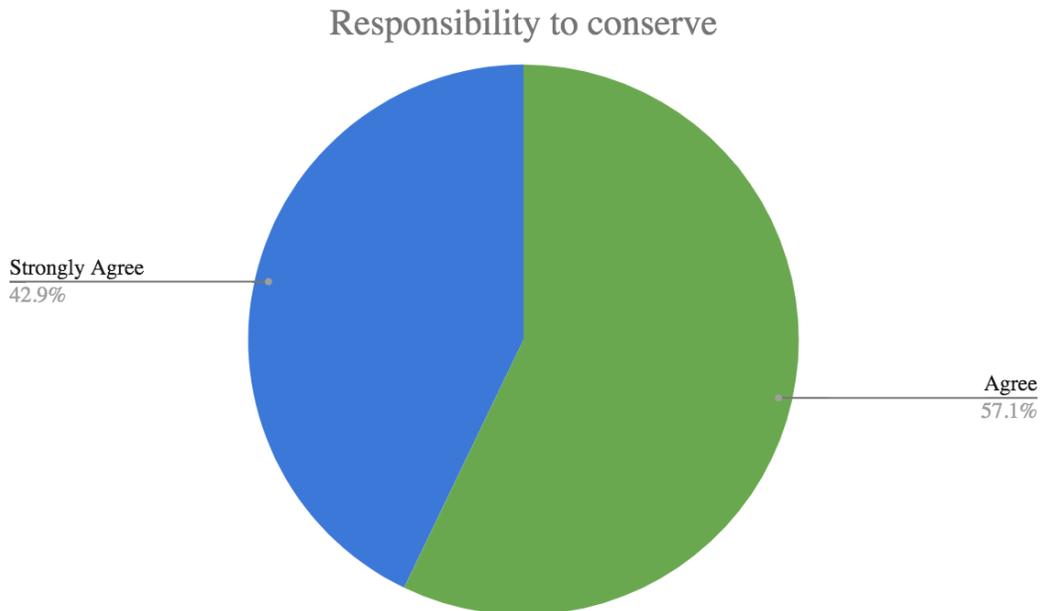


Figure 3: Opinions on the statement, "I have a responsibility to serve the creek"

Stewardship is secondary to the need for organized action. As one participant points out, "I can only do so much" (Participant 4). Many of the concerns and frustrations expressed by the participants also evolved into suggestions or recommendations that would require a higher involvement of management. Participant 4 mentioned the idea of a park ambassadorship stemming from the underlying suggestion to establish an organized program which would offer

more structure and leadership for coordinated events like litter collection or debris clean-up after floods. When it comes to the quality of the management of the creek, participants had drastic differences in their perception of management, with 42.9% of people being neutral (Figure 4). Participants would like to see more consistent management from the city to protect the health of the creek and surrounding land. Specifically, there is a desire for more clear communication from the city about actions taken to manage the health of the watershed.

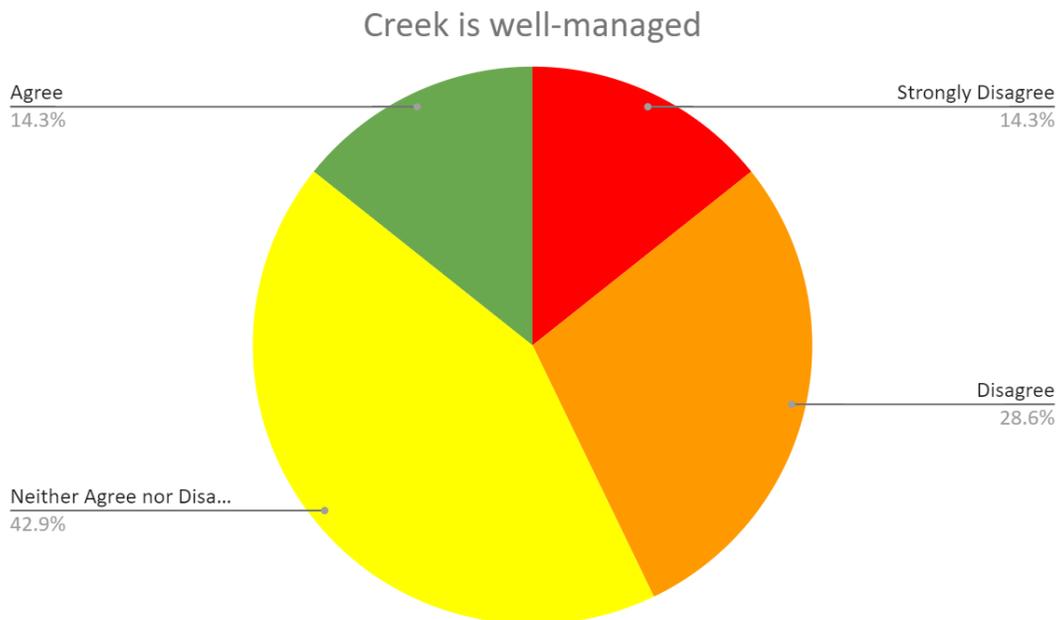


Figure 4: Opinions on the statement, “The creek is well-managed”

