

RELEVANCY ROADMAP INDIANA PILOT REPORT

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PROJECT FOCUS: RELEVANCY ROADMAP BARRIER, STRATEGY, AND STEPS

Constituent Culture Barrier 3: Constituents may not recognize the threats facing fish and wildlife, habitats, and humans or how to engage to address the threats.

Strategy: Connect constituent concerns for human quality of life to the threats facing fish, wildlife, and their habitats and provide transparent, productive, consistent ways for constituents to engage

Steps

1. Develop a better understanding of how concerns about quality of life align with threats to fish, wildlife, and habitats.
2. Work with partners to identify opportunities to reduce barriers to broader constituencies' engaging effectively with the agency.
3. Work with partners to identify the most needed and effective engagement activities for constituents to reduce threats to fish, wildlife, and habitats.
4. Implement activities and programs that foster constituent engagement and behaviors to reduce threats to fish, wildlife, and habitat.

INTRODUCTION

We began this project to explore how the [Relevancy Roadmap](#) (AFWA and WMI 2019) could be applied to developing the goals of a new, one-person, statewide-coordinated stewardship program, which focuses on providing a variety of opportunities for the public to engage in

activities that positively impact human quality of life as well as fish, wildlife, and their habitats. Examples of stewardship program activities include DFW property-based volunteer opportunities such as habitat management or property maintenance and volunteer monitoring opportunities such as the annual [Turkey Brood Survey](#) or the newly developed [Paddlecraft Wildlife Index Survey](#).

Prior to this project, the stewardship program was lacking two critical components. First, it was lacking a clearly articulated set of outcomes, which provided an opportunity to align the stewardship program with the Relevancy Roadmap, positioning the program as an avenue to address a constituent culture barrier. Aligning the program to national efforts allows us to be more strategic in allocation of our limited capacity. Second, it was lacking prospective volunteer voice. Without prospective volunteer voice, the program is constructed around assumptions. In this program, the assumptions of the statewide-coordinator and property staff about our prospective volunteer pool could compound in a way that unknowingly restricts participation by and engagement with a broader audience.

Our investigation aimed to follow the actions outlined in step 1, which is to develop a better understanding of how constituent concerns align to threats to fish, wildlife, and their habitats. Using this information, we hoped to find partner groups that we may not have otherwise engaged who are aligned with the values and interests of prospective volunteers. To learn from prospective volunteers, we followed the approach of Floyd et al. (2016) which used qualitative methods to investigate barriers connecting audiences to nearby public lands. Qualitative research prioritizes developing an in-depth understanding of specific cases, allowing researchers to observe patterns that emerge from participant responses in an inductive manner. Findings from qualitative research can later be used to develop quantitative investigations.

We chose an approach that maximized direct contact with the target audience and emphasized generative discovery of emergent themes. Because this was an exploratory, inductive approach, we did not use a specific theoretical frame in developing the research questions to test hypotheses. Rather, we tied our findings back to the literature when the patterns emerged mirrored those of known social processes. Although this approach limits our ability to produce generalizable or statistically representative results, we can use our findings to shape the stewardship program opportunities and perform quantitative analyses and evaluation of the stewardship program in the future.

TARGET AUDIENCE

For this project, the target audience was people that live within a 25-mile radius of a Fish & Wildlife Area (FWA), managed by the Division of Fish & Wildlife (DFW). Prior to this project,

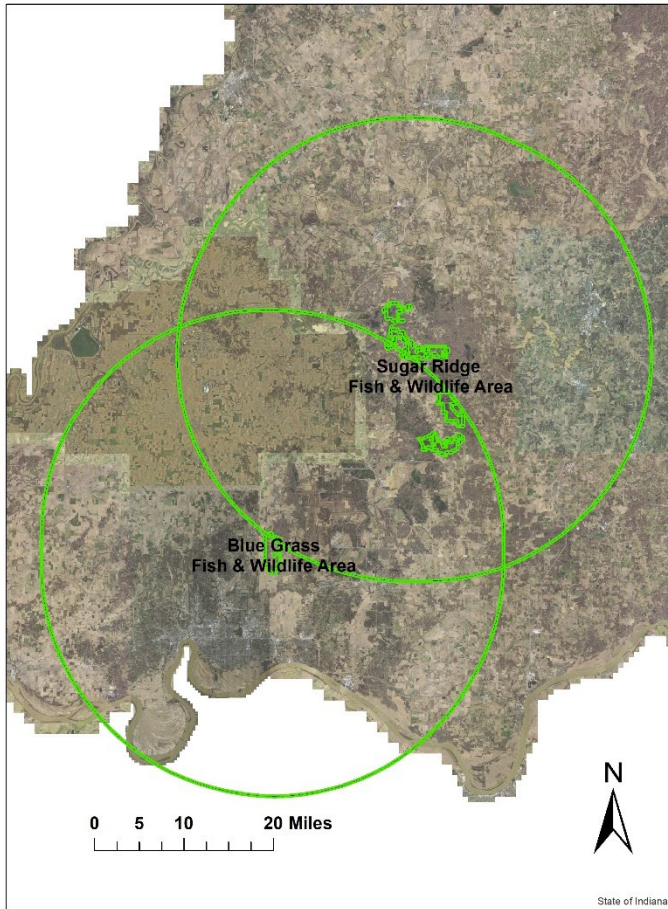


Figure 1. Map of Blue Grass FWA in relation to Sugar Ridge FWA. Although these properties are approx. 25 miles from each other, Blue Grass FWA is adjacent to Evansville, IN (ranked 3rd for population size) and Sugar Ridge FWA is in Pike County, ranked 84 of 92 Indiana counties for population size.

the stewardship program identified engaging with current and new public land users who live close to DFW properties as a priority. This target audience was chosen based upon key recommendations from The Nature of Americans Study (Kellert et al. 2017) and the target audience represents the population that is least likely to be impacted by barriers to volunteering such as distance and familiarity with a property. Specifically, drawing individuals close to FWAs narrows the "gap in interest in nature and efforts, abilities, and opportunities" by decreasing the time and money invested in traveling to a natural space (Kellert et al. 2017). Moreover, we assume individuals who live relatively close to a property may be more likely to make visiting a FWA a "repeated and recurrent part of life" (Kellert et al. 2017).

PROJECT PLAN

BUILDING THE BACKBONE OF THE STEWARDSHIP PROGRAM

Because the stewardship program is relatively new, it was lacking a clear articulation of the logic, strategies, and outcomes we predict will occur when people participate in stewardship-related work. In this segment of the project, we worked with Relevancy Roadmap Authors Matt Dunfee, Director of Special Programs, Wildlife Management Institute and Ann Forstchen, Relevancy Coordinator, Florida Fish and Wildlife Conservation Commission. We developed the conceptual model and main stewardship program results chains to align with both the Relevancy Roadmap and the Strategic Plan for the Indiana Division of Fish & Wildlife (DFW) ([Appendix A](#)). Additionally, we developed the evaluations associated with each results chain to assess the effectiveness of our strategies to influence our mid- and ultimate outcomes for the stewardship program (available upon request).

FOLLOWING THE STEPS

Our intent was to follow the steps outlined in the Barrier 3 Strategy 1 in 2020. Our focal FWAs for this project were one urban adjacent FWA (Blue Grass FWA) and one rural FWA (Sugar Ridge FWA) that are both managed by Hillary Bulcher in SW Indiana. We anticipated that the target audience may have different values and interests and wanted to explore these differences. We anticipated that these differences might arise from property users' proximity to urban areas and the common property uses and activities, among other differences we did not identify.

STEP 1: We took an exploratory approach to understanding our target audience. The goal was to gain a broad understanding of the behavioral motivators for participating in conservation activities and to also identify the target audience's existing relationship to conservation. Because the motivations and connection to a property may be highly context



Figure 2. Front and back of mailed postcard.

specific, we began with exploratory qualitative approaches, which may be used to inform later quantitative evaluation efforts. Prior to the widespread closure of public meetings due to Covid-19, we planned to conduct two to three focus groups for each property. We pivoted our plan to recorded and transcribed telephone interviews.

