

# FOR NATIONWIDE AERIAL APPLICATION OF FIRE RETARDANT ON NATIONAL FOREST SYSTEM LANDS

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## Introduction

In October of 2011, the Forest Service signed the Record of Decision for the Nationwide Aerial Application of Fire Retardant on National Forest System Land (United States Department of Agriculture Forest Service 2011c), after completing the Environmental Impact Statement (United States Department of Agriculture Forest Service 2011b) and associated Endangered Species Act Section 7 Consultations. The Record of Decision implemented an adaptive management approach to protect resources when using aerially applied fire retardant. A five-year review was completed in 2017. The Endangered Species Act Section 7 consultation documents (United States Department of Commerce, National Oceanic and Atmospheric Administration, 2011, and United States Department of Interior, Fish and Wildlife Service, 2011) with the Services were amended as needed. All consultation documents expired on January 1, 2022.

The Record of Decision approved the use of aerially applied fire retardant and implemented an adaptive management approach that protects resources and continues to improve the documentation of retardant effects through reporting, monitoring and application coordination. Aerial retardant drops are not allowed in mapped avoidance areas or waterways. This direction is mandatory and implemented in all cases except where human life or public safety is threatened and retardant use within avoidance areas could be reasonably expected to alleviate that threat. Any misapplication will be reported, assessed for impacts, monitored and remediated as necessary. The Record of Decision also provided direction to better protect important heritage, cultural, and tribal resources and sacred sites; and approved aircraft operational guidance, avoidance area mapping requirements, annual coordination and reporting and monitoring requirements, and modifications resulting from Endangered Species Act Section 7 Consultation.

In order to assist in implementation of the Record of Decision, the Forest Service published the Implementation Guide for Aerial Application of Fire Retardant in 2012. The Implementation Guide has been updated as needed (United States Department of Agriculture Forest Service 2019). The document provides guidance for completing avoidance area mapping; requirements for pilots, fire operations, and resource specialists; reporting and monitoring instructions; and seasonal duties and annual training.

Avoidance area maps were developed beginning with the 2012 fire season and included aquatic avoidance areas and terrestrial avoidance areas. For aquatic avoidance areas, waterways, including perennial streams, intermittent streams, lakes, ponds, identified springs, reservoirs and vernal pools are given a minimum 300-foot buffer. Terrestrial avoidance areas are used to avoid impacts on a) one or more federally listed threatened, endangered or proposed plant or animal species or critical habitat where aerial application of fire retardant may affect habitat and/or populations; or b) any Forest Service terrestrial sensitive or candidate species where aerial application of fire retardant may result in a trend toward federal listing under the Endangered Species Act or a loss of viability on the planning unit (Forest). Depending on the species and protection requirements, there may be additional buffer widths for both aquatic and terrestrial mapped avoidance areas.

Each year the maps are reviewed, updated, and republished. The maps are available at different scales (Forest wide or by quadrangle) and from several data sources, both internal to the Forest Service and external. The Record of Decision also included a requirement for the Forest Service to annually assess five percent of all fires that are less than 300 acres in size and during which

aerially delivered fire retardant had been used and aquatic or terrestrial avoidance areas exist. The intent of this requirement was to determine if underreporting of retardant misapplications was occurring.

In total, from 2012 through 2019 there were 457 intrusion assessments completed for 244 fires with intrusions (Appendix B). In some cases, the misapplication was identified first, and that fire was used as the 5 percent reporting requirement by the forest. Of the reported intrusions: 213 were partially in water; 217 were in the water buffer only; 27 were in terrestrial avoidance areas. Out of the estimated 56,868 number of drops from 2012 through 2019, 0.80% were intrusions into avoidance areas. The percent of fires with an intrusion was 0.46 percent.

The purpose of this document is to disclose the potential effects of using aerially applied fire retardants, included now or in the future on the Forest Service Qualified Products list<sup>1</sup>, on Regional Foresters' Sensitive Plant Species (i.e., "sensitive plants"). Forest Service Manual 2670 direction requires preparation of a biological evaluation for all Forest Service planned, funded, executed, or permitted programs and activities for possible effects on threatened, endangered, proposed, candidate for listing, or sensitive species. The Endangered Species Act requires a biological assessment to be completed to determine whether a proposed action is likely to "adversely affect listed species or designated critical habitat; jeopardize the continued existence of species that are proposed for listing; or adversely modify proposed critical habitat." The biological assessment prepared for this project is a separate document and fulfills both Forest Service Manual 2670 and Endangered Species Act requirements for threatened, endangered, and proposed species. This report addresses the potential effects on sensitive species, including candidate species, of the actions proposed in the Nationwide Aerial Application of Fire Retardant on National Forest System Lands Supplemental Environmental Impact Statement, and builds updates the information contained in Laufmann and Carsey (2011). This botanical biological evaluation analyzes 2,454 plant species listed as sensitive. A separate biological evaluation has been prepared for terrestrial and aquatic wildlife species. Impacts to nonnative invasive species are discussed in Appendix C.

# **Project Description**

The U.S. Department of Agriculture, Forest Service, proposes to continue the nationwide use of aerial application of fire retardant. Effects described within this biological evaluation refer to aerial delivery of retardant only. This analysis does not address use of foams, water enhancers, ground-based application of retardants, or the environmental effects of wildland fire. Aerial use of fire retardant is a programmatic activity with no end date.

# Proposed Action (Modified Alternative 3)

This alternative would allow aerially applied fire retardants, included now or in the future on the Forest Service Qualified Products List, to be used on NFS lands as follows:

• Aerial retardant drops would be prohibited in aerial retardant avoidance areas (see definition below), which include:

<sup>&</sup>lt;sup>1</sup> Products that have been submitted for evaluation as described in USDA Forest Service (2020) and have successfully met the requirements stated therein shall be added to the Forest Service Qualified Products List.

- Waterways or their buffers, whether mapped or not, when water is present (also referred to as aquatic avoidance areas).
- All or part of the habitat of certain Endangered Species Act threatened, endangered, proposed, or candidate species or Regional Forester sensitive species, as mapped per the requirements described in the "Aerial Retardant Avoidance Areas Mapping Requirements" section of this alternative.
- Areas mapped by the local unit.
- The above direction would be mandatory nationwide except when human life or public safety are threatened and retardant use in the aerial retardant avoidance area could be reasonably expected to alleviate that threat.
- When an intrusion (formerly termed misapplication'; see definition below) occurs for any reason it would be reported, and if necessary it would be assessed for impacts, monitored, and remediated.

The definition of 'aerial retardant avoidance area' has been updated to clarify its purpose and ensure consistency in use. An aerial retardant avoidance area (also referred to simply as 'avoidance area') is defined as an area in which application of aerial fire retardant is prohibited in order to avoid, limit, or mitigate potential impacts to specified resources.

- The term 'aquatic avoidance area' refers to any avoidance area, whether mapped or not, that is based on the presence of water, or as mapped to reduce impacts to Endangered Species Act threatened, endangered, proposed, or candidate species or critical habitat or Regional Forester sensitive species or habitat associated with waterways, waterbodies, or riparian areas.
- The term 'terrestrial avoidance area' refers to any avoidance area that is mapped to protect Endangered Species Act threatened, endangered, proposed, or candidate species or critical habitat or Regional Forester sensitive species or habitat or other resources that are not associated with waterways or riparian areas.

The term 'misapplication' has been replaced by the term 'intrusion' for clarity of meaning. An intrusion is defined as *the intentional or unintentional application of aerial fire retardant into an aerial retardant avoidance area*.

The term 'waterway' in this context includes but is not limited to perennial streams, intermittent streams, lakes, ponds, identified springs, reservoirs, vernal pools, wetlands, peatlands, and riparian vegetation.

In addition to the above direction, this alternative includes five components that provide specific direction for aircraft operations, aerial retardant avoidance area mapping, coordination, reporting and monitoring, and procedures for additions to the Qualified Products List, as described below. Additional information on implementation of these components, as well as guidance on operations planning and on the role and function of resource specialists are found in the <a href="Implementation Guide for Aerial Application of Fire Retardant">Implementation Guide for Aerial Application of Fire Retardant</a> (USDA 2019 or subsequent versions).

## Aircraft Operational Guidance

This guidance shall not require pilots to fly in a manner that endangers their aircraft or other aircraft or structures, or that compromises the safety of ground personnel or the public.

*Operational guidance to ensure retardant drops are not made within avoidance areas:* 

Incident commanders and pilots should follow guidance in the current version of the <u>Implementation Guide for Aerial Application of Fire Retardant</u> (USDA 2019 or subsequent versions), which will be updated as needed. This guidance includes:

- Requirements for providing pilots with maps or other information about the location of all avoidance areas on the unit.
- Information on performing dry runs or other methods for ensuring retardant is not applied in avoidance areas.
- Information on when and how to terminate and resume application of fire retardant when approaching and departing avoidance areas.
- Guidance on flight conditions that allow for safe and effective use of retardant, including keeping retardant out of avoidance areas.

Operational guidance to limit potential impacts outside of avoidance areas to species listed under the Endangered Species Act or to Regional Forester Sensitive species:

Whenever practical, agency administrators and incident commanders should use water or other less toxic suppressants in habitats of species listed under the Endangered Species Act or certain Regional Forester sensitive species, where those habitats are not mapped as avoidance areas.

