

**A COMMUNITY NEEDS ASSESSMENT TO EXPLORE THE  
FEASIBILITY OF EXPANDING ENVIRONMENTAL  
EDUCATION PROGRAMMING**

By  
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A Thesis

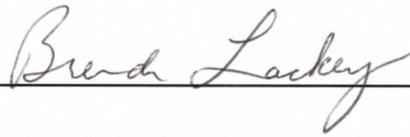
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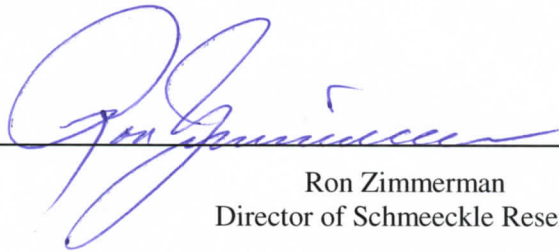
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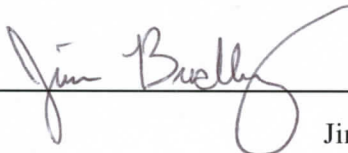
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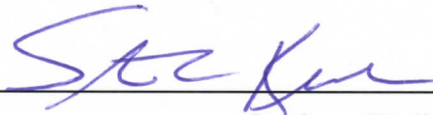
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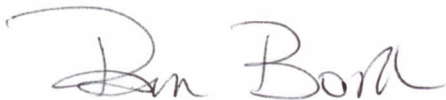
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## ABSTRACT

Education programs are often conceived with a phone call, an idea, or a conversation. Even popular programs that are initiated without a defined purpose or problem are difficult to defend. Conducting a needs assessment allows project managers to take a step back and systematically consider whether or not there is a gap in existing services or materials, and if so, the nature of the gap. Due to an increase in requests for programming, this study uses Schmeeckle Reserve, a natural area in Wisconsin, to explore the feasibility of expanding educational programs beyond existing efforts. Data were collected in three major ways and complemented a three-phased planning framework commonly proposed in needs assessment research. To understand existing programs, semi-structured interviews were conducted with key targeted education program coordinators. A series of three surveys were sent to target audiences: teachers, youth and adult program leaders, and homeowners to determine the unique interests, barriers, and needs for educational programming. A final report was given to reserve decision makers and identified perceived critical needs and determined potential strategies to move forward. Results of the three phases showed that there is a perceived gap in educational programming among non-formal youth and adult program leaders within the community. Education program coordinators (phase one) indicated youth are an audience that is underserved currently (n = 14, 82.2%). Additionally, when asked, “what is your level of interest for educational programming at Schmeeckle Reserve” (phase two), the strongest interest was reported among youth and adult program leaders (n = 19, 82.6%). Lastly, during the group process decision meeting (phase three), decision makers indicated that Schmeeckle Reserve is interested in allocating resources to fill the gap in providing educational programs and services to non-formal youth audiences. The findings of this research are locally important for determining the role that Schmeeckle Reserve can play. Broadly, there is implication for replicating this study among informal learning centers experiencing similar concerns for new or expanded program efforts.

**KEYWORDS:** Needs assessment, collaboration, strategic decision-making framework, informal learning centers, environmental education, program planning

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## **CHAPTER I: INTRODUCTION TO THE STUDY**

From turning off the light when you leave a room to determining community public health, decisions are made every day. Many are routine and straightforward while others are extraordinary and complex, requiring consideration of multiple viewpoints. Making sound decisions about what to do is not always easy. Likewise, determining choices about what educational program development looks like at informal learning centers should be considered seriously. Fortunately, academic literature provides several strategies for designing logical and disciplined methods for collecting useful information and making decisions based on that information. One method commonly used is *needs assessment*. This study uses Schmeckle Reserve, a natural area in Wisconsin, to explore the feasibility of expanding educational programs by conducting a community-driven needs assessment. The study design borrows from a three-phased planning model proposed by Witkin & Altschuld (1995) that is commonly referenced in the literature. All three phases build on one another and in total determine key findings that inform needs-based programming decisions at Schmeckle Reserve.

### **PROBLEM STATEMENT**

The purpose of this study was to explore the needs of potential stakeholders for environmental education programs at Schmeckle Reserve and assess the feasibility for providing expanded programs that meet their needs and extend the mission of the reserve.

### **RESEARCH QUESTIONS**

The research problem was divided into four questions:

1. What environmental education programs are offered in the Stevens Point-area?
2. What gaps exist in current environmental education programs?
3. What user preferences, interests, and needs for environmental education programs exist among potential stakeholders?
4. What conclusions can be drawn from potential stakeholders that inform the development of Schmeckle Reserve's educational mission?

### **SIGNIFICANCE OF THE STUDY**

Since its inception, Schmeckle Reserve, a university natural area, has provided educational

programs to general public audiences. However, formal feedback from attendees has never been captured. Presently, the reserve offers interpretive nature programs to general public audiences during the spring and fall semesters. Environmental education and interpretation students deliver the programs as part of their capstone coursework and value the real-world experience they gain. Programs are well-attended and recognized by community members. Nevertheless, in recent years, growing requests for programming have emerged from additional audiences, causing reserve leadership to make important decisions with regard to expanding their programs to meet the needs of new audiences. Questions arise like: What programs should be developed? What audiences are in need of serving? Are there resources to support these needs? How will serving these audiences meet the educational goals of the reserve?

Locally, the results of this study are important because they provide rich analysis of current environmental education programs and services in the Stevens Point area. Understanding gaps in programming provided to various stakeholder groups, identifying the interests of potential users for environmental education programming, as well as exploring resources that may be useful to overcoming those needs, collectively act to provide useful insights regarding educational needs in the Stevens Point area. The results contribute important information that allows Schmeckle Reserve to develop an informed, needs-based environmental education program that is both aligned with the educational mission of the reserve and avoids duplication of existing efforts within the community.

Broadly, this research will benefit people and teams involved in planning and decision making among organizations with a similar mission, including parks, zoos, aquariums, or other non-formal education sites. Unfortunately, little research is published in the academic community on the role of needs assessment in environmental education. Even less research has been recorded regarding community environmental education needs specifically in informal learning centers. This research will contribute current documentation that outlines the importance of needs assessment as a planning tool that establishes criteria for determining how to best allocate available money, people, facilities, and other resources as well as the process to conduct one at their site. Therefore, this research provides potential application for

a variety of government, public, private, and non-profit organizations interested in conducting a needs assessment to better meet the needs of their specific stakeholders.

A list of definitions and terms are included in Appendix A for reference.

### **STUDY CONTEXT: SCHMEECKLE RESERVE**

During the 1950s, the University of Wisconsin-Stevens Point began purchasing land near campus that was considered for additional campus housing, faculty housing, or even for extra parking space. Plans changed, however, in 1976, when a Federal Land and Water Conservation (LAWCON) grant proposed by the Board of Regents of the University of Wisconsin System was received and ensured that the property be used with a land stewardship focus in mind. The present 280-acre reserve is a product of the hard work and visioning of many staff and students of the university and the Stevens Point community. At the time, notable individuals such as Lee S. Dreyfus (UWSP Chancellor), John J. Joanis (Chief Executive Officer, Sentry Insurance Corporation), and Daniel Trainer (Dean, College of Natural Resources) were influential members in favor of Schmeeckle Reserve's founding and served on the Board of Regents (Board of Regents, University of Wisconsin System, 1976).

The reserve's name, Schmeeckle, (pronounced *Schmee-klee*) honors Fred Schmeeckle, a professor who taught at UWSP from 1923 to 1959, and whose early efforts were important in the purchase of some of the initial reserve lands. Although based in the agriculture department, Schmeeckle "foresaw the depletion of our natural resources and warned his students about it" (Board of Regents, University of Wisconsin System, 1976). However, it was not only his students who were influenced by his devout passion for conservation; he believed that in an exploding Stevens Point population, at the time, the need for restorative places that provided natural resource-based recreation opportunities was paramount. Twenty years prior to the reserve's formal establishment, Schmeeckle prophesized, "Someday this area will serve as an island of green in the city of Stevens Point." That remains a continuously accurate depiction of the unique natural area today (University of Wisconsin-Stevens Point, 2013). The "island of green" is demonstrated in

Figure 1 and shows a map of the reserve's present day boundaries.

**Figure 1: Schmeckle Reserve Boundary Map**



In the decades to follow, the reserve was governed, and remains today, by a set of priorities that follow Fred Schmeckle’s conservation education practices. First and foremost, the reserve strives to: (1) *Preserve, maintain, and restore native ecological communities of central Wisconsin;* (2) *Serve as an outdoor laboratory for teaching and research;* (3) *Provide recreational opportunities for the campus and community as long as those needs do not conflict with the preservation and educational priorities* (Schmeckle Reserve Website, 2015). Early guiding documents elaborate on the second priority, or educational mission of the reserve, and add, “educational programs which will use the area will utilize the unique features of the natural area and not alter or degrade the natural ecosystems” (Board of Regents, University of Wisconsin System, 1976).

Having expanded from 111 acres during its inception to the 280 acres of today, the reserve continues to grow, attempting to meet the needs of its diverse users. Taking up more than two-thirds of

the university campus area, one of the reserve's primary audiences consists of university staff and students. However, a growing number of community members and residents visit the reserve on a daily basis for educational programs, recreational exercise, or solitude. According to recent trail counter studies, nearly 90,000 visitors annually traverse the five miles of trails, fish the 24-acre Lake Joanis, or photograph the restored Moses Creek freshwater marsh, to name a few activities. Many also stop by the Visitor Center (see Figure 2) to shop in the Browse Shop, discover the Land of Wealth natural and cultural history museum, use the conference room, or explore the Wisconsin Conservation Hall of Fame.



As the reserve continues to expand through land acquisition and other new developments, reserve directors acknowledge limitations regarding staffing and resources. Schmeckle Reserve has only three full-time employees; a director, assistant director, and outreach coordinator. This leaves day to day operations, such as staffing the front desk, purchasing gift shop goods, managing cedar sign sales, and overall grounds / trail maintenance, to the approximately 50 part-time students hired every spring, fall, and summer semesters. Student employees are almost always limited to those who qualify for the Federal Work-Study program, which provides funds for approximately 70 percent of the cost of the student's salary. Matching funds require the reserve to cover the remainder (Student Involvement and Employment, 2015). Campus employers will likely face reduced work-study funding or greater competition for student employees in the future (Espe, 2013).

Given a heavy reliance on student staffing in recent years, reserve directors have chosen to investigate the potential for expanded outreach efforts. Espe (2013) completed an exploratory study of how a community involvement program can benefit both Schmeckle Reserve and potential participants.

As a result, the reserve founded a citizen support organization commonly referred to as a “Friends Group.” Guided by the recently hired outreach coordinator, the community-based nonprofit organization’s main functions are to provide programs and outreach, land management and acquisition, and raise funds / resources for the reserve (University of Wisconsin-Stevens Point, 2013). With over 100 members after the first six months, and growing, the Friends of Schmeckle Reserve encompasses tremendous potential as a valued asset that links the reserve with the greater Stevens Point community, and possibly expanded educational programming.

The support of the Friends of Schmeckle Reserve will help to ensure a fiscally sustainable program as other budget uncertainties may present themselves. While the state of Wisconsin, through the University of Wisconsin-Stevens Point, owns Schmeckle Reserve, only about one third of the total operating budget is supported through state government funds. Reserve staff secures the remaining two thirds from entrepreneurial revenue streams, such as, but not limited to, interpretive master planning, book sales from the Interpretive Handbook Series, and gift shop / cedar sign sales. Additionally, the university’s Student Government Association collects student-paid activity fees, which Schmeckle Reserve applies for a portion each year “to restore and manage habitats, operate and maintain the visitor center, upgrade and build the expansive trail and boardwalk systems, and provide educational programs and events that unite the community and UWSP” (University of Wisconsin-Stevens Point, 2013).

In partial fulfillment of its educational goals, the reserve provides spring and fall natural history interpretation programs marketed to general public audiences. Programs are provided by University of Wisconsin-Stevens Point students focusing on Environmental Education and Interpretation as their major program of study and who are enrolled in their capstone practicum coursework. The reserve is unique in its ability to accommodate a diverse set of audiences, but limited staff and resources make it difficult to meet the needs of all stakeholders. Increasing requests from audiences such as teachers, youth, and adult groups have led reserve directors to question the ways in which the reserve might meet their educational needs beyond the current capacity. This constant need to “reinvent the wheel” both exhausts an already over-burdened staff, as well as encourages inconsistent programming that is based on the needs of the

group and not the feasibility of sustaining such programs at the reserve (Zimmerman & Buchholz, personal communication, August 26, 2013).

This research recommends, based on the results of a three-phased needs assessment model, how Schmeckle Reserve can most effectively expand its educational program efforts to meet the needs of potential stakeholders, or users of the resource. The recommendations proposed are meant to act in concert with the needs of the stakeholder groups, and most importantly, the feasibility for Schmeckle Reserve to implement the programs in the future.

#### **LIMITATIONS OF THE STUDY**

1. The study focuses on Schmeckle Reserve and the findings may not be applicable to all sites assessing the need for expanding educational programming.
2. The participants interviewed in the first phase of research were selected based on a purposive sample of key-targeted informants with programming that included some facet of environmental education. Due to time limitations, the participants were selected from approximately a 15-mile radius of the geographic center of Stevens Point.
3. Teachers who represented the opinions of the Stevens Point formal education community were accessed during the closing months of the 2014-2015 school years. Thereby the survey process was limited to accessing teachers from the Stevens Point Area School District, Stevens Point Catholic School Network, and Central Wisconsin Holistic Homeschool Network and may have been difficult to respond based on timing in the school year.
4. Respondents included in the community survey were limited to homeowners versus a broader sample of renters or students within Stevens Point, Hull, Plover, and Whiting because of address access that was provided by 2014 tax parcel data.



### **ASSUMPTIONS OF THE STUDY**

1. Schmeeckle Reserve will benefit from the development of expanded educational programming as a result of the needs assessment.
2. Individuals were invited to be interviewed based on their organization's affiliation with environmental education or community based education programs in the Stevens Point area and assumed their willingness to honestly discuss the successes and challenges of their programs.
3. Respondents who complete the survey(s) carefully and truthfully answered all questions.

### **EXPECTATIONS FOR UPCOMING CHAPTERS**

The chapters that follow are designed to provide background, literature, methodology, and results that mirror the three phases of needs assessment that this research followed: pre-assessment, assessment, and post-assessment. Chapter 2 describes events that took place in the pre-assessment and largely aims to explore existing educational programs with a similar mission in the Stevens Point area. Chapter 3 outlines the data collection procedures that took place in the assessment phase. Researchers describe this phase as a place for “reality testing,” or gathering feedback from the “real world” to inform program planning (Patton, 1999). Chapter 4 summarizes the results of the first two phases and describes the results of a group process meeting that took place with Schmeeckle Reserve decision makers. The final chapter elaborates on key findings and recommendations from the cumulative needs assessment. This approach and the structure of a needs assessment as a whole provides a road map across the complex terrain of program development for environmental education (Jacobsen, 1987). Table 1 demonstrates the three-phased approach proposed by Witkin & Altschuld (1995).



**Table 1:** Three-phased Needs Assessment Study Design

PHASE	SUB-PROBLEMS	OBJECTIVES	METHODS
Phase One: Pre-assessment  <i>Sampling</i>  <i>Program Coordinator Interviews</i>	(1) What environmental education programs are offered in the Stevens Point-area?	Inventory what is known about current educational programming provided at Schmeckle Reserve and in the Stevens Point area.	Analyze programs, target audiences, and resources within education programs in Stevens Point.
	(2) What gaps exist in current environmental education programs?	Examine strengths and perceived barriers of organizations that provide educational programming to formal and non-formal audiences within study area.	Conduct and summarize semi-structured interviews with education program coordinators. Code for common themes.
Phase Two: Data Collection  <i>2 Email Surveys</i> <i>1 Mail Survey</i>	(3) What user preferences, interests, and needs for environmental education programs exist among potential stakeholders?	Explore the perceived needs of three primary audiences in the Stevens Point-area (teachers, non-formal program leaders, and residents).	Administer surveys to analyze three primary audiences' interests and needs for educational programming.
Phase Three: Utilization  <i>Group Decision Meeting</i>	(4) What conclusions can be drawn from potential stakeholders that inform the development of Schmeckle Reserve's educational mission?	Analyze the results of the needs assessment and provide recommendation for expanded environmental educational programming at Schmeckle Reserve.	Summarize results and communicate to reserve administrators and the planning committee. Assess the feasibility of implementing expanded educational efforts.

## CHAPTER II: DETERMINING GAPS IN EDUCATIONAL PROGRAMMING IN CENTRAL WISCONSIN

### INTRODUCTION TO PHASE ONE: PRE-ASSESSMENT

A needs assessment was conducted within a community in central Wisconsin to identify immediate and long-term environmental education needs. Researchers who study needs assessment describe the process as best implemented in a three-phased approach that explores the gap between *what is* (phase one) and what *should be* (phase two) (Witkin & Altschuld, 1995). The final phase studies the *gap* and analyzes the feasibility for an organization to fill program-based needs. This portion of the larger needs assessment study takes an innovative approach to exploring community educational programming by conducting a qualitative analysis of educational programs with a similar environmentally motivated mission and seeks to understand the extent to which existing programs are meeting the needs of target audiences in the Stevens Point area.

### TREATMENT OF SUB QUESTION(S)

The goal of the first phase is to (sub-question 1) understand what environmental education programs are currently offered in the Stevens Point Area, and (sub-question 2) determine gaps that may exist in the programs currently provided within those organizations. Table 2 demonstrates the research questions addressed in phase one of the three-phased needs assessment model.

**Table 2:** Phase One of Three-phased Needs Assessment Study Design

PHASE	SUB-QUESTIONS	OBJECTIVES	METHODS
Phase One: Pre-assessment <i>Sampling</i>	(1) What environmental education programs are offered in the Stevens Point-area?	Inventory what is known about current educational programming provided at Schmeeckle Reserve and in the Stevens Point area.	Analyze programs, target audiences, and resources within education programs in Stevens Point.
<i>Program Coordinator Interviews</i>	(2) What gaps exist in current environmental education programs?	Examine strengths and perceived barriers of organizations that provide educational programming to formal and non-formal audiences within study area.	Conduct and summarize semi-structured interviews with education program coordinators. Code for common themes.

## **BACKGROUND: COMMUNITY ENVIRONMENTAL EDUCATION**

Wisconsin has a longstanding history of producing environmentally literate citizens. Pioneers like Aldo Leopold, former Senator and Governor Gaylord Nelson, John Muir, and many others have paved the way for progressive action that aims to ensure that our state's natural resources are protected for future generations. Similarly, the Stevens Point area, and specifically the University of Wisconsin-Stevens Point, has extended learning in natural resources by providing one of the nation's leading undergraduate natural resource programs (UWSP College of Natural Resources homepage, 2012). The program's beginnings can be traced to 1946, when Fred Schmeckle, Schmeckle Reserve's namesake, established the nation's first "conservation education" major at UWSP. Today, Schmeckle Reserve, a 280-acre campus natural area adjacent to the UWSP campus, continues to grow as a unique gathering place for community members, students, faculty, and other organized groups to meet and explore the natural and cultural features unique to central Wisconsin. One can only help but wonder if the area's deep-rooted history in natural resource education has played a role in providing such active community environmental education.

However, it appears as though not all wishes are being met among all users. As the reserve grows in visitation, events, and interest, administrators are prompted to adapt, accommodating the many needs of a variety of audiences while keeping in mind the original intent of the site (Zimmerman & Buchholz, personal communication, August 26, 2013). A major goal of the reserve is to "serve as an outdoor laboratory for teaching and research" (University of Wisconsin-Stevens Point, 2013). However, recent increased requests for K-12 and other non-formal youth and adult programming have caused the reserve to assess the need for expanding programming beyond existing efforts. Rather than meeting demands from additional audiences on a case-by-case basis, reserve directors have chosen to step back and determine potential needs within the larger community education context.

### **Research Goals—**

The overall purpose of this study was to explore the needs of potential stakeholders for expanded environmental education programs at Schmeckle Reserve. The purpose of phase one was to inventory

current educational programming provided in the Stevens Point-area (including mission, audiences, program types / format, etc.), as well as to broadly explore strengths and perceived barriers to providing educational programming. A shared overall objective of this phase was to examine whether gaps exist in current educational programs that Schmeckle Reserve may fill as a way to expand rather than compete with existing community educational programming (Johnson, 1987; Simmons, Easton, & Day-Miller, 2009; Witkin & Altschuld, 1995).

### LITERATURE REVIEW

At the root of needs assessment lays the very notion of need. Witkin & Altschuld (1995) write that a “need” refers to a “discrepancy or gap between *what is*, and a desired end state, *what should be*. In other words, a need is a measurement between the *actual* and the *ideal* (Witkin & Altschuld, 1995; Kaufman, 1992). Largely, theorists agree that a need is anything essential for a satisfactory mode of existence or level of performance (Scriven, 1999). Figure 3 illustrates this concept of “need” as a sort of gap analysis common to every needs assessment.

**Figure 3: Gap Analysis Process**



In the model described, the *need* is neither the baseline nor the future situation, but rather it is the *gap* between them. In analyzing the gap, organizations can begin to identify problems, opportunities, strengths, challenges, and possible new directions. Needs assessment provides a systematic set of procedures undertaken for the purpose of setting priorities and making decisions about program improvement and allocation of resources (Henderson & Bialeschki, 2010; Witkin & Altschuld, 1995). The priorities are based on identified needs. “Such insights can and should be used to inform a strategic examination of programs by identifying priorities, overlap, gaps, and exemplars” (Simmons, Easton, & Day-Miller, 2009, p. 7).

Experienced evaluators advise organizations investing resources in developing new programs to conduct meaningful needs assessments that carefully consider the context in which the problem, or purpose of the assessment exists. Researchers note that there is often a tendency to look for solutions to a problem without fully defining the problem and from where it stems (DeSilets, 2006; Gagne, Briggs, & Wager, 1992). One study highlighted the importance understanding the context of a problem or situation before determining solutions by exploring why wildlife education staffs at an informal learning center in Kenya were not utilizing evaluation of their programs, despite requests from their agency. McDuff (2010) tackled this question by conducting a document-review, participant observation, semi-structured interviews, as well as a participatory rural appraisal that included drawing, word association, and ranking. She discovered that staff members at informal learning centers in Kenya felt ill equipped to evaluate their programs, and therefore ranked the task lowest on their priority list. A workshop on program evaluation was scheduled to better equip their staff, which was a reality that was not otherwise understood before initiating the study. Therefore, prior to understanding the needs of audiences requesting programming at Schmeeckle Reserve, it is important to understand the context in which organizations that provide environmental education services in the Stevens Point area attempt to eliminate duplicative efforts that might compete rather than promote the overall educational mission.

Therefore, the first phase of needs assessment research allows for careful analysis of the existing market. Who are the organizations providing educational services? What audiences do they serve? Are there audiences that may be underserved that allude to a gap that may be filled by potential programming at Schmeeckle Reserve? After assessing organizational strengths, a more strategic understanding of gaps and potential opportunities emerge, reducing the chance of duplicating the efforts of existing programs (Simmons, Easton, & Day-Miller, 2009). Therefore, going straight to the source by interviewing individuals like education program coordinators assists in accurately determining the gap between audience or group needs that is based on firsthand description, rather than reliance on a content-based ‘hunch’ or ‘a bias’ (Witkin & Altschuld, 1995). This gap identification takes place in the pre-assessment

phase, helping guide the needs assessment by narrowing the question of who to involve, what and how to collect data, and what do the results mean for the organization's program efforts.