To avoid biasing our interviews toward people that were existing Blue Grass FWA or Sugar Ridge FWA property users, we randomly selected a sample of addresses within a 25-mile radius of each property to contact. The 25-mile radii of both properties overlapped, so any duplicates were purged. Within the lists of 9,000 addresses associated with either Sugar Ridge FWA or Blue Grass FWA, Nth record sampling was used to generate a list of 2,000 addresses per property. These addresses received mailed postcards in early September 2020 (Figure 1). The postcards directed recipients to visit a website and share contact information to set up an interview. Due to a low response rate, we supplemented the postcard mailing with placing flyers on windshields at Sugar Ridge FWA and in person visits at Blue Grass FWA in October 2020.

We designed the interview guide ([Appendix B](#)) to structure discussion around our key research areas of interest: 1) property use, 2) individuals' connection to the term conservation, 3) perceived importance of conservation actions, 4) motivations for and barriers to volunteering, 5) current engagement with volunteering, and 6) how Covid-19 impacted volunteering in Spring and Summer 2020.

RESULTS/DISCUSSION

We recruited 21 potential interviewees and successfully conducted 11 interviews; 36% of participants were female, and all were existing Blue Grass FWA, Sugar Ridge FWA, and/or other DNR property users, with the majority identifying Blue Grass FWA as the primary property that they used (Table 1). The response rate to the postcard mailing was less than 1% and 1/3 of the potential interviewees responded to the direct recruitment in October. Our recruitment strategy to talk about DNR properties and conservation values from randomly selected individuals who were not necessarily DNR property users, was not effective and would have required far more than 2,000 addresses per property, or an in-person recruitment strategy, which was not possible with Covid-19. For example, we had planned to do in-person recruitment at locations such as grocery stores or public libraries where we could have intercepted a broader cross-section of the community that lived with 25-miles of each property.

PARTICIPANT PROFILE

Table 1. Summary of DNR property use for participants (N=11)

Property Use	Interviewees (%)
Blue Grass only	36.4
Sugar Ridge only	9.1
Blue Grass and Sugar Ridge	18.2
Other DNR only	0
Blue Grass and/or Sugar Ridge and Other DNR	36.4

While Blue Grass FWA is a very popular fishing destination for both boat and bank fishing, there were a surprising variety of other uses reported. Blue Grass FWA participants not only fish, but they also kayak, cycle, sight-see, drive through for the scenery, stargaze, and pick berries. While hunting and trapping occurs at Blue Grass FWA, no participants who used Blue Grass FWA identified as hunter or trappers. For the few participants that were Sugar Ridge FWA users, there were a more limited set of activities reported and no participants identified as trappers. Participants use the shooting range, hike, racoon hunt, and drive through for the scenery. Participants represented the range of visitor frequency, from frequently (weekly) to infrequently (a few times a year). For the participants that reported on their frequency, the participants that lived closer to a property visited more often.

CONSERVATION ACTIVITIES & MOTIVATION

DEFINING THE TERM "CONSERVATION" WAS DIFFICULT

Participants were asked to identify examples of conservation activities. There was a high level of difficulty in answering this question. Participants often required clarification or asked the interviewer for examples. The difficulty defining "conservation" may indicate the term is not easily mentally available even among individuals who are already engaged in outdoor recreation, and who we assume have stake in the continued availability of their preferred recreational activities.

"I think about ... stewardship of the land and you know, kind of a tough question. It is, it is you know, not, not dirtying it up, not polluting it when I'm out there picking up, see stuff."

Some participants were more easily able to identify the larger concept of conservation happening at the agency level, for example commenting that conservation is "doing what's best

for the health of the [fish and wildlife] population,” but had greater difficulty giving examples of conservation activities that the public could be involved in.

SOCIAL FACTORS MAY CAUSE DISCONNECT BETWEEN DFW AND USERS

We assumed that people who recreate outdoors and who live near the property are most likely to be engaged with DFW and may be looking for ways to elevate that engagement through stewardship opportunities. However, the findings in these interviews indicate that there is a potential social division between even these engaged users and DFW. In addition to general difficulty articulating what conservation is, some participants also expressed uncertainty if DFW’s definition of conservation included their personal definition.

“I don't really know [what actions are conservation activities] because some people think that conservation is like planting trees or cleaning trails up or, but I don't really know how DNR looks at it.”

This uncertainty may be related to how DFW has traditionally framed its activities. In the past, DFW has largely focused on increasing the utility and opportunities of narrowly defined user-groups, such as hunters and anglers. As the numbers of hunters and anglers shrink, state agencies have sought to broaden their audiences to ensure they remain relevant to the public. However, while internal priorities may have shifted, public perception of who DFW serves most is likely slower to change.

Different factors, such as social identity or value orientations, may explain why divisions exist between DFW and audiences we hope to engage more fully. Individuals will use social identities, or different ways of characterizing themselves in groups (e.g., hunter, angler, conservationist, environmentalist) and divide themselves into in-groups and out-groups. Social identities can be derived from many things, including recreation preferences or belief systems. Individuals will adopt and reinforce shared attitudes, values, and norms from their in-group and often discredit, minimize, or dismiss the thoughts and perspectives of those they consider as part of their out-group (Hornsey 2008). The role of social identity in conservation or natural resources conflicts has been documented in the literature (van Eeden et al. 2019, Bruskotter et al. 2019, Lute and Gore 2018). Efforts and communications by DFW may unintentionally draw social groups that exclude users we wish to include.

We see suggestions of “in group” definition in our interviews. For example, most participants were not hunters but recognized hunting as an activity that happens frequently on DFW properties. Some chose to provide reasons why they did not hunt, *“I just don’t know what I’d do with the animal if I shot it, so I don’t hunt.”* Others recognized that hunting is considered a priority activity and expressed the conditions they felt made hunting appropriate by stating things like, *“I’m not at all against hunting as long as it’s done right,”* and *“Hunting is ok if it isn’t just hunting for a trophy buck.”* Individuals who brought up hunting may have been attempting to define a social group of users that included multiple different types of recreationists while

appealing to what they perceive as the priorities of DFW, but this question requires further study.

Another respondent noted how conflict among different recreation groups may make individuals feel unwelcome:

“They, they did get onto is quite bad about it. You know, it's only for fishing and hunting its not for horseback riders. And I mean, they were, I would say rude. I know they were just trying to protect the property.”

Although this investigation did not set out specifically to identify the role of social identity in motivating conservation actions or perceptions of DFW, the emergence of discussion around groups defined by recreation type and belonging are an important and salient social categorization that all users consider and associate with DFW properties.

The narrow definition of the DFW “in-group” may be a result of a homogeneous composition of employees’ values and attitudes. Other studies have found that agency values are generally not reflective of their constituencies, including in Indiana (Manfredo et al. 2018), hold different attitudes about use of fish and wildlife resources compared to the public (An Internal Look at Outdoor Recreation 2021), and even have different preferences for amenities and experiences when participating in fish or wildlife dependent recreation (Krogman 2020). Unintentional blind spots result from homogeneity within agency staff, which hinders our ability to recruit and retain users in programs that could potentially include any person, regardless of their preferred outdoor recreation. When staff are homogenous in their values and attitudes, our perceptions may be reinforced, and we may not examine or ignore other perspectives. For example, communication efforts about engaging with the stewardship program may appeal to values only present among narrowly defined social groups like hunters or anglers. This case study highlights the consequences of the traditional approach to inviting certain recreational users to participate as members of the conservation community. By defining conservation around recreational use, existing feelings of division between who considers themselves part of the in-group and out-group could continue to be reinforced.

RECREATION MAY NOT ALWAYS BE THE BEST “WHY” FOR MOTIVATING CONSERVATION

Defining public land users by their recreation preferences is a common practice in state fish and wildlife agencies. However, appealing to how conservation contributes to an individual’s recreational opportunities alone may not be the most appropriate way to motivate individuals to participate in stewardship activities of those public lands.

Motivating conservation action can be approached broadly from different perspectives that may emphasize conserving resources for the instrumental or intrinsic value individuals assign to them. For example, someone may value the recreational opportunity that deer represents and the satisfaction that they derive when hunting or observing the animal (instrumental value). That same individual may also recognize that deer have inherent worth as part of an ecosystem (intrinsic value) independent of the benefit it provides to humans. Although agency appeals to instrumental value often focus on recreation, instrumental value is not limited to recreational utility but also includes recognition of the economic, ecological services, or functional utility resources wildlife provide to humans. In contrast, intrinsic value is inherent to something independent of its function, utility, or benefit that it provides to humans (Vucetich et al. 2015). Although they may be sometimes treated as such, intrinsic and instrumental value of natural resources are not exclusive. One individual may believe the same animal to have both instrumental and intrinsic value.

