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Abstract
Environmental Stewardship (ES) is voluntary action on behalf of the environment. ES is typically practiced at environmental nonprofit organizations that offer stewardship programs. Because these programs are managed by individual organizations, relatively little external research exists on their impacts, for example, diffusing norms and behaviors of ES more broadly across society. Responding to that research gap, this paper studies change in the environmental outlooks and behaviors of participants at two partner nonprofits in Texas using surveys (n=407) and interviews (n=5). Three categories of changes in environmental behavior are assessed: Natural Areas, Environmental Activism, and Water Awareness. Findings demonstrate that participation was linked to pro-environmental changes in all categories for the survey respondents. Follow-up interviews allowed the authors to capture additional aspects of ES not addressed in the survey. Ultimately, ES can lead to greater uptake in selected pro-environment actions, higher awareness of environmental issues, and greater appreciation for natural amenities.

Introduction
Environmental stewardship (ES) involves voluntary individual or collective *action* on behalf of the environment, largely due to a moral concern, that results in positive environmental impacts (Krasny 2020; Cockburn, Cundill, Shackleton, & Rouget, 2018; Raymond et al., 2013; Welchman, 2012; Worrell & Appleby, 2000). ES actions are the "suite of approaches, activities, behaviors, and technologies that are applied to protect, restore, or sustainably use the environment" (Bennett et al., 2018, p. 603). ES actions are further characterized by their scale, issue, activity, location, motivation(s), and levels of complexity (Bennett et al., 2018). Scholarship on ES has been on the rise in recent years, stemming at least in part from a growing interest in ES in the population (Falkner & Buzan, 2019), particularly in the United States (Close et al., 2016). Nevertheless, despite the popularity of the topic, empirical research on the outcomes/impacts of ES programs is lacking, and there is often disconnect between researchers who study this interdisciplinary phenomenon from individual disciplinary perspectives and traditions (Bennet et al., 2018; Van Putten et al., 2014). In other words, there is a need for more unified empirical scholarship on ES. Toward those ends, this paper draws on an integrative framework proposed by Bennett and colleagues (2018) to assess the outcomes and impacts of ES programs at two partner nonprofit organizations. Three research questions guide the study: (1) To what extent do stewards (a) use skills and insights gained from ES participation in their daily lives and (b) share experiences with others in their social networks?; (2) What additional skills or insights do environmental stewards say they gained from participation with the organization?; and (3) What, if any, differences exist in skill acquisition and knowledge sharing at organizations that operate at different spatial scales?

Addressing these questions with empirical data obtained from participants in partner environmental organizations will deepen our understanding of the environmental behavior changes and "spillover effects"—i.e., "an effect of an intervention on subsequent behaviors not targeted by the intervention" (Truelove et al., 2014, p.128)—that are linked to ES opportunities. Further, by working with partner organizations that operate at different spatial resolutions, this article will contribute to emerging

scholarship on how organizational type and geographic extent/scale reach may affect changes in environmental behaviors (Johnson et al., 2019; Jasny et al., 2019).

Background

Relevant Literature

Scholarly research on ES has been on the rise in recent decades, as the phenomenon has gained momentum in the United States and other nations in the global North (Bruyere & Rappe, 2007; Close et al., 2016). Much of this work is aimed at understanding the *motivations* of persons engaged in ES, i.e., stewards (Bennett et al., 2018; Asah & Blahna, 2012; Van Riper et al., 2018). Because ES relies heavily on volunteerism, understanding what motivates people to steward is crucial for both (1) spreading pro-environmental norms and behaviors to other members of society (Udall et al., 2019) and (2) helping venues of ES opportunities—namely, environmental nonprofit organizations—enhance their capacities to recruit and retain stewards (Johnson et al., 2018; Krasny, Russ, Tidball, & Elmqvist, 2014, p. 17; Merenlender, Crall, Drill, Prysby, & Ballard, 2016; Wright, Underhill, Keene, & Knight, 2015; Crall et al., 2013).

Spreading pro-environmental norms, increasing environmental behaviors, and building the capacities of stewardship programs and their parent organizations require more than knowledge on what *motivates* stewards. Namely, accomplishing these goals also requires evidence on the *impacts* and *efficacy* of ES programs—topics to which the literature has paid relatively less attention (Bennett et al., 2018). Put another way, the full potential of ES in terms of its broader societal impact is poorly understood (Wolf et al., 2013, p. 13, for a city-wide study see Hidayat & Stoecker, 2018 and "Bee Cities" in Marshman et al., 2019), insofar as the outcomes and results of ES programs are rarely the subject of academic or applied research available for public consumption (Lopez, 2020). Sheppard and colleagues, for instance, observed that if any outcome-oriented ES activities are occurring, they are largely qualitative and usually highly program specific (Sheppard, Ryan, & Blahna,, 2017, pp. 93-94). As such, to push the ES literature toward a richer understanding of the relationships between social systems and the natural environment (Marzluff & Ewing, 2008; Wolf & Kruger, 2010), ES scholars must focus more attention on the collective "impact these [ES] practices have on urban biodiversity, ecosystem services provision, individual health and well-being, or community cohesion" (Silva & Krasny, 2016, p. 158).

Clearly, one consideration that is critical to the study of ES impacts is *scale*. Scholars suggest that special attention needs to be given to the scale of stewardship actions relative to the scale at which the desired outcomes can be achieved (Bennett et al., 2018, p. 604; Lopez, 2020). Wyborn and Bixler (2013) assessed various stewardship organizations in the large spatial extent of the Rocky Mountains and found that cross-scale interactions (see Peters, Bestelmeyer, & Turner, 2007) within three parameters of scale (scale framing, scale dependency, and scale dependent collaborative advantage) greatly impacted the effectiveness of the organizations' respective missions and desired outcomes. Bennett and colleagues (2018) argued that comprehensive understanding of all feedback at various scales, both positive and negative, are crucial for evaluating, and then adapting, ES approaches. Incorporating lessons learned at a variety of [interacting] scales into programs and policies can add significant value to steward programs and improve their efficacy (Bennett et al., 2018, p. 605). What is more, from an organizational/practical perspective, the significance of evaluating outcomes and applying adaptive management is "critical for demonstrating project impacts to stakeholders, whether they are funders, interested individuals, or regulatory agencies" (Sheppard et al., 2017, p. 87). Adaptive management, a concept that has been widely applicable to various fields of academic and nonacademic study, calls for the iterative approach to managing a resource and creating best management practices based on monitoring and adaptation, usually in collaboration with multiple groups (Holling, 1978; Wyborn, 2015; Sheppard et al., 2017).

