

## Output 2: Implementation Checklist

|  |  |   |  |
|--|--|---|--|
| <b>Project:</b> Badger Jelms Shrub Planting  |  | <b>District:</b> Laramie Ranger District        |  |
| <b>Partnership Project:</b> Yes  |  | <b>Primary Partner(s):</b> Mule Deer Foundation |  |
| <b>Accounting Unit:</b> Fox Wood   |  | <b>Accounting Unit:</b> Choose an item.         |  |
| <b>Objective(s):</b> #3 enhance forest and rangeland resiliency to future insect and disease infestations; #5 restore wildlife habitat                               |  |   |  |
| <b>Project Description:</b> Plant native mixed mountain shrubs on 554 acres to improve browse and thermal cover in big game crucial winter range.                    |  |   |  |
| <b>Location Description:</b> In / near the 2018 Badger Creek Fire Area, 1 to 5 miles west and northwest of Jelm, WY  |  |   |  |
| <b>Legal Location:</b> In portions of Township 13 North, Range 77 West. 6th P.M., Albany County, Wyoming.  |  |   |  |
| <b>Management Areas:</b> In Forest Plan Management Area 3.58 (Crucial Deer and Elk Winter Range).  |  |   |  |
| <b>Treatment Opportunity Areas:</b> Entirely in the Wildlife Emphasis Treatment Opportunity Area (TOA) and partially in the Fuels Treatment and Safety Emphasis TOA. |  |   |  |
| <b>Pinyon Data Location(s):</b> <a href="https://usfs.box.com/s/nx681po60hw5jsscsoepe8bbgg5cdt80">https://usfs.box.com/s/nx681po60hw5jsscsoepe8bbgg5cdt80</a>        |  |   |  |
| <b>GIS Data Location(s):</b> T:\FS\NFS\MBRTB\Project\LaVA_Implementation\GIS\Badger\Data   |  |   |  |

| Available Treatment Acres from Record of Decision |        |                      |         |                            |        |
|---|--------|----------------------|---------|----------------------------|--------|
| <b>Stand Initiation:</b>                          | 83,209 | <b>Intermediate:</b> | 148,780 | <b>Other Treatment(s):</b> | 51,821 |

| Project Treatment Acres  |              |                       |              |                               |              |
|--------------------------|--------------|-----------------------|--------------|-------------------------------|--------------|
| <b>Stand Initiation:</b> | 0            | <b>Intermediate:</b>  | 0            | <b>Other Treatment(s):</b>    | 554          |
| <b>Treatment Type</b>    | <b>Acres</b> | <b>Treatment Type</b> | <b>Acres</b> | <b>Treatment Type</b>         | <b>Acres</b> |
| n/a                      | 0            | n/a                   | 0            | Mixed mountain shrub planting | 554          |

| Management Areas       |                        |                        |                        |
|------------------------|------------------------|------------------------|------------------------|
| <b>Management Area</b> | <b>Treatment Acres</b> | <b>Management Area</b> | <b>Treatment Acres</b> |
| 3.58                   | 554                    | n/a                    | 0                      |

| Wildlife Areas Acreage                 |                        |                                 |                        |
|--|------------------------|---------------------------------|------------------------|
| <b>Security Area (Accounting Unit)</b> | <b>Treatment Acres</b> | <b>Lynx Analysis Unit</b>       | <b>Treatment Acres</b> |
| n/a                                    | 0                      | None – Snowy Range linkage area | 0                      |

| <b>Specified Road Work (Type)</b> | <b>Miles</b> | <b>Temporary Road Mileage Available</b>   | <b>Project Temporary Road Mileage</b> | <b>Balance of Temp Roads</b> |
|-----------------------------------|--------------|---|---------------------------------------|------------------------------|
| n/a                               | 0            | 575.3   | 0                                     | 575.3                        |
|                                   |              | All temporary road mileage is estimated. Actual road miles will be tracked during the monitoring phase. |                                       |                              |
|                                   |              |   |                                       |                              |

LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework  
Output 2: Implementation Checklist: Badger Jelm Shrub Planting

| Resource                        | Pre-Treatment SOPs (Attachment 4) have been reviewed | Project Design Features (Attachment 2) are appropriate | More rigorous site-specific design features are recommended | N/A Resource is not present in the project area | Signature / Date*       |
|---------------------------------|--|--|---|---|-------------------------|
| Botany                          | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Greg Pappas 7/7/23      |
| Boundary Survey                 | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Hoyt Meyer 9/10/23      |
| Engineering                     | <input checked="" type="checkbox"/>                  | <input type="checkbox"/>                               | <input type="checkbox"/>                                    | <input checked="" type="checkbox"/>             | Nyoka Erikson 8/21/23   |
| Fire and Fuels                  | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Jeremy McMahon 7/10/23  |
| Fisheries                       | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Dominique Lujan 8/21/23 |
| Heritage                        | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input checked="" type="checkbox"/>                         | <input type="checkbox"/>                        | Hallie Pelton 8/18/23   |
| Hydrology                       | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Lucie Law 7/24/2023     |
| Lands and Non-Rec. Special Uses | <input type="checkbox"/>                             | <input type="checkbox"/>                               | <input type="checkbox"/>                                    | <input type="checkbox"/>                        |                         |
| LEI                             | <input type="checkbox"/>                             | <input type="checkbox"/>                               | <input type="checkbox"/>                                    | <input type="checkbox"/>                        |                         |
| Noxious Weeds / Invasives       | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Jackie Roaque 8/21/23   |
| Public Engagement               | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Matt Schweich 8/8/23    |
| Range                           | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Jackie Roaque 8/21/23   |
| Recreation                      | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Jonathon Brooks 9/11/23 |
| Rec. Special Uses               | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Jonathon Brooks 9/11/23 |
| Scenery                         | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Jonathon Brooks 9/11/23 |
| Silviculture                    | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Tim Douville 7/20/23    |
| Soils                           | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input checked="" type="checkbox"/>                         | <input type="checkbox"/>                        | Mike Kasten 8/18/23     |
| Timber                          | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Curtis Prolic 7/20/23   |
| Wildlife                        | <input checked="" type="checkbox"/>                  | <input checked="" type="checkbox"/>                    | <input type="checkbox"/>                                    | <input type="checkbox"/>                        | Ruben Mares 8/21/23     |
| Other                           | <input type="checkbox"/>                             | <input type="checkbox"/>                               | <input type="checkbox"/>                                    | <input type="checkbox"/>                        |                         |

\*Signatures acknowledge completion of the pre-treatment SOPs, participation in a project review, and/or implementation of this project.

**Summary of How Public Feedback was Incorporated / Addressed:**

No public feedback was received for the Badger Focus Area or Jelms Shrub Planting Project.

## Pre-treatment Standard Operating Procedures and Project Design Features

A set of pre-treatment Standard Operating Procedures (SOPs) (Appendix A, Attachment 4) and Project Design Features (Appendix A, Attachment 2) are applied to each project prior to its implementation. It is the responsibility of the IDT resource specialists to confirm that the planned project: a) meets applicable Forest Plan standards and guidelines; b) is consistent with the SOPs, design features, MFEIS, and ROD; c) surveys / fieldwork has been completed; and d) if necessary, provide any additional design features and attach those to this checklist.