We found that in our interviews, participants reiterated conservation to be a worthwhile endeavor in terms of both instrumental and intrinsic value. For example, individuals related potential conservation actions to enhancing their recreation behavior such as trail or shoreline maintenance, to maintaining habitat for a preferred species to hunt, or to improving quality of life. Additionally, instrumental value was not limited towards recreation, but included ecological services that are important to human communities such as providing clean water or air. Here, one participant references recreational and ecological instrumental value, along with the intrinsic worth that resources carry by virtue of their existence:

“And so we have to find ways to [conserve wetland habitat] so that we can be productive and make our living [in agriculture] and stay living here and doing these kinds of things. But also [we should conserve resources to] have some access to, leisurely, beautiful nature things and appreciating God's creation.”

While most fish and wildlife dependent recreationists and relevant belief-based social identities (e.g., conservationist, wildlife advocate) believe that wildlife possesses intrinsic value (Vucetich et al. 2015, Bruskotter et al. 2019), state agency management of fish and wildlife resources and subsequent engagement with stakeholder groups are still largely framed around instrumental use of wildlife specifically as how it relates to recreation.

As discussed in the previous section, social identities defined by recreation are a salient group categorization when talking about DFW property use but reliance on them can lead to potential social conflict among the diversity of users and potential volunteers.

One example of a stewardship activity that may be expanded to appeal to a greater variety of individuals is constructing wood duck boxes. In the past, DFW has partnered with hunting groups to host events, effectively connecting efforts to increase wood duck populations to the instrumental utility of waterfowl hunting. DFW can widen the framing of this event to focus on

how wood duck boxes increase the instrumental utility of photographers or wildlife watchers hoping to see a diversity of ducks; increases instrumental utility that functioning ecosystems provide to humans; and provides an opportunity for participants who find wildlife intrinsically valuable to express stewardship and care for a resource independent of the benefit they might receive from it.

TURN “CONSERVATION” INTO ACTIONS THAT CITIZENS CAN DO

After the initial confusion about trying to name conservation activities, participants identified a variety of highly discrete “tangible” actions with direct visible impact such as invasive species removal, installation of habitat boxes for wildlife, creating habitat (e.g., planting trees/vegetation), recycling, and trash pick-up that capture a variety of actions participants may think themselves or others of capable of doing. Different participants were able to assign different qualities or specificity that likely reflects some of the psychological distance between the individual and the conservation-related activity they name.

Individuals can regard a mental construction of something as very near and concrete or far and abstract (Trope and Liberman 2010). An example of a highly contextualized, concrete, and psychologically “near” action might be this participant talking about their specific behaviors:

“When I take walks, I take, always take a grocery bag and pick-up trash ... I'm going just ride my bike out to one of these County roads and bring a trash bag and walk all up and down it and pick up all this trash because I'm tired of people throwing it out.”

Or the specific ways that an individual can offer financial support as a means of accomplishing conservation:

“Well, just basically being able to buy your hunting license and give the funds to people like you [the DNR] and you guys put it into motion.”

As opposed to a distant action, where the participant can speak to the importance of conservation for the community, but otherwise has difficulty mentally retrieving behaviors that may be considered conservation activities:

“Just being responsible. We have a strong agriculture community down here and just being responsible with how you get rid of no chemicals and... I'm not sure. Just I don't know.”

In general, conservation psychology literature has found that individuals tend to view environmental problems as psychologically distant and reducing psychological distance (specifically, temporal and spatial) makes individuals more willing to engage in pro-environmental behavior (see Griffeon et al., 2016). The initial difficulty with which individuals had retrieving conservation actions and the variation in psychological distance speaks to the

importance of breaking down large conservation actions into manageable “pieces” that can remain easily available or top-of-mind. Reducing the distance or abstraction between an individual and the conservation action may potentially broaden the base of individuals who are more likely to engage with the stewardship program.

CONCLUSIONS: CONSERVATION ACTIVITIES AND MOTIVATIONS

- Property users who are not hunters, trappers, or anglers likely see DFW’s “in-group” as very narrowly defined and not inherently inclusive of them.
- Social division may cause individuals to be less likely to engage in programs focused on conservation or stewardship if they do not consider themselves as belonging to DFW’s “in-group”.
- Intrinsic and instrumental values are not exclusive binary themes, and individuals may regard a resource with both values.
- Intrinsic and instrumental values that are not related to recreation (e.g., improving quality of life, providing ecological services) may be more broadly applicable to potential participants in a stewardship program.
- Individuals may have difficulty associating with large and psychologically distant environmental problems, such as the term “conservation”. The more concrete and relatable, the better.

VOLUNTEER ACTIVITY MOTIVATIONS AND BARRIERS

The motivations for participants’ interest in pursuing volunteer activities can best be understood through the theory of planned behavior (Ajzen 1991). This theory suggests that there are a set of internal criteria that are evaluated prior to an individual deciding to pursue a task (Figure 2).

I want to do
this task! ... IF ...

- I decide the task is favorable (attitude towards behavior)
- Members of my group would approve of this task (social norms)
- The task seems within my capabilities (perceived behavioral control)
 - I already have/can acquire the resources or knowledge to do the task (internal control)
 - I perceive that I can overcome the outside influences/constraints/ability to do the task (external control)
- I perceive the moral correctness of me doing the task (moral norms)

Citation: Ajzen 1991

Figure 3. The theory of planned behavior in a nutshell.

Participants expressed connections to volunteer work in one of the following ways: 1) the outcome directly benefits the participant themselves as a user (favorable attitude towards behavior; Azjen 1991); or 2) the outcome benefits the community or others (moral norms; Azjen 1991). For example, one participant expressed that it was necessary to see personal benefit to have a favorable attitude toward a conservation action.

"I'm just trying to be honest. If it's not, if it doesn't really help me, then why am I spending, what little free time I have doing it? You know what I'm saying?"

While another participant connected conservation actions to their moral norm of engaging in activities that benefit the community.

"I think just public grounds are great, like an incentive, because it's like, it belongs to every like the whole community. And then, you know, if you put in time to take care of it, you're going to get more out of it."

Another important component of the theory of planned behavior is perceived behavioral control which helps a person evaluate whether a task is within their capability (Figure 2). Research suggests that of all the internal criteria, perceived behavioral control is the strongest predictor of a person taking on a task (Conner and Armitage 2001), including for some types of volunteers (Lee 2014). Because items like capabilities and skills are specific to tasks or actions at hand, participants may not be likely to bring up these items without discussing a specific volunteer activity which we did not do in the interview.

We did see suggestions that perceived behavioral control influenced the volunteers' responses, however. The primary barrier to volunteering identified in the study was is limited free time, whether this is because of work or balancing personal or family schedules.

"Up until recently, worked 70 hours/week and had no time to volunteer for anything."

"I mean, I think you know, there might be something as a family that you know, would be able to, that we might be able to volunteer, I guess it all depends on, you know worrying about whether my schedule is available versus three people's schedules."

Lack of free time is an example of an external control which affects volunteer motivation to participate and is commonly reported as a barrier to volunteerism (Sundeen et al. 2007). Perhaps clear communication about time of day, duration, and tools or equipment provided (if any) may help a prospective volunteer accurately assess their availability and other external factors that may be barriers to participation. DFW may also influence a prospective volunteer's sense that a volunteer activity is within their capabilities (internal control, Figure 2). Clear messages of what the opportunity entails (skills, physical abilities, and tools/equipment

needed) may help attract individuals who are already capable of participating in the volunteer opportunity, which addresses a potential internal control barrier. Without specifically addressing the skills, physical abilities, and tools/equipment needed, a volunteer may inaccurately assess that they are not a good fit for an opportunity, when in fact, they are.

ATTITUDES TOWARDS VOLUNTEERING OPPORTUNITIES MAY DRIVE PARTICIPATION

Lack of free time could also impact a person's favorable attitude of the volunteer event (Figure 2). If deciding to attend a volunteer event may negatively impact a person's life in another way, the prospective volunteer's motivation may decline. Research has shown that attitude is one of the primary drivers influencing intentions to volunteer (Greenslade and White 2005), and considering the previously mentioned barrier of free time from the perspective of attitude provides additional perspective. Some participants also identified that with the little free time they have, they need to prioritize opportunities based on their values.

"I have limited free time. And so I, I'm going to pick the things that are most important to me to spend my time."

