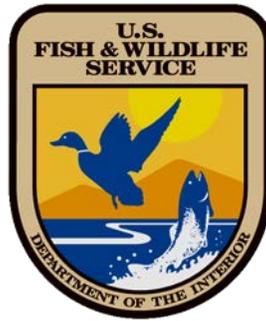




# Briefing on the 2011 Wilderness Fellow Initiative

Implementing Wilderness Character Monitoring  
in the U.S. Fish & Wildlife Service  
National Wildlife Refuge System



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## Contents

Executive Summary .....	2
Introduction .....	<b>Error! Bookmark not defined.</b>
Background .....	<b>Error! Bookmark not defined.</b>
Process.....	3
Results.....	5
Did it work? .....	5
Was it worthwhile? .....	5
Lessons Learned and Recommendations.....	6
Wilderness Character Monitoring in the NWRS .....	6

## Executive Summary

This report summarizes the background, process, results, lessons learned, and recommendations from the 2011 Wilderness Fellows Initiative. This initiative is a new effort of the U.S. Fish & Wildlife Service to preserve the character of wilderness by assessing trends in wilderness character in the National Wildlife Refuge System (NWRS).

Two questions have been used to frame the success of this initiative—"Did it work?" and "Was it worthwhile?"

### Did it work?

The 2011 Wilderness Fellows Initiative hired 10 Wilderness Fellows and established wilderness character monitoring protocols at 18 national wildlife refuges, representing 29% of the NWRS refuges with designated wilderness. An average of 30 wilderness character monitoring measures were developed for each national wildlife refuge. In total, 269 unique measures were developed across the 18 participating refuges.

72% of refuges that participated in the initiative feel that the baseline assessment of wilderness character developed reflects what's happening on the ground in their refuge wilderness. Furthermore, 89% of refuge leaders indicated that participating in the Wilderness Fellows Initiative increased their staff's wilderness and wilderness character awareness. More than three-quarters also indicated that wilderness character monitoring will likely have a future impact on refuge wilderness stewardship and refuge operations.

### Was it worthwhile?

83% of refuges that participated in the 2011 initiative indicated that monitoring the trend in wilderness character is worth their time and effort. Refuge project leaders indicated that they are, and will, widely use the information produced for them by the initiative. Wilderness Fellows contributed to the refuges in valuable and unexpected ways from producing content for Comprehensive Conservation Plans to providing outreach to external organizations interested in wilderness stewardship.

The implementation of this initiative also resulted in a significant set of lessons learned and recommendations that are relevant to both the future of wilderness character monitoring in the NWRS and the Wilderness Fellows Initiative. These recommendations include:

- Continuing the Wilderness Fellows initiative is the most certain way to perpetuate an understanding that wilderness and refuge purposes overlap. It also ensures meeting the goal of establishing wilderness character protocols at all national wildlife refuges with designated wilderness by 2014.
- Developing and distributing a national wilderness character monitoring strategy for the NWRS.
- Wilderness Character Monitoring database needs substantial improvements to be fully functional.
- Need to ensure that refuge project leaders have an accurate sense of the effort required to establish and continue wilderness character monitoring efforts.
- Refuge concerns about actions resulting from wilderness character monitoring trends need to be addressed.

In conclusion, the 2011 initiative developed a baseline understanding of wilderness character at more than a quarter of national wildlife refuges with wilderness, helped these refuges to understand how stewardship decisions and actions influence trends in wilderness character, and developed a comprehensive and systematic approach for evaluating wilderness character. The continuation of this initiative would effectively enable the NWRS to ensure the development of wilderness character monitoring measures at all refuge wildernesses, a critical step in meeting the Service's policy mandate to preserve wilderness character.



Refuge	State	Wilderness Acres*
Agassiz	Minnesota	4,000
Becharof	Alaska	400,000
Cabeza Prieta	Arizona	803,418
Charles M. Russell (UL Bend)	Montana	20,819
Chassahowitzka	Florida	23,579
Edwin B. Forsythe	New Jersey	6,681
Fort Niobrara	Nebraska	4,635
Great Swamp	New Jersey	3,660
Havasu	Arizona & California	17,801
Imperial	Arizona & California	15,056
Izembek	Alaska	300,000
Kenai	Alaska	1,354,247
Kofa	Arizona	516,200
Moosehorn	Maine	7,392
Okefenokee	Georgia	353,981
Red Rock Lakes	Montana	32,350
Seney	Michigan	25,150
Unimak	Alaska	910,000

\* Represents only designated wilderness acres.