The project design features were developed to conserve and protect resources during implementation of the LaVA Project. Most of the design features were derived or adapted from Forest Plan standards and guidelines, the Region 2 Watershed Conservation Practices Handbook, national core best management practices (BMPs) for water quality management on National Forest System lands, and BMPs developed by the State of Wyoming.

The design features are expected to provide adequate resource protection under most treatment scenarios. However, there may be instances where additional design features are needed to address locally unique conditions. The additional project design features have been developed by Forest Service resource specialists and approved by the responsible official.

The sections below list the SOPs and design features by resource area. A checked box (☑) indicates that an SOP is applicable to the treatment. Those identified with an asterisk (\*) are required for all treatments per law, regulation, policy, or for consistency with the MFEIS, design features, or decision triggers, to the extent they are applicable to the project.

### Air Quality

#### Pre-Treatment SOPs

- ☐ \*Ensure all activities are designed to comply with the Clean Air Act (**PHY-AIR-S.1.**)
- ☐ \*For smoke generating activities, obtain State of Wyoming air quality (smoke) permits (**PHY-AIR-S.1.**)
- ☐ \*Identify smoke sensitive areas and design the burn plan to limit effects. (**PHY-AIR-G.1.**)
- ☐ \*Consult and incorporate the State of Wyoming Department of Environmental Quality-Air Quality Division's Vegetative Material Open Burning Guide into the Burn Plan. (**PHY-AIR-G.1.; WAQSR Chapter 10, Section 2(g)**)
- ☐ Request and acquire spot weather forecasts prior to ignition.

#### During Treatment SOP

- ☐ \*Monitor smoke effects and dispersion, adjusting ignition if necessary. (**PHY-AIR-G.1.; WAQSR Chapter 10, Section 2(g); MON-AIR-1**)

## Amphibians, Fish, and Wildlife

### Pre-Treatment SOPs

- ☒ Conduct site visits and GIS review of treatment units to determine areas that must be avoided and areas that need field survey. GIS review includes but is not limited to evaluation of the following: chytrid fungus data, habitat data, old growth, security areas, seasonal ranges, mining information, watercourse and wetland/fen info, and survey data for the appropriate species.
- ☒ \*Complete surveys required by law, regulation, or policy. The list below is not exhaustive, nor does it apply to every treatment. The appropriate biologist(s) will determine which surveys need to be conducted. **(BIO-TESS-S.1., BIO-TESS-S.2., BIO-TESS-S.3., BIO-TESS-S.4., BIO-TESS-S.5., BIO-TESS-S.6., DF GOS-1, DF AF-7, SRLA (Southern Rockies Lynx Amendment, Greater Sage-grouse Land Management Plan Amendment)**
  - Northern goshawk
  - Bald eagle
  - Boreal toad
  - Wood frog
  - Caves/mines (for bats)
  - Canada lynx habitat
  - Other Rocky Mountain Sensitive Species as needed
  - Species of Local Concern as needed
  - Old growth
  - Elk security
  - Big game seasonal range
- ☒ Ensure treatments are not planned in Preble's Meadow Jumping Mouse Area of Influence in Fox Wood Accounting Unit along the Laramie River. **(DF PM-1)**
- ☐ If treatments are planned near a nest/roost (northern goshawk, bald eagle, or other sensitive raptor) or breeding habitat of bighorn sheep, greater sandhill crane, Columbian sharp-tailed grouse, or Greater sage-grouse, ensure the appropriate timing restrictions are applied. **(BIO-WILD-S.2., BIO-TES-S.6, BIO-TESS-S.7, DF GOS-1, DF AMF-1)**
- ☐ \*Review treatment prescriptions outside of WUI to ensure unique overstory and understory features, and diversity will be retained where possible. Unique features may include structurally unique snags or uncommon trees, and woody debris. **(DF MB-1).**
- ☒ Coordinate treatment design and prescription with other resources as needed.
- ☐ \*Ensure treatments are designed to maintain or improve wildlife habitat and security areas won't be reduced more than identified in the decision trigger table. **(DT-Iss-5)**
- ☐ Ensure treatments won't exceed the thresholds for treating lynx habitat as described in the wildlife BA and decision trigger table. **(DT-Iss-3, Southern Rockies Lynx Amendment (SRLA) Standards and Guidelines)**
- ☐ Ensure treatments in Greater sage-grouse habitat follow the Greater Sage-grouse Land Management Plan Amendment.
- ☐ If necessary to protect biotic resources, develop additional project design features and attach to this checklist. **(DF AMF-7)**

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

Amphibians and Fisheries Design Features

**Objective:** Conserve populations of amphibian and fisheries species and maintain or improve habitats.

| <b>Design Feature</b>   | <b>Applicable? (Yes, No, Modified)</b> | <b>If no, explain. If modified, describe modification and rationale.</b>  |
|---|--|---|
| Keep heavy equipment out of streams during fish spawning, (May 15 to July 31 for cutthroat and rainbow trout, October 15 to November 30 for brook trout and brown trout). <b>(DF-AF-1)</b>      | No                                     | No heavy equipment use.   |
| Install stream crossings as perpendicular to flow as practicable. <b>(DF-AF-2)</b>  | No                                     | No new road construction, maintenance, or rerouting of roads; thus, no stream crossings.  |
| In consultation with fisheries and timber staff, Forest Service resource specialists will locate, design, and designate any temporary road crossings of perennial streams. <b>(DF-AF-3)</b>     | No                                     | No perennial stream crossings.  |
| Avoid direct ignition in riparian and wetland areas; allow fire to back into these areas. <b>(DF-AF-4)</b>  | No                                     | Not a fuels project. No prescribed fire.  |
| Use spill containment equipment if it is necessary to locate staging and refueling areas within water influence zones. <b>(DF-AF-5)</b>   | No                                     | No staging or refueling areas.  |
| Felled material or other debris with potential to block stream culverts or bridges will be removed from the high-water mark. <b>(DF-AF-6)</b>   | No                                     | No trees will be felled.  |
| In consultation with fisheries staff, develop site-specific design criteria to ensure protection of boreal toad, wood frog, and northern leopard frog habitat and populations. <b>(DF-AF-7)</b> | No                                     | The project area does not contain habitat for boreal toad. Wood frog and northern leopard frog were not detected in the project area. |

Wildlife Design Features

**Objective:** Conserve populations of threatened, endangered, and sensitive species and maintain or improve wildlife habitats.

| <b>Design Feature</b>  | <b>Applicable? (Yes, No, Modified)</b> | <b>If no, explain. If modified, describe modification and rationale.</b>  |
|--|--|---|
| General: Vegetation management and ground-disturbing actions within ¼ mile of suitable goshawk nesting habitat will be surveyed using the accepted protocol (Joy et al. 1994) between June 19 and August 4 of the year prior to actions or the year actions are expected to occur. Where active nests or territories are identified, Forest Plan standards will apply (USDA 2003a). <b>(DF-WILD-1)</b> | No                                     | This project does not involve vegetation management. This project will not remove goshawk nesting area habitat, post-fledging habitat, or foraging habitat. The project is also anticipated to occur outside critical periods that correspond with goshawk reproductive stages. |
| Migratory Birds: Outside the wildland-urban interface, vegetation management actions will be designed to retain or promote unique features for overstory and understory diversity if feasible. These features can include items such as snags, uncommon trees, or woody debris. <b>(DF-MB-1)</b>   | No                                     | The project is anticipated to occur outside migratory bird nesting season.  |

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale.                   |
|---|---------------------------------|---|
| Preble's Meadow Jumping Mouse: No treatment will occur in the Preble's meadow jumping mouse Area of Influence (766 acres) that occurs in the LaVA project area, located adjacent to the upper Laramie River in the southeast corner of the Fox Wood accounting unit. This area occurs within Township 13 North, Range 77 West, section 33 and Township 12 North, Range 77 West, section 4. <b>(DF-PM-1)</b> | No                              | The project area is outside suitable habitat for the Preble's meadow jumping mouse. |

Columbian Sharp-Tailed Grouse Design Features

Design criteria for shrubland treatments within two kilometers (1.24 miles) of Columbian sharp-tailed grouse leks (based on Hoffman and Thomas 2007 and Hoffman et al. 2015).

LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework  
Output 2: Implementation Checklist: Badger Jelms Shrub Planting

| Design Feature   | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale.                   |
|--|---------------------------------|---|
| Prioritize treatment in Columbian sharp-tailed grouse habitat to manage conifer invasion in shrublands and manage over-mature (more than 40 percent canopy cover) mountain shrublands, especially Gambel oak. Prioritize treatment on ridges, mesas, and other flat topography. <b>(DF-CS-1)</b>   | No                              | The project area is outside suitable habitat for the Columbian sharp-tailed grouse. |
| Prescriptions can treat up to 20 percent of over-mature sagebrush shrublands. Individual treatment areas can vary up to two to 10 hectares. Prioritize treatment in over-mature stands (more than 40 percent canopy cover). Retain some over-mature stands within 400 meters of leks. <b>(DF-CS-2)</b>   | No                              | See above   |
| Prescriptions can treat up to 30 percent of over-mature mountain shrublands, focusing on Gambel oak. Individual treatment areas can vary up to 20- to 100-hectare patches. Future treatments can occur at 5 to 10-year intervals in remaining stands. Where mountain shrublands comprise less than 15 percent of the area, prescriptions can treat up to 10 percent of the over-mature mountain shrublands with subsequent treatments at 10- to 15-year intervals. Treatment areas can vary up to 2- to 10-hectare patches. <b>(DF-CS-3)</b> | No                              | See above   |
| Prescribed fire can occur before April 15, during September if there will be substantial early fall snow to cover treated areas, or after September. <b>(DF-CS-4)</b>  | No                              | See above   |
| Treated areas should be rested from livestock grazing for one to two growing seasons unless mountain shrubs have resprouted sufficiently and grass and forb cover is adequate for long-term habitat productivity. If mountain shrub and grass and forb response is not adequate, additional measures such as adaptive livestock management or temporary fencing can be adopted until recovery occurs. <b>(DF-CS-5)</b>   | No                              | See above   |

## Rare Plants

### Pre-Treatment SOPs

- ☒ \*Conduct field surveys in the treatment units to determine if any individuals or populations of Rocky Mountain Region sensitive plant species or Medicine Bow NF species of local concern occur. **(DF RP-1, BIO-DIV-G.6.)**
  - ☐ If a sensitive species or species of local concern is found, the area will be flagged and avoided. A limited treatment buffer around the species and/or habitat is usually applied as well.



*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

Rare Plant Species and Sensitive Ecosystems Design Features

**Objective:** Maintain ecological integrity and functioning of uncommon, sensitive, or otherwise vulnerable ecosystems. Protect populations of threatened, endangered, and sensitive plant and pollinator species and maintain viability of all plant species in the project area. The following design criteria were developed to comply with the standards and guidelines in the Forest Plan, meet the requirements of the National Forest Management Act and 2012 Final Planning Rule, and conform to the policy described in Supplement 2600-2017-1 to the Forest Service Manual 2600 – Wildlife, Fish, and Sensitive Plant Habitat Management, Chapter 2670 – Threatened, Endangered, and Sensitive Plants and Animals.

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale.  |
|---|---------------------------------|--|
| Rare plants: Threatened, endangered, Rocky Mountain Region sensitive, and local concern plant species will be subject to a limited-action buffer (typically 30 to 100 feet) in which heavy equipment will be prohibited and other activities may be limited, unless otherwise agreed upon by the botanist and District Ranger. Specific buffer distances will depend on plant and habitat characteristics and will be determined at time of discovery. <b>(DF-TESS-1)</b> | No                              | No known sensitive plants in the project area and expect minimal effects to native vegetation from shrub planting. |
| Meadows: Use of heavy equipment is prohibited in meadows and grasslands unless no other option is available. If heavy equipment use cannot be located outside these areas, Forest Service resource specialists will be contacted prior to implementation to determine whether additional surveys are needed, or special requirements are warranted to protect site integrity. <b>(DF-TESS-2)</b>  | Yes                             | Click or tap here to enter text.   |
| Pollinators: In consultation with Medicine Bow National Forest resource specialists, conduct vegetation management activities in a manner that protects or enhances pollinator habitat. The pollinator-friendly best management practices for Federal lands (draft, May 2015 or finalized version) will be used as a guide. <b>(DF-TESS-3)</b>  | Yes                             | No special measures necessary.   |

**Cultural / Heritage Resources**

Pre-Treatment SOPs

- ☒ \*National Historic Preservation Act compliance will be completed for each treatment area prior to implementation. This may include literature reviews, field surveys (if deemed necessary by the heritage specialist), and completion of State Historic Preservation Office and Tribal consultation. Surveys, reporting, and consultation may be conducted in accordance with a programmatic agreement. State Historic Preservation Office and Tribal consultation may identify additional cultural resource avoidance or protection measures. **(DF HR-1, SOC-HER-S.1, SOC-HER-S.2)**
- ☒ \*Site-specific measures to protect or enhance heritage resources will be determined at the time of treatment implementation and will be attached to this checklist. Generally, protection measures are to flag and avoid cultural sites; other measures may be taken as well but this is the standard. **(DF HR-3, SOC-HER-S.4.)**

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

During Treatment SOP

- ☒ \*If cultural materials or human remains are discovered, all activities in the immediate area will stop, the area secured, and the forest archaeologist and District Ranger will be notified immediately. Work will not resume in that area until the forest archaeologist has evaluated the material and has notified the District Ranger that the applicable requirements of 36 CFR 800 and the Native American Graves Protection and Repatriation Act have been completed. **(DF HR-2, SOC-HER-S.3., SOC-HER-G.5.)**

Heritage Resources Design Features

**Objective:** Protect cultural sites that need protection; fulfill National Historic Preservation Act requirements; and avoid, minimize, or mitigate unexpected adverse effects to heritage resources.