In general, participants share the view that Robin Creek positively impacts their community (Figure 1). The creek offers opportunities to interact with nature, wildlife, and each other as well as engage in numerous recreational activities, many of which fulfill personal values. However, the physical state of the creek and surrounding area contributes to shared property and safety concerns and an overall desire to see the creek taken better care of. While a majority of participants assume a personal level of responsibility for conserving the creek, most also perceive a void in management that they perceive would best be filled by the city (Figure 4).

Discussion

Residents in the Robin Creek watershed made several things clear: the creek is a beloved part of the community, but it's not without flaws. On a positive note, all participants observed the sanctuary that Robin Creek provides within Davenport's urban environment, speaking positively of the prevalence of wildlife. It also seemed that most of the participants had established a relationship with the creek in ways of personal hobbies, community bonding activities, and stewardship practices. On the other hand, it was evident that there was confusion about who was responsible for aspects related to the upkeep of the creek, especially near their private properties. The biggest and most consistently noted flaws involved the overall conditions and health of the creek, and their impacts on the participants. There were concerns about threats such as riverbank erosion, sewage contamination, and flooding— all serious hazards that may require formal management intervention. Many residents provided us with suggestions of their own regarding how the city of Davenport could enhance their engagement with the maintenance of Robin Creek and the surrounding area.

The variety and scope of activities engaged in near and along the creek as well as the natural wildlife observed in this habitat suggests that the residents maintain strong place meanings associated with Robin Creek. The participants interviewed were in agreement that the creek is a positive aspect in their community, and functions not only as a home to local wildlife but also as a place to escape from busy and highly industrialized areas and enjoy a serene and tranquil environment. The participants' descriptions of how they felt when being close to nature, the ways they interacted with the creek on a regular basis in their daily lives, and their attitudes about seeing the creek disrespected when litter is left behind suggests that participants may depend on the creek for their wellbeing to some degree and possess some level of attachment

with the creek. The significant amount of stewardship carried out by the participants in this study as well as their keen attention to detail and physical degradation of the creek and its landscape support the overarching conclusion that the residents of Robin Creek share a collective desire for a healthy creek.

This mindset of a desire for a healthy creek holds importance for the creek, its inhabitants, and the city of Davenport. For one, the place meaning and place attachment shared by members may help determine the level of environmental stewardship in a community (4; 7; 9; 14). Residents who appreciate their creek and uphold a collective desire to protect its wellbeing are more likely to engage in acts of stewardship. However, attitude alone does not necessarily predict or assure action. The responsibility to preserve the quality of the creek and surrounding land rests in the hands of its residents only to an extent, and collaborative and organized management that is active and responsive can nurture the sense of place that Robin Creek provides for many of its residents.

Those who were interviewed were excited to share their perspective of Robin Creek and its impact on their life. The creek is an important part of what makes their neighborhood special, which supports the existing literature in that people will have strengthened feelings of sense of place if they feel connected to it (13). Residents value Robin Creek and view it as an integral part of their community, directly affecting their perspective of their environment. Scholars have found that some urban citizens have felt less connected to their environment due to the detachment from natural spaces (1). We were pleased to find that our participants noticed that having this natural space in the midst of the urban setting has encouraged their interest in the area. Beyond sheer interest, the residents wanted to see improvements made to their creek, which shows the direct link between the health of Robin Creek and the attitude residents hold towards it

(3). Residents harbor negative feelings towards the litter, erosion, and flooding affecting Robin Creek and therefore have turned to engaging in acts of stewardship, showing just how important maintaining the presence of the creek is to them (6;14). Lastly, as we will further explain in the next paragraph, studies have shown that owning private property has led to increased protective attitudes and behaviors. Similarly, our participants all owned their land and all exhibited a desire to maintain healthy conditions of their observed surroundings (8).

Despite our research team's adherence to a carefully curated interview protocol and a methodical approach to collecting community perceptions about their local creek, this study was limited in its size and scope. All participation in the study was completely voluntary, so those who did respond to the survey were passionate about conserving Robin Creek. Individuals who didn't respond may feel completely different from those who were interviewed. Although those interviewed provided a rich amount of information within their interviews, it is not representative to generalize the true feelings of the community as a whole based on answers from seven participants. Some examples of diversity deficits we encountered were all of our participants shared the experience of moving to the area for working purposes, all were older than 30 years old, and all owned their homes. Previous studies, as well as our research, have indicated that homeowners felt a responsibility to maintain their property and it would be interesting to have had a renter's perspective to see if that would significantly affect the results. The findings shared in this report affirm, above all, the importance of acknowledging social phenomena like sense of place in management of ecological systems.

