

Persistence of Voluntary Conservation Actions on Private Lands:

The Impact of the Partners for Fish and Wildlife Program

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Front cover: A restored riparian habitat in Montana. Credit: U.S. Fish & Wildlife Service.

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Executive Summary

Approximately 70% of the land in the United States is privately owned. Voluntary conservation efforts by the U.S. Fish and Wildlife Service's (Service) Partners for Fish and Wildlife Program (PFW Program, Program) on private lands are essential for accomplishing landscape-scale conservation and promoting stewardship. The PFW Program works with private landowners to improve fish and wildlife habitat on their lands and is a leader in voluntary stewardship for fish and wildlife conservation.

The PFW Program cost-shares these conservation efforts with landowners in hopes the practices will be continued beyond the typical 10-year agreement, which facilitates the PFW Program mission. Anecdotal evidence suggests that private landowners often keep their restored habitat in place beyond the required duration. However, a systematic review of the effectiveness and persistence of these projects over time has been lacking.

Through this study, we quantified the percent of participants who maintained their conservation project and for how long. We also explored:

- Landowners' motivations for continuing or discontinuing their conservation practice
- The factors that encouraged landowner participation in the PFW Program

- The effect that working with the PFW Program had on future conservation behaviors
- Landowner beliefs about and satisfaction with the Program
- Landowner beliefs about potential Program improvements
- Landowner conservation values
- Demographics

We synthesized findings from previous conservation persistence literature and results from past PFW Program studies to understand lessons learned and to inform the survey development. We surveyed landowners in Idaho, Oregon, Washington, Arizona, New Mexico, Texas, and Oklahoma with agreements initiated between 2001 and 2008. We achieved a 40% response rate with 128 of 317 landowners responding to the survey.

Key takeaways from this study include:

- Persistence of conservation activities was high after the agreements expired.
- Landowner motivations for engaging with the PFW Program generally were altruistic.
- Landowner satisfaction with the PFW Program was high.
- Landowner participation in the PFW Program had a positive effect on future conservation behaviors.



The PFW Program offers financial and technical assistance to private landowners who improve fish and wildlife habitat on their land. Credit: U.S. Fish & Wildlife Service.

The results support that PFW Program projects do persist over time, beyond the terms of the agreement. Additionally, landowner engagement with the PFW Program leads to continued and additional conservation actions on their property. These findings underscore the ripple effect of private lands conservation efforts through the PFW Program, and the importance of these and similar programs for fish and wildlife conservation. The high percentage of projects that continued beyond the life of the agreement highlights the enduring success of the Program and makes the strong case for continued investment.

Key Recommendations

Following are key recommendations based on the results of the literature review and survey.

Develop targeted communication strategies that align with landowner motivations to conserve fish and wildlife and improve their land for their children and grandchildren

Landowner motivations for working with the PFW Program were largely altruistic, focused more on benefits to fish and wildlife and habitat improvements for future generations than simply their bottom line. As such, PFW Program staff may consider emphasizing these non-monetary benefits to conservation for fish, wildlife, habitat, and future generations in interpersonal communications.

Clearly articulate the expected timelines and outcomes of a project to improve

landowner satisfaction and encourage future conservation behaviors

Landowners who understood the expected outcomes had higher levels of satisfaction with the PFW Program and were more likely to collaborate in the future. Explicit communication to landowners about the expected timelines and outcomes of habitat restoration and any potential unintended negative consequences of a project are paramount.

Continue the streamlined application process and improve regular one-on-one communication with landowners to increase buy-in and persistence of projects

Landowners appreciated the PFW Program's streamlined application process and viewed the partnership as a relationship rather than simply transactional. These are important "selling points" for the Program to emphasize and this continued communication can lead to increased persistence.

Equip landowners with the skills needed to maintain their project over time through training and one-on-one communication

Previous research indicates landowners who feel they have the knowledge, skills, and ability to maintain a project are more likely to continue the restoration effort post-agreement. Providing landowners with information that puts them in control and sets them up for success early on will have a positive effect on persistence.

“Both biologists were helpful, attentive, and suggestive. It felt like a real partnership and excellent resource. I deeply appreciate the help I received for deer cactus and juniper [...] I seeded it with little bluestem, Indian grass, and other native grasses. I have continued to remove juniper that came back, the areas have good stands of native grasses [...]. It is now a native grassland again. Thank you for your help, great staff.”

- Anonymous Survey Respondent

Introduction

Approximately 70% of the land in the United States is privately owned and most fish and wildlife resources occur on those lands (U.S. Department of Interior FWS, 2010). Public agencies and other conservation organizations charged with protecting and recovering these resources must include privately held lands if they are to complete their mission. Voluntary incentive programs have become popular for promoting private land conservation (Dayer et al., 2018). Financial incentive programs allow landowners to voluntarily participate in conservation activities while retaining land ownership. These programs typically have a fixed duration (Kuhfuss et al., 2016) and are influenced by both agency (e.g., available funding, program policies) and landowner characteristics (e.g., attitudes, norms). The incentives can be non-monetary (e.g., technical assistance), or cost share agreements. Doremus (2003) has suggested that for those who are resistant to government regulations on their property, these incentive programs are an effective method for encouraging landowner behavior change.

One such voluntary incentive program is the U.S. Fish and Wildlife Service's (Service) Partners for Fish and Wildlife Program (PFW Program, Program). The PFW Program began in 1987 and works with private landowners to improve fish and wildlife habitat on their lands with no constraints on property rights or ownership. PFW Program staff engage landowners through cost-share habitat restoration and enhancement and provide technical support to make on-the-ground conservation affordable, feasible, and effective. Program staff help identify funding sources and guide landowners through permitting processes. The resulting partnerships have conserved wetlands, streams and rivers, marshes and estuaries, and upland grasslands and forests throughout the United States.

This technical assistance provided by the PFW Program has facilitated the Service's mission to conserve and recover Federal trust species and their habitats. This study sought to expand insights about the impact of the PFW Program in order to improve its conservation outcomes. Specifically, we investigated:

- Why do landowners engage with the Program?
- How long do landowners maintain their conservation activities post-agreement?
- How satisfied are landowners with the Program?
- Does landowner participation in the PFW Program have a positive effect on future conservation behaviors?

Answering these questions can improve PFW Program conservation design, delivery, and communication. For example, field staff can develop communication messages that resonate with landowners and streamline conservation. Such information can improve long-term fish, wildlife, and habitat decision-making and planning (e.g., understanding the role of private lands conservation in recovering at-risk and Federally Threatened and Endangered species) and support continued investment in the Program beyond the typical agreement duration.

To address these questions, we conducted a survey of past Program participants. The survey was informed by a literature review of past research, expert opinion of Program staff, and interviews with six landowners who had participated in the Program. This study was a collaboration between PFW Program staff in seven states (Washington, Oregon, Idaho, Arizona, New Mexico, Texas, and Oklahoma) and in Headquarters; the Human Dimensions Branch of the National Wildlife Refuge System; and Colorado State University.

Literature Review

The success of efforts such as the PFW Program primarily have been evaluated biologically, rather than socially. For example, conservation practices typically are judged based on acres treated or miles of streams restored, and not social outcomes such as changes in landowner stewardship attitudes or the persistence of landowner behavior change (Burton et al., 2008; Race & Curtis, 2013).

There is limited research measuring conservation persistence of non-monetary incentive programs such as the PFW Program. A meta-analysis of the persistence literature called for the research reported here (Dayer et al., 2018). Of the 42 peer-reviewed journal articles and gray literature reviewed by Swann and Richards (2016) and Dayer et al. (2018), only eight empirically examined landowners' intention to keep practices in place and only three examined actual persistence post agreement.

The social psychology discipline can explain much about human behavior, including conservation behavior. Social psychology sheds light on the interpretations an individual uses to understand situations and make decisions and includes concepts such as beliefs, attitudes, and norms (Vaske & Manfredo, 2012). Landowner attitudes toward conservation in general and their attitudes toward specific practices are predicted to influence the adoption of conservation practices (Baumgart-

Getz et al., 2012). If landowner participation in incentive programs generates positive changes in attitudes, persistence in the behavior is likely to continue even after the financial benefits have ended (Dayer et al., 2018). Also of importance in conservation decision-making are landowner skills (perceived and real), personal responsibilities, and norms.

The literature indicates that a landowner's knowledge, skills, and abilities related to conservation is likely to affect persistence behaviors (Lynne et al., 1995). For the PFW Program, this suggests that up-front and ongoing technical assistance is important. Landowners who are confident that they can manage for conservation on their property are more likely to exhibit persistence in the behavior (Hayes, 2012; Jackson-Smith et al., 2010). Conservation practices that are harder to remove are more likely to be kept by a landowner than those that are easily returned to status quo. Furthermore, capitalizing on landowners' existing stewardship ethics will bode well for the PFW Program meeting its conservation objectives. More research such as that described here is needed on the persistence of non-monetary incentivized conservation actions to be able to draw generalizable, cross-program conclusions.