## **METHODOLOGY**

Central to Schmeckle Reserve's mission is a commitment to creating a connection between the Stevens Point community and native habitats of central Wisconsin. Organizations exist in the surrounding area with a similar vision, and in order to build on those existing efforts rather than compete, it is important to take an in depth look at the programs being offered within the community (Zimmerman & Buchholz, personal communication, August 26, 2013). Therefore, a qualitative approach was used to explore existing educational program efforts in an effort to understand their perceived strengths, gaps, and recommendations for the role that Schmeckle Reserve may play. Organizations were selected via a purposive sample of key targeted informants and interviews were conducted during April – June 2014 with program coordinators from representative agencies.

### **Institutional Review—**

All University of Wisconsin- Stevens Point research projects must follow protocol established by the Institutional Review Board for the Protection of Human Subjects (IRB). The researcher completed online training pertinent to research that involved human subjects and submitted a proposal detailing the research methodology, which was approved by the University of Wisconsin- Stevens Point IRB committee in May 2014. Informed consent was obtained for each interview respondent that chose to participate in the interviews.

### **Sampling—**

A 15-mile radius was drawn using Schmeckle Reserve as a center point—assumed to be representative of the average potential stakeholder's "willingness to travel" distance. This radius is referred to as the *study area* for the remainder of the research. A list of organizations was generated based on recommendations from reserve directors (Zimmerman & Buchholz, personal communication, August 26, 2013).

The initial sample was determined via snowball sampling, where subjects judged to be representative of the population, according to reserve directors, were included. The sampling procedure continued when interviewees recommended additional respondents to contact and continued until the list was exhausted (Ary, Jacobs, & Razavieh, 2010). In the end, the amount of organizations contacted grew nearly two-fold from initial start to finish. A list of organizations that were contacted is included in Table 3. The three organizations not interviewed are *italicized* and primary audiences served are outlined for reference.

**Table 3:** Stevens Point Education Organizations

Stevens Point Education Organizations	
1	Aldo Leopold Audubon Society
2	Lincoln Aging and Disability Resource Center
3	Learning is Forever Program (LIFE)
4	UWSP Adventure Tours
5	UWSP Outdoor EdVentures
6	Central Rivers Farmshed
7	Golden Sands Resource Conservation & Development Council, Inc.
8	<i>Isaac Walton League</i>
9	Mead Wildlife Area
10	<i>Nature Treks, LLC and Nature's Niche</i>
11	UWSP Museum of Natural History
12	<i>UWSP Allen F. Blocher Planetarium &amp; Observatory</i>
13	Wisconsin Lions Camp
14	Boys and Girls Club of Portage County
15	Boston School Forest
16	Central Wisconsin Children's Museum
17	Central Wisconsin Environmental Station
18	Environmental Educators and Naturalists Association
19	Glacier Hollow Summer Camp (YMCA)

**Semi-Structured Interview Procedures—**

An interview is considered semi-structured in nature when the interviewer and respondent engage in a formal conversation in which the interviewer follows an “interview guide”, but is able to insert topical trajectories in the conversation that may stray from the guide, when appropriate (Cohen & Crabtree, 2006). Semi-structured interviews are commonly used among researchers when the interviewee will not

get more than one chance to interview someone, or when interviews occur over a long period. The semi-structured interview guide, then, becomes an important tool that provides a clear set of instructions that makes for more reliable, comparable qualitative data.

For this research, interview questions underwent several rounds of pilot testing to enhance readability and comprehension of questions. Questions were developed in order to best address phase one sub-problems. Interview questions were pilot tested by education program coordinators whose employment took place outside of the study area. When tested for readability, the final copy of questions was rated at grade level 8.7 according to the Flesch-Kincaid Grade Level Index.

The final set of interview questions were divided into four categories: programs, resources, niche, and recommendations. A total of seven questions, along with several sub-questions, were asked. A quarter of the questions focused on education program topics, audiences, format, and demand. One question asked what resources were used in conjunction with programmatic uses, followed by one question that addressed the uniqueness of programs at each organization compared to others in the area. A final question inquired about suggestions for the role that Schmeckle Reserve may play in future community education programs from the perspective of fellow program coordinators. Interview questions listed below are also listed in Appendix B. Procedures and protocol, including timeline of contact, introductory statement, and a follow-up contact template are included in Appendix C.

Semi-structured interview questions are included below:

1. What programs do you offer?
  - a. Who do these programs serve?
  - b. When do you usually offer these programs?
2. How do your programs differ from other organizations in the county?
3. How do your educational programs help your organization meet its mission?
  - a. What other goals of your organization do these programs serve?
4. What resources (volunteers, partnerships, grants, etc.) do you use to help provide these educational programs?
5. What kinds of programs are in highest demand?



- a. What format are they provided in?
  - b. What topics do they cover?
6. What potential audiences (user groups) do you feel are underserved by educational programs at your site?
  - a. Do you plan to serve these audiences in the future?
7. Do you have suggestions about the role that Schmeckle Reserve can play in future community programming?

Respondents were invited via email, or in some cases by phone, to schedule an interview during April 2014. The body of the invitation message included the purpose of the proposed semi-structured interview requesting available day(s), time(s), and contact information to conduct the interview. Follow-up communication included a copy of the interview questions and a consent form so that the respondent was aware of the general format of the interview and rights as human subjects engaging in research (see Institutional Review section).

Interviews were conducted onsite (in-person) of the interviewee's place of work. Sixteen out of nineteen program coordinators in the Stevens Point area were interviewed. Each interview lasted anywhere from 15 - 45 minutes (average 30 minutes) and was recorded via a small hand-held device. One interview was conducted over the phone due to scheduling conflicts. All interviews were complete by June 2014.

### **Analysis—**

To characterize the data collected for the treatment of sub-problems one and two, the researcher assigned codes to words or phrases relevant to the sub-problem. A student research assistant, who used word processing software and a foot pedal to control playback, transcribed the interviews. Documents were then imported into NVivo, a software program designed for organizational assistance with qualitative research analysis. Questions were arranged where "nodes," or codes, were assigned by the researcher every time a respondent described one of the question topics (ex. programs offered, audience, uniqueness, barriers, etc.). This *constant comparative method* assesses similarly coded passages with each other, different codes with each other, and different interviews with each other (Gibbs, 2007). Codes were

then analyzed, grouped, named, and placed in a hierarchy of branched arrangement of sub-categories. The arrangement demonstrated a series of themes drawn from the data (Ary, Jacobs, & Razavieh, 2002). An example codebook is shown in Table 4. Categories were placed under the “coded category” column, grouped, tallied, and arranged to create themes derived from the data.

**Table 4:** Example Constant Comparative Method Codebook

<i>Example: What audiences are underserved by programs at your site?</i>		
Themes	Coded categories	# of responses

**RESULTS**

The purpose of this study was to explore the needs of potential stakeholders for expanded environmental education programs at Schmeckle Reserve. Although a total of 19 program coordinators were sent an invitation to be interviewed, 16 were completed. Results of the first phase of research are reported below.

**Sub-problem 1:** What environmental education programs are offered in the Stevens Point area?

To explore what is known about current educational programming provided in the Stevens Point area and within Schmeckle Reserve, an analysis was completed that inventoried educational programs provided within 15 miles of Stevens Point. The mission of the programs focused some aspect of educational programming on its application to the natural environment. Organizations selected and their subsequent missions are included in Table 4. Since this study was completed internal to Schmeckle Reserve, the mission and subsequent interview questions were not included in this phase. However, the final phase of the needs assessment includes a detailed analysis of the role that Schmeckle Reserve can play in fulfilling the needs of users based on existing programming and target audience needs.

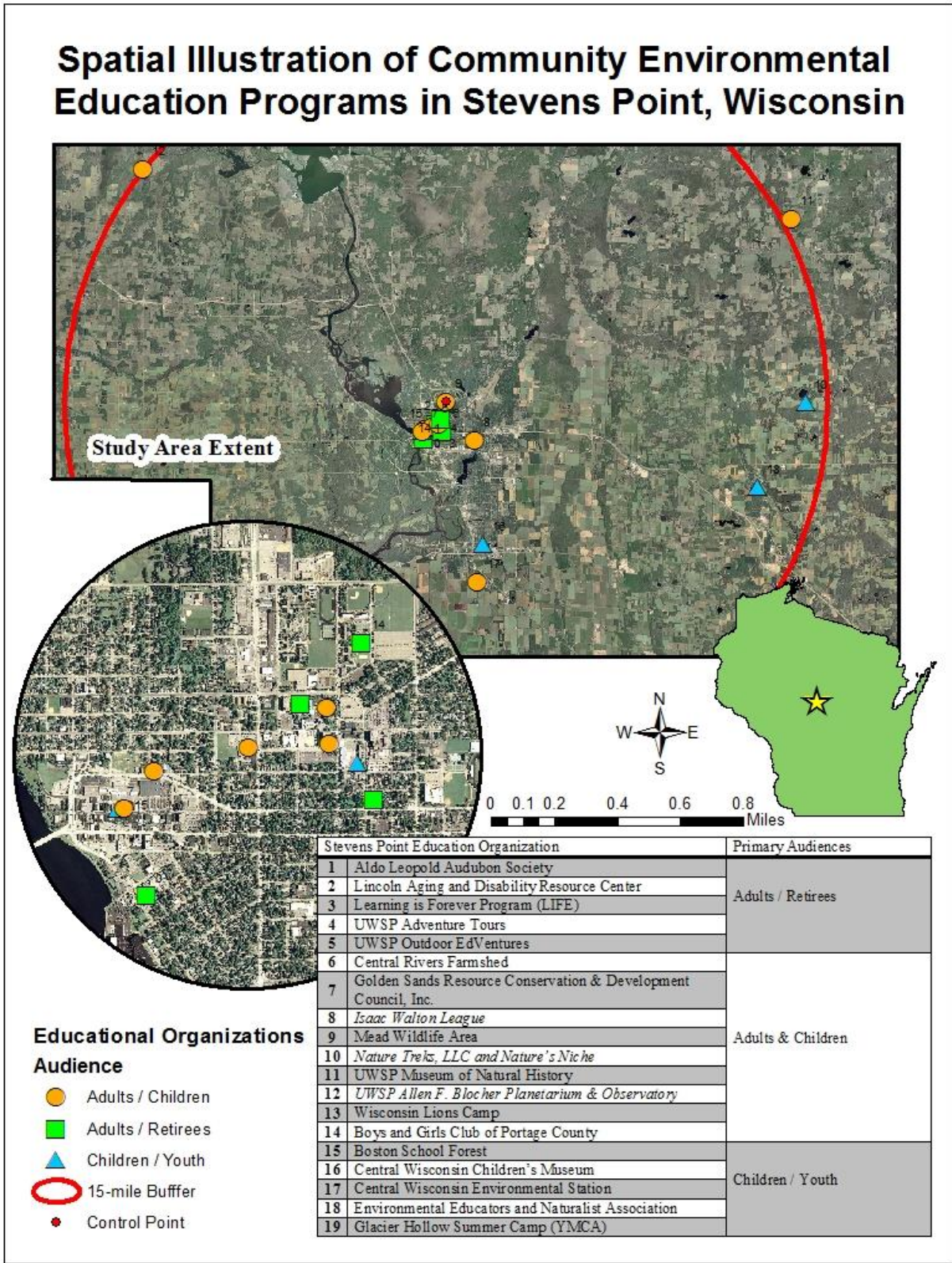
**Table 5:** Mission of Stevens Point Education-based Organizations

Organization	Mission
Aldo Leopold Audubon Society	<i>Conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity.</i>
Boston School Forest	<i>Promote hands-on learning through standards-based environmental education practices among the students and families within the Stevens Point School District.</i>
Boys and Girls Club of Portage County	<i>Inspire and enable all youth, especially those who need us most, to realize their full potential as productive, responsible, and caring community members.</i>
Central Rivers Farmshed	<i>Expand the connection between local residents and their food by providing opportunities for participation, education, cooperation, and action to support a local food economy in central Wisconsin.</i>
Central Wisconsin Children's Museum	<i>Provide a family-based discovery place where children and adults can play and explore together to strengthen confidence, capabilities and creativity through hands-on investigation.</i>
Central Wisconsin Environmental Station	<i>Foster in adults and youth the appreciation, understanding, skill development, and motivation needed to help them build a sustainable balance between the environment, economy, and community.</i>
Environmental Educators and Naturalist Associations	<i>Dedicated to help its members become better naturalists and interpreters that aims to provide practical experience and foster environmental awareness on campus and within the community.</i>
Golden Sands RC&D, Inc.	<i>Manage natural and human resources in ways consistent with sound conservation principles by working across county lines to address local concerns.</i>
Glacier Hollow Summer Camp (YMCA)	<i>Provide a special place where youth and teens learn about the environment, develop positive values, make meaningful friendships, learn new skills and increase self-confidence.</i>
Lincoln Aging and Disability Resource Center	<i>Support seniors, adults with disabilities, and their families and caregivers by offering easy access to services and by fostering a caring community that values lifelong contributions, maximum independence, and individual dignity.</i>
Mead Wildlife Area	<i>Ensure plant and wildlife habitat diversity through sound resource management; allowing compatible recreational activities, and fostering an appreciation and understanding of natural resource values and issues through education.</i>
UWSP Learning is Forever	<i>A membership-based association of senior adult learners providing an opportunity to share learning experiences and discover new joys in your life. It is hosted by UW-Stevens Point Continuing Education through the College of Letters and Science, which also provides the Arts and Culture outreach program to youth and community members.</i>
UWSP Adventure Tours	<i>Develops wellness vacations focused on group adventures for adults. The goals of the program are to (1) encourage adults to take the initiative and lead more healthy/active lifestyles through wellness travel, (2) increase global awareness and cultural sensitivity, and (3) enhance the image of the School of Health Promotion &amp; Human Development.</i>
UWSP Outdoor EdVenture	<i>Provide the collegiate community of UWSP with outdoor skills and environmental education opportunities.</i>

UWSP Museum of Natural History	<i>Ensure the professional curation of the Museum's collections and foster their growth, facilitate access to these resources for research, aid in the dissemination of scientific and ethnographic information, encourage the integration of Museum resources in UWSP student instruction and research, provide for exhibition of the Museum's collections, and serve as a teaching and learning resource for schools and the regional public community.</i>
Wisconsin Lions Camp	<i>Be the identified leader in providing programs and services that enrich the quality of life for the communities we serve.</i>

While some organizations interviewed have a mission that more closely aligns with the goals of Schmeckle Reserve than others, all of the programs selected exhibit educational values centered on fostering a caring youth and adult community in a sustainable environmental stewardship ethic. Organizations ranged from government, private, and non-profit. Their locations were largely centered in Stevens Point, but include surrounding towns like Amherst Junction, Plover, and Rosholt. A map including spatial influence relative to audiences served is included in Figure 4.

Figure 4: Education organizations within 15-mile study area



**Sub-problem 2:** What gaps exist in current environmental education programs?

Semi-structured interviews were conducted with education program coordinators to explore strengths and perceived barriers of organizations providing educational programming to formal and non-formal audiences within the study area. Stated previously, the goal of phase one is to determine the *actual*, or “what is” and compare to what “should be” (phase two) to determine the gap, or potential role that Schmeekle Reserve can play to meet the needs of audiences (Monroe, 2002).

The researcher asked education program coordinators broadly, “what programs do you offer,” which yielded a variety of responses including, but not limited to: time of year programs were offered, primary audiences served, potentially underserved audiences, and overall program strengths, or unique characteristics, compared to others. Respondents willingly provided information about their programs. Where a topic was not addressed among all groups, the researcher asked a follow up question to maintain consistent interview results.

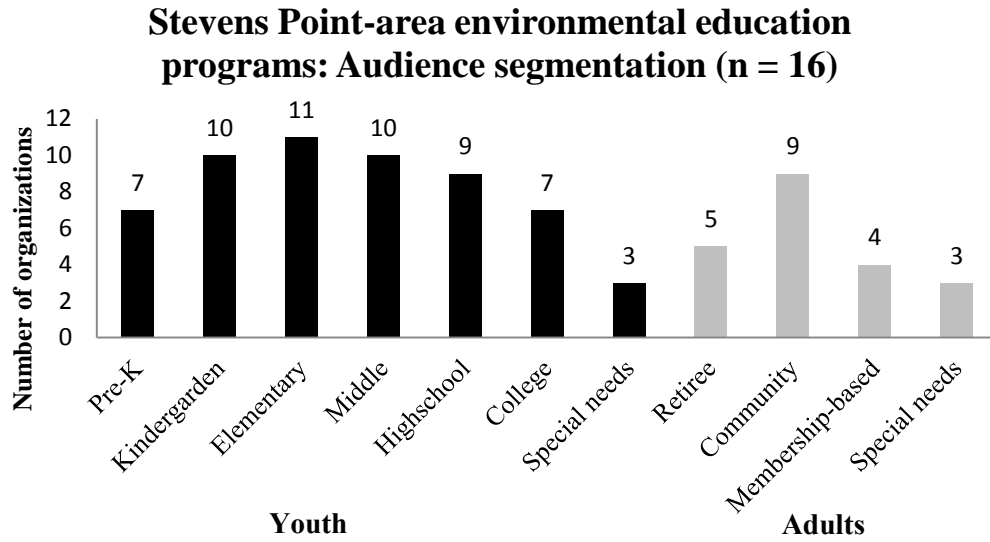
Of the sixteen organizations (excluding the three organizations not interviewed), all (100%) reported having provided programming during the academic school year; whereas, roughly half (56%) provide summer programming. Specific details are listed in the Table 6.

**Table 6:** Education Coordinators’ response to when programs are offered (N = 16)

School Year	N = 16	100.00%
Summer	N = 9	56.25%

The majority of program coordinators discussed a feature of their organizations’ programming serves youth between kindergarten and middle school. Fewer responses showed organizations that serve adult audiences. Of those, the majority focus broadly on providing community programming. See Figure 5 for detailed responses.

**Figure 5:** Education coordinators' response to audiences served



Almost every program coordinator (87.5%) mentioned youth as an audience that either is underserved or could be served better. Within that audience, the majority of respondents stated high school students were currently not being served by their educational programming. A few other responses indicated that home schools, low-income schools, and college students were also underserved. Communities and families were mentioned as a group that program coordinators would like to continue to serve, or do a better job of serving, which included reference to targeted groups such as scout groups, Boys and Girls Club, organized or adult programs (18.8%). In addition, a few program coordinators discussed a need to reach out to minorities in the community, particularly individuals of Southeast Asian or Hispanic descent (18.8%). Almost half (43.8%) of organizations described their intent to “serve these audiences better, if they had better resources” (i.e. support funds for transportation or programming). Coded responses and categories are shown in Table 7.

**Table 7: What audiences are underserved?**

Themes	Coded categories	
<p><i>Youth, if better resources or access were available</i></p>	<p>Ex. Audiences that are underserved, or might be better served include...</p> <ul style="list-style-type: none"> <li>• Home schools, if we had more staff (CWES),</li> <li>• High school students / school groups, if there wasn't so much red tape (Golden Sands RC&amp;D),</li> <li>• Visiting school programs, outreach when they cannot come to us, and high schools (Mead Wildlife Area),</li> <li>• More developed youth program, if we had better resources (Central Rivers Farmshed),</li> <li>• High school students, Scout groups, and college students, but we are working on it (UWSP Museum of Natural History)</li> <li>• High school students, because of scheduling conflicts (Glacier Hollow Camp/YMCA),</li> <li>• Middle school and teenagers (Boys and Girls Club),</li> <li>• College students, mainly awareness (Outdoor EdVenture),</li> <li>• Children, but it is the hardest program to do unless you are set up for it (UWSP LIFE Program).</li> </ul>	<p>14</p>
<p><i>Community and families, if better resources or access were available</i></p>	<ul style="list-style-type: none"> <li>• Families, if there is a commitment to show up so as not to waste resources (Mead Wildlife Area),</li> <li>• Public audiences to extend our work to the community (EENA).</li> </ul>	<p>3</p>

Each organization shared one or more comments regarding what they felt was unique about their educational programming. Overwhelmingly, respondents felt as though “there is not another place like this nearby,” or shared things like “to my knowledge, there is no one else doing programming like this.” The largest category of responses (75.0%) showed respondents believed their programs are unique because they involve a specific resource. Examples included recreational appeals, ecological features, sustainability focus, or promoting a certain skill. Statements like, “We have all three habitats, which makes us different from the other wildlife areas,” or “For us, it may be more recreational kind of activities that make us unique.” Additional responses showed that over half of the respondents perceive their programs to be audience-specific. One respondent stated, “We really try to focus on special needs, and really not anything that I’ve really seen in other environmental programs,” while another described, “What we do is pretty tightly connected to the school district curriculum. And, so, we wrote this with that intention [to serve teachers].” The remainder of comments (12.5%) included programs that have



undergone an accreditation process of some sort, making them functionally unique. Coded response categories are shown in Table 8.

**Table 8:** How do your programs differ from other organizations in the county?

Themes	Coded categories	
<i>Our programs are broad, diverse, and appeal to a variety of interests: (recreation, ecology, sustainability, continuing education, skill-building)</i>	<p>Ex. Our programming is unique in that it caters to a/an...</p> <ul style="list-style-type: none"> <li>• Campus community connection (UWSP LIFE Program),</li> <li>• Variety of interests (Aldo Leopold Audubon Society),</li> <li>• Versatile target audiences (Golden Sands RC&amp;D),</li> <li>• Diverse recreational activities / central location (Glacier Hollow YMCA),</li> <li>• Wide range of habitats (Mead Wildlife Area),</li> <li>• Unique ecological features and land (CWES),</li> <li>• Wide range of audiences because of no cost programs / central location (Natural History Museum),</li> <li>• Low-income families (Boys and Girls Club).</li> <li>• Individuals and schools interested in sustainability and food systems (Central Rivers Farmshed)</li> </ul>	12
<i>Our programs are designed specifically to meet the needs of our unique audiences</i>	<ul style="list-style-type: none"> <li>• Audience with special needs (WI Lions Camp)</li> <li>• Individuals with cognitive disabilities as well as caregivers (Lincoln Aging &amp; Disability Resource Center),</li> <li>• Retirement learning community (UWSP LIFE Program),</li> <li>• Students in the Stevens Point School District (Boston School Forest),</li> <li>• Learning experience for university practicum students (CWES).</li> </ul>	8
<i>Our programs provide a unique learning experience that could not be mirrored elsewhere</i>	<ul style="list-style-type: none"> <li>• Peer-teaching environment where students are led by college students new to the field (EENA),</li> <li>• Opportunity that is “more than a school forest” (Mead Wildlife Area),</li> <li>• Experience led by UWSP faculty focused on wellness (UWSP Adventure Tours)</li> </ul>	5
<i>Our programs have underwent accreditation processes that could not be mirrored anywhere else.</i>	<ul style="list-style-type: none"> <li>• American Camp Association certified summer programs (CWES)</li> <li>• Licenses residential camp and day-camp program (Camp Glacier Hollow YMCA)</li> </ul>	2

While the non-formal education community of Stevens Point serves a variety of interests, according to program coordinators, there are areas for improvement. Respondents were asked, “do you have suggestions for the role that Schmeckle Reserve can play in future community educational programming?” Three fourths (75.0%) of program coordinators responded that they wished to work with

Schmeeckle Reserve in some capacity to assist with building and expanding “hands-on environmental education programs” (n = 18). A common sentiment among respondents determined, “my suggestion for Schmeeckle and everybody, is to find a way to work together, to bring those resources together, and offer them up as one big team.”

