



## **Treatment Summary for Unit:**

Unit D Treatment - Either chainsaw cutting or a skid-steer shear will be used as the felling method and “mechanical biomass removal” as a harvest removal method:

- 1) ATV based method - western juniper trees will be felled with chain saws. Those to be removed will be skidded to road side landings by ATVs with arch trailers attached. The trees will then either be chipped into shuttle vans or trailers, or they will be loaded (via log loader, loader tractor, forklift, etc.) as boles into trucks, for use as posts, poles, firewood, etc.. Limbs will either be left in the units, piled at the landing (for later burning), or chipped and removed.
- 2) Skid-steer shearer method - western juniper trees will be felled with a small skid-steer mounted hydraulic shear. Those to be removed will be loaded into trucks for use as posts, poles, firewood, etc.
- 3) Cut juniper and slash may be left on site.

NWTF selected a contractor to implement the work who uses a skid steer with a shear. The contractor elected to remove junipers through whole tree yarding to piles at a central landing. CRNG staff agreed with the NWTF contractor that the skid steer would be able to make one pass through an area off of a main skid trail to fell and remove juniper.

## **Selected Implementation Guidelines, Management Measures, and BMPs to Evaluate:**

- Prohibit cutting any ponderosa pine or dead juniper.
- Prohibit cutting old growth juniper of any diameter.
- Restrict juniper felling to April 1 through November 15 (Mule Deer Winter Range).
- Pull back western juniper slash beyond the dripline of ponderosa pine trees or lop the material so that it extends no more than one foot above the ground surface in ponderosa pine stands.
- Lop western juniper slash to extend no more than three feet above the ground surface in juniper stands.
- Prohibit mechanical based activities during the wet season. These activities will only occur during dry soil periods, frozen ground, or over snow.
- Prohibit skid-steer juniper felling or removal within Riparian Habitat Conservation Areas (RHCA's).
- Designate RHCA crossings by ground-based equipment prior to operations.
- Avoid scabland habitat associated with Henderson's and Wallowa needlegrasses when skid-steer juniper felling or any harvest material removal.
- Designate skid trails: at 25-30 foot spacing for skid/steer shear or pickup truck
- Permit only one pass (out and back) off main trails for skid-steer juniper cutting or removal.
- Avoid all identified heritage sites. Grassland archaeologist will be notified of new sites and operations stopped until an assessment is complete and design criteria are identified.
- Clean all equipment to be operated within the project area. This requirement does not apply to passenger vehicles or other equipment operated exclusively on roads. Cleaning will occur off of National Grassland administered lands and will be inspected and approved by the administrator of the contract or agreement.
- Road maintenance equipment will be cleaned prior to moving out of the infested area.
- Access to Unit D will not be authorized from the east through private land due to the presence of an unavoidable medusa-head rye site on that road.

- Inspect road rock source pits/quarries for noxious weed infestations prior to use. Do not utilize rock source material contaminated with high priority weed propagules.
- Seed areas of bare/disturbed soil (including but not limited to: skid trails, landings, and equipment staging areas).
  - 1) Seed will be certified weed free (all states noxious weed certification).
  - 2) Utilize a seed mix including at least one grass species which grows readily in the absence of the A soil horizon, and which is moderately to strongly rhizomatous.
  - 3) Utilize a seed mix including one fast germinating annual grass species to provide immediate (relatively) ground cover.
  - 4) Seed application rates will be high (20-30 lbs/acre pure live seed basis) to compensate for the broadcast method of application, and to generate vegetative densities adequate to provide deterrence to noxious weed invasion.
- Complete a noxious weed inventory if new noxious weed infestations do occur within the project areas. Employ an early treatment strategy under the Forest's anticipated early detection, rapid response protocol.

Comments/Notes:

- Old growth juniper is identified by growth form characteristics, such as twisted, gnarled trees growing out of rock outcrops, and not by size. This may be accomplished by utilizing a “designation by prescription” or “individual tree mark”.
- “Frozen ground” or “oversnow” is described as: six inches of frozen ground, four inches of frozen ground and one foot of snow, or more than 24 inches of snow.
- Scabland habitat is identified by the presence of rigid sage or low sage.

### Unit Evaluation

Were the treatments implemented as described in the decision document or Record of Decision? Were the treatments implemented in accordance with the Selected Implementation Guidelines, Management Measures and BMPs identified above? If not, please explain why.

