Barriers and Opportunities for Increasing Landowner Participation in Conservation Programs in the Interior Northwest

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Introduction

Working forest and range lands are rapidly changing as exurban growth, economic trends, and environmental impacts associated with climate change challenge traditional livelihoods derived from the production of farm, ranch, and forest products. Sustaining viable small and medium-sized forest and ranch operations while also supporting conservation-oriented management practices is essential to ensure that these properties continue to contribute to the working landscape and maintain ecological values in the American West.

Private lands are critical to healthy ecosystems and wildlife populations. For example, two-thirds of federally listed species are present on private lands and for some, almost all remaining habitat is in the hands of private landowners. Similarly, private lands have a strong influence on water quality, as nonpoint source pollution from agricultural lands is

a major contributor to 48 percent of impaired stream and river miles nationally.² Conservation practices such as the maintenance of riparian buffers or filter strips, can help provide habitat, preserve water quality, and promote healthy ecosystems.

Conservation programs are one tool used to align economic and ecological goals by promoting environmentally sustainable management practices through financial and other incentives, sometimes referred to as "payments for ecosystem services". Ecosystem services are the benefits people receive from nature, such as water quality, wildlife habitat, and carbon sequestration. Numerous existing programs, such as those offered by the Natural Resource Conservation Service (NRCS), seek to engage landowners in forest and rangeland stewardship through conservation easements, cost-share programs, and other means. Other types of opportunities are also

 Table 1
 Examples and explanations of several types of conservation programs

Type of conservation program	Explanation These programs typically require landowners to retire a specific area of land from production in return for an annual payment or other benefits. Reserve programs often involve a 10 to 30 year contract during which time management options are limited to practices that enhance the natural characteristics of the reserve area. Example includes USDA's Conservation Reserve Programs (CRP/CREP).		
Reserve programs			
Cost shares, grants, and other direct payment programs	These programs provide financial and technical assistance for a specific conservation project or practice. Sometimes these programs pay for the entire cost of implementing the project, and sometimes they provide a cost-share, where a landowner is responsible for a percentage of the costs (e.g., 25 percent).		
Conservation easements and land transfers	These efforts can result in financial compensation for landowners in exchange for restricting future development or management opportunities on their land. Agreements are typically perpetual but in some cases may be termed (e.g., 20 or 30 years).		
Certification or ecolabeling programs	These programs involve third-party verification of sustainable practices, and are another way some producers of food and fiber seek to benefit financially from good stewardship by differentiating their products in the marketplace. Examples include Certified Organic, Predator Friendly, Salmon Safe, and Forest Stewardship Council certification, among others.		
Environmental credit markets	Markets have been developed in some places to "offset" impacts to wetlands, fish or wildlife habitat, water quality or quantity, or carbon emissions. These markets offer financial incentives for private landowners to protect or conserve natural resources, and result in credits that can be bought and sold.		

emerging, such as ecosystem markets (e.g., carbon markets), water quality trading programs, and certification schemes (e.g., grass fed beef, certified forest products, and organic produce) (see Table 1, above).

The success of existing and emerging conservation initiatives, however, requires broad landowner participation.³ To achieve robust participation levels, programs need to be designed with sensitivity to landowner preferences and recognition of the factors influencing management decisions. To address this issue, we investigated landowner experiences with, attitudes towards, and preferences for existing and future conservation programs in the Interior Northwest with the aim of answering the following questions:

- 1. What are the barriers preventing broader participation in traditional and emerging conservation programs?
- 2. What opportunities exist to improve these programs to make them more appealing to landowners?

Our objective was to provide information to policy-makers, land use decision makers and conservation practitioners to assist them in the design and delivery of new policies and programs, or the redesign of existing programs, so that they align with land-owner needs and preferences. We aimed to inform the search for ways to achieve greater accountability for environmental outcomes, and the concurrent need to address budget constraints. Insights from this research can be used to proactively engage land-owners through initiatives that are compatible with landowner motivations and management objectives.