Past Studies of the PFW Program

Understanding past research is key to contextualizing the results presented in this report. Past studies examined motivations for participating in the Program, satisfaction with the Program, conservation behavior persistence, and threats to that persistence. The project described here builds on this past research. We examined six past Program studies that are summarized in Appendix A. Overall, this research suggests motivations, attitudes, and beliefs are related to landowner adoption

and/or persistence of practices. For example, landowner motivations are correlated with the desirability of enhancing wildlife habitat and restoring private property for future generations (Abrams et al., 2019; Ezell, 1999; Fairchild, 2004; Kitchen, 1999; Ruwaldt et al., 1995).

Two studies found that financial and technical assistance motivated conservation behavior (Kitchen, 1999; Ruwaldt et al., 1995). Non-monetary factors that motivated conservation

behavior included personal experience and social considerations (Ezell, 1999; Fairchild, 2004). Project profitability was the least motivating factor for landowner conservation while non-monetary motivations ranked highest (Pease et al., 1997).

Several studies indicated landowner attitudes toward conservation were consistently positive, especially relative to trust in programs, perceived control over agreement terms, and the responsibility of landowners (Abrams et al., 2019; Ezell, 1999; Fairchild, 2004). Participants were overwhelmingly satisfied with their projects. Limited dissatisfaction occurred when projects failed or did not work as intended (Fairchild, 2004; Kidd, 1994; Ruwaladt et al., 1995).

Landowners' reported intentions to maintain projects beyond the agreement expiration (Abrams et al., 2019; Ruwaladt et al., 1995).

Threats to operations or projects not working as intended were the leading causes for project removal prior to the expiration of agreements (Abrams et al., 2019). Although project failures tended to be low (Kitchen, 1999; Ruwaladt et al., 1995), most landowners who prematurely discontinued agreements remained interested in implementing future projects (Abrams et al., 2019; Kidd, 1994).

Past PFW Program studies suggest that it is important for a conservation practice to be successful and work as intended for a landowner to keep that practice in place. If a landowner viewed the project as a failure or not working as intended, even if it was a conservation success, persistence suffered. This suggests the need for the PFW Program to clearly communicate anticipated project outcomes.

Methods

We surveyed landowners who signed an agreement between 2001 and 2008 because PFW Program agreements generally have a duration of 10-years, and we designed the study population to only include landowners with expired agreements. We did not include agreements before 2001 because information on these projects was limited. We surveyed landowners within a seven-state study area that included Washington, Oregon, Idaho, Arizona, New Mexico, Texas, and Oklahoma (Figure 1).

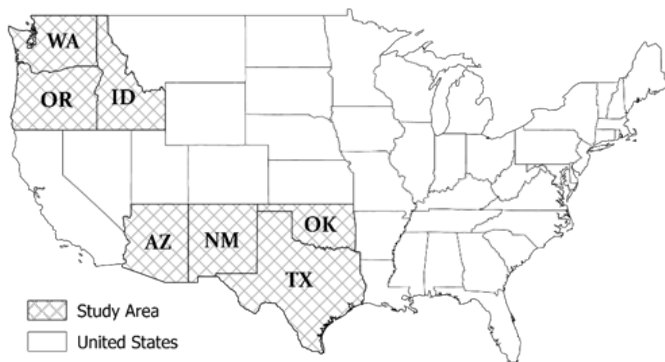


Figure 1. Project Study Area

The survey of past PFW Program participants focused on the following topics (see Appendix B for the full survey instrument):

- Property and project characteristics
- Persistence of practice
- Factors that influence persistence
- Factors that affect respondents' decisions to work with the PFW Program
- Satisfaction (with project and Program)
- Future conservation actions
- Experiences with other organizations (prior and future projects)
- PFW Program beliefs
- Landowner demographics
- Land ethics

We identified over 1,000 projects in the PFW Program Habitat Information Tracking System (HabITS) within the study area. We did not include projects completed by entities other than individual landowners (e.g., non-governmental organizations, government

entities, businesses, tribes). This database provided project-level information such as administrative details, habitat type, and project characteristics. Because HabITS does not store landowner information, Program field station staff cross-referenced projects, files, and provided contact information for each landowner. After deleting individuals who were deceased, had moved, had incomplete address information, or invalid addresses (as verified by the National Change of Address system), there were 317 potential respondents in the population.

We administered the survey to all potential respondents in March and April 2019 utilizing the “Total Design Method” (Dillman et al., 2009) to maximize response rate. We first sent a pre-notice letter signed by PFW Program field station coordinators. One week later, we sent the survey with a cover letter and postage-paid return envelope and then a reminder postcard a week after that. Five weeks after the initial mailing we sent all non-respondents a follow-up mail survey. All correspondence was mailed from Colorado State University. A total of 128 landowners completed the survey for a response rate of 40%.

Results

Landowner and Project Characteristics

Survey respondents used their property for a variety of purposes and participated in different types of conservation projects with the PFW Program. Two thirds of respondents (65%)

reported having cattle operations. Forty-nine percent indicated recreational activities, and 39% cited agricultural uses (Figure 2).

We asked respondents to consider one specific practice they worked on with the PFW Program

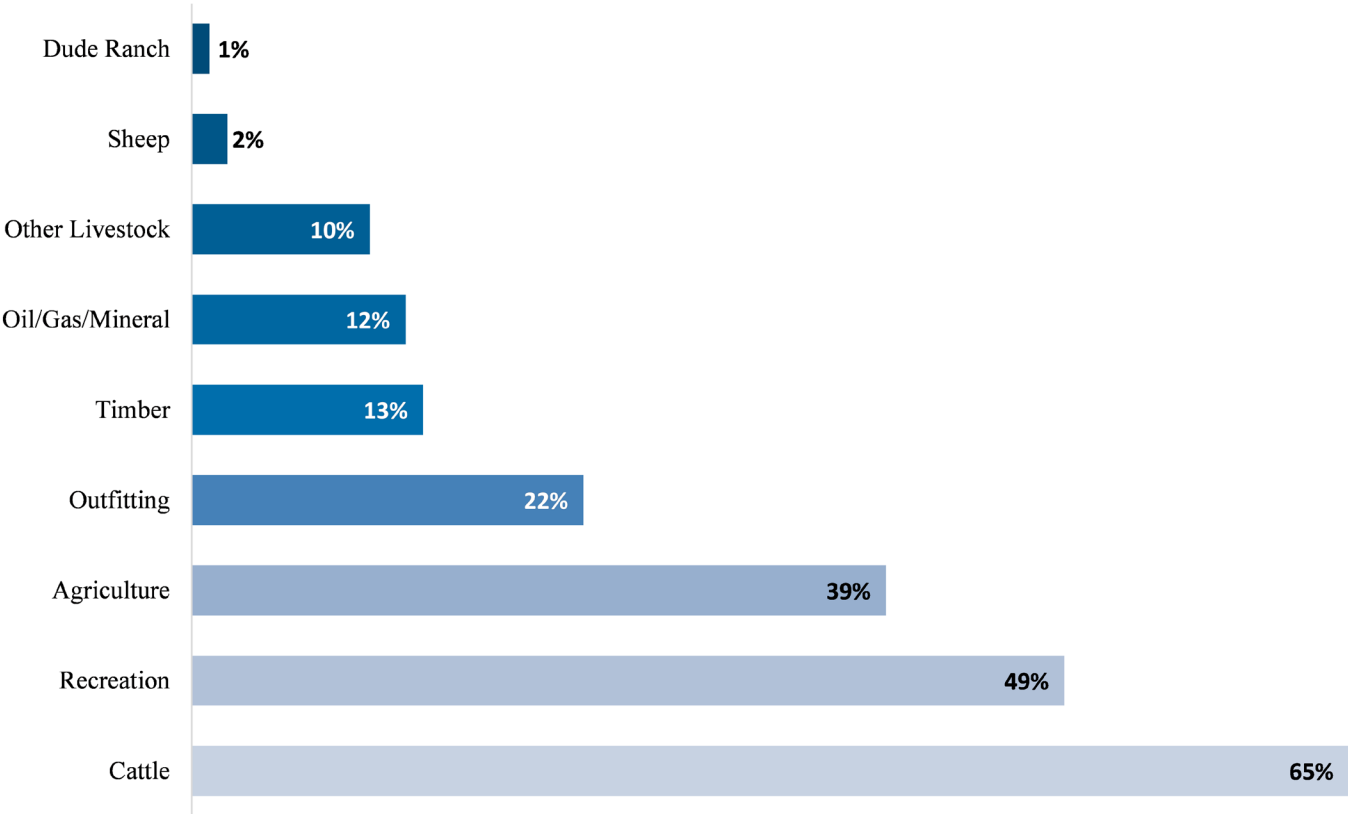


Figure 2. Operations and Land-Use on Respondent Properties

when answering the survey questions (e.g., plantings, grazing management, or fencing). Identified practices fell into the following treatment categories: Respondents identified water management (36%), planting (26%), fencing (23%), grazing management (5%), and habitat/infrastructure modification (4%) (Figure 3).