A Wilderness Character Monitoring Database, built in Microsoft Access, was developed in conjunction with the NWRS Wilderness Fellows Initiative. The database was developed through a collaboration of NWRS Inventory and Monitoring, the National Park Service Inventory and Monitoring Program, and the Aldo Leopold Wilderness Research Institute of the U.S. Forest Service. The database was developed with the intent of being used by all four wilderness managing agencies.

Ten wilderness fellows were hired, one of whom was stationed at the NWRS Inventory and Monitoring offices in Fort Collins, Colorado. The Student Conservation Association (SCA) was contracted to handle all administrative aspects for the Wilderness Fellows. Wilderness Fellows received three days of training in mid-June at the NWRS Inventory and Monitoring offices in Fort Collins

Wilderness Fellows followed these steps to develop wilderness character monitoring measures at their assigned refuges:

1. *Gather information.*
2. *Identify draft measures.*
3. *Review draft measures with refuge staff.*
4. *Select final measures with refuge staff.*
5. *Enter data into the database.*
6. *Produce a final report.*

All project leaders at participating 2011 Wilderness Fellows Initiative refuges were interviewed via telephone in order to learn their impressions of the initiative, understand how they intend to use the information produced by the initiative, and to gather their recommendations for future initiative implementation.

## Results

Results from the Wilderness Fellows Initiative are presented in two categories—"Did it work?" and "Was it worthwhile?" These categories correspond with the questions that were asked in the initiative's debriefing interviews, as well as feedback received from Wilderness Fellows.

### Did it work?

1. Wilderness character monitoring measures were developed for 18 national wildlife refuges, representing 4.5 million acres of designated wilderness (29% of NWRS refuges with designated wilderness and 23% of total NWRS wilderness acreage).
2. 72% of participating refuges feel that the baseline assessment of wilderness character completed reflects what's happening on the ground in their refuge wilderness.
3. Wilderness character monitoring would not have been implemented without the Wilderness Fellows Initiative. Wilderness Fellows are more effective than utilizing refuge staff to develop wilderness character monitoring measures.
4. Wilderness character monitoring will likely have a future impact on refuge wilderness stewardship and refuge operations. 83% of project leaders indicated that wilderness character monitoring will have at least some impact on wilderness stewardship and 61% indicated that it will have an impact on refuge operations.
5. 89% of project leaders indicated that participating in the Wilderness Fellows Initiative increased refuge staff's wilderness and wilderness character awareness.

### Was it worthwhile?

1. 83% of refuges indicate that monitoring wilderness character trends are worth their time and effort.
2. Information produced by the Wilderness Fellows Initiative will be widely used by refuges. Project leaders indicated it would be used in Comprehensive Conservation Plans (CCPs), wilderness stewardship plans, habitat management plans, inventory and monitoring plans, fire management plan. In addition, refuges indicated interest in sharing information with partners and other parties such as the local community, advocacy groups, and other agencies.
3. Wilderness Fellows contributed to refuges in unexpected and valuable ways. All Fellows made themselves available to help the refuge with non-wilderness character monitoring related efforts. Wilderness Fellows spent between 8 and 300 hours at each refuge on non-wilderness character monitoring related tasks.
4. The Wilderness Fellows Initiative improved interagency coordination.
5. The future of wilderness character monitoring at participating refuges is uncertain. Only 39% of refuge project leaders indicated they are confident their refuge will continue wilderness character monitoring efforts in 2012 and beyond. 33% of project leaders indicated that they are uncertain monitoring will continue in the absence of a Wilderness Fellow. 28% of refuge project leaders stated monitoring would not continue.

## Lessons Learned and Recommendations

Lessons learned from the 2011 Wilderness Fellows Initiative produced a number of recommendations for the future of wilderness character monitoring in the NWRS and for the Wilderness Fellows Initiative, should it be continued. The following lessons learned and recommendations are relevant to both the U.S. Fish & Wildlife Service and the other wilderness managing agencies.