Reducing potential conflicts between volunteering and other personal priorities such as quality time with family and/or friends may influence the prospective volunteer's attitude in a way that motivates participation. Encouraging groups of people to volunteer together allows for people to spend time together and contribute to a cause they may mutually value.

CONCLUSIONS: VOLUNTEER ACTIVITIES AND MOTIVATIONS

- The theory of planned behavior is a useful frame in motivating participation in the stewardship program. Understanding perceived behavioral control can shape how volunteer opportunities are communicated.
- Family-friendly events reduce the barrier to making choices about whether to spend time volunteering or spending time with family.

PARTICIPANT PREFERENCES FOR VOLUNTEER OPPORTUNITIES

MOST PEOPLE LIKE OPPORTUNITIES WITH TANGIBLE OUTCOMES

When asked what kinds of volunteer opportunities participants might be interested in, activities fell into the following types: roadway/waterway litter pick up, large trash or electronics pick up, habitat work (invasive species control or planting), recreation access projects (shoreline maintenance, trail creation or maintenance), and cultivating donors or partners. Most of these activity types are concrete, similar to the kinds of conservation activities participants

mentioned. It is unclear whether the participants' responses indicate a lack of interest in larger projects or if it was difficult for participants to construct ideas of the opportunities that they are interested in being because they see larger conservation programs as more abstract.

THERE IS VARIATION IN PREFERENCE FOR GROUP VOLUNTEER OPPORTUNITIES

Participant interest in event-based (organized, larger group, higher visibility) volunteer opportunities varies.

"Yeah, I think I'd be more likely to like individual kind of on my own kind of stuff."

"And the third week of June is the river sweep. And they normally have 22,000 to 23,000 people picking up litter along the banks of the Ohio river and its tributaries..."

There are benefits to cultivating a cohort of independent volunteers and also holding larger events which may draw in a variety of volunteers representing different user groups. Some participants indicated interest in specific group events that may repeat over time.

CONCLUSIONS: VOLUNTEER PREFERENCES FOR OPPORTUNITIES

- When looking for general volunteer participation, concrete activities may be more relatable to a larger number of people.
- There's a variety of preference for group volunteer opportunities

ABILITY TO VOLUNTEER CHANGES OVER A LIFETIME

Participants mentioned retirement as a solution to freeing up time that can be used to volunteer.

"I mean, that's my goal when I retire is to make more time to do that. Cause I will have more time to do that. Right. and it's, I, I think too, you know, it's just very gratifying to be able to you know, help people out. And to me, it's, it's like a gift that keeps on giving."

The current mean age of Division volunteers is 50.7, with the highest frequency of volunteers in the 60-79 age range. Nationally, the age of people most likely to volunteer fall between 35 to 54 years old (Bureau 2016), however as the population ages, this trend could shift. Research suggests that older adults are motivated by volunteer opportunities that allow volunteers to act on beliefs about the importance of helping others, learn about oneself and the world, and improves the sense of feeling useful and good about oneself (Okun et al. 1998). In other words, addressing older volunteers in a way that positively influences their attitude about the volunteer opportunity and their moral norms (Figure 2) can be an effective recruitment strategy.

LEARNING AND CONTACT

Participants were asked the best way to keep them updated about volunteer opportunities in the future. Most participants preferred direct emails, however too frequent emails were a disincentive to participate. The second preferred way of learning about volunteer opportunities was “social media”, though this exclusively meant Facebook. Interestingly, only one participant followed DNR Facebook and none knew the Division of Fish & Wildlife had a Facebook page.

DFW should review how volunteer opportunities and content are presented in our existing communications channels and evaluate where there are missed opportunities. With limited staff and a newly developing volunteer program, creating volunteer-specific communications channels is not possible at this time.

COVID-19 IMPACTS

Participants were asked whether Covid-19 impacted their visitation to either Blue Grass FWA or Sugar Ridge FWA. The majority of participants responded that it did not change their visitation, while a few indicated that visitation increased.

“Not really much. I was definitely in Brown County last week and the only difference that I did was I took one of my masks and basically wore it as a bracelet when I was on the hiking trails. And then when I heard someone coming, I would put it on. So not really a whole lot, you know, when you're in a boat or out in the kayak, you're pretty much on your own anyway. So you don't have to worry about it.”

For participants that were already volunteering (with other organizations), Covid-19 decreased their opportunities for volunteering in indoor settings. When participants were asked whether they would have concerns with volunteering for DNR in the context of Covid-19, the response was consistently no. Participants’ concerns about spreading or contracting Covid-19 were diminished because of the outdoor nature of volunteer work at DFW properties. Additionally, participants expressed comfort with taking social distancing precautions and wearing masks, either for their own safety or to address the concerns of other volunteers. Until directed otherwise, DFW will continue to design volunteer opportunities that are easy to participate in alone or in small groups which follow DNR employee Covid-19 safety guidelines.

RECOMMENDATIONS AND CONCLUSIONS

RECOMMENDATIONS FOR THE STEWARDSHIP PROGRAM

Based on this work, we have developed the following series of recommendations for the stewardship program moving forward. The recommendations are hyperlinked back to the relevant results and discussion subsection.

- DFW could increase the number of people that feel associated with and included at FWAs by broadening the types of recreation groups that DFW specifically makes appeals to. Or DFW could increase the number of people by shifting focus to belief-based identities that key into shared values around conservation and public land regardless of recreation type. ([Conservation Activities and Motivations](#))
- Broadening DFW's in-group may be accomplished through increasing the variety of specialized volunteer events that better reflect the diversity of recreational use of the property or by ensuring events appeal to shared identities other than recreation alone. ([Conservation Activities and Motivations](#))
- Both instrumental and intrinsic value may be emphasized when appealing to the reasons why people may want to participate in stewardship activities, as individuals may find one reason more compelling than another. ([Conservation Activities and Motivations](#))
- DFW should define small incremental actions can be undertaken by volunteers in the stewardship program rather than leaving conservation as an abstract concept that individuals may have difficulty seeing themselves as capable of contributing to. ([Conservation Activities and Motivations](#))
- Always include the following elements when advertising a volunteer opportunity ([Volunteer Activity Motivations and Barriers](#)):
 - What are the benefits of this activity?
 - What skills, physical abilities, and tools or equipment to volunteers need to participate?
 - What training (skill development), tools, or equipment will be provided?
- Family-friendly events reduce the barrier to making choices about whether to spend time volunteering or spending time with family. ([Volunteer Activity Motivations and Barriers](#))
- Aspire to make volunteer activities as concrete as possible. ([Preferences for Volunteer Opportunities](#))
- For less concrete tasks (building relationships), it may be better to define desired skillsets and promote a need from that point of view. ([Preferences for Volunteer Opportunities](#))
- Volunteer opportunity planning could take a "portfolio" approach. Annually, offer some of each of the following opportunities ([Preferences for Volunteer Opportunities](#)):
 - Independent self-directed opportunities, and
 - 1 or 2 larger annual or regular organized events and provide some opportunities for partner group volunteer opportunities for scouts, 4-H, company work teams, or community groups.
- Look for ways to encourage people approaching retirement age to consider volunteering post-career with DNR ([Ability to Volunteer Changes over Time](#)).
- Promote signing up to the Division of Fish & Wildlife direct e-newsletter, which advertises volunteer opportunities monthly ([Learning and Contact](#)).

- Encourage following Division of Fish & Wildlife Facebook page, which also regularly advertises volunteer opportunities ([Learning and Contact](#)).
- Continue co-promoting volunteer opportunities with partner organizations to help connect people to DFW communications channels ([Learning and Contact](#)).

PROJECT CONCLUSIONS

We recognize that our sample size is low, so there may be limitations to how broadly this case study can be applied across Indiana FWAs. However, we previously had no information, and so as we apply our learnings, we will remain mindful of situations where our learnings do not apply. Qualitative methods allowed us to deeply explore certain aspects of individual's interactions with the two properties and volunteering in a way that quantitative research methods could not. We felt surprised by the direction some of the conversations took us during the interviews.

Finally, even a small amount of exposure to social psychology ideas such as social groups, intrinsic and instrumental value, psychological distance, and the theory of planned behavior can be used to understand the public that we serve, our own agency biases, and what messaging may resonate more successfully with a larger segment of the public.

NEXT STEPS

We were not able to complete steps 1-4 during 2020, but we plan to continue with this project in the following manner:

Step 2: Now that the interviews and analysis have occurred, we will engage with potential partners whose values align with the values of the target audience and who have connections to the local community. For example, we learned that property clean-up days resonated with participants, so we might partner with local waste removal companies to help us collect and responsibly dispose of property trash.