A barrier to adaptive management, or any other method of evaluation, for environmental nonprofit organizations is that such organizations tend to be small, poorly-funded and "often lack access to the research capacity, funding, or tools needed to evaluate scientifically the environmental effectiveness of the measures they undertake" (Close et al., 2016, p. 1). As such, a promising and mutually beneficial line of ES research involves forming partnerships or collaborations between environmental nonprofit organizations and researchers at universities (Silva & Krasny, 2016). In the discipline of geography, these

mutually beneficial research collaborations are increasingly referred to as *community geography* (see Lopez, 2020; Robinson, 2010). Community geography involves undertaking research wherein objectives, data collection, and monitoring procedures are informed by community partners, such as environmental nonprofit organizations, based on their short- and long-term needs (Lopez, 2020). Such collaborations have appeared in recent ES research (Martin, 2019; Close et al., 2016; Johnson et al., 2018). Community geography facilitates mutually beneficial research interventions that attend to partner capacity and programmatic needs while opening opportunities to advance ES scholarship via empirical case studies (Lopez, 2020).

Along those lines, integrating the practice of community geography into ES scholarship offers an opportunity for putting a sharper focus on the outcomes and impacts of ES programs. This paper sets out to realize that opportunity. Prior to unpacking our approach in greater detail, however, recall that in addition to the need for research on ES outcomes, there is also a documented need to study ES from a more holistic and interdisciplinary perspective (Bennet et al., 2018). The next section briefly relates the conceptual framework that structures our research, which is drawn from a recent attempt to explicate the complex and interdisciplinary nature of environmental stewardship.

Conceptual Framework
According to Bennett and colleagues, "the lack of an integrated framework for environmental stewardship limits our ability to systematically analyze case studies, build theory, and produce practical guidance" (Bennett et al., 2018, p. 598). For that reason, Bennett et al. (2018) proposed a comprehensive analytical framework meant to synthesize the various elements of stewardship (Figure 1), including outcomes and leverage points for change. Bennett and colleagues (2018) challenged future researchers to engage with their integrative framework in studies that evaluate: (a) outcomes that are both intended and unintended (Larrosa, Carrasco, & Milner-Gulland, 2016); and (b) any benefits that may exist after the ES activity/program, meaning any "spillover effects" or changes in environmental outlooks and behavior due to participation (Courtney, Mills, Gaskell, & Chaplin, 2013; Hargreaves, 2011; example of another framework application in Plummer et al., 2020).

Figure 1
The authors applied yellow boxes to Bennett et al.'s 2018 framework, highlighting components relevant to this study. (Source: Bennett et al., 2018, p. 605)
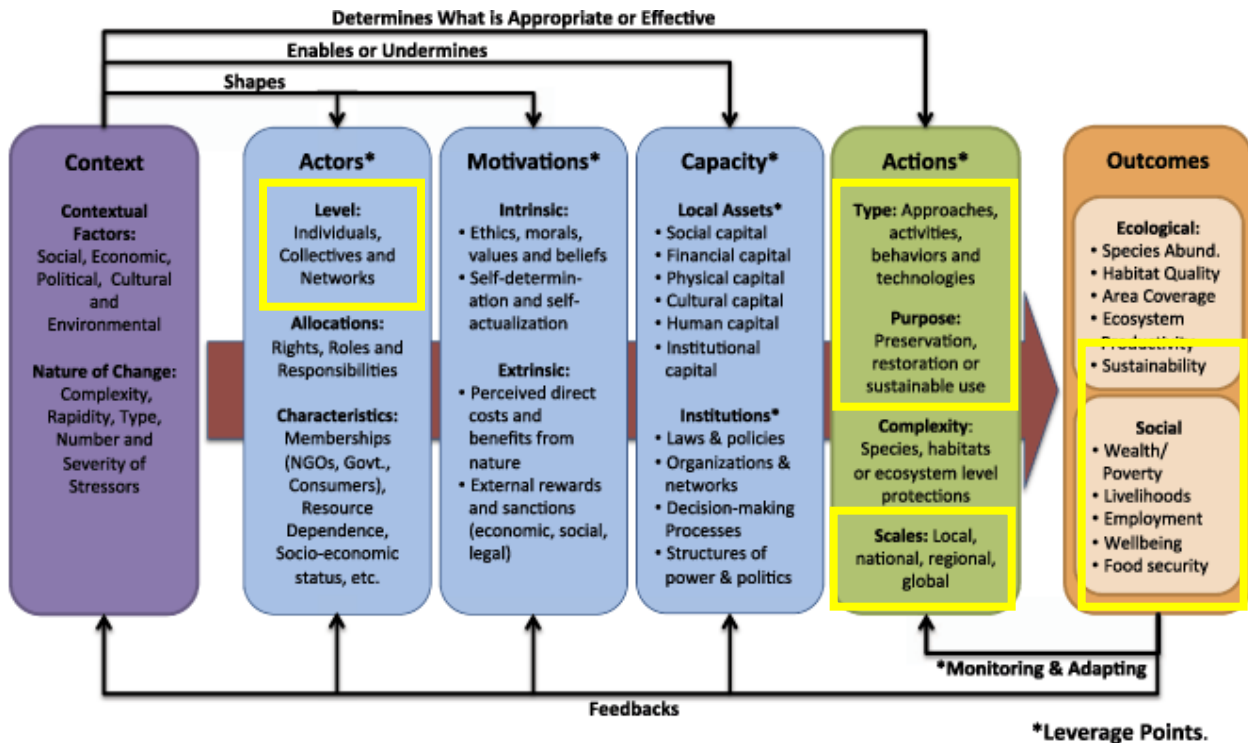
Taking up this challenge, the authors note that researchers have long suggested that environmental volunteerism may be associated with changes in environmental outlooks and behaviors that can *strengthen* the connection between people and their environment (Ryan, Kaplan, & Grese, 2001; Jordan, 1989; Ross, 1994). More specifically, working with and in natural areas may create an attachment to places and/or place meanings that manifest as pro-environmental behaviors (Ryan, 1997; Stedman, 2002; Stedman & Ingalls, 2014; Chow et al., 2019; Kudryavtsev, Krasny, & Stedman, 2012). Environmental behaviors are generally defined as any behaviors that promote sustainable use of natural resources, benefit the physical environment, and/or improve the quality of the natural environment (Larson et al., 2018). Environmental behaviors are typically generated from an informal environmental education experience, e.g., participation in a stewardship program or the like (Erhabor, 2018).

Environmental behaviors come in many forms. Particular behaviors relevant to this study fall into three broad categories: lifestyle, citizenship, and social-environmental (Krasny, 2020). Lifestyle behaviors include daily behavior and consumer choices that reduce environmental degradation or enhance our relationship with the environment (Dietz et al., 2009). Citizenship behaviors involve attempting to influence policies and policymakers that prioritize environmental issues. Lastly, social-environmental behaviors consist of discussing and educating others in a given social network (friends and family) about environmental issues (Larson et al., 2015; Krasny, 2020).

