

Environmental Assessment (EA) Resources

Environmental information should be attached to the EA specific forms or to the Other Attachments form.

All potential impacts should have a statement explaining how these impacts will be **MITIGATED**. Mitigation statements must be included on the Environmental Assessment (EA) Worksheets. Mitigation is defined by the Montana Environmental Policy Act (MEPA) as:

- **avoiding an impact by not taking a certain action or parts of an action;**
- **minimizing impacts by limiting the degree or magnitude of an action and its implementation;**
- **rectifying an impact by repairing, rehabilitating, restoring the affected environment; or**
- **reducing or eliminating an impact over time by preservation and maintenance operations during the life of an action or the time period thereafter that an impact continues.**

The EA process is required by the Montana Environmental Policy Act and it also makes the project participants aware of environmental factors that require additional caution or a different treatment method to reduce the risk to the environment. Share the EA information with your project participants; it is for their benefit in caring for the environment.

Assistance in developing this information can be requested through the Montana Department of Agriculture with the specialists that review specific sections of the EA. Please contact Greta Dige 406-444-7882 or greta.dige@mt.gov will direct you to the person responsible for reviewing and approval of their specific EA section. You may also contact your local county weed district, local county extension agent, local conservation district, Natural Resource Conservation Service, and MSU for additional help. **START EARLY!!**

Requirements for Environmental Information from the Noxious Weed Trust Fund Final Programmatic Environmental Impact Statement [May, 2010] include:

Chemical Weed Control Programs

1. *Vegetation Type*
2. *Soil Type*
3. *Water Resources*
4. *Air Quality*
5. *Fish and Wildlife Habitat*
6. *Threatened, Endangered, Species of Concern*
7. *Historical and Archeological Sites*

Non-Chemical Weed Control Programs (grazing, mechanical, and cultural projects)

1. *Vegetation Types*
2. *Threatened, Endangered, Species of Concern*
3. *Fish and Wildlife Habitat*
4. *Historical and Archeological Sites*

- **Required:** Obtain an Environmental Summary Report from the Department of Agriculture (MDA), or the Montana Natural Heritage Program (MTNHP). Please include a project map, latitude/longitude, and general size of the project when making a report request. This report can be used to answer questions on the General Vegetation, Wildlife Habitat and TES Species forms. Upload the report to "Other Attachments".

To obtain a report, contact either of the following:

- MDA- Greta Dige (greta.dige@mt.gov)
- MTNHP- [Request a Report here](#)

- 1) **GENERAL VEGETATION TYPE:** This section should address impacts on non-target vegetation of terrestrial plant communities. Plant community type and plant species information can be found using the MTNHP Map Viewer, herbicide labels and/or the Environmental Summary Report.
- Impact/Risk:** Use the Environmental Summary Report and herbicide labels to complete the table. Answer each question regarding the severity of impact from the proposed project activities. For each question, answer if mitigation is possible (if no impact is anticipated, answer “NA”).
 - Mitigation:** List species in the area that are susceptible to herbicide damage (find on labels and in the EA Summary Report). Describe mitigation strategies for any minor or potentially significant impacts.
 - Some mitigation strategies may include creating a buffer, spot spraying instead of broadcasting, using biocontrol in riparian areas, etc. Remember, not all impacts are negative. Most weed control efforts will only temporarily affect non-target plants, and in the end create healthier plant communities. These impacts should be listed as well as any negative impacts.

Resources:

MT Natural Heritage Program
Local Conservation District
Bureau of Land Management (local office) Rangeland
Natural Resource & Conservation Service (local office) Rangeland Specialist
Local County Extension Office
U.S. Forest Service (local office) Range Resource person