Operational guidance to provide protection of cultural resources, including historic properties, traditional cultural resources, and sacred sites:

These resources cannot be mapped using a national protocol or addressed with a standard prescription that would apply to all instances. Cultural resources specialists, archaeologists, and tribal liaisons would assist on a case-by-case basis in the consideration of effects and alternatives for protection when aerial application of fire retardant is ordered. Incident commanders would consider the effects of aerial applications on known or suspected historic properties, any identified traditional cultural resources, and sacred sites.

# **Avoidance Areas Mapping Requirements**

All forests and grasslands would review and update maps annually, following current national mapping protocols described in the <u>Implementation Guide for Aerial Application of Fire</u> Retardant (USDA 2019 or subsequent versions).

Requirements for mapping or identifying aerial retardant avoidance areas are as follows:

- Any waterway (including but not limited to perennial streams, intermittent streams, lakes, ponds, identified springs, reservoirs, vernal pools, wetlands, peatlands, and riparian vegetation) in which water is present at the time of retardant application, and buffers extending no less than 300 feet on either side of a waterway, is considered an avoidance area (also called aquatic avoidance area), whether mapped or not.
- Mapping of waterways that are dry at the time of retardant application is not required.
- Map avoidance areas where aerial application of fire retardant may impact one or more aquatic or terrestrial Endangered Species Act threatened, endangered, proposed, or

candidate plant or animal species or designated critical habitat, as identified in consultations.

- Map avoidance areas where aerial application of fire retardant may impact certain aquatic or terrestrial Regional Forester sensitive species or their habitat.
- Avoidance areas may be adjusted or established based on local conditions, including to comply with forest plan requirements such as those for Species of Conservation Concern or to protect other biological or cultural resources. Avoidance area buffers around waterways may not be less than 300 feet on either side of a waterway in which water is present but may be increased where needed. Adjustments related to Endangered Species Act threatened, endangered, proposed, and candidate species would be coordinated with the United States Department of Interior Fish and Wildlife Service (Fish and Wildlife Service) and the United States Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries).
  - Consult with local tribes to identify any avoidance areas needed to protect cultural resources or sacred sites.

#### Annual Coordination

The Forest Service would coordinate annually with:

- The Fish and Wildlife Service and NOAA Fisheries (collectively, 'the Services')
- Aviation managers and pilots
- Cooperators/other agencies

Coordination would ensure that requirements of this alternative are met, and would maintain relationships and allow problem resolution to occur at the lowest management level. Guidance on coordination meetings would be provided in the <u>Implementation Guide for Aerial Application of Fire Retardant</u> (USDA 2019 or subsequent versions).

# Reporting Requirements

The Forest Service would maintain a database for reporting intrusions of aerially applied fire retardant into avoidance areas. Intrusion reporting requirements are described in the <a href="Implementation Guide for Aerial Application of Fire Retardant">Implementation Guide for Aerial Application of Fire Retardant</a> (USDA 2019 or subsequent versions), and include requirements for upward reporting to the Services for any intrusions into avoidance areas for any threatened, endangered, proposed, or candidate species or critical habitat. The Forest Service would provide to the Services annual reports summarizing retardant use and intrusions, as described in the Implementation Guide.

If a retardant drop occurs on a cultural resource, a traditional cultural property, or a sacred site, then the site condition would be assessed by a qualified archaeologist and reported to the State Historic Preservation Officer and, if appropriate, tribal representatives including the Tribal Historic Preservation Officer. If the affected resource is a sacred site or a traditional cultural property, then tribal notification and consultation would be required as part of the determination of effects. If the effect is found to be adverse, then the agency would consult with the tribe to determine an appropriate course of action to mitigate or resolve the adverse effect.

# Consultation Procedures for Additions to the Qualified Products List

Private companies submit retardants to the Forest Service for potential addition to the <u>Qualified Products List</u>. New products or new formulations of existing products must meet Forest Service specifications for long-term retardant (United States Department of Agriculture, Forest Service, <u>Specification 5100-304 Long-term Retardant</u>, Wildland Firefighting) to be included on the Qualified Products List. In addition to meeting those specifications, any retardant added to the Qualified Products List would meet the requirements of the Endangered Species Act as follows:

- Products or new formulations do not require additional consultation as long as the maximum extent and duration of effects of the new products do not exceed the effects of other products already considered in the biological assessments and biological opinions for this action. Products will generally meet these criteria when amount of retardant salts when delivered at standard coverage levels, and the percentage of thickeners, coloring agents, and performance ingredients in the total mixed product do not exceed those established in completed consultations. The toxicity levels of new products must not exceed those of products with completed consultations, and there must be no risk factors risks not previously identified and assessed in completed consultations. The Services will be notified of additions to the Qualified Products List and will be provided appropriate supporting information.
- Products or new formulations that do not meet the above criteria would require re-initiation
  of consultation with the Services. The product would not be eligible for addition to the
  Qualified Products List until all required tests and consultations are completed.

In the future, any retardant that is added to the Qualified Products List could be used under the direction provided in this alternative.

# Methodology

Surveys and inventories for species have been conducted for many years by various individuals, organizations and government agencies including but not limited to the Forest Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, universities and researchers, and state wildlife and natural resource agencies. Through this process, surveys are completed as needed and updates to national and state databases are completed at the project level during the NEPA process at the single National Forest level.

Environmental effects to all sensitive species have been analyzed on a nationwide, programmatic scale. The information on amounts of retardant use contained in this analysis is derived from the most accurate, readily available data on aerial application of fire retardant use. Analysis is based on what the expected effects of aerial application of fire retardant on species will be based on the screening process, avoidance mapping to reduce effects, and known information on use in the past projected into the immediate and near future. The spatial extent of this analysis includes all National Forest System lands (approximately 193 million acres). The temporal extent for cumulative effects analysis is the next 10 to 20 years. This time frame encompasses the period of time in which aerially applied retardant could reasonably be expected to have an impact. A few studies show effects from fertilizers lasting up to 22 years, but most studies of retardants show effects to plants lasting 1 to 2 years; therefore, this temporal extent is conservative with respect to retardant impacts.

#### **National Effects Screening Process**

The National Effects Screening Process was developed as a coarse filter for all sensitive species to determine the impacts based on the potential use of aerial application of fire retardant on wildlife, plant, and aquatic species and habitats. Unit-specific determinations have been made. For example, a "No Impact (NI)" determination is warranted for a forest that doesn't aerially apply fire retardant, but another forest within the range of that species that uses aerial application of fire retardant could have a "May Impact Individuals and Habitat (MIIH)" determination. Tables 1 shows the process to standardize impacts determinations for sensitive terrestrial and aquatic species, respectively, addressed in this analysis. The third column of Table 1 shows the coarse filter impacts determination. NatureServe G1 and G2 rankings for plant species were used as the coarse filter criteria for determining whether a species is a small, isolated population. When coarse filter determination was "MIIH or WII" a fine filter approach was used to determine impacts for a final determination. Information was obtained from individual units or available databases (e.g., CNDDB, CalFlora) to determine the distribution of the species on the forest to consider whether aerial retardant was likely to impact the species within a single fire event. Species that occurred on more than one unit were not considered to be a small, isolated population. Additional consideration was given to life form since trees, shrubs and succulents are less likely to be threatened by the potential spread of non-native invasive species through fertilization effects from retardant use. Perennial species are able to withstand nitrates in soil until they diminish in a couple years, and are less likely to have long term adverse impacts from aerial retardant treatment. Local specialists were contacted for input on the number of occurrences. distribution of occurrences, threats to local occurrences from non-native invasive species and whether the species was adapted to fire.

#### Information and Assumptions Used in the National Effects Screening Process

The occurrence of past fires and retardant drops provide a baseline and indicator for considering when and where retardant may be used in the future. Retardant application potential is described for each unit as 'very low', 'low', 'moderate' or 'high' based on the average annual retardant use by forest between 2012 and 2019 and the maximum total gallons of retardant used in any given year from 2012 through 2019 (Table 3). These category assignments may be adjusted for a specific unit based on the percent of National Forest System land on which aerially delivered retardant is used annually, on average, along with the frequency (number of years retardant was used over the 8-year period) of use for that unit. This adjustment takes into consideration that smaller units could experience greater impact if a larger proportion of the land base is affected by retardant annually.

The retardant application potential for each forest is listed in Appendix D. The criterion for the categories is as follows:

- 'Very low' retardant application potential:
  - annual average of less than 25,000 gallons,
  - ♦ maximum of 100,000 gallons,
  - average aerial retardant used on up to 0.01 of forest unit annually, and
  - frequency of generally less than 0.375.
- 'Low' retardant application potential:
  - less than 50,000 gallons on average annually,
  - less than 200,000 gallons maximum,
  - average aerial retardant used on up to 0.01 of forest unit annually, and

- generally less than 0.625 frequency.
- 'Moderate' retardant application potential:
  - less than 150,000 gallons on average annually, and
  - less than 500,000 gallons maximum,
  - average aerial retardant used on up to 0.01 of forest unit annually, and
  - generally between 0.5 to 0.8 frequency.
- 'High' retardant application potential:
  - ♦ 150,000 gallons on average annually,
  - greater than 500,000 gallons maximum, average aerial retardant used on more than 0.01 of forest unit annually, and greater than 0.8 frequency.