Ryan et al. (2001) found that the skills learned and obtained from volunteerism led to the creation of native landscapes, general appreciation of natural areas, and environmental activism (environmental behaviors). The implication is that stewardship activities can create a positive feedback loop, whereby the amount of "appreciation of and advocacy for local natural areas" (Ryan et al., 2001, p. 641) is increased due to participation in ES. More specifically, when volunteers participate in environmental programs, they are acting on opportunities for environmental behaviors. Performing those environmental behaviors, in

turn, influences a steward's identity in ways that increase the likelihood of subsequent environmental behaviors (Krasny, 2020, p. 64).

In addition to feedback effects, participation in ES programs also produces spillover behaviors that manifest when stewards apply ideas, skills, or insights gained from ES in different contexts—i.e., outside of the ES arena in which the knowledge was acquired (Nilssion, Bergquist, & Schultz, 2017). At times, spillover behaviors act as "cues" that enable stewards to perceive themselves as "environmentally conscious," which increases the probability they will perform environmental behaviors in the future (Cornelissen et al., 2008). Spillover behaviors also serve as a "foot-in-the-door," which allows stewards to replicate and expand environmental behaviors that facilitate their budding environmental identity (Nilsson, Bergquist, & Schultz, 2017; Krasny, 2020).

Thus, it is reasonable to assume that those who become involved as environmental stewards typically expand their participation in environmental programs, which reinforces their commitment to solving or mitigating environmental issues. The education and experience(s) obtained from stewardship programs might therefore be considered *transformative learning*, insofar as they can result in behavioral modification (Pisters et al., 2020; Leal et al., 2018; Mehmood et al., 2019).

To put these expectations in the context of the Bennett et al. framework (Figure 1), the authors contend that feedback relationships exist between actors, actions, and outcomes in ES programs hosted by environmental nonprofits. In that sense, *actors* can be viewed at the collective level, where individual actors self-select into, and then act as part of, institutions. The *actions* of actors are at least partially determined and/or constrained by the stewardship programs in which actors participate. These actions are established by environmental nonprofits. Circling back to a key point from earlier, the *impacts* or *outcomes* from these program-specific actions, if any, will occur at different *scales* based on the extents or footprints of the environmental nonprofits and their stewardship programs (Wyborn and Bixler, 2013; Bennett et al., 2018).

Putting all of these pieces together, advancing ES scholarship (1) by partnering with one or more environmental nonprofits (i.e., conveners of *actors*), (2) to study how voluntary participation in ES programs at those nonprofits (i.e., program-sponsored *actions*), (3) results in socially beneficial *outcomes*, and arguably necessitates a collaborative research design similar to projects being carried out under the heading of *community geography* (Lopez, 2020). To the extent that partnerships can be forged at multiple *scales* of analysis in order to study how (or if) outcomes vary by institutional reach and mission. These engaged projects can begin to fill in critical blanks in the current landscape of ES research (e.g., Bennett et al., 2018). The project described herein attends to these objectives by partnering with two environmental nonprofits with stewardship programs—one that operates at the scale of the state of Texas, and one that operates at the scale of a medium-size city (San Marcos, Texas)—to examine selected outcomes and differences in those outcomes by organization. The next section elaborates on the study design, prior to presenting and discussing the results.

Methodology

Community Geography Approach

Guided by the principles and values of community geography (e.g., Robinson, 2010; Robinson & Hawthorne, 2018), the authors at Texas State University invited two environmental nonprofits to participate in new research collaborations. After discussing shared interests and research possibilities, both organizations ultimately accepted the authors' invitations and began generating lists of potential research questions that they would be interested in exploring. For anonymity and privacy, the two collaborator organizations are referred to as community partner 1 (CP1) and community partner 2 (CP2).

Community Partners

CP1 focuses on water quality awareness and water quality monitoring throughout the state of Texas. The organization was established in 1991 and since has trained over 10,000 stewards to monitor water quality. Currently, CP1 has five full-time staff members and three part-time student workers. CP1 is dedicated to protecting the over 30,700 kilometers of Texas waterways. The organization brings together

community members, students, and educators to promote ES. To provide an example of their breadth, CP1 held 3,062 educational events and monitored an average of 405 stewards each month, spending 5,964 hours sampling 241 sites over two years (2016-2018).

CP2 is operated by approximately 20 part-time volunteers and was established in 1998 as a nonprofit organization to serve the City of San Marcos, Texas. CP2's mission is to connect greenspaces and trails to improve access to natural spaces—and, by extension, enhance quality of life—for local residents. CP2 works primarily in three arenas: 1) *conservation*, to protect and conserve greenspace by working with stakeholders; 2) *stewardship*, to maintain the health of greenspaces through community participation; and 3) *outreach/education*, to promote awareness and understanding of the value of protecting and connecting greenspaces. Volunteers operate the organization in several capacities. For instance, the trail crew conducts most of the stewardship work, while the outreach and fundraising committees work behind the scenes, all in an effort to keep more than 35 kilometers of trails in natural areas across the city maintained.

While CP2 aims to connect people to places with alternative routes, watershed management is an added benefit of preserving natural areas. Natural areas can provide essential ecological services critical to urban ecological functioning and sustainability (Wolch, Byrne, & Newell, 2014; Irvine et al., 2009). For example, natural areas improve watershed health (Avril & Barten, 2007): the pervious cover from absence of a heavily built-up environment allows for more water infiltration, reducing pollution from excessive runoff. Moreover, natural areas enable water retention and "natural" treatment systems to manage storm water; tree canopies and root systems reduce storm water flows and nutrient loads (i.e., fertilizer in the form of pollution) that can reach waterways (Bartens et al., 2008). Other benefits of natural areas include: reduced pollutants from wetlands acting as sponges, buffering developed areas from flooding and pollution; forested areas removing carbon (Vaughn et al., 2014), and lowering the Urban Heat Island effect, thereby sustaining important biological resources and natural habitats. These benefits are particularly relevant in CP2 service area. Namely, San Marcos, Texas is located in the heart of the Austin-San Antonio Corridor, one of the fastest growing regions in the nation. The area is known as "flash flood alley" and has the national record for flood-related deaths (Ponstingel, Lopez, & Earl, 2019; Caran & Baker, 1986). As such, natural space preservation for flood mitigation is crucial in this region.

Data
Both community partners had a common research interest: they wanted to know what impact their programs have on people's daily lives. They were particularly interested in knowing whether stewards use the skills and insights gained from volunteering in their home lives, and whether they share that knowledge with friends and families. Because each partner had a myriad of other research objectives, surveys were developed to address each respective partners' needs. However, both surveys included "core questions" that allow us to explore outcomes for both organizations in a consistent (and comparative) way.