Additionally, regarding the role that Schmeeckle Reserve can play in community educational programming, a majority of respondents (81.3%) suggested that “youth audiences” were a niche in which Schmeeckle Reserve could play a role. One respondent stated, “Being more accessible to those groups that aren’t necessarily school groups, but more like Boy Scouts, Girl Scouts, Cub Scouts, the 4-H, the youth groups that are not affiliated with either school or camping. I just think that’s a niche that’s overlooked.” Other general recommendations were offered such as, “keep programs affordable,” “get parents comfortable going outdoors,” and “be flexible when considering to do programming onsite or offsite to meet the needs of your audiences.” Coded response categories are listed in Table 9.

**Table 9:** Do you have suggestions for the role that Schmeeckle can play?

Themes	Coded categories	
<p><i>Schmeeckle Reserve should collaborate with other organizations when considering expanded programming</i></p>	<p>Ex. The Reserve has a role to play in community educational programming by...</p> <ul style="list-style-type: none"> <li>• Collaborate with other campus organizations like the UWSP Planetarium, UWSP Museum of Natural History, or student groups like the Herpetology Society or EENA to “package” programming for a full school-day field trip (Boston School Forest, UWSP Museum of Natural History),</li> <li>• Build off of lessons already taught at Boston School Forest and CWES rather than duplicating (Mead Wildlife Area),</li> <li>• Establish relationships with existing youth programs like the Boys and Girls Club, scout programs, the University Child Learning and Care Center, or the YMCA (Wisconsin Lions Camp, UWSP LIFE Program),</li> <li>• Utilize the Friends of Schmeeckle Reserve to provide recreational experiences for college students and the community by partnering with organizations like UWSP Outdoor EdVentures, Pokey Pedalers, or Cyclovia (UWSP Outdoor EdVentures, UWSP Adventure Tours),</li> <li>• Consider the ways in which Schmeeckle Reserve is promoting sustainable practices through educational partnership ventures (Central Rivers Farmshed).</li> </ul>	<p>18</p>

**Table 9:** Do you have suggestions for the role that Schmeeckle can play? (continued)

Themes	Coded categories	
<p><i>Schmeeckle Reserve should cater to specific audiences types (i.e. youth groups, summer programming for young children, schools nearby, college students, community programs)</i></p>	<p>Ex. The Reserve has a role to play in community educational programming by...</p> <ul style="list-style-type: none"> <li>• Provide programming that serves non-formal youth groups like the Boys and Girls Club, 4H, church groups, and scout groups (UWSP LIFE Program, Boys and Girls Club of Portage County, Wisconsin Lions Camp),</li> <li>• Consider summer / camp programming for young children or pre-schools like the University Child Learning and Care Center or the YMCA’s Great Escapes program (UWSP LIFE Program, Camp Glacier Hollow YMCA),</li> <li>• Work with schools nearest the reserve or with programming focused on the environment such as the Tomorrow River Community Charter School, Stevens Point Area High School, or the Central Wisconsin Holistic Homeschool Co-op (Central Wisconsin Environmental Station, Aldo Leopold Audubon Society, Camp Glacier Hollow YMCA),</li> <li>• Do more for college students by providing recreational opportunities in the reserve (UWSP Outdoor EdVentures, UWSP Adventure Tours),</li> <li>• Continue to provide community programming that meets the needs of diverse audiences (Mead Wildlife Area, UWSP Adventure Tours).</li> </ul>	<p>13</p>

**SUMMARY OF PHASE ONE**

Interviews with program coordinators from educational organizations in the Stevens Point area revealed common and insightful responses regarding existing program strengths, uniqueness, areas for improvement, and recommendations for Schmeeckle Reserve. By understanding the thoughts and feedback of organizations dedicated to a common mission, the reserve can be more informed when determining the feasibility for expanding its educational programming. While feedback from this group is important, it encompasses one part of a three-phased model for assessing the needs of potential stakeholders to guide expansion of Schmeeckle Reserve’s current programming. Continued discussion and recommendations of this and the next two chapters (phases two and three) are included in the final chapter (chapter five).

## CHAPTER III: EXPLORING AUDIENCE PERCEPTIONS OF EDUCATIONAL PROGRAMMING AT INFORMAL LEARNING CENTERS

### INTRODUCTION TO PHASE TWO: ASSESSMENT

Schmeeckle Reserve, a campus natural area in the city of Stevens Point, WI, conducted a needs assessment for expanded educational programming. The previous chapter outlined the first phase, also known as the pre-assessment, or exploratory phase, of needs assessment study design. The primary goal of this phase was to determine *what is*, or the actual environmental education programming provided in the Stevens Point area. Approximately sixteen interviews with education program coordinators provided understanding of the perceived gaps in programming (i.e. underserved audiences, program strengths, etc.) that exist. The results of phase one provided insight regarding the role that Schmeeckle Reserve can play in community educational programming, but did not ask actual users about the extent to which their needs are being met by current community educational programming. This chapter takes into account the results of the first phase and explores the perceived needs for educational programming by soliciting feedback from three primary educational audiences in the Stevens Point-area: teachers, youth and adult program leaders, and individual residents.

### TREATMENT OF SUB-QUESTION(S)

The goal of the second phase of needs assessment research is to determine (sub-question 3) what are the user preferences, interests, and needs for environmental education programs among potential stakeholders. Table 10 demonstrates the research questions addressed in phase two of a three-phased needs assessment study design.

**Table 10:** Phase Two of Three-phased Needs Assessment Study Design

PHASE	SUB-PROBLEMS	OBJECTIVES	METHODS
Phase Two: Data Collection <i>2 Email Surveys</i> <i>1 Mail Survey</i>	(3) What user preferences, interests, and needs for environmental education programs exist among potential stakeholders?	Explore the perceived needs of three primary audiences in the Stevens Point-area (teachers, non-formal program leaders, and residents).	Administer surveys to analyze three primary audiences' interests and needs for educational programming.

## **BACKGROUND**

Three main audiences emerge as having a particular interest or need among most traditional informal education settings: formal (teachers and schools), non-formal (youth and adult groups), and the public (individual residents and families). Informal education settings include “any learning that occurs outside of formal education system in which the learner has choice and control over his or her experience” (Diamond, Luke, & Uttal, 2009, p. 11). Schmeckle Reserve is one such place within the Stevens Point-area, complemented by the nearly nineteen additional organizations identified in phase one that provide educational programming within the community.

The results of the first phase of the needs assessment research determined that there may be gaps in educational programming targeted at youth and community audiences. Additionally, reserve directors and staff have noticed an increase in requests for educational programming from these groups (Zimmerman & Buchholz, personal communication, August 26, 2013). While the reserve has provided environmental interpretation programming to community members through a partnership with the University of Wisconsin-Stevens Point environmental education and interpretation practicum students, this increase in program requests has caused reserve directors to question to what extent meeting these needs are worth exploring. In addition to understanding needs, assessments can determine the interest of individuals, or the “willingness to pay” for particular services (Henderson & Bialeschki, 2010, p. 70). No formal evaluation or feedback has been gathered related to the needs of these three audiences prior to this research.

### **Research Goals—**

The overall purpose of this study was to explore the needs of potential stakeholders for expanded environmental education programs at Schmeckle Reserve. A primary goal of this phase was to learn about the potential stakeholders’ user preferences, interests, and needs for educational programming that may inform the role that Schmeckle Reserve can play in expanded efforts. A shared goal of needs assessment research underlines the importance of learning about audience needs *before* a program has been designed to better understand how visitors will eventually respond once the project has been

developed (Diamond, Luke, & Uttal, 2009; Ernst, Monroe, & Simmons, 2009; Witkin & Altschuld, 1995).

## **LITERATURE REVIEW**

Many environmental education and interpretation programs, services, and media are developed through something other than formal needs assessment. Most ideas for educational programs come from the people most closely involved in a particular area—it's "my passion," or "my field," or "my experience" that determines the topic (Simmons, Easton, & Day-Miller, 2009). Although enlightening in certain circumstances, anecdotal evidence or program feedback cannot be reliably applied to a range of situations or used to make generalized statements about the larger program (Powell, Stern, & Ardoin, 2006). Rather, a variety of evaluative researchers propose various techniques for designing and implementing needs assessments as a tool to understand the needs of target audiences through systematic gathering of data.

Several studies have informed the needs of teachers with regard to planning formal education efforts and were used to create methods for this research. Jacobson (1995) explored the role of environmental education in schools in Bay Islands, Honduras using both qualitative and quantitative means. In-depth interviews, surveys, and document analysis determined that teachers largely viewed environmental education as a "tack on" to already demanding curriculum needs. In response, funders and researchers developed toolkits that were equipped with lessons that tied to curriculum and integrated environmental education based on the marine ecology of the area. In addition to this research, Monroe (2010) determined similar findings when assessing teacher's needs for environmental education services in central Florida. While these studies showed congruency in teachers' views of environmental education as a "tack on," very few studies have measured the interest or needs of non-formal audiences in community settings.

With that said, the primary purpose of collecting data is to inform decision makers about the diverse perspectives related to educational programming external to the organization. Therefore, designing methods that are reliable and valid in their ability to test a study's specific evaluation question

are critical to the success of the needs assessment (Henderson & Bialeschki, 2010). Michael Patton (2007) proposes evaluation should be focused on its intended usability—a function of an organization’s needs, wants, and logistical realities (Patton, 1999). In other words, a utilization-focused needs assessment is one that is developed for its intended user; therefore, questions and design should reflect what an organization’s staff and administration feel is most useful and realistic to be an outcome of the assessment (Powell, Stern, & Ardoin, 2006).

## **METHODOLOGY**

Three audiences emerged as having a potential interest in expanded educational programming at Schmeckle Reserve: teachers, youth and adult program leaders, and individual residents. A mixed-method survey was sent to each group to capture feedback regarding specific education program interests, barriers, and needs. As the literature suggests, audiences were sampled based on the best method for accessing each group (ex. email versus mail) and specific contacts and questions were determined by the researcher and approved by the decision makers, which includes three reserve program managers, one university faculty, and the principal needs assessor. All communications followed basic principles of Don Dillman’s *Tailored Design Method* (2007) to maximize response rates.

### **Institutional Review—**

Informed consent was obtained for each survey respondent that chose to participate in the survey (Appendices C & D).

### **Sampling—**

Teachers were sent the survey via a census method where every single person in the defined population was included (O’Leary, 2010). The study area included 501 teachers within the 17 public schools located in the Stevens Point School District. The census also included 18 teachers within the five schools involved in the Stevens Point Catholic School Network and 4 educators with membership in the Central Wisconsin Holistic Homeschool Co-op. A total of 523 respondents were sent a copy of the Schmeckle Education Needs Survey.

Because of limited access to a formal list of youth and adult program leaders, a snowball sampling method was used and involved building a sample through referrals. In social science, a snowball sample is respondent driven. A non-probability sampling method, initial subjects recruit future subjects from among their acquaintances, thus the sample appears to grow like a snowball (O'Leary, 2010). This method was chosen because there was not existing access to a contact list of non-formal program leaders prior to this study. Initial respondents for this study included youth group leaders, Scout leaders, or other organized adult groups were identified based on prior requests for educational services at Schmeeckle Reserve. After being asked to complete the survey, respondents were asked to identify others who met the study criteria. Criteria included: (1) Respondents must be a leader of a youth or adult non-formal education group, (2) groups must reside within the Stevens Point-area (Portage County), and (3) responses must be recorded by the survey close date. Respondents were asked to pass the survey along to qualified candidates. The “snowball” process continued until approximately 100 respondents were sent the survey and the contact list was exhausted.

Respondents from the community survey were selected via a simple random sample method were potential respondents within the population where randomly selected from a list and therefore given an equal chance of inclusion (O'Leary, 2010). The population consisted of homeowners within the city of Stevens Point and surrounding municipalities: town of Hull, villages of Park Ridge and Whiting, and cities of Plover and Stevens Point. Data was accessed via 2014 Portage County parcel data acquired using geographic information system (GIS) technology. Total population of homeowners included  $N = 11,004$  residents. A representative sample was calculated for a 95% confidence interval with approximately 4% error to determine the final sample ( $n = 588$ ). A randomization function in Microsoft Excel created the final list of homeowners that was used for the sample.

### **Survey Procedures—**

Crafting a successful survey takes a great deal of time and energy on the front end to confirm that questions are asked in a straightforward way to make every effort to ensure that respondents will read and reflect on each question in a similar way (Diamond, Luke, & Uttal, 2009). It is important practice to



ensure questions on a survey are clearly understood by pilot testing with a sample of people beforehand (O'Leary, 2010; Diamond, Luke, & Uttal, 2009; Meichtry & Harrell, 2002). Dillman (2007) proposes that surveys must possess a tailored design in which “the development of survey procedures create respondent trust and perceptions of increased concerns and reduced costs for being a respondent” (Dillman, 2007, p. 27). This social exchange suggests that the likelihood of respondent participation, accuracy, and completion is greater when the respondent *trusts* that the expected *concerns* of responding will outweigh the anticipated *costs* (Dillman, 2007; Henderson & Bialeschki, 2010). He suggests several techniques that build on this concept of trust, reward, and cost that were implemented in administration of all three surveys (i.e. make it personal, display mail surveys on folded tabloid paper, create a clean design, etc.).

To develop questions for each of the three surveys, one or more pilot testing procedures was utilized. The teacher survey was created using Select Survey proprietary software and pilot tested by emailing approximately ten educators (formal and non-formal) outside of the intended study population. Participants were asked to take the survey initially, making note of how long it took to complete, and to indicate any questions that were confusing, wordy, etc. A similar procedure was followed for the youth and adult program coordinator survey. Both surveys asked ultimately the same questions because needs were perceived to be similar; however, slight variation of wording occurred in order to reflect more relevant verbiage for each audience (ex. “group” versus “students,” etc.). Lastly, the community mail survey, different from the prior two, was tested with approximately 7-10 representative members of the homeowner population. Revisions were considered and re-piloted until suggestions were exhausted.

Dillman (2007) notes that different modes of data collection often produce different results. While the objectives for all three surveys were the same, to maximize response rates, a mixed-mode approach was applied where two of the surveys were emailed (sub-populations: teachers and youth and adult program leaders) and the final mailed (sub-population: community members). Past needs assessment research has proposed that the most successful method for contacting teachers is email survey versus more traditional methods (Monroe, 2002; Lake Superior National Estuarine Research Reserve, 2011; McDuff, 2002). There was limited research that described the best methodological practice for

contacting youth and adult community groups. However, it was assumed that a similar method (email survey) would be effective. Access to individual residents of Stevens Point was made possible through tax parcel data where all individuals with a physical address (i.e. homeowners) were included. This was the best method for contacting a wide-range of residents external to perhaps more cost-effective modes such as using the reserve email list. Research suggests that providing a digital Internet survey in addition to the hard copy mailed survey might increase convenience and reduce perceived “social cost” for the audience, which would thereby increase the likelihood of response (Dillman, 2007). However, this did not prove to be an overly effective method among respondents of this study.

While all three surveys depicted elements of the tailored design technique, the mail survey followed Dillman’s proposed methodology. Four contacts were made via mail and the entire process lasted approximately 4.5 to 6 weeks. A procedural timeline for all three surveys (mail and email) is included in Table 11.

**Table 11:** Phase Two Survey Methodology Timeline

Sample	Survey Mode	Initial Contact	Pre-notice letter (#1)	Survey (#2)	Thank you / Replacement Survey (#3)	Final contact (#4)	Survey Close
Teachers	Email	Administered by Stevens Point District Superintendent	May 27th	June 4th	June 9th	June 11th	June 15th
Youth / Adult Leaders	Email	Sent to initial program coordinators	First week of June	June 19 <sup>th</sup>	First week of July	July 21 <sup>st</sup>	Aug. 1 <sup>st</sup>
Community Members	Mail Internet	Sent to randomly selected homeowners	Aug. 27 <sup>th</sup>	Sept. 2 <sup>nd</sup>	Sept. 8 <sup>th</sup>	Sept. 24 <sup>th</sup>	Oct. 15 <sup>th</sup>

**Analysis—**

Results of each survey were analyzed using the Statistical Package for Social Scientists (SPSS) database management program. All questions were analyzed using descriptive statistics, including frequency distributions. To detect patterns among variables, a chi-square test compared significance between nominal levels (Henderson & Bialeschki, 2010). Open-ended questions were transcribed and

coded for common themes (Gibbs, 2007). The summarized results were compiled approximately two weeks after the survey close date. All answers remained confidential in order to protect the respondents. Additionally, an undergraduate research assistant was recruited and hired to assist with the four-phase mail distributions and mail survey data entry.

### **Limitations—**

All three surveys faced unique limitations based on time, money, or access to respondents. A major limitation to the teacher survey was that responses were collected during the end of the 2013 / 2014 academic calendar just before school let out for summer. In addition to being administered during a busy time at the end of the academic school year, the survey was limited in its mode of contact, using only a web-based survey and email to notify teachers of the opportunity. Literature states that the highest response rates are achieved when a bi-modal contact method is provided to respondents, where for example, they are able to provide feedback in multiple ways, like hard copy and digital survey (Nulty, 2008; Mertler, 2003).

Youth and adult program coordinators were contacted via snowball sample. Therefore, the population was limited to self-selected individuals who were sent the survey based on desired affiliation with a youth or adult non-formal education program. While feedback from this group is valuable, this contact method asserts that there is no way of knowing whether the sample is representative of the population.

A major limitation to the homeowner survey was that respondent addresses were unable to be tracked because of a miscommunication with the mailing distribution center. For example, where each survey was initially marked with a unique identification number (UID), during replacement survey mailing, the physical address spreadsheet sent to the mailing distribution center was scrambled—resulting in surveys returned that did not match the initial assigned UID. Due to this miscommunication, contact was not made to non-respondents that might have given insight as to non-response bias. To mitigate for this next time, the researcher will write UID's by hand on every survey.

A complete list of questions that were asked to teachers and non-formal youth and adult program

leaders is displayed in Appendix D followed by procedure guides for each group: Teachers (Appendix E) and non-formal program leaders (Appendix F). Survey questions for homeowners are shown in Appendix G as well as a procedure guide (Appendix H).

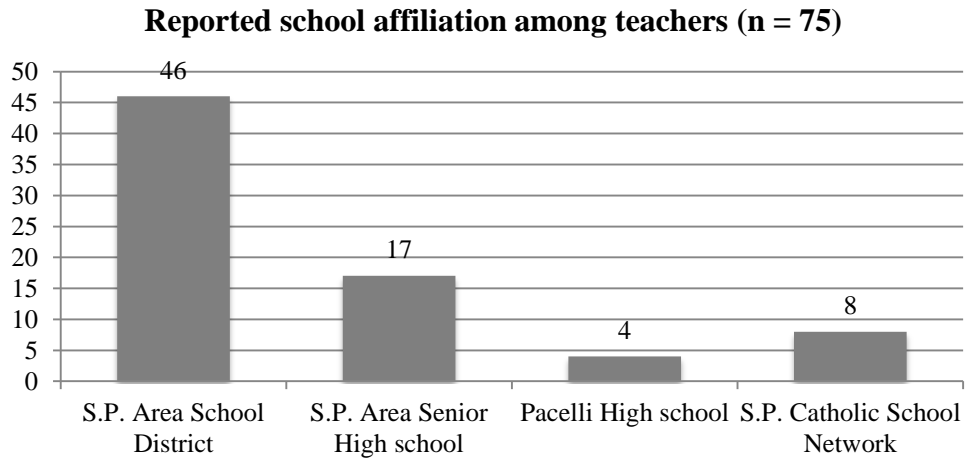
## **RESULTS**

The overall purpose of this study was to explore the needs of potential stakeholders for expanded environmental education programs at Schmeckle Reserve. Results of the second phase of research are reported below.

**Sub-problem 3:** What are the past user preferences, interests, and needs for environmental education programs among potential stakeholders?

Three stakeholder groups were surveyed in order to understand past user preferences, interests, and needs for environmental education at Schmeckle Reserve. A census of teachers in the Stevens Point area included public schools within the Stevens Point School District, Catholic schools within the Stevens Point Catholic Schools Network, and one homeschool targeted as the Central Wisconsin Holistic Homeschool Co-op. Approximately 92 respondents out of 523 completed the email survey (17.6% response rate). One question asked teachers to identify school affiliation. Of the total survey respondents (n = 92), 75 respondents shared school affiliation. Results are listed in Figure 6.

**Figure 6:** School affiliation among teachers



The most commonly reported grade level taught was among middle / junior high school (30.4%), followed by elementary (28.3%) and high school (27.2%) teachers. Science was the most commonly taught subject (48.3%) among survey respondents.

A second email survey was sent via snowball sample to youth and adult program coordinators. Approximately 28 respondents completed the survey out of 100 reported having been sent the survey (28.0% response rate). Well over half served audiences under 18 years old (67.4%) and the spatial location of the sample organization's target audience reach was nearly evenly distributed among the surrounding Stevens Point-area municipalities: Stevens Point (26.4%), Plover (19.4%), Park Ridge (19.4%), Whiting (18.1%), and Hull (16.7%), which appears anecdotally to be representative of the Stevens Point community.

Lastly, a random sample of 588 community members was sent a mail survey that led to 187 returned (31.8% response rate). Out of the total population of homeowners (N = 11,004) the overall response rate is 1.7% of the total population. A breakdown of township residency showed that 24.1% of respondents were from the village of Plover, 17.1% from the town of Hull, and 5.9% from the village of Whiting. The majority of respondents were female (64.2%), age 46 and over (72.8%).

When asked how many people live in their home, the average response was between two and three people (M = 2.55, SD = 1.13). However, the majority of respondents (71.1%) said that there were not minors living in the home.

***Past user preferences related to environmental education—***

Three questions on the survey targeted understanding teachers’ user preferences related to environmental education. Questions included: What is your past participation in environmental education activities? Where have you taken students? What topics related to environmental education have you emphasized? A similar set of questions was asked to youth and adult program leaders, or non-formal program leaders. Respondent results for the first two email surveys are listed in the paragraphs below.

Teachers were asked to rate their past use of environmental education activities, where a 1 equaled “no classes,” a 2 equaled “a portion of one class,” and a 3 indicated “one or more classes.” On average (M = 2.55, SD = 1.33) teachers engage their students on field trips that involve environmental education more often than inviting groups to their classroom to conduct outreach programs (M = 2.01, SD = 1.38). Teachers most commonly reported utilizing environmental education activities for a portion of one class compared to one or more classes, or not at all. Overall, 58.2% of teachers responded as having spent time taking their classes on field trips focused on the environment. Specific details are included in Table 12.

**Table 12:** Teachers’ past use of environmental education activities with students

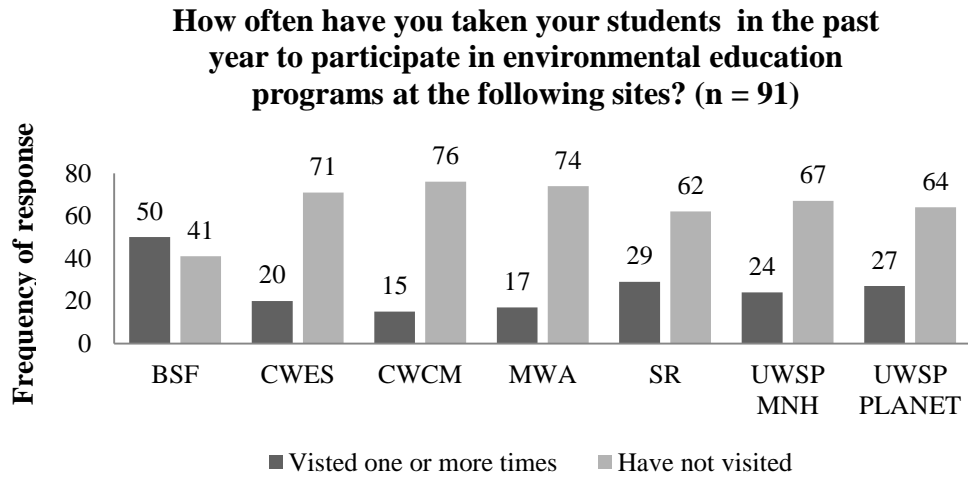
How often have you participated in environmental education activities with your student / group?	N	M	SD	Teachers		
				No classes	A portion of one class	One or more classes
<i>How often have you invited outside organizations to your classroom to lead a program connected to the environment?</i>	92	2.01	1.33	8	26	8
<i>How often have you taken your students on a field trip to participate in a program that focuses on the environment?</i>	91	2.55	1.38	8	38	15

Note: 1 equaled “No classes,” 2 equaled “A portion of one class,” and 3 equaled “One or more classes” measured on an annual basis.