The national effects screening process also relied on the following assumptions:

- Historical Fire Season Data: The 2012-2019 fire season statistics (Table 3) provide a reasonable representation of the potential for retardant applications on National Forest System lands over the next 20 years.
- Avoidance area designations would protect known species occurrences from adverse impacts by prohibiting retardant use in those areas.
- Intrusions of aerial fire retardant may occur in avoidance areas on rare occasions. Data from intrusion of retardant in terrestrial avoidance areas averaged 0.06 percent of the estimated number of drops (range 0.02 0.16 percent) from 2012 through 2019 (Appendix B). Intrusions into water or buffer zones averaged 0.76 percent (range 0.40 1.48 percent) across all years. This analysis assumes that intrusion rates will remain similar in the future.
- Past retardant use and intrusion data does not allow for predictions about when or where
  intrusions may occur in the future. Assuming the potential for an intrusion is higher in
  areas where more retardant is applied, all species that occur in these areas could be
  impacted unless other factors (habitats) determine otherwise.
- Under some circumstances, terrestrial wildlife populations that are isolated or rare could be more vulnerable to impacts of aerial fire retardant application, depending on the potential for retardant use where they occur.

#### National Effects Screens

Table 1 shows the screens used process to standardize impacts determinations for sensitive terrestrial and aquatic species, respectively, addressed in this analysis. The screens rely on information about species habitat and distribution as well as on the potential for aerial retardant application on the unit where the species occurs and is identified as a Regional Forester sensitive species. As shown in the table, some species may require further screening through the terrestrial or aquatic wildlife species screens, which are discussed below.

Table 1: National impacts screening process for sensitive wildlife species

Aerial Retardant Application Potential <sup>2</sup>	National Screening Factor for Aerially Applied Retardant	Impact <sup>1</sup>
none	Species/habitat occur in areas with no fires, therefore no potential retardant use. Examples: cliffs, caves, estuaries, marshes, lakes, ocean shoreline, sand dunes.	NI
none	Species occurs near, but not on national forest lands and effects from retardant use on forest lands are not anticipated.	NI
none	No retardant use recorded on forests where species occur or are suspected <sup>2</sup>	NI
Aquatic Hab	itats	
very low to low	Species occurs on forest with very low or low retardant application potential	MIIH
moderate to high	Species occurs on forest with greater than low retardant application potential.	MIIH or WII: use Aquatic Effects screen
Terrestrial H	abitats	
very low to high	Species occurs or is suspected of occurring on a forest with less than 0.01 percent of its land base impacted by retardant on average annually <sup>3</sup> , and retardant is generally not used in species habitat. Examples include desert, dense forest canopy, alpine, talus/scree slopes.	NI
very low to high	Species occurs or is suspected of occurring on a forest with <b>less than</b> 0.01 percent of its land base impacted by retardant on average annually <sup>3</sup> , and retardant may be used in species habitat. Species populations are <b>not isolated</b> .	MIIH
very low to high	Species occurs or is suspected of occurring on a forest with <b>less than</b> 0.01 percent of its land base impacted by retardant on average annually <sup>3</sup> , and retardant may be used in species habitat. Species populations are isolated.	MIIH or WII: use Terrestrial Effects screens
very low to high	Species occurs or is suspected of occurring on a forest with <b>greater than</b> 0.01 percent of its land base impacted by retardant on average annually <sup>3</sup> , and retardant is generally not used in species habitat.	MIIH
very low to high	Species occurs or is suspected of occurring on a forest with <b>greater than</b> 0.01 percent of its land base impacted by retardant on average annually <sup>3</sup> , and retardant may be used in species habitat.	MIIH or WII: use Terrestrial Effects screens

<sup>1</sup>NI: no impact; MIIH: May impact individuals and habitat – no trend toward listing; WII: Will impact individuals and habitat – trend toward listing

# **Affected Environment**

The Forest Service is comprised of nine Regions covering 193 million acres of land. All National Forest System lands within the United States comprise the affected environment. In some areas, this may extend approximately one mile from National Forest System lands to include those species on the boundary or juxtaposition to National Forest System lands. Amounts of retardant

<sup>&</sup>lt;sup>2</sup>As described in Appendix D

use on terrestrial habitats are estimated by ecoregion (Bailey 1995; table 2) that contain different wildlife and habitat groups. For most of this analysis, the affected environment is described by ecoregion to determine effects on habitat types; however, since most of the data recorded for aerial retardant use are by national forest or Forest Service region, there is not a direct correlation to habitat type by ecoregion. Table 2 displays complete descriptions and retardant application rates for each ecoregion, as well as peak fire season, by ecoregion. The occurrence of peak fire season within an ecoregion is an important consideration in assessing risk to sensitive species, since that is when chemical use is more likely to happen. If chemical application coincides with the presence of vulnerable life stages of a species, adverse impacts may be more likely (Auxilio Management Services 2020).

Fire retardants could be applied wherever a wildfire occurs, and no one ecosystem can represent the variety of site conditions that are found in all areas where wildland fire is possible. Retardant application can occur in various types of vegetation including annual and perennial grasslands, conifer forests, summer and fall hardwood forests, sagebrush with grass, intermediate brush, southern rough vegetation, and mixed chaparral areas. Table 3 shows the representative use of aerially applied fire retardant for each forest and region from 2012-2019. Based on drop tests, retardant does not land evenly. Therefore, the calculations provide a range of acres impacted based on the following assumptions:

- Calculations for each tanker are based on gallons of retardant reported divided by the maximum retardant load for the aircraft multiplied by drop acres.
- Overlap in drops is not accounted for, so the values are a conservative estimate of acres impacted (i.e., a maximum value).

Table 4 lists fire retardants currently approved for use by the Forest Service, along with their ammonia and phosphate concentrations. In addition, the ecological risk from Fortress FR-100 and Fortress FR-200 LLC, long-term retardants containing magnesium and chloride salts, will be evaluated.

Fire fighters and fire planners describe the affected environment by fuel-model type. Firefighters integrate fuel models and fuel descriptions to determine the appropriate retardant coverage level. Fuel models are classified into four fuel-complex groups that include grasses, brush, timber litter, and slash. The fire behavior relates to the fuel loading expressed in tons per acre and the fuel bed depth, which relates to the fuels distribution among the fuel-size classes. Knowing which fuel model a certain habitat type occurs in determines the amount of fire retardant that may be applied to that habitat type.

A determination of the impacts on wildlife habitats can also be assessed by describing impacts to the habitat's ecological function, rather than ecoregion type or fuel-model type. The analysis includes the following wildlife-habitat types (Cooperrider et al. 1996):

- Wetlands, tidal marshes, bogs, springs (with aquatic associated plant species);
- Riverine wash and riparian upland (those areas immediate adjacent to streams and waterways discussed under the aquatics section);
- Arid, semi-arid, or desert; Great Basin, Mojave, Sonoran, and Chihuahuan;
- Grasslands and meadows and pine-oak savannah;
- Brush or chaparral; (including southern rough and pinyon-juniper-sage)
- Fossorial or subterranean;

- Forested (including hardwood, coniferous and mixed forest as well as various seral stages of development and age groups);
- Rocky areas (including outcrops, talus, cliffs, and caves); and
- Arboreal (snags, poles, and other perch sites for birds).

Peak fire season (Auxilio Management Services 2020) and retardant coverage levels based on fuel types and fuel models (Anderson 1982) provide approximations of when and how much retardant could be applied in certain ecoregions of the country. Scott and Burgan (2005) further refined fuel models by including non-burnable fuel types (urban, ice, water, rock) and subgrouping the fuel complexes by adding moisture-climatic-condition classes along with the fuel loading and distributions.

Table 2. Representative ecoregions for retardant application

Forest Service Region	<b>Description</b> <sup>a</sup>	EcoRegions- Divisions <sup>a</sup>	Geographic Location	Number of Fires 2012 – 2019	Retardant Application (gallons per 100 square feet)	Peak Fire Season <sup>c</sup>
R1	shrubland, needleleaf forest annual and perennial grasslands, sagebrush with grass	Prairie; Temperate Desert; Temperate Steppe; Temperate Steppe Mountains	ID, MT, ND, SD, WY	6,398	1 to 3	April - October
R2	shrubland, needleleaf forest, annual and perennial grasslands, sagebrush with grass	Temperate Desert; Temperate Desert Mountains; Temperate Steppe; Temperate Steppe Mountains; Tropical/Subtropical Mountains; Tropical/Subtropical Steppe	SD, NE, CO, WY	4,116	1 to 3	June - October
R3	shrubland, needleleaf forest, annual and perennial grasslands, woodlands	Temperate Steppe; Temperate Steppe Mountains; Tropical/Subtropical Desert; Tropical/Subtropical Mountains; Tropical/Subtropical Steppe	AZ, NM	8,665	1 to 4	May - July
R4	shrubland, needleleaf forest; dry steppe, annual and perennial grasslands, woodlands	Mediterranean Mountains; Temperate Desert; Temperate Desert Mountains; Temperate Steppe; Temperate Steppe Mountains; Tropical /Subtropical Desert; Tropical/Subtropical Steppe	NV, UT, WY, ID	5,080	1 to 4	June - October