Survey Instrument
For both organizations, the authors created a 20-item survey instrument (Appendix A). Surveys were administered online via the Qualtrics platform during the summer of 2019 to each organization's volunteer database. For the purposes of this study, the survey items regarding changing environmental outlooks and behavior (i.e., *outcomes*) included a series of 13 statements about selected environmental behaviors. For each environmental behavior, respondents were asked to choose from the following responses: "I did this prior to involvement;" "Yes – I now do this;" or "No – I do not do this." The survey was designed to capture the degree to which volunteers practiced selected pro-environmental behaviors or held pro-environmental outlooks (1) *prior to* their involvement with the nonprofit partner, (2) practiced pro-environmental behaviors or held pro-environmental outlooks *after* (i.e., *by way* of) their volunteer experience, or (3) have not and do not practice pro-environmental behaviors or hold pro-environmental outlooks. The specific environmental behaviors of interest to our partners fell into three content areas, which are summarized alongside their associated type of environmental behavior, as follows:

Natural Areas: Usage and Appreciation

- I visit natural areas and preserves. [Lifestyle behavior]

- I enjoy myself in the outdoors. [Lifestyle behavior]

- I take vacations to natural areas. [Lifestyle behavior]

- I feel at home in natural areas. [Lifestyle behavior]

- I explore new areas within nearby parks and preserves. [Lifestyle behavior]

- I invite others to explore natural areas with me. [Social-environmental behavior]

Environmental Activism

- I write letters about environmental issues. [Citizenship behavior]

- I tell my friends and family about environmental issues. [Social-environmental behavior]

- I sign petitions regarding environmental quality. [Citizenship behavior]

- I participate in/attend local government decision-making meetings. [Citizenship behavior]

Water Awareness

- I reduce household water consumption indoors. [Lifestyle behavior]

- I reduce household water consumption outdoors. [Lifestyle behavior]

- I understand how watershed health affects water quality. [Lifestyle behavior]

Survey respondents were given the option at the end of the questionnaire to indicate their willingness to participate in face-to-face, individual interviews at a later date. To gain additional insights and diverse perspectives, interviews with willing participants complemented the survey by having semi-structured, conversation-style discussions with a handful of stewards. In total, the authors received 522 survey responses (~12% response rate) and conducted five follow-up interviews.

Research Questions and Methods

The data described in the previous section was used to answer the three research questions stated in the introduction and reproduced below for convenience.

Research Question 1

 (1) To what extent do stewards use skills and insights gained from participation in their daily lives and share experiences with their social networks?

To evaluate this question, the authors used McNemar tests to identify before and after changes in environmental behaviors (e.g., Weaver et al., 2016). This statistical test can be used for comparing paired responses and testing the null hypothesis that the numbers of volunteers reporting environmental behaviors experienced no change before and after participation in ES (Caronni & Sciumè, 2017). In other words, the test allows us to conceptualize participation in a stewardship program as something of a "treatment" that might have an "effect" on how volunteers (participants) use and appreciate natural areas, participate in environmental activism, and show awareness of selected water [conservation] issues and practices (see above).

Research Question 2

(2) What additional skills or insights do volunteers say they gained from participation with the organization?

Insights were obtained through guided interviews (Litchman, 2009, p. 141) or semi-structured interviews (Qu & Dumay, 2011). The same broad question (*What has involvement in CP1/CP2 changed in your life?*) was asked to all participants to help identify themes consistently and systematically. From there, in-conversation probes were used to provoke more elaborate responses (Qu & Dumay, 2011, p. 241). The interviews were recorded, transcribed, and data was analyzed using an open-coding approach, wherein no codes were pre-construct, themes and patterns were allowed to arise organically from textual data (Gibbs, 2007).

Research Question 3

(3) What, if any, differences, existed in skill acquisition and knowledge sharing due to the scale of the organization?

A series of chi-square tests were applied to the "Yes – I now do this" responses to our pro-environmental behavior questions by organization. The chi-square statistic is used when the variable is measured at the nominal/categorical level and categories are mutually exclusive. The null hypothesis is that there are no differences in patterns of responses between the groups (Gray, Grove, & Sutherland, 2017). Based on our earlier survey findings (Lopez & Weaver, 2020), stewards with broader scale environmental nonprofits tend to be more motivated by career, professional, networking, and policy advocacy opportunities than stewards at finer scale community-based organizations. At the same time, volunteers at local scale organizations tend to be more motivated by desires to make tangible, visible changes in their immediate communities. Based on these findings, the authors expect, in contrast to the null hypothesis, that volunteers with CP1 will become more likely to engage in advocacy (e.g., letter writing, petition signing, and talking about issues with family and friends), whereas CP2 volunteers will become more inclined to engage in action (e.g., visiting natural areas, reducing water consumption, and going to local government meetings—NB: while attending local government meetings is certainly related to policy and advocacy, the authors assume that volunteers with community scale organizations are more likely to engage in local political processes, whereas volunteers with broader/state scale organizations would be more likely to engage in state and national politics).

All statistical analyses described above were performed in JMP Pro 14, and qualitative coding was conducted manually using Microsoft Word.

Results

The survey received 522 responses, of which 397 were from CP1 and 125 from CP2. Of those observations, 407 responses contained sufficient information for use in the chi-square tests described above. However, on average, there were 314 complete responses with sufficient information to study changes in the environmental outlook and behavior portions. More precisely, because McNemar tests require paired data observations, several observations with only partial responses were unusable and omitted from the outcome-oriented analysis. Five interviews were conducted, lasting approximately 30 minutes each. Because the option to participate in the study further (the last question asked on the survey) indicated in-person interviews, only those accessible to the researchers, i.e., in San Marcos, Texas, were able to schedule interviews during the allotted time frame. As such, only environmental stewards from CP2 are presented in the interviews. This limitation will be expanded on later in the paper.

Research Question 1

McNemar tests revealed that both nonprofit partners appear to have experienced success in "moving the needle" toward pro-environmental behaviors among their volunteers. More specifically, with the exception of two lifestyle behaviors, all of the environmental behaviors about which respondents were questioned were associated with significant uptake following volunteer experiences (Table 1). The two exceptional statements were "I feel at home in natural areas" and "I enjoy myself in the outdoors." After involvement, 100% of respondents reported that they feel this way. Because of the lack of variation, McNemar tests for these items could not be fully implemented. However, despite the lack of our ability to quantify the statistical significance of this outcome, the authors note that it has extremely important practical significance—namely, after their stewarding experiences, stewards from both organizations unanimously claimed to feel at home in natural areas and enjoy the outdoors.