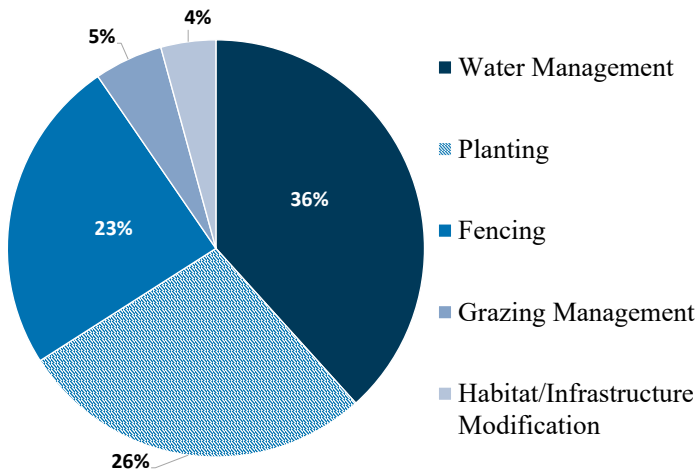


Figure 3. Distribution of Project Practices by Treatment Category

Landowner Beliefs about the PFW Program

Ninety-four percent of respondents agreed that the PFW Program allowed them to manage their property as desired (Table 1). Between 86% and 90% believed that the Program did not put permanent restrictions on their property, believed that the cost share arrangements fit their financial needs, and trusted the Program staff. Nearly as many needed the technical assistance to help plan restoration activities (79%) and did not believe that the Program’s bureaucracy was too burdensome (74%).

Persistence

Ninety-three percent of respondents reported keeping the practice in place after the agreement expired, with 82% of those people reporting that the practice was still in place at the time of the survey (Figure 4). Ninety-four percent of respondents who still had the practice in place at the time of the survey reported they intended to keep the practice in place for as long as they own the property (see Appendix B for the survey instrument and descriptive statistics).

Table 1. Respondent Beliefs about the PFW Program

	Disagree	Neither	Agree
The Partners Program allows me to still manage my property the way I want to	2%	4%	95%
The Partners Program places no permanent restrictions on my property	5%	6%	89%
I trust the Partners Program staff	5%	9%	86%
The cost-share arrangement with the Partners Program fits my financial needs	5%	9%	86%
I needed technical assistance to help plan restoration activities that were beneficial to wildlife on my operation	8%	13%	79%
The Partners Program bureaucracy/paperwork/red tape is not burdensome	8%	18%	74%
I feel that the Partners Program will maintain a relationship with me for the long haul	11%	21%	68%
I’ve worked with the Partners Program in the past and had a good experience	7%	31%	62%
The Partners Program helps me better prepare for potential endangered species listing decisions	3%	44%	53%
My family, friends, neighbors and/or business associates work with the Partners Program	17%	61%	22%

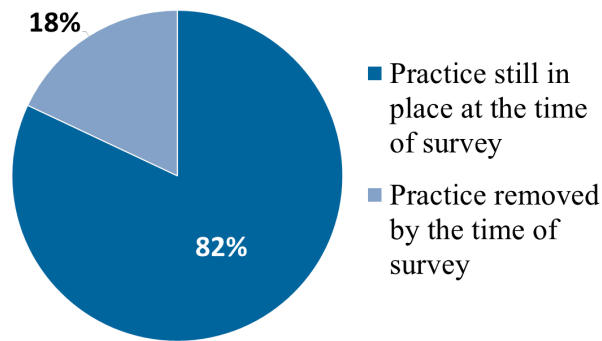


Figure 4. Practice Persistence after Agreement Expired

When asked under what circumstance they would consider removing the conservation practice, 49% would remove it if it did not work as intended and 40% would remove it if it had negative unintended consequences (Figure 5). Only 13% indicated they would consider discontinuing the practice if doing so could increase their income, and only 23% if it got in the way of their operation.

Respondents indicated they would continue to keep the practice if it worked as intended (94%), enhanced their operation (89%), provided unintended benefits (70%), or increased their income (60%) (Figure 6).

Of the 18% of people who had removed the practice by the time of the survey, 23% did so 3 to 4 years after expiration, 13% did so 5 to 6 years after, and 64% kept the practice for at least 7 years after their agreement expired (see Appendix B for the survey instrument and descriptive statistics).

Landowner Motivations

Top reasons respondents participated in the PFW Program included their value for wildlife and their habitat (98%), a desire to do conservation on their property (96%), and to improve their property (96%). Between 80% and 87% said they wanted to leave their land in good shape for their children and/or grandchildren; felt a moral obligation to protect wildlife; trusted PFW Program staff; and wanted technical assistance. Less common reasons for engagement included wanting to establish a relationship with the PFW Program prior to any potential endangered species listing decision (41%), encouragement from their friends or neighbors (25%), or wanting to increase their income through property improvements (Table 2).

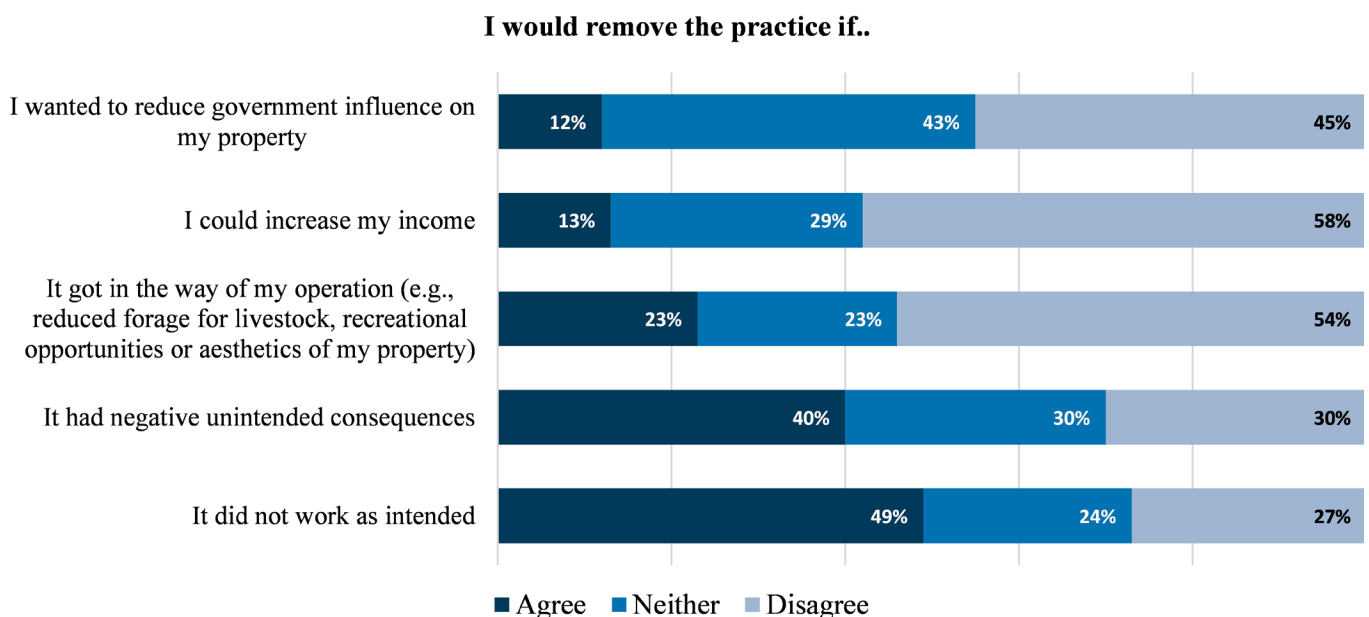


Figure 5. Factors that Would Encourage Respondents to Remove a Practice for Those Who Kept the Practice in Place

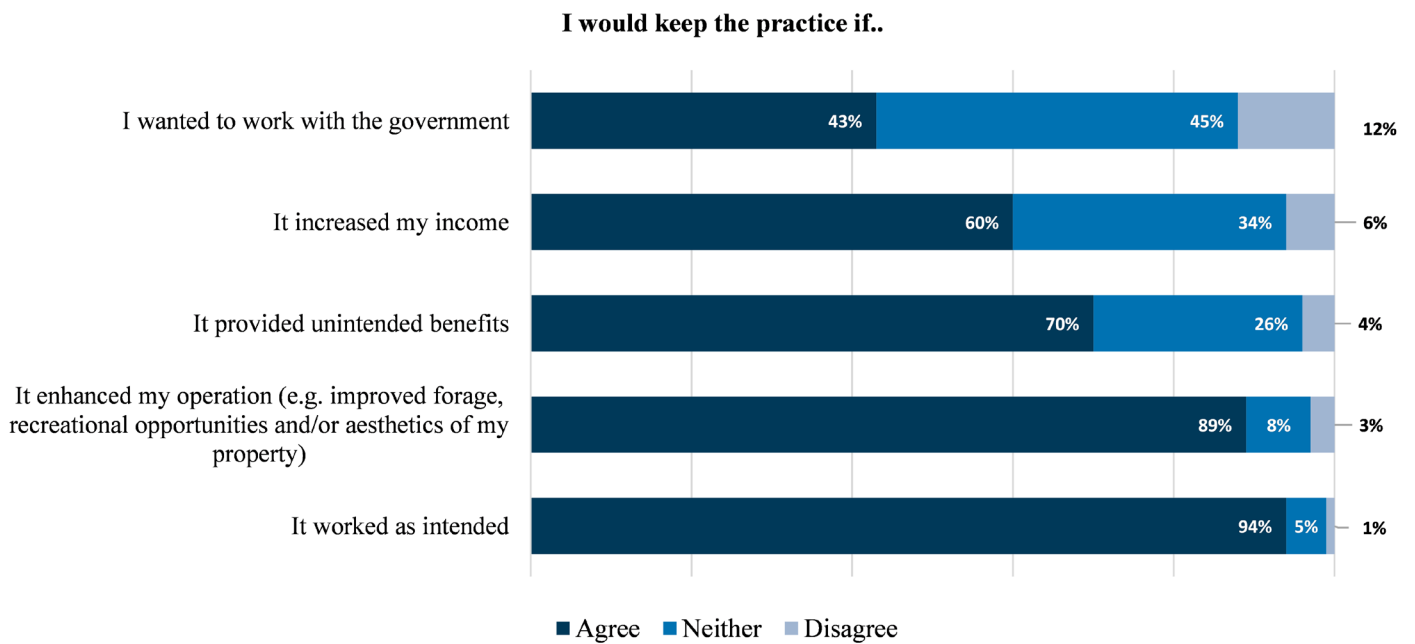


Figure 6. Factors That Would Encourage Respondents to Continue to Keep a Practice in Place

Satisfaction

Ninety-five percent of respondents were satisfied with the PFW Program overall (Figure 7). Nearly as many (90%) thought they

were able to manage their property under the terms of the agreement. Between 85% and 89% of respondents were satisfied with the cost share arrangement, the Program staff, technical

Table 2. Reasons Respondents Participated in the PFW Program

	Disagree	Neither	Agree
I value wildlife and their habitat	1%	1%	98%
I wanted to do conservation on my property	2%	2%	96%
I wanted to improve my property	2%	2%	96%
I wanted to leave my land in a good state for my kids and/or grandkids	2%	11%	87%
I felt a moral obligation to protect wildlife	3%	12%	86%
I trusted the Partners Program staff	5%	9%	86%
I wanted technical assistance	7%	13%	80%
I wanted to establish a relationship with the Partners Program prior to any potential endangered species listing decision	15%	44%	41%
I was encouraged by my friends, neighbors and/or business associates	22%	53%	25%
I wanted to increase my income through property improvements:			
Increased forage yield	22%	40%	38%
Increased hunting lease quality and quantity	21%	38%	41%
Increased recreation opportunities on my land other than hunting and fishing	16%	30%	55%

assistance they were given, and the terms of the agreement.

Continued Conservation Action

Seventy-eight percent said working with the PFW Program made them more likely to continue conservation work on their property through the PFW Program and/or other organizations (Figure 8). Only 2% cited they would be less likely to engage in conservation activities in the future as a result of PFW

Program participation. Forty-eight percent of landowners said their experience working with the PFW Program encouraged them to work on another project with the PFW Program. Two-thirds of respondents cited that their experience working with the PFW Program encouraged them to work on projects with other organizations (e.g., USDA/NRCS, local or state government, land trusts or non-governmental organizations).

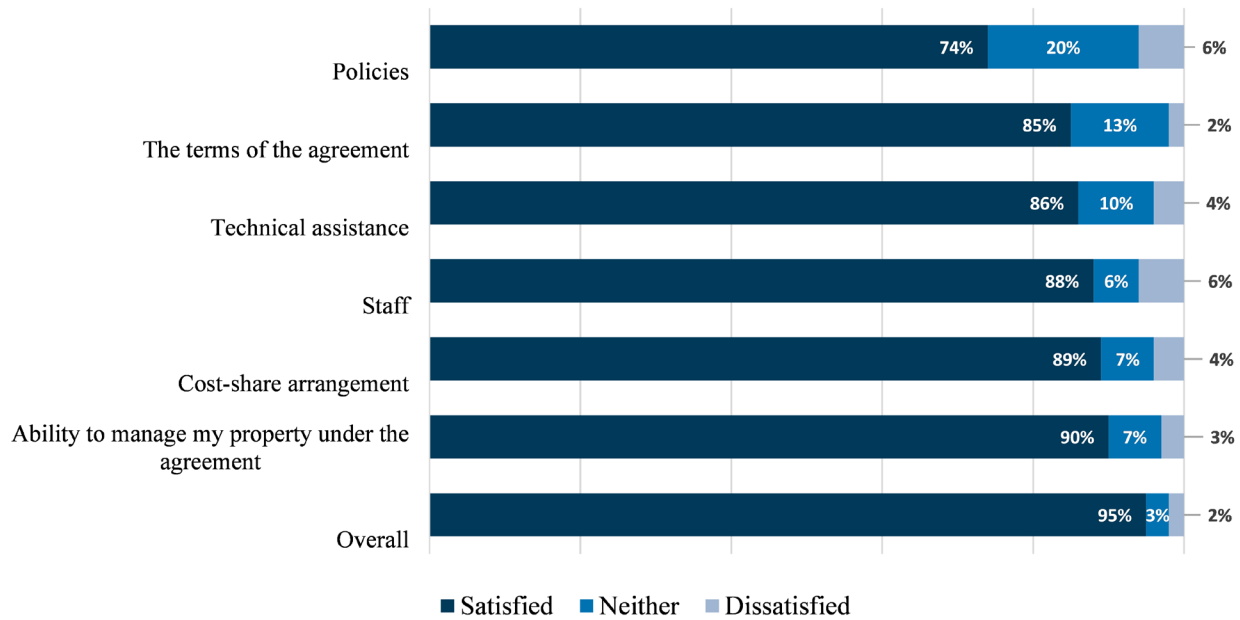


Figure 7. Respondent Satisfaction with the PFW Program Overall and with Specific Aspects of the Program

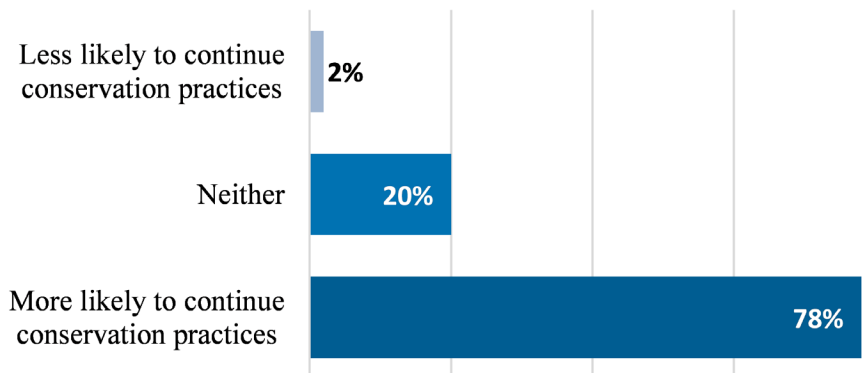


Figure 8. Respondents' Likelihood of Continuing Conservation Practices on Their Property as a Result of Engaging with the PFW Program

Top reasons respondents participated in additional projects included wanting more wildlife on their property (87%), valuing the outcomes of conservation projects (83%), and wanting to improve their property (82%)

(Figure 9). Only 10% indicated concerns about a potential listing under the Endangered Species Act as reason for participating in an additional project.