Step 3: While we hypothesize that volunteering and volunteer monitoring are two valid ways of engaging the public, we will use the information collected in Steps 1 and 2 to design and evaluate a volunteer opportunity at both Blue Grass FWA and Sugar Ridge FWA. We will also work with Division outreach specialists to develop a communication plan, which will include evaluation of the effectiveness of our communication effort.

Step 4: By mid-October 2021, we will implement at least one engagement opportunity at each FWA. We will also complete all the associated evaluation with the opportunities.

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APPENDIX A: DEFINING OUTCOMES AND RESULTS OF A PUBLIC ENGAGEMENT PROGRAM FOCUSED ON VOLUNTEERS

Elizabeth Middleton, Indiana Department of Natural Resources

Matt Dunfee, Wildlife Management Institute

Ann Forstchen, Florida Fish and Wildlife Conservation Commission

INTRODUCTION

This work represents a very personal journey for me. In fall 2018, I first learned about the Relevancy Roadmap when I was working as a plant community ecologist. I was fascinated by the complexity of how to engage new constituents in conservation. My fascination led me to a position in my home state of Indiana. In early 2019, I began a position with the Indiana Department of Natural Resources—Division of Fish & Wildlife in the Public Engagement Unit. I was given the opportunity to build the stewardship program, which focuses on engaging the public through volunteer activities such as habitat management on Fish & Wildlife Areas or through volunteer monitoring (citizen science) efforts statewide.

I suppose I started tackling the problem of creating lasting impact on people and fish, wildlife, and their habitats as I would have any other scientific inquiry. What do we know? Who has models I can learn from? What are the tools we use to assess effectiveness? I learned very quickly that this was a problem that many people are working on, but few have addressed formally in natural resources. I was determined and overwhelmed. What use was my science training in plant research for this new problem? Where can I even begin?

With the help of AFWA 2020 Multistate Conservation Grant “Capacity Building, Training, and Pilot Testing of the Fish and Wildlife Relevancy Roadmap”, I offer this work to others who may also be committed to public engagement but need a place to start. Through this grant, I have had the invaluable opportunity to work with Ann and Matt to create a conceptual model that hypothesizes the long-term impact of engaging the public in volunteer opportunities. Additionally, we have worked together to create results chains for the core components within the stewardship program that translate to measurable objectives and evaluation. Through this process, I have seen that these conceptual models and results chains, when thought about rigorously, become testable hypotheses. When working closely with people who have experience in social sciences, someone with a science background *can* participate in this approach to program design.

The Relevancy Roadmap has emphasized the importance of social science in the work we do. Now and into the future, we will all benefit from more learning and exposure to the principles and tools used in the social sciences discipline. For those of us in the conservation community who are striving to learn a new discipline and who are also passionate about engaging with the public, we offer this document as a

place to start. I know that together we will continue to learn from and improve on this work with rigor and energy.

Elizabeth

STEWARDSHIP PROGRAM CONCEPTUAL MODEL AND NARRATIVE

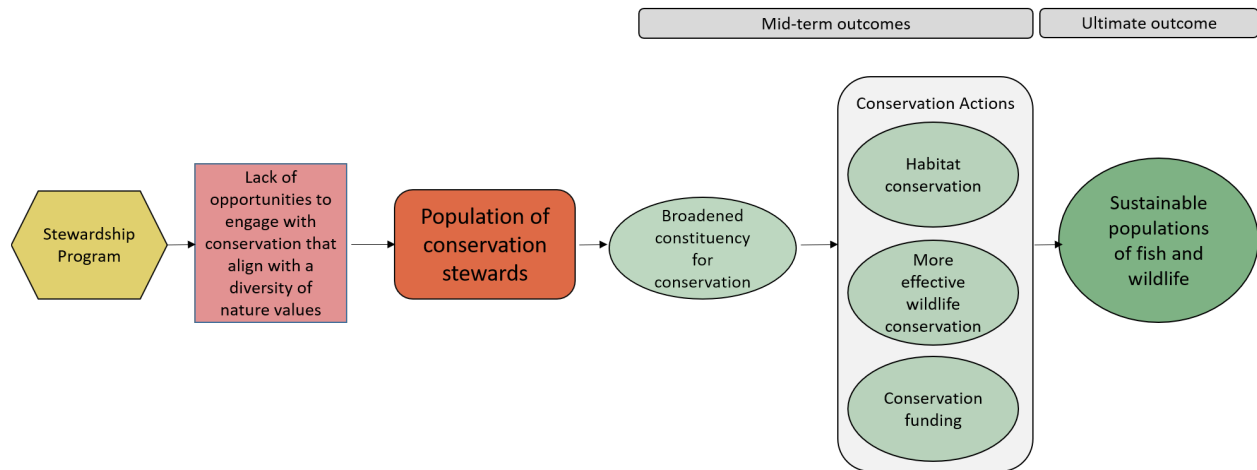


Figure 1. Conceptual Model for the Stewardship Program. The stewardship program is a strategy (yellow hexagon) used to address the barrier (pink box) for increasing the population of conservation stewards in the state (population target, orange box). If the population of conservation stewards in the state increases, there may be a broadened constituency for conservation. This broadened constituency for conservation may lead to increases in habitat conservation, conservation funding, and more effective wildlife conservation in our state (mid-term outcomes, light green circles). If these mid-term outcomes occur, we may be able to achieve sustainable populations of fish and wildlife (ultimate outcome, dark green circle) through our relationship with a greater number and diversity of conservation stewards.

The Indiana DNR Division of Fish & Wildlife (DFW) strives to ensure sustainable populations of fish and wildlife for present and future generations of Hoosiers. The work DFW does is not possible without our conservation partners and conservation stewards around the state. A conservation steward is an individual that participates in one or more of the following conservation-oriented behaviors:

- Purchases a license or equipment related to hunting, fishing, trapping, or shooting sports;
- Donates to a conservation cause (within DFW, through the purchase of a license plate or donation to the Indiana nongame wildlife fund);
- Volunteers for a conservation organization; or
- Uses political influence to support conservation.

Until recently, both in the state and nationally, public engagement efforts have focused on engaging conservation stewards that were the traditional state fish and wildlife agency audience: hunters, anglers, trappers, or sport shooters. We use the term traditional in the sense that since the late 1930s, it is hunters, anglers, trappers, and sport shooters whose nature values have been monetized to fund

state fish and wildlife agency conservation work. This narrow definition of a conservation steward also represents a more restricted set of nature values than we might find in the rest of the population of the state. When discussing nature values, we must distinguish between wildlife value orientations (Manfredo et al. 2018), wildlife value types (Manfredo et al. 2018), and nature values. Wildlife value orientations are descriptive tools that define a suite of values within a single descriptor, such as domination or mutualism (Manfredo et al. 2018). Wildlife value types are then ways to describe people with similar wildlife value orientations, such as traditionalist or pluralist. Nature values, as we use the term, are individual values that people associate with nature as it relates to their lives such as belonging, exploration, legacy, or independence. One person may have several nature values.

The stewardship program is designed to provide opportunities to conservation stewards who have a more diverse set of nature values and currently lack opportunities to express them through DFW-organized activities (Figure 1). When DFW engages with people representing a wider range of nature values, DFW will increase the number and diversity of conservation stewards in Indiana. DFW then gains an opportunity to work with a broadened constituency to increase the agency’s capacity through political support, fiscal support, or volunteer support. Longer term, with the broadened constituency, we will be poised to design a sustainable funding model, increase habitat conservation, and implement more effective wildlife conservation in the state. Ultimately, a sustainable funding model, along with the larger and more diverse constituency, will allow us to accomplish sustainable populations of fish and wildlife for the people of Indiana.