### Wilderness Character Monitoring in the NWRS

1. Continuing the Wilderness Fellows Initiative is the most certain way to perpetuate an understanding that wilderness and refuge purposes significantly overlap and that wilderness designation is the best way to preserve and support many refuge purposes. The initiative also ensures meeting the goal of establishing wilderness character monitoring protocols at all national wildlife refuges with designated wilderness by the 50<sup>th</sup> anniversary of The Wilderness Act in 2014.
2. Develop and distribute a national wilderness character monitoring strategy for the NWRS. The Wilderness Fellows Initiative was highly successful in establishing wilderness character monitoring at refuges, but the initiative did not address how monitoring data will be reviewed, compiled in future years, and how monitoring should impact wilderness stewardship.

Developing and distributing a national wilderness character monitoring strategy would establish a long-term direction for wilderness character monitoring in the NWRS. It would also be an opportunity to further emphasize that wilderness stewardship is a high, national priority for the system. This strategy should also develop methods for crediting refuges that exhibit excellence or overcome a wilderness stewardship or management challenge. Such a strategy would be instrumental in ensuring that the gains in wilderness awareness made when a refuge participates in the Wilderness Fellows Initiative are not forgotten or dismissed.

3. The Wilderness Character Monitoring database needs substantial improvements to be fully functional. Additional funds should be sought to develop a web-based database that is capable of compiling monitoring data from all NWPS wilderness areas into a single interface that is user-friendly, stable, and allows users to search, compile, and sort data from across the NWPS.
4. Need to ensure that refuge project leaders have an accurate sense of effort required to establish and continue wilderness character monitoring efforts. Refuge project leaders expressed concerns about the amount of staff resources necessary to continue wilderness character monitoring. In contrast, deputy project leaders and wildlife biologists who helped to develop wilderness character monitoring measures in conjunction with Wilderness Fellows expressed few concerns about continuing monitoring, citing that the monitoring data is already available or easy to collect. It is important that project leaders have an accurate understanding of the effort that will be required from their staff to continue monitoring. Otherwise, they will be likely to cut wilderness character monitoring from the staff's duties.
5. Refuge concerns about actions resulting from wilderness character monitoring trends need to be addressed. Project leaders are uncertain what actions they will be asked to take if wilderness character monitoring trends demonstrate degrading wilderness character.
6. Encourage consistency in naming monitoring measures across refuges, wilderness areas, and agencies. Also strive to encourage similar monitoring methods where appropriate.

7. Some refuges may require additional guidance and assistance in order to monitor difficult to measure natural trends. Without the ability to monitor these natural processes wilderness character monitoring can feel inadequate.
8. Increase the activities of regional wilderness coordinators on the refuge-level. Project leaders would like more contact with U.S. Fish & Wildlife Service wilderness leadership. One way to improve contact is to encourage regional wilderness coordinators to interact directly with wilderness refuge project leaders more frequently.

### **Wilderness Fellows Initiative**

1. There should be more communication before, during, and after the initiative between refuges and initiative leadership. Create opportunities for Wilderness Fellows to communicate with refuge staff prior to their refuge arrival.
2. The Student Conservation Association (SCA) is not an effective administrator of a Fellowship initiative such as this one.
3. The Wilderness Fellows Initiative should strive to continue hiring Fellows with proven track records working outdoors and on independent projects.
4. Refuges should dedicate a refuge staff member to work closely with their Wilderness Fellow.
5. Re-evaluate the length of time Wilderness Fellows spend at each refuge.
6. Strive to provide Wilderness Fellows with standard certifications and IT security clearance as part of the training they receive before arriving at the first refuge.
7. Continue the practice of having once weekly conference calls to bring together all Wilderness Fellows with initiative leaders.
8. Facilitate communication of measures with all Wilderness Fellows as they are developed at individual refuges.
9. Encourage Wilderness Fellows to take on refuge tasks that expose them to experiences beyond their immediate wilderness character monitoring mission.
10. Encourage refuges to share wilderness character monitoring efforts with refuge partners (ex. friends groups, advocacy groups) and the community. Prepare Fellows to provide outreach services.
11. Develop methods for initiative leadership to give Wilderness Fellows feedback about individual measures to increase the likelihood of adopting highly measurable, reliable, sensitive, and well-described measures.