Forest Service Region	<b>Description</b> <sup>a</sup>	EcoRegions- Divisions <sup>a</sup>	Geographic Location	Number of Fires 2012 – 2019	Retardant Application (gallons per 100 square feet)	Peak Fire Season <sup>c</sup>
R5	mosaic of fire adapted woodland/shrubland, needle leaf evergreen and broadleaf woodlands; sagebrush with grass	Mediterranean; Mediterranean Mountains; Temperate Desert; Tropical/Subtropical Desert	CA	10,415	3 to >6	August - October
R6	short needle closed conifer; needle leaf evergreen and broadleaf woodlands; sagebrush with grass; short needle conifer	Marine, Marine Mountains: Mediterranean Mountains; Temperate Desert; Temperate Steppe Mountains	OR, WA	9,893	3 to 4	June - October
R8	cold-deciduous broadleaf forests; cold-deciduous broadleaf forests; fall hardwood; southern rough; summer hardwood; herbaceous with broadleaf; shrublands	Hot Continental; Hot Continental Mountains; Prairie; Savanna Mountains; Subtropical	South Eastern U.S.	4,867	2	September - July
R9	short and long needle conifer cold-deciduous broadleaf forests; summer hardwood; herbaceous woodlands; shrublands	Hot Continental, Hot Continental Mountains; Prairie; Warm Continental	North Eastern	3,234	2	April - October
R10	Pacific coastal mountains and meadows	Marine Mountains; Subarctic	AK	115	3 to 6	June - September

<sup>&</sup>lt;sup>a</sup>Based on Bailey (1995)

<sup>&</sup>lt;sup>b</sup>Mixed (diluted) product

<sup>°</sup>National Protection Fire Association

 Table 3. Aerial fire retardant use information by region and forest

Forest Service Region	Forest Name	Acres	Total Number of Fires 2012- 2019	Total Number of Retardant Drops 2012- 2019 <sup>1</sup>	Average Drops per Year <sup>2</sup>	Total Gallons 2012-2019	Average Gallons per Year 2012 – 2019 <sup>3</sup>	Acres of Impact at 4 gpc <sup>3</sup>	Acres of Impact at 8 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 4 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 8 gpc <sup>3</sup>
1	Beaverhead- Deerlodge	3,393,381	497	266	33	664,125	83,016	64-146	56-115	0.0019- 0.0043%	0.0017- 0.0034%
1	Bitterroot	1,594,659	552	233	29	582,587	72,823	56-128	49-101	0.0035- 0.0080%	0.0031- 0.0063%
1	Custer Gallatin	3,040,134	540	127	16	317,046	39,631	31-70	27-55	0.0010- 0.0023%	0.0009- 0.0018%
1	Dakota Prairie grasslands	1,257,901	128	4	1	10,477	1,310	1-2	1-2	0.0001- 0.0002%	0.0001- 0.0002%
1	Flathead	2,414,162	463	40	5	100,701	12,588	10-22	8-17	0.0004- 0.0009%	0.0003- 0.0007%
1	Helena-Lewis and Clark	2,856,442	370	521	65	1,302,675	162,834	126-287	109-226	0.0044- 0.0100%	0.0038- 0.0079%
1	Idaho- Panhandle	2,498,072	758	348	44	870,343	108,793	84-192	73-151	0.0034- 0.0077%	0.0029- 0.0060%
1	Kootenai	2,243,219	687	279	35	697,339	87,167	68-154	58-121	0.0030- 0.0069%	0.0026- 0.0054%
1	Lolo	2,216,287	1023	2,013	252	5,033,651	629,206	488- 1109	422-873	0.0220- 0.0500%	0.0190- 0.0394%
1	Nez Perce - Clearwater	3,935,562	1380	528	66	1,319,283	164,910	128-291	111-229	0.0033- 0.0074%	0.0028- 0.0058%

Forest Service Region	Forest Name	Acres	Total Number of Fires 2012- 2019	Total Number of Retardant Drops 2012- 2019 <sup>1</sup>	Average Drops per Year <sup>2</sup>	Total Gallons 2012-2019	Average Gallons per Year 2012 – 2019 <sup>3</sup>	Acres of Impact at 4 gpc <sup>3</sup>	Acres of Impact at 8 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 4 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 8 gpc <sup>3</sup>
Regio	n 1 Subtotal	25,449,819	6,398	4,359	545	10,898,227	1,362,278	1056- 2401	914- 1890	0.0041- 0.0094%	0.0036- 0.0074%
2	Arapaho & Roosevelt	1,597,940	404	89	11	221,819	27,727	21-49	19-38	0.0013- 0.0031%	0.0012- 0.0024%
2	Bighorn	1,105,310	106	13	2	33,452	4,182	3-7	3-6	0.0003- 0.0006%	0.0003- 0.0005%
2	Black Hills	1,251,148	589	116	14	289,091	36,136	28-64	24-50	0.0022- 0.0051%	0.0019- 0.0040%
2	Grand Mesa Uncompahgr e and Gunnison	2,965,320	252	44	5	109,297	13,662	11-24	9-19	0.0004- 0.0008%	0.0003- 0.0006%
2	Medicine Bow-Routt	2,892,559	540	341	43	853,602	106,700	83-188	72-148	0.0029- 0.0065%	0.0025- 0.0051%
2	Nebraska	1,054,075	173	5	1	11,532	1,442	1-3	1-2	0.0001- 0.0003%	0.0001- 0.0002%
2	Pike and San Isabel	2,757,586	890	219	27	547,857	68,482	53-121	46-95	0.0019- 0.0044%	0.0017- 0.0034%
2	Rio Grande	1,838,862	114	70	9	173,871	21,734	17-38	15-30	0.0009- 0.0021%	0.0008- 0.0016%
2	San Juan	1,865,618	620	194	24	484,464	60,558	47-107	41-84	0.0025- 0.0057%	0.0022- 0.0045%
2	Shoshone	2,439,091	157	209	26	523,740	65,468	51-115	44-91	0.0021- 0.0047%	0.0018- 0.0037%

Forest Service Region	Forest Name	Acres	Total Number of Fires 2012- 2019	Total Number of Retardant Drops 2012- 2019 <sup>1</sup>	Average Drops per Year <sup>2</sup>	Total Gallons 2012-2019	Average Gallons per Year 2012 – 2019 <sup>3</sup>	Acres of Impact at 4 gpc <sup>3</sup>	Acres of Impact at 8 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 4 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 8 gpc <sup>3</sup>
2	White River	2,288,696	271	288	36	720,561	90,070	70-159	60-125	0.0031- 0.0069%	0.0026- 0.0055%
Regio	n 2 Subtotal	22,056,205	4,116	1,588	198	3,969,286	496,161	385-874	333-688	0.0017- 0.0040%	0.0015- 0.0031%
3	Apache- Sitgreaves	2,015,925	1093	94	12	235,089	29,386	23-52	23-41	0.0011- 0.0026%	0.0010- 0.0020%
3	Carson	1,491,916	508	33	4	83,413	10,427	8-18	8-14	0.0005- 0.0012%	0.0005- 0.0009%
3	Cibola	1,879,318	500	326	41	813,951	101,744	79-179	79-141	0.0042- 0.0095%	0.0036- 0.0075%
3	Coconino	1,844,098	1787	215	27	537,088	67,136	52-118	52-93	0.0028- 0.0064%	0.0024- 0.0050%
3	Coronado	1,719,928	609	849	106	2,123,058	265,382	206-468	206-368	0.0120- 0.0272%	0.0103- 0.0214%
3	Gila	3,269,965	812	336	42	838,779	104,847	81-185	81-145	0.0025- 0.0057%	0.0021- 0.0044%
3	Kaibab	1,543,675	805	44	6	110,178	13,772	11-24	11-19	0.0007- 0.0016%	0.0006- 0.0012%
3	Lincoln	1,095,603	298	211	26	527,713	65,964	51-116	51-92	0.0047- 0.0106%	0.0040- 0.0084%
3	Prescott	1,257,034	364	819	102	2,048,302	256,038	198-451	198-355	0.0158- 0.0359%	0.0137- 0.0282%
3	Santa Fe	1,546,059	600	244	31	610,190	76,274	59-134	59-106	0.0038- 0.0087%	0.0033- 0.0069%

Forest Service Region	Forest Name	Acres	Total Number of Fires 2012- 2019	Total Number of Retardant Drops 2012- 2019 <sup>1</sup>	Average Drops per Year <sup>2</sup>	Total Gallons 2012-2019	Average Gallons per Year 2012 – 2019 <sup>3</sup>	Acres of Impact at 4 gpc <sup>3</sup>	Acres of Impact at 8 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 4 gpc <sup>3</sup>	Percent National Forest System Land with Fire Retardant at 8 gpc <sup>3</sup>
3	Tonto	2,866,880	1289	1,022	128	2,555,214	319,402	248-563	249-443	0.0087- 0.0196%	0.0075- 0.0155%
Regio	n 3 Subtotal	20,530,401	8,665	4,193	524	10,482,975	1,310,372	878- 1997	878- 1572	0.0043- 0.0097%	0.0037- 0.0077%
4	Ashley	1,378,472	145	25	3	63,315	7,914	6-14	5-11	0.0004- 0.0010%	0.0004- 0.0008%
4	Boise	2,204,674	695	1,084	136	2,710,760	338,845	263-597	227-470	0.0119- 0.0271%	0.0103- 0.0213%
4	Bridger- Teton	3,432,162	300	514	64	1,284,666	160,583	124-283	108-223	0.0036- 0.0082%	0.0031- 0.0065%
4	Caribou- Targhee	2,899,406	324	45	6	113,397	14,175	11-25	10-20	0.0004- 0.0009%	0.0003- 0.0007%
4	Dixie	1,632,111	358	531	66	1,326,390	165,799	128-292	111-230	0.0078- 0.0179%	0.0068- 0.0141%
4	Fishlake	1,709,014	309	140	18	350,182	43,773	33-75	29-59	0.0019- 0.0044%	0.0017- 0.0035%
4	Humboldt- Toiyabe	6,253,933	810	868	108	2,169,855	271,232	210-478	182-376	0.0034- 0.0076%	0.0029- 0.0060%
4	Manti-La Sal	1,340,351	363	133	17	331,292	41,412	32-73	28-57	0.0024- 0.0054%	0.0021- 0.0043%
4	Payette	2,310,111	486	630	79	1,574,718	196,840	153-347	132-273	0.0066- 0.0150%	0.0057- 0.0118%
4	Salmon- Challis	4,355,403	383	316	40	791,114	98,889	77-174	66-137	0.0018- 0.0040%	0.0015- 0.0031%