Additionally, about one third of teachers (31.9%) reported having used Schmeckle Reserve in the past as an environmental education destination to bring students. Schmeckle Reserve followed Boston School Forest as the most frequently reported destination to bring students (54.9%). This is not

surprising because of the heavy participation among respondents from Stevens Point School District teachers who have an agreement with the school forest to bring each class one time per year. See Figure 7 for detailed responses.

**Figure 7:** Teachers’ past field trip use of Stevens Point environmental education destinations



Teachers were asked what concepts they placed importance on within their curriculum to determine content areas where future environmental education topics may align. Topics were chosen based on the Wisconsin Model Academic Standards for Environmental Education. Since 1983, the people of Wisconsin, through their elected officials, have achieved important environmental education goals. These goals comprised topic areas included in this survey question (Fortier, Grady, Lee, & Marinac, 1998). Teachers reported heaviest emphasis was placed on personal and civic responsibility (80.5%) as well as questioning and analysis / scientific process (74.7%). Specific details are listed in Table 13.

**Table 13:** Teachers’ emphasis on environmental education topics (n = 87)

How much emphasis did you give each of the following topics?	Little or no emphasis		Moderate to heavy emphasis	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Cultural / Heritage Resources	34	39.0	53	60.9
Energy and Ecosystems	32	36.8	55	63.2
Environmental Issue Investigation Skills	34	39.0	51	58.6
Natural Resources and Environmental Quality	35	40.2	51	58.6
Decision and Action Skills	24	27.6	59	67.8
Outdoor Recreation	38	43.7	48	55.1
Personal and Civic Responsibility	16	18.4	70	80.5
Questioning and Analysis / Scientific Process	22	25.3	65	74.7

*Note:* Question type was a grid format where respondents checked *either* little or no / or moderate to heavy emphasis.

Youth and adult program leaders reported bringing their groups offsite to participate in field trip activities (M = 3.15, SD = 1.54) more commonly than inviting an organization to their site to teach (M = 2.7, SD = 1.59). Respondents indicated bringing their group members on field trips at least one time per year (77.8%) slightly more frequently than inviting outside organizations to their locations (70.4%). Specific details are listed in Table 14.

**Table 14:** Youth and Adult Program Leaders’ past environmental education use

How often have you participated in environmental education activities with your student / group?	N	M	SD	Non-formal Program Leaders		
				No classes	A portion of one class	One or more classes
<i>How often have you invited outside organizations to your classroom to lead a program connected to the environment?</i>	27	2.7	1.54	8	3	16
<i>How often have you taken your students on a field trip to participate in a program that focuses on the environment?</i>	27	3.15	1.59	6	1	20

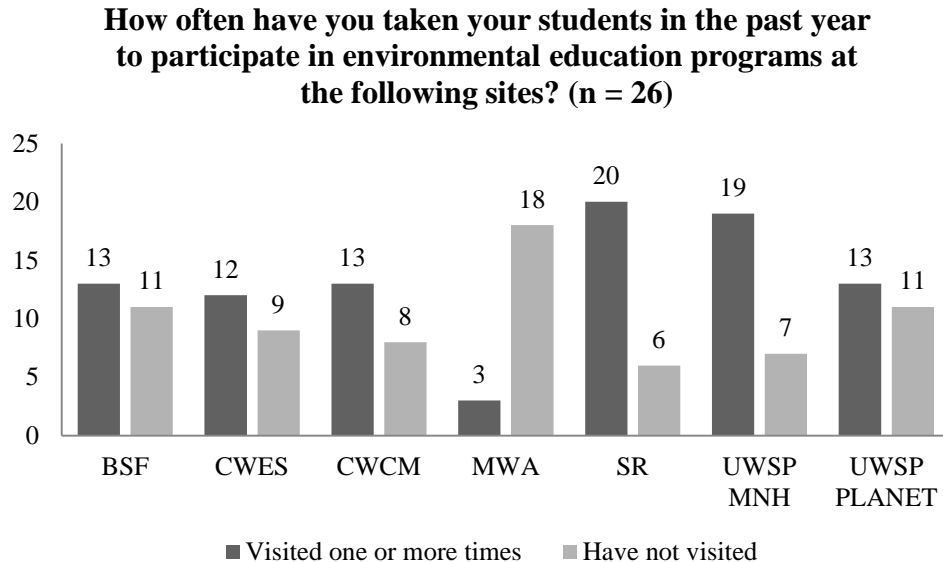
*Note:* 1 equaled “No classes,” 2 equaled “A portion of one class,” and 3 equaled “One or more classes” measured on an annual basis.

The researcher asked youth and adult program leaders about their past utilization of facilities that provide environmental education in order to understand what locations within the Stevens Point area are most commonly visited among these groups. The overwhelming majority of program leaders (76.9%) responded having used Schmeckle Reserve one or more times in a year to fulfill their groups’ environmental education programming needs. The University of Wisconsin-Stevens Point Museum of Natural History and Planetarium were the second (73.1%) and third (50.0%) most heavily visited,



indicating that there may be some relationship with proximity involved with the selection of these organizations to utilize within the Stevens Point area. See Figure 8 for detailed responses.

**Figure 8:** Youth and adult program leaders' past field trip use in Stevens Point



Homeowners were asked a variation of these questions related to their past user preferences toward environmental education. The researcher asked how respondents heard about Schmeckle Reserve, what past experience they had, as well as past experience related to educational programming.

Overwhelmingly, individual residents, or homeowners, had heard of Schmeckle Reserve (98.4%). Of those respondents, the vast majority (86.3%) reported having heard of the reserve through a personal connection (i.e. from a friend, my family, or kids), affiliation (i.e. as a student, work on campus), or other onsite recognition (i.e. drove by, noticed a sign).

When homeowners were asked about past user experiences at the reserve, the vast majority reported having used the trails (86.8%). Visiting the “Land of Wealth” museum and the Wisconsin Conservation Hall of Fame were listed second highest (54.8%), followed by attending educational programs (41.2%). The majority of respondents reported that they do not visit the reserve to participate in

educational activities on a regular basis, with some saying they have not visited at all (51.9%), have done so 1-3 times per year (42.5%), or 4-6 times per year or more (55.2%).

***Interest in environmental education—***

All three groups were asked to indicate their level of interest in attending educational programs at the reserve. A chi-square test of independence was performed to examine the relationship between groups surveyed and interest for educational programming. The relation between these variables was not significant  $\chi^2(2) = .305$ . Group affiliation does relate to level of interest in education programs at Schmeeckle Reserve. All groups including teachers (N = 87, M = 3.77, SD = 1.28), non-formal educators (N = 23, M = 4.39, SD = 0.78), and homeowners (N = 184, M = 3.54, SD = 0.97) indicated they were somewhat to strongly interested in education programs. Specific details are listed in Table 15.

**Table 15:** Chi-square comparison of interest in education programs at Schmeeckle Reserve

Interest Scale Across Groups	N	M	SD	Uninterested		Neither interested or uninterested		Interested		$\chi^2(1)$
				Count	Percentage	Count	Percentage	Count	Percentage	
Teachers	87	3.77	1.28	15	17.2%	17	19.5%	55	63.2%	.305 p = .858
Non-formal Program Leaders	23	4.39	0.78	0	0%	4	17.4%	19	82.6%	
Homeowners	184	3.54	0.97	28	15.2%	38	20.7%	118	64.1%	

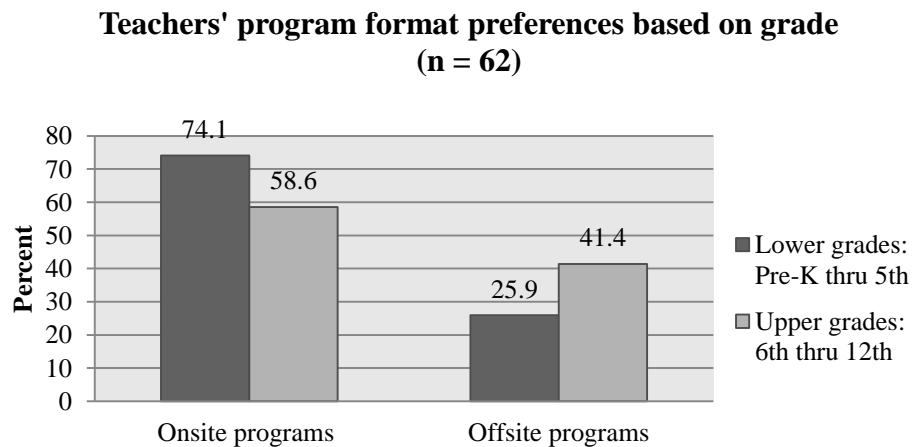
Note: Chi-Square value was not significant meaning that the level of interest was not a function of group. All groups reported interest in educational programs at Schmeeckle Reserve. Group means are shown in the graph below, where 1 equaled "Strongly uninterested," 3 equaled a neutral mid-point, and 5 equaled "Strongly interested."

Additional questions addressed to teachers and youth and adult program leaders asked about program format preferences (i.e. guided versus self-guided, travel trunk versus outreach / offsite programs) as well as seasonal preferences (i.e. spring, summer, winter, or fall). Homeowners were also asked about program formatting preferences, except the categories were slightly different, more applicable to program preferences of that group (i.e. workshop, guided hike, special event, citizen science, etc.).

Over half of teachers indicated that they preferred Schmeeckle staff provide a guided field experience (56.0%) for their students compared to educators coming to their school to conduct what is commonly referred to as "educational outreach" (25.3%). These options outweighed additional choices

such as providing teachers with resources to conduct their own programs, such as self-guided field experiences (16.0%), or sending them a travel trunk (2.7%) to provide their own education in their classrooms. However, when categorized, teachers who taught lower grades (pre-K through 5<sup>th</sup> grade) indicated a stronger interest for onsite programming provided by Schmeeckle Reserve educators (i.e. guided field experiences) than teachers from grades six through high school, indicating a greater need for assistance with younger grades. A seasonal preference for field trips during the spring (80.5%) and fall (59.8%) versus winter (17.2%) or summer (9.2%) were also recorded as preferred. Specific details are shown in the Figure 9.

**Figure 9:** Teachers' preferences for on-site versus off-site programming based on grade level



Youth and adult program leaders reported a similar response to interest in a guided field experience for their group participants (54.5%) compared to educational outreach (18.2%), a self-guided field experience (18.2%), or a travel trunk (9.1%). Unique to this group, interest in educational programming leaned towards spring (69.2%) and winter (69.2%) compared to summer (42.3%) or fall (42.3%).

Homeowners were asked to indicate activities of interest at the reserve. A majority (55.1%) indicated attending a special event was of most interest. Almost half of respondents preferred programs facilitated by Schmeeckle Reserve (46.6%) versus self-guided activities (34.5%). Other responses

included interest in “both” (9.6%), “depends on the program topic” (5.2%), or “not interested” (3.4%). Specific details are listed in Table 16.

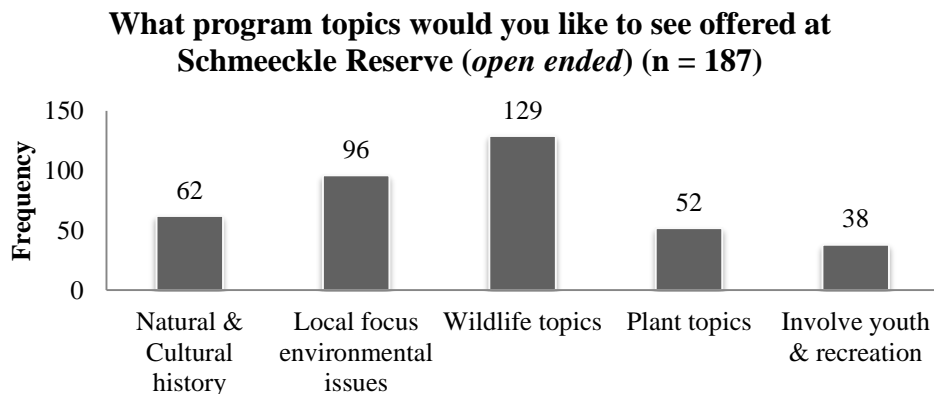
**Table 16:** Homeowner education program format interest (N = 187)

Which activities would you prefer to participate at the Reserve?	n	%
Citizen Science	34	18.2
Workshop	64	34.2
Guided Hike	88	47.1
Indoor Program	58	31.0
Special Event	103	55.1
Other	16	8.6

Note: Totals of percentages are not 100 for every characteristic because of rounding.

An open-ended question asked respondents to elaborate on the topics they wanted to see offered at the reserve. 106 respondents out of 187 total (56.7%) provided feedback. Results were broadly coded, where topics were grouped based on emergent themes among respondents. For example, wildlife topics included examples such as owls, birds, turtles, bees/insects, mammals/bats, fish, hibernation strategies, and nocturnal wildlife, to name a few. Examples of environmental issues included programs that focus on central Wisconsin, such as water levels in Portage County, Schmeckle Reserve research, deer tick infections in Wisconsin, wildlife and human encounters, etc. Additionally, homeowners wished to know about potential land acquisition for Schmeckle Reserve. See Figure 10 for detailed responses.

**Figure 10:** Homeowner response to open-ended interest in program topics

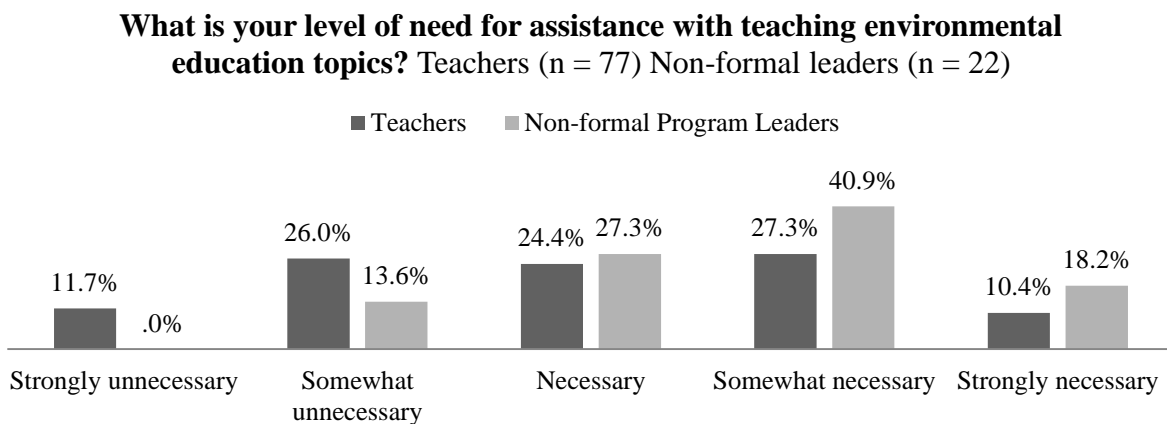


Lastly, homeowners indicated preference for programming during fall (69.5%) and summer (61.0%) compared to spring (49.2%) and winter (26.2%). Respondents were asked when the best time to attend programs might be. Weekends scored moderately higher than weekdays, and of those weekend afternoons (51.3%) and weekday evenings (44.4%) were preferred.

***Needs for environmental education—***

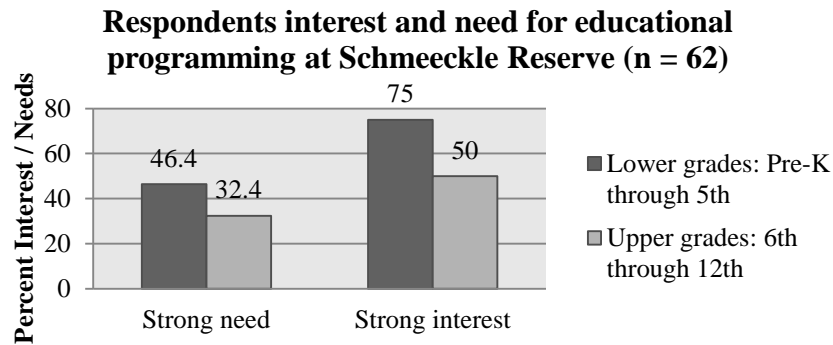
Teachers and youth and adult program leaders were asked their level of need for assistance with teaching environmental education topics. Non-formal (youth and adult) program leaders demonstrated the most need for assistance with teaching and environmental education topics. See Figure 11 for detailed responses.

**Figure 11:** Level of need for assistance with teaching EE topics



To better understand how needs and interests aligned with grade levels taught, a comparison of elementary teachers (grades pre-k through 5<sup>th</sup>) indicated both a strong interest *and* need for educational programs and services at Schmeckle Reserve compared to middle and high school (grades 6<sup>th</sup> through 12<sup>th</sup>). This finding demonstrates a potential focal area for expanded programming designed for teachers at Schmeckle Reserve. See Figure 12 for specific details.

**Figure 12:** Teachers interest and needs compared to grade level taught



All three groups were asked an open-ended question about what programming suggestions might fulfill their education needs. Teachers, youth, and adult program leaders responded with subject-area standards as well as overarching “best practices” for implementing educational programs, whereas homeowners indicated general responses for what they wish to see for the future of Schmeckle Reserve.

Overall, teachers wished for students to learn basic natural resource topics (ex. adaptations, pond study, plant and animal identification) (50.0%). One respondent reported, “Programs should connect to the natural environment and provide the students with a greater sense of place through knowledge of different types of habitats, importance of wetlands, etc.” Additionally, a connection to higher-level learning was emphasized (17.2%), “Dependence of living creatures on their environment and the interaction among different ecosystems found at Schmeckle Reserve.” A shared sentiment that might be expected among both teachers and youth and adult program leaders suggested programs should be “experiential and interdisciplinary, including not just sciences, but math, art, literature, music, and geometry as well.” Lastly, exploring “human and social interactions with our environment” was a commonly suggested strategy for making programming *relevant* to youth audiences.

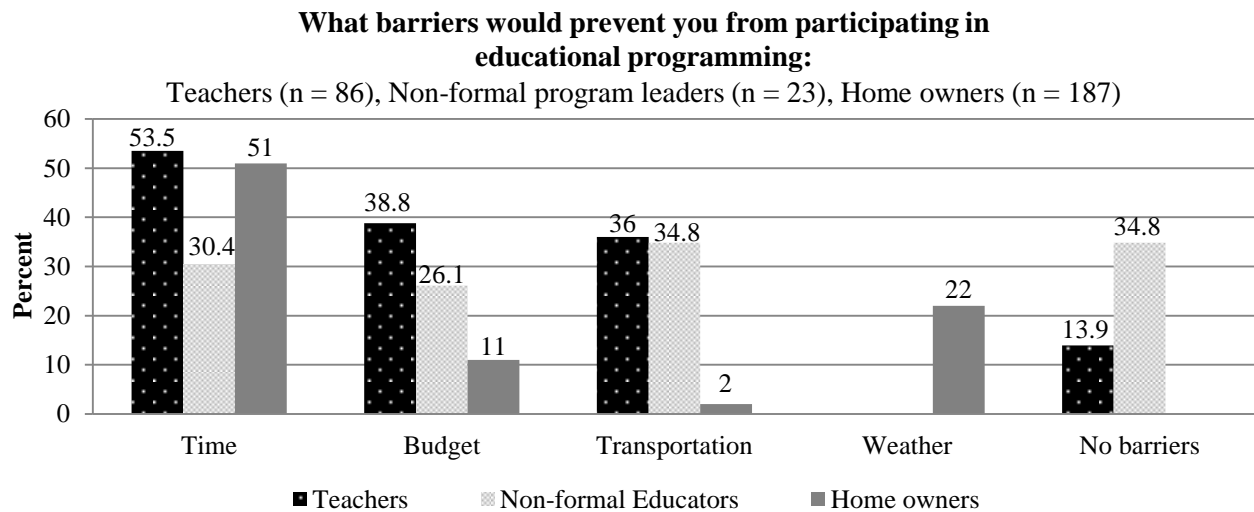
Out of 47 respondents, the majority of homeowners (57.4%) indicated that Schmeckle Reserve should “not change what they are doing” regarding educational programming. One respondent stated, “Schmeckle Reserve is truly a gift to our city and all who visit.” Where suggestions were made, some respondents (14.9%) provided the following insights: “Consider offering programs targeted at youth, senior citizens”; “Coordinate with master gardeners or other non-profits that match the mission”; and “Do

more for the younger kids.” Finally, 19.1% spoke to management concerns that were unrelated to the education needs survey, and 10.6% of respondents thanked Schmeeckle Reserve for their “interest in community interests and needs” by sending the survey.

***Barriers to participating in environmental educational programming—***

Teachers, youth and adult program leaders, and homeowners also shared perceived barriers that prevent them from participating in educational programs at Schmeeckle Reserve. Time appeared to be the largest barrier for all groups, followed by budget and transportation. Assuring program affordability and scheduling will be important tasks to make programming accessible to these groups. Lastly, teachers as well as youth and adult program leaders were concerned with transportation, likely due to the challenges of moving a large group offsite. Only homeowners were asked if weather provided a barrier. Specific results are included in 13 for specific details.

**Figure 13: Perceived barriers for participation in educational programming**



Teachers as well as youth and adult program leaders were asked what resources would assist with overcoming perceived barriers. Coded responses from the open-ended question showed that money (“Keep the costs low” ; “Support funding for buses”), standards-based programming (“Design programs that connect with standards so that they are relevant and justifiable”), and extended-learning resources

(“Provide pre-lessons that can be implemented before attending the field trip to save time”) were most frequently indicated needs.

## **SUMMARY OF PHASE TWO**

Three surveys sent to potential Schmeckle Reserve educational programming stakeholders revealed insightful responses regarding use, interest, and needs both unique and common among teachers, youth and adult program leaders, and homeowners. Key findings from phase two determined *what should be* according to survey respondents. In short, non-formal program leaders indicated the strongest interest, need, and past use of guided community environmental education field experiences compared to teachers and homeowners. Barriers to participating in educational programs at Schmeckle Reserve included time, budget, and transportation considerations. Residents from the homeowner survey showed a strong interest in expanded special event programming, particularly during the summer months. Finally, the strongest interest and need for programming at Schmeckle Reserve was described among elementary teachers.

Gathering feedback regarding the needs of these groups is important to understand how Schmeckle Reserve can best serve its potential audiences with expanded educational programming. “People are most apt to attend or participate in an educational activity when the content bridges the gap between their present knowledge or skill and their need for additional information or skills” (DeSilets, 2006). While findings from these groups are important, they encompass one part of a three-phased framework. Continued discussion and recommendations of the combination of all three phases of the needs assessment are included in the final chapter—chapter 5.



## CHAPTER IV: A GROUP PROCESS FOR SYNTHESIZING EDUCATIONAL NEEDS OF A COMMUNITY ENVIRONMENTAL EDUCATION PROGRAM

### INTRODUCTION TO PHASE THREE: POST-ASSESSMENT

As stated in previous chapters, the major purpose of this assessment is to collect information that sets priorities on needs and establishes a rational basis for allocation of resources at Schmeeckle Reserve. A needs assessment is not complete unless plans are made to apply the information in a practical way (Witkin & Altschuld, 1995). Where the results of the first two phases describe the differences between *what is* and *what should be* with regard to environmental education programming at Schmeeckle Reserve, phase three provides a bridge from analysis to action—connecting reality to the ideal goals through feasible implementation of needs-based solutions.