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale.   |
|---|---------------------------------|---|
| National Historic Preservation Act compliance will be completed for each treatment area prior to treatment implementation. This may include literature reviews, field surveys (if deemed necessary by the heritage specialist), and completion of State Historic Preservation Office and Tribal consultation. Surveys, reporting, and consultation may be conducted in accordance with a programmatic agreement. State Historic Preservation Office and Tribal consultation may result in additional cultural resource avoidance or protection measures. <b>(DF-HR-1)</b> | Yes                             | Click or tap here to enter text.  |
| If cultural materials or human remains are discovered, all activities in the immediate area will stop, the area will be secured, and a Forest Service archaeologist and District Ranger will be notified immediately. Work will not resume in that area until the archaeologist has evaluated the material and notified the District Ranger that the applicable requirements of 36 CFR 800 and the Native American Graves Protection and Repatriation Act have been completed. <b>(DF-HR-2)</b>   | Yes                             | Click or tap here to enter text.  |
| Site-specific measures to protect or enhance heritage resources will be determined at the time of treatment implementation. <b>(DF-HR-3)</b>  | Yes                             | Heritage resources were identified in the project area. Site-specific resource protection measures have been developed and provided to the project manager. |

**Fire / Fuel Treatments**

Pre-Treatment SOPs

- ☐ \*Incorporate the Forest Plan Management Area (MA) standards and guidelines into the treatment plans and/or burn prescription and burn plan. **(Forest Plan Chapter 2)**
- ☐ Create treatment plan to achieve desired conditions.
- ☐ Ensure fuels are piled/disposed of appropriately. **(DF INF-2)**

## Land Survey

### Pre-Treatment SOPs

- ☒ \*Prior to commencing any ground- or vegetation-disturbing activities, evidence of the PLSS (Public Land Survey System) will be marked for protection. The Forest Land Surveyor shall be consulted to assist with providing data, searching for and evaluating evidence, and locating and protecting monuments of the PLSS from destruction. (**DF INF-1**, 35 Stat. 845; 36 Stat. 884; 43 U. S. C. sec. 772).
- ☒ Property and boundary lines within 1/4 mile of any land and resource management activity shall be surveyed, located, and marked prior to the activity. This includes the location, by survey, of easements necessary for resource management, reference draft version FSH 5509.15, section 30.3. At this time, a finalized version of the policy on boundary management has not yet been approved.

## Range and Invasive Species

### Pre-Treatment SOPs

- ☒ \*For all proposed treatments or activities, assess the risk of noxious weed introduction or spread and implement appropriate mitigation measures. Areas may be excluded from prescribed burning where there are infestations of fire-proliferating species (cheatgrass and musk thistle). Weed-infested areas included in burns, except for annual grasses, will be treated with appropriate herbicides or other control methods, as needed, to minimize the spread of weed species pre-treatment, post-treatment, or both. (**DF INV-2, BIO-DIST-INVAS-S.1., BIO-DIV-G.3.**)
- ☐ \*If heavy equipment use, seeding, or the use of imported materials is proposed, ensure project design features are included in the contract/work order. (**DF INV-1, DF INV-3, DF INV-4; BIO-DIST-INVAS-S.2., BIO-DIST-INVAS-S.3.**)
- ☐ \*If the following are present, identify them as features to be protected from disturbance during treatment activities (**DF INF-1**):
  - ☐ Range improvements
  - ☐ Range transects and witness trees and posts
- ☐ Coordinate treatments with other resource specialists and with permittees. (**DF RNG-1**)

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

Rangeland Resources Design Features

**Objective:** Maintain grazing opportunities on suitable rangelands to achieve desired conditions. Desired condition includes emphasis on healthy native plant communities, minimizing noxious weeds and other non-native species.

| Design Feature   | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|--|---------------------------------|---|
| Treatment opportunities must be coordinated with Forest Service rangeland management specialists to provide adequate time to plan changes in grazing management and to limit effects to allotment management and permittee operations. <b>(DF-RNG-1)</b> | No                              | Livestock won't be present during project.                        |

Invasive Weeds Design Features

**Objective:** Maintain ecological integrity by preventing the introduction and reducing the spread of noxious weeds and invasive plant species in the project area. The following decision criteria were developed to comply with the direction in the forest plan, Executive Order 13751 – Safeguarding the Nation from the Impacts of Invasive Species, and the USDA Forest Service guide to noxious weed prevention practices.

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|---|---------------------------------|---|
| Cleaning of equipment: Require equipment to be cleaned of mud and plant debris and inspected before vehicles are moved into the project area to prevent introduction or spread of noxious or invasive weed species. <b>(DF-INV-1)</b>   | Yes                             | Click or tap here to enter text.                                  |
| Vegetation treatments: Manage vegetation treatments to promote native species and to hinder weed species germination. Prior to implementation, field conditions will be assessed to locate areas with existing infestations of weeds. Areas may be excluded from prescribed burning where there are infestations of fire-proliferating species (cheatgrass and musk thistle). Weed-infested areas included in burns, except for annual grasses, will be treated with appropriate herbicides or other control methods, as needed, to minimize the spread of weed species pre-treatment, post-treatment, or both. <b>(DF-INV-2)</b> | Yes                             | Click or tap here to enter text.                                  |
| Seeding: On sites where the probability of erosion or weed infestation is high, disturbed areas will be seeded with an appropriate mix of native plant species per the "Guidelines for Revegetation for the Medicine Bow-Routt National Forests and Thunder Basin National Grasslands" (signed 2007, as updated). Areas may not need to be seeded where duff or slash cover the ground, or where natural revegetation is expected to occur quickly. The intent is to intervene only if necessary, to establish effective ground cover to control erosion, prevent weeds, and meet scenic objectives. <b>(DF-INV-3)</b>            | No                              | No ground disturbance that could require seeding.                 |

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

| Design Feature   | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|--|---------------------------------|---|
| Imported materials: All materials imported from off-forest (erosion control materials, soil, mulch, etc.) will be certified weed-free or from a weed-free source or area. Forest-level source material (gravel pits and borrow areas) used for individual treatments will be inspected prior to use to inventory noxious weed presence and treated with herbicide as needed. If inspections cannot occur before implementation, identify where the material came from and monitor for noxious weed presence. <b>(DF-INV-4)</b> | Yes                             | Click or tap here to enter text.                                  |

## Recreation

### Pre-Treatment SOPs

- ☒ The Recreation Specialist will work with the team to inventory the recreation attributes that may be affected. The type of treatment and location can affect recreation activities and the quality of the recreation experience in the near term and over the long term. Evaluate how the project will affect recreation facilities and settings in the area. Use design features to ensure recreation opportunities are managed appropriately during implementation and in the long-term. Design projects to minimize effects on recreation users to the extent feasible, including having good communication with partners and the public about the effects of the activities. **(DT-ISS-8)**
- ☒ Review and incorporate both MA and geographic area standards and guidelines from the Forest Plan. **(Forest Plan Chapters 2 & 3)**
- ☒ Review the design features. If necessary to protect local conditions/resources, recommend additional design features and attach to this checklist.