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4	Sawtooth	2,111,959	250	300	37	749,524	93,691	73-165	63-130	0.0035- 0.0078%	0.0030- 0.0062%
4	Uinta- Wasatch- Cache	2,158,851	657	1,106	138	2,765,419	345,677	128-291	111-229	0.0059- 0.0135%	0.0051- 0.0106%
Regio	n 4 Subtotal	31,786,447	5,080	5,692	712	14,230,632	1,778,829	1056- 2401	914- 1890	0.0033- 0.0076%	0.0029- 0.0059%
5	Angeles	668,279	1110	1,511	189	3,777,882	472,235	366-832	317-655	0.0548- 0.1254%	0.0474- 0.0980%
5	Cleveland	426,804	625	934	117	2,334,163	291,770	226-514	196-405	0.0530- 0.1204%	0.0459- 0.0949%
5	Eldorado	615,035	434	566	71	1,416,203	177,025	137-312	119-246	0.0223- 0.0507%	0.0193- 0.0400%
5	Inyo	1,987,906	367	356	44	889,980	111,248	86-196	75-154	0.0043- 0.0099%	0.0038- 0.0077%
5	Klamath	1,505,983	767	1,647	206	4,118,014	514,752	399-907	345-714	0.0265- 0.0602%	0.0229- 0.0474%
5	LTBMU	154,268	332	1	0	2,075	259	0	0	0.0000%	0.0000%
5	Lassen	1,154,416	329	240	30	599,516	74,940	58-132	50-104	0.0050- 0.0114%	0.0043- 0.0090%
5	Los Padres	1,780,182	253	3,715	464	9,287,593	1,160,949	900- 2046	779- 1611	0.0506- 0.1149%	0.0438- 0.0905%
5	Mendocino	918,349	136	297	37	741,948	92,744	72-163	62-129	0.0078- 0.0177%	0.0068- 0.0140%

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5	Modoc	1,679,173	709	771	96	1,927,851	240,981	187-425	162-334	0.0111- 0.0253%	0.0096- 0.0199%
5	Plumas	1,205,685	794	735	92	1,838,511	229,814	178-405	154-319	0.0148- 0.0336%	0.0128- 0.0265%
5	San Bernardino	673,294	1069	2,385	298	5,962,980	745,373	578- 1314	500- 1034	0.0858- 0.1952%	0.0743- 0.1536%
5	Sequoia	1,114,954	436	1,510	189	3,773,826	471,728	366-831	317-655	0.0239- 0.0745%	0.0261- 0.0587%
5	Shasta- Trinity	2,139,325	999	1,387	173	3,467,858	433,482	336-764	291-601	0.0157- 0.0357%	0.136- 0.0281%
5	Sierra	1,316,193	504	2,673	334	6,681,406	835,176	647- 1472	560- 1159	0.0492- 0.1118%	0.0425- 0.0881%
5	Six Rivers	1,167,659	438	565	71	1,412,888	176,611	137-311	119-245	0.0117- 0.0266%	0.0102- 0.0210%
5	Stanislaus	898,739	440	1,062	133	2,655,013	331,877	257-585	223-460	0.0286- 0.0651%	0.0248- 0.0512%
5	Tahoe	854,807	673	318	40	795,873	99,484	77-175	67-138	0.0090- 0.0205%	0.0078- 0.0161%
Regio	n 5 Subtotal	20,261,051	10,415	20,673	2,584	51,683,580	6,460,448	5007- 11387	4335- 8964	0.0247- 0.0562%	0.0214- 0.0442%
6	Columbia River Gorge	83,339	138	7	1	17,248	2,156	2-4	1-3	0.0024- 0.0048%	0.0012- 0.0036%
6	Colville	1,104,904	355	174	22	434,907	54,363	42-96	36-75	0.0038- 0.0087%	0.0033- 0.0068%

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6	Deschutes and Ochoco	2,338,099	1856	518	65	1,294,840	161,855	125-285	109-225	0.0053- 0.0122%	0.0047- 0.0096%
6	Fremont- Winema	2,253,654	809	178	22	445,661	55,708	43-98	37-77	0.0019- 0.0043%	0.0016- 0.0034%
6	Gifford Pinchot	1,357,447	262	82	10	204,580	25,573	20-45	17-35	0.0015- 0.0033%	0.0013- 0.0026%
6	Malheur	1,722,070	787	379	47	946,825	118,353	92-209	79-164	0.0053- 0.0121%	0.0046- 0.0095%
6	Mt. Baker- Snoqualmie	1,762,266	384	0	0	0	0	0	0	0.0000%	0.0000%
6	Mt Hood	1,015,873	644	40	5	100,219	12,527	10-22	8-17	0.0010- 0.0022%	0.0008- 0.0017%
6	Okanogan- Wenatchee	4,010,517	1003	1,190	149	2,975,955	371,994	288-656	250-516	0.0072- 0.0164%	0.0062- 0.0129%
6	Olympic	632,646	59	0	0	0	0	0	0	0.0000%	0.0000%
6	Rogue River- Siskiyou	1,719,305	721	805	101	2,012,446	251,556	195-443	169-349	0.0113- 0.0258%	0.0098- 0.0203%
6	Siuslaw	630,204	122	0	0	0	0	0	0	0.0000%	0.0000%
6	Umatilla	1,404,806	547	283	35	707,359	88,420	69-156	59-123	0.0049- 0.0111%	0.0042- 0.0088%
6	Umpqua	986,610	593	168	21	419,817	52,477	41-92	35-73	0.0042- 0.0093%	0.0035- 0.0074%

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6	Wallowa- Whitman	2,403,487	733	439	55	1,098,137	137,267	106-242	92-190	0.0044- 0.0101%	0.0038- 0.0079%
6	Willamette	1,689,648	880	63	8	158,428	19,804	15-35	13-27	0.0009- 0.0021%	0.0008- 0.0016%
Regio	n 6 Subtotal	25,114,875	9,893	4,327	541	10,816,422	1,352,053	1048- 2383	907- 1876	0.0042- 0.0095%	0.0036- 0.0075%
8	Chattahooch ee-Oconee	867,578	283	7	1	17,420	2,178	2-3	1-3	0.0002- 0.0005%	0.0001- 0.0003%
8	Cherokee	660,211	208	8	1	19,954	2,494	2-4	2-3	0.0003- 0.0006%	0.0003- 0.0005%
8	Daniel Boone	709,856	383	0	0	0	0	0	0	0.0000%	0.0000%
8	El Yunque	28,805	0	0	0	0	0	0	0	0.0000%	0.0000%
8	Francis Marion & Sumter	635,197	251	0	0	0	0	0	0	0.0000%	0.0000%
8	George Washington and Jefferson	1,799,145	185	0	0	0	0	0	0	0.0000%	0.0000%
8	Kisatchie	608,535	326	0	0	0	0	0	0	0.0000%	0.0000%
8	Land Between the Lakes NRA	171,239	29	0	0	0	0	0	0	0.0000%	0.0000%

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8	NFs in Alabama	671,667	302	0	0	0	0	0	0	0.0000%	0.0000%
8	NFs in Florida	1,203,415	679	40	5	99,660	12,458	10-22	8-17	0.0008- 0.0018%	0.0007- 0.0014%
8	NFs in Mississippi	1,191,206	563	0	0	0	0	0	0	0.0000%	0.0000%
8	NFs in North Carolina	1,256,188	685	8	1	19,583	2,448	2-4	2-3	0.0002- 0.0003%	0.0002- 0.0002%
8	NF in Texas	677,696	289	4	1	11,200	1,400	1-2	1-2	0.0001- 0.0003%	0.0001- 0.0003%
8	Ouachita	1,783,951	418	0	0	0	0	0	0	0.0000%	0.0000%
8	Ozark-St. Francis	1,160,921	266	0	0	0	0	0	0	0.0000%	0.0000%
Regio	n 8 Subtotal	13,425,610	4,867	67	8	167,817	20,977	16-37	14-29	0.0001- 0.0003%	0.0001- 0.0002%
9	Allegheny	513,794	51	0	0	0	0	0	0	0.0000%	0.0000%
9	Chequamego n-Nicolet	1,525,127	146	0	0	0	0	0	0	0.0000%	0.0000%
9	Chippewa	672,128	253	4	1	10,796	1,350	1-2	1-2	0.0001- 0.0003%	0.0001- 0.0003%