Approach

We surveyed over 800 property owners in eastern Oregon, eastern Washington, and western Montana to understand landowners' experiences with conservation programs that provide compensation, the factors that influence their decision making regarding participation, their attitudes towards these programs, and their views on how conservation programs could be improved. We also asked about their relationships with intermediaries (including state and federal agencies and nonprofit organizations).

Figure 1 Counties surveyed



We randomly selected nonindustrial landowners with forest or rangeland parcels of at least 20 acres within the three focus areas (see Figure 1, page 3). We mailed these landowners a questionnaire with 33 questions. In all, we contacted 2,226 property owners and we received surveys from 835 participants, a 38 percent response rate. We then analyzed the data using standard statistical techniques to provide insights into landowner opinions and preferences.

Findings

Landowner views on conservation and experience with conservation programs Landowners view themselves as conservationists and see conservation practices as aligned with their management objectives.

Most landowners reported a strong resonance with the concept of conservation. For instance, 86 percent of landowners either strongly agreed or somewhat agreed with the statement: "For me, practicing conservation is just the right thing to do." Similarly, 78 percent agreed that practicing conservation is very beneficial to their land (see Figure 2, page 9). A majority also saw conservation programs as compatible with their goals for their land (55 percent) (see Figure 3, page 9). Although definitions of "conservation" vary between landowners, this finding suggests that the stewardship values of most family forest and ranch landowners may be compatible with many conservation programs and, as such, there is an opportunity to effectively engage a large percentage of landowners if these programs are perceived as aligned with their management preferences and objectives.

Many landowners are aware of or have participated in existing conservation opportunities.

Approximately one-third of forest and ranch landowners reported participation in some type of conservation program or market (e.g., cost-share, conservation easement, certification, or environmental credit market), and nearly the same number reported that they were very or extremely likely to participate in one or more in the future. The most commonly reported programs landowners participated in were cost-share programs (30 percent) to implement conservation projects (see Table 2, below).

Experience with more market-based conservation opportunities, such as carbon markets, was substantially less than more traditional conservation pro-

Table 2 Have you participated in a voluntary conservation, certification, easement, environmental credit market, or other programs on any part of the land you own, rent, or lease?

	Number of responses	Percentage	
No	527	67%	
Yes	265	33%	
	Total: 792	100%	
If yes, what kind of program	was it?		
Cost-shares	134	30%	
Certification or eco-labeling programs	76	17%	
Environmental credit markers	74	16%	
Conservation easements and land transfers	64	14%	
Grants	44	10%	
Other	41	9%	
Reserve programs	21	5%	



grams. Only 4 to 8 percent of surveyed landowners reported having participated in a certification program or an environmental credit market, or having granted a conservation easement on their property.

We found that participation rates were correlated with the primary land use of a person's property. Landowners who reported that the primary use of their land was ranching or forestry were approximately 40 percent more likely to have participated in conservation programs than landowners with primarily other uses (e.g., recreation, investment, or residential). However, forest operators who had participated in the past were about 25 percent less likely than ranchers to report that they would participate in similar programs in the future, which raises questions about some of the challenges in maintaining ongoing participation, as well as the differences between forest and ranch landowner circumstances.

Barriers to participation

Landowners are concerned about legal and regulatory implications.

A critical challenge programs face is landowner perception of the legal and regulatory environment. For instance, 52 percent of landowners agreed that participation in conservation programs results in increased regulatory pressure (see Figure 4, page 10). Over half of landowners rated the lack of regulatory or legal assurances as the biggest reason to not participate in a conservation program. Landowners expressed a great degree of concern that conservation programs can create unintended consequences (see Figure 5, page 10); for example, if enhanced habitat brought species protected under the Endangered Species Act (ESA) to their land. While challenging, this finding presents an opportunity for policymakers and conservation practitioners to develop programs that provide legal and regulatory assurances for landowners. For example, conservation programs could be integrated with Safe Harbor Agreements for ESA listed species to ease landowner concerns.