### *Ski Areas SOPs*

- ☐ \*In MA 8.22, consult with ski area permit administrator about treatment plans and designs. **(DF REC-11, MA-8.22-REC-G.1.)**

### *Developed Recreation Sites SOPs*

- ☐ Consult with District Ranger to identify priority developed recreation sites for treatment and any other developed sites affected by treatment activities.
- ☐ Consult with District Ranger to determine if sites are managed by Forest Service or under permit with a concessionaire.
- ☐ \*Ensure slash and merchantable materials are removed from developed recreation sites after treatments have been completed. **(DF RC-1)**
- ☐ \*If possible, treat developed campgrounds during the less busy season of November 15-April 30. **(DF REC-2)**

### *Dispersed Recreation Sites/Activities SOPs*

- ☒ Consult with District Ranger to identify dispersed recreation sites that need to be protected and/or those that have a higher need for treatment. **(DT-ISS-8)**
- ☒ Consider effects to all types of dispersed recreation including hunting, fishing, special forest product collection, etc. when designing treatments and closures associated with treatments. **(MON-REC-11)**

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

*Trails SOPs*

- ☐ \*Consult with District Ranger to identify the location of any National Forest System Trail (NFST) to be affected by treatment activities. **(SOC-SCN-S.2.)**
- ☐ Assess whether designated National Scenic, Historic, or Recreation Trails including existing routes and areas where potential re-routes may be implemented will be affected. To limit effects to trails and scenic integrity, develop and attach additional design features to this checklist as needed.
- ☐ \*For treatments that may affect the Continental Divide National Scenic Trail, ensure no skidding occurs on the trail and provide alternate routes and/or detours as needed. **(DF REC-4, DF REC-5, DF REC-8)**
- ☐ \*For treatments that may affect the Continental Divide National Scenic Trail (CDT) Vegetation Treatments-Best Practices. Specific best management practices are listed below **(DF REC-4, DF REC-5, DF REC-8)**:
  1. ☐ Create irregular edges for treatment units visible from the CDT to mimic natural vegetation patterns.
  2. ☐ Consider the use of low intensity fire as a preferred method of fuels treatment and forest regeneration. Avoid scorching the tree canopy. Fire lines within 300 feet of the trail must be restored.
  3. ☐ Maintain a minimum of 30% canopy cover with 50% desired.
  4. ☐ Minimize effects from mechanized and hand treatments within 300 feet of the trail to promote a natural appearing setting.
  5. ☐ Mark only take trees and put the mark on the unseen side of the tree within 300 feet of the trail.
  6. ☐ Limit stump heights within 300 feet of the trail to a maximum of 6 inches on the uphill side. Cut stumps horizontally. Stumps should be covered with duff, dirt, or debris to hide or stain the newly exposed cut trunks.
  7. ☐ Retain healthy, large diameter or character trees in a manner that results in stable, wind-firm residuals that are seen within ¼ mile of the CDT.
  8. ☐ Trees should be felled in different random patterns in foreground and middle ground viewsheds on slopes greater than 20% if whole trees are left.
  9. ☐ Build burn piles 100 feet or more from the trail or behind natural screening.
  10. ☐ Do not use the CDT as a temporary road or as a route for skidding. Minimize skid trails across the route and make them perpendicular to the trail.
  11. ☐ Restore skid trails and roads within ¼ mile of the trail immediately following conclusion of treatment activity.
  12. ☐ Locate landings outside of foreground (up to ¼ mile from the trail) unless no other options are available.
  13. ☐ Clean up most slash including unburned piles after implementation for those units within 300 feet of trail.
  14. ☐ Notify CDT administrator and trail partners of vegetation projects well in advance of implementation.
  15. ☐ Manage trail user access during treatment activity to both protect users from safety concerns and to facilitate use.
- ☐ \*Identify managed snow trails; develop and recommend additional design features if necessary. **(DF REC-10)**

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

- ☐ \*Identify the types of uses of all trails that may be affected by treatments and recommend additional design features if necessary. Ensure trails are returned to pre-treatment conditions. **(DF REC-5, DF REC-9, DF REC-2)**
- ☐ \*Ensure that any crossing of trails (temporary roads) is done perpendicular to the trail. **(DF REC-3)**

*Recreation Special Uses SOP*

- ☐ Consult with District Ranger to identify the location of any authorized recreation special uses that could be affected by treatment activities. Identify the types of uses that could be affected. Develop and attach additional design features to this checklist if necessary to reduce adverse effects.

*Scenic Byways SOPs*

- ☐ \*Consult with District Ranger to identify the location of Forest, State, or National Scenic Byways and ensure MA standards and guidelines are incorporated. **(MA-4.2-FF-G.1., MA-4.2-IPM-G.1., MA-4.2-VEG-S.1., MA-4.2-VEG-S.1., MA-4.2-WILD-G.1.)**
- ☐ Ensure burned slash piles along the scenic byways are rehabilitated. **(DF SCN-2)**

Recreation Design Features

**Objective:** Maintain or improve the condition of recreation resources while enhancing recreation opportunities by improving public safety and accessibility around recreation features.

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale.                                    |
|---|---------------------------------|--|
| Remove operational slash and merchantable materials from developed recreation sites that are the direct result of logging the site. <b>(DF-REC-1)</b>   | No                              | No developed recreation sites in project area. No slash or merchantable materials will be generated. |
| Do not implement treatments in developed campgrounds during the highest periods of use or when damage to campground features is likely to occur due to snow depth. If treatments require implementation during snow cover or high use periods, coordinate with recreation staff to minimize conflicts with recreation use and damage to infrastructure. <b>(DF-REC-2)</b>                       | No                              | No developed campgrounds in project area.  |
| Temporary road or skid trail crossings of designated trails will be kept to a minimum. Any crossings will be perpendicular to designated forest trails to the extent practicable. <b>(DF-REC-3)</b>   | No                              | No trails in project area. No temporary roads or skid trails   |
| Minimize overlaying skid trails or haul roads on nonmotorized system trails. If trails are used as skid trails or haul roads, they will be returned to pre-existing conditions. Trail widths will not be increased. <b>(DF-REC-4)</b>   | No                              | No trails in project area. No skid trail or haul roads will be created or used.                      |
| When activities preclude use of a nearby trail, a) notify the public; b) consider identifying timeframes for safe travel on the trail; c) if activities are expected to preclude use for more than one season and a detour is feasible, provide a detour; and d) place warning signs on all trail access points and along the trail where treatment activities are occurring. <b>(DF-REC-5)</b> | No                              | No trails in project area.   |

LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework  
Output 2: Implementation Checklist: Badger Jelms Shrub Planting

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|---|---------------------------------|---|
| Unauthorized user-created routes within treatment boundaries may be decommissioned to discourage continued, illegal motorized use and to offset effects to resources. <b>(DF-REC-6)</b>   | Yes                             | Click or tap here to enter text.                                  |
| To the maximum extent possible, alternate route(s) or detours will be used during implementation to allow continued use of the Continental Divide National Scenic Trail and to mitigate scenery management effects during vegetation management operations. <b>(DF-REC-7)</b>   | No                              | No CDNST in project area.   |
| No skidding is allowed on or across the Continental Divide National Scenic Trail without prior coordination with recreation staff. Any skidding on or across the trail will be located to limit damage to the trail, which will be returned to pre-treatment condition. <b>(DF-REC-8)</b>   | No                              | No CDNST in project area.   |
| Coordinate with recreation staff on off-highway vehicle trails if vegetative treatments are planned on or adjacent to off-highway vehicle trails. Off-highway vehicle trails will be returned to pre-existing conditions. <b>(DF-REC-9)</b>   | No                              | No OHV trails in project area.                                    |
| Coordinate with recreation staff if winter operations are planned on snowmobile trails. <b>(DF-REC-10)</b>  | No                              | No winter operations planned.                                     |
| Design and implementation of vegetative treatments or associated activities (for example, access routes, staging, etc.) within MA 8.22 Ski Based Resorts – Existing and Potential) shall be coordinated with the Forest Service ski area permit administrator to ensure compatibility with current and potential recreational opportunities. <b>(DF-REC-11)</b> | No                              | No MA 8.22 in project area.                                       |