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9	Green Mountain and Finger Lakes	427,053	32	0	0	0	0	0	0	0.0000%	0.0000%
9	Hiawatha	898,451	98	0	0	0	0	0	0	0.0000%	0.0000%
9	Hoosier	204,274	104	0	0	0	0	0	0	0.0000%	0.0000%
9	Huron- Manistee	978,891	859	0	0	0	0	0	0	0.0000%	0.0000%
9	Mark Twain	1,507,887	848	7	1	18,170	2,271	2-4	2-3	0.0001- 0.0003%	0.0001- 0.0002%
9	Midewin	18,225	10	0	0	0	0	0	0	0.0000%	0.0000%
9	Monongahela	920,783	40	0	0	0	0	0	0	0.0000%	0.0000%
9	Ottawa	998,994	48	0	0	0	0	0	0	0.0000%	0.0000%
9	Shawnee	286,311	125	0	0	0	0	0	0	0.0000%	0.0000%
9	Superior	2,173,267	227	34	4	84,126	10,516	8-19	7-15	0.0004- 0.0009%	0.0003- 0.0007%
9	Wayne	244,258	348	0	0	0	0	0	0	0.0000%	0.0000%
9	White Mountain	807,799	45	0	0	0	0	0	0	0.0000%	0.0000%
Regio	n 9 Subtotal	12,177,242	3,234	45	6	113,092	14,137	11-5	9-20	0.0001- 0.0002%	0.0001- 0.0002%
10	Chugach	5,400,752	48	0	0	0	0	0	0	0.0000%	0.0000%

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10	Tongass	16,747,705	67	0	0	0	0	0	0	0.0000%	0.0000%
Region	10 subtotal	22,148,457	115	0	0	0	0	0	0	0.0000%	0.0000%
TOTAL		192,950,107	52,783	40,945	5,118	102,362,031	12,795,254	9916- 22552	8586- 17753	0.0051- 0.0117%	0.0044- 0.0092%

<sup>&</sup>lt;sup>1</sup>Data derived from National Interagency Fire Center ABS database

<sup>&</sup>lt;sup>2</sup>Data averaged over 2012-2019

 $<sup>^{3}</sup>$ gpc = 100 ft<sup>2</sup>; 4 gpc = 4 gallons/100 ft<sup>2</sup> = 1,740 gallons/acre; 8 gpc = 8 gallons/100ft<sup>2</sup> = 3,480 gallons/acre; 1 acre = 43,500 ft<sup>2</sup>

Table 4. Component amounts of fire retardants currently on the Qualified Products List

Nutrients Delivered at Specific Coverage Levels <sup>1</sup>							
Retardant	pounds of ammonia per square foot delivered at 4 gallons per square foot retardant	pounds of phosphate per square foot delivered at 4 gallons per square foot retardant	pounds of ammonia per square foot delivered at 8 gallons per square foot retardant	pounds of phosphate per square foot delivered at 8 gallons per square foot retardant			
Phos-Chek LC-95A-R	0.0095	0.0301	0.0190	0.0602			
Phos-Chek LC-95A-Fx	0.0095	0.0273	0.0191	0.0546			
Phos-Chek LC-95-W	0.0095	0.0276	0.0191	0.0553			
Phos-Chek MVP-Fx	0.0053	0.0199	0.0105	0.0399			
Phos-Chek 259-Fx	0.0070	0.0203	0.0140	0.0406			
Phos-Chek LCE20-Fx	0.0073	0.0208	0.0147	0.0415			
	pounds of magnesium per square foot delivered at 4 gallons per square foot retardant	pounds of chloride per square foot delivered at 4 gallons per square foot retardant	pounds of magnesium per square foot delivered at 8 gallons per square foot retardant	pounds of chloride per square foot delivered at 8 gallons per square foot retardant			
Fortress FR-100	0.0093	0.0270	0.0185	0.0541			
Fortress FR-200 LLX	0.0094	0.0275	0.0188	0.0549			

<sup>1</sup>Source: Hunter Jones, Project Leader-Chemist, Wildland Fire Chemicals, Forest Service National Technology and Development Program

Data collected from 2012 through 2019 indicate that Regions 2, 8, 9, and 10 use relatively low amounts of retardant, annually, when compared to the other regions; Regions 3, 4, and 6 use similar amounts ranging from an average of 1.3 to 1.8 million gallons annually; Region 5 uses the most retardant, averaging 6.5 million gallons annually (table 4). The percent of National Forest System land receiving aerial application of fire retardant during the 2012 through 2019 reporting period had an average annual range of 0.0051-0.0117 percent of National Forest System lands at 4 gallons per 100 square feet, and an average annual range of 0.0045-0.0092 percent of National Forest System lands at 8 gallons per 100 square feet. No one forest exceeded more than 0.1952 percent (San Bernardino National Forest) of its land base annually. Retardant applications are based on a number of factors including fuel type, application rates, delivery systems, and other fire-fighting tactics. Application rates range between 1 and 8 gallons per 100 square feet, with the majority of applications being between 4 and 8 gallons per 100 square feet (Johnson 2010). Usually, the width and length of a retardant drop varies based on the type of aircraft used for delivery. An average drop is 50 to 75 feet wide by up to 800 feet long. Depending on fire-fighting tactics, retardant drops may be strung together creating a continuous path of retardant on the

ground or used to create a barrier in combination with other naturally occurring barriers to the advancement of fires (i.e. ridgetops, roads, waterways).

The following forests were over 0.01 percent use in 2011 and 2020: (R1) Helena-Lewis and Clark; (R2) None; (R3) Cibola, Coronado, Lincoln, Prescott, (R4) None; (R5) Angeles, Cleveland, Los Padres, Mendocino, Plumas, San Bernardino, Sequoia, Shasta-Trinity, Stanislaus; (R6) Deschutes, Ochoco, Okanogan-Wenatchee; (R8) None; (R9) None; (R10) None.

The following forests increased to over 0.01 percent use in 2020: (R1), Lolo, (R2) None; (R3) Tonto; (R4) Boise, Dixie, Sawtooth, Uinta-Wasatch-Cache; (R5) Eldorado, Inyo, Klamath, Lassen, Modoc, Sierra, Six Rivers, Tahoe; (R6) Malheur, Rogue River-Siskiyou, Umatilla, Wallowa-Whitman; (R8) None; (R9) None; (R10) None.

Both the Payette National Forest (R4) and Cherokee National Forest (R8) were over 0.01 percent use in 2011 but decreased below that amount in 2020.

Intrusion data gathered annually for the period of 2012 through 2019 show the number of fires on National Forest System lands with intrusions averaged 0.46 percent (range 0.28 to 0.61 percent). The total number of intrusions divided by the estimated number of retardant drops averaged 0.80 percent (range 0.56 to 1.52 percent) across all years (Appendix B).

# **Environmental Consequences**

This section focuses on the effects of aerial application of fire retardant on sensitive plant species and their habitats. This analysis addresses 2,454 sensitive species (Appendix A), in habitats ranging from arid and semi-arid to riparian, upland, forest, rocky areas, and many others. In addition to threatened, endangered, proposed, and candidate species (addressed in the biological assessment), the effects as described for sensitive plant species is expected to apply to all plants.

# **Assumptions**

A main assumption to the screening process is that forests that currently use aerial fire retardant would continue to do so at a rate similar to use described in table 3.

#### General Assumptions:

- Guidelines for mapping avoidance areas would continue to be implemented at the field level.
- The mitigation measures of avoidance mapping for habitat and populations will include established trigger points (at local level) for restricting the use of retardants within watersheds where retardant has caused adverse impacts to a species or population.
- Yearly pre-season coordination meetings will still occur and help in reducing impacts to species and habitats by discussing changes in new population information and monitoring needs for species prior to season use.
- Small isolated populations could also be identified to receive avoidance mapping; determined at field level.

# Analysis of Effects Common to All Sensitive Species

Given the programmatic nature of this environmental analysis, this assessment uses qualitative rather quantitative values due to the impossibility of accurately predicting where and when the aerial application of fire retardant will be used as a firefighting tool, or how much it will be used.

Regardless of whether fire retardant is used, the following assumptions may be made concerning large wildland fires (Geier-Hayes 2011), they:

- often burn for long durations in a variety of weather and fuel conditions that can produce high fire severity effects across a large area.
- have more potential to affect a greater proportion of the population of a species or their habitats at one time, particularly for endemics or species whose populations or habitats are limited in distribution or have been affected by fragmentations or changes in land use surrounding them.
- have the potential to increase the spread of nonnative plant species, which favor ground disturbances, and thus, may reduce the quality of habitat for native plant species.

# Potential Direct and Indirect Effects Common to All Sensitive Species

#### **Chemical Risks**

A Risk Assessment (Auxilio Management Services 2020, 2021a, 2021b, 2021c) was prepared for the Forest Service for a number of chemicals used in long-term fire retardants. Text is quoted directly from the Risk Assessment (Auxilio Management Services 2020, 2021a, 2021b, 2021c) to ensure that information is conveyed without losing context through summarization. The risk assessment uses the ecoregions classifications described by Bailey (1995; table 3) and considers areas of the United States where firefighting chemicals are more likely to be applied. The risk evaluation for plant species is summarized below.

- Few studies have evaluated the potential effects of fire retardants on terrestrial vegetation. Overall, they indicate the possibility of phytotoxic effects to individual plants of more sensitive species at the application rates typically used, but generate no expectation of widespread or enduring impacts.
- The phytotoxic effects and vegetation diversity endpoints in this analysis have underlying links related to mechanisms of toxicity (for example, varying susceptibility to effects on seed germination among plant species). However, further exhaustive or quantitative analysis of the topic is not warranted, since only limited areas are treated with these products and the vegetation would otherwise be severely affected by the fire itself in the absence of their use.