### TREATMENT OF SUB-PROBLEMS

The goal of the final phase of needs assessment research is to determine (sub-question 4) what conclusions can be drawn from potential stakeholders that inform development of Schmeeckle Reserve’s educational focus or mission. Table demonstrates the research question addressed in the final phase of a three-phased needs assessment study design.

**Table 17:** Phase Three of Three-phased Needs Assessment Study Design

PHASE	SUB-QUESTIONS	OBJECTIVES	METHODS
Phase Three: Utilization  <i>Group Decision Meeting</i>	(4) What conclusions can be drawn from potential stakeholders that inform the development of Schmeeckle Reserve’s educational mission?	Analyze the results of the needs assessment and provide recommendation for expanded environmental educational programming at Schmeeckle Reserve.	Summarize results and communicate to reserve administrators and the planning committee. Assess the feasibility of implementing expanded educational efforts.

### BACKGROUND

Limited resources prevent non-formal environmental education organizations from identifying gaps in educational programming efforts. Determination of gaps assist with aligning the mission of the organization with the target needs of the audience it is serving. Practices like needs assessment are often overlooked because of limited staff, expertise, time, or lack of confidence or experience in evaluation, but are critical to designing programs that align with

community needs, producing responsible benefits that address those needs (The North American Association for Environmental Education, 2004).

### **Research Goals—**

The overall purpose of this study was to explore the needs of potential stakeholders for expanded environmental education programs at Schmeeckle Reserve. A primary goal of this phase was to learn about potential stakeholders' use, interest, and needs for educational programming that may inform the role that Schmeeckle Reserve can play in expanded efforts. The goal of this chapter was to communicate the results of the needs assessment to key decision makers who ultimately determine the implementation of programmatic changes. Results were presented to the decision makers two weeks in advance of a collaborative group process meeting, which created a shared space with which to consider findings and weigh alternate strategies. Involving decision makers in decision-making is important because it fulfills their previous commitment (prior to the initiation of the needs assessment) to take constructive action based on needs assessment findings (Witkin & Altschuld, 1995).

### **LITERATURE REVIEW**

In past decades, practitioners and researchers have questioned the role of evaluation in providing *useable* data compared to other *theory-driven* frameworks. Both provide varying levels of insight related to a site's intended evaluation question. Some say that wisdom emerges when theory *meets* practice and honest, in-depth inquiry (Patton, 1999; Powell, Stern, & Ardoin, 2006). Patton (1999) proposes a new look at evaluation research as one that focuses on *value*. He states, "utilization-focused evaluation begins with the premise that evaluations should be judged by their utility and actual use" (p. 371). Recommendations of this broad design emphasize the nature of the framework as it does not prescribe any specific content, method, or theory opposed to a concrete or fixed methodology. Additional researchers agree with specific regard to needs

assessment that the means of reaching outcomes are completely dependent on the unique evaluation question(s) (Witkin & Altschuld, 1995; Ernst, Monroe, & Simmons, 2009).

Where evaluation practitioners and researchers also agree, is in the utility of decision-making that follows completion of needs assessment. “Decision making, in consultation with those who can benefit from the evaluation, is an important part of the process. As important is the fact that intended users will more likely utilize an evaluation in which they have ownership” (Patton, 1999; Powell, Stern, & Ardoin, 2006). Well-designed needs assessments are highly participatory, inviting a broad range of stakeholder feedback rather than designed to validate a pre-determined course of action (Simmons, Easton, & Day-Miller, 2009). For these reasons, decision-makers are essential in guiding the development of the assessment. These people included the reserve director, assistant director, outreach coordinator, and advisor to the interpretation practicum program.

As Schmeckle Reserve’s needs assessment progressed, increased requests for educational programming continued confirming that reserve decision makers’ *hunch* might be true and decisions were necessary to be made. Witkin and Altschuld (1995) assert that group processes are the most widely used method for gathering opinions and data for needs assessment because of the inclusive nature that invites decision makers into the process (p. 153). While meeting platforms can take different formats, the salient feature is the “opportunity for face-to-face interaction among those who have pertinent knowledge or a stake in the assessment” (Witkin & Altschuld, 1995). Group processes are important to needs assessment because they demonstrate the willingness and interest of the needs assessors to commit to the utility of the assessment. Outlined in the methodology section are the steps taken in reporting, prioritizing, and implementing solutions.

## **METHODOLOGY**

In phase three, the decision makers join the process by considering findings and weighing alternate solution strategies, thus fulfilling their previous commitment to take constructive action

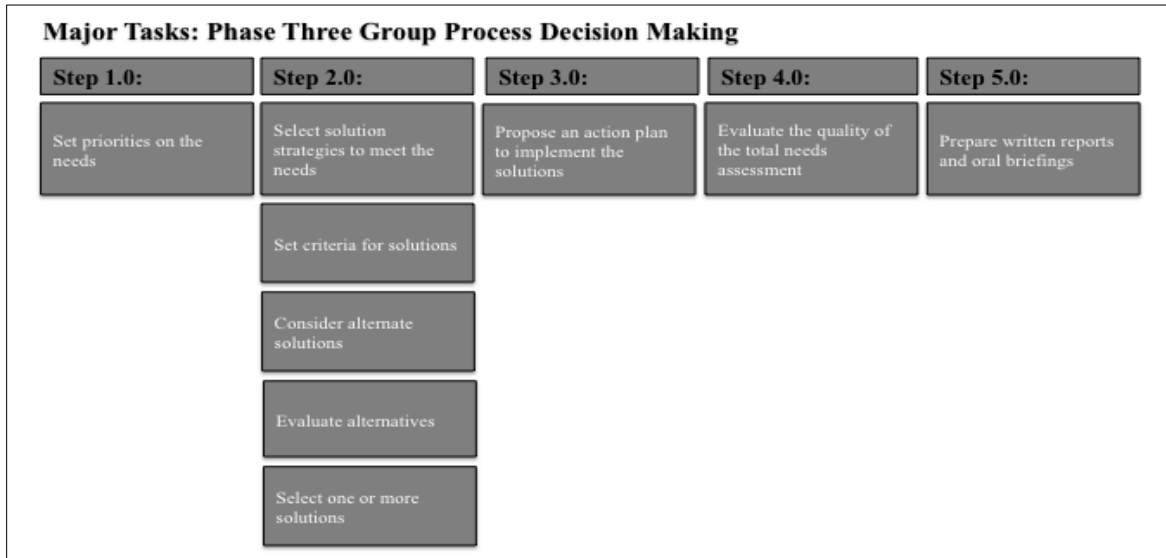
based on the needs assessment (Witkin & Altschuld, 1995). For Schmeckle Reserve, decision makers included the director, assistant director, outreach coordinator, graduate student research advisor, and the needs assessor. Individuals were selected based on their role as a program manager at Schmeckle Reserve or connection to the educational efforts at the reserve. Figure 14 shows meeting participants (graduate advisor not pictured). Additionally, as the literature suggests, participants had an inherent interest in the outcome of the decision because they were involved with the design of the needs assessment from the beginning.



**Figure 14: Group Process Meeting**

Decision makers reviewed a report that outlined key findings of the first two phases of the needs assessment during December 2014. The complete needs assessment report detailed the first two phases of research and aimed to describe the situation, or *what is*, as well as the actual, *what should be*, essential feedback from stakeholders. Included in the report were detailed findings supported by charts, graphs, and expressed using descriptive statistics from interviews with education program coordinators (phase one) as well as survey results from potential users of educational programming: teachers, youth and adult program coordinators, and homeowners (phase two). The purpose of the group process meeting was to consider what the results of phase one and two mean, according to key decision makers, for the role that Schmeckle Reserve may play in community educational programming. By giving individuals the report in advance of the meeting, decision makers were free to make independent judgment about the results of the first two phases and share their opinions collectively. The following steps outlined in Figure 15 highlights the steps proposed by Witkin and Altschuld (1995) for group process decision meetings. A complete agenda is listed in Appendix I.

**Figure 15: Major Tasks for Phase Three Decision Making**



The group process meeting was broken up into three main parts that mirrored steps one through three of the Major Tasks for Phase Three figure shown in Figure 15. An overall introduction thanking participants for attending and outlining the meeting agenda were presented by the principal needs assessor, followed by meeting proceedings. Group process questions and an approximate timeline are included in Table 18.

**Table 18: Group Process Meeting Question Prompts**

<b>Group Process</b>	<b>Question Prompt</b>	<b>Time</b>
<b>Part One</b>	What needs among potential stakeholders appear to be most critical?	30 minutes
<b>Part Two</b>	What is the role that Schmeckle Reserve can feasibly play in fulfilling those needs?	35 minutes
<b>Part Three</b>	What are possible short and long-term solutions or strategies to meeting those needs?	40 minutes

The meeting lasted two hours, was recorded, and transcribed to accurately analyze and document the thoughts and outcomes of decision makers. Transcribing the meeting audio provided a control that increased internal validity, or the degree to which the research provides a true picture of the situation and / or people being studied (Gibbs, 2007).

## RESULTS

The overall purpose of this study was to explore the needs of potential stakeholders for expanded environmental education programs at Schmeeckle Reserve. Results of the third phase, a group process meeting with key educational programming decision makers, provided insight regarding the critical needs of potential educational users. Discussion of the role that Schmeeckle Reserve can play in fulfilling those needs and determination of possible strategies to achieving educational program goals are included in the report below and address the final sub-problem:

Sub-problem 4: What conclusions can be drawn from potential stakeholders that inform the development of Schmeeckle Reserve's educational focus / mission?

Schmeeckle Reserve decision makers (also referred to as respondents) were asked to independently draw conclusions from the needs assessment report prior to participating in the group process meeting. They were additionally asked to consider group process meeting questions listed in Table and summarized below.

### ***Question One: What needs among potential stakeholders appear to be most critical?***

The following were identified and agreed among decision makers to address question one:

1. *There appears to be a strong need for non-formal youth programs that fulfill specific curriculum objectives.*

Several responses support this need and expand on its potential application at Schmeeckle Reserve. One statement demonstrated broad observation of the needs of non-formal program leaders, asserting, "Just as formal educators have curriculum needs, the youth groups have certain things that they are rewarded for as lay leaders and they have monthly planning sessions for that." Additional statements suggest that based on the needs assessment findings, needs are strongest among untrained parent Scout leaders. "Both youth group leaders and Scouts who are untrained in natural history based concepts come to us for a guided experience...they are looking for professionals to assist them...so, one of these needs is for Scout leaders that need more

information about a specific topic to come to us to get that information...putting myself in their shoes and thinking how am I going to fill this time?"

2. *There is a need for daytime educational programming geared towards children and families offered during summer months.*

Schmeckle Reserve decision makers noted that the homeowner survey showed a strong need for educational programming during the summer. It was noted that such programming has been provided at Schmeckle Reserve in decades past. A respondent states, "During the 1980s, we [Schmeckle Reserve] had program staff (two full-time students) that just did day-time programming. We used to get family groups and young mothers with children." While it was noted that this audience is "difficult to get feedback from," it is safe to assume, "if programming were provided, it would be heavily used." Additionally, there was support for serving this group because of perceived patronage to the Reserve. "Some parents who brought their kids to those programs are grandparents now. I see them, they are still Schmeckle users," the respondent said.

3. *There appears to be a community interest in expanded special, one-time events open to the public, providing for a unique, novel experience, different than regularly scheduled programs.*

Schmeckle Reserve decision makers agreed that a perceived interest was present among homeowners, who noted there was a need for continued and expanded efforts regarding special event programming. Examples of existing programs mentioned included the Friends of Schmeckle Reserve Volunteer Day, Research Sampler Series, as well as bi-annual Candlelight Hike events. Opportunities for new, authentic special events included suggestions for a walk through Hyland Forest (newly acquired land north of the reserve), a director-led special program, and a wildflower walk led by a university expert. Overall, decision makers agreed the emphasis of this need was on "once a year or once in a lifetime, novel programming apart from general public programming."

4. *There is a perceived need to provide guided field experiences to school groups on a limited basis (ex. once per week); however, additional information about current users (teachers) is needed.*

Schmeckle Reserve decision makers agreed that there was a need among teachers to bring students on guided field experiences at Schmeckle Reserve; however, it did not appear overwhelmingly great. One respondent pointed out that while “more than 50% of teachers indicated that there is a need for teaching or reinforcing topics at Schmeckle Reserve” interest was lowest among this group compared to non-formal groups and homeowners.

Despite teachers showing the least interest and need for educational programs at Schmeckle Reserve, decision makers pointed out a similar trend that emerged from survey responses among teachers that mirrored non-formal educators. Interestingly, subjects who taught art, english, and social science represented a greater number of respondents compared to math and science teachers. One respondent stated, “So, maybe they don’t have that science background, but they want the ‘art and environment,’ or other unique comparison to natural areas.” Respondents agreed, “Schmeckle’s niche may be working with those that do not have that knowledge base to begin with...working with teachers who do not have formal training, but they need that connection and are interested in that connection.”

***Question Two: What is the role that Schmeckle Reserve can play in fulfilling those needs?***

Decision makers were asked about their thoughts on the role that Schmeckle Reserve may play in fulfilling needs identified in the first question. Two emergent audiences and programs demonstrated the greatest agreement. Responses to question two, aimed at assessing the feasibility for expanding educational programs at Schmeckle Reserve, are included below:

1. *Schmeckle Reserve can play a role in providing educational programming to non-formal groups.*

Where reserve decision makers felt Schmeckle Reserve could play the strongest role in expanded educational program efforts was in serving the needs of non-formal groups, specifically youth. Respondents agreed that there was a need among “untrained youth group and / or Scout



leaders for curriculum or badge requirements that Schmeeckle Reserve can fill with moderate expanded efforts.” Similarly, all agreed “we are not talking about massive amounts of numbers like with school groups, so focusing on some of those non-formal needs would be a likely place for educational program expansion.” Discussion followed regarding the feasibility of hiring a work-study student majoring in environmental education, or a volunteer who is solely focused on education to fulfill this effort.

2. *Schmeeckle Reserve can play a role in providing summer programming to general public audiences.*

Given that over half of respondents (61.0%) from the homeowner survey indicated an interest in summer programming at Schmeeckle Reserve, decision makers agreed “offering more summer programs could be a pretty simple, early step for the reserve, even if just hiring an environmental education / interpretation work-study student.” Then, respondents agreed a major focus of that position can “experiment with audience interest and/or segmented target programming that specifies unique preferences for time of day or day of week. “Providing a smattering of ranger-type programs might work well” according to decision makers, and provide for a seemingly risk-free first step in expanded programming.

Decision makers also recognized areas or categories where the reserve may be limited in its abilities to provide expanded educational programming presently.

3. *Schmeeckle Reserve is physically limited (due to space, staff, and facilities) in its capability to serve school groups despite inherent interest in expanded programs among teachers.*

Serving school groups at Schmeeckle Reserve appeared to be a welcomed service by teachers in the Stevens Point area; however, decision makers questioned the feasibility for expanding this service given physical limitations of the site. Respondents agreed, “This is a pleasant place to bring groups, and they feel like it’s worthwhile, but once they get here, we do not have the facility / restrooms, etc. to accommodate such large groups.” Several potential solutions were addressed and are discussed in question three.

Respondents agreed, however, that a “little bit of a gap in our knowledge” may be present. Before determining in what ways this group may be served, additional research is needed. According to the needs survey, roughly 32% of teachers responded stating they had brought students to Schmeckle Reserve for an environmental education experience in the past. Despite the surprising number of teachers already using Schmeckle Reserve, “We don’t know why teachers come. We assume it is because of the resource—280 acres with a lake” but speculate perhaps it is because of the unique “rustic experience—different than an urbanized setting.” Researching why these groups currently bring students to Schmeckle Reserve may provide additional insight regarding how it may be most efficient to meet their needs if that is a group reserve decision makers choose to target in the future.

Given the amount of physical improvements and resources necessary to meet the perceived needs of school groups, additional insight was described as *necessary* among decision makers in order to make a more informed decision to expand. In fact, a concern was addressed that “If people [referring to homeowner survey] indicated having a *passive appreciation* of the Reserve—vaguely just remembering the place, and rather, know that they just really like to be here, then perhaps if we did provide programming to these [school] groups, we would be detracting from that experience.” Therefore, it was agreed “focus groups, or informal discussions with some of the teachers using the facility, would assist with providing direction, determine what training is necessary, or what next steps are recommended.”

***Question Three: What are possible solutions or strategies to meeting those needs?***

Following discussion of the role that Schmeckle Reserve can play in expanded educational programming, several solutions and strategies were proposed. Overall, addressing the needs of potential users led to four main categories of solutions included below:

1. *There is strong potential for the Friends of Schmeckle Reserve and volunteers to take the lead in developing, promoting, funding, and / or facilitating the Reserve’s educational mission and goals.*

Much discussion was centered on the tremendous potential that the Friends of Schmeeckle Reserve may play in expanded educational program efforts. Respondents agreed, “Volunteers are a key element that we have been missing up until now” and “I see the Friends group really focusing on the educational mission of Schmeeckle Reserve—that’s how several other places do it as well.” Additional ideas on the role of the Friends included potential for fiscal support to fund either a full time, half time position, or graduate assistantship. An added benefit to graduate assistant support from the Friends of Schmeeckle Reserve would allow the reserve to “compete outside the college for financial assistance” in addition to other inherent benefits of a consistent person in an education coordinator role.

2. *Schmeeckle Reserve will investigate the potential for either hiring a work-study student, re-allocating job duties of the graduate assistant, or other staff position to coordinate educational efforts.*

While it was agreed that the role of the Friends of Schmeeckle Reserve members and volunteers would be critical to the success of expanded educational program efforts at Schmeeckle Reserve, in order to be truly successful services would require the consistent work of a program coordinator. Both benefits and concerns were presented that included the fact that an additional staff member would first and foremost “train and manage the education program” as well as “add a position under the current Outreach Coordinator”; however, an additional staff member “could add more work to staff, and so identifying a supervisor that would supervise and be direct contact for the students would be important.”

3. *The shelter building, if transitioned to a three-season facility, may provide a feasible solution to overcoming physical resource-based limitations to accommodating education groups.*

Decision makers concluded that existing facilities were limited in their ability to serve additional groups. However, existing structures, like the shelter building, located in the southwest corner of the Reserve, may be able to fill certain physical needs. One respondent noted, “The shelter building has bathrooms and could be converted to a space that functions as a three-season

classroom.” Concepts were discussed for a potential new visitor center located there, or other additions that would make the area more purposeful.

4. *There is potential for recently acquired land north of the reserve to be designated as a “sanctuary,” that is either free from school groups or used only for school groups in order to avoid multiple user conflicts if education programs were expanded to additional audiences.*

A preliminary recommendation was discussed regarding recently acquired land north of Schmeeckle Reserve as a space that may accommodate school groups. One respondent stated, “There is potential for putting a porta-potty, boardwalks, etc., in the new property and use that for school groups.” A contrasting opinion was countered and others agreed, “or there is an opportunity to leave that a place of solitude and keep this as the busier area.” At the heart of this discussion remained the question of whether or not increased use or accommodating additional user groups would undermine promotion of the *Schmeeckle Idea*—a notion that sparked discussion of the Reserve’s educational mission.

***Focusing the educational mission—***

Additional discussion followed question three and focused on deepening an understanding of Schmeeckle Reserve’s educational mission. As referenced earlier, the Reserve’s overarching mission is guided by three priorities: refuge, research and education, and recreation. Up until now, the Reserve has not defined specific parameters for an educational mission. However, several suggestions were explored. Decision makers agreed that at the heart of Schmeeckle Reserve is a concept of promoting the *Schmeeckle Idea*, or “instilling a sense of place in central Wisconsin.” By including a variety of community members and groups to feel a sense of ownership, the Reserve is fulfilling that mission. They expanded, “Schmeeckle is an idea that we can take a space, preserve it, and make it something that is open to everyone while supporting wildlife. The atmosphere is calm, making for a transformative experience.” When people come to an educational program, “we promote that idea by inspiring others that they can do these things in their own backyards—manage their own green spaces just because it is part of

that sense of who we are as people.” It was agreed that the Friends of Schmeeckle Reserve is and will continue to provide a key extension of that idea.

### **SUMMARY OF PHASE THREE**

Results from a group process meeting with decision makers at Schmeeckle Reserve provided key insights regarding the role that the reserve can play in community educational programming. Findings make connections between existing educational programs in the Stevens Point area as well as survey results from potential users that provide deepened understanding of perceived gaps in educational programming. Decision makers weighed critical needs and strategies that the reserve may incorporate to produce needs-based strategies that aim to expand educational efforts rather than duplicate. Discussion and recommendations of the combination of all three phases of the needs assessment are included in chapter five.

## **CHAPTER V: KEY FINDINGS AND RECOMMENDATIONS**

### **INTRODUCTION**

Previous chapters described the background, literature, methods, and results of a three-phased framework for assessing the needs of various user groups for expanding educational efforts at Schmeeckle Reserve. This chapter will review major findings, discuss the value of these results, and make recommendations to Schmeeckle Reserve as decision makers decide how to proceed in expanding year-round educational programming. Also in this chapter, the researcher offers needs and suggestions for further research and proposed plans to disseminate results.

### **REVIEW OF SUB QUESTIONS & RESULTS**

The purpose of this study was to explore the needs of potential stakeholders for environmental education programs at Schmeeckle Reserve. By assessing the feasibility for providing expanded programs, reserve decision makers were able to consider solutions to meeting audience needs while extending the mission of the reserve. A summary of research question findings are included below:

#### **Sub question 1: What environmental education programs are offered in the Stevens Point-area?**

A review of educational programs in the Stevens Point area showed approximately 19 organizations within a 15 mile radius that provide programming with an emphasis related to environmental education. Programs ranged from topics on sustainability to art and nature as well as traditional outdoor learning. Some programs like the Central Wisconsin Environmental Station and Boston School Forest provided traditional environmental education programming to formal audiences (students) while others offered more general public oriented programming like the Aldo Leopold Audubon Society or the Wisconsin Lions Camp. All were united by a common interest in promoting an improved environmental literacy and inspiring an informed community.

**Sub question 2: What gaps exist in current environmental education programs?**

Representatives from 16 out of the 19 organizations agreed to be interviewed to share more in-depth conversation about the nature of their programs. All of the organizations provided programming during school months (September to May), while almost half (56.3% ) did so during the summer. Additionally, while the vast majority of organizations provide programming for youth from pre-K to high school, 87.5% of respondents felt that youth were an audience that is underserved or that they wished they could serve better. Respondents commonly proposed that Schmeckle Reserve, because of its reputation and background in interpretation, had a role to play in providing educational programs to youth (81.3%), likely in non-formal or non-traditional settings (ex. homeschools, Scout groups, 4-H, Boys and Girls Club, YMCA, young mothers / families, etc.). Key findings from the first two sub-questions indicate a perception that gaps are present most strongly in youth programming, and consideration of these gaps provides opportunity for Schmeckle Reserve to fill. Additional data from the end user (teachers, youth and adult program coordinators, and community members) assists with providing perspective to the nature of the gap.

