

**Colorado Forest Restoration Institute-Colorado State University**  
**FY2013 ACCOMPLISHMENT REPORT – December 2013**

For FY2013 for Colorado Forest Restoration Institute (CFRI) at Colorado State University was allocated \$150,000 to meet the intent of the Southwest Forest Health and Wildfire Prevention Act of 2004.

This annual report for FY2013 contains information on the following:

- A comparison of actual accomplishments to the goals established for each work plan project. Where the output of a project can be readily expressed in numbers, a computation of the cost per unit may be required if that information is useful.
- Reason for delay if established goals were not met.
- Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

Explanations are provided for changes or incomplete deliverables. A federal financial report is submitted separately from the Office of Sponsored Programs at Colorado State University to the Southwest Regional Office.

**Project 1: Supporting Collaborative Forest Landscape Restoration Projects**

Project components:

- Coordinating the implementation and adaptive management of the multi-party monitoring plan for the Front Range Collaborative Landscape Restoration Program
- Assess effectiveness of treatments on attaining desired conditions consistent with restoration and wildfire hazard reduction goals
- Ongoing technical assistance for the Uncompahgre Plateau Mesas Forest Restoration Project: treatment design, ecological and socio-economic monitoring, and adaptive management
- Assessment of aspen dynamics on the Uncompahgre Plateau

<b><i>Supporting Collaborative Forest Landscape Restoration Projects</i></b>	
<b>Proposed Project Deliverable</b>	<b>Actual Project Deliverable</b>
Calendar year 2012 ecological and social-economic monitoring report for the Front	Completed. Socio-economic monitoring report can be downloaded at <a href="http://coloradoforestrestoration.org/wp-content/uploads/2013/12/2013_FR-CFLR-2012-SE-monitoring-report_Final.pdf">http://coloradoforestrestoration.org/wp-content/uploads/2013/12/2013_FR-CFLR-2012-SE-monitoring-report_Final.pdf</a> . Ecological monitoring report can

<p>Range Collaborative Forest Landscape Restoration Program.</p>	<p>be downloaded at <a href="http://coloradoforestrestoration.org/wp-content/uploads/2013/12/2013_FR_CFLRP_EcologicalMonitoringReport2011-2012.pdf">http://coloradoforestrestoration.org/wp-content/uploads/2013/12/2013_FR_CFLRP_EcologicalMonitoringReport2011-2012.pdf</a>.  Primary contact: Hal Gibbs, Arapaho-Roosevelt NF and Pawnee NG.</p>
<p>Calendar year 2012 ecological and social-economic monitoring report for the Uncompahgre Collaborative Forest Landscape Restoration Program.</p>	<p>In progress. Work is currently underway to compile and analyze CY2012 socio-economic monitoring data. The work has been complicated by the complexity of contracts and contractors, making progress unexpectedly slow compared to similar work for the Front Range CFLR project. Contract data has been obtained; field data collection is proceeding with contractors through Winter and Spring 2014, with analysis through Spring. Review, comment, and editing through the summer is expected, with a final completion by September 30, 2104.  Primary contact: Tammy Randall-Parker, Ouray District Ranger, and Clay Speas, CFLR coordinator for the GMUG NF.</p>
<p>At least two (2) field-based workshops per CFLR project to review and deliberate treatment effects and desired conditions</p>	<p>1) Co-organized and –sponsored a multi-stakeholder field workshop to the Uncompahgre Plateau June 14-15, 2013 to revisit the Uncompahgre Mesas Forest Restoration and aspen treatment areas, and conduct ‘citizen science’ trainings to gather historic forest field evidence. Attended by over 20 individuals from federal and state agencies, research institutions, industry, and non-governmental organizations. Primary contact: Tammy Randall-Parker, District Ranger, Ouray Ranger District.  2) Co-organized and –sponsored a multi-stakeholder field workshop to Colorado Front Range CFLR project sites on the Pike National Forest, July 9, 2013, and the Arapaho-Roosevelt NF, July 11, 2013. Attended by over 40 individuals from federal and state agencies, research institutions, industry, and non-governmental organizations. Primary contacts: Jeff Underhill, Forester, Pike-San Isabel National Forest, and Hal Gibbs, Arapaho-Roosevelt NF and Pawnee NG.</p>

**Project 2: Addressing Knowledge Needs for Post-Bark Beetle Forest Recovery**

Project components:

- Assist efforts to prioritize and assess the effects of post-bark beetle forest treatments

- Expand opportunities to link managerial monitoring of forest recovery and management effects with RMRS post-outbreak research on forest recovery and management effects