## Soils, Hydrology, and Wet Areas

### Pre-Treatment SOPs

- ☒ Consider the potential for cumulative watershed effects **(PHY-WAQ-S.2)**, based on the Treatment Tracking Workbook or other summary of equivalent clearcut area (ECA) for project watersheds, and follow the guidance in Attachment 1: LaVA Decision-Making Triggers when:
  - ☐ Past, present, and proposed activity levels in a watershed reach 20% ECA in watersheds with known stream health concerns (stream reaches with a diminished (Water Conservation Practices Handbook), nonfunctional (proper functioning condition), or not meeting designated uses (Wyoming Department of Environmental Quality) stream health category, which could be affected by the proposed treatment),
  - ☒ OR 25% ECA in watersheds without known stream health concerns.
- ☒ Based on site visits and GIS data, identify lakes, reservoirs, fens, wetlands, wet meadows, springs, intermittent, and perennial streams. **(DF HWA-1, DF HWA-1a, DF HWA-2, DF HWA-3, PHY-WAQ-S.4, PHY-WAQ-S.14)**
  - ☒ Recommend appropriate streams for “protected stream course” protection under timber sale contracts.
  - ☒ Recommend water influence zones (WIZ) buffers and document any deviations from design features and Forest Plan standards and guidelines.
  - ☐ Develop site-specific design features where necessary to protect water resources and include in this checklist.



Output 2: Implementation Checklist: Badger Jelms Shrub Planting

- ☒ All fens, wetlands, wet meadows, and WIZs delineated, flagged, and avoided. **(PHY-WAQ-S.15., BIO-DIV-G.7., PHY-WAQ-S.4., PHY-WAQ-S.7., DF HWA-1, DF HWA-1a, DF HWA-2, DF HWA-3.)**
- ☒ All water-related infrastructure (for example, ditches, reservoirs, pipelines, spring developments, wells, etc.) delineated, flagged, and protected. **(DF INF-1)**
- ☐ All SNOTEL and snow course infrastructure delineated, flagged, and protected.
- ☐ Determine the need for stream crossings. Design crossings to allow passage of water and sediment, to withstand expected flood flows, and allow free movement of resident aquatic life. **(DF AF-2, DF AF-3, PHY-WAQ-S.5.)**
- ☒ Review treatment plans, contracts, road packages, etc., for consistency with design features and Forest Plan standards and guidelines.
- ☒ Based on GIS data, soil surveys, or site visits, identify sensitive soil types including areas of severe erosion hazard rating, slopes greater than 40 percent, and landslide prone areas. **(DF SOIL-2, PHY-SOIL-G.1., PHY-SOIL-G.2.)**
  - ☐ If sensitive areas are present and can't be avoided, develop site-specific design features and include in this checklist. **(DF SOIL-4)**
- ☒ Create map products of sensitive soils (if needed) for use in the project design stage and contract maps. **(PHY-SOIL-G.2)**
- ☒ For treatments that alter vegetation, ensure soil design features 1, 5, 6, and 7 (if applicable) are included in contract packages. **(DF SOIL-1, 5, 6, & 7, PHY-WAQ-S.2., PHY-WAQ-S.3., PHY-WAQ-S.6.)**

During Treatment SOPs

- ☐ Review proposed temporary road locations and evaluate them for potential effects to sensitive soil types, including areas of severe erosion hazard rating, slopes greater than 40 percent, and landslide/mass failure prone areas.
- ☐ Review proposed temporary road locations for number and locations of stream crossings, length within WIZs, and the potential for effects to the hydrology of groundwater dependent ecosystems. **(PHY-WAQ-S.4. PHY-WAQ-S.5.)**
- ☐ Monitor implementation and effectiveness of BMPs outlined in Water Quality Management on NFS Lands (USDA 2012), Forest Plan standards and guidelines and design features to ensure compliance with State of Wyoming Water Quality Standards, the Wyoming Nonpoint Source Management Plan (WDEQ 2000) and the Clean Water Act.
- ☐ Spot check treatments to ensure adequate organic ground cover is maintained in each activity area to prevent harmful increased runoff. At least 60% effective ground cover should be maintained to lower the risk of soil erosion. When walking transects across the unit, no more than 4 out of 10 sample points should be bare ground. Effective ground cover includes surface rock, pine needles, low-lying vegetation, and mulch. **(DF-SOIL-3)**

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

Soil Design Features

**Objective:** Minimize disturbances to soil properties (physical, chemical, and biological) to ensure inherent ecological capacity and hydrologic functions of the soil resources are maintained.

| <b>Design Feature</b>   | <b>Applicable? (Yes, No, Modified)</b> | <b>If no, explain. If modified, describe modification and rationale.</b>   |
|---|--|--|
| When activities are planned over snow or frozen ground: <ul style="list-style-type: none"> <li>Conduct activities when frozen soil is more than 4 inches deep or snow or a combination of compactable snow and frozen soil is more than 12 inches thick. Snow quality should be such that it will compact and form a running surface for equipment by being moist and non-granular. <b>(DF-SOIL-1)</b></li> <li>Additional site-specific design features may be developed to minimize resource concerns.</li> </ul> | No                                     | No winter activities are planned.  |
| Prohibit soil-disturbing activities on slopes greater than 60 percent and on soils susceptible to high erosion and geologic hazard. Site-specific design features will be developed if these areas cannot be avoided. <b>(DF-SOIL-2)</b>  | Modified                               | Soil disturbance from hand planting shrubs is minimal. The small incision created in the soil surface for planting is closed when completed. This small disturbance is unlikely to cause accelerated soil erosion and will have little or no effect on soil resources. Establishing shrub cover will decrease splash erosion from rainfall, provide soil a slow organic matter input, and lower soil temperatures. |
| For mechanical treatments, maintain a minimum 60 percent effective ground cover across treatment units throughout the implementation period to provide long-term organic matter, nutrients, and erosion control. <b>(DF-SOIL-3)</b>   | No                                     | No mechanical treatment is proposed.   |
| Site-specific design features will be developed if treatment activities include operation of heavy equipment on slopes greater than 40 percent. <b>(DF-SOIL-4)</b>  | No                                     | No heavy equipment will be used.   |
| Designated skid trails will be used, when applicable, during timber harvest. Designated skid trails are recommended if more than three passes over the same ground is necessary or when not on flat ground. Designated trails are not necessary when harvesting over frozen ground, snow, or both. <b>(DF-SOIL-5)</b>   | No                                     | No timber harvest or skid trails are proposed.   |
| Where feasible, skid trails and landings from past harvests will be used to minimize new soil disturbance. <b>(DF-SOIL-6)</b>   | No                                     | Planting sites will be accessed by vehicles on open National Forest System roads or by walking. No vehicles will be driving off road for planting.   |
| Equipment operation shall not occur when ground conditions are such that extensive damage will result. If ruts develop that are six inches deep and 30 feet long or more, activities should stop. <b>(DF-SOIL-7)</b>  | Yes                                    | Applicable during fence construction.  |

Hydrology and Wet Areas Design Features

LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework  
Output 2: Implementation Checklist: Badger Jelms Shrub Planting

**Objective:** Maintain long-term ground cover, soil structure, water budgets, and flow patterns of wetlands to sustain their ecological functions.