Table 1

McNemar test results for all categories of changes in environmental outlooks and behaviors

Category	Statement	p-value and descriptive interpretation After = # of responses that engage in behavior/total responses
Natural areas: Usage and Appreciation	I visit natural areas and preserves.	<0.001 After (n= 318/319) Before (n=274/319)
	I enjoy myself in the outdoors.	After involvement 100% of participants now enjoy themselves in the outdoors. (n=323)[1]
	I take vacations to natural areas.	<0.001 After (n=300/314) Before (n=237/314)
	I feel at home in natural areas.	After involvement 100% of participants now feel at home in natural areas. (n=321)[1]
	I explore new areas within nearby parks and preserves.	<0.001 After (n=311/319) Before (n=203/319)
	I invite others to explore natural areas with me.	<0.001 After (n=280/312) Before (n=177/312)
Environmental Activism	I write letters about environmental issues.	<0.001 After (n=112/298) Before (n=78/298)
	I tell my friends and family about environmental issues.	<0.001 After (n=302/317) Before (n=193/317)
	I sign petitions regarding environmental quality.	<0.001 After (n=224/306) Before (n=138/306)
	I participate in/attend <u>local</u> government decision-making meetings.	<0.001 After (n=163/299) Before (n=90/299)
Water Awareness	I reduce household water consumption indoors.	<0.001 After (n=309/323) Before (n=220/323)
	I reduce household water consumption outdoors.	<0.001 After (n=306/314) Before (n=215/314)
	I understand how watershed health affects water quality.	<0.001 After (n=314/319) Before (n=174/319)

[1] All respondents now perform this activity, statistical significance not evaluated.

Research Question 2

Closed-ended surveys are appropriate for statistical analysis, but often leave key insights unrevealed. A secondary objective of this study was to attempt to capture additional spillover effects/behaviors and feedbacks that have not been documented in the literature. The data obtained from five interviews was analyzed and coded into three categories of changes, with respect to: *perceptions* of natural areas and self (identity), *experiences* in natural areas, and *skills* learned through knowledge shared (see Discussion).

In changing their perceptions of natural areas, one interviewee reported to see their local natural areas in a different way after working with CP2. The individual stated that the local natural areas are "something to preserve, to fight for, and to keep … [they will] make this a really special place for years to come." In changing their self-perception, one interviewee described how they always considered themselves an environmentalist, but "never really acted on it until getting involved" with CP2. By enacting their values through initial participation, they felt like "being involved with [CP2] has…opened the doors for me to be involved in the city" in other forms of activism. Another interviewee described a similar experience, wherein they said that after participation in a stewardship program: "I definitely have a better local identity … I feel I've connected a lot more to local issues."

Consistent with the survey results from above, most interviewees reported changes in the way they experience natural areas. For example, some stated they now seek out more remote natural areas for the solitude they bring: "I like to go to the ones that are remote enough and big enough so that you don't hear a car, see anyone, or have cell service." Others reported to use their local trails more frequently. Several stated how involvement with CP2, particularly with trail-building, significantly changed their attitude(s) when recreating on trails: "I had no idea what it took to maintain the trails for these places" and "it sure has made a difference in my attitude towards a lot of stuff … doing some of this work and seeing how much work a lot of people do; there's a lot of people that do a ton of uncompensated work." Another interviewee simply remarked that understanding trail-building has "really made [the interviewee] appreciate volunteers."

Lastly, though informal environmental education is a component of most stewardship programs, changes in skills learned through knowledge were further expressed in the interviews. For example, an interviewee stated: "I'm actually learning skills in trail crew that I could apply at my house." Another interviewee described how they were in fact using the skills they learned at home. Namely, the volunteer, in relating a story about going on a tour of a natural area with a botanist (a CP2 program), remarked: "When I got home and walked around my yard … and that is when I realized I had different trees. I thought I had nothing but hackberries and cedars pretty much, but after learning more from [CP2], I actually had some of those trees [from the natural area] growing in my own yard!"

Research Question 3

Scale, as a fundamental spatial concept, is frequently mentioned in ES research—but remains underexplored, especially as it relates to the social or spatial reach of ES outcomes (Lopez, 2020). As such, this study attempted to differentiate changes in environmental outlooks and behavior based on two environmental organizations that function at very different scales. The operation of the scale (scale framing) also plays into the goals, missions, and anticipated reach of the respective organizations.

Table 2 reports on patterns of differences in responses to questions about environmental behaviors between the two partner organizations. Where nonrandom between-group differences in responses were observed, they were attributable to more changes than expected in CP2 (city-scale) compared to CP1 (state-scale). With respect to Natural Areas, statements about visiting natural areas, enjoying self in the outdoors, taking vacations to natural areas, and feeling at home in natural areas were different between the two sets of respondents ($p < 0.01$), while no meaningful differences were found in statements regarding exploring new areas and inviting others to explore (Table 2). For the Environmental Activism category, nonrandom between-group differences were observed in the statements regarding telling friends and family about environmental issues ($p < 0.01$, Table 2) and participating/attending local government decision-making meetings ($p < 0.01$, Table 2). A slightly significant difference was observed between the

two sets of respondents for the statement "I sign petitions regarding environmental quality" (p=0.09, Table 2). No differences were found in any of the Water Awareness responses.

Table 2
Chi-squared tests based on organization type

Category	Statement	% Agree or Yes, CP1	% Agree or Yes, CP2	p
Natural Areas: Usage and Appreciation	I visit natural areas and preserves.	18%	32%	0.005
	I enjoy myself in the outdoors.	14%	27%	0.004
	I take vacations to natural areas.	16%	32%	0.002
	I feel at home in natural areas.	16%	31%	0.007
	I explore new areas within nearby parks and preserves.	32%	39%	0.321
	I invite others to explore natural areas with me.	30%	40%	0.104
Environmental Activism	I write letters about environmental issues.	12%	16%	0.928
	I tell my friends and family about environmental issues.	29%	48%	0.002
	I sign petitions regarding environmental quality.	25%	36%	0.091
	I participate/attend local government decision-making meetings.	20%	36%	0.006
Water Awareness	I reduce household water consumption indoors.	27%	30%	0.615
	I reduce household water consumption outdoors.	29%	30%	0.858
	I understand how watershed health affects water quality.	45%	40%	0.384

Discussion

Our investigation of research question 1 revealed that ES substantively altered stewards' environmental behaviors and contributed to the creation of new environmental behaviors (Table 1). Stated plainly, the ES programs at our partner organizations had a demonstrable *impact* on cultivating pro-environmental behavior in volunteer participants. Such outcome-oriented findings have been in relative undersupply in the literature (Wolf et al., 2013). More precisely, while the conceptual foundations of a feedback loop between stewardship and pro-environmental behavior have been well sketched out in theory, empirical evidence for that loop—especially evidence that also suggests that individual environmental organizations play key and impactful roles in that loop—is largely absent from the literature. In keeping with the community geography tradition, our results therefore serve the dual purposes of documenting program impacts for our research partners, while also adding weight to extant ES scholarship on the links between volunteering and the expansion of environmental behaviors. With respect to the latter, the authors found that in each topical area under investigation in this study—Natural Areas, Environmental Activism, and Water Awareness—significant levels of change toward pro-environmental behaviors were associated with involvement in stewardship programs (Table 1).