The treatments implemented to date match up closely with the treatments described in the CE. But there was still a significant amount of work to be completed on the unit so participants on the field visit could not comment on how closely the final treatment will match up with the treatments described in the documents.

The group reviewed the Management Measures for the project while on site. Specific observations are listed below. There were a few deviations from the Management Measures in implementation, but generally the work to date adheres to the Measures.

- Prohibition on old growth cutting: There appeared to be one tree trunk in the piles at the landing that was large with ropy bark. Otherwise, it appeared that the contractor had been conservative – leaving a number of trees that were probably not old-growth but had one or more old-growth characteristics just to be safe. One of the participants on the field visit also thought they saw evidence of one snag being cut down on the unit.

- Contractor did not operate during wet conditions or during the November to April restricted period. There was some road rutting on the way out to the unit, but the CRNG determined that this was not caused by the contractor.
- Juniper slash fuel beneath the ponderosa pines was not pulled back or lopped down enough yet to protect the pines from fire risk. But it does not look like the contractor is finished treating the drainage yet either. CRNG staff will not sign off on the work if treatment in drainage is not completed. The 3 foot high guideline for slash outside of the drainage was being met.
- The group looked closely at the skid trails and it appeared that the spacing guideline and the limitation of only one pass from the main skid trail were being followed. Soil disturbance on site was minimal. CRNG staff also indicated that the contractor would rough out the skid trails before their work was done on the unit so that the reclaimed skid trails could be seeded.
- Heritage sites were avoided. A site that had not been identified during the initial assessment was found at the start of implementation and the area was put off limits and a new skid trail was designated avoiding the area.
- No T & E plant species were found during implementation and hence none needed to be avoided.

For each Management Objective for this Unit please evaluate whether the objective has been achieved. If the objective has not been achieved, please comment on barriers, constraints, limitations, etc and what might be needed for future projects to achieve the objective.

As mentioned above, no individual unit objectives were listed in the CE or Decision Record for this unit.

### **Project Evaluation**

Were the results of this project what was anticipated and intended? Have treatments addressed the Purposes and Needs for this Unit? If not, why not?

Work to date on the unit suggests that the Purposes and Needs of the project will be addressed by the treatments on this unit. Encroaching juniper is being rolled back, creating opportunities for other sage-steppe species to flourish and to provide quality habitat. The potential negative impacts of the treatments, primarily in the form of skid trails, do not appear severe so far. Overall, it seems like the vegetation will be much closer to a historic composition after the treatment than it was prior to the treatment. Both the CRNG staff and the participants in the field visit liked what they saw in the parts of the unit that were completed.

Please share any observations or comments about the project planning, implementation, or results that are important to understanding management of this unit or important for improving future management in similar projects.

One participant in the field review asked whether it was necessary to lop and scatter on this site or whether it would have been OK to just cut and leave the juniper. Lopping and scattering definitely makes the treatment more expensive per acre so using this technique means that less acres will get treated given a limited budget. However, there might be fuels considerations that might lead the land manager to decide that lop and scatter is necessary. It makes sense to ask this question on most sites where juniper removal is being planned.

Another participant suggested that yarding junipers out of the draw with a winch will cause more damage than driving a wheeled skidder into the draw / drainage to whole tree yard the junipers out. Unfortunately, there is little room to experiment with these different techniques because Forest Plan standards and guidelines do not allow mechanized equipment in drainages such as this one, even if the drainage is almost never flowing.

Another suggestion was to leave higher stumps both in the drainage and in strategic places throughout the unit. In the drainage a high stump will create roughness in the channel and prevent or reverse erosion. Out on the rest of the landscape, high stumps can be left to visually deter OHV riders from entering an area.

CRNG staff are excited about using Stewardship Agreement authority on this project. Implementing work through Stewardship Agreement raises many questions about contractor management, accountability, efficiency, etc. But there are a number of benefits to the partnership that comes with a Stewardship Agreement. The CRNG staff are spending a lot of time working with the contractor (NWTF) and subcontractor to get the work done exactly as they want it on this unit. But they anticipate that this will be time well invested as the Grasslands does more work with the NWTF and this contractor.

One of the big challenges of doing this work in the Grasslands is trying to implement significant treatments without paving the way for the invasion of non-native weeds like Medusa Head. Throughout the day the group discussed ways that treatments could be implemented in ways that did not create conditions (such as soil disturbance) for the invasion of non-native weeds. The Grasslands is trying a lot of different approaches and is taking a cautious approach, often erring on the side of safety with respect to activities that might facilitate weed invasion.