

holders in the watershed, and invest proceeds from the endowment in cooperative projects conducted through strategic partnerships. The partners and the Commission together create ongoing 5-year strategic plans with the goal of fostering a greater understanding and appreciation of the watershed in its entirety, including the protection of its vast biodiversity and remote Wilderness areas. As a result, the Commission provides significant funding to the border partners for both short-term and long-term natural resource management and monitoring projects, specialized research, and environmental education activities in Wilderness. Projects proposals are evaluated by the Commission's International Technical Committee consisting of agency and non-profit subject matter specialists. Over the past 5 years the Commission has invested almost \$600,000 in the partners' work in the watershed. The current 2014-2018 work plan provides a similar level of funding for a diverse range of projects including water quality monitoring, wildlife restoration, aquatic species assessment and monitoring, vegetation management, environmental education programs, and student volunteer trail projects. The projects help leverage existing agency funding for this type of work, and in many cases, without this support, the work would not get done. Public land managers on the border recognize that it's essential to work closely with their international counterparts and the other partners to plan for, and address common immediate and long-term stewardship needs. In this case, the Commission plays an important role in helping both the National Park Service and B.C. Ministry meet their Wilderness stewardship goals on the ground. As land managers facing an increasingly changing environment and social landscape in both countries, the strength of working across boundaries is highly valued as a critical tool in the stewardship toolbox. In the North Cascades, land managers are taking full advantage of this tool to enhance Wilderness stewardship - including its relevancy to the public, through this unique partnership arrangement on the border.

Designated Wilderness Lands: The Challenge of Wilderness Inholdings

Reid Haughey, *Wilderness Land Trust*

The designation of Wilderness does not complete the preservation of Wilderness values. Wilderness inholdings can be mined, timbered, farmed, built upon and require the development of roads and utilities through Wilderness. The ecological and recreational degradation from these developments can extend well into cherished Wilderness. Conversely, convoluted boundaries reduce the integrity of designation efforts by leaving critical integral lands unprotected. Tools that address inholdings and boundary issues are as unique as the problem, but build upon accepted practice. Solving the preservation puzzle of Wilderness inholdings requires an understanding of proper and well-developed conservation techniques, including land evaluation, acquisition, ownership and designation for these non-standard properties. The Wilderness Land Trust (WLT) helps private landowners receive a fair price for their property, and facilitates the lengthy and complex process of transferring that land to federal ownership to be included in the surrounding Wilderness Area. Our projects address a spectrum of resource management issues from recreation access to wildlife habitat fragmentation, wildfire mitigation and abandoned mine cleanup.

We gave an overview of facts critical to the understanding of Wilderness inholdings, not limited to legal foundation, limitations, title issues, and relevant portions of the 1964 Wilderness Act. WLT, in conjunction with Colorado State University in 1994, developed an innovative and unique process for prioritizing the acquisition of Wilderness inholdings. Using this as our foundation, we provided a description of the preservation tools and limitations. Purchase options and pre-purchases were discussed, as well as issues in federal acquisition and appraisal problems within Wilderness areas. We created a basic understanding of the issues and risks from the inholdings that remain within Wilderness and on the Wilderness boundaries. From there, the audience developed baseline knowledge of the designation tools available to avoid the creation of inholdings and inefficient boundaries with long-term management issues.

Wilderness Fellows Develop Monitoring Measures for National Wildlife Refuges

Peter Dratch, *US Fish & Wildlife Service*,

Nancy Roeper, *US Fish & Wildlife Service*

Peter Landres, *Aldo Leopold Wilderness Research Institute*

Mark Chase, *US Fish & Wildlife Service*

Our goal was to develop in four years baseline measures on all of the designated Wilderness areas in the National Wildlife Refuge System. These measures would be developed by refuge staff and used to monitor the Wilderness character of the 63 sites over time. To accomplish this, we selected Wilderness Fellows, trained them in the principles of the Wilderness Act and the methods of *Keeping It Wild*, and sent them to work with

staff on refuges for about 10 weeks. They worked closely with staff at all levels to develop measures appropriate to the refuge that would not require additional fieldwork to monitor. The Wilderness Fellows brought with them a desktop database originally developed by the National Park Service to store the information on the measures from each refuge. As they described in their presentation, the process of bringing Wilderness Fellows to wildlife refuges has been very successful, both in providing young people with professional experience, and focusing staff on their Wilderness areas, often the least utilized and understood part of the refuge. The Wilderness character database has gone through several iterations, each time with suggestions from the Wilderness Fellows, and has moved from a desktop to a web-based application. We expect to complete a Wilderness character baseline for each designated and proposed Wilderness on refuges managed by the U.S. Fish & Wilderness Service. Continued monitoring of Wilderness character on these refuges is now mandated in the policy of the National Wildlife Refuge System. The training in Colorado brought together young professionals who with the experience gained, have gone on to work in several land management agencies.

Wilderness Fire Management: Successes, Challenges and Concerns - a panel review

Dave Campbell, *US Forest Service (retired)*

A review of the past 50 years of Wilderness fire management across the NWPS by panel members (government and non-government) preceded a moderated discussion with audience participation and questions encouraged.

Wilderness managers, fire managers, decision makers, members of NGOs and others (e.g. tribal members, county commissioners, outfitters, Wilderness recreationists) have an interest in how fire is managed in Wilderness. This panel explored challenges, opportunities and concerns related to managing fire in Wilderness. Panel members presented their own perspectives and ideas for the future. Panelists: 1) reviewed law and policy relating to managing fire in Wilderness focusing on decisions whether or not to suppress fires and effects to Wilderness character from fire suppression; 2) explored the successes that Wilderness management agencies have had in reducing risk and preserving Wilderness character; 3) discussed ways to increase the Wilderness fire program.

As a result of this panel it is expected that the audience gained an understanding of the successes and failures of Wilderness fire management as well as suggested paths forward for the future of Wilderness fire management including increased use of prescribed fire and increased engagement of Wilderness management professionals.

Presenters. This session was comprised of a panel of government and non-government experts and other informed and interested people. Panel members included Wilderness and fire managers, local government officials, outfitters and guides.

Meeting the Challenges of Recreation Impacts: Wild South and the Sipsey Wilderness

Mark Kolinski, *Wild South*

Eastern Wilderness Areas are characteristically smaller than their western counterparts and tend to be located in close proximity to major population centers to be accessible for day-use recreational activities by large numbers of people. These two facts commonly lead to recreational impacts that significantly threaten Wilderness character.

The Sipsey Wilderness in the Bankhead National Forest in northwest Alabama, containing 25,000 acres, is the second largest Forest Service managed Wilderness area east of the Mississippi River and is a perfect example of a Wilderness area where the Wilderness experience and the Wilderness resource are significantly impacted by a high level of recreational use, which continues to grow annually.

Wild South, a 501(c)(3) non-profit organization, has been actively engaged in stewardship activities in the Sipsey Wilderness since 2009 and in partnership with National Forests in Alabama established a volunteer Wilderness ranger program in 2011. Wild South volunteers experience and do their best to mitigate recreational impacts on a regular basis. As the eyes and ears of the Forest Service in the field, they can provide a more current and comprehensive picture of constantly changing recreational use levels and impacts than the management agency would otherwise have. This informs management decisions important to mitigating these impacts.

Wild South's volunteer Wilderness rangers are trained to essentially fulfill all the functions of an agency Wilderness ranger except for law enforcement. Volunteer activities mitigate recreational impacts in 3 distinct ways: