

## BITTERROOT RESTORATION COMMITTEE

October 27, 2008

### Session Summary

#### SESSION OBJECTIVES

1. Continue project work.
2. Conduct Committee "business" including the desires of Committee members pertaining to the future of the Committee.

#### COMMITTEE MEMBERS IN ATTENDANCE

Bill Grasser	Wayne Hedman	Mike Jeffords
Gary Milner	Paul Moore	Cameron Naficy
Steve Powell	Adam Rissien	Craig Thomas

The Committee welcomed Gary Milner to the group. He will replace Jim Miller who is leaving the Committee for health reasons. The Committee signed a card for Jim and the facilitator will mail it.

Cameron will be leaving after the November meeting for his Fulbright in Argentina.

#### TECHNICAL ADVISORS AND OBSERVERS

Julia Altemus	Dave Campbell	Larry Campbell	Joe Hudson
Dan Ritter	Ruth Wooding	Virginia Tribe (Facilitator)	

#### COMPLETED AGENDA ITEMS

##### Updates and Information

##### Forest Service Chief's New Policy regarding Restoration

Chief Kimbell has issued the following policy as an interim directive for a new title to the Forest Service Manual (FSM)

*FSM2000 – National Forest Resource Management, Chapter 2020 – Ecological Restoration and Resilience*

*FSM 2020 defines Ecological Restoration as "the process of assisting the recovery of resilience and adaptive capacity of ecosystems that have been degraded, damaged, or destroyed. Restoration focuses on establishing the composition, structure, pattern, and ecological processes necessary to make terrestrial and aquatic ecosystems sustainable, resilient, and healthy under current and future conditions."*

##### Review of Article referred by Dave Bull

- See Attachment A.

### **Lower West Fork Project Update**

- Dave Campbell gave the Committee an update on the Lower West Fork Project including the following:
  - The DEIS is close to going to print and should be available before the end of the 2008.
  - The Restoration Committee is welcome to review the Draft and make whatever contributions it thinks appropriate when the public comment period starts.

### **Debriefing - Darby Lumber Lands Field Trip**

- Members of the Committee who attended the Darby Lumber Lands field trip reported on the serious need for restoration in the area – some areas more than others - particularly regarding roads and “blowouts”.
- Members agreed that the area should be included as a project for the Committee and affirmed the earlier draft work done in terms of desired result, etc.
- The Committee also discussed the difficulty of finding funds for the project.

### **Continued Work on Butterfly Creek Project**

- The Committee explained the draft work done at the September meeting (see Attachment B) and suggested that if possible, recommendations to the Forest Service be completed at the November 17 meeting.
- While there is general agreement about the desired outcome and objectives for the project, the access issue still presents a difficult problem
- The Draft Desired Future Condition was edited as follows:

*The Committee seeks the following desired results: a healthy fire-resistant area with a preponderance of large Ponderosa Pine and some Douglas Fir; uneven age class; low impact access system for ongoing maintenance; and a well-established fir routine.*
- The following Committee members agreed to do the following to prepare for the November discussion:
  - Bring copies of the Montana BMPs/Stream practices – Paul
  - Encourage Chris Clancy (and other Committee members) to attend the November meeting so we have his input on access issues and fish/streams - Ginny
  - Explore possible access ideas including the road through the Game Range – Dan Ritter and Forest Service personnel
  - Bring more solid information regarding possible prescriptions for the area – Forest Service Silviculturist; Cameron will e-mail his power point presentation to the Committee.
- Upon successful completion of this project, the Committee may expand into the adjacent area to include portions heavily affected by Mistletoe.

**Committee “Business**

- The facilitator will work with the Committee through June 2009 and continue to do the duties of a “chair:
- The Committee may use sub-groups as they move ahead with projects.
- The meeting summary will be posted on the [www.montanarestoration.org](http://www.montanarestoration.org) website.

**Where do we go from here?**

- The Committee will meet on Monday, November 17 – 6:00 to 8:30 PM at the Bitterroot River Inn. The facilitator will bring snacks. The agenda will concentrate on:
  - Addressing the Butterfly Creek Project access issue and completing the Committee’s recommendations to the Forest Service for that area.
  - Preliminary discussion on how to proceed with the Darby Lumber Lands, the Douglas Fir mistletoe area near the Butterfly Creek Project, and possibly the riparian area on Willow Creek.
- Other meeting dates scheduled are:
  - Monday, December 15
  - Monday, January 26, 2009
- The Committee will schedule February through June 2009 at the November meeting.

## Attachment A

### **When it comes to forest soil, wildfires pack one-two punch**

#### **New study finds substantial loss of carbon, nitrogen from burned soils-and connections to warming climate**

PORTLAND, Ore. October 16, 2008. For decades, scientists and resource managers have known that wildfires affect forest soils, evidenced, in part, by the erosion that often occurs after a fire kills vegetation and disrupts soil structure. But, the lack of detailed knowledge of forest soils before they are burned by wildfire has hampered efforts to understand fire's effects on soil fertility and forest ecology.

A new study led by the Pacific Northwest (PNW) Research Station addresses this critical information gap and represents the first direct evidence of the toll wildfire can take on forest soil layers. It draws on data from the 2002 Biscuit Fire, which scorched some 500,000 acres in southwest Oregon, including half of a pre-existing study's experimental plots, which had been studied extensively before the fire. The result was a serendipitous and unprecedented opportunity to directly examine how wildfire changes soil by sampling soils before and after a wildfire. The study appears in the November issue of the Canadian Journal of Forest Research.

"Losing our experiment in the fire was hard, but the opportunity to better understand fire as a dominant ecosystem process has been very exciting," said Bernard Bormann, a research forest ecologist with PNW Research Station and the study's lead investigator. "This study, covering over 300 acres, provided nearly 400 soil sampling points as well as extensive tree and understory plots to use in our analysis."

Bormann-along with study co-author and Western Washington University professor Peter Homann and colleagues from the PNW Research Station and Oregon State University- conducted chemical analyses on soil samples collected before and after the fire. They found that the combustion of the organic layer at the soil's surface, including woody debris, caused intense, 1,300 °F-plus temperatures, which, in turn, displaced considerable amounts of carbon and nitrogen from the underlying mineral soil layer and left mostly ash behind. What was more surprising to the researchers was how these organic materials may have been lost. Some carbon and nitrogen were lost as gases-consisting mostly of carbon dioxide, nitrogen dioxide, and water vapor-and some in an inch of fine mineral-soil particles, which disappeared and left behind a crust of rocks.

"Altogether, we documented losses of more than 10 tons per acre of carbon and between 450 to 620 pounds per acre of nitrogen," Bormann said. "The loss of topsoil and combustion of organic materials together led to losses that are higher than most previous estimates."

The loss of topsoil and carbon from soil can negatively affect a range of processes, Bormann said, including nutrient retention and water infiltration. In the absence of special nitrogen-fixing plants, which are capable of converting atmospheric nitrogen into nitrogen compounds for growth, losses of nitrogen in the order of what he and his colleagues documented would require at least a century to be reversed.

Equally disconcerting is the role these released organic materials might have on the atmosphere, especially in the face of a warming climate. The burning of soil by wildfire may contribute to global warming, in the short term, by releasing carbon as a greenhouse gas and, in the long term, by reducing soil productivity through losses of organic matter and nutrients. With less productive soils, Bormann said, a forest will not grow as quickly nor reabsorb as much carbon as before a burn—a process critical to mitigating the accumulation of atmospheric carbon, which traps heat in the atmosphere and can, thus, raise temperatures.

"Our findings suggest that forest managers should carefully consider the effects of wildfire on soils when planning to reduce fuels, suppress future fires, and help trees and habitat recover after fire," Bormann said.

To read the article online, visit

<http://rparticle.web-p.cisti.nrc.ca/rparticle/AbstractTemplateServlet?calyLang=eng&journal=cjfr&volume=38&year=0&issue=11&msno=x08-136>

The PNW Research Station is headquartered in Portland, Oregon. It has 11 laboratories and centers located in Alaska, Oregon, and Washington and about 500 employees.

## Attachment B

**Draft Butterfly Creek Project Collaborative Framework** (September 22, 2008 Restoration Committee meeting)

### **Draft Issue Statement**

There is an opportunity to improve the fire resistance of an area with many large Ponderosa Pine and improve the overall health of the area.

### **First Cut at Interests**

- Protect and restore old growth Ponderosa Pine stands by making it more resistant to fire.
- Protect water quality threatened by catastrophic wildfire and road reconstruction /use.
- Maintain visual quality from the Valley floor and from adjoining areas.
- Enhance recreational opportunities because of improved habitat and visual quality.
- Provide for low-impact, long-term access for ongoing maintenance.
- Consider use of an improved road for recreation.

### **Draft Guiding Principles**

- We believe that we need to enhance and retain old growth Ponderosa Pine characteristics because it has these components but need to be managed to enhance and retain them.
- We believe in keeping sedimentation to a minimum because we value fisheries and healthy streams.
- We believe in retaining existing recreational uses because treatments should not preclude future use in this area.
- We believe in approaches that reduce long term maintenance needs because the Agency needs to reduce its deferred maintenance backlog and it has limited budget.

**Draft Desired Future Condition** (edited version from the October 27, 2008 Restoration Committee meeting)

*The Committee seeks the following desired results: a healthy fire-resistant area with a preponderance of large Ponderosa Pine and some Douglas Fir; uneven age class; low impact access system for ongoing maintenance; and a well-established fir routine.*

### **Objectives**

- Assure long term access for future management.
- Retain large diameter Douglas Fir and Ponderosa Pine.
- Create conditions so that the site is better condition able to take a wildfire or prescribed burn without losing old growth character.
- Keep soils/sedimentation out of streams in the area.