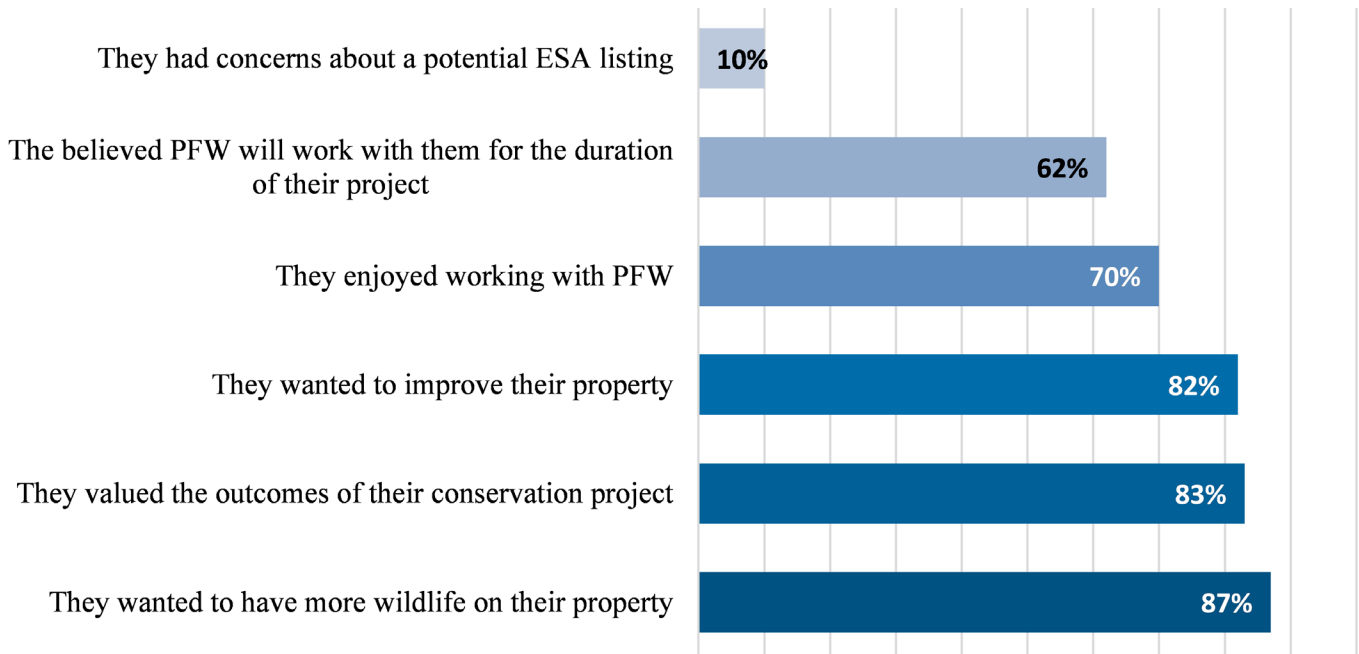


Figure 9. Reasons for Participating in Additional PFW Program Projects/Practices

Conclusions and Recommendations

The enduring impact of the PFW Program on conserving fish, wildlife, and their habitats hinges, at least in part, on the persistence of conservation actions on private lands. Understanding what motivates landowner conservation behavior is necessary to more effectively engage landowners, inform Program improvements, better serve landowners, and more effectively communicate Program impacts. Finally, landowner satisfaction can help the Program understand what is working and what improvements could lead to more efficient landowner engagement and improved conservation delivery.

Persistence of conservation practices is key to conservation return on investment and continuation of projects post-agreement. The longer the practice stays in place post-

agreement, the higher the conservation return on investment for habitat and wildlife conservation. Respondents who worked directly with PFW Program staff for the life of the agreement and beyond were more likely to continue conservation work on their property. This underscores the importance of the priority the PFW Program places on one-on-one relationships with landowners.

Understanding landowners' motivations can inform PFW Program outreach and communication efforts both with landowners and policy and decision makers. Tailoring outreach to these motivations can boost the effectiveness of the Program. Communications that appeal to landowners' altruistic conservation motivations is likely to be effective messaging. Conversely, some messages may not

resonate well with landowners such as messages about Endangered Species Act restrictions. Given this, it makes sense to use messages like this sparingly and only when the situation warrants (e.g., when a landowner expresses concern about endangered species).

Satisfaction with the PFW Program was high. By capitalizing on aspects of the program that have high satisfaction such as Program staff, technical assistance, and the cost share arrangement, landowners are more likely to continue projects post-agreement. The positive impact of PFW Program staff was evident in landowner satisfaction, persistence of practices post-agreement, and the fact that engagement with the Program leads to continued conservation behavior on their property. Combined, these findings point to the effectiveness and strength of the PFW Program and make the strong case for continued investment.

Key Recommendations

Following are key recommendations based on the results of the literature review and survey.

Develop targeted communication strategies that align with landowner motivations to conserve fish and wildlife and improve their land for their children and grandchildren

Landowner motivations for working with the PFW Program were largely altruistic. Communications highlighting program benefits to fish and wildlife and habitat improvements for future generations resonated with landowners. Landowners cared about their bottom line, but financial gain was not a primary driver for engaging with the Program; they were drawn to the practical benefits of working with the PFW Program (e.g., no permanent property restrictions, excellent technical assistance) and recommended increasing communication, extending outreach, and/or enhancing Program visibility. As such, PFW Program staff may consider emphasizing these non-monetary benefits to conservation for fish, wildlife, habitat, and future generations in

future communications with new and existing landowners.

Clearly articulate the expected timelines and outcomes of a project to improve landowner satisfaction and encourage future conservation behaviors

Landowners who understood the expected outcomes had higher levels of satisfaction with the PFW Program and were more likely to collaborate in the future. Conversely, when a project did not work as intended, landowners were more likely to discontinue the project post-agreement, were less satisfied, and were less likely to seek future conservation projects. Explicit communication to landowners about the expected outcomes of habitat restoration and the timeline to reach these outcomes are paramount. Transparency regarding potential unintended negative consequences of a project is equally important to communicate.

Continue the streamlined application process and improve regular one-on-one communication with landowners to increase buy-in and persistence of projects

Landowners appreciated the PFW Program's streamlined application process and preferred regular interactions with Program staff throughout the project and beyond the agreement. Landowners viewed the partnership as a relationship rather than simply transactional. This continued communication has the potential to lead to increased persistence and improved landowner receptivity to working with the PFW Program on another project. Landowners surveyed recognized these attributes as "selling points" of the Program; as such, clearly emphasizing them with landowners will resonate.

Equip landowners with the skills needed to maintain their project over time through training and one-on-one communication

Previous research indicates landowners who feel they have the knowledge, skills, and ability to maintain a project are more likely to continue the restoration effort post-agreement. Providing

landowners with information that puts them in control and sets them up for success early on will have a positive effect on persistence.

Conduct future research focused on understanding PFW Program persistence at a national-scale and further exploring the theoretical underpinnings of conservation behavior on private lands

The literature review and survey highlight implications for future research. First, there would be benefit in extending this research to a nationwide study of landowners who have worked with the PFW Program in order to understand regional variations in landowner motivations and measure program-wide conservation persistence.

Second, more theoretical research is needed to explore the role of value orientations, attitudes, and norms in shaping landowners' long-term behavior. Research adapting those theoretical issues to understand conservation behavior persistence show promise and have the potential to inform best practices for practitioner/landowner relations. By considering different landowner audiences based on shared values, attitudes, and norms, the PFW Program can create more compelling messaging targeted to specific subgroups, thus improving conservation delivery and outcomes.



Migrating sandhill cranes benefit from restored habitat on private land. Credit: U.S. Fish & Wildlife Service.

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Appendix A

Past Studies of the PFW Program Summaries

Appendix A includes a review of six studies conducted on PFW Program landowners. References for studies in Appendix A can be found in the References section of this report.

Restored Wetlands Evaluation (Kidd, 1994)

Kidd assessed project-based conservation initiatives implemented by the PFW Program. This evaluation addressed: landowner satisfaction with the project; landowner involvement in wildlife management on the site; restoration opportunities; wildlife use of the site; re-enrollment options; and the overall success of the project.

The first five objectives were addressed through landowner telephone surveys. Following the survey, an on-site assessment measured the subjective success of the restorative efforts using qualitative parameters. The sample was drawn from landowners (n = 32) across seven counties in southwestern Wisconsin with current or previous experience participating in wetland restoration through the PFW Program.

Results indicated landowner satisfaction with the Program was generally high across the region; only two landowners were dissatisfied and five were mildly satisfied with their projects overall. The two dissatisfied landowners felt that the restoration project was unsuccessful, likely because of minimal landowner involvement and/or minimal visitation to the restoration site by PFW Program staff.

Kidd suggested that landowners were enthusiastic about wetland restoration and intended to keep the wetland for as long as they owned the land. About two-thirds of landowners agreed that the restored wetlands received high to very high wildlife use. Over half indicated ducks or geese had nested on or near the project area. Findings suggested that respondents (60%), who were active in the restoration project

experienced more diversity in vegetation and wildlife use.

The majority of landowners expressed interest in renewing their agreements at the end of the 10 years regardless of the project's duration at the time of inquiry (the project had only been in place one year for some respondents). Although many landowners had achieved or were engaged in sufficient wetland restoration on their property, several suggested that financial incentives (e.g., tax breaks) would increase their support for the restoration program and encourage them to re-enroll in future conservation endeavors.

Indiana Landowner Attitudes Toward the U.S. Fish and Wildlife Service Partners for Wildlife Program (Ruwaldt, Miller, & O'Leary, 1995)

According to Ruwaldt et al., private landowners in Indiana have been increasingly receptive to the PFW Program, yet overwhelming interest in conservation assistance has exceeded the ability of U.S. Fish & Wildlife Service and its partners to adequately meet demand. Incentivizing both monetary and non-monetary components influenced landowner participation in voluntary conservation. To enhance the strategic allocation of resources and identify necessary changes for achieving conservation goals, Researchers assessed participants' demographics, motivations for participation, and overall satisfaction with the Program in Indiana.

A mail-questionnaire was sent to the 376 Indiana landowners who had previously completed projects with the Program. Survey topics included the type of restoration, the purpose of the specified projects, positive and negative aspects of the Program, and the landowner's overall opinion of the Program. Responses were received from 230 landowners (61%).

Understanding the shift from private landowners who derive their main income from farming to those who do not farm provides insight into the motivations for conservation

and wildlife management (Koontz, 2001). In this study, only 16% of landowners reportedly earning more than 25% of their income from farming or other agricultural land uses. Grain farming (30%) and recreation (40%) were the principal property uses. Results suggests that the Program landowners in the region were not full-time farmers.

