

Finding of No Significant Impact
ARS South Mountain
Environmental Assessment DOI-BLM-ID-B030-2013-0009

I have reviewed the Council on Environmental Quality Regulations (CEQ) for significance (40 CFR 1508.27) and have determined the actions analyzed in **DOI-BLM-ID-B030-2013-0009** would not constitute a major federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not required. This finding was made by considering both the context and intensity of the potential effects, as described in the above EA, using the following factors defining significance:

1) Impacts that may be both beneficial and adverse.

The beneficial effects of Alternative B are:

1. Juniper hand cutting and prescribed fire treatments at this early stage of soil degradation allow for natural vegetation recovery with minimal additional soil disturbance from mechanical treatments like mastication and drill seeding (Section 3.1.2.2).
2. Increased soil cover by herbaceous and shrub vegetation in the first few years post-treatment, and long-term improvement in infiltration and reduced soil erosion (Section 3.2.2.2).
3. Treating juniper in the project area would provide long lasting benefits to wildlife by protecting existing sagebrush steppe, meadow, spring, and riparian habitats, and provide the opportunity for those habitat types to recover from the detrimental effects of juniper encroachment (Section 3.4.2.2).
4. ARS research findings regarding juniper treatment and sagebrush-steppe recovery impacts on snow accumulation, redistribution and melt, soil stability and health, stream flow and sedimentation will be useful for future management of juniper encroachment (Section 1.0).

The adverse effects of Alternative B are:

1. The proposed fire will burn through allotment boundaries, therefore there is potential for damage to fence lines (Section 3.3.2.2).
2. Moderate, short term (1-2 days) negative impact on air quality and visibility in the form of smoke and dust emissions predominantly in the Particulate Matter (PM) 10 and PM 2.5 size range may impact the local project area (Section 3.6.2.2).
3. Runoff and erosion from areas under juniper canopies are increased the first 1-2 years post burn (Section 3.2.2.2).

2) The degree to which the proposed action affects public health or safety.

The use of prescribed fire during juniper treatment would result in a moderate short-term negative effect on air quality and visibility during and immediately following the

actual activity. Air quality effects would be in the form of dust and smoke which is predominantly PM 10 and PM 2.5 size range. This activity is not expected to exceed any State and/or Federal air quality standards based on the types of fuels and size of burns. Smoke would be noticeable over a small area of western Owyhee County for 1-2 days post burn.

- 3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

No park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas, such as Areas of Critical Environmental Concern (ACECs), or Wilderness are in close proximity. There are four cultural resource sites which require mitigation to protect them from adverse effects during all implementation phases of the proposed project. Mitigation measures will be designed in consultation with the Idaho State Historic Preservation Office. With mitigation measures in place there will be no adverse effect to any eligible or unevaluated cultural resource site (Section 3.5.2.2).

- 4) *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

The effect on the quality of the human environment is expected to be minimally controversial. There were only two comments during the scoping process in May/June of 2013. One comment was in favor of removing juniper and the other comment was considered but not analyzed in detail in this EA # DOI-BLM-ID-B030-2013-0009 because it was not applicable to the need and purpose of the project (Section 1.7, Section 2.2).

- 5) *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Cutting and prescribed burning juniper stands is an established means of treating juniper encroachment which has been in use for several decades. The use of cutting and girdling juniper treatment areas provides for better control of where the prescribed fire will burn in denser stands of juniper (the majority of the treatment area is Phase III juniper). Girdling prevents the need for felling the larger trees, thereby reducing ground fuel loading to a treated area, and resulting in less soil heating when the slash is burned. Girdling is also less visually intrusive than felling as girdled trees look as though they were naturally killed by fire, drought, or beetles (Section 2.3.2). It is expected that highly uncertain or unique risks will have little to no effect on the human environment.

- 6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

The actions and practices analyzed in the EA are normal practices that have been successfully implemented elsewhere. This EA does not set a precedent for future actions that have significant effects. Consequently, the scientific knowledge that will be gained from ARS's watershed research has the potential to be beneficial and supportive of future landscape scale juniper treatments.

- 7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

This EA considered potential cumulative impacts of the Proposed Action and alternatives. Such analysis concluded that implementation will not result in significant cumulative effects on biological, cultural, or social resources, even when considered in relation to other past, present, and reasonable foreseeable future actions.

- 8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.*

Cultural resource surveys were conducted in the project area. Based on that survey and the analysis in the EA, the proposed action would not result in loss or destruction of significant scientific, cultural, Native-American, or historical resources. Mitigation measures to protect the four cultural sites within the treatment units will be in effect during implementation of the project. Additionally, the four Weirs and six meteorology monitoring sites will be protected or removed during the prescribed burn.

- 9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has determined to be critical under the Endangered Species Act of 1973.*

Species associated with sagebrush steppe habitat are negatively impacted from the loss of habitat to juniper. The prescribed fire is expected to have few direct effects to wildlife because fire is something that wildlife evolved with and adapted to. Because of the small area affected by the proposed action in comparison to the cumulative effects analysis area and the improved conditions in the project area, there would be no cumulative effects to wildlife (Section 3.4.2.2).

- 10) *Whether the action threatens a violation of Federal, State, and local laws or requirements imposed for protection of the environment.*

The proposed action analyzed in the EA was developed in accordance with all applicable Federal, State, and local laws/regulations for the protection of the environment. The EA discloses the potential effects of the proposed action on all critical and non-critical elements. It was determined that the proposed action would not adversely or significantly affect any of them.

/s/ Michelle Ryerson

10/23/2014

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Date