Moving forward, the city of Davenport may utilize the findings in this report to inform best management considerations in the short and long term future that will positively impact the health and condition of Robin Creek and its surrounding landscape. In addition, many of the

interviewees shared explicit concerns about the state of the creek that correlate directly either with various management decisions or gaps in management where helpful action could be taken to satisfy residents while also protecting the watershed (Table 3).

Table 3: Management recommendations

Key Recommendations
1. Increased Communication
2. Organized & Collaborative Action

One important takeaway from the study’s findings is a collective recommendation from the participants to the city of Davenport for more clear communication between management and those who live near Robin Creek. Residents want to be better informed about how responsibilities are delegated when it comes to taking precautionary measures to prevent instances of land degradation from causing negative consequences to residents’ safety and properties. The second recommendation residents expressed that they would like to see is more organized action from the city’s management force overall to assure the community that the health of Robin Creek is being prioritized so that the beauty, functionality, and quality of the watershed can be preserved for years to come. One participant had a specific idea of how to best establish this, “I think if we had some kind of park ambassadorship like they have in other communities, if they could tap into that, I think there would be people that would be interested as long as there was some guiding force to organize it” (Participant 4). With this new outlook on how residents perceive their local creek and the city’s management decisions, the city of Davenport can take informed steps to improve and/or protect its residents’ senses of place when taking any actions that may affect Robin Creek and its natural landscape. In turn, this can set in

motion a more sustainable and collaborative approach to protecting Robin Creek and preserving community retention and satisfaction.

Appendices

Appendix 1: Interview Protocol

Open-Ended Questions

1. How long have you lived in this area?
2. Why did you move to this area?
 - a. (Or) Why did you choose to stay in this area?
3. If I was new to the neighborhood, could you tell me a bit about what the creek and surrounding area has to offer?
 - a. (If needed) What outdoor activities are available in this area?
 - i. Which ones do you partake in?
4. Can you share an experience that you have had with the Creek or surrounding area?
 - a. (If needed) How did you feel about this experience?
 - b. How often do you interact with the local creek?
5. What are your own attitudes about the creek? Do you think these align with the community?
 - a. Think about your attitudes when you first moved here, are there any differences now?
 - b. What influenced your change of attitude if it did change?
6. What does the future of the creek look like in your eyes? What would be your ideal future of the creek?

Using the scale of strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree, please respond to the following statements:

7. I feel knowledgeable about the creek
8. The creek is clean
9. The creek is well managed
10. The creek positively impacts our community
11. My community values the creek
12. I would recommend a loved one to live near the creek
13. The things I do here I would enjoy just as much anywhere else
14. I have a responsibility to conserve the creek
15. I feel attached to the creek
16. I depend on the creek for my well-being
17. The creek is part of my identity

Demographics:

18. In what year were you born?

19. What is your gender identity?
20. What is your occupation?
21. Do you rent or own your home?
22. How many adults (18+) live in the household? How many children?
23. What is your address?

Closing:

24. What other information would you like to share about Robin Creek?

Appendix 2: Codebook

Code	Category/Subcategory		Definition
ATT.	Attitude		
.ACTOR		Towards Actors	Feelings towards external or internal human influences
.CITY			City
.NEIGH			Neighbors
.CREEK		Towards Creek	Feelings projected onto the physical creek
.POS			Positive
.COMP			Complaint
MEAN.	Place Meaning		
.PHYS.		Physical Attributes	Location based; Not activities you can do, but location that you do them in
.MANAGE			Management
.RECREATE			Recreational Activities Available
.GEOG			Geographical Condition
.SOC			Social Conditions
.WILD			Wildlife
.COMM.		Community Binding Attributes	Aspects of a place that bring people together
.INTERACT			Interaction with Creek
.STEWARD		Environmental Stewardship	Efforts to better the natural environment
ATTACH.	Place Attachment		
.DEPEND.		Dependence	Reliance on area for well-being
.EMPLOY			Employment
.IDENTITY.		Identity	Creek offers numerable unique

				contributions to person's self-perception
.FAMILY			Family Ties	Proximity of family; Generational longevity; Inclusion of family in creek activities
.RECREATE			Recreational Activities	Activities personally enjoyed with sight of creek
.KNOW			Knowledge of Creek	Not just scientific knowledge, but also lived experience; or lack thereof
RECOM.	Recommendations			Explicit statements from interviews about problems that need to be addressed and actions that need to be taken
.ACT		Action		Actionable steps that can be taken to address issues
.CONC		Concern		Issues pertaining to potential negative outcomes related to current conditions
EVENT.	Event			
		Descriptor		

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