- 2) **SOILS, and GROUND & SURFACE WATER:** This section should address the types of soils and geology in the area and their susceptibility to herbicide leaching. This section should also address protecting surface water in the project area and identifying areas with shallow groundwater.
- Create a soil data map using Web Soil Survey, or through your local NRCS office. All maps should include: Soil Map; Soil Chemical Properties: pH (1 to 1 Water); Soil Physical Properties: Saturated Hydraulic Conductivity (Ksat); Soil Erosion Factors: K Factor, Whole Soil; Soil Erosion Factors: Wind Erodibility Group; and Water Features: Depth to Water Table. Detailed instructions on how to obtain soil maps through Web Soil Survey are found under “Attachments” in the funding opportunity or on the MDA website [Here](#). Do not send your entire County’s soil survey, only the project area.
 - Create a map of the project area and identify all surface waters by **name** and/or description (i.e., ponds, wetlands, lakes, intermittent streams, and/or perennial streams). Use the NRIS map viewer tool available at: www.mtnhp.org/mapviewer or any other mapping tool including google maps.
 - Create a well location map and obtain a well log through the Montana Geographic Information Clearinghouse. Specifically identify any/all wells 50 feet deep or less. Detailed instructions on how to obtain well maps and logs are found under “Attachments” in the funding opportunity or on the MDA website [Here](#).
 - Project Description:** Reference your soils and water maps and complete the table. Choose all that may apply. Soil erosion (i.e. steep slopes, powdery dry soils, etc.), soil compaction (i.e. heavy agricultural use, public access points, etc.), shallow groundwater (<200ft), surface water (even intermittent streams and ponds), and wells (shallow or deep).

- e. **Potential Risk:** List each active ingredient you will be using in your project area and choose all potential hazards that may be associated with each herbicide (susceptible to runoff, leaching, or drift, toxic to aquatic life, and that list surface water restrictions). Reference each herbicide label in the environmental hazards section and other sections where soils or surface and groundwater risks are stated.
- f. **Mitigation:** Describe mitigation strategies for those specific herbicides that have risks to soil, surface and groundwater. Examples include “the use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination” so mitigation for that chemical would be to use a 100ft buffer around all shallow groundwater sites, or use an alternative herbicide in those areas. Match the herbicide risks, and project description to know where you must have mitigation strategies.
- g. Attach the soil map(s), surface water map, well map, and well log to the application in WebGrants in the “Other Attachments” form.

Resources:

Natural Resources Conservation Service (local office)
 County Extension Office (local office)

www.nris.mt.gov

<https://websoilsurvey.nrcs.usda.gov/app/>

MT Bureau of Mines and Geology

Ground Water Information Center

<http://maps2.nris.mt.gov/mapper>

www.mtnhp.org/mapviewer

- 3) **WILDLIFE HABITAT and TES SPECIES:** This section should address the potential for effects from weed control actions on the habitat of fish and wildlife species and the effects on species listed under the Federal Endangered Species Act or species listed as sensitive by the Montana Natural Heritage Program.

A list of fish, wildlife, and TES species and their habitats can be found using the MTNHP Map Viewer, or the Environmental Summary Report. You could also contact a local Fish, Wildlife and Parks (FWP) Biologist to help identify the common wildlife species in your project area, or the MTNHP and request a Species of Concern report for your project area.

- a. **Impact/Risk:** Use the Environmental Summary Report and herbicide labels to complete the table. Answer each question regarding the severity of impact from the proposed project activities. For each question, answer if mitigation is possible (if no impact is anticipated, answer “NA”).
- b. **Mitigation:** List species in the area that may be vulnerable to project activities (burning, removing groundcover, aerial applications, etc.). Describe mitigation strategies for any minor or potentially significant impacts (i.e. create a buffer around all surface waters, release biocontrol in areas where sensitive species are living, revegetate areas that are noxious weed monocultures, etc.).
- c. If the project includes grazing, consult with a local FWP specialist and describe mitigation strategies in question 4d.

Resources:

Montana Fish, Wildlife & Parks- FWP local biologist

US Forest Service (local office)
Montana Field Guide- MTNHP- <http://nris.mt.gov/reqapp/userMain.asp>
Bureau of Land Management (local office)
<http://fieldguide.mt.gov>
www.nris.mt.gov
<http://plants.usda.gov/threat.html>

4) **AIR QUALITY:** Please describe how the air quality in the project area may be impacted and how these impacts will be mitigated. For example: If burning, soil tillage, or herbicide operations will be used, describe how you would prevent or lessen the impact of the smoke, dust, or drift to the adjoining property owners. **Note: herbicide application will temporarily reduce air quality.**

- a. **Impact/Risk:** Use herbicide labels to complete the table. Answer each question regarding the severity of impact from the proposed project activities. For each question, answer if mitigation is possible (if no impact is anticipated, answer “NA”).
- b. **Mitigation:** Describe mitigation strategies for any minor or potentially significant impacts. **List advisory and mandatory statements from each herbicide label regarding air quality and drift.**

