Natural Resources Conservation Service

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Purpose of Presentation

- This presentation outlines the potential brush management practices that can be used to address resource concerns on ranches in this area
- It discusses the feasibility of utilizing brush management and the specifications that NRCS requires
- A brief discussion of eligibility and payments



Conservation planning is also intended to help farmers and ranchers comply with a variety of environmental regulations

- Clean Water Act
- Clean Air Act
- Endangered Species Act
- State laws
- Tribal laws



Technical References

- Plants Database
- Web Soil Survey
- Water Supply Forecasts
- Publications
- Ecological Site
 Descriptions
- NRCS Technical Guide

- Coordination with local, state and federal agencies
- Assistance to Tribal Entities
- National Planning Procedures Handbook

Types of Brush Management

Mechanical
Chemical
Biological
Prescribed Fire

Brush Management – Mechanical (314)



Brush Management – Mechanical (314)



Brush Management -Mesquite grubbing (314)



Brush Management – Chemical (314)



Brush Management –Weed Control -Back pack spraying (315)



Brush Management-Chemical





Post Treatment



Prescribed Fire (338)-requires much more planning



NRCS Planning for Brush

- We have several documents that we require in order to apply any method
- Inventory of the existing condition with comparison to Ecological Site Description is required
- Decision support documents help producers determine the best method
- Let's look at these documents

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	tulip pricklypear	OPPH	<u>Opuntia</u> phaeacantha	0	1	*
Tree				<u>Annual Proe</u> (pounds pe		
<u>Group</u> <u>Group</u> <u>name</u> 11 -Trees	<u>Common name</u>	<u>Symbol</u>	Scientific name	Low 0	<u>High</u> 25	
	alligator juniper	JUDE2	<u>Juniperus deppeana</u>	0	2	
•	oneseed juniper	JUMO	<u>Juniperus</u> <u>monosperma</u>	0	2	4
	Arizona white oak	QUAR	<u>Quercus arizonica</u>	0	20	
	Emory oak	QUEM	<u>Quercus emoryi</u>	0	25	
					l	
Annual Produ	uction by Plant	Туре				

Annual Production (Ibs/ac)

Representative

8.50 x 11.00 in

Monitoring Requirements as stated in our standard

Prepare brush management plans and specifications that conform to all applicable Federal, State, and local laws. These documents will contain the following data as a minimum:

- 1. Goals and objectives clearly stated.
- Pretreatment cover or density of the target plant(s) and the planned post-treatment cover or density and desired efficacy.
- Maps, drawings, and/or narratives detailing or identifying areas to be treated, pattern of treatment (if applicable), and areas that will not be disturbed.
- 4. A monitoring plan that identifies what should be measured (including timing and frequency) and that documents the changes in the plant community (compare with objectives) will be implemented.

Monitoring Recommendations

- Perennial grass basal cover is a good measurement as basal cover is included in NRCS ESD's and it is a vegetation metric that many studies have shown is important for long term cover monitoring for herbaceous plants. This is the most reliable cover metric since above ground plant parts can vary based on rainfall and the time of gathering basal cover data is not as critical as other metrics since basal cover is not as affected by livestock removal of taller portions of the plants that are used in for example production and similarity index calculations.
- We also generally set up 1/100th acre plots to count stems before and after for % kill
- Installing a Key Area on the site to look at frequency and get a photo before and after is ideal.

Payment Schedule

Mechanical, Hand tools		\$82.44
Mechanical, Small Shrubs, Light Infestation		\$49.54
Chemical, Aerial Applied (Resprouting Species)		\$67.76
Split-method event series		\$115.40
PJ Mechanical Removal - Low Density		\$103.60
PJ Mechanical Removal - Moderate Density		\$147.41
PJ Mechanical Removal - High Density		\$233.41
Riparian Area or Sensitive Area		\$768.84
Mechanical & Chemical, Small Shrubs, Medium Infestation	ac	\$79.25
Mechanical & Chemical, Small Shrubs, Heavy Infestation		\$91.24

CULTURAL RESOURCE SURVEYS ARE REQUIRED FOR MECHANICAL CHOICE – Not included in the payment we provide but we can do the survey for you

Photo courtesy of USDA

NRCS Key Points

- Species must show that the amount present is in excess of the historic condition to treat.
- Monitoring pre and post treatment should be done and we can assist.
- 80% kill is ideal but, due to Programs restrictions, we must pay timely. Split treatments should be considered.
- Brush Management has a 10 year lifespan. We won't retreat before 10 years but maintenance is suggested on your own (unless split treatments are selected).

NRCS Key Points (cont)

- 2 years deferment during the growing season is required – July 1st – September 30th at minimum.
- We do not treat main washes. 100 foot buffer is required.
- Diesel is not allowed, considered a pollutant.
- Cultural Resource surveys are required for mechanical. Large areas may be surveyed at less than 100% - over 640 acres according to our agreement.

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