

Nevada Pinyon-Juniper Partnership
Resource Improvement / Biomass Utilization Demonstration Area
Draft Statement of Purpose

Pinyon and Juniper trees within their natural range represent a renewable resource that provides wildlife habitat, a harvestable human food crop, a carbon sink, and is of cultural significance to the indigenous people of Nevada. The Partnership agrees that a healthy Pinyon and Juniper woodland is one that has sufficient biodiversity to support a viable, resilient, sustainable ecosystem. The Partnership agrees that over much of the landscape, in the absence of natural disturbances such as fire, the Pinyon–Juniper woodland complex has reached a stagnant or decadent condition that limits fauna and flora populations, diminishes biological diversity, and exists at a catastrophic resource stress level. The Partnership agrees that this situation has potential devastating consequences and that treatment interventions are required to restore normal ecosystem functioning.

Within the highest priority candidate area, half of the over 1.5 million acres of Pinyon and Juniper is estimated to either be in a decadent condition, referred to as Phase III density, or is moving to the decadent Phase III condition within a 10 year period. Existing funds and other available resources are inadequate to prevent or mitigate this conversion. Presently there is a planned action to treat just 27,000 acres within the next 5 years, yet recent history indicates that in the 2004-2010 timeframe more than 580,000 acres were lost to fire in the Ely District of the Bureau of Land Management alone, and an average of \$3.2 million was spent each year in that district for emergency stabilization and rehabilitation treatments. The risk of loss to fire, disease and/or insect damage, leaving burned areas at risk for invasion by exotic weeds and increased soil erosion, continues.

The Partnership proposes the creation of a landscape-scale demonstration area of Pinyon-Juniper woodland where a variety of restoration treatments can be applied and monitored for effectiveness in restoration of rangeland health while simultaneously exploring the potential for productively utilizing the generated biomass. A separate document details the area proposed for the demonstration area and the accompanying rationale. The impacts from current treatment practices are, in many instances, the same as from collection of biomass for utilization. In addition, advances in harvesting, handling, and transporting technology are designed to minimize damage to the resource. Generating financial return from the utilization of biomass has the potential of offsetting at least a portion of the treatment costs of restoration and therefore of expanding and accelerating the implementation of restoration efforts. Within the proposed demonstration area the treatment prescriptions will be optimized to provide multiple ecosystem benefits including fire mitigation, infestation mitigation, ecosystem restoration, wildlife habitat improvement, watershed health, biomass utilization and bio-energy development. An objective of the Partnership is to determine to what extent biomass utilization can augment and increase ecosystem restoration treatments through the value added, beneficial use of the accumulated biomass. The anticipated result is an increase in the rate at which the degraded woodland and sagebrush ecosystems can be restored.

Numerous policy documents over the last decade indicate the necessity of treating public lands holistically, at a landscape scale, as well as the commitment of federal agencies to addressing the imperatives of climate change and energy independence. The Partnership and its proposed demonstration area offer a powerful approach to responding to those commitments. The collective expertise presented by members of the Partnership, the readiness of the land management agencies, and the authorities and tools the Partnership will request be made available within the demonstration area will all serve to scientifically document the outcomes of landscape-scale treatment in terms of risks and harms mitigated, costs averted, and positive outcomes achieved. The objective of the demonstration project is to create a known cycle of planning, environmental assessment, and viable large-scale restoration treatments that also enables the utilization of harvested biomass for bio-energy to offset restoration costs. The proven and documented results of this multi-year demonstration effort will be able to authoritatively guide restoration activities in similar decadent woodlands throughout the West. The companion implementation plan indicates the committed parties, the entities from whom commitment of authorities, expertise, and resources are necessary, the timeframes for the action, and the measurable outcomes expected.