Landowners believe that it is confusing and complex to participate in conservation programs and it may not be worth the hassle.

Landowners reported a perception of conservation programs as confusing and complex. Over half of the respondents (55 percent) felt that the paperwork required by conservation programs is complex (see Figure 6, page 11), while 41 percent viewed the signup process as confusing (see Figure 7, page 11) and

43 percent felt that participating in programs was not worth the hassle. This finding suggests there is a real opportunity to increase landowner participation by simplifying program details and streamlining the landowner enrollment process. One strategy to achieve this would be to provide greater support to agency personnel or intermediaries, such as local nonprofits, who are trained and experienced with the process. Intermediaries can assist in identifying programs, providing outreach to landowners, integrating multiple pots of money, and helping landowners complete and submit paperwork.

Programs may lack the flexibility to meet landowner needs.

Landowners must juggle many different considerations when making land and water management decisions. They may have to manage a significant amount of uncertainty and be flexible in order to adapt to changing circumstances, and a lack of flexibility in conservation programs was a perceived barrier for some landowners. For example, 30 percent of landowners strongly or somewhat agreed with the statement "the programs aren't flexible enough to meet my needs." These perceptions were especially true for programs with long contract durations. Finding ways to provide landowners flexibility over time may enhance some landowners' perception of these programs.

Opportunities to improve participation Rewards for participating in conservation programs do not need to be exclusively in the form of a direct payment.

Landowners reported that the most desirable benefits for participating in conservation programs or markets were tax incentives, an agreeable annual payment, or insurance against legal liability and contract failure (see Figure 8, page 13). Landowners with either residential or recreational property rated protection from legal liability and contract failure as more important than an agreeable annual payment. This is not to suggest that the financial implications are not important to landowners: 54 percent of respondents either strongly or somewhat agreed with the statement "practicing conservation has to 'pencil

out' financially" (see Figure 9, page 13). In addition, 41 percent of respondents saw an overall negative impact of participation on landowner finances (see Figure 10, page 14), possibly due to the fact that many respondents had participated in cost-share programs, which require landowners to pay for part of a conservation practice. Identifying ways to make participation "pencil out" for landowners may be an opportunity to increase participation rates.

Programs that protect existing high-quality habitat are the most appealing to landowners.

Many landowners perceived themselves as conservationists, and of six statements about future conservation programs and environmental markets, landowners agreed most strongly with the statement that they "... should reward landowners for protecting existing high quality habitat." "Implementing new conservation actions" was ranked significantly lower—fifth of the six statements landowners rated. These findings suggest that landowners believed that programs should reward those who are already good stewards, rather than paying to help those who have not demonstrated a high degree of stewardship in the past. The lowest ranked statement was "implementing conservation projects jointly with neighbors or nearby landowners" (see Figure 11, page 14).

Notably, forest and ranch operators were more likely to express interest in projects that emphasized water quality than other types of projects, with 56 percent of respondents reporting that they were either "extremely likely" or "very likely" to participate in such a program if it were offered. This was followed by projects that aimed to restore or protect stream flows (49 percent), stream habitat (49 percent), wetlands (43 percent), and endangered species habitat (42 percent). Landowners had the least interest in carbon sequestration projects (29 percent) (see Figure 12, page 16). These preferences may be a reflection of the challenging regulatory environments surrounding wetlands and endangered species, and the lack of regulations regarding carbon emissions. The uncertainty around compliant climate markets and future demand for carbon credits may also make landowners less interested in these projects.

Shorter duration contracts are preferred over longer-term contracts.