**Sub question 3: What are the user preferences, interests, and needs for environmental education programs among potential stakeholders?**

Feedback was gathered from three target audiences in the form of two email surveys to teachers and youth and adult program leaders, and one mail survey to homeowners in the Stevens Point area. Questions about former use of the reserve, specific interests in educational programs, and needs for assistance with teaching or resources were asked. On all three measures, youth and adult program leaders indicated they had used the reserve with their groups for educational purposes (76.9%), more commonly than teachers (31.9%) or homeowners (41.2%). Additionally, they shared the strongest interest (82.6%) compared to homeowners (64.1%) and teachers (63.2%) for educational programming opportunities. And they indicated the strongest need for programming (86.4%) in comparison to teachers (62.1%). In short, non-formal youth audiences

provided the strongest case for the direction of Schmeeckle Reserve's expanded educational programs.

**Sub question 4: What conclusions can be drawn from potential stakeholders that inform the development of Schmeeckle Reserve's educational focus / mission?**

Since findings from phase one and two were conclusive, it was no surprise that reserve decision makers saw an opportunity for the reserve to fill gaps in expanding efforts for non-formal youth audiences. A group process meeting outlined the solutions and strategies that form the basis of an educational mission for educational programs. Overall, reserve decision makers agreed that the reserve could play a role in providing additional programming to serve the needs of non-formal youth audiences, especially during summer months. Limitations were discussed to expanding efforts for formal schools based on available space and facilities. The remainder of this chapter outlines the next steps for Schmeeckle Reserve to consider while putting into practice the application of these findings.

**INTERPRETING THE RESULTS**

Needs (or gaps between current and desired results) are difficult to quantify given the diversity of perspectives within an organization. Often, findings of an assessment are challenging to prioritize, leaving unclear agreement among decision makers regarding how to move forward with program planning. As was stated previously, researchers caution needs assessors from concluding the assessment before prioritization of needs and discussion of feasible solutions are determined among decision makers (Witkin & Altschuld, 1995; Patton, 1999; Henderson & Bialeschki, 2010).

To overcome this predicament, Watkins, Meiers & Visser (2012) propose a 2x2 matrix that acts as an aid to decision making that allows for comparing and contrasting a variety of perspectives about opportunities and concerns in a simple illustration. A major advantage of using this technique allows decision makers to compare and contrast the value of taking *action* (or selecting a need as a high priority) or *not taking action* (or not selecting a need as a high priority,



or not implementing a solution). “Too often the latter—decisions not to do something are not considered for their potential consequences or payoffs” (Watkins, Meiers, & Visser, 2012). Additional benefits assert that a 2x2 matrix decision aid can help communicate multiple perspectives, allow for potential positive and negative consequences to be considered for decision making, and expand on needs assessment findings by considering what should be done in response to identified needs. Table 19 shows an example template of the 2x2 decision matrix.

**Table 19:** Example 2x2 Decision Making Matrix

	<b>Implement idea / program</b>	<b>Do not implement idea / program</b>
<b>Opportunities</b>		
<b>Concerns</b>		

Where the 2x2 decision matrix technique is limited is in its ability to generate ideas about what to do next. Watkins, Meiers & Visser (2012) describe that the analysis of the technique is only as useful as the quality of information from the needs assessment. In this way, points are simply listed and not prioritized or given weight.

Therefore, where greatest success is implemented through use of a 2x2 matrix is in assessing the rewards and risks (i.e. what we know, and what we do not know) regarding expanded educational program efforts. This research sees rewards as opportunity and risks as concerns and applies the methodology to describe the various considerations among the three stakeholders groups surveyed: non-formal youth and adult groups, teachers, and community members / homeowners. In addition to survey results, qualitative findings from interviews with program coordinators and the group process meeting with decision makers were included. Finally, the creators of the 2x2 matrix technique suggest creating the matrix *with* decision makers; however, the matrices depicted below were created *after* all needs assessment data were

gathered. Rather, in this sense, the tool is used to communicate and document the perspectives of decision makers.

Tables 16, 17, and 18 depict the key findings of the Schmeeckle Reserve community education needs assessment. Each table was created to summarize the perceived opportunities and concerns discussed by decision makers in the final phase of the needs assessment during the post-assessment, or group process meeting. Since non-formal youth and adult programs showed strongest agreement among all three phases, they are listed first, followed by community members and schools.

### **KEY FINDINGS**

#### *1. Meeting the needs of non-formal youth and adult groups through expanded educational programming.*

Youth audiences are the most commonly served audience in Stevens Point area, according to education program coordinators affiliated with organizations who possess a mission dedicated to the environment. However, program coordinators felt as though Schmeeckle Reserve could best fill a gap in community educational programming by serving non-formal audiences. Respondents said things like, “Being more accessible to those groups that aren’t necessarily school groups, but more like Boy Scouts, Girl Scouts, Cub Scouts, the 4-H, and youth groups that are not affiliated with either school or camping is a niche that is overlooked.”

A similar sentiment was shared among non-formal youth and adult program leaders who participated in the education needs survey results. During phase two of the needs assessment, non-formal program leaders from groups such as area Scout programs, 4-H youth extension, Boys and Girls Club, and local organized adult groups were asked about their past use, interest, and needs for educational programming. Respondents reported having visited Schmeeckle Reserve with their groups more frequently compared to other area destinations. The second and third most frequently reported destinations were other University of Wisconsin-Stevens Point organizations (Museum of Natural History and Planetarium) indicating potential links to a central proximity.

Additionally, over 80% of respondents indicated that they were interested in expanded programming at Schmeeckle Reserve. Lastly, over 86% said that it was “necessary to strongly necessary” to receive assistance with teaching or reinforcing topics related to the environment.

Decision makers at Schmeeckle Reserve agreed that serving non-formal audiences is a niche that may be feasible through expanded environmental education program efforts. Several suggestions provided context regarding potential strategies for implementing expanded programs. One that stood out was the need for hiring additional staff (ex. work-study, graduate assistant, or full-time staff). It was discussed that hiring staff would provide consistent direction and a needed “point person” for educational program efforts. Table 20 addresses the opportunities and concerns to implementing and *not implementing* youth and adult programs at Schmeeckle Reserve.

**Table 20:** Concerns versus opportunities for providing programs to youth and adult groups

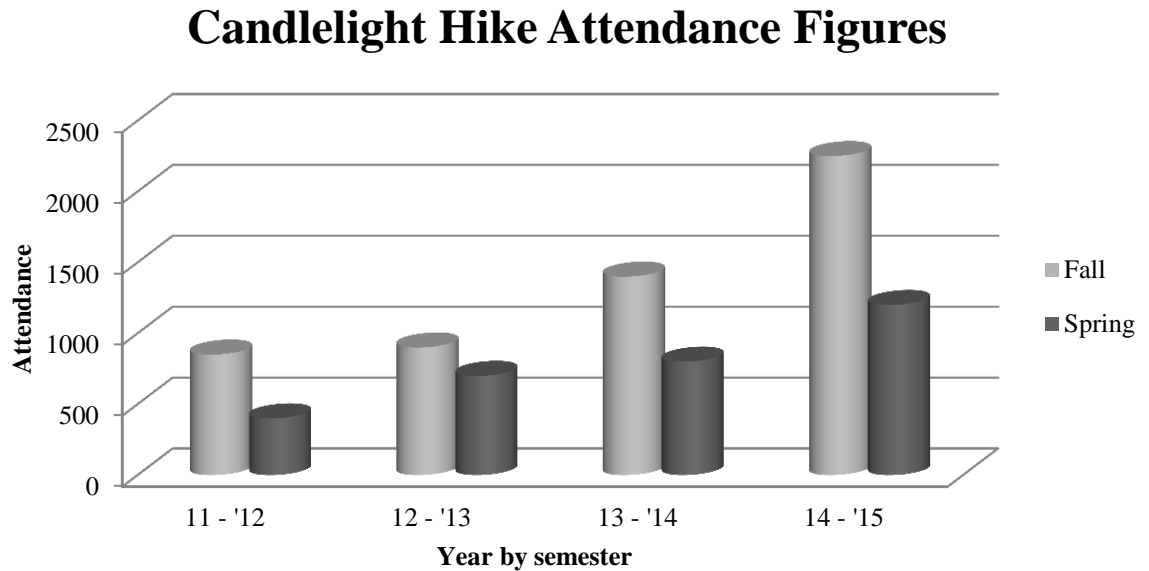
	<b>Implement non-formal youth &amp; adult education program</b>	<b>Do not implement non-formal youth &amp; adult education program</b>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Meets educational mission by allowed opportunity to serve a different audience</li> <li>• Fill a niche in community educational programming</li> <li>• Relieve manager burden of responding to continued requests</li> </ul>	<ul style="list-style-type: none"> <li>• Saves time and money</li> <li>• Do not have to place additional burdens on managers</li> </ul>
<b>Concerns</b>	<ul style="list-style-type: none"> <li>• Requires time of managers</li> <li>• Added student staff</li> <li>• Potential to detract from solitude of reserve through added use</li> <li>• Reduces ability to respond to other needs more central to the mission of providing a “refuge.”</li> </ul>	<ul style="list-style-type: none"> <li>• New staff members are not able to perform</li> <li>• Potential to spread negative image due to lack of mission-based programming</li> <li>• Continued uncertainty regarding how to handle incoming program requests</li> </ul>

*2. Meeting the needs of community through expanded special event programming.*

The homeowner survey asked community members about their preferences regarding educational programming at the reserve. Of 187 respondents, more than half (55.1%) said special events were a preferred format compared to guided hikes (47%), indoor programs (31%), workshops (34%) and citizen science activities (18%). The Candlelight Hike Festival was listed

next to the question as an example special event. In this case, special events can be defined as any event where a large number of people are brought together to watch or participate. Popularity among attendees of the Candlelight Hike Festival is on the rise. Since its inception in 2005, the reserve has hosted the event every spring and fall semester, with fall events showing the strongest growth in participation. Figure 16 shows a four-year snapshot between spring and fall events.

**Figure 16:** Hike Figures



Research shows that a major attractant among community members for participating in special events and festivals is due in large part to a perceived “sense of community” (VanWinkle & Woosnam, 2014). They state, “One only needs to attend a festival of any magnitude for a short period to see the profound impact such an event can have on the attendees and the geographical community in which it is hosted” (pg. 25). Events that promote a heightened awareness of both the social and natural communities that people live in are more likely to provide a sense of fulfillment for attendees and thus increase their likelihood of participating.

While program coordinators did not specifically mention a perceived gap in community special event programming, respondents did offer recommendations for collaborating with other organizations to broaden the audience base and strengthen support for the reserve (See Appendix

J). Respondents also agreed that Schmeeckle Reserve is a coveted resource in the community because of its convenient proximity to the downtown area. Program coordinators suggested that Schmeeckle should capitalize on this by “getting parents comfortable going outdoors” by hosting more special events to broaden the reserve’s audience scope. Table 21 shows the potential opportunities and concerns of *implementing* and *not implementing* expanded community special events.

**Table 21:** Concerns versus opportunities for expanded community special event programming

	<b>Implement expanded community special events</b>	<b>Do not implement expanded community special events</b>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Meets educational mission by creating an opportunity to serve a different audience</li> <li>• Fills a niche in community educational programming</li> <li>• Provides potential fundraising venture to sustain educational programs</li> </ul>	<ul style="list-style-type: none"> <li>• Saves time and money</li> <li>• Does not place additional burdens on managers or staff</li> </ul>
<b>Concerns</b>	<ul style="list-style-type: none"> <li>• Requires time of managers</li> <li>• Uses reserve resources</li> <li>• Adds or overburdens student staff necessary for event needs</li> </ul>	<ul style="list-style-type: none"> <li>• New staff members are not able to perform</li> <li>• Missed opportunity for potential support for reserve programs among new audiences</li> </ul>

*3. Meeting the needs of school groups, a potential opportunity for the future—*

Feedback was gathered from a third audience, asking teachers in what ways their environmental education needs may be filled with expanded programming at Schmeeckle Reserve. As stated in Chapter 2, program coordinators in the Stevens Point area agreed that youth audiences may be underserved, particularly the very young (pre-K and early childhood education) and older students (high school and college). These results conflicted, however, with feedback from teachers who reported both a stronger interest and need among lower grades (pre-K through 5<sup>th</sup>) compared to upper grades (6<sup>th</sup> through 12<sup>th</sup>)—see Chapter 3, Figure for specific details.

Furthermore, results of a qualitative analysis of education programs showed that over half (62.5%) of the organizations that provide environmental education programs in the Stevens Point area do so with formal school groups as a primary audience. Broadly, teachers reported the

greatest percent of barriers to participating in educational programming compared to other groups. And, when asked what might prevent them from bringing students to Schmeeckle Reserve, roughly half stated that time (53.5%) and budget (48.8%) were prominent barriers. Overall, teachers’ reported interest for programming was lowest (63.2%), albeit marginally, compared to homeowners (64.1%) and non-formal groups (82.6%).

Several concerns were discussed among Schmeeckle Reserve decision makers for serving this group during the phase-three group process meeting. Limited facility space, restrooms, and staffing were all barriers discussed to serving school groups. Feedback from program coordinators was also weighed. When asked what recommendations they had for Schmeeckle Reserve educational programs, respondents overall agreed that a potential niche exists in serving non-traditional groups (i.e. home school cooperatives, area charter schools, or limited school groups located in close proximity to the reserve).

At this time, given perceived disagreement among program coordinators and teachers regarding target ages, as well as resource-based limitations, Schmeeckle Reserve decision makers agreed that further research, acquisition of land, or other practices are necessary to make an informed decision as to how to best serve this group. Additional suggestions for research questions are included in the “Future Research” portion of this chapter.

Table 22 explores the potential opportunities and concerns for *implementing* and *not implementing* educational programs that meet the needs of formal school groups.

**Table 22:** Concerns versus opportunities for expanded education programs to schools

	<b>Implement formal school programs</b>	<b>Do not implement formal school programs</b>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Meets educational mission by creating an opportunity to serve a different audience</li> <li>• Fills a niche in community educational programming</li> <li>• Builds and expands spirit of community environmental education</li> </ul>	<ul style="list-style-type: none"> <li>• Saves time and money</li> <li>• Do not have to place additional burdens on managers</li> <li>• Continued atmosphere of serenity throughout reserve without increased use</li> </ul>

**Table 22:** Concerns versus opportunities for expanded education programs to schools (cont.)

<b>Concerns</b>	<ul style="list-style-type: none"> <li>• Requires time of managers</li> <li>• Added student staff</li> <li>• Potential to detract from solitude of reserve</li> <li>• Perceived competition with Boston School Forest, Central WI Environmental Station</li> <li>• Potential dilution of practicum student experience</li> <li>• Need for use is during an already heavily used time in the reserve</li> </ul>	<ul style="list-style-type: none"> <li>• New staff members are not able to perform</li> <li>• Potential to spread negative image due to lack of mission-based programming</li> <li>• Continued uncertainty regarding how to handle incoming program requests</li> </ul>
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*A note on program topics & timing—*

Unique programmatic topic needs were reported among each stakeholder group. Homeowners described a variety of program topics they wished to see offered at Schmeckle Reserve. These topics may lend insight regarding the likelihood of public interest for attending potentially themed community special events or other interpretive programs. Refer to Chapter 3, Figure 10 for more details. Additional preferences regarding approaches to teaching environmental education topics are included in Table 12.

Interesting patterns emerged when groups were asked what seasonal preferences they had for programming.

Figure represents preferences greater than 50% among stakeholder groups for educational programming. Cells with color indicate months where audiences indicated the strongest interest in programming. White cells indicate slower times where less interest was reported among respondents compared to black, indicating the highest interest. Gray cells depict months when Schmeckle Reserve currently offers interpretive programs to the general public, and cells marked in black indicate expanded programming efforts beyond spring and fall interpretive programs provided to the public currently. Figure 17 acts to highlight potential focal areas where additional programming efforts may be most effective at reaching targeted groups.

**Figure 17: Seasonal preferences for education programs**

Education program user preferences (reported among >50% of respondents)												
	January	February	March	April	May	June	July	August	September	October	November	December
School groups												
Non-formal youth and adult groups												
Home owners												

*Note* : Cell color indicates months were audiences indicated the strongest interest in programming. *White* cells did not have indicated preference. *Gray* cells show programs that are already offered. *Black* cells indicate potential areas for expanded programming by audience type.

**RECOMMENDATIONS FOR SCHMEECKLE RESERVE**

Upon initiation of this research, Schmeeckle Reserve leadership, including the director, assistant director, and outreach coordinator, discussed an ongoing question surrounding how to handle growing requests for education programs. The reserve director expressed that apparent interest among groups was present based on increased requests for programming, but the need to clarify in what ways those needs may be filled was yet to be determined. Given the reserve’s unique proximity, to the city of Stevens Point and connection to the University of Wisconsin-Stevens Point campus, a needs assessment was initiated to explore the role that Schmeeckle Reserve may play in fulfilling its educational mission through expanded programs.

Schmeeckle Reserve is regarded as “a gift to the city of Stevens Point” and a “wonderful resource for the community” among community members, in large part thanks to the dedicated work of the reserve’s human resources. The director, assistant director, and outreach coordinator collectively support the mission and work of the reserve through impressive entrepreneurial endeavors. Work-study students and university resources act to ensure daily operations, on the ground maintenance and land management, as well as exceptional visitor services to provide the quality experience that the community treasures.

However, reserve leadership recognizes the opportunity to move forward and grow the environmental educational capacity of the Stevens Point community. With the results of this study in mind, the researcher recommends that Schmeeckle Reserve hire an education coordinator



and pursue development of expanded educational efforts guided by the newly developed citizen support group, the Friends of Schmeckle Reserve. Based on this study's results, the researcher makes the following recommendations:

**1. Hire an education program coordinator or re-allocate the duties of the graduate assistant**

Up until this point, reserve staff has provided educational programming on a case-by-case basis, as time allows. If staff is able to fill a group's request one year, there is an obligation to do so the next time they ask. Similarly, choosing to simply not serve such groups can lead to negative perceptions among the community because the reserve's mission possesses an educational focus. A major reason the reserve has not provided expanded educational programming so far is largely due to limited staff time. Given university resources, with one of the largest undergraduate environmental education and interpretation programs, as well as a newly emerging volunteer Friends group with a growing interest in education, the feasibility of expanding efforts has never been more timely. With the guidance of an education coordinator, the reserve would be able to meet the needs of such audiences by developing, marketing, implementing, and managing the program. Such measures would provide both consistency and opportunity to reach new audiences to extend the mission of the reserve and add breadth of support to ensure care and stewardship of the reserve.

**2. Develop brand strategy and educational mission**

While Schmeckle Reserve cannot meet the needs of all groups all the time, central to the purpose of this study is the fact that some identified needs can be met through recognition of what the reserve does best. Bolger (2009) says, "not only is it important to know what you want to accomplish; you must also define what sets you apart. It is essential to identify and communicate what makes your organization unique, what you do best, and what defines your place and programs in comparison to others" (p. 13). Regarding the role that Schmeckle Reserve can play in community educational programming, results of this research showed that there are gaps in

educational programming provided to youth groups and the general public that reserve staff believe they can feasibly fill with allocation of additional resources. Reserve leaders agreed that at the heart of Schmeckle Reserve's educational mission is the concept of promoting the *Schmeckle Idea* that acts "to instill a sense of place in central Wisconsin and inspire participants' care for their own special places." Expanded education programming should highlight the unique research-based stewardship practices that promote this unique mission.

### **3. Create an education strategic plan**

With the help of the outreach coordinator, key individuals interested in planning and conducting educational programs should be identified and contacted regarding their involvement with extended educational programs. Results of this study and additional research will be necessary in order to narrow down the specific needs of particular user groups. Therefore, the education coordinator should set goals, priorities, and strategies for meeting the needs of target audiences. An education strategic plan, or work plan, should be drafted to adequately plan and describe the unique programmatic elements of each program, including purpose and objectives of each program as well as strategies for achieving program goals (i.e. recruiting volunteers, utilizing campus partnerships). Specific curriculum goals should be identified and a fee structure set in order to determine financial sustainability of the education program. Bell, Masaoka, & Zimmerman (2010) suggest thinking strategically about the sustainability of programs as they relate to the "Dual Bottom Line: Mission Impact and Financial Sustainability."

### **4. Implement programs and evaluate**

The literature referenced in this study has emphasized the importance of designing, embedding, and implementing a program evaluation plan into new programming. It is only appropriate that an expanded educational program at Schmeckle Reserve be conducted in a similar fashion. Researchers differentiate the purpose of needs assessment as having slight but important differences between front-end evaluation (Watkins, Meiers, & Visser, 2012; Kaufman & Guerra-Lopez, Needs Assessment for Organizational Success, 2013). The results of this study

guide the initial decision-making and planning steps to developing educational programming; however, an evaluation plan and a subsequent logic model following the needs assessment will act to guide the program development process with more long-term efficiency by identifying and documenting strategic functions of the program. Determining a plan for evaluating formative and summative program efforts on the front-end will also help to create consistent efforts across the long-term program spectrum, especially given potential frequent coordinator turnover if current students are hired for that role.

#### **FUTURE RESEARCH AT SCHMEECKLE RESERVE**

This study initiated the opportunity for formal feedback between stakeholders that Schmeckle Reserve had not gathered before. While valuable insights from research findings helped Reserve decision makers determine priorities for expanded educational ventures based on gaps in community programming, site-based research remains to help answer questions like: (1) Why do teachers bring their students to the reserve? (2) What is the role that Schmeckle Reserve can play in providing educational programming to college students? (3) What best practices may Schmeckle Reserve learn from with regard to creating financially sustainable education programs?

As stated in previous chapters, 32% of teachers indicated that they had brought their class to the reserve in the past. Further questions about what motivates them to be involved, what curriculum needs they may have, or in what ways might Schmeckle Reserve educators assist will help Reserve decision makers make informed decisions as to whether or not to extend programming to this group.

Due to study limitations, feedback from university students was not included in this study. During winter 2015, college students were sent a survey asking about their general thoughts and feelings about Schmeckle Reserve programs and activities. A small percentage of students (12.17%) indicated they wished to see increased community outreach efforts. Respondents wished to see “more programs, better communication to students, more events like

the Candlelight Hikes, create programs geared towards college students, offer non work-study job opportunities, more volunteer opportunities.”

Watkins, Masaoka, and Zimmerman (2010), among other researchers, suggest several tools and techniques for strategic planning of educational programs. They suggest programs should be concerned with both high mission impact and high profitability across a scale. They propose organizations think carefully about the ways in which programs at their sites fulfill these goals and provide a sustainability matrix that works to visualize the role of programs for decision-making and planning. Schmeckle Reserve in partnership with the Friends of Schmeckle Reserve would benefit from such an exercise when considering forward movement of the organization.

#### **DISSEMINATING FINDINGS**

Schmeckle Reserve was unique in its ability to hire a graduate student researcher who was devoted to the study for two years’ time. Recognizing the feasibility of replicating this study at informal learning centers is not a major goal of this study. Nor does this study attempt to generalize the findings to other similar locations. However, several lessons can be gleaned from the concepts, application, and methods of needs assessment in environmental education program planning and decision-making scenarios. Therefore, the researcher plans to disseminate information to targeted audiences in the following ways:

##### *Local Audiences—*

A two-page executive summary highlighting the results of the needs assessment was created and shared with education program coordinators in the Stevens Point area so organizations can benefit from the study at Schmeckle Reserve. In Wisconsin, this research is available to the WI Nature Centers Collaborative, a statewide initiative to enhance collaboration among similar informal learning centers through networking and resource-sharing practices, as a method that enables nature centers to assess the needs of local audiences for expanded educational programs at various sites.