Nearly all of the landowners (97%) participated in the Program to “attract wildlife.” Habitat restorations were overwhelmingly wetland projects; prairie and bottomland hardwood restorations were identified less frequently.

Landowner experience with the Program was positive overall. About a fifth (21%), however, suggested more timely follow-ups and additional information about the project and wildlife in general (17%) would have been beneficial. Program landowners were committed to long-term conservation on their property; 90% of those surveyed intended to keep their project indefinitely. Of the 14% of landowners who were dissatisfied with the project, 74% said the project was not working as intended. Dissatisfaction with the project did not affect satisfaction with the Program, however, as 95% of landowners would recommend the Program to others.

Monitoring Report for Wisconsin (1987-1999) – An Assessment of Landowner Participation and Habitat Accomplishments (Kitchen, 1999)

Voluntary conservation efforts often embody long term landowner participation and encompass a complex array of ecological systems and habitats. This suggests that the success of management goals cannot be adequately assessed without sufficient monitoring procedures once projects have been established. Kitchen examined landowner participation and habitat accomplishments in response to a year-long monitoring effort to determine the success of the Program in Wisconsin. The study evaluated: landowner attitudes, experiences, and acceptance of the Program; and the quality and appropriateness of habitat restoration projects completed through the Program. The research also assessed the

consistency in Program delivery by randomly sampling completed projects in each of the participating field offices in Wisconsin.

The sample included projects completed prior to 1994, which were filtered according to the depth of the project details and property information provided. A total of 351 landowners were selected for the study, involving 8 of the 9 U.S. Fish & Wildlife Service field offices serving Wisconsin. The mail-questionnaire evaluated landowner satisfaction with the project, future plans to maintain the project, and whether landowners had additional restoration opportunities on their properties. A total of 311 surveys were received (response rate = 85%).

Results indicated that 68% of respondents were fully satisfied with their participation in the PFW Program. Dissatisfied landowners (11%) had wetland restorations that did not work as intended. Dissatisfaction was also attributed to a lack of habitat understanding among landowners, specifically regarding wetland types, wetland ecology, and hydrologic considerations. Long-term commitment to habitat improvement and persistence of conservation behavior was indicated by 89% of respondents intending to maintain the project beyond the agreement’s expiration. Over half (58%) of the landowners believed that there were additional habitat restoration opportunities on their land.

Based on site visits, habitat evaluation records identified a number of failed projects. For restorative prairie planting, less than 50% of the planted grass and forbs observed in the field were successful. Such findings highlight the difficulty in establishing prairie communities. Small sample sizes and premature assessment of projects that require a prolonged period of establishment, however, indicated the need for further study and sampling to confirm the preliminary findings. There were significantly higher success rates for wetland projects. Of the 335 wetlands sampled, only 6% failed and another 13% were partially successful. The low failure rate was similar across all study years.

Kitchen also surveyed a random sample of Program administrative offices to assess internal operational procedures. The complexity and variability in program delivery made comparisons difficult. However, one common theme was a general lack of adequate records (location information, documentation of cost, permits, and design information).

Partners for Fish and Wildlife Landowner Survey (Ezell, 1999)

With growing demand for conservation assistance, feedback from landowners is increasingly required to satisfy the individualized needs of diverse habitats and landowners. Ezell sought to improve and strengthen the Program by analyzing feedback from landowners across four states.

The sample consisted of landowners with current or previous experience participating in Program projects in U.S. Fish & Wildlife Service Region 2 (Oklahoma, Texas, New Mexico, and Arizona). The mail-questionnaire was completed and returned by 254 landowners (response rate = 76%) across the four states.

Results indicated that both technical and financial assistance were invaluable resources for landowners; 62% of the landowners said they would not have restored their wetland if it had not been for the Program. Although financial assistance was important to landowners, 83% of landowners believed that financial profitability was the least important reason for participation in their project. Conversely, 89% were concerned with habitat loss and wanted to provide habitat for wildlife. An increase in wildlife usage was experienced by 92% of landowners.

Nearly all (97%) of landowners were satisfied with their projects, even though 29% experienced technical problems, 20% had a delay in payment, and 20% experienced financial issues. Even with setbacks, landowners were loyal to the Program. The entire sample (100%) planned on maintaining their project after the terms of the agreement expired, and

91% expressed interest in implementing an additional Program project.

Private Landowner Perspectives Affecting Retention of Restored Lands (Fairchild, 2004)

Based on this research, thousands of acres of wetlands in Minnesota have been restored through both mandatory and voluntary methods. Voluntary conservation programs, however, do not always require landowner commitments in perpetuity. The fate of roughly two-thirds of wetlands in the Mississippi Flyway, which includes Minnesota, was decided by private landowners (Pavelis, 1987). To increase the longevity and abundance of restored wetlands, Fairchild explored private landowner motivations for retaining wetlands in Minnesota.

The study described: landowners who participated in a wetland restoration program and retained the wetland after the conservation agreement ended; their beliefs regarding restored wetlands; their perceived sense of control over restored wetlands; their perceptions of social pressure to retain wetlands; and their intent to retain restored wetlands in the future. Data collected in the study were compared with existing research on motivations for participating in wetland restoration and other rural land-use options.

Data were collected with a mailed survey that included both qualitative and quantitative questions. Participants were encouraged to express their feelings and opinions on private wetlands in addition to directed questions. The sample was provided by the Program, which insured the landowners had restored wetlands on their property. Of the 157 questionnaires that were mailed, 80 completed usable surveys were returned (response rate = 51%).

On average, respondents owned their property for 29 years and had an average project size of 5 acres (ranging from 0.4-30 acres). Approximately two thirds (65%) of respondents reported residency on the property where the wetland restoration took place. Regardless of residence, 58% reported using their land for agricultural

or farming purposes. Although 64% noted the need for periodic wetland maintenance, 70% indicated that the wetlands benefited their farming practices.

Respondents believed that wildlife benefited from the wetlands on their property. Ninety percent agreed that restoring and retaining wetlands was good management practice. Two-thirds believed that wetlands are a good property use, that wetlands increase property value, and that wetlands reduce the severity of spring runoff.

Only 5% of respondents did not own the property at the time of restoration. The overwhelming majority intended to retain the wetland on their property. Landowners who spent more time and effort managing their wetlands held stronger views toward the benefits of wetland retention. Although 18% of respondents had re-enrolled their restored wetlands in a permanent conservation program after the agreement expired, nearly three-quarters (71%) of the remaining respondents would not consider permanent conservation restriction options.

Beaver-Related Restoration in Owyhee County, Idaho: Opportunities and Challenges (Abrams, Johnduff, & Charnley, 2019)

Species-specific conservation has garnered attention from state/federal wildlife agencies and nongovernmental organizations (NGOs) interested in restoring and conserving habitat for sensitive species on private landscapes (USFWS, 2017). Owyhee County, Idaho is home to sagebrush-confiding species as well as species that require high-quality riparian and aquatic habitat. Abrams et al. assessed the social,

hydrological, and ecological effects associated with beaver-related watershed restoration and suggested there were opportunities for increasing restoration efforts that incorporate species specific-activities.

The analyses were based upon a review of relevant literature and 16 interviews with 19 Owyhee County key informants. The sample included 13 ranchers/landowners and six state, federal, or NGO representatives experienced in working with ranchers/landowners. Interviewees were intentionally selected, according to their actual or potential experience with beaver or riparian restoration. Interviews were conducted during two separate visits to Owyhee County in April and August of 2017. In some cases, interviews were conducted via telephone and/or included site-visits of ranches and riparian areas.

Potential overlap existed between conservation goals and livestock production benefits of watershed restoration. Grant and cost-share funding opportunities available for beaver-related projects identified opportunities for future restoration and cattle production interests. Landowners indicated an overall positive perception for beaver presence and habitat restoration, as long as daily operations were not disrupted. However, landowners expressed concerns regarding regulations and stakeholder liability (e.g., potential conflict regarding grazing management due to liability arising from the creation of habitat for threatened or endangered species) that need to be addressed to establish a foundation for long-term riparian habitat improvement.

Appendix B

Survey Instrument and Descriptive Statistics

Appendix B is the correspondence and mail survey that was sent to all landowners in the study sample. Embedded within the appendix are the descriptive statistics for each question or answer option.



«Name »
«Company »
«Address »
«Address2 »

«RegCoordinator_Name»
«RegCoordinator_Title»
«RegCoordinator_Agency»
«RegCoordinator_Agency2»
«RegCoordinator_Address1»
«RegCoordinator_Address2»
«RegCoordinator_Phone»
«RegCoordinator_Email»

Dear «FirstName»,

I am writing to ask for your help with a study being conducted by the Partners for Fish and Wildlife Program of the United States Fish and Wildlife Service (Partners Program). The purpose of this study is to understand ways in which the Partners Program can improve so that it may better serve landowners like yourself. Your input on this topic is very valuable and we are excited to provide you with an opportunity to share your opinions and experiences in regards to working with the Partners Program. You were selected to participate in this study because you began a project with the Partners Program more than 10 years ago and therefore have long-term experience working with them.