Contracts of 10 years appealed to landowners much more than contracts of 20-year, 30-year, or permanent length. This was especially true for landowners who had not participated in conservation programs or markets before. Shorter-term agreements may allow more landowners to try conservation programs or markets to see if they are compatible with their objectives. Permanent agreements and 30-year contracts were rated equally undesirable, suggesting that landowners may view any contract duration of 30 years or more as basically permanent (see Figure 13, page 16). This finding suggests that there is an opportunity to increase landowner participation by offering multiple options for contract lengths—for example, shorter-term contracts for first time participants and longer-term contracts for returning participants. This approach would enable some landowners to try conservation programs without locking them into what could be perceived as a lifetime obligation. As landowners become more comfortable with programs and develop relationships with program administrators, they may be more willing to continue to participate and open to longer duration options.

Local entities matter, especially for recruiting new landowners.

Landowners that had not previously participated in a conservation program or market rated local government and local non-profit groups as more highly desirable to work with than other state, federal, or private sector entities. For landowners who had participated in the past and reported that they were likely to do so again in the future, state and federal government agencies were rated equal to local government and local non-profits. Working with and through local intermediaries that have trusted relationships with landowners is likely the best way to reach those who have not previously participated in conservation programs. These local actors may help bridge the trust gap between landowners and state and federal agencies and open up additional conservation opportunities for landowners.



Conclusions and Recommendations

Forest and ranch landowners operate in a complex and dynamic environment and must balance shortterm opportunities with their long-term goals and objectives for their properties when deciding whether or not to participate in a conservation program.

In this research, we identified several barriers that may prevent landowners from participating in conservation programs. The perceived risks of increased regulatory scrutiny and limitations on future management options due to long-term contract durations were the most significant obstacles to increased participation. Also significant were the complexities of understanding the details of different programs, and the bureaucratic hassle of enrolling. Together, these obstacles limited overall landowner participation.

These findings suggest that there are opportunities to improve the attractiveness of conservation programs by reducing the perceived risks and increasing the perceived benefits. Working with local intermediaries to conduct outreach and education may help build trust and improve understanding of the regulatory environment; however, integrating local intermediary partners into conservation programs will require the development and or maintenance of adequate capacity and financial support for those organizations. Another approach is to expand program incentives to include legal and regulatory assurances, which would have the impact of simultaneously diminishing perceived risks and increasing landowner benefits. Similarly, developing new conservation programs around areas such as water quality and stream habitat may also alleviate some perceived regulatory risks.

Recruiting new landowners into these programs is also essential for achieving long-term success. Our research indicates that many landowners who have not previously participated in programs are interested but unsure of opportunities. Our findings suggest two key ways to increase participation from this group. The first is to provide multiple options for participation, including different contract lengths. Landowners who are unsure are much less likely to make a long-term commitment, but may be willing to experiment over a shorter period such as 10 years or less. Finally, landowners who had not participated in programs in the past generally had less trust of federal and state agencies and greater trust in local organizations and local agency staff. Enabling local nonprofits to serve as intermediaries

Perceived barriers to participation

- Potential for increased regulatory scrutiny
- Limitations on future management options due to long-term contract durations
- Participation may not "pencil out" financially
- Complexity in understanding the details of different programs
- · The bureaucratic hassle of enrolling

may help bridge the trust gap between landowners and government-run programs to increase new landowner recruitment.

In sum, the long-term goals and objectives of many landowners do align with the goals and objectives of some conservation initiatives. Our results suggest that many landowners view themselves as conservationists, have a strong land ethic, and can be important allies in protecting the ecological health of western landscapes. By better understanding their needs and preferences, existing and emerging conservation programs can be better designed and delivered to assist forest and ranch managers in the stewardship of their lands.