| Design Feature   | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|--|---------------------------------|---|
| Fens: Treatment will not occur in fens. In addition, fens will be protected by a 300-foot limited-action buffer in which heavy equipment use will be prohibited. <b>(DF-HWA-1)</b>   | No                              | No fens identified in area.                                       |
| Wet meadows: No operation of heavy equipment, prescribed fire control lines, or tree removal will occur in seasonally wet, herbaceous- or shrub-dominated wetlands, commonly referred to as wet meadows. Wet meadows may also contain trees but do not include aspen woodlands or riparian gallery forests. <b>(DF-HWA-1a)</b>   | Yes                             |   |
| Wetlands, riparian areas, and aquatic ecosystems: When treating within non-excluded wetlands (see above), riparian areas, and aquatic ecosystems: <b>(DF-HWA-2)</b> <ul style="list-style-type: none"> <li>• Restrict temporary roads, landings, or main skid trails as recommended by resource specialists and approved by the line officer;</li> <li>• Hand fall and leave in place; or</li> <li>• Treat with mechanized equipment over a combined surface of 12 inches of frozen ground and snow.</li> </ul>  | Yes                             |   |
| Water influence zone: A buffer with a minimum horizontal width of 100 feet from the top of each stream bank or edge of wetlands will be applied to perennial and intermittent streams, lakes, reservoirs, riparian areas, and wetlands. However, buffers may vary depending on the type of wet area and site conditions, as agreed upon by resource specialists. When treating buffers including the WIZ, equipment use is permitted; <b>(DF-HWA-3)</b> <ul style="list-style-type: none"> <li>• If winter activities occur, the over-snow design feature <b>(DF-SOIL-1)</b> will apply.</li> <li>• Where feasible, avoid temporary roads, landings, main skid trails, or slash piles in the WIZ.</li> <li>• If the aforementioned are necessary in the WIZ, consult resource specialists. Prior to working in WIZ buffers, resource specialists will assess the need for site-specific design criteria for retention of coarse woody debris.</li> </ul> | Yes                             | Click or tap here to enter text.                                  |
| Winching of trees across streams is prohibited. <b>(DF-HWA-4)</b>  | Yes                             | Click or tap here to enter text.                                  |

## Timber

### Pre-Treatment SOPs

- ☒ Conduct GIS data and on-site evaluations to develop treatment unit plans.
  - ☒ GIS data consulted may include:
    - ☒ Forest Activity Tracking System (FACTS), Forest vegetation information (FSVeg/FSVegSpatial)
    - ☒ Forest GIS Data: Treatment Opportunity Areas, Geographic Areas, old growth, security areas, streams/wetlands/lakes, invasive species, threatened/endangered and sensitive species info (wildlife/botanical/amphibian), insect and disease data, transportation, recreation, etc.

Output 2: Implementation Checklist: Badger Jelms Shrub Planting

- ☐ On-site evaluations may include:
  - ☐ Stand exams or walk-through exams
  - ☐ Insect and disease surveys
  - ☐ Operational feasibility and access surveys
- ☐ Work with other resource area specialists to incorporate areas of concern into project design/plans.
- ☒ Use the results of the GIS analysis, on-site evaluations, and other resource surveys to determine existing conditions of stands, feasibility of treatment, and which vegetation treatment option(s) will be used (Appendix A – Attachment 3). Compare existing conditions to desired conditions for the MA(s).
- ☒ \*Consult and incorporate both the MA and geographic area standards and guidelines from the Forest Plan into treatment prescription/design. **(Forest Plan Chapters 2 &3).**
  - ☒ Specifically assess silvicultural treatments in old growth, wildland-urban interface (WUI), and leave tree and snag recruit requirements by MA. Include any explanations or justifications for deviations from direction in this checklist.
- ☐ Develop the following:
  - ☐ \*Silvicultural prescription and marking guides, including coarse woody debris, leave trees, snags and snag recruit requirements by MA, forest cover type, and/or designations such as WUI. **(BIO-SILV-S.2, BIO-SILV-S.5., BIO-SILV-S.6., BIO-SILV-G.1., BIO-SILV-G.2., BIO-SILV-G.5., Forest Plan Chapters 2,)**
  - ☐ Determine contract type (stewardship, timber sale, service, etc.)
  - ☐ Incorporate design features and relevant standards and guidelines into contract, by creating crosswalk with design features and contract provisions/clauses
  - ☐ Develop the logging plan. The logging plan includes:
    - ☐ Expected landing locations
    - ☐ Yarding/slash requirements
    - ☐ Logging system transportation network
    - ☐ Improvements to be protected
    - ☐ Watercourses and wetlands
  - ☐ Use R2 appraisal system to appraise cost of treatment
- ☐ Finalize boundaries (paint if necessary).
  - ☐ Mark units according to prescription/markings guide.

During Treatment SOP

- ☐ During implementation, spot check boundaries and activities to ensure contract (timber sale, stewardship, etc.) requirements and the prescription are being met, and the boundary markings are still intact; this is a standard and required part of contract administration.

LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework  
Output 2: Implementation Checklist: Badger Jelms Shrub Planting

Old Growth Design Feature

**Objective:** To maintain or enhance old forest across the landscape.

| Design Feature   | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|--|---------------------------------|---|
| If treatment in old growth is planned, replacement acres will be identified prior to implementation, per Forest Plan biological diversity standard 1. Vegetation management can be conducted in these stands if treatments maintain or promote characteristics of old growth stands, new stands are identified that meet the requirements of old growth, and these stands are incorporated into the Medicine Bow National Forest old-growth strategy. Treatment of old growth is prohibited in Forest Plan MA 5.15. <b>(DF-OG-1)</b> | No                              | Treatment is not in old growth                                    |

**Transportation System / Temporary Roads / Stream Crossings**

Pre-Treatment SOPs

- ☐ \*Depending on the planned treatment(s), apply the appropriate design features for transportation systems and haul routes to keep effects to existing routes and effects from temporary routes within the bounds disclosed in the MFEIS and ROD. **(DT-Iss-6)** Specifically, assess the following:
  - ☐ The condition of the existing roads to be used by the project.
  - ☐ The need for temporary construction or reconstruction (specify location if necessary, otherwise describe the areas or conditions where temporary roads will not be acceptable).
  - ☐ Based on the condition, expected use, and need for roads, produce a road package.
  - ☐ Ensure any temporary roads approach or cross other travel routes or watercourses perpendicular to travel or flow. **(DF AF-2, DF Rec-3)**
- ☐ \*If perennial streams require crossing, locate and design the temporary road crossing and include any timing restrictions if necessary to protect resources. **(DF AF-1, DF AF-3)**
- ☐ WDEQ must be consulted when crossing perennial streams, and a temporary turbidity increase application must be submitted. The assigned resource specialist will need to determine the current contact at WDEQ if this SOP is applicable.
- ☐ \*Incorporate the Forest Plan MA standards and guidelines into the treatment plans **(Forest Plan Chapters 2)**
- ☐ Develop additional design features when needed and attach to this checklist.
- ☐ \*Ensure temporary roads (and level 1 roads) remain closed to the public thru signage, gates, or other means. **(MON-8c)**

During Treatment SOPs

- ☐ \*Ensure adherence to contract and road design specifications during road reconstruction and maintenance. **(MON-8a)**
- ☐ \*Ensure temporary roads (and level 1 roads) remain closed to the public thru signage, gates, or other means. **(MON-8c)**

*LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework*  
*Output 2: Implementation Checklist: Badger Jelms Shrub Planting*