VOLUNTEER EVENT AND STAFF TRAINING RESULTS CHAINS AND NARRATIVES

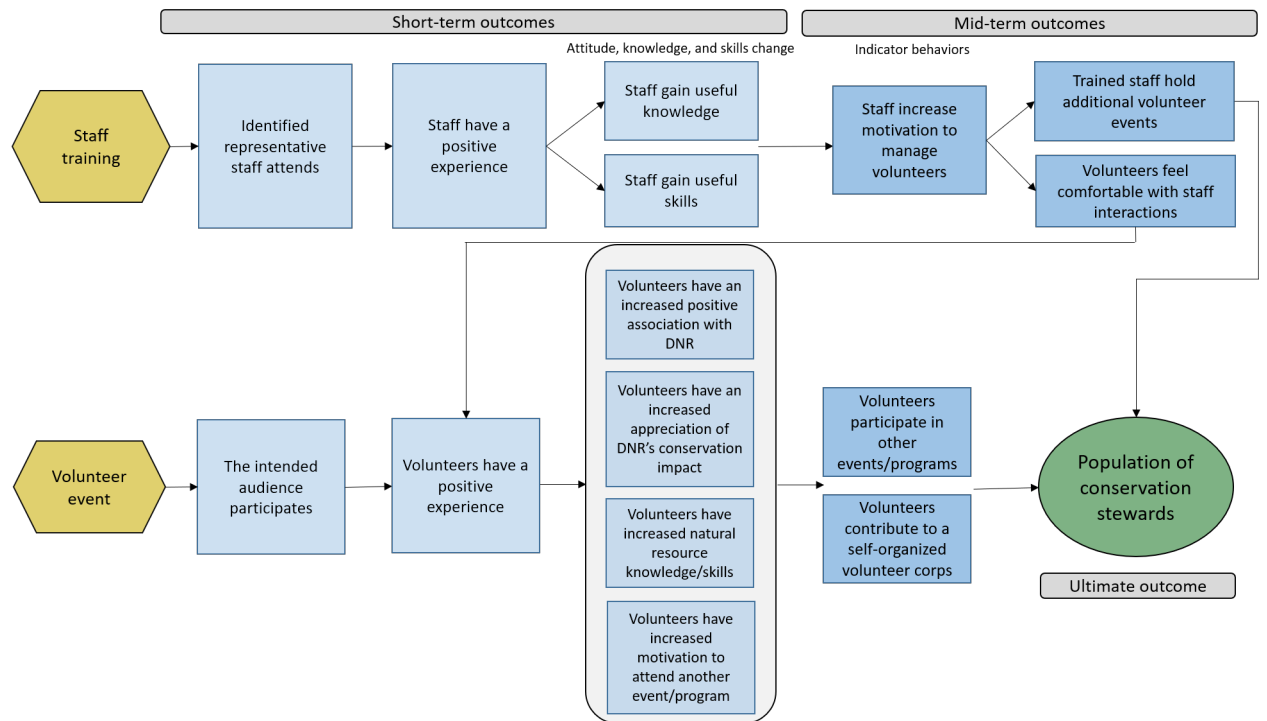


Figure 2. Increasing the population of conservation stewards through property volunteer events and staff training results chain. These two results chains are broken down further below. Improving the knowledge, skills, and motivation of Division staff to hold property volunteer events may positively impact a volunteer’s experience at a

property volunteer event. Volunteers may then experience positive changes in attitude, knowledge and skills that lead to increased volunteer involvement.

The results chain above describes how the combination of providing DFW staff with volunteer management training and holding volunteer events will contribute to increasing the population of conservation stewards (Figure 2). In the sections below, the two results chains have been separated and explained individually.

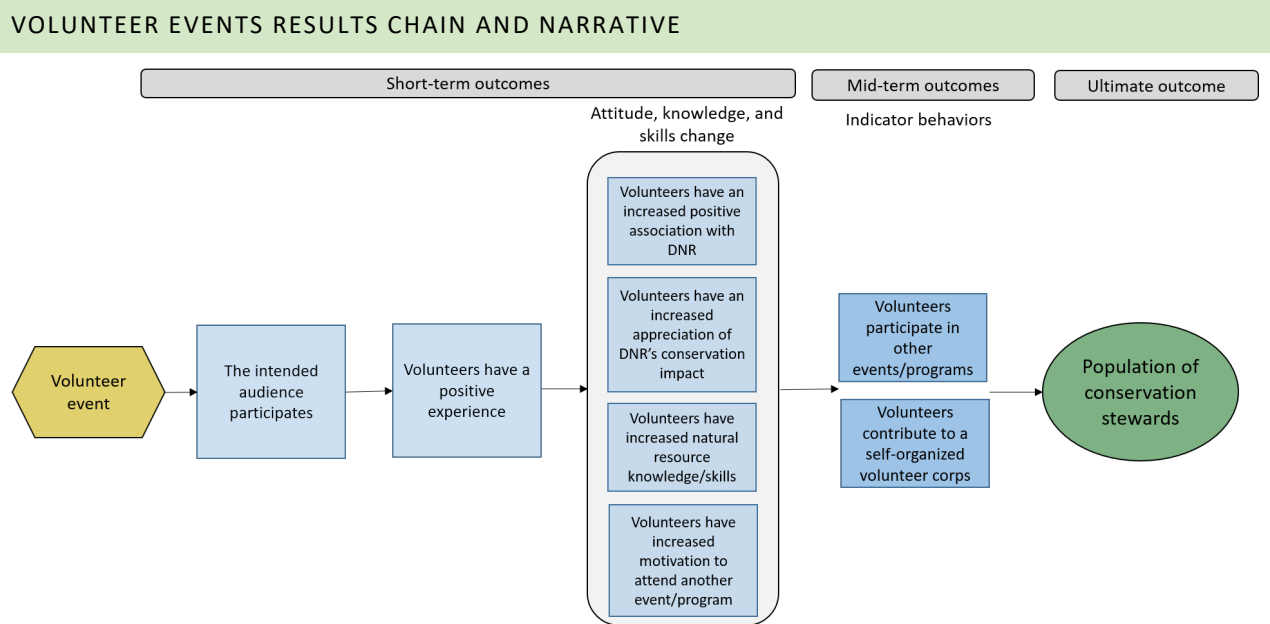


Figure 3. Volunteer events on a property are a key strategy (yellow hexagon) for increasing the population of conservation stewards. Intended volunteers may attend and have a positive experience which may lead to changes in volunteer attitudes, knowledge, and skills (results, light blue boxes). These volunteers may be more likely to participate in other volunteer opportunities (results, darker blue boxes) and this strategy may ultimately increase the population of conservation stewards in the state.

The term “event” should not be interpreted as a “one and done” intention, rather as a generic term for a planned interaction with one to many volunteers. Thought must be given to the audience we intend to engage when designing a volunteer event. Before an event is designed with an intended audience in mind, the desires, needs, and barriers of that audience need to be assessed. This information then can be used to shape how the event is designed and delivered. The first objective of a volunteer event is that the intended audience participates. If the volunteer event is designed around the intended audience, and the intended audience attends, it is likely that this audience (volunteers) will have a positive experience (Figure 3).

If the intended audience attends and they have a positive experience, we expect changes in the following attitudes, knowledge, and skills:

- Volunteers have an increased positive association of the DNR—we define a positive association as an increase in the volunteer’s trust in the DNR and in DNR staff. While trust in a state agency

forms as a result of the public’s recognition of shared values and their assessment of an agency’s technical competency, technical competency matters less when shared values aren’t acknowledge or explored. This results chain will focus on value recognition as a signal of trust.

- Volunteers have increased appreciation of DNR’s conservation impact—we define increased appreciation as a volunteer’s increased knowledge of the breadth of conservation work the DNR and DNR staff are involved with across the state. By placing this attitude in this model, we are indicating that volunteer events should intentionally share information about what the DNR does for conservation in Indiana, why DNR does it, and how DNR staff are involved in conservation efforts. Additionally, appreciation includes value recognition as mentioned above.
- Volunteers have increased natural resources knowledge/skills—volunteering events are often opportunities to share conservation knowledge/skills such as wildlife identification, habitat management principles or skills, or construction skills. This knowledge and/or skill is then able to be applied to other conservation topics or volunteer opportunities around the state. By increasing natural resources knowledge or skills, volunteers may improve their capacity to accomplish a task that they feel makes a meaningful impact. For example, if a volunteer learns construction skills with help and can then more independently build a habitat structure on her own, she may feel that her contribution to the habitat effort was more impactful in the long-term.
- Volunteers have increased motivation to attend another event—we want some proportion of volunteers to be motivated to come back and continue the good work they helped DFW accomplish.

There are two mid-term outcomes from the desired changes in attitudes and skills as a result of the intended audience participating and volunteers having a positive experience. First, volunteers may participate in other DFW events, as time and life situation allow. Alternatively, volunteers may become inspired to join a self-organized volunteer corps such as a DNR Friends group. Volunteers may also find other self-organized volunteer corps with other conservation entities in the state that fit their location, time, and interests. Both mid-term outcomes lead to the ultimate outcome, which is an increase in the population of conservation stewards in Indiana.