The analysis from the Risk Assessment (Auxilio Management Services 2020, 2021a, 2021b, 2021c) follows:

#### **Phytotoxicity**

Impacts on terrestrial plants from ingredients in the retardant formulations were evaluated. The exposure characterization for plants was based on the same application scenarios as the exposure

characterization for wildlife species. Limited data were expected to be available for the effects characterization, so the risk characterization was planned to be quantitative where possible and qualitative where data were limited.

The potential toxicity to plants of ingredients in the retardants was evaluated semi-quantitatively, depending on the nature of the chemical-specific plant toxicity information that was available for each ingredient, if any.

A field study (Larson and Newton 1996) examined the effect of a retardant that is no longer commercially available (containing monoammonium phosphate and diammonium sulfate), applied at a rate of 1 gallons per 100 square feet, on vegetation in a North Dakota mixed grass prairie. In each test area, four plots were evaluated: a control, application of product only, application of product plus burn, and burn only. The retardant application produced a notable increase in herbaceous biomass for the first growing season only, regardless of whether the plot was also burned, and caused no effects on shoot, leaf, or stem growth characteristics. This study's observations regarding species diversity effects are discussed in the following vegetation diversity section.

A follow-up study (Larson et al. 1999) evaluated the same retardant product when applied to Great Basin shrub steppe vegetation, in northern Nevada. Growth, resprouting, flowering, and incidence of galling insects were not affected by treatment with the retardant applied at a rate of 3 gallons per 100 square feet. This study's observations regarding species diversity effects are also discussed in the following vegetation diversity section.

Shoot and whole plant death on individual plants were recorded following experimental application of a retardant that is no longer commercially available (containing diammonium sulfate, diammonium phosphate, and monoammonium phosphate) to plots on an Australian heathland (Bell 2003, Bell et al. 2005). Adverse effects varied by species, and increased with increasing application rate (from 0.5 to 1.5 liters mixed retardant per square meter, or 1.2 to 3.7 gallons per 100 square feet). However, there was little change in visual estimates of percent foliar cover between treated and untreated areas.

Few studies have evaluated the potential effects of fire retardants on terrestrial vegetation. Overall, they indicate the possibility of phytotoxic effects to individual plants of more sensitive species at the application rates typically used, but generate no expectation of widespread or enduring impacts. Visible browning of leaves, possibly related to chemical burn caused by direct application of an ammonium-based product as well as dehydration of the leaf surface from exposure to the elevated salt content of the fire retardant, has been documented in field studies by Larson and Newton (1996); however, regeneration of leaf material was recorded later in the same growing season and herbivory was not affected.

#### **Vegetation Diversity**

Positive and negative effects of chemicals on plant species' growth were considered qualitatively. A major focus of the analysis was the potential for enhancement of invasive species' spread and corresponding decline of native species.

This topic was evaluated qualitatively based on a literature review of the effects of fire suppression on the vegetative community. Available literature was limited and was both habitat and chemical-specific.

Information on the effects of fire retardant chemicals on vegetation diversity is extremely limited. Larson et al. (1999) suggested that many effects of ammonium-based retardants can be anticipated based on studies with fertilizers. Similar to the effects of fertilizers, fire retardants may encourage growth of some plant species, giving them a competitive advantage over others, thus resulting in changes in community composition and species diversity (Tilman 1987, Wilson and Shay 1990). Bell et al. (2005) recorded enhanced weed invasion in an Australian heathland ecosystem, particularly in areas receiving high concentrations of a retardant that is no longer commercially available (containing diammonium sulfate, diammonium phosphate, and monoammonium phosphate). The effects of a retardant that is no longer commercially available (containing monoammonium phosphate and diammonium sulfate) were also evaluated in a North Dakota grassland community (Larson and Newton 1996) and in a shrub steppe area in the Great Basin in Nevada (Larson et al. 1999). The researchers measured community characteristics, including species richness, evenness, diversity, and number of stems of woody and herbaceous plants.

- ♦ In the North Dakota prairie ecosystem, species richness was reduced in plots exposed to retardant regardless of whether the plot was burned or unburned. All plots were dominated by *Poa pratensis*, which clearly gained a competitive advantage from retardant application and crowded out other species.
- ♦ Investigations in the Great Basin shrub steppe ecosystem also showed that plots treated with fire chemicals experienced initial declines in species richness; however, differences among plots were undetectable after a year. Depression of species richness was most pronounced in the riparian corridor.

Overall, vegetative community response to burning was more dramatic than was the response to chemical application. In both studies, the authors note that each study was short-term, and that long-term ecological responses should be measured over several growing seasons. However, they did recommend that managers intending to use these chemicals to control prescribed burns should consider the effects on species richness or on individual species of concern (invasive species) when they evaluate management objectives on a landscape scale.

In an evaluation of the application of Phos-Chek XA fire retardant (containing diammonium phosphate) that was applied to a California grassland during the course of fighting a wildland fire, Larson and Duncan (1982) studied the effects on vegetative productivity. The two-year study reported that application of the retardant produced almost twice the yield of forage in the first year after application in both burned and unburned areas; this relative increase continued into the second year for the unburned treated plot. In the second year, there was no statistically significant increase in forage production in either the treated or untreated burned plots compared to the unburned, untreated control area. The authors reported that, although forbs usually increase in annual grassland after a fire, nitrogen fertilizer favors grasses, which dominated the first year after the fire. Forbs dominated the second year.

Although the phytotoxic effects and vegetation diversity endpoints in this analysis have underlying links related to mechanisms of toxicity (for example, varying susceptibility to effects on seed germination among plant species), further exhaustive or quantitative analysis of the topic is not warranted, since only limited areas are treated with these products and the vegetation would otherwise be severely affected by the fire itself in the absence of their use.

The Risk Assessment (Auxilio Management Services 2020, 2021a, 2021b, 2021c) does not address phytotoxicity and vegetation diversity impacts of magnesium chloride. Most of the studies on plant responses to magnesium chloride have focused on the application of formulations used for dust abatement. These studies have focused primarily on damage to tree species that have resulted in needle loss, severe damage and mortality (Goodrich and Jacobi 2012, Goodrich et al. 2009). Magnesium chloride use for dust abatement occurs repeatedly throughout the life of roadside vegetation, but repeated application of magnesium chloride based retardant on the same location is unlikely. Some species may be susceptible to damage from the application of magnesium chloride based aerial retardant, but the limited number of applications and area of applications would reduce the impact to individual species and vegetation diversity.

The use of aerial fire retardants may prevent more wildfires from becoming much larger and impacting more habitat for a particular species. Fires are getting larger and burning with higher intensities than in the past. For example, on the Plumas National Forest 767,859 of the 1,203,113 total acres of the forest ownership are within the footprint of 7 major fires occurring between 2017-2022. This represents 64% of Plumas National Forest ownership (USFS 2022). Thirty three percent (397,481 acres) of Plumas National Forest ownership have burned at high severity in these recent fires. Beneficial effects of using fire retardant may include the protection of habitat from burning by the prevention of large scale, stand replacing events in those area that are not adapted to larger fires. The beneficial use of aerial retardant on plant occurrences may outweigh the negative impacts by reducing the intensity of burns near or within occurrences. The use of retardant may also reduce the amount of direct impacts that can result from the hand and bulldozer construction of fireline. Short term increases in productivity from fertilizer effects occur over a smaller area than the disturbance created by high intensity fire. This may reduce the overall risk of spread of non-native invasive species into sensitive plant habitat.

# Potential Cumulative Effects Common to All Sensitive Species

The proposed action has the potential to result in a positive or negative cumulative effect to sensitive species viability or habitats, when combined with several past, present, and reasonably foreseeable natural and human-caused actions. These actions include habitat restoration and rehabilitation projects, habitat destruction from land development, recreational activities, natural disasters, such as hurricanes, climate change, grazing, timber harvesting, road construction and maintenance, mining, etc. Components of Forest Plans provide for protection and restoration as well as for wildlife species and habitats, including habitats for sensitive species

As previously described, the use of aerial application of fire retardant is expected to have short-term effects. Additionally, the use of aerial application of fire retardant is expected to assist in preventing wildfires from increasing and consuming habitat for species.

The cumulative effect of aerial application on sensitive species is likely to be minor because of the small amount of area affected by retardant each year, spread widely across the United States (less than 1 percent of all National Forest System lands). Once a wildfire has burned through an area, the re-application to these same locations in the future is highly improbable due to the fact that fire and use of retardant would not occur due to low fuel loads. In other words, once a fire burns an area, it is highly improbable to burn at the same intensity, again, to cause the Forest Service to drop more retardant in that area. In addition, sensitive species located within retardant avoidance mapped areas would be protected from the effects of retardant. However, the amount

of retardant could increase, decrease or stay the same depending on fire-fighting tactics used in the surrounding area. Establishing trigger points for restricting the use of retardants within watersheds where fire retardant has caused adverse effects to a species or population, and annual coordination should help reduce impacts to sensitive species and habitats. To summarize, avoidance area mapping for habitat and populations, establishing trigger points that restrict the use of retardants within watersheds where fire retardant has caused adverse effects to a species or population, and annual coordination should help reduce impacts to species and habitats.