Temporary Road Construction, Landings, and Skid Trails Design Features

**Objective:** To decompact compacted soil in the temporary road surfaces, restore natural drainage, and prevent unauthorized motorized use after vegetation management.

| <b>Design Feature</b>   | <b>Applicable? (Yes, No, Modified)</b> | <b>If no, explain. If modified, describe modification and rationale.</b> |
|---|--|--|
| Erosion Control: Recontour temporary road template to the original contour to permit normal maximum flow of water. <b>(DF-RdEC-1)</b>   | No                                     | No temporary roads.  |
| Erosion Control: Remove culverts, install water bars, and restore stream channels to near natural dimensions. <b>(DF-RdEC-2)</b>  | No                                     | No temporary roads.  |
| Erosion Control: For the entire length of the temporary road, provide 35 percent to 65 percent ground cover by scattering debris on the route footprint. Ground cover range is provided to account for different harvest methods and project objectives. <b>(DF-RdEC-3)</b>   | No                                     | No temporary roads.  |
| Compaction: Rip or otherwise roughen the length of the temporary road prism to eliminate compaction, ensuring an average depth of 6 to 12 inches, as needed. Avoid continuous furrow lines as they function as conduits for water transport and do not eliminate compaction within the entire prism. <b>(DF-RdCOM-1)</b>  | No                                     | No temporary roads.  |
| Visuals and Motor Vehicle Access: Temporary road rehabilitation methods will be designed to effectively prevent motorized vehicle use by utilizing berms, boulders, slash, mulch, dead trees, or a combination. The obliteration method(s) selected will cover the temporary road for the sight distance from its origin. For the entire length of the temporary road, provide 35 percent to 65 percent ground cover by scattering debris on the route footprint. <b>(DF-RdVis-1)</b> | No                                     | No temporary roads.  |
| Timing: Complete rehabilitation of temporary roads will occur within three years after the vegetation management treatments have been completed. <b>(DF-RdT-1)</b>  | No                                     | No temporary roads.  |
| Timing: Skid trails and landings will be rehabilitated as needed to minimize soil and hydrologic effects. Site-specific measures will be developed at time of implementation. <b>(DF-RdT-2)</b>   | No                                     | No skid trails or landings.  |

**Visual Resources**

Pre-Treatment SOPs

- ☒ \*Identify treatment area's visual quality objectives based on Forest Plan MA guidance. **(Forest Plan Chapter 2, DF SCN-1, DF SCN-2)**
- ☒ If proposed treatment won't meet the visual requirements, develop additional design features and attach to this checklist.

LaVA Project MFEIS – Appendix A: Adaptive Implementation and Monitoring Framework  
Output 2: Implementation Checklist: Badger Jelms Shrub Planting

Scenic Resources Design Features

**Objective:** To provide high-quality scenery while allowing multiple-use management to occur.

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|---|---------------------------------|---|
| In all treatment areas, follow general direction and associated standards and guidelines in the “Scenery Management” section of the Forest Plan (pages 1-56 to 1-58). <b>(DF-SCN-1)</b>   | Yes                             | Click or tap here to enter text.                                  |
| Along scenic byways burned slash piles will be rehabilitated, if needed, within four years of the activity to eliminate the appearance of uncharacteristic disturbance. <b>(DF-SCN-2)</b> | No                              | No scenic byway.  |

**Public Engagement**

Pre-Treatment SOPs

- ☒ Advertise the opportunity to provide “proposed focus area and individual treatment area(s) feedback” using local media sources (e.g., radio, newspaper, twitter), the LaVA Implementation Website, StoryMap, and emails/mailings to the project mailing list.
- ☒ Host a workshop during the ‘Individual Treatment Phase’ of Appendix A.
- ☒ Accept public feedback for two weeks following the ‘Individual Treatments’ workshop.
- ☐ Consider and adjust treatment proposals in response to public feedback submitted during focus area and individual treatment area(s) phases.
- ☒ Attach to implementation checklist:
  - ☒ Summary of public feedback received during Focus Area phase, relative to treatment.
  - ☒ Summary of feedback received during the Individual Treatment Feedback phase.
  - ☐ Summary how public feedback was incorporated into the treatment plan(s).
- ☒ Host an annual monitoring field trip to review areas, post-treatment.
- ☒ Provide opportunities for public engagement if adjustments to Appendix A are warranted.
- ☒ Provide opportunities for public engagement if monitoring reveals the need for a Supplemental Information Report (FSH 1909.15, Chapter 18).

### Public Safety Design Feature

**Objective:** To provide safe conditions for the administrative operations and the public uses.

| Design Feature   | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|--|---------------------------------|---|
| Forest Service personnel will provide advanced notice to the public if roads are temporarily closed during project activities. Alternate access routes may be identified. Forest Service personnel will work cooperatively with the applicable federal, state, county, and local governments to post road closure information. Traffic control will comply with the Manual for Uniform Traffic Control Devices. <b>(DF-PS-1)</b> | No                              | No road closures are planned or expected.                         |

### Infrastructure Design Features

**Objective:** To protect improvements and investments.

| Design Feature  | Applicable? (Yes, No, Modified) | If no, explain. If modified, describe modification and rationale. |
|---|---------------------------------|---|
| All Forest Service authorized improvements (for example, fences, water improvements, survey monuments) will be protected during management activities. <b>(DF-INF-1)</b>  | Yes                             | Click or tap here to enter text.                                  |
| Slash piles should be removed as soon as practicable. If possible, locate all machine piles at least 100 feet from infrastructure. If possible, locate hand piles at least 50 feet from infrastructure. If not possible to meet the aforementioned distances, consult the zone fire staff or forest fuels specialist. <b>(DF-INF-2)</b> | No                              | No slash piles will be generated.                                 |

### Additional Design Features

**Objective:** To provide additional protection for resources not identified elsewhere in the checklist.

| Design Feature                   | Describe purpose and rationale for the added design feature. |
|----------------------------------|--|
| Click or tap here to enter text. | Click or tap here to enter text.                             |

### Finalize Treatment Plan – (Timber Sale Contract, Work Order, or Burn Plan)

The implementation team will finalize treatment plans and ensure all aspects of the SOPs and design features have been completed and approved by the line officer. The implementation team will ensure contracts, agreements, burn plans, and other implementation instruments are reflective of this framework.

### Contract Review (If applicable)

The Contracting Officer, TMA or COR, and NEPA Planner will review contract packages to ensure the applicable SOPs and design features are identified within the work order, contract, or various contract C provisions.



## **District Ranger Approval/Review**

The District Ranger will review the checklist and confirm that the treatment has been designed and planned accordingly. In particular, the ranger will review the SOPs and design features and confirm they apply to this treatment. By signing this checklist, the ranger confirms that this treatment is within the scope of the original analysis in the MFEIS and ROD.

**Proposed By (Project Manager):** Nicole Reed

**Signature and Date:**

**Reviewed By (NEPA Coordinator):** Matt Schweich

**Signature and Date:**

- ☒ **Approve proceeding with project. All resource concerns have been mitigated as recommended and the project is within the effects analyzed.**
- ☐ **Approve proceeding with project. Resource concerns could not be mitigated fully but project is still within effects analyzed under decision. Justification for proceeding is included in supplemental information.**
- ☐ **Do not proceed with project. Conditions since initialization of the project have changed substantially and need to be reassessed. Justification is attached.**

**Approved By (District Ranger):** Frank Romero

**Signature and Date:**