*National Practitioners & Academics—*

This study has implication for not only Schmeeckle Reserve, but ideally for other informal learning centers wishing to expand community educational programming. While the findings outlined in this study highlight the unique audience's needs and interest for educational programming in central Wisconsin, the research design and methods provide a valuable framework that may be applicable to other sites. This study looked at the needs of users within a community, or regional, context for new or expanded programming. Others may wish to discover the needs of audiences unique to a specific program already in place, or provoke interest in exploring an idea for a new program. Whatever the case may be, before design or implementation of a program, careful exploration of existing programming within a regional scale will ensure that new programming will meet a need, or gap within a community rather than compete. In addition, the process of gathering feedback from potential audiences or users provides the opportunity to consider input from potential users of the service, allowing new perspective that may prevent potential issues or problems in the end. Finally, assessing the feasibility for the organization to expand financially, resource dependence, as well as mission alignment are critical considerations to determine the role that a program plays in building the capacity of an organization. This three-phased framework (pre-assessment, assessment, and post-assessment) work together to provide a roadmap for education program planning.

Not every study will require the level of detail that was demonstrated in this work. Nor will every site have the time, budget, or expertise to accomplish the goals outlined in this plan, however, when conducting a needs assessment, the process should remain the same. Appendices B - I provides background pertaining to a variety of interview, survey, and group process procedures that can easily be replicated at other sites as part of the three-phased needs assessment approach. Additional resources listed in the literature cited section of this paper provide background on how to set up a needs assessment in a variety of settings. However, from the

researcher's perspective, the most important lessons from this study that should be extended to informal learning centers are the following:

*Before beginning, plan carefully.* Take the time necessary to conduct important practices like needs assessment before beginning a new initiative or program.

*Know your neighbors.* Practice mapping, inventorying, interviewing, or even meeting regularly with nature centers within the region to determine opportunities for partnership or collaboration.

*Know your niche.* Congruent with knowing your neighbors, identifying what sets your organization apart as well as understanding areas of similarity will aid in complementing rather than competing with environmental education programs in your area and work to build the capacity of understanding the importance of preserving our natural resources.

To share this research with practitioners at informal learning centers wishing to grow or expand their programming, the researcher presented a session at the National Association for Interpretation (NAI) annual workshop in Denver, CO, during fall 2014. In addition, the researcher led a roundtable discussion on the process of conducting needs assessments at informal learning centers at the North American Association for Environmental Education (NAAEE) conference in Ottawa, Canada in October 2014. These experiences, among others, demonstrated the *need* for needs assessment processes in environmental education industry. More permanent contributions to the field are being developed through manuscript proposals to the Journal of Applied Environmental Education & Communication. Additional opportunities will be sought as appropriate.

## **CONCLUSION**

When Schmeckle Reserve staff described their desire to understand stakeholder needs for educational programming, understanding of their educational role in the community was unclear. Nearly two years later, the reserve is able to more completely envision its niche as it aims to fill in the gaps rather than duplicate existing programs. Moreover, it is now able to make

decisions and plans that are based on the needs of potential users rather than blindly pressing forward based on a hunch or bias. Fortunately, aspects of the data determined gaps in programming that the reserve believes it can feasibly fill.

## LITERATURE CITED

- Ary, D., Jacobs, L., & Razavieh, A. (2010). *Introduction to research in education (Seventh edition)*. Belmont: Wadsworth/Thomson Learning.
- Bell, J., Masaoka, J., & Zimmerman, S. (2010). *Nonprofit Sustainability: Making Strategic Decisions for Financial Viability*. San Francisco, CA: Jossey-Bass.
- Board of Regents, University of Wisconsin System. (1976). *Schmeckle Reserve, Stevens Point, WI: Proposal for Secretary of Interior Contingency Reserve*. University of Wisconsin Stevens Point. Stevens Point: University of Wisconsin System.
- Bolger, G. (2009). *Branding & marketing your nature center*. Association of Nature Center Administrators. Baltimore, MD: VictorGraphics, Inc.
- Cohen, D., & Crabtree, B. (2006, July). *Qualitative research guidelines project*. Retrieved February 4, 2015, from <http://www.qualres.org/HomeSemi-3629.html>
- DeSilets, L. (2006). Administrative angles: needs assessment. *Journal of Continuing Education in Nursing*, 148-149. Retrieved February 18, 2014 from <http://www.healio.com/journals/jcen/%7Be99561ba-229a-4e8f-81a0807afa95f2bc%7D/needs-assessment#>.
- Diamond, J., Luke, J., & Uttal, D. (2009). *Practical evaluation guide: tools for museums and other informal educational settings*. Lanham, Maryland: AltaMira Press.
- Dillman, D. A. (2007). *Mail and internet surveys: the tailored design Method, Second edition*. Hoboken, NJ: John Wiley & Sons, Inc.
- Ernst, J., Monroe, M., & Simmons, B. (2009). *Evaluating your environmental education programs: a workbook for practitioners*. Washington, D.C.: North American Association for Environmental Education.
- Espe, M. (2013). *An exploratory study of how a community involvement program can benefit both Schmeckle Reserve and potential participants (Masters thesis)*. Available from Stevens Point, WI: University of Wisconsin, College of Natural Resources.
- Fortier, J., Grady, S., Lee, S., & Marinac, P. (1998). *Wisconsin's model academic standards for environmental education*. Milwaukee: Wisconsin Department of Public Instruction.
- Gagne, R., Briggs, L., & Wager, W. (1992). *Principles of instructional design*. Orlando: Harcourt Brace Jovanovich.
- Gibbs, G. (2007). *Analyzing qualitative data*. Los Angeles: SAGE Publications.
- Heimlich, J.E. (1993). Environmental education: toward a working definition. *The Environmental Outlook. ERIC/CSMEE Informational Bulletin*. Retrieved November, 4 2013, from <http://files.eric.ed.gov/fulltext/ED360154.pdf>.
- Henderson, K., & Bialeschki, M. (2010). *Evaluating Leisure Services: Making Enlightened Decisions*. State College, PA: Venture Publishing, Inc.
- Jacobson, S. K. (1987). Conservation education programs: evaluate and improve them. *Environmental Conservation*, 14.3, 201-205.



- Jacobson, S.K. (1995). Needs assessment techniques for environmental education. *International Research in Geographical and Environmental Education*, 4(1), 125-133.
- Johnson, D. E. (1987). *Needs Assessment: theory and methods*. Ames, IA: Iowa: University Press.
- Kaufman, R. (1992). *Strategic planning plus: An organizational guide*. Newbury Park, CA: SAGE Publications.
- Kaufman, R., & Guerra-Lopez, I. (2013). *Needs assessment for organizational success*. Alexandria, VA: Association for Talent Development.
- Lake Superior National Estuarine Research Reserve. (2011). *Education program needs assessment and market analysis*. Retrieved November 2014, from [http://estuaries.noaa.gov/Doc/PDF/LSNERR\\_MANA\\_FinalReport.pdf](http://estuaries.noaa.gov/Doc/PDF/LSNERR_MANA_FinalReport.pdf)
- McDuff, M. (2002). Needs assessment for participatory evaluation of environmental education Programs. *Applied Environmental Education & Communication* , 1:1, 25-36. Retrieved on March 30, 2014, from <http://www.tandfonline.com/doi/abs/10.1080/15330150213990#.Ut8tuGTnaqQ>.
- Meichtry, Y., & Harrell, L. (2002). An environmental education needs assessment of K-12 teachers in Kentucky. *The Journal of Environmental Education* , 33.3, 21-26. <http://eric.ed.gov/?id=EJ654492>.
- Mertler, C. (2003). Patterns of response and nonresponse from teachers to traditional and web surveys. *Practical Assessment, Research & Evaluation* 8(22).
- Monroe, M. (2010). Assessing teachers needs for environmental education services. *Applied Environmental Education & Communication* , 1:1, 37-43. Retrieved on October 14, 2015, from <http://dx.doi.org/10.1080/15330150213988>.
- Nulty, D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education Vol. 33, No. 3* , 301-314.
- O'Leary, Z. (2010). *The essential guide to doing your research project*. Los Angeles : SAGE Publications Ltd.
- Patton, M.Q. (2007). *Qualitative research & evaluation methods: integrating theory and practice*. Sage Publications.
- Patton, M. Q. (1999). *Utilization focused evaluation*. Sage Publications.
- Powell, R., Stern, M., & Ardoin, N. (2006). A sustainable evaluation framework and its application. *Applied Environmental Education & Communication* , 5:4, 231-241.
- Scriven, M. (1999). Needs assessment: concepts and practical tools. *An evaluation workshop conducted at the Evaluators' Institute*. Washington, D.C.
- Simmons, B., Easton, J., & Day-Miller, E. (2009). *Designing education projects: a comprehensive approach to needs assessment, project planning and implementation, and evaluation (Rev. ed.)*. USDOC: NOAA.

- Student Involvement and Employment. (2015). *Work study-frequently asked questions*. Retrieved January 19, 2015, from SIEO :  
<http://www.uwsp.edu/centers/SIEO/pages/employment/current/work-study-faq.aspx>.
- The North American Association for Environmental Education. (2004). *Nonformal environmental education programs: guidelines for excellence*. Washington, DC: NAAEE.
- University of Wisconsin- Stevens Point. (2013). *Schmeeckle Reserve website*. Retrieved March 2014, from <http://www.uwsp.edu/cnr-ap/schmeeckle/Pages/home.aspx>.
- University of Wisconsin-Stevens Point. (2012). *College of Natural Resources homepage*. Retrieved from <http://www.uwsp.edu/cnr/Pages/default.aspx>.
- VanWinkle, C., & Woosnam, K. M. (2014). Sense of community and perceptions of festival social impacts. *International Journal of Event and Festival Management* , 5 (1), 22-38.
- Watkins, R., Meiers, M., & Visser, Y. (2012). *A guide to assessing needs: essential tools for collecting information, making decisions, and achieving developmental results*. . World Bank Publications.
- Witkin, B., & Altschuld, J. (1995). *Planning and conducting needs assessments: a practical guide*. Thousands Oaks, California: SAGE Publications, Inc.

## APPENDIX A: DEFINITIONS AND TERMS

**Environmental Educational Programming:** The incorporation of learning activities that require the use of the physical environment or moving into nature and natural settings to explore issues of the environment (Heimlich, 1993). Environmental education programming includes related areas such as interpretation, place-based education, service learning, and others.

**Feasibility:** An evaluation and analysis of the potential of the proposed project, which is based on extensive investigation and research to support the process of decision-making.

**Front-End Evaluation:** Both assessment and front-end evaluation employ similar methods; however, they differ in purpose and timing. A front-end evaluation's primary purpose is to collect data to determine whether current results match the results expected from solutions (ex. new programs, new technologies, new processes, training, or any other means we select to help us achieve our objectives) that we have already implemented (Kaufman & Guerra-Lopez, Needs Assessment for Organizational Success, 2013).

**Needs Assessment:** A systematic set of procedures undertaken for the purpose of setting priorities and making decisions about program or organizational improvement and allocation of resources. The priorities are based on identified needs (Witkin & Altschuld, 1995). Needs assessment differs from evaluation because analyzing and collecting data takes place *before* decisions are made about what activities are to be implemented in order to define where an organization is headed and how it plans to get there (Watkins, Meiers, & Visser, 2012).

**Schmeeckle Reserve:** A 280-acre natural area on the University of Wisconsin-Stevens Point campus, managed by the College of Natural Resources and owned by the University of Wisconsin System, which is open for public recreation and education.

**Stakeholders:** A stakeholder is anyone who can affect or is affected by an organization, strategy, or project.

**Stevens Point Area:** The Stevens Point area includes the following surrounding municipalities: town of Hull (5,597), villages of Park Ridge (502) and Whiting (1,722), and cities of Plover (12,239) and Stevens Point (26,919). Locations selected fall within two miles of the geographic center of Stevens Point.

**University of Wisconsin-Stevens Point (UWSP):** A public university with an enrollment of about 9,500 students located in central Wisconsin that is a part of the University of Wisconsin System.

## **APPENDIX B: EDUCATION PROGRAM COORDINATOR INTERVIEW QUESTIONS**

Questions for population in Sub question 2:

1. What programs do you offer?
  - a. Who do these programs serve?
  - b. When do you usually offer these programs?
2. How do your programs differ from other organizations in the county?
3. How do your educational programs help your organization meet its mission?
  - a. What other goals of your organization do these programs serve?
4. What resources (volunteers, partnerships, grants, etc.) do you use to help provide these educational programs?
5. What kinds of programs are in highest demand?
  - a. What format are the provided in?
  - b. What topics do they cover?
6. What potential audiences (user groups) do you feel are underserved by educational programs at your site?
  - a. Do you plan to serve these audiences in the future?
7. Do you have suggestions about the role that Schmeekle Reserve can play in future community programming?

## APPENDIX C: EDUCATION PROGRAM COORDINATOR INTERVIEW GUIDE

This assessment will explore needs of student, youth, or adult organizations that focus on education-based programming in the Stevens Point area by conducting semi-structured interviews with key targeted education program coordinators within a 25-mile radius of Stevens Point.

Supporting Documents not included in this handout: (1) Evaluation Plan Matrix (as a guide for line of inquiry) (2) Stevens Point Area Maps, and (3) Stevens Point Education Program Inventory Matrix

Purpose of the Interview:

The purpose is to explore the current status of community educational programming offered within the Stevens Point area. This research is one component of a larger needs assessment, which will examine the need for expanded environmental education/interpretation programming at Schmeckle Reserve.

This semi-structured interview with education program coordinators in the Stevens Point area will investigate programs, target audiences, and perceived gaps in educational programming in the Stevens Point area.

Invitation Email or Phone Call:

SUBJECT: Schmeckle Reserve Education Programs: Seeking your feedback.

Good morning/afternoon, [insert name of education coordinator]

My name is Carly Swatek, and I am the Graduate Assistant at Schmeckle Reserve. Currently, I am pursuing my master's degree in Environmental Education and Interpretation, and for my thesis research, I am conducting a needs assessment for expanding environmental education programming at Schmeckle Reserve.

As you know, the majority of education programs aim to expand rather than reinvent. Schmeckle Reserve, a University of Wisconsin, Stevens Point campus natural area is assessing the need to increase its outdoor educational programming. The reserve is contacting local community organizations that offer similar educational programming to avoid duplicating efforts and complement existing programs.

I am interested in learning more about your programs at [insert site/organization].

*Would you be willing to sit down with me for approximately 15-20 minutes in the coming weeks to discuss your organization and programming?* I am happy to visit you in person for your convenience. Please select a day and time that works for your schedule based on the days/times proposed below.

- [INSERT DAY/TIME]

If you can get back to me by [insert date] with your preferred day(s) and time(s), I will follow up with a copy of the questions I plan to use as a guide for our discussion.

Thank you in advance for your help, and I look forward to talking with you soon,

Confirmation Email

SUBJECT: Thanks for agreeing to chat!

BODY: Thank you for agreeing to meet with me so that I can learn more about your organization and its education programs. This confirmation of our meeting on [INSERT DAY/TIME]. I have included the questions that I will ask below. This conversation will take approximately 15-20 minutes and I plan to record our conversation to accurately capture your response.

If you have any questions or concerns, please contact me at [cswatek@uwsp.edu](mailto:cswatek@uwsp.edu).

Questions for Program Coordinators

1. What programs do you offer?
2. How do your programs differ from other organizations in the county?
3. How do your educational programs help your organization meet its mission?
4. What resources do you use to help provide these educational programs?
5. What kinds of programs are in highest demand?
6. What potential audiences do you feel are underserved by educational programs at your site?
7. Do you have suggestions about the role that Schmeeckle Reserve can play in future community programming?

Thank you, and I look forward to speaking with you soon.

Carly

*Carly J. Swatek*  
Graduate Assistant  
Schmeeckle Reserve  
University of Wisconsin-Stevens Point  
715-346-4992  
[www.uwsp.edu/schmeeckle](http://www.uwsp.edu/schmeeckle)

Stevens Point Area Education Program Coordinator Interview Form

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Location or phone call: \_\_\_\_\_

Participant Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Introductory Script:

*Good morning/afternoon, thanks again for taking the time to speak with me. Is this still a good time to talk? I expect the conversation should take about 15-20 minutes. Just for a bit of background, Schmeckle Reserve currently provides approximately 10-15 interpretive programs to a non-captive audience during the spring and fall semesters. Programs are provided by the NRES 482: Environmental Interpretation Practicum students. We also host one special event, the Candlelight Hike during the spring and fall, but otherwise do not provide environmental education programming. Due to a recent demand in "EE" programs, reserve administrators are interested in determining whether or not there is a need to expand programming. There currently is not a position dedicated to education, but there may be in the future.*

*Therefore, the main goal for today is to get a better picture of the programs and audiences that your organization serves in order to not duplicate, but complement existing programs. Additionally, this information will assist with determining the unique role that Schmeckle Reserve could play in offering expanded programming.*

*Did you receive the email copy of questions? [If not, give hard copy of questions]. Also, for the purpose of this research, I would like your permission to tape this conversation. Are you OK with this conversation being taped? If at any time during the interview you want to "go off the record," just let me know and I will pause the recording.*

*Please ask for clarification as we go through the interview. And, if something we discuss triggers additional information you would like to add to your response to another question, please feel free to tell me.*

*What questions do you have before we start?*

Interview Questions

1. What programs do you offer?
  - a. Who do these programs serve?
  - b. When do you usually offer these programs?
2. How do your programs differ from other organizations in the county?
3. How do your educational programs help your organization meet its mission?
  - a. What other goals of your organization do these programs serve?
4. What resources (volunteers, partnerships, grants, etc.) do you use to help provide these educational programs?
5. What kinds of programs are in highest demand?
  - a. What format are they provided in?
  - b. What topics do they cover?
6. What potential audiences (user groups) do you feel are underserved by educational programs at your site?

- a. Do you plan to serve these audiences in the future?
7. Do you have suggestions about the role that Schmeckle Reserve can play in future community programming?

What additional comments might you have regarding this interview? Are there other organizations or individuals who I should talk to? Please feel free to email me if you think of anything after this as well.

Closing Statement:

Thank you again for your time today. Your feedback is extremely important to us as we continue to explore the needs of community members, educators, and youth program coordinators. Following this conversation, I will be transcribing our conversation as well as the responses from other education program coordinators in order to determine common themes. Would you like to receive a summary of results?



**APPENDIX D: NEEDS SURVEY QUESTIONS FOR TEACHERS & NON-FORMAL PROGRAM LEADERS**

Questions for population (formal and non-formal educators) in sub question 3:

1. What grade level(s) do you teach? (checkboxes).
  - a. Pre-K
  - b. Kindergarten
  - c. Elementary
  - d. Middle/Junior High
  - e. High School
  - f. Other: \_\_\_\_\_
2. What subject(s) do you teach? (checkboxes).
  - a. Art
  - b. English
  - c. History/Social Studies
  - d. Foreign Language
  - e. Math
  - f. Science
  - g. Special Education
  - h. Other: \_\_\_\_\_

*What did you do this year with EE programming?*

3. How often have you taken your students *this year* to natural or cultural resource sites in the Stevens Point area? (Place a checkmark next to the places you have visited.)

	Visited Once (Checkmark)	Visited more than once (Checkmark)
Boston School Forest		
Central Wisconsin Environmental Station		
Central Wisconsin Children’s Museum		
Mead Wildlife Area		
Schmeckle Reserve		
UWSP Museum of Natural History		
UWSP Planetarium		

4. What other local locations have you and your students visited this year to explore environmental education topics? (Open-ended: text box).

*What have you participated in in the past regarding EE programs?*

5. In the last three years, how often have you invited outside organizations to facilitate an environmental education program at your school? (Please select the best response)
  - a. None
  - b. A portion of one class
  - c. 1-3 classes per year
  - d. 4-6 classes per year
  - e. 7-9 classes per year
  - f. 10+ classes per year

*Interest*

6. What is your level of interest in participating in environmental education programs at Schmeckle Reserve with your students? (Please select the description that best describes your opinion).
  - a. Strongly Interested
  - b. Somewhat Interested
  - c. Interested
  - d. Somewhat Uninterested
  - e. Strongly Uninterested
7. What are your interests in bringing your students to Schmeckle Reserve to participate in environmental education programming? (open-ended).

*Needs*

8. What state standards do you need most help teaching or reinforcing and may be addressed with external environmental education programming at Schmeckle Reserve? (Open ended)
9. What topics related to environmental education would you like to see offered at Schmeckle Reserve? (Open ended)

*Motivations/Barriers for EE*

10. What are barriers to taking your students offsite to participate in environmental education programs? (Select all that apply).
  - a. I do not feel there are barriers
  - b. Time
  - c. Budget
  - d. Transportation
  - e. Administrative Support
  - f. Lack of access to training in environmental education topics
  - g. Other:\_\_\_\_\_
11. What level of influence does Wisconsin's Model Academic Standards for Environmental Education weigh on your decision to take your students offsite to participate in environmental education programs?
  - a. Does not influence
  - b. Slight influence
  - c. Moderate influence
  - d. Considerable influence
  - e. Strong influence

12. What level of influence do Next Generation Science Standards weigh on your decision to take your students offsite to participate in environmental education programs?
  - a. Does not influence
  - b. Slight influence
  - c. Moderate influence
  - d. Considerable influence
  - e. Strong influence
  
13. Which season of the year is best to bring you and your students to Schmeckle Reserve? (Select all that apply)
  - a. Spring
  - b. Summer
  - c. Fall
  - d. Winter
  
14. Assuming you would like to bring your students to Schmeckle Reserve, would you prefer your visit to be facilitated or self-guided? (Please choose one)
  - a. I would like the program to be facilitated by a Schmeckle environmental educator.
  - b. I would like to lead the program, therefore it will be self-guided.
  - c. Other: \_\_\_\_\_

*Demographics*

15. What school do you currently work at? (checkboxes)
  - a. Bannach
  - b. Jefferson
  - c. Kennedy
  - d. Madison
  - e. McDill
  - f. McKinley
  - g. Plover-Whiting
  - h. Roosevelt
  - i. Washington
  - j. Ben Franklin
  - k. P.J. Jacobs
  - l. Charles F. Hernandez Center
  - m. SPASH
  - n. Tomorrow River Community Charter School

Thank you for your feedback!

16. What is the best way to provide information to you about environmental education programs or opportunities at Schmeckle Reserve?
  - a. Brochures
  - b. Email
  - c. Facebook
  - d. Flyer
  - e. Telephone
  - f. Website
  - g. Other: \_\_\_\_\_

## APPENDIX E: EDUCATION NEEDS SURVEY PROCEDURE GUIDE (TEACHERS)

### Protocol:

Initial Invitation Email: Sent 5/27/2014

SUBJECT: You're input is needed- Master's student needs assessment research  
Dear Stevens Point teachers,

Schmeeckle Reserve, 280-acre natural area adjacent to the University of Wisconsin, Stevens Point campus is examining the need for expanding environmental education programming. *We are seeking your feedback.* Please click the link (<http://survey.uwsp.edu/TakeSurvey.aspx?SurveyID=n4LJno82>) to take a short survey that should last less than 7 minutes. The purpose of the survey is to gain insight on Stevens Point area teachers' interests, needs, and barriers for environmental education programs and services.

The results will be shared in the master student's thesis, which aims to provide valuable information that will guide not only environmental educational programming at Schmeeckle Reserve, but also the greater Stevens Point community. This is an anonymous survey. Results will be coded in such a way that the respondent's identity will not be attached. Additionally, this research has been approved by the SPAPSD Cabinet Team.

*As a token of appreciation, for taking the survey, we would like to present you with a 25% discount in the Schmeeckle Reserve Browse Shop.* Details are included in the survey after you hit "submit." Please note that Schmeeckle Reserve understands the educational partnership for offsite field trips with the Boston School Forest. The proposed programming at Schmeeckle Reserve aims to complement and extend programming already taking place at that site.

If you have any questions, please contact the principal investigator, Carly Swatek at [cswatek@uwsp.edu](mailto:cswatek@uwsp.edu) or (715) 346-4992.