Key recommendations

- Address perceived legal and regulatory implications of participation through enhanced landowner outreach and education
- Expand program incentives to include legal and regulatory assurances for participation
- Develop new conservation programs around areas such as water quality and stream habitat protection
- Provide multiple options for participation including different contract lengths
- Engage local nonprofits as intermediaries to increase trust and recruitment of new landowners

Endotes

- 1 United States Fish and Wildlife Service (USFWS), ESA Basics: 40 Years of Conserving Endangered Species (Arlington, VA: USFWS, 2013). Available online at: http://www.fws.gov/endangered/esa-library/pdf/ESA_basics.pdf
- 2 J. Christian-Smith, "Water and Agriculture," in A Twenty-First Century U.S. Water Policy, ed. J. Christian-Smith and P. Gleick (Oxford: Oxford University Press, 2012), 203.
- M. Sorice, C. Oh, T. Gartner, M. Snieckus, R. Johnson, and C. J. Donian. 2013. "Increasing participation in incentive programs for biodiversity conservation." Ecological Applications. 23: 1146-1155.

Figure 2 To what extent do you agree or disagree with the following statements about adopting conservation practices on your land?

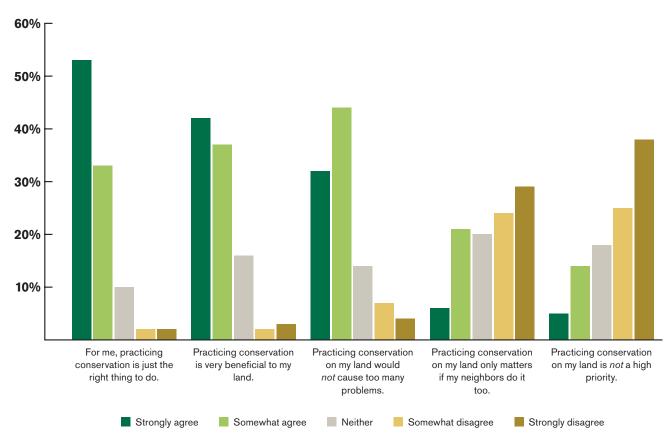
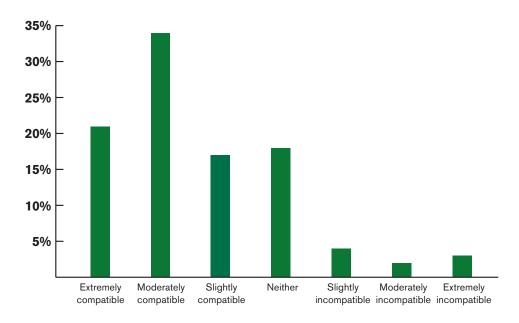


Figure 3 Typically, my goals for my land and the goals of conservation programs are:



increased

increased

increased

Figure 4 Typically, participation in conservation programs results in regulatory pressure that is:

Figure 5 To what extent do you agree or disagree with the following about why you might *not* participate in conversation programs?

reduced

reduced

reduced

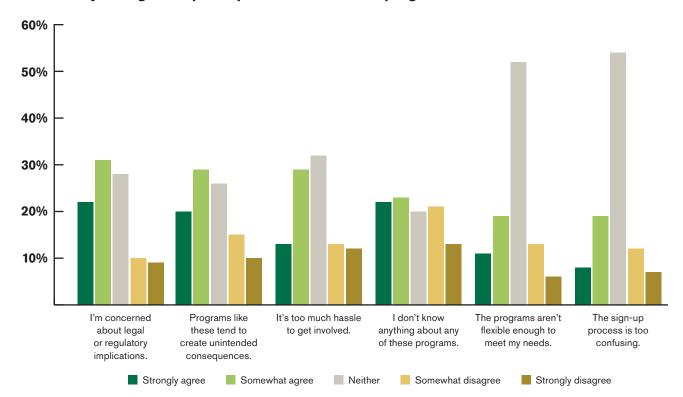


Figure 6 Typically, the paperwork required by conservation programs is:

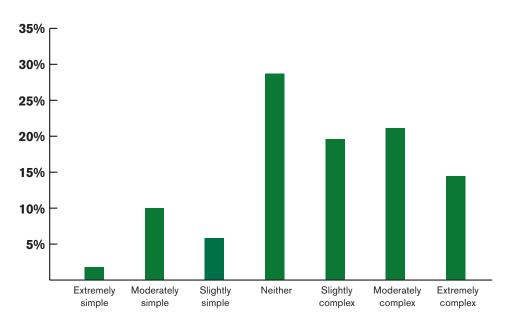


Figure 7 Typically, the sign-up process for conservation programs is:

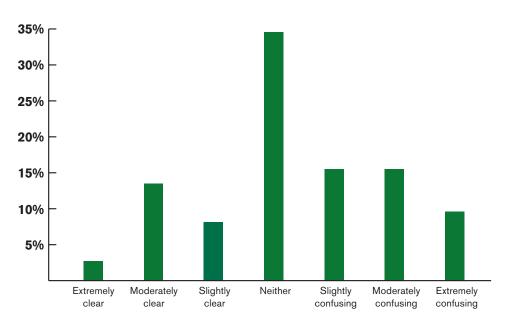
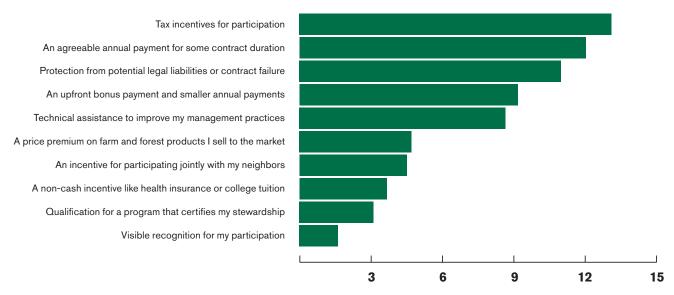


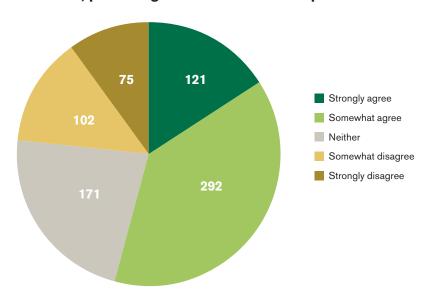


Figure 8 Assuming participation in a market or program for conservation was in your interest, which of the following benefits would be most desirable to you?*



^{*}Respondents were asked to assign 100 points to the ten items above. The graph represents the average points assigned to each item.

Figure 9 To what extent do you agree or disagree with the statement "For me, practicing conservation has to 'pencil out' financially"?



35% 30% **25**% 20% 15% 10% **5**% Extremely Moderately Slightly Neither Slightly Moderately Extremely positive negative positive positive negative negative

Figure 10 Typically, the impact of conservation programs on landowner finances is:

Figure 11 To what extent do you agree or disagree that future markets or programs for conservation should reward landowners for the following:

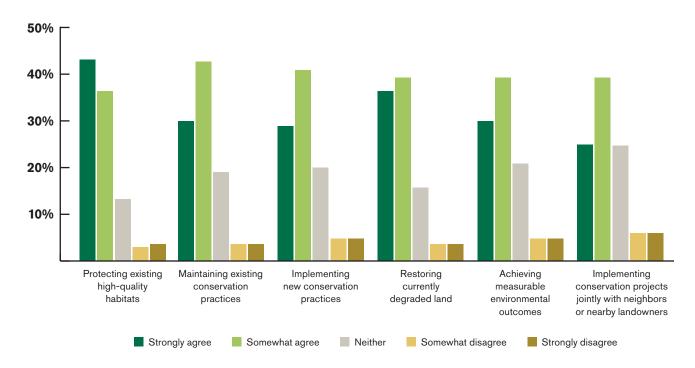




Figure 12 How likely would you be to participate in a market or program for conservation that supported projects to protect or restore the following?

