# **Environmental Summary- Revised Grants**

## **Checklist of files needed:**

 [ ]  Project Map (map showing boundaries of project area)

[ ]  Letter from the Montana Historical Society or local Cultural Record Office

[ ]  Soils Maps (Ksat, KFactor-Whole Soil, Wind Erodibility Group, pH, and Depth to Water Table)

[ ]  Surface Water Map (any map of project area with all water bodies labeled)

[ ]  A 50-foot buffer (no spray zone) will be given to all well regardless of depth.

[ ]  EA Summary Report (zip or both PDF & EXCEL files)

 [ ]  Photo(s) of the Problem (optional)

## **Resources for Files/Letters**

* **EA Summary Report (project boundaries and center coordinates needed): For assistance**

Greta Dige

Noxious Weed Trust Fund-MDA

Phone: 406-444-7882

E-mail: Greta.Dige@mt.gov

-or-

MT Natural Heritage Program

P.O. Box 201800 Helena, MT 59620-1800

Phone: 406-444-3290

<http://nris.mt.gov/reqapp/userMain.asp>

* **Surface Water Map & Project Boundary Map:** Any legible map source such as google earth, Montana Geographic Information Clearinghouse, [Montana Natural Heritage Map Viewer](http://mtnhp.org/mapviewer/), scanned paper topographical maps, etc.
* **Soils Maps:** [Web Soil Survey](https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/) or through the local NRCS office**.**
* **Cultural Records letter:** Complete a file Search Request form at [Montana Historical Society](http://mhs.mt.gov/shpo/CulturalRecords.asp#_blank) and e-mail it to Damon Murdo. Email: mailto:dmurdo@mt.gov. **Note:** You will not be charged any fees for this service. Or..

STATE HISTORIC PRESERVATION OFFICE
1410 8th Ave., P.O. Box 201202, Helena, MT 59620-1202
Phone: (406)-444-7767
Attn: Damon Murdo

## **General Vegetation:**

Complete the table. Answer each question regarding the severity of impact from the proposed project activities (choose one level of impact for each question). Answer if mitigation is possible (if no impact is anticipated, answer NA). Describe mitigation strategies for any minor or potentially significant impacts. \*Remember, not all impacts are negative. Most weed control efforts have positive impacts on native plant communities.

This section should **address potential damage to non-target vegetation in the project area**. Plant community type and plant species information can be found using the Montana Natural Heritage Program (MNHP) Map Viewer or the Environmental Summary Report. See the Grant Guidelines for more details.

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| **Impact/Risk** | **Choose** | **one for** | **each question** |  |  |  |
| Will any proposed project activities result in: | **None** | **Minor** | **Potentially Significant** | **Can**  | **it be** | **mitigated?** |
| 1. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, forbs, grasses)?
 |[ ] [ ] [ ]  [ ]  Yes | [ ]  No | [ ]  NA |
| 1. Adverse effects on any non-target plants?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |
| 1. Any other likely impacts not addressed above?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |

**Mitigation:** List vulnerable plant species in the area and describe mitigation strategies for any minor or potentially significant impacts. Mitigation may include creating a buffer, spot spraying instead of broadcasting, etc. (use herbicide labels and EA Summary report):

## **Wildlife Habitat & TES Species:**

Complete the table. Answer each question regarding the severity of impact from the proposed project activities (choose one level of impact for each question). Answer if mitigation is possible (if no impact is anticipated, answer NA). Describe mitigation strategies for any minor or potentially significant impacts. \*Remember, not all impacts are negative. Most weed control efforts have positive impacts on native plant communities which can enhance wildlife habitat.

This section should **address the potential for effects from weed control actions on fish and wildlife habitat** in the project area. Use the Montana Heritage Program Field Guide or Environmental Summary Report to find species and habitat information, or contact your local Fish, Wildlife and Parks biologist. See the Grant Guidelines for more details.

* **If your project includes grazing**, consult with a local Fish, Wildlife and Parks specialist. Describe how the project will address potential issues with bighorn sheep, grizzly bears, wolves and other predators.

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| **Impact/Risk (Fish & Wildlife Habitat)** | **Choose** | **one for** | **each question** |  |  |  |
| Will any proposed project activities result in: | **None** | **Minor** | **Potentially Significant** | **Can** | **it be** | **mitigated?** |
| 1. Alterations of critical fish or wildlife habitat?
 |[ ] [ ] [ ]  [x]  Yes  | [ ]  No  | [ ]  NA |
| 1. Changes in the diversity or abundance of game animals or bird species?
 |[ ] [ ] [ ]  [ ]  Yes | [ ]  No  | [ ]  NA |
| 1. Changes in the diversity or abundance of nongame species?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No  | [ ]  NA |
| 1. Targeted grazing in areas associated with bighorn sheep or predators?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No  | [ ]  NA |
| 1. Any other likely impacts not addressed above?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No  | [ ]  NA |

This section should **address effects on species listed under the Federal Endangered Species Act (ESA) or species listed as sensitive** by the Montana Natural Heritage Program (NHP) in the project area. See the Grant Guidelines for more details.