<b>Supporting Post-Bark Beetle Future Forest Planning, Analysis, and Monitoring</b>	
<b>Proposed Project Deliverable</b>	<b>Actual Project Deliverable</b>
One written technical report on post-beetle forest structure and composition, and one manuscript to be submitted to peer-reviewed journal.	In progress. Partnered with the NASA DEVELOP program housed in the North Central Climate Science Center to sponsor the development and application of post-bark beetle forest structure spatial modeling ( <a href="http://www.earthzine.org/2013/04/03/beyond-the-beetle-modeling-change-in-a-post-attack-subalpine-forest-ecosystem/">http://www.earthzine.org/2013/04/03/beyond-the-beetle-modeling-change-in-a-post-attack-subalpine-forest-ecosystem/</a> ). The written report will be completed by March 2014. The delay is due to personnel changes within the NASA DEVELOP team that pushed back the timing of the deliverable.
Participate in assessment and planning events of the Colorado Bark Beetle Cooperative	In progress. Geospatial and non-spatial data on post-outbreak forest conditions, and data on completed and planned treatments have taken longer than expected to track down and compile. CFRI has assembled a geospatial atlas and will be planning participatory assessment actions with the Colorado Bark Beetle Cooperative in Spring 2014, with final reports and products completed by end of summer 2014.
Convene at least one (1) workshop in partnership with RMRS research scientists and federal and private forest land managers to link managerial monitoring and scientific research	Completed. Co-organized and –facilitated with the Rocky Mountain Research Station the “Future Forest” webinar series on post-mountain pine beetle forest ecology and management issues ( <a href="http://www.fs.fed.us/rmrs/webinar-series/future-forests/">http://www.fs.fed.us/rmrs/webinar-series/future-forests/</a> ). The webinar spanned FY12 and FY13 work plan periods. Primary contact: Jan Engert, RMRS.

### **Project 3: Assessing Treatment Effectiveness**

Project components:

- Analyze currently available information on restoration and hazard reduction treatments relative to desired conditions.

<b>Assessing Treatment Effectiveness</b>	
<b>Proposed Project Deliverable</b>	<b>Actual Project Deliverable</b>
Between 1-3 field-based workshops to review and deliberate treatment effects and desired conditions	1) Convened and led 2 field-based workshops June 8 and July 13 to discuss desired conditions and design criteria for treatments for the Upper Monument Creek (UMC) Landscape Initiative on the Pike National Forest. The UMC initiative is a 67,000 acre proposed project under the Colorado Front Range CFLR program. Primary contact: Jeff Underhill, Forester, Pike-San Isabel National Forest.
Between 1-3 written reports on current available evidence or scientific research on treatment effectiveness on wildland fire behavior	1) One report completed. Report can be downloaded at <a href="http://coloradoforestrestoration.org/wp-content/uploads/2013/12/2013_Hoffman-etal_PhysicsBasedModels.pdf">http://coloradoforestrestoration.org/wp-content/uploads/2013/12/2013_Hoffman-etal_PhysicsBasedModels.pdf</a> . 2) In progress: Treatment effectiveness studies have been conducted on the Pike National Forest and the Uncompahgre Plateau, with analysis being completed Fall 2013. Final reports and workshops will be planned with federal and non-federal forest and fuel managers in Spring and Summer 2014.

#### **Project 4: Supporting Collaborative Capacity-Building**

Project components:

- Current information on biophysical and social science pertaining to forest restoration and fuel reduction
- Current analysis and interpretation on policies and programs pertaining to forest restoration and fuel reduction
- Coordinate and facilitate learning within and between place-based forest collaboratives

<b>Supporting Collaborative Capacity-Building</b>	
<b>Proposed Project Deliverable</b>	<b>Actual Project Deliverable</b>

<p>Between 2-4 site visits or field-based workshops for place-based forest collaboratives to deliver current knowledge and analyses</p>	<p>1) June 19, 2013 – Field-based workshop RE: the Little Sand Fire on the San Juan National Forest, involving the San Juan Headwaters Forest Health Partnership. Over 40 individuals attended from government land management agencies, non-governmental organizations, and the local community to learn about and plan future collaborative learning engagement for forest restoration and wildland fire management. Primary contact: Steve Hartvigsen, Forester, Pagosa Ranger District</p> <p>2) Two site visits with the core organizing committee for the “Plains to Peaks Landscape Restoration Project” April 5 and August 29, 2013 to chart out collaborative learning and planning pathways. Primary contact: Chad Julian, Senior Forester, Boulder County Open Space.</p>
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