Resources:
<http://www.pesticides.montana.edu/reference/drift.html>

5) **HISTORICAL AND ARCHEOLOGICAL SITES:** A local historical society or the Montana Historical Society should be able to provide information on local features of historical or archeological importance to the area. Contact Damon Murdo at the MT Historical Society or your local county museum and request a letter from them pertaining to any historical or archeological importance within your project area. You will need to give them your project location and boundary of your proposed Trust Fund project. **NOTE: You will not be charged any fees for this service.**

- a. Complete the File Search Request Form and e-mail it to Damon Murdo. Attach the letter to the application.
- b. **Impact/Risk:** Describe mitigation strategies if any impacts to historical and archeological sites is anticipated or indicated by the MT Historical Society.

Cultural Records

The Montana Antiquities Database contains cultural resource information on known historic and archaeological sites, previously conducted cultural resource inventories, National Register site status, and cultural resource management project information.



File Search Requests:

To request a file search please fill out the File Search Request form and email it in to dmurdo@mt.gov. The results of the file search will be sent within a few days of receiving the request.

[File Search Request Form](#)

Resources:
Montana Historical Society

Damon Murdo
E-mail: dmurdo@mt.gov
<http://mhs.mt.gov/shpo/CulturalRecords.asp>

- 6) **EA DOCUMENT CHECKLIST:** Complete the checklist after you have uploaded all documents listed to “Other Attachments” or specified forms.
- Project Map** (with boundaries)
 - EA Summary Report** (zip file or both the PDF and EXCEL files)
 - Soil Maps** (Ksat, KFactor-Whole Soil, Wind Erodibility Group, pH, and Depth to Water Table)
 - Surface Water Map** (all water bodies labeled)
 - Well Map** (indicate all shallow wells <50’)
 - Well Log** (list all shallow wells <50’)
 - Letter from Montana Historical Society** (or local Cultural Records office)
 - Photo(s) of the problem** (optional)

Using the Montana Natural Heritage Program Website

The MTNHP identifies and categorizes ecological communities into 97 vegetation communities by types. This information will be very helpful determining what type of plant communities are present in your project area. Go to www.mtnhp.org/mapviewer and click on “Landcover” and at the top of the map click on the zoom button or use the many ways to “Search for Location” located on the left of the Montana map.

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Now click on Summarize Landcover By and select Township to turn on the township and range lines to help with locating the right area for your project area. Once you have located your project on the map click on Landcover Type Distribution, which will open a pop-up a legend of the colors on the map and the type of plant system. Click on a specific plant system name and a description will open.

Select Landcover to Highlight

- Forest and Woodland Systems
 - Conifer-dominated forest and woodland (mesic-wet)
 - Rocky Mountain Mesic Montane Mixed Conifer Forest
 - Rocky Mountain Subalpine Mesic Spruce-Fir Forest and Woodland
 - Conifer-dominated forest and woodland (xeric-mesic)
 - Great Plains Ponderosa Pine Woodland and Savanna
 - Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest
 - Rocky Mountain Foothill Limber Pine - Juniper Woodland
 - Rocky Mountain Foothill Woodland-Steppe Transition
 - Rocky Mountain Lodgepole Pine Forest
 - Rocky Mountain Montane Douglas-fir Forest and Woodland
 - Rocky Mountain Ponderosa Pine Woodland and Savanna
 - Rocky Mountain Poor Site Lodgepole Pine Forest

Clear Selection

Charts and Data

Rocky Mountain Mesic Montane Mixed Conifer Forest

These forests are generally dominated by western hemlock (*Tsuga heterophylla*), western red cedar (*Thuja plicata*), and grand fir (*Abies grandis*). They are found in areas influenced by incursions of mild, wet, Pacific maritime air masses west of the Continental Divide in Montana. Occurrences are found on all slopes and aspects but grow best on sites with high soil moisture, such as toeslopes and bottomlands. At the periphery of its distribution, this system is confined to moist canyons and cooler, moister aspects. Generally, these are moist, non-flooded or

Useful websites: www.mtnhp.org/mapviewer, http://fieldguide.mt.gov/displayES_LCLU.aspx or <http://fieldguide.mt.gov>.