Thank you,  
Carly

*Carly J. Swatek*  
Graduate Assistant  
Schmeeckle Reserve  
University of Wisconsin-Stevens Point  
715-346-4992  
[www.uwsp.edu/schmeeckle](http://www.uwsp.edu/schmeeckle)

Reminder Email: Sent 6/4/2014 (One week before survey close)

SUBJECT: Requesting feedback- Master's student needs assessment research  
Dear teachers,

Last week you received an invitation to take a short survey regarding your needs for expanded educational programming at Schmeeckle Reserve. Thank you to those who have taken a moment to provide feedback. For those that have not, we need to hear from you. Please click the link (<http://survey.uwsp.edu/TakeSurvey.aspx?SurveyID=n4LJno82>) to view a short survey expected to take less than 7 minutes. The purpose of the survey is to gain insight on Stevens Point area teachers' interests, needs, and barriers for environmental education programs and services.

As a token of appreciation, for taking the survey, you will be eligible for a 25% discount in the Schmeeckle Reserve Browse Shop located at the Visitor Center (2419 Northpoint Dr.). Your feedback is appreciated by the survey closing date, Wednesday, June 11th.

If you have any questions, please contact the principal investigator, Carly Swatek at [cswatek@uwsp.edu](mailto:cswatek@uwsp.edu) or (715) 346-4992.

Thank you,

Carly

*Carly J. Swatek*  
Graduate Assistant  
Schmeeckle Reserve  
University of Wisconsin-Stevens Point  
715-346-4992  
[www.uwsp.edu/schmeeckle](http://www.uwsp.edu/schmeeckle)

**Survey Open Duration: 3 weeks**

## APPENDIX F: NEEDS SURVEY PROCEDURE GUIDE (NON-FORMAL PROGRAM LEADERS)

### Protocol:

*Initial Invitation Email:* Scheduled to be sent June 23<sup>rd</sup>, 2014

SUBJECT: Your input is needed- Master's student needs assessment research

Dear [insert program coordinator's name],

Schmeckle Reserve, a 280-acre natural area that is part of the UW- Stevens Point campus is examining the need for expanding environmental education programming. *We are seeking your feedback.* Please click the link (<http://survey.uwsp.edu/TakeSurvey.aspx?SurveyID=11LK8n8K>) to take a short survey that should take 5-7 minutes.

*In addition to taking the survey, please also feel free to forward this survey to youth and adult program leaders in the Stevens Point area that you feel may be interested in environmental education programs and services provided by Schmeckle Reserve.*

The purpose of the survey is to gain insight from Stevens Point area youth and adult program leaders' interests about needs and barriers of environmental education programs and services.

The results will be shared in the master student's thesis, which aims to provide valuable information that will guide not only environmental educational programming at Schmeckle Reserve, but also the greater Stevens Point community. This is an anonymous survey. Results will be coded in such a way that the respondent's identity will not be attached. Additionally, this research has been approved by the UWSP Institutional Review Board.

*As a token of appreciation, for taking the survey, we would like to present you with a 25% discount in the Schmeckle Reserve Browse Shop.* Details are included in the survey after you hit "submit".

If you have any questions, please contact the principal investigator, Carly Swatek at [cswatek@uwsp.edu](mailto:cswatek@uwsp.edu) or (715) 346-4992. Thank you in advance for your time and contributions in helping us make Schmeckle Reserve better at serving the needs of our Stevens Point-area community.

Thank you,  
Carly

*Carly J. Swatek*  
Graduate Assistant  
Schmeckle Reserve  
University of Wisconsin-Stevens Point  
715-346-4992  
[www.uwsp.edu/schmeckle](http://www.uwsp.edu/schmeckle)

Reminder Email: Sent 7/7/2014 (One week before survey close)

SUBJECT: Requesting feedback- Master's student needs assessment research  
Dear program coordinators,

Last week you received an invitation to take a short survey regarding your needs for expanded educational programming at Schmeeckle Reserve. Thank you to those who have taken a moment to provide feedback. For those that have not, we still would like to hear from you.

Please click the link (<http://survey.uwsp.edu/TakeSurvey.aspx?SurveyID=IILK8n8K>) to view a short survey expected to take 5-7 minutes.

The purpose of the survey is to gain insight from Stevens Point area youth and adult program leaders interests about needs and barriers related to environmental education programs and services.

*As a token of appreciation, for taking the survey, we would like to present you with a 25% discount in the Schmeeckle Reserve Browse Shop. Details are included in the survey after you hit "submit". Your feedback is appreciated by the survey closing date, Monday, July 14<sup>th</sup>, 2014.*

If you have any questions, please contact the principal investigator, Carly Swatek at [cswatek@uwsp.edu](mailto:cswatek@uwsp.edu), or (715) 346-4992.

Thank you,  
Carly

*Carly J. Swatek*  
Graduate Assistant  
Schmeeckle Reserve  
University of Wisconsin-Stevens Point  
715-346-4992  
[www.uwsp.edu/schmeeckle](http://www.uwsp.edu/schmeeckle)

**Survey Open Duration: 3 weeks**

**APPENDIX G: EDUCATION NEEDS SURVEY QUESTIONS FOR HOMEOWNERS**

Questions for population (homeowners) in sub question 3:

**PURPOSE:** The purpose of the survey is to understand the beliefs, attitudes, and opinions of community members towards educational programs provided by Schmeeckle Reserve.

These results will be used to determine a prioritization of recommendations for expanded environmental education programs at Schmeeckle Reserve.

**INSTRUCTIONS:** Please completely fill out all of the information requested in this form. All of your answers are for evaluative purposes only and will be kept strictly confidential. If information from this survey is used, it will be disassociated from your name or any personal identifiers.

*NOTE: If you are under the age of 18, please allow the head of household over the age of 18 to complete this questionnaire.*

1. What is your experience with programs and services provided at Schmeeckle Reserve?  
(Please circle one for each item)

	Yes, I have	No, I haven't but I'd like to in the future	Not interested
Attended public naturalist programs	3	2	1
Enjoyed the trails	3	2	1
Purchased items in the Browse Shop, Cedar Signs, etc.	3	2	1
Utilized the meeting room	3	2	1
Visited the museum	3	2	1
Volunteered	3	2	1
Other:	3	2	1

2. How did you first hear about Schmeeckle Reserve? (Please circle one)

- I have not heard about Schmeeckle Reserve
- From a friend
- Television
- Radio
- Newspaper
- Online
- Other: \_\_\_\_\_

3. One of Schmeeckle Reserve's priorities is to serve as an outdoor living laboratory for teaching and learning. Considering this mission, what is your level of interest in attending one of Schmeeckle Reserve's environmental education programs? (Please select the description that best describes your opinion)



Strongly Interested	Somewhat Interested	Interested	Somewhat Interested	Strongly Uninterested
3	2	1	-2	-3

4. Out of the following, which would you prefer as activities to participate in at Schmeeckle Reserve? (Circle all that apply)

- **Citizen Science:** *Typically 1-2 hour activities focused on contributing specialized data to a natural resource topic.*
- **Demonstration/Workshops:** *Typically 1-3 hour events hosted and highlighting a skill, activity, or make-and-take.*
- **Guided Hikes/Outdoor Programs:** *Typically 1 hour outdoor programs featuring natural/cultural history topics.*
- **Indoor Programs:** *Typically 1 hour indoor programs featuring natural/cultural history topics.*
- **Special Events (e.g., Candlelight Hike Festivals):** *Typically 2-3 hour family friendly education events.*
- **Other:** \_\_\_\_\_

5. What topics would you like to see offered at Schmeeckle Reserve?

6. Which of the following prevent you from attending educational programs at the reserve? (Circle all that apply)

- Budget
- Time Constraints
- Transportation
- Schedule Conflicts
- Other: \_\_\_\_\_
- Doesn't apply, I do not wish to attend.

7. Which season of the year is best for you to attend program(s)? (Circle all that apply)

- Spring
- Summer
- Fall
- Winter

8. What are the best times of day for you to attend educational activities? (Circle all that apply)

Weekdays (Mon. – Thurs.)	Morning	Afternoon	Evening
Weekend (Fri. – Sun.)	Morning	Afternoon	Evening

9. Would you prefer your visit to be facilitated or self-guided? (Please choose one)

- a. I would like the program to be facilitated by a Schmeeckle environmental educator.
- b. I would like to learn on my own, therefore self-guided.
- c. Other: \_\_\_\_\_

10. What other comments would you like to include?

*Demographics*

11. How many people live in your household? \_\_\_\_\_
12. Are there people in your household under the age of 18? (Please circle one)
- Yes- *If so, what are their ages?* \_\_\_\_\_
  - No
13. What is your gender? (Please circle one)
- Female
  - Male
  - Other
14. What is your age? (Please circle one)
- 18–25
  - 26–35
  - 36–45
  - 46–55
  - 56–65
  - 66+
15. Where do you reside? (Please circle one)
- Hull
  - Park Ridge
  - Plover
  - Stevens Point
  - Whiting
  - Other: \_\_\_\_\_
16. What is the best way to provide information to you about environmental education programs or opportunities at Schmeckle Reserve?
- a. Brochures
  - b. Email
  - c. Facebook
  - d. Flyer
  - e. Telephone
  - f. Website
  - g. Other: \_\_\_\_\_

Thank you for your feedback!

*Individuals who complete this survey will receive a 25% discount to the Browse Shop, Schmeckle Reserve's gift shop filled with great books, wildlife activities, and stuffed animals great for you, your family, or your friends. Just say "ENVIRONMENTAL EDUCATION" at the check out to receive your discount. This offer is good through December 1, 2014.*

## **APPENDIX H: EDUCATION NEEDS SURVEY PROCEDURE GUIDE (HOMEOWNERS)**

### **Protocol:**

A random sample survey (N = 588) was sent to individual residents in the Stevens Point area. Parcel data was acquired using geographic information system (GIS) technology and a random point assignment from 2014 parcel data. The study area included the following surrounding municipalities: town of Hull (5,597), villages of Park Ridge (502) and Whiting (1,722), and cities of Plover (12,239) and Stevens Point (26,948) that determine the representative sample (~600 people). Locations selected fall within two miles of the geographic center of Stevens Point.

Question strategies and survey implementation were developed using a four-contact distribution method that included (1) pre-service letter, (2) initial survey, (3) follow up / thank you, and (4) replacement survey (Powell, 1998; Dillman, 2007). This method was selected in order to maximize results by increasing response rates. Questions included include a mix of closed-ended questions and open-ended responses aimed at understanding the belief, interest, and need for environmental education programming in the Stevens Point area.

The community survey was pilot tested with 7-10 members of the public that included students, parents, faculty members of the University of Wisconsin- Stevens Point, and others during May – July, 2014. Revisions were made until the questions accurately reflected the desired responses.

The survey mailing timeline is included below:

- Pre-Survey Invitation Post Card: Sent Wednesday, August 27<sup>th</sup>
- Initial Survey: Sent Tuesday, September 2<sup>nd</sup>
- Thank you/Reminder Poster Card (including incentive): Sent Monday, September 8<sup>th</sup>
- Replacement Survey: Sent Wednesday, September 24<sup>th</sup>

A paid undergraduate research assistant was recruited and hired to assist with the four-phase mail distributions and data entry from September to mid-October, 2014.

### **Survey Readability Index:**

*Assessed from Flesch Reading Ease and Flesch-Kincaid Grade Level Index.*

Grade Level: 8.7

Correspondence #1: Introduction to Survey  
 Printed on a 3x5" post card

**We want to hear from you!**

In about a week, you will receive a short survey in the mail from Schmeeckle Reserve, 11W Stevens Point. The survey will only take a few minutes of your time, and your answers will help us understand the need for outdoor education in the Stevens Point area. You have been randomly selected to receive this survey, so your participation is very important to us. We look forward to receiving your feedback!

**Your participation is important because:**

1. This unique resource is right in your backyard, so your responses have direct and local impact.
2. Your feedback will impact future generations by fostering relevant, needs-based education programs.
3. Your participation is completely anonymous.
4. You will receive a 20% off coupon for merchandise in the Schmeeckle Reserve gift shop.

**Quick Facts**

Schmeeckle Reserve is a 280-acre conservancy area that is managed to protect and restore natural communities of central Wisconsin.

The Reserve exists to serve as an outdoor classroom for teaching and learning.

Facilities and trails are free and open to the public 365 days a year.

It provides a unique gathering place for the community and university in the heart of Stevens Point.

 Schmeeckle Reserve  
 College of Natural Resources  
 University of Wisconsin - Stevens Point

Schmeeckle Reserve  
 2419 Northpoint Drive  
 Stevens Point, WI  
 54481

**For more information about Schmeeckle Reserve, visit our website at [www.uwsp.edu/schmeeckle](http://www.uwsp.edu/schmeeckle)**

Correspondence #2: Survey  
 Printed on tabloid (11x17") paper, folded in half

**Schmeeckle Reserve Needs Survey**


Understanding the outdoor education needs of Stevens Point area residents.


Schmeeckle Reserve provides both educational and recreational opportunities that serve the Stevens Point community and beyond. Your participation in this survey will provide feedback that allows the Reserve to better plan and manage programs and services that make for a stronger community.

*"Someday this area will serve as an island of green in the City of Stevens Point."*

-Fred Schmeeckle, 1958

To take this survey online, visit [www.schmeeckleneeds.wordpress.com](http://www.schmeeckleneeds.wordpress.com)

 Schmeeckle Reserve  
 College of Natural Resources  
 University of Wisconsin - Stevens Point

 University of Wisconsin-Stevens Point  
 College of Natural Resources  
 Schmeeckle Reserve  
 Stevens Point, WI 54481-2897  
 715-448-4712, fax 715-479-4518  
[www.uwsp.edu/schmeeckle](http://www.uwsp.edu/schmeeckle)

September 1, 2014

Dear Stevens Point-area resident,


Thank you for participating in this important study. Our purpose is to learn about your opinions regarding interests and needs for educational programming at Schmeeckle Reserve. The information you provide will be vital to the Reserve in creating programs that help meet the needs of the greater Stevens Point community.

This survey is being given to only a select number of residents, so your participation is very important since your opinions will represent those of thousands of other community members. It should take you only a few minutes, and you can be assured that your responses will be treated in the strictest of confidence. Your completed questionnaire will be identifiable only by a number.

As a token of appreciation for your valuable time, we would like to offer you a coupon good for **20% off your entire purchase** at the Schmeeckle Reserve Browse Shop located inside the Schmeeckle Reserve Visitor Center. The Browse Shop offers a wide selection of nature-oriented gifts for anyone who enjoys the outdoors.

If you have any questions, please contact Carly Swatek, graduate assistant at Schmeeckle Reserve. Carly can be contacted via email at [cswatek@uwsp.edu](mailto:cswatek@uwsp.edu) or you may leave a message for her at (715) 346-2636. Thank you for your assistance.

Sincerely,



Ron Zimmerman  
 Director, Schmeeckle Reserve

### Informed Consent to Participate in Human Subject Research



You are being asked to participate in a research study conducted by Carly Swatek, a graduate student in the College of Natural Resources at the University of Wisconsin-Stevens Point. The purpose of this study is to assess the needs of various user groups for expanded yearlong educational programming at Schmeckle Reserve, a natural area on the UW-Stevens Point campus. This study will contribute to the student's completion of her master's thesis.

Your participation is entirely voluntary. The results of this study will be coded in such a way that the respondent's identity will not be attached to the final form of this study. **Completion and receipt of this survey signifies your consent to participate in this research.**

If you have any complaints about your treatment as a participant in this study or believe that you have been harmed in some way by your participation, please call or write:

Dr. Jason R. Davis  
Chair Institutional Review Board for the Protection of Human Subjects  
School of Business and Economics, University of Wisconsin-Stevens Point  
Stevens Point, WI 54481  
(715) 346-4598

This research project has been approved by the UW-Stevens Point Institutional Review Board for the Protection of Human Subjects.

## SURVEY START

### Instructions:

To be completed by one adult (age 18 and over) in your household. Please completely fill out all of the information requested in this booklet. When finished, place pages 1-4 in the self-addressed envelope (included) and mail to Schmeckle Reserve.

This survey should take less than five minutes to complete. As a reminder, the survey is available online by visiting [www.schmeckleneeds.wordpress.com](http://www.schmeckleneeds.wordpress.com).

Page 1

### 1. How did you first hear about the Reserve?

#### Check one.

- I have not heard of Schmeckle Reserve
- From a friend
- Television
- Radio
- Newspaper
- Online
- Other: \_\_\_\_\_

### 2. Which of the following programs and services at Schmeckle Reserve have you experienced?

#### Circle the most appropriate response for each program and service.

- |  |     |    |        |
|--|-----|----|--------|
| Attend an education program.....                   | Yes | No | Unsure |
| Use the trails.....                                | Yes | No | Unsure |
| Purchase items (ex. Browse Shop, Cedar Signs)..... | Yes | No | Unsure |
| Utilize the meeting room.....                      | Yes | No | Unsure |
| Visit the museum/Conservation Hall of Fame.....    | Yes | No | Unsure |
| Volunteer.....                                     | Yes | No | Unsure |
| Other:.....  | Yes | No | Unsure |

### 3. How often have you visited the Reserve to participate in an educational activity (guided hike, demonstration/workshop, special event, volunteer work day, etc.)?

#### Check one.

- None
- 1-3 times per year
- 4-6 times per year
- 7-9 times per year
- 10+ times per year

### 4. Out of the following, which activities would you prefer to participate in at the Reserve?

#### Check all that apply.

- Citizen Science: 1-2 hour activities focused on the collection of data related to the natural world
- Demonstration/Workshop: 1-3 hour events focused on skill-building or other activities
- Guided Hike/Campfire Program: 1-hour outdoor programs featuring natural/cultural topics
- Indoor Program: 1-hour program featuring natural/cultural topics
- Special Event (e.g. Candlelight Hike Festivals): 2-3 hour family friendly events
- Other: \_\_\_\_\_

Page 2

### 5. What is your level of interest in attending an educational program at the Reserve?

#### Circle one.

- Strongly Interested    ---    Somewhat Interested    ---    Neither Interested or Uninterested    ---    Somewhat Uninterested    ---    Strongly Uninterested

### 6. Would you prefer facilitated or self-guided educational opportunities at Schmeckle Reserve?

#### Check one.

- I would like the program to be facilitated by a Schmeckle environmental educator
- I would like to learn on my own, participating in education that is self-guided
- Other: \_\_\_\_\_

### 7. What program topics would you like to see offered at the Reserve?

Please describe your thoughts. (i.e. *owls, water in central Wisconsin, logging history, etc.*)

### 8. Which of the following may prevent you from attending educational programs at the Reserve?

#### Check all that apply.

- Budget
- Time Constraints
- Transportation
- Weather
- Other: \_\_\_\_\_
- Does not apply, I do not wish to attend. (If so, why?) \_\_\_\_\_

### 9. Which season of the year is best for you to attend program(s)?

#### Check all that apply.

- Spring
- Summer
- Fall
- Winter
- Does not apply, I do not wish to attend. (If so, why?) \_\_\_\_\_

### 10. What are the best times for you to attend educational activities?

#### Circle the most appropriate response for both weekdays and weekend.

- |                               |         |           |         |
|-------------------------------|---------|-----------|---------|
| Weekdays (Mon. - Thurs.)..... | Morning | Afternoon | Evening |
| Weekend (Fri. - Sun.).....    | Morning | Afternoon | Evening |

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### 11. How many people live in your home? \_\_\_\_\_

### 12. Are there people in your household under the age of 18?

#### Check one.

- Yes (if so, what are their ages?) \_\_\_\_\_
- No

### 13. What is your gender?

#### Check one.

- Female
- Male
- Other: \_\_\_\_\_

### 14. What is your age?

#### Check one.

- 18 - 25
- 26 - 35
- 36 - 45
- 46 - 55
- 56 - 65
- 66+

### 15. Where do you live?

#### Check one.

- City of Stevens Point
- Park Ridge
- Town of Hull
- Village of Plover
- Village of Whiting
- Other: \_\_\_\_\_

### 16. What is the best way to provide information to you about environmental education opportunities at Schmeckle Reserve?

#### Check all that apply.

- Brochures/Flyers/Posters
- Email
- Facebook
- Mail
- Website
- Other: \_\_\_\_\_

Please list any additional comments you have about education topics or the survey itself below.

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**Thank you for completing this survey!**

**Please return your completed survey in the self-addressed envelope to:**

Schmeckle Reserve  
University of Wisconsin-Stevens Point  
2419 Northpoint Dr.  
Stevens Point, WI 54481

**A coupon will be sent in the mail in the next two weeks in appreciation of your participation.**

For more information, contact Carly Swatek, graduate assistant, at Schmeckle Reserve at 715-346-2636.

### Schmeckle Reserve Quick Facts:

- Schmeckle Reserve is a 280-acre conservancy area that is managed to protect and restore natural communities of central Wisconsin.
- The Reserve exists to serve as an outdoor classroom for teaching and learning.
- Facilities and trails are free and open to the public 365 days a year.
- It provides a unique gathering place for the community and university in the heart of Stevens Point.

### Directions

Schmeckle Reserve is conveniently located in the city of Stevens Point on the northside of the UW-Stevens Point campus, just a 5-minute drive from Interstate-39.

For more information, visit [www.uwsp.edu/schmeckle](http://www.uwsp.edu/schmeckle)

Correspondence #3: Thank you / Reminder to take Survey  
Printed on 3x5" postcard

**As a token of our appreciation...**

Please accept this gift certificate as a small token of our appreciation for your participation in the Schmeckle Reserve Needs Survey.

If you have not yet completed your survey, please take a moment to do so and mail it by Wednesday, October 15th.

For more information, contact Carly Swatek, graduate assistant, at 715-346-2636.

**This coupon is good for 20% off your entire purchase in the Schmeckle Reserve Browse Shop.**

Located Inside the Schmeckle Reserve Visitor Center, the Browse Shop offers a wide selection of nature-oriented gifts for anyone who enjoys the outdoors.

Offer expires December 31, 2014.  
Coupon must be present to receive discount.

**Don't forget!**  
You can take the survey online at [www.schmeckleneeds.wordpress.com](http://www.schmeckleneeds.wordpress.com)

Schmeckle Reserve  
College of Natural Resources  
University of Wisconsin-Stevens Point

Schmeckle Reserve  
2419 Northpoint Drive  
Stevens Point, WI  
54481

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**For more information about Schmeckle Reserve, visit our website at [www.uwsp.edu/schmeckle](http://www.uwsp.edu/schmeckle)**

Correspondence #4: Replacement Survey [See Correspondence #2]  
*Sent only to respondents who had not yet sent a survey*  
Printed on tabloid (11x17") paper, folded in half

## **APPENDIX I: GROUP PROCESS MEETING AGENDA**

### **Schmeckle Reserve Education Needs Assessment Phase Three: Group Decision Making Process Meeting Agenda**

- I. Thank participants: 2 minutes**
- II. Meeting Format: 3 minutes**
- III. Project Overview: 5 minutes**
- IV. Question One: 30 minutes**

**What needs amongst potential stakeholders appear to be the most critical?**

- Generate list of needs.
- What appears to be most critical?

- V. Question Two: 35 minutes**

**What are some possible solutions / strategies to meeting those needs?**

- Generate list of solutions / strategies.
- What is necessary to meet the needs of each stakeholder group?

- VI. Question Three: 40 minutes**

**What is the role that Schmeckle Reserve can play in fulfilling those needs?**

- From strategies, generate concept of SR's role?
- What is Schmeckle Reserve's educational mission / goals?

- VII. Additional considerations: 10 minutes**

- What steps should be taken to implement this mission?
- Generate action items / timeline.
- Is there another meeting that should be followed up with?
- What other information are we missing?
- How might this information be best shared?
- Who else should be involved in this process?