Guide to Vegetation Treatment Costs for Land Management in the Great Basin Region

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| **Prescribed Burn**  
Pinyon-Juniper Ecosystems and Sagebrush Ecosystems  
Vegetation Type: Low Cost: Grass (Fuel Model 1–3); Medium Cost: Shrub (Fuel Model 4–7); High Cost: Forest (Fuel Model 8–11)  
Size of Treatment Area: Per acre costs decrease as treatment area increases.  
Operational Difficulty: Burn units on steep slopes, with mid-slope control lines, or adjacent to homes will have higher costs.  
**Low Cost:** $5–$25 per acre  
**High Cost:** $125–$175 per acre  
| - Low per acre cost when treating large areas  
- Mimics natural processes which leads to positive public perception  
- Can effectively reduce fuel load and intensity of future fires  
- In areas with an abundance of native plants a prescribed burn performed in favorable weather conditions can favor the return of native species  
| - Intensive planning requirements and liability concerns  
- Requires qualified applicators  
- Impaired air quality and reduced aesthetics over short term  
- Imprecise and variable treatment as fires may burn hotter or cooler than planned  
- Need for adequate fire weather conditions, narrow time period for application  
- In certain plant communities can favor return of non-native plants such as cheatgrass |
| **Chainsaw Cut**  
Pinyon-Juniper Ecosystems  
Tree Density: Cost increases with density of trees to be cut.  
Terrain: Steep terrain and distance from roads or difficult accessibility increase cost.  
Post-Cut Treatment: If trees are valued as a product (e.g., firewood) they may be removed for free or reduced price. If trees are to be stacked, chipped, burned or scattered, cost increases with labor intensity.  
**Low Cost:** $10–$40 per acre  
**High Cost:** $200–$600 per acre  
| - Precise treatment, ability to target trees and control boundaries  
- Ability to treat areas too steep for heavy machinery  
- Promotes growth of understory vegetation by minimizing disturbance and removing competition  
- Cut trees, slash or chips can be left on site to control erosion  
| - Can be prohibitively expensive in rough, inaccessible terrain with high tree density  
- Fuel loads can be increased by leaving cut trees on site  
- High density of cut trees left on site can limit mobility of large herbivores and kill desirable plant species by shading  
- Understory response can be unpredictable and slow, especially in areas of high tree density  
- Small trees may be overlooked, sometimes requiring follow-up treatment |
| **Heavy Machinery**  
Pinyon-Juniper Ecosystems (Mastication, Chaining, Feller-buncher)  
Sagebrush Ecosystems (Mowing, Disking, Harrowing)  
Terrain: Steep slopes and rough terrain increase cost and can even prohibit use of heavy machinery.  
Vegetation Type and Density: Mature, dense stands of trees are the most costly to treat and costs increase where multiple passes are required.  
Fuel Prices: High fuel prices as well as remoteness of treatment site increase cost.  
**Sagebrush Treatment:** $10–$65 per acre  
**Pinyon-Juniper Treatment:** $50–$500 per acre  
| - Can be very effective in reducing fuel loads and thinning sagebrush, pinyon and juniper  
- Ability to target specific trees (mastication, feller-buncher), vary treatment intensity and precisely control treatment boundaries  
- Can be applied in combination with prescribed burn to increase benefit/decrease cost  
- Flexibility in timing of treatment  
| - Access to roads and fuel supply required  
- Should avoid use when soils are excessively wet  
- Can require follow-up treatment for small trees  
- Costly in cases of high tree density and rough terrain  
- Heavy machinery cannot be used in excessively steep, rough or inaccessible terrain |
| **Herbicide Application**  
Sagebrush Ecosystems  
Cost of herbicide and rate of application: Herbicides can be applied at different rates according to vegetation characteristics and management goals.  
Application method: Application by hand in rugged terrain is most costly, while aerial and ground rig application cost significantly less.  
**Low Cost:** $8–$20 per acre  
**High Cost:** $50–$250 per acre  
| - Can effectively target specific plants over large area  
- Often most cost effective method to remove undesirable plant species or groups  
- Viable option in remote, steep or rugged terrain when applied aerially  
| - Negative public perception and concerns regarding broader environmental impact  
- Can increase fuel flammability in the short-term  
- Potential for targeted species to develop immunity if overused |

*High and low costs represent those commonly reported by SageSTEP collaborators and the NRCS in 2010 and 2011. Costs reported here are meant to provide a starting point only and should be verified through additional research. Many of these treatments are eligible for cost-share assistance through the NRCS Environmental Quality Incentives Program. Contact your local NRCS agency or visit [http://www.nrcs.usda.gov/programs/equip/](http://www.nrcs.usda.gov/programs/equip/) for more information.  
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