TRAINING FOR STAFF RESULTS CHAIN AND NARRATIVE

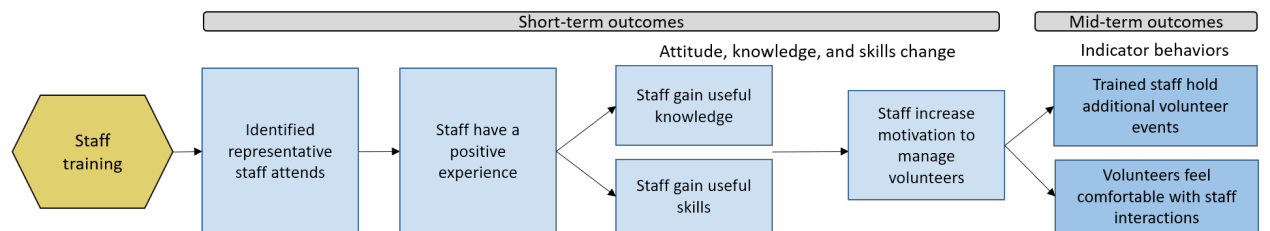


Figure 4. Division staff training for property-focused volunteer events is a strategy (yellow hexagon) to influence the volunteer’s positive experience at a property event (Figure 2). If staff attend training, have a positive experience, and gain knowledge, skills, and motivation to manage volunteers (results, light blue boxes), the

number of volunteer events held by the Division may increase and volunteers may feel more comfortable with staff interactions (Results, darker blue boxes).

We expect that a key component to volunteers having a positive experience at an event is that DFW staff are trained in some basic volunteer management principles and skills (Figure 2). Because this expectation exists, the results chain for a DFW employee-focused training effort also needs to be articulated (Figure 4).

First, identified representative staff need to attend the training. The target audience are those staff that will be planning to lead (volunteer manager) or support (CERVIS leadership team) volunteer events on a local scale. Ideally this training would not be mandatory, and attendance would be driven by self-evaluating against criteria shared with the Division when the call for training is posted. If motivated staff attend the training, participants need to have a positive experience in order to learn effectively. A positive experience could mean that staff felt the training was relevant, at the appropriate level of information, engaging, and a reasonable length of time.

If staff have a positive experience, there is likely to be knowledge gain related to recruitment and retention of volunteers. There is also likely to be an increase in useful skills related to customer service and effective communication. If staff increase knowledge and skills to support volunteer events, we expect that DFW staff who participated in the training will increase their motivation to manage volunteers, which may result in volunteers reporting that they were comfortable with DFW/volunteer staff interactions. Additionally, DFW staff who participated in the training may choose to run or help staff additional volunteer events.

TWO PHILOSOPHIES THAT GUIDE WORK IN VOLUNTEER MONITORING PROGRAMS

First, I want to reconsider using the term citizen science. Instead, I advocate for recognizing that observing and reporting fish and wildlife through our existing programs is a volunteer effort. By transitioning to the term volunteer monitoring, the stewardship program is more conceptually integrated, DFW lets go of a potentially politically charged term “citizen,” and DFW acknowledges that most of the current information provided by volunteers is related to monitoring changes in populations. Monitoring is an extremely valuable action that feeds into the process of science. In contrast to monitoring, science is driven by a question, is predictive or explanatory, and requires reporting observations to test that question. In the current volunteer monitoring programs, we ask volunteers to describe. Volunteer monitoring data then provides additional information used to evaluate population status or trends, not test a hypothesis.

After discussions across DFW, I have come to understand that there are two philosophies that we can employ to guide volunteer monitoring efforts in the Division. I provide models for both philosophies below. As a Division, we should be clear when we are choosing to operate from one philosophy or the other, both in existing programs and in future program designs.

WHEN THE DESIRED OUTCOME OF VOLUNTEER MONITORING IS MORE EFFECTIVE FISH AND WILDLIFE CONSERVATION:

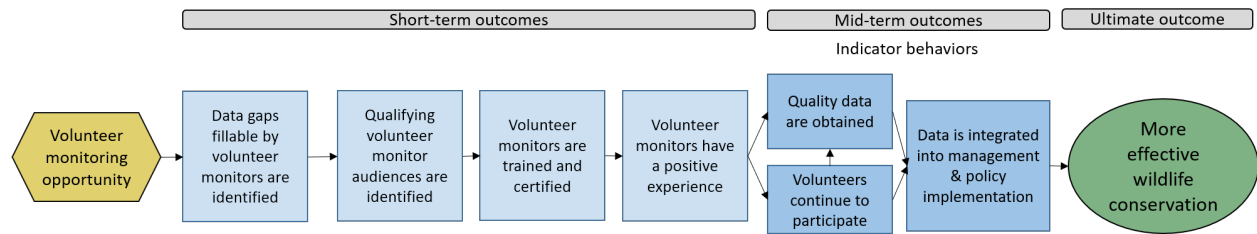


Figure 5. Volunteer monitoring as a strategy (yellow hexagon) to accomplish more effective wildlife conservation (ultimate outcome, green circle). If the Division identifies data gaps that volunteer monitors are able to fill, finds and trains volunteers, and volunteers have a good experience (results, light blue boxes), quality data may be obtained for the Division and volunteers may continue to participate (results, darker blue boxes). Data could then be integrated into Division management and policy decisions (Result).

If the desired outcome is more effective wildlife conservation, then the first step is to design a volunteer monitoring opportunity around identified data gaps that can be answered by volunteer monitors (Figure 5). Next, we would work to identify qualifying participant audiences that have the interest and motivation aligned with the existing data gaps. We would then work to provide any necessary training (or training materials such as field guides) and certification so that we can ensure a minimum level of data quality that DFW defines as acceptable. We would also design the opportunity so that participants have a positive experience.

If participants have a positive experience, then quality data may be obtained from volunteer monitors and some number of volunteers will continue to participate. If volunteer monitors contribute quality data to DFW programs, and the data are integrated into management and policy decisions in DFW, then volunteer monitors will have contributed to more effective fish and wildlife conservation. Incorporating data, collected with volunteer monitor help, into management and policy decisions is also a practice in governmental transparency.

WHEN THE DESIRED OUTCOME OF VOLUNTEER MONITORING IS MORE EFFECTIVE WILDLIFE CONSERVATION THROUGH AN INCREASED POPULATION OF CONSERVATION STEWARDS:

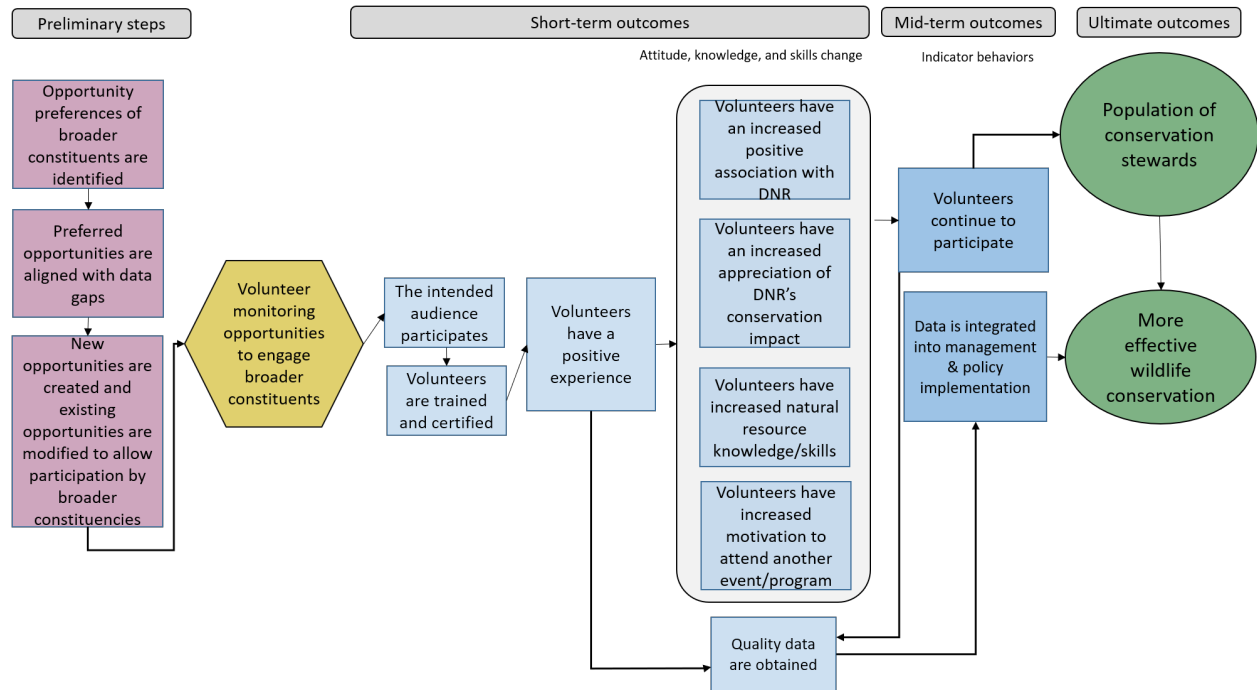


Figure 6. If the ultimate outcome of this volunteer monitoring strategy (yellow hexagon) is more effective wildlife conservation through increasing the population of conservation stewards, then prior to strategy implementation, some preliminary steps will need to take place (purple boxes). Once the intended audience is understood and a strategy is designed *with* the audience in mind, volunteers will be trained and may have a positive experience (Results, light blue boxes). In addition to obtaining quality data (Result), volunteers may also experience changes in attitudes, knowledge, and skills (Results, light blue boxes) that could result in more volunteers participating in volunteer monitoring and more data available to be integrated into division decisions (Results, darker blue boxes).

It is possible to view volunteer monitoring as an opportunity to engage a broader constituency. The process is a little different, and the way in which more effective wildlife conservation is achieved is through developing an increased population of conservation stewards, in addition to providing quality data which is then integrated into management and policy (Figure 6).

If we view volunteer monitoring as a way to engage broader constituents, then there are three steps that need to occur before a volunteer monitoring program can be implemented. First, the preferences of broader constituents in relation to volunteer monitoring activities would need to be identified. These identified activities would then be aligned with the existing data gaps in DFW programs. After the identification of preferences and alignment with data gaps, we would work to either create new opportunities or review and modify existing opportunities to allow participation by more constituencies.

From there, a volunteer monitoring program can begin the outreach work to the intended audience so that the intended audience participates. From this point, training, and ensuring volunteers have a positive experience are similar to the steps outlined in the previous results chain (Figure 5). We would

expect that quality data would be obtained, allowing for more data to guide management and policy implementation in DFW, with the ultimate outcome of more effective wildlife conservation.

However, when volunteer monitoring opportunities are designed with preferences of broader constituencies in mind, we can also expect additional benefits. In this situation, we would expect that not only are quality data obtained, but also there is likely to be a change in the attitude and skills of participants:

- Volunteers have an increased positive association of the DNR—as mentioned above, we define a positive association as an increase in the volunteer’s trust in the DNR and in DNR staff. While trust in a state agency forms as a result of the public’s recognition of shared values and their assessment of an agency’s technical competency, technical competency matters less when shared values aren’t acknowledge or explored. This results chain will focus on value recognition as a signal of trust.
- Volunteers have increased appreciation of DNR’s conservation impact—we define increased appreciation as a volunteer’s increased knowledge of the breadth of conservation work the DNR and DNR staff are involved with across the state. By placing this attitude in this model, we are indicating that volunteer events should intentionally share information about what the DNR does for conservation in Indiana, why DNR does it, and how DNR staff are involved in conservation efforts. Additionally, appreciation includes value recognition as mentioned above.
- Volunteers have increased natural resources knowledge/skills—volunteering monitoring opportunities are designed around conservation knowledge/skills such as plant or wildlife identification, wildlife habitat requirements, and/or wildlife management principles or skills, and involvement in volunteer monitoring may encourage additional learning or skill development. This knowledge and/or skill is then able to be applied to other conservation topics or volunteer opportunities around the state that require more advanced knowledge or skill. By increasing natural resources knowledge or skills, volunteers may improve their capacity to accomplish a task that they feel makes a meaningful impact.
- Volunteers have increased motivation to participate in another volunteer monitoring opportunity—we want some proportion of volunteers to become motivated to come back and continue the good work they helped DFW accomplish.

If volunteer monitors experience these changes in attitudes, knowledge, and skills, they will be more likely to continue to participate in volunteer monitoring opportunities, which will also contribute quality data to DFW. Additionally, when volunteer monitors continue to participate, they may be added into the population of conservation stewards in the state.

ACKNOWLEDGEMENTS

This work would not have been possible without critical review and discussion from the following individuals at Indiana DNR Division of Fish & Wildlife: Jenn Domenech, Colleen Hartel, Steve Donabauer, and Angie Haywood.

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APPENDIX B—INTERVIEW GUIDE

Intro:

Hi, thank you again for talking with me today. The Division of Fish & Wildlife is interested in learning about all the different types of people that we serve around the state. We're doing these interviews because we want to expand opportunities to people who live around the properties. We hope that these interviews will help us make programming and events that are interesting and tailored to you and the people in your community. We are going to record and transcribe these interviews for our own use, but they'll be kept anonymous and confidential.

- *I'll get us started with an easy question. Can you tell me a little bit about the different types of outdoor activities you like to do?*
 - What types of outdoor activities do you like to do?
 - How often do you do them?
 - Where do you do them? Do you do different activities in different places?
 - **If unsure about what property they are using or talking about a different DNR property:**
 - *What types of activities do you do there?*
 - *How has your visitation changed from March until now in light of the Covid-19 pandemic?*
 - *What are some of the reasons you prefer to visit this property over other places?*
- *Has your visitation changed from March until now in light of the COVID-19 pandemic?*
- *Next up I want to talk about conservation. The Division of Fish & Wildlife considers conservation to be an activity that all people can be a part of. Can you tell me what types of activities or actions come to mind when you think about conservation of our natural resources?*
 - *What types of activities do you think are good for conservation of natural resources?*
 - *Do you think citizens can make a difference in conservation?*
 - *After they answer regardless of yes/no/unsure -> Can you tell me a little bit why you think that?*
 - *Do you think it's important for citizens to participate in conservation?*
 - *After they answer regardless of yes/no/unsure -> Can you tell me a little bit why you think that*
 - *What's something that you or your neighbors could do to make a difference in conservation?*
 - *Do you participate in any activities you think are conservation oriented?*

- *Thank you for sharing all of those things! I want to switch gears a little bit and talk about volunteering in your community. Do you (did you) participate in volunteering in your community? Recognizing that your habits may have changed because of Covid-19*
 - **If yes:**
 - *What types of activities did you do?*
 - *How did you learn about these activities?*
 - *What are some of the reasons you liked to participate in these activities?*
 - **If no:**
 - *What keeps you from volunteering?*
 - *Imagine you find a magic sliver of time. What kinds of activities would you be interested in volunteering for?*
 - *Can you name any qualities or reasons that would motivate you to volunteer in the future?*
 - *Qualities they might be interested in: Family, planned events vs self-scheduling, done alone or part of a group, related to a specific topic or effort*
 - *How do you feel/what are your feelings about starting or returning to volunteering after the Covid-19 Pandemic? What would make you feel comfortable returning to them?*
- *Okay, last part of the interview. I'm going to try and tie together some of the previous questions. We're specifically thinking about different types of volunteer events we can hold on our properties. Do you think you would ever be interested in participating in volunteering or a volunteering event at [Blue Grass/Sugar Ridge]? Some of the types of events that we do are...*
 - **If no:**
 - *Okay! Can you tell me some of the reasons why you might not be interested or able to participate?*
 - *Earlier you talked about (outdoor activity/conservation activity). Would you be interested in volunteering if it related specifically to that? Are there any reasons why you do that activity in this other area but would not be interested at FWA?*
 - *Earlier you talked about potentially wanting to volunteer for (reason). Do you see a way you would be able to do that on a Fish and Wildlife Property?*
 - **If yes:**
 - *Great to hear! We want to make sure these events are tailored to the interested parties. Can you tell me a little bit about the types of volunteering activities that are most interesting to you?*

- *How do you feel/what are your feelings about participating in these activities after the Covid-19 Pandemic? What would make you feel comfortable participating in them?*
 - *What's the best way to keep you informed about property updates/activities?*
- *Those are all the questions I had for you today. Thank you again for your participation. Before we wrap up, is there anything else you'd like to discuss about stewardship and volunteering activities at our Fish and Wildlife Areas?*