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| **Impact/Risk (TES Species)** | **Choose**  | **one for** | **each question** |  |  |  |
| Will any proposed project activities result in: | **None** | **Minor** | **Potentially Significant** | **Can**  | **it be** | **mitigated?** |
| 1. Alterations of critical habitat for TES species?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |
| 1. Adverse effects on any TES species?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |
| 1. Any other likely impacts not addressed above?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |

**Mitigation:** Describe mitigation strategies for any minor or potentially significant impacts, as well as any additional impacts not addressed in the tables (use EA Summary report):

## **Soils and Water:**

This section **should address the types of soils in the project area susceptible to unwanted impacts of herbicide application and potential impacts to water in the project area** based on maps and label statements.

* **Create soil data maps** using [Web Soil Survey](https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/) or through the local NRCS office. Maps must 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. If the project is too large to read soil labels on the map, separate the project into several sections and create a map for each area.
* **Create a surface water map** with any legible map source such as google earth, Montana Geographic Information Clearinghouse, paper topographical maps, etc. Maps must clearly label all surface water features by name within the project area and adjacent to herbicide application areas. Indicate unnamed features as “unnamed pond #1”, or “unnamed stream #2”.
* **A 50-foot buffer (no spray zone) will be given to all well regardless of depth.**

Attach the soil map and surface water map to the "Other Attachments" form. Instructions and links can be downloaded or opened from this Funding Opportunity’s description page under “Attachments”.

 \*For public water supplies (PWS), each PWS has a Well Control Zone associated with its permitting. Well Control Zones have special restrictions about the storage and usage of hazardous materials (including pesticides). In Montana, Control Zones typically consist of a 100-foot radius exclusion zone. When in doubt contact the Montana Department of Environmental Quality.

**Read the labels of the products you are planning to use thoroughly**. Address any label statements that indicate potential impacts related to soil properties or surface and groundwater.

Complete the table for the project site description and the active ingredients being used. Describe mitigation strategies for any potential impact or risk from your list of active ingredients on the project site below. **List advisory and mandatory statements from herbicide labels** regarding soils, and surface and ground water for the active ingredients you will be using. 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”, “high potential for runoff”, etc. Other chemical properties including half-life can be found at the EPA’s Pesticide Chemical Search.

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| **Potential Risk** | **Choose** | **all** | **that** | **apply** |  |
| Active Ingredients (New herbicides only) | **Runoff** | **Leaching** | **Drift** | **Risk to Aquatic Ecology** | **Surface Water Restrictions** |
|  |[ ] [ ] [ ] [ ] [ ]
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*List all new active ingredients (AI) you want to use in your project and choose all potential hazards associate with each AI (reference herbicide labels). List tank mix ingredients separately.*

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| **Project Description** | **Choose** | **all** | **that** | **apply** |  |
| Does the proposed project contain: | **Soil Erosion** | **Soil Compaction** | **Shallow Groundwater** | **Surface Water** | **Wells** |
| Project Site Description |[ ] [ ] [ ] [ ] [ ]

*Reference your soil and water maps, then choose all that apply in the table below. Soil erosion (ex. steep slopes, powdery dry soils), soil compaction (ex. heavy agriculture use), shallow groundwater (<200ft), surface water (even ponds), and wells (shallow and deep).*

**Mitigation:** Describe mitigation strategies (use herbicide labels) for any minor and potentially significant impacts, as well as any additional impacts not addressed in the tables:

## **Air Quality:**

Complete the table. Answer each question regarding the severity of impact from the proposed project activities (choose one level of impact for each question). Answer if mitigation is possible (if no impact is anticipated, answer NA). Describe mitigation strategies for any minor or potentially significant impacts**. List advisory and mandatory statements from each herbicide label regarding air quality and drift**. Examples include “do not apply at wind speeds over 10 mph”, “boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter”, “do not apply with a nozzle height greater than 4 feet above crop canopy”, etc.

This section should **address the impact to air quality in the project area**. See the Grant Guidelines for more details.

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| **Impact/Risk** | **Choose one**  | **for each** | **question** |  |  |  |
| Will any proposed project activities result in: | **None** | **Minor** | **Potentially Significant** | **Can it** | **be** | **mitigated** |
| 1. Emission of air pollutants or deterioration of ambient air quality?
 |[ ] [ ] [ ]  [x]  Yes | [ ]  No |  [ ]  NA |
| 1. Creation of objectionable odors?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |
| 1. Adverse effects on nontarget plants due to drift?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |
| 1. Any other likely impacts not addressed above?
 |[ ] [ ] [ ]  [ ]  Yes  | [ ]  No | [ ]  NA |

**Mitigation:** Describe mitigation strategies for any minor or potentially significant impacts, as well as any additional impacts not addressed in the table:

## **Historical or Archaeological Sites:**

This section should **address impacts on historical and archeological resources in the project area**. See the Grant Guidelines for more details.

* Please **obtain and attach a letter to the “Other Attachments” form, from either a local historical society or the Montana Historical Society**. The letter should provide information on local features of historical or archeological importance to the area and their potential impact from proposed control methods. Note: grazing, burning and some mechanical weed control methods may cause impacts to historical and archeological sites.

**Will the proposed project impact any historical and/or archeological?**

 [ ]  Yes [ ]  No

**Describe any necessary mitigation strategies:**