

The Middle Applegate Pilot Multiparty Monitoring Initiative:
Interim Report
March 2013

Middle Applegate Pilot Background

The Middle Applegate Dry Forest Restoration Pilot Project is a demonstration based on the dry forest restoration principles developed by Drs. Jerry F. Franklin and K. Norman Johnson. In December 2010, Secretary of Interior Ken Salazar designated several landscape-scale pilot projects in southwest Oregon to demonstrate the application of the Franklin and Johnson restoration principles, support regional workforce and milling infrastructure and build public support for the active restoration of federal forests.

The first phase focused on a small subset of the Middle Applegate watershed, an approximately 5,000 acre sub-watershed containing Chapman and Keeler creeks. The first phase of the project became recognized as Pilot Joe and generated the Pilot Joe Timber Sale. Implementation began in Fall 2011. Below are photos from the work done on Pilot Joe. The following pages review the objectives, indicators, research questions, and status of said objectives for Pilot Joe. For further information on the pilots and the Multiparty Monitoring, please visit the BLM website at: <http://www.blm.gov/or/districts/medford/forestrypilot/pilot-projects.php>



Grayback Forestry personnel completing the 'finish work' in a commercial unit of Pilot Joe



Landscape view, as seen from near highway 238, of a completed commercial unit.



Conditions at one of 20 FIREMON plots established one year prior to any treatments.



Conditions at the same plot immediately following the hand-piling of remaining activity fuels.

Monitoring Objectives and Indicators

Objective 1: <i>Increase forest ecosystem resistance and resilience</i>	Objective 2: <i>Increase spatial heterogeneity to benefit biodiversity and species of concern at the stand and landscape scale</i>	Objective 3: <i>Conserve and improve northern spotted owl habitat through LSEA (late seral emphasis area) design</i>	Objective 4: <i>Generate jobs and support regional manufacturing infrastructure</i>	Objective 5: <i>Gain public support for active management in federal forests</i>
Indicators: - Fire behavior - Stand density - Tree vigor - Mean diameter - Overstory and understory species composition -Snag and down woody material abundance	Indicators: -Canopy cover -Stand level skips and gaps -Stand level structural complexity -Seral stage composition at landscape scale -Bird species composition	Indicators: -Fire behavior adjacent to LSEA's -Percentage of NRF, dispersal, and unsuitable habitat -Spotted Owl reproduction and pattern of use	Indicators: - Jobs created or maintained - Board feet and ton weight of material harvested - Market utilization by product category -Implementation and contracting efficiency	Indicators: - Awareness and support of engaged public - Success of community outreach and engagement - Scoping and EA comments

Middle Applegate Pilot Multi-party monitoring objectives and indicators. Elements in bold have been completed, or are in progress on Phase I: Pilot Joe. Funds are being sought to be able to complete monitoring

Objective 1

Research questions: 1) How well did the demonstration of the Dry Forest Principles conform to the intent to move current conditions toward the desired conditions? 2) Did the implementation of the Dry Forest prescription increase resistance/resilience of forest stands and landscape to wildfire, drought, insects, etc. by reducing stand densities, ladder fuels, and promote shifted tree species diversity?

Status: Twenty FIREMON plots were installed in the commercial units of Pilot Joe in late summer 2011, prior to logging activity (see map). Plots were stratified according to plant series prescriptions and logging system. Plot locations were randomly generated within stratified treatment units. Pre-treatment plot data has been summarized. Stand level fire behavior modeling has been completed for pretreatment conditions based on the data collected from the FIREMON plots. It shows a potential risk of a passive crown fire and associated high basal area mortality under dry conditions. Plots will be reread upon completion of treatments at the optimal time for accurate data collection.

Objective 2

Research questions: 1) How do the Pilot's restoration treatments affect spatial heterogeneity at the stand and landscape scales? 2) How do any changes in stand- and landscape-level spatial heterogeneity affect the diversity and abundance of plants and animals?

Status: Pre-treatment monitoring and data analysis for stand-level spatial heterogeneity has been completed. There are 18 plots co-located with FIREMON plots. Four plots have been measured post treatment, the rest will be measured in Spring 2013 once the leaves are out. Results from the 4 plots show an increase in fine scale spatial heterogeneity. Monitoring of bird species abundance and composition has not been completed for Pilot Joe. Funds are being sought to be able to accomplish this.

Objective 3

Research questions: 1) Did the landscape design, through the establishment of Late Seral Emphasis Areas (LSEA) and adjacent strategic placement of treatments, contribute to fulfilling the intent of the Endangered Species Act by conserving ecosystems upon which species depend and incorporating elements of active management proposed by the US Fish and Wildlife Service in the draft revised Recovery Plan for the Northern Spotted Owl?

Status: Fire spread will be modeled in both the pre-treatment and post treatment landscape for both phases of the Pilot project (Pilot Joe & Thompson) to determine the effects of restoration treatments and project design on potential fire spread and effects, particularly adjacent to Late Successional Emphasis Areas. OSU, BLM, USFWS and FS are undertaking a minimum three year monitoring effort to assess Northern Spotted Owl presence and absence with an eye toward population dynamics. Monitoring using audio surveys began spring 2013 in phase II and will occur in phase III next season, pending additional funding.

Objective 4

Research questions: 1) How well did the demonstration do in providing commercially viable timber sale(s) opportunities? Additionally were there opportunities for commercial activities generated such as stewardship and service contracting? 2) How can this work be done more efficiently so as to improve economic benefits?

Status:

Once Pilot Joe implementation is completed, work will begin to determine job generation, material harvested, and product utilization.

Objective 5

Research Questions/Learning component: A series of guided conversations will be convened to capture collective learning related to the design and implementation of the Pilots. The purpose is to gauge the level of public support for active forest restoration and to capture key pilot participant perspectives to inform and improve future project design and implementation. The

learning conversations are designed at two scales: at the scale of the Middle Applegate watershed to capture learning from the Pilot Joe project to benefit future Medford District BLM pilot and ecological forestry project activities; and at the scale of the Medford, Roseburg and Coos Bay Districts to comparatively summarize Secretarial Pilot Project accomplishments. These substantive, forward-looking conversations can help determine whether pilot project goals were met, and offer a unique opportunity to learn from key participants ways to improve future forest management planning, design and implementation.

Status: Five learning conversations have been completed. More are to be scheduled in the coming months. These included operators, industry, BLM planners, and MPM members. The final reports will be posted on the website once completed.

Photo Points

Photos provide a visual record across multiple phases of project implementation and generate a baseline to identify change over time through repeat photography. Photos provide opportunities to assess project implementation and change over time. They can also provide a tool to build public understanding of the dynamic nature of stand response to active management over time. Initial photo points have been established in the spatial heterogeneity plots, non-commercial units, yarder corridors, and commercial units.

This permanent photo point of a cable yarding corridor was established by the Pilot Joe Multiparty Monitoring Team immediately after completion of the 'finish work,'



This is a permanent photo point of a plot post-slash established by the Pilot Joe Multiparty Monitoring Team.



Next Steps

The next phase of the project is set in the Thompson Creek sub-watershed. The Environmental Assessment for that phase was released late February 2013. The Multiparty Monitoring team is preparing for Pilot Thompson to best achieve the same set of objectives.

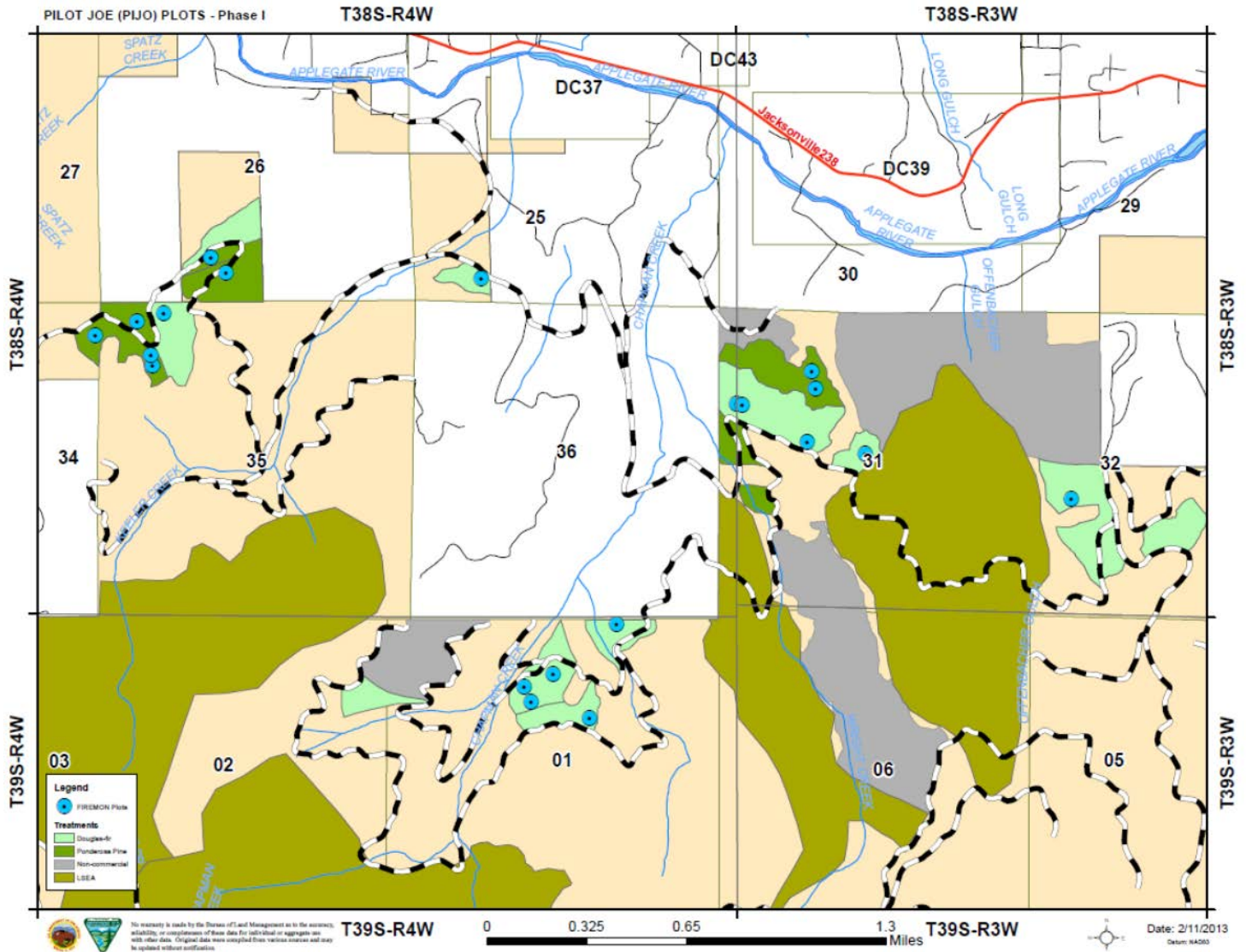


Figure 1. Pilot Joe (Phase I) treatments and plot locations. Light green treatments were determined to be Douglas-fir plant series and had treatments prescribed accordingly. The dark green polygons represent ponderosa pine treatment prescriptions. The blue points represent the FIREMON plot locations.

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