Western Juniper Harvest and Transport System Survey
Agency Contacts

Objective: Through a qualitative survey, evaluate systems being used by forest operators to harvest and transport western juniper material for utilization.

Format: The survey/interview questions are organized into the following five topics:

- General Information
- Project Information
- Operating Conditions
- Utilization
- Needs Assessment

Survey/Interview Questions:

I. General Information

Name of interviewee: Mike Bechdolt
Position: 
Organization: Klamath Falls BLM Resource Area
Address: 
E-mail: 
Phone: (541) 885-4118

II. Project Information: Forest Operations and External Factors that influence the loggers/contractor operations

(1) How many acres of juniper treatments is your unit implementing per year? Are you conducting projects that include utilization?

K Falls Field Office is implementing 3000 to 4000 acres of juniper treatments per year. The vast majority of those treatments are cut, pile, and burn treatments with only a small amount of utilization. Only doing utilization on about 300 acres per year.
(2) What are the objectives of the projects?

- Wilfire hazard reduction [X]
- Watershed enhancement [ ]
- Wildlife ecology [ ]
- Biomass utilization [ ]
- Other [ ]
  __Rangeland Restoration__________

(3) What type of operating constraints do you place on the operations?

- Season of year for harvesting [X] (May 15 to Oct 30)
- Soil disturbance [X] (less than 20% of area, skid trails must be 150 feet apart)
- Stream protection [ ] (riparian areas only treated by hand – very expensive: $600+/acre)
- Wildlife restrictions [ ]
- Protection of sensitive plants [X] (no old growth cutting)
- Other [ ]
  __equipment must be washed for invasive weed control, native seeding post treatment__________

(4) How are the operator services being contracted?

- Service contracts [ ]
- Stewardship contracts [X]
- Timber sales contracts [ ]
- Combination of above [ ]
- Other [ ]
  __Fuels ID / IQ__________________

*Every contract has option to utilize if they meet certain conditions*

III. Operating Conditions

(1) What is the average size of your operating units (acres)?

100 to 1000 acres

(2) How far apart are your operating units on average (miles)?

Typically contiguous

(3) Please describe the typical haul road conditions in your operating units:

Roads in place (yes)

Dirt / natural surface or gravel
Construct new roads (length & road standards):

*Sometimes a little bit of temporary road construction*

Upgrade existing roads (describe types of upgrades): 

Other description of road conditions:

(4) What is the average transport distance from your operating units to the market (miles)?

50+ miles

IV. Utilization

(1) What markets do you have available for Juniper and other harvested tree species?

The major market recently has been clean chips for hardboard. (Collins Pine is making hardboard with 15% juniper and 85% pine). Historically, juniper has been used in the Klamath Falls area for firewood, posts, poles, landscape logs, boughs. REACH has made fencing, paneling, flooring, and other dimensional lumber and specialty products. K Falls BLM anticipates that markets for hog fuel and sawdust will be available soon too.

(a) In what form will they accept their raw material (e.g. acceptable length and diameters, delimming standards, chip quality)?

Collins Pine has been taking clean chips from Quicksilver.

(b) What is the standard unit of measure that contractor are paid on?

(c) What are the consumers paying per unit?

(2) What are the local community development and family-wage employment opportunities with juniper utilization?

*Harvest, transport, primary processing, manufacturing*

(3) Is there an adequate workforce capacity in your working area to remove and utilize junipers with available markets, or if markets were available in the future?

*So far there is adequate harvest, transport and processing capacity*

(4) What workforce training initiatives are needed to prepare the local workforce
for juniper utilization work (e.g. equipment operation & maintenance, use of chainsaws)?

V. Needs Assessment: Assessing the strengths and weaknesses of juniper harvesting operations at present and into the foreseeable future AND challenges

(1) What things do contractors do well in your operations?

The K Falls Field Office has been working closely with Quicksilver for the past 2-3 years, particularly through the Gerber Stew Stewardship Contract. BLM pays Quicksilver to cut juniper and yard them to a landing point (about $250/acre). Then Quicksilver pays a modest price for the material at the landing and covers the cost of processing and hauling the material to a market. This has been a good relationship which helps BLM and local industry achieve their objectives.

(2) What are the challenges in your operations?

The big challenge is the yarding of the juniper. Mike Bechdolt said that cutting juniper, letting it dry for a year, and then dragging it over the ground was the equivalent of dragging a steel rake across the landscape. The damage to the existing understory vegetation from this kind of yarding is very dramatic. Using standard logging equipment (Timbco's, etc) in this kind of a scenario can have severe resource impacts and this is the reason why the K Falls BLM has limited utilization to such a small number of acres thus far. They have treated 25-30,000 acres in the last 7 years but have only utilized material from about 2000 acres.

This yarding issue is one piece of a broader puzzle that the K Falls BLM is trying to figure out: how to promote desired native vegetation and suppress invasive, non-native vegetation during juniper projects. They are trying to figure out how to ensure that native understory vegetation beats out cheatgrass in the post-juniper removal landscape. Seeding skid trails and landings immediately after treatment seems to help. They have also done tube planting of bitterbrush with some success. As we know from other places, a lot depends on the condition of the understory vegetation before the juniper removal.

(a) What are the harvesting system limitations?

See above

(b) What areas are presently in need of improvement?

Yarding; Post-treatment understory recovery; Costs per acre for treatments

(c) What opportunities do you see for equipment improvements?
Using yarding systems that do not entail dragging of whole trees (especially dry trees) could address some of the key issues. K Falls BLM and contractors are looking into forwarders and trailer systems. Mike thinks that the native shrubs and grasses could stand being driven over two or three times with rubber tires a lot better than they can stand having a whole, dry juniper tree dragged over them.

(d) Are there resource issues associated with the harvesting system (soils, vegetation, weeds, wildlife habitat, others)?

(e) Other challenges:

(3) How could more stable markets affect your operations?

K Falls BLM has substantial markets available for material. They have to resolve yarding issues to be able to provide more material to keep markets going. In fact, K Falls BLM did not sell any material to REACH last year even though REACH wanted it because the number of acres where utilization is allowed are so limited.

(4) For the challenges that you identified above, how would you like to see the problems resolved, or the challenges met?

(5) For the above challenges, how might we get there?

One of the things that the K Falls Resource Area is doing to address the resource impacts of juniper treatments is analyzing which sites are the most resilient (and are thus suitable for material extraction. At its most basic, they want to avoid extraction in areas with shallow soils and heavy weed presence. They are analyzing their whole Resource Area using GIS. The key data inputs are: BLM ecological site index information (to rate their rangelands) and access factors (roads, slope, soils). They are also looking at the concentrations of weeds in areas. After identifying what are the appropriate sites to do treatments and what the characteristics of that area are they can write start to finish prescriptions.