Next, recall that both community partner organizations have missions that are oriented toward environmental stewardship *generally*, but are characterized by different *specific* areas of practice. CP1 (state-level) focuses principally on monitoring surface water quality, while CP2 (city-level) is concerned primarily with maintaining natural areas. These differences are noteworthy insofar as participants from both organizations reported gaining skills or knowledge beyond the narrow focal areas of their host institutions. For example, volunteers at CP1 were found to experience positive changes (i.e., increased uptake) in environmental behaviors related to natural areas, just as volunteers with CP2 reported heightened water awareness. These "spillover effects" suggest that stewards ostensibly become broader, better-rounded pro-environmental actors by virtue of their ES experiences, even when they receive direct instruction or training only in specific/narrow areas of focus (Truelove et al., 2014; Nilsson et al., 2017). One implication is that ES networks stewards to people and ideas in ways that expand the individual

stewards' overall environmental behavioral repertoires. In such circumstances, specific (narrow) ES opportunities function as "cues" for or precursors to future environmental behaviors that go beyond the knowledge directly acquired in ES-related training or education (Cornelison et al., 2018).

As an example of additional spillover effects from ES, respondents from both organizations were found to experience changes in lifestyle behaviors due to their volunteering. For example, respondents were more inclined, after their ES experience, to report that they "feel at home in natural areas" and "reduce household water consumption." Similarly, ES participation was associated with increases in citizenship behaviors for stewards, in the form of greater levels of environmental activism. Respondents were significantly more likely to say that, following their ES experience, they now sign petitions and participate in local government meetings (Table 2). Likewise, respondents' post-ES social-environmental behaviors were significantly more oriented toward transmitting pro-environmental behaviors within their social networks—e.g., there was a significant post-volunteering increase in the number of stewards who agree with the following statements: "I tell my friends and family about environmental issues" and "I invite others to explore natural areas with me."

Taken together, the evidence from studying research question 1 suggests that the institutionally constrained actions (i.e., the actions available in stewardship programs at partner organizations) taken on by volunteer actors (stewards) (Figure 1) produced something of a feedback loop. Namely, the actors, by virtue of engaging in ES actions, expanded their environmental behavioral repertoires and adopted more pro-environmental behaviors in more numerous and diverse aspects of their lives. The benefits that might accompany those choices (e.g., potential positive health impacts from using and enjoying natural areas; potential for fulfilling social interactions that come from inviting others to explore natural areas and talking to friends and family about environmental issues, etc.; see Silva & Krasny, 2016) are likely to motivate stewards to engage in more ES in the future.

To add a richer perspective to these findings, our second research question sought to identify *specific* skills or knowledge gained from ES, beyond the environmental behaviors that our survey was designed to capture. A small number of post-survey interviews with stewards helped to clarify the picture of feedbacks, spillover effects, and unintended outcomes (Larrosa et al., 2016; Ryan et al., 2001; Courtney et al., 2013) that was painted in the results discussed above. The most common theme to emerge from the interviews was that ES seemingly changes *perceptions* of the self and the environment. For example, an interviewee reported to see their local environment from a different perspective due to their ES experience. They described how local natural areas are "something to preserve, to fight for, and to keep … [they will] make this a really special place for years to come." Involvement with an environmental organization provided another interviewee with a way to actualize their internalized values of environmentalism. They "never really acted on [their values] until getting involved" which "opened the doors…to be involved in the city" in other forms of activism—i.e., they got their "foot-in-the-door" (Nilsson et al., 2017). The interviews revealed that ES is potentially a vehicle through which stewards acquire and build "power within"—that is, power in the form of the confidence and knowledge to make individual decisions that contribute to broader societal (here, pro-environmental) changes that the stewards hope to see in the world (e.g., Green, 2016).

Collectively, the findings from research questions 1 and 2 hint at a virtuous circle of pro-environmental behavior similar to that of "the habit loop" (e.g., see Becker et al., 2014; Duhigg, 2012). Individuals with internalized pro-environmental values seemingly seek out opportunities to act on those values (often, via environmental nonprofit organizations). Those actions allow stewards to accumulate additional pro-environmental values, knowledge, and behavior. That process of accumulation reinforces internal values and further motivates stewards not only to keep stewarding, but to become more active in broader processes of social change aimed at enhancing and protecting the environment (both locally and globally). That being said, such a virtuous circle is animated in our results—not definitively established and comprehensively mapped out. Rather, there is much to explore in this arena, particularly with respect to how a steward's self-identity/perceptions of self-identity change in relation to participation in stewardship programs. Because such experiences appear to lead to tangible, actionable changes in behaviors, involvement with environmental stewardship programs may be considered *transformative learning*, which is characterized by "place-based sustainability initiatives [that] develop an ecological

consciousness" (Pisters et al., 2019, p. 1). Future research on this topic will potentially allow for a better-*rounded* picture of the virtuous circle that the authors started to outline above.

More immediately, our third research question asked what differences, if any, existed between the two organizations in terms of changes in environmental behaviors. All of the significant differences we observed were due to volunteers with CP2 (the community scale organization) exhibiting higher rates of behavioral change (i.e., more instances of "Yes – I now do this") relative to volunteers at CP1 (the broader/state scale organization). In the Natural Areas part of the survey, stewards from CP2—who tend to do more hands-on, active work in natural areas—became more likely to "feel at home in natural areas." This finding was intuitive due to the hands-on, *in situ* character of the organization's work. However, in Environmental Activism, the authors anticipated that volunteers with CP1 would demonstrate more changes in letter writing, petition signing, and speaking with family and friends about environmental issues, given that the organization functions at a broad scale and is concerned with the universalizing (policy-relevant) issue of water quality. Yet, it was the volunteers at CP2 who demonstrated significantly greater uptake in speaking with friends and family about environmental issues, and a weakly significant increase in signing environmental petitions (Table 2). While this finding is not exactly what the authors were expecting, we note that it is highly consistent with the notion that stewardship leads to "spillover effects," or an increase in environmental behaviors beyond the scope of the stewardship work itself. To that end, the null results in the Water Awareness section demonstrate that although CP2's main mission is not directly centered on issues of water quality and conservation, 40% of stewards learned how watershed health affects water quality (Table 2).

As expected, CP2 volunteers became more inclined to attend local government meetings after volunteering. This increase in civic behavior was also evident in an interview, in which a CP2 steward stated that involvement "opened the doors" for them to become involved in city governance. Note again that no differences were observed in terms of understanding how watershed health affects water quality—volunteers from both organizations reported improved understanding in this arena, but the changes were not significantly different (Table 2).