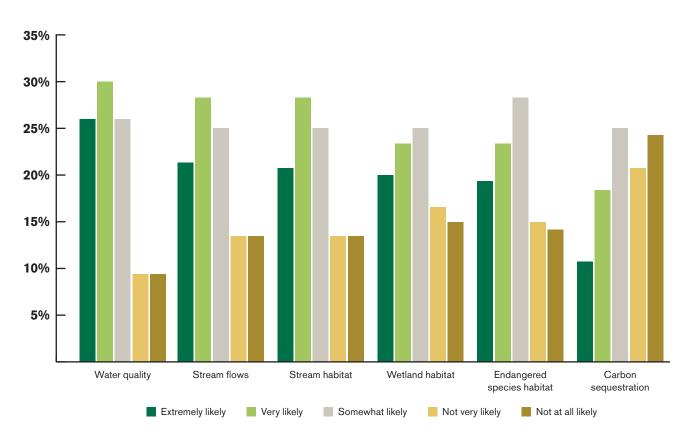
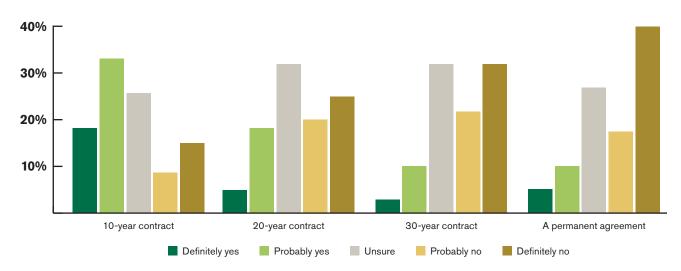
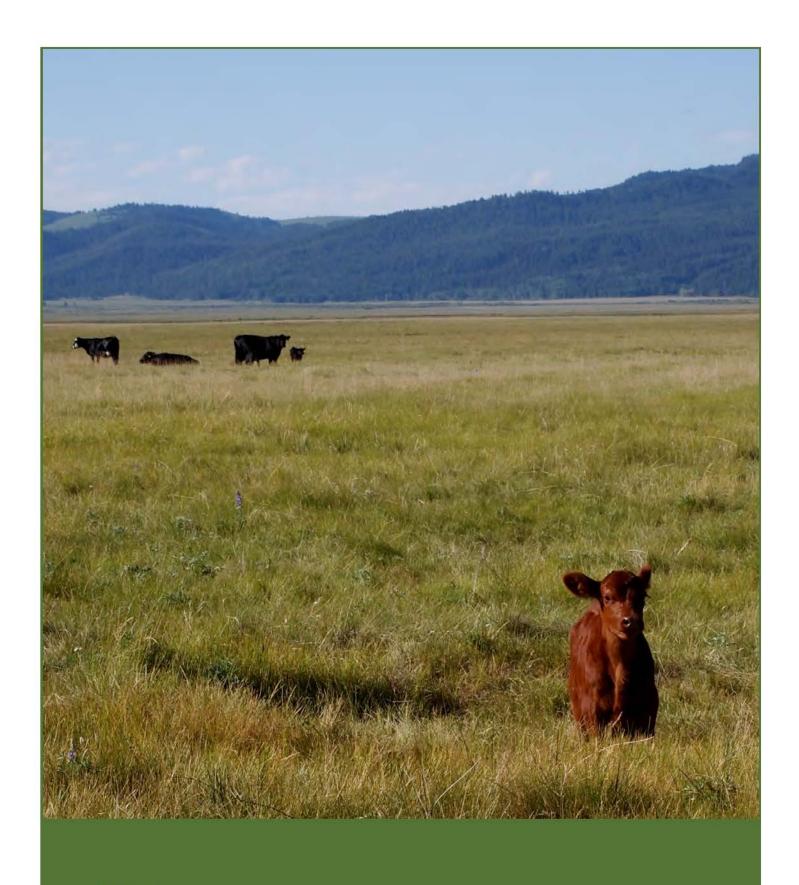


Figure 13 Assuming the benefits were sufficient, would you be willing to participate in a market or program for conservation that required the following contract lengths? (Select one response for each contract length)





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