You began work on a project with the Partners Program in «YEAR» in «CountyName» County, «State». This survey refers to that project. As part of this project you may have worked with the Partners Program on one or more activities such as grazing management, wetland restoration, or fencing.

Your participation in this survey is voluntary and has been approved through the requirements of the Office of Management and Budget (OMB Control # 1040-0001). It should take you no more than 18 minutes to complete. When you return your completed questionnaire, your name and address will be deleted from the mailing list and never connected to your answers in any way.

If you have any questions or comments about this study, we would be happy to talk with you – simply contact us by email at Brad_Milley@fws.gov or by calling 970-266-2998.

Sincerely,

«RegCoordinator_Name»

Your Experience Working with the US Fish and Wildlife Service Partners for Fish and Wildlife Program

1. What type of operation(s) do you have on your property? (Check all that apply)

- Cattle **(65%)** Sheep **(2%)** Other livestock **(10%)**
- Farming / Agriculture **(39%)** Timber **(13%)** Dude Ranch / Ag-tourism **(1%)**
- Oil, Gas, Mineral extr. **(12%)** Recreation **(49%)** Outfitting (fishing, hunting) **(22%)**
- Other(s) **(24%)**: Restoration (2%) Conservation (2%) Goats (2%)

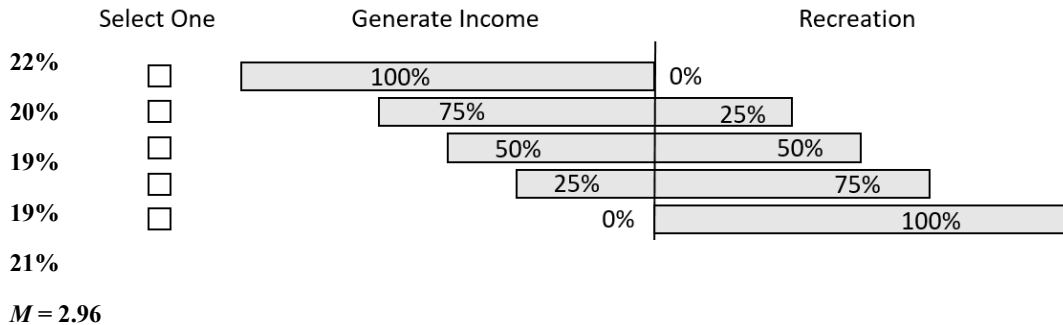
2. About how many acres is your operation? M = 2,89 Number of acres

3. About how many years has your family or group owned this, property? M = 41 Number of years

4. Is use of your property restricted by an easement that was put in place for wildlife habitat or other resource conservation purposes?

- Yes No Not Sure
- (24%)** **(67%)** **(9%)**

5. Thinking about how you use your property, what proportion is used to generate income and what proportion is for recreation. Select one the choices below that most closely represents that proportion.



6. For purposes of this survey we'd like you to select one of the practices you worked on with the Partners Program. For example, you may have entered into an agreement with the Partners Program to do plantings, grazing management and fencing, all of which are called "practices".

Please select the **one** practice below you are most interested in talking about (there may only be one listed). This list comes from our files, if a practice you worked on is not listed use the space below to write it in. (*Circle only one*)

Habitat Types

- 1. River **(16%)**
- 2. Upland **(36%)**
- 3. Wetland **(48%)**

Treatment Categories

- 1. Water Management **(36%)**
- 2. Planting **(26%)**
- 3. Fencing **(23%)**
- 4. Grazing Management **(5%)**
- 5. Modification **(4%)**

Treatment Name

- 1. Dike/Levee Work (22%)
- 2. Trees/Shrubs (17%)
- 3. Vegetation Buffer (10%)
- 4. Vegetation (9%)
- 5. Grazing Management (8%)
- 6. Vegetation Management (6%)
- 7. Water Control Structure (6%)
- 8. Forest Stand Improvement (4%)
- 9. Watering Facility (4%)
- 10. Barrier Modification (2%)
- 11. Livestock Management (2%)
- 12. Prescribed Burning (2%)

Other(s) (please list): _____

For the rest of this survey please answer each question with this single practice in mind.

7. Did you keep the practice in place after the agreement with the Partners Program expired?
- Yes **(93%)**
 - No *if 'no' skip to question 12* **(7%)**
8. Most agreements with the Partners Program last 10 years (although some may vary). About how long past the end of the agreement with the Partners Program **did you keep** the practice in place?
- The practice is still in place **(82%)**
 - I removed the practice... (Check the appropriate box below) **(18%)**
 - Less than a year after
 - A year after
 - 2 years after
 - 3 to 4 years after **(23%)**
 - 5 to 6 years after **(13%)**
 - 7 + years after **(64%)**
9. If the practice is still in place beyond the terms of the agreement, how long **do you intend to keep** the practice in place?
- 1 to 2 years
 - 3 to 5 years
 - 6 to 15 years **(3%)**
 - 16 to 20 years
 - More than 20 years **(3%)**
 - As long as I own the property **(94%)**

These questions only apply to *those who kept* the practice in place.

10. What factors would **encourage** you to **remove** the practice?

I would remove the practice if:	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
I could increase my income $M = 2.14$	1 (45%)	2 (13%)	3 (29%)	4 (9%)	5 (4%)
It got in the way of my operation (e.g., reduced forage for livestock, recreational opportunities and/or aesthetics of my property) $M = 2.35$	1 (40%)	2 (14%)	3 (23%)	4 (18%)	5 (5%)
It did not work as intended $M = 3.22$	1 (23%)	2 (4%)	3 (24%)	4 (27%)	5 (22%)
Please explain: _____					
I wanted to reduce government influence on my property $M = 2.36$	1 (35%)	2 (10%)	3 (43%)	4 (9%)	5 (3%)
It had negative unintended consequences $M = 3.50$	1 (29%)	2 (1%)	3 (30%)	4 (15%)	5 (25%)
Please explain: _____					
Other(s) (please describe): _____					

These questions only apply to *those who kept* the practice in place.

11. What factors would **encourage** you to **keep** the practice?

I would keep the practice if:	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
It increased my income $M = 3.84$	1 (5%)	2 (1%)	3 (34%)	4 (24%)	5 (36%)
It enhanced my operation (e.g., improved forage, recreational opportunities and/or aesthetics of my property) $M = 4.53$	1 (1%)	2 (2%)	3 (8%)	4 (21%)	5 (68%)
It worked as intended $M = 4.72$	1 (1%)	2	3 (5%)	4 (15%)	5 (79%)
I wanted to work with the government $M = 3.50$	1 (5%)	2 (7%)	3 (45%)	4 (20%)	5 (23%)
It provided unintended benefits $M = 4.11$	1 (4%)	2	3 (26%)	4 (22%)	5 (48%)

Please explain: _____

Other(s) (please describe): _____

These questions only apply to those *who did not keep* the practice in place.

12. If you answered 'no' in question 7, why did you remove or discontinue the practice after the agreement with the Partners Program expired? (*If you DID keep the practice in place please skip to question 13*)

	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
I was able to increase my income by removing the practice $M = 3$	1 (29%)	2	3 (43%)	4	5 (28%)
The practice was intrusive and got in the way of my operation $M = 2$	1 (43%)	2 (14%)	3 (43%)	4	5
The practice did not work as it was intended $M = 3.11$	1 (22%)	2	3 (44%)	4 (11%)	5 (22%)
I wanted to reduce government influence on my property $M = 2.86$	1 (14%)	2	3 (71%)	4 (14%)	5
The practice had negative unintended consequences $M = 2$	1 (43%)	2 (14%)	3 (43%)	4	5

Please explain: _____

Other(s) (please describe): _____

13. Thinking of the practice you identified in question 6, to what extent did each of the following influence you to work with the Partners Program on that practice?