In sum, our community geography-motivated engagement with Bennett et al.'s (2018) ES framework found meaningful differences in actors' (stewards') environmental behaviors due to stewardship (actions). Our evidence supports the notion that these behavioral changes exist in a feedback loop—stewarding provides skills, experience, and knowledge that motivate stewards to continue stewarding, to involve others in stewarding, and to become active in broader processes of social change. Notably, though, behavioral changes associated with stewarding exhibited some variation (albeit slightly) depending on the scale at which actions were performed—and, as such, the actions available to the stewards. Still, pro-environmental behaviors increased for participants in both partner organizations, irrespective of scale. In addition to adding informative empirical evidence to ES scholarship on the feedback loop between stewarding and environmental behavior, these results have practical value for our partner organizations. To obtain funding, nonprofit ES organizations typically need to monitor their programmatic outcomes and impacts, incorporate lessons learned (Bennett et al., 2018; Handy, 2001), and document their efficacy to funders (Sheppard, Ryan, & Blahna, 2017). To the authors and our partners, empirical evidence of pro-environment behavioral change is an important testament to programmatic impacts and organizational efficacy. In other words, consistent with the aims of community geography, our study has the potential to contribute simultaneously to existing ES scholarship *and* to the capacity of our nonprofit partners.

To use this latter observation as a point of departure, one implication of this article is that, to advance ES theory, it is critical for researchers to collaborate with organizations who are at the frontline of ES work (Close et al., 2016; Johnson et al., 2018). Yet environmental organizations, and any nonprofit or community-based organization for that matter, are often hesitant to partner with researchers given the history of being research "subjects" rather than partners (Pain, 2004; Pain & Kindon, 2007; Kindon & Elwood, 2009; Kindon et al., 2007; Fuller & Kitchin, 2004). Community geography strives for reciprocity in research collaborations (Mohan, 2007). As a form of Participatory Action Research (PAR), community geography encourages community partners to pose research questions, share their needs, and guide the research design so that the data produced directly benefits them (Robinson, 2010; Boll-Bosse & Hankins, 2018). Toward that end, our results show that our two community partner organizations appear to be

running effective programs that produce impacts in the form of behavioral change. At the same time, the authors have shown that behavioral change is arguably most closely linked to empowerment—suggesting that our partners will be best served by designing and implementing programs that provide all volunteers with opportunities to do empowering work, and not simple menial tasks that the organization lacks the internal capacity (or desire) to do. The next step in our community geography process is to take these insights and use them to generate "action plans" for each partner organization that are aimed at building and retaining larger and more diverse volunteer pools.

Limitations and Future Research

The authors study, and especially our investigation of research question 2, was limited by the number and source of participants. The authors studied just two organizations in Central Texas (USA), and all five follow-up interviews were conducted with volunteers from just one of those organizations (CP2) due to distance limitations and a low response rate to our request for interviews. Future research should strive to perform more interviews to engage deeply with stewards' individual [perceptions of] volunteer experiences. Similarly, our partner organizations function at the city- and state-scale. Additional research that works in collaboration with hyperlocal- (e.g., a block club or neighborhood garden), national-, and global-scale institutions—and institutions that operate between and/or across those scales—is needed. Future research is also needed on the tangible (physical ecological) changes to the landscape that take place as a result of ES (e.g., is the average quality of surface water across the state improving?). In other words, behavioral changes among stewards is only one (small) dimension of change.

Next, while the authors observed differences in changes to environmental behavior in our two, differently scaled partner organizations, we did not explore how these changes did or did not relate to the number of people conducting the stewardship activity at a particular *time*. For instance, CP2 brings volunteers together in greenspaces in small groups, while CP1 sends volunteers off to monitor surface water alone or with a partner. When people steward together, they build connections and stronger communities (Manzo & Perkins, 2006). These social connections can create or reinforce social norms around environmentalism (Krasny, 2019), thereby jumpstarting or turbocharging the feedback loop we described earlier. If such circumstances hold in institutions that operate at different scales of analysis, then it may be valuable for environmental organizations to restructure their programs so that volunteers are regularly engaged in small group activities. Once again, however, additional empirical work is needed to explore such a possibility.

Finally, the impacts of ES stand to be long-lasting and alter self-identity. Longitudinal studies of ES participants should explore this potential in the context of a transformative learning framework (Pisters et al., 2018) and/or by engaging more deeply with research on place identity and place meaning (Williams, 2014; Scannell & Gifford, 2017; Chow et al., 2019).

Conclusion

This paper studied changes in the environmental behaviors of environmental stewards at two partner nonprofits in Texas using surveys and interviews. The authors found that participation in ES was linked to various types of increases in pro-environmental behaviors for respondents from both partner organizations. This empirical evidence is consistent with the idea that ES plausibly exists in a self-reinforcing system of pro-environmental behaviors. That is, ES can create more well-rounded pro-environmental actors. Such an implication speaks to the important role that environmental nonprofits play in cultivating environmental citizenship. By documenting that role for two collaborating institutions, our findings served a further purpose that is essential to the spirit of community geography: namely, the authors created, for each partner organization, empirical evidence of program impacts and efficacy. That evidence is available for the partners to use in annual reports, funding applications, and promotional material—and it will serve as the basis for custom, partner-specific volunteer recruitment and retention action plans in the next phase of this research.

Overall, the authors' findings suggest that ES can lead to greater uptake in selected pro-environment actions, higher awareness of environmental issues, and greater appreciation for natural amenities. ES programs have spillover effects and outcomes that deliver social benefits beyond what the individual ES program intended. Thus, collective action—rooted in stewardship activities—cultivates our relationship

with the natural world; these "win-win" behaviors can have a positive impact on the environment and human well-being alike (Kurisu, 2015).

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Appendix A – Survey

Q1 Please indicate your level of agreement with the following phrases that complete this statement: "I volunteer with [organization] because ...."

	Strongly agree (11)	Somewhat agree (12)	Neither agree nor disagree (13)	Somewhat disagree (14)	Strongly disagree (15)
I want to help or enhance the environment. (1)	○	○	○	○	○
I want to help the community. (2)	○	○	○	○	○
I want to learn skills or new knowledge. (11)	○	○	○	○	○
I want to learn more about water quality and/or native vegetation. (12)	○	○	○	○	○
I want to engage with other people. (13)	○	○	○	○	○
I want to get outside and connect with nature. (14)	○	○	○	○	○
I want to do something physically active. (15)	○	○	○	○	○
I want to have fun. (16)	○	○	○	○	○
I want to advance my career through gained experience or networking. (17)	○	○	○	○	○

Q2 Please indicate your level of agreement with the following phrases that complete this statement: "I volunteer with [organization] because ...."

	Agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Disagree (5)
I want to meet new people. (1)	○	○	○	○	○
I want to interact with like-minded people. (2)	○	○	○	○	○
I want to spend time with family or friends. (3)	○	○	○	○	○
I like learning from others with more experience. (4)	○	○	○	○	○
I like sharing my experiences, knowledge, or expertise with other volunteers. (5)	○	○	○	○	○

Q3 Do you prefer to perform tasks in a group or alone? Choose the option that best fits your most frequent choice.

○ Alone (1)

○ With a partner (2)

○ Small group (3-5) (3)

○ Medium group (6-10) (4)

○ Large group (10 or more) (5)

○ Large event (50+) (6)

Q4 In the future, how likely are you to ....

	Extremely likely (1)	Somewhat likely (2)	Neither likely nor unlikely (3)	Somewhat unlikely (4)	Extremely unlikely (5)
Continue volunteering at the same rate? (1)	○	○	○	○	○
Increase the amount of time you spend volunteering? (2)	○	○	○	○	○

Decrease the amount of time you spend volunteering? (3)	○	○	○	○	○
Recommend volunteering to others? (4)	○	○	○	○	○

Q5 How likely are you to complete an outdoor task if the weather is unfavorable?

○ Extremely likely (1)

○ Somewhat likely (2)

○ Neither likely nor unlikely (3)

○ Somewhat unlikely (4)

○ Extremely unlikely (5)

Q6 Please indicate your level of agreement with the following statements.

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)
I like "one-time" training events in order to participate. (1)	○	○	○	○	○
I like to complete sequential training activities to increase my level of expertise. (2)	○	○	○	○	○
I like to earn recognition or a reward for completing training activities. (3)	○	○	○	○	○
Opportunities for my role to grow are important to me. (4)	○	○	○	○	○
I feel that [organization] leaders would support me if I wanted to deepen my level of participation. (5)	○	○	○	○	○
I feel adequately trained for my volunteer position. (6)	○	○	○	○	○

Q7 I have received some form of recognition or appreciation for my work.

○ Strongly agree (14)

○ Somewhat agree (15)

○ Neither agree nor disagree (16)

○ Somewhat disagree (17)

○ Strongly disagree (18)

Q8 Please indicate your level of agreement with the following statements.

	Agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Disagree (5)
It is important to me to receive some form of recognition or appreciation for my work. (1)	○	○	○	○	○
I would prefer not to receive any recognition or appreciation for my work. (2)	○	○	○	○	○

Q9 How important or meaningful are the following forms of recognition to you?

	Extremely important (1)	Very important (2)	Moderately important (3)	Slightly important (4)	Not at all important (5)
Hand-written card (1)	○	○	○	○	○
Personalized email (2)	○	○	○	○	○
Volunteer appreciation event (3)	○	○	○	○	○
Certificate or token of appreciation (4)	○	○	○	○	○
Gifts such as stickers, t-shirts, and hats from organization (5)	○	○	○	○	○
Name recognition in newsletter(s) (6)	○	○	○	○	○
Name recognition in social media (Facebook, Twitter, etc.) (7)	○	○	○	○	○

Q10 Natural Areas: Usage and Appreciation. Has involvement in [organization] led to any of the following changes in your life? Please select all that apply.

	Yes - I now do this (1)	No - I do not do this (2)	I did this prior to involvement (3)	N/A (4)
I visit natural areas and preserves. (1)	○	○	○	○
I enjoy myself in the outdoors. (2)	○	○	○	○
I take vacations to natural areas. (3)	○	○	○	○
I feel at home in natural areas. (4)	○	○	○	○
I explore new areas within nearby parks and preserves. (5)	○	○	○	○
I invite others to explore natural areas with me. (6)	○	○	○	○
I encourage children to explore the outdoors. (8)	○	○	○	○

Q11 Environmental activism. Has involvement in [organization] led to any of the following changes in your life? Please select all that apply.

	Yes - I now do this (1)	No - I do not do this (2)	I did this prior to involvement (3)	N/A (4)
I write letters about environmental issues. (1)	○	○	○	○
I work to protect natural areas. (2)	○	○	○	○
I tell friends and family about environmental issues. (3)	○	○	○	○
I sign petitions regarding environmental quality. (5)	○	○	○	○
I participate / attend local government decision-making meetings. (6)	○	○	○	○

Q12 Water Awareness. Has involvement in [organization] led to any of the following changes in your life? Please select all that apply.

	Yes - I now do/understand this (1)	No - I do not do/understand this (2)	I did/understood this prior to involvement (3)	N/A (4)
I reduce household water consumption indoors. (1)	○	○	○	○
I reduce household water consumption outdoors. (2)	○	○	○	○
I understand how watershed health affects water quality. (3)	○	○	○	○

Q13 How long have you been a volunteer?

○ Less than 6 months (1)

○ More than 6 months but less than 1 year (2)

○ 1 to 3 years (3)

○ 3 to 5 years (4)

○ 5 years or more (5)

Q14 Please describe your gender:

○ Male (1)

○ Female (2)

○ Prefer not to say (3)

○ Other (4) _____

Q15 What is your race/ethnicity

_____

○ White (1)

○ Black or African American (2)

○ Hispanic (8)

○ American Indian or Alaska Native (3)

○ Asian (4)

○ Native Hawaiian or Pacific Islander (5)

○ Two or more (6)

○ Other (please specify) (7)_____

Q16 In what sector are you employed?

○ Government or public (1)

○ Private (2)

○ NGO or non-profit (3)

○ Self-employed (4)

○ Student (5)

○ Retired (6)

○ Disabled, not able to work (7)

○ Other (please specify) (8)_____

Q17 Which category best fits your age?

○ Under 18 (1)

○ 18 - 24 (2)

○ 25 - 34 (3)

○ 35 - 44 (4)

○ 45 - 54 (5)

○ 55 - 64 (6)

○ 65 - 74 (7)

○ 75 - 84 (8)

○ 85 or older (9)

Q18 Please describe your educational status

○ Less than high school (1)

○ High school graduate (2)

○ Some college (3)

○ 2 year degree (4)

○ 4 year degree (5)

○ Professional degree (6)

○ Doctorate (7)

Q19 Which category best describes your household income?

○ Less than $10,000 (1)

○ $10,000 - $29,999 (2)

○ $30,000 - $49,999 (3)

○ $50,000 - $79,999 (16)

○ $80,000 + (4)

○ Prefer not to say (6)

Q20 What are your political views?

○ Extremely Liberal / Left (1)

○ Liberal (2)

○ Slightly Liberal (3)

○ Moderate, middle of the road (4)

○ Slightly Conservative (5)

○ Conservative (6)

○ Extremely Conservative / Right (7)

○ Do not know (8)