	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
I wanted to improve my property <i>M</i> = 4.77	1 (2%)	2	3 (2%)	4 (12%)	5 (84%)
I wanted to leave my land in a good state for my kids and/or grandkids <i>M</i> = 4.53	1 (2%)	2	3 (11%)	4 (16%)	5 (71%)
I wanted to do conservation on my property <i>M</i> = 4.80	1 (2%)	2	3 (2%)	4 (10%)	5 (86%)
I was encouraged by my friends, neighbors and/or business associates <i>M</i> = 2.99	1 (16%)	2 (6%)	3 (53%)	4 (13%)	5 (12%)
I wanted to increase my income through property improvements:					
Increased forage yield <i>M</i> = 3.19	1 (17%)	2 (5%)	3 (40%)	4 (19%)	5 (19%)
Increased hunting lease quality and quantity <i>M</i> = 3.28	1 (18%)	2 (3%)	3 (38%)	4 (15%)	5 (26%)
Increased recreation opportunities on my land other than hunting and fishing <i>M</i> = 3.54	1 (13%)	2 (3%)	3 (30%)	4 (26%)	5 (29%)
I trusted the Partners Program staff <i>M</i> = 4.46	1 (2%)	2 (3%)	3 (9%)	4 (18%)	5 (68%)
I value wildlife and their habitat <i>M</i> = 4.89	1 (1%)	2	3 (1%)	4 (6%)	5 (92%)
I wanted to establish a relationship with the Partners Program prior to any potential endangered species listing decision <i>M</i> = 3.41	1 (10%)	2 (5%)	3 (44%)	4 (16%)	5 (25%)
I wanted technical assistance <i>M</i> = 4.21	1 (3%)	2 (4%)	3 (13%)	4 (30%)	5 (50%)
I felt a moral obligation to protect wildlife <i>M</i> = 4.46	1 (1%)	2 (2%)	3 (12%)	4 (23%)	5 (63%)
Other(s) (please describe):					

14. Overall, how satisfied are you with your experience working with the Partners Program on the identified practice? *M* = 4.73

- Extremely dissatisfied (2%)
- Slightly dissatisfied (1%)
- Neither dissatisfied nor satisfied (3%)
- Slightly satisfied (12%)
- Extremely satisfied (83%)

15. Overall, how satisfied are you with the following aspects of the Partner Program?

	Extremely Dissatisfied	Slightly Dissatisfied	Neither	Slightly Satisfied	Extremely Satisfied
Staff $M = 4.59$	1 (2%)	2 (4%)	3 (6%)	4 (7%)	5 (81%)
Policies $M = 4.12$	1 (2%)	2 (4%)	3 (20%)	4 (29%)	5 (45%)
The terms of the agreement $M = 4.38$	1 (1%)	2 (1%)	3 (13%)	4 (28%)	5 (57%)
Cost-share arrangement $M = 4.47$	1 (2%)	2 (2%)	3 (7%)	4 (25%)	5 (64%)
Technical assistance $M = 4.46$	1 (2%)	2 (2%)	3 (10%)	4 (19%)	5 (67%)
Ability to manage my property under the terms of the agreement $M = 4.51$	1 (1%)	2 (2%)	3 (7%)	4 (27%)	5 (63%)

16. Did your experience working with Partners Program encourage you to work on another project with the Partners Program?

- Yes If yes, please continue (48%)
- No If 'no' skip to question 18 (52%)

17. What factors led you to the decision to work on another project with the Partners Program (Check all that apply)?

- I wanted to improve my property (82%)
- I value the outcomes of these activities (83%)
- I want to have more wildlife on my property (87%)
- I enjoy working with Partners Program staff (70%)
- I believe Partners Program staff will work with me for the duration of the project (62%)
- I had concerns about a potential listing under the Endangered Species Act (10%)
- Other(s) (please describe): (8%)

18. Did working with the Partners Program make you more or less likely to want to continue that kind of work on your property (either with the Partners Program or another organization)? $\eta = 2.77$

- Less likely (2%)
- Neither (20%)
- More likely (78%)

19. Did your experience with the Partners Program encourage you to work on a project(s) with another organization (e.g., USDA/NRCS-FSA, local or state government, land trusts or non-governmental organizations)?

Yes **(67%)** If yes, what organization(s): _____

Please describe the project or projects: _____

No **(33%)** If no, why not? Please explain: _____

20. In addition to those you identified in question 19, what other types of organizations could you work with and which would you consider working with in the future? (Circle your responses to both)

	Could work with		Would consider working with	
	Yes	No	Yes	No
Local government agencies (for example municipal or county)	(85%)	(15%)	(87%)	(13%)
State agencies (for example State wildlife agency, State Parks)	(98%)	(2%)	(94%)	(6%)
Federal agencies (for example Farm Service Agency (FSA) that administers the CRP program)	(96%)	(4%)	(90%)	(10%)
Land Trusts (for example Cattleman’s Land Trust, The Nature Conservancy)	(81%)	(19%)	(77%)	(23%)
Non Governmental Organizations (for example Ducks Unlimited, Rocky Mountain Elk Foundation, Trout Unlimited)	(90%)	(10%)	(90%)	(10%)
Other(s) (please describe): _____	(95%)	(3%)	(98%)	(2%)

21. Were there any factors that lead you to work with the Partners Program instead of other organizations? Please be as specific as possible.

22. To what extent do you disagree or agree with the following statements regarding working with the Partners Program?

	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
I feel that the Partners Program will maintain a relationship with me for the long haul $M = 3.89$	1 (6%)	2 (5%)	3 (21%)	4 (29%)	5 (39%)
I trust the Partners Program staff $M = 4.41$	1 (3%)	2 (2%)	3 (9%)	4 (24%)	5 (63%)
The cost-share arrangement with the Partners Program fits my financial needs $M = 4.3$	1 (1%)	2 (4%)	3 (9%)	4 (36%)	5 (50%)
The Partners Program bureaucracy/paperwork/red tape is not burdensome $M = 4.06$	1 (2%)	2 (6%)	3 (18%)	4 (32%)	5 (42%)
The Partners Program allows me to still manage my property the way I want to $M = 4.59$	1 (1%)	2 (1%)	3 (4%)	4 (27%)	5 (68%)
The Partners Program places no permanent restrictions on my property $M = 4.49$	1 (2%)	2 (3%)	3 (6%)	4 (23%)	5 (66%)
The Partners Program helps me better prepare for potential endangered species listing decisions $M = 3.72$	1 (2%)	2 (2%)	3 (44%)	4 (28%)	5 (25%)
My family, friends, neighbors and/or business associates work with the Partners Program $M = 3.06$	1 (9%)	2 (9%)	3 (61%)	4 (13%)	5 (9%)
I've worked with the Partners Program in the past and had a good experience $M = 4.02$	1 (4%)	2 (3%)	3 (31%)	4 (12%)	5 (50%)
I needed technical assistance to help plan restoration activities that were beneficial to wildlife on my operation $M = 4.13$	1 (4%)	2 (4%)	3 (13%)	4 (33%)	5 (46%)

23. Was there anything about the Partners Program that made you hesitant to want to work with them? Please be as specific as possible.

Yes (19%) If yes, what were those things: _____

No (70%)

Don't know (11%)

24. In your opinion, how can the Partners Program improve to make itself better for landowners?

25. People think about the land and land ownership in different ways. The following questions help us understand how landowners who work with the Partners Program view and relate to the land. By understanding this the Partners Program will be able to better serve their partners. To what extent do you *disagree* or *agree* with each of the following statements about land ownership by circling the number that matches your response.

	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
Landowners have the right to use their land as they see fit. M = 4.18	1 (6%)	2 (8%)	3 (3%)	4 (29%)	5 (54%)
Landowners have an obligation to consider how their management affects other people. M = 4.38	1 (1%)	2 (4%)	3 (8%)	4 (30%)	5 (57%)
Other people have no right to tell private landowners how to manage their land. M = 3.61	1 (14%)	2 (12%)	3 (12%)	4 (25%)	5 (37%)
Landowners have an obligation to maintain the land for future generations. M = 4.71	1 (2%)	2 (1%)	3 (2%)	4 (16%)	5 (80%)
Private landowner rights outweigh any responsibilities the landowner has to manage land for public benefit. M = 3.36	1 (16%)	2 (14%)	3 (13%)	4 (30%)	5 (26%)
The public has a role in deciding how private land is used. M = 2.19	1 (48%)	2 (16%)	3 (13%)	4 (17%)	5 (7%)
Conservation is a voluntary choice of the landowner. M = 4.09	1 (3%)	2 (11%)	3 (8%)	4 (29%)	5 (49%)
Conservation is one of the responsibilities of private landownership. M = 4.68	1	2 (2%)	3 (2%)	4 (23%)	5 (73%)
Conservation is a state of harmony between people and land. M = 4.58	1	2 (2%)	3 (8%)	4 (20%)	5 (70%)
When people see land as a community to which they belong, they may begin to use it with love and respect. M = 4.18	1 (2%)	2 (4%)	3 (17%)	4 (27%)	5 (50%)
Land management is right when it tends to preserve the integrity of the land. M = 4.65	1 (1%)	2 (1%)	3 (2%)	4 (25%)	5 (71%)
People abuse land because they regard it as a commodity belonging to them. M = 3.81	1 (5%)	2 (10%)	3 (19%)	4 (31%)	5 (36%)
Landowners have an obligation to manage the land in the interest of the community. M = 3.26	1 (16%)	2 (14%)	3 (18%)	4 (31%)	5 (21%)
A landowner is a custodian of the land. M = 4.76	1 (1%)	2	3 (3%)	4 (15%)	5 (82%)
Landowners have a responsibility to manage land for private and public benefit. M = 3.4	1 (12%)	2 (15%)	3 (21%)	4 (25%)	5 (27%)
The private landowner is a custodian of wildlife. M = 4.58	1 (2%)	2 (2%)	3 (3%)	4 (24%)	5 (70%)

The following two questions help us understand more about the type of people who work with the Partners Program. As a reminder, your responses will never be shared individually.

26. Are you: 89% Male or 11% Female