Overall, the cumulative risk to most sensitive plant species is minor, with the exception of small, isolated, endemic populations. For species that are wide-ranging and have larger populations, aerial application of fire retardant on a specific fire would occur only within the habitat of a very small portion or fraction of a population; therefore, cumulative effects would be very minor.

# **Summary of Determinations**

For the 2,454 Forest Service sensitive plant species, the unit specific determinations are summarized in Table 5. There are:

1,395 species unit occurrences with No Impacts due to no retardant use or not in habitat where fire retardant would be used.

- 3,440 species unit occurrences with a May Impact Individuals or Habitat determinations.
- 0 sensitive species have a potential risk to be trending towards listing with use of aerial application of fire retardant.

Appendix A displays sensitive plant species by Region and Forest, along with the determination for each unit where the species occurs and the rationale for the determination.

Table 5. Determinations by Region.

	number		may impact individual or	will impact individuals
Region	of	no impact	habitats but will not lead to a	and habitats and lead to a
	species		trend in federal listing	trend in federal listing
1	205	18	287	0
2	86	27	200	0
3	173	3	224	0
4	220	68	229	0
5	481	22	796	0
6	543	222	1215	0
8	312	322	311	0
9	698	698	178	0
10	16	16	0	0

Some species may be mapped for avoidance by individual National Forests for reasons outside of this analysis, but none are required to do so due to a will trend to list determination.

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# **Appendix A: Regional Forester Sensitive Plant Species**

Forest Service Senstive Plant Determination Summary by Region and Forest Where Species Occur

7-Jul-23

This spreadsheet displays the Forest Service Regional Forester designated sensitive plant species and summarizes the rationale and determinations for the Nationwide Aerial Delivery of Fire Retardant on National Forest System Lands SEIS for each unit where the species occur. The Biological Evaluation describes the national screening process used. This spreadsheet includes the responses to the screening criteria, and additional information used to make a determination. For sensitive species, determinations are made at the planning unit (forest or administrative unit) level, and can vary between units based on retardant use.

Species included on Regional Sensitive Species lists that are listed or proposed to be listed as threatened or endangered were included in the analysis in the Biological Assessment. These species are not included in the Biological Evaluation and determinations are not found in this spreadsheet for them. Species that were federally listed as threatened or endangered and are delisted are included on the Regional Sensitive Species list for 5-years post delisting (FSM 2670) and are included in this analysis.

Forests that have completed Forest Plan Revisions under the 2012 Planning Rule no longer have sensitive species. Those Forests have been hidden from the lists in each Region. Forests with new Forest Plans under the 2012 Planning Rule include:

Region 1: Flathead (2018), Helena - Lewis and Clark (2021), Custer-Gallatin (2022)

Region 2: Rio Grande (2020)

Region 3: Cibola (2022); Carson (2022); Santa Fe (2022)

Region 4:

Region 5: Inyo (2019); Sierra (2023); Segouia (2023, not including the Seguoia National Monument)

Region 6:

Region 8: Francis Marion (2017); El Yunque (2019); Nantahala and Pisgah (2023)

Region 9

Region 10: Chugach (2020)

### Codes in this spreadsheet:

NI = no impact

MIIH - may impact indiviuals and habitat but will not lead to a trend in federal listing

WII - may impact indiviuals and habitat and will lead to a trend in federal listing

Forests Names in Red font indicate those forests where retardant use averages over 1 percent of the land base in a year.

### Notes:

- 1. Sensitive species are not identified on the 2018 Region 8 sensitive species list for the Francis Marion National Forest because the Forest Plan was completed in 2017.
- 2. The sensitive species list for the National Forests in North Carolina, which include the Nantahala and Pisgah National Forests, is not broken out by individual forest; therefore the entire species lists is included in this analysis.
- 3. The sensitive species list for the Sequoia National Forest is not broken out for the Sequoia National Monument; therefore all species on the Sequoia National Forest list are included in this analysis.

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						<u>.</u> . T		T		I		T			Habitat			
			Beaverhead-	Bitterroot	1	Dakota Prairie	Flathead	Helena-Lewis	Idaho-	Kootenai	Lolo	Nez-Perce	Species Rank		potentially	Initial Determination from National	Species occurs on more	tree, shrub, succulent
Category	Common name	scientific name	Deerlodge		Gallatin	Grasslands		and Clark	Panhandle			Clearwater	G1/G2?	Use over 0.01		Screen Process	than 1 unit?	life form?
																MIIH- Not G1/G2, One or more forests		
			міін								MIIH					over 0.01 application rate, Plant occurs in a		
											141111				140	habitat unlikely to burn and/or unlikely to		
plant - vascular	muskroot	Adoxa maschatellina											No	Yes		have retardant applications.		
	Cusick's giant		NI												NI-Talus			
plant - vascular	hyssop	Agastache cusickii				$\vdash$							No	No		NI-Talus		
																MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a		
	wostorn joonyo	Aggrating (Fungtorium)	MIIH	MIIH						MIIH	MIIH				No.	habitat unlikely to burn and/or unlikely to		
plant - vascular	western joepye- weed	Ageratina (Eupatorium) occidentalis											No	Yes		have retardant applications		
piant - vasculai	weed	occidentalis				<del>                                     </del>							INO	res		MIIH- Not G1/G2, One or more forests		
			міін	MIIH							MIIH					over 0.01 application rate, habitat		
plant - vascular	Hooker's onion	Allium acuminatum	IVIIII	1411111							IVIIII		No	Yes		potentially impacted		
plant vascalar	THOOKET'S OTHOR	, unam dearminatam				<del>                                     </del>							140	103		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	small onion	Allium parvum	MIIH	MIIH									No	No	Voc	habitat potentially impacted		
piant tastana.	Sman omon	, partam											110	110		pacteu		
															Yes, but riparian	MIIH- Not G1/G2, One or more forests		
										МІІН	MIIH				buffers likely to	over 0.01 application rate, habitat		
	small round-leave	ed													p	potentially impacted, but riparian buffers		
plant - vascular	orchid	Amerorchis rotundifolia											No	Yes	nrotoction	likely to provide protection		
		,														MIIH- Not G1/G2, No use over 0.01, Plant		
															No, riparian	occurs in a habitat unlikely to burn and/or		
									MIIH						buffers likely to	unlikely to have retardant applications.		
															•	Riparian buffers likely to provide		
plant - vascular	bog-rosemary	Andromeda polifolia											No	No	protection	protection		
	denseleaf		NI												NI-Talus			
plant - vascular	pussytoes	Antennaria densifolia	IVI										No	No		NI-Talus		
						міін									Voc	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	potato bean	Apios americana				1411111							No	No		habitat potentially impacted		
																MIIH- Not G1/G2, One or more forests		
	small flower															over 0.01 application rate, habitat		
plant - vascular	columbine	Aquilegia brevistyla											No	Yes		potentially impacted		
															Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular		d Asclepias ovalifolia				$\vdash$							No	No		habitat potentially impacted		
	maidenhair	Analysis and trials are an are							NI			NI			NI-Cliffs and	NII Cliffe and tales		
plant - vascular	spleenwort	Asplenium trichomanes				-							No	No	talus	NI-Cliffs and talus		
																MILL Not C1/C2 No use over 0.01 Plant		
						MIIH									No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or		
plant - vascular	Barr's milkvetch	Astronalus harrii											No	No		unlikely to have retardant applications.		
piant - vasculai	Barr S milkvetch	Astragalus burrii				<del>                                     </del>							INO	INO		MIIH-G1/G2, One or more forests over		
																0.01 application rate, Plant occurs in a		
	Lackschewitz'														N <sub>O</sub>	habitat unlikely to burn and/or unlikely to		
plant - vascular	milkvetch	Astragalus lackschewitzii											Yes	Yes		have retardant applications.		
	least balddery												1.03	1.00		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	milkvetch	Astragalus microcystis							MIIH				No	No		habitat potentially impacted		
	-	3 ,												-		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	Payson's milkvetc	h <i>Astragalus paysonii</i>		MIIH					MIIH			MIIH	No	No		habitat potentially impacted		
	Bitterroot	·														MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	milkvetch	Astragalus scaphoides	MIIH										No	No	Voc	habitat potentially impacted		
																MIIH- Not G1/G2, One or more forests		
				MIIH							MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	sandweed	Athysanus pusillus	<u> </u>			<u> </u>							No	Yes		potentially impacted		
	large-leaved		MIIH													MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	balsamroot	Balsamorhiza macrophylla	IVIIII										No	No		habitat potentially impacted		
						ı <del>1</del>						1				MIIH- Not G1/G2, No use over 0.01, Plant		
															huffers likely to	occurs in a habitat unlikely to burn and/or		
									MIIH						provide	unlikely to have retardant applications.		
															protection	Riparian buffers likely to provide		
plant - vascular	bog birch	Betula pumila	i l	i								1	No	No	F. 310011011	protection	İ	

			Beaverhead-		Custer-	Dakota Prairie		Helena-Lewis	Idaho-			Nez-Perce			Habitat			
			Deerlodge	Bitterroot	Gallatin	Grasslands	Flathead	and Clark	Panhandle	Kootenai	Lolo	Clearwater	Species Rank		potentially	Initial Determination from National	Species occurs on more	
Category	Common name	scientific name				Crassianas		u				Great trace.	G1/G2?	Use over 0.01	impacted?	Screen Process	than 1 unit?	life form?
															No, riparian	MIIH- Not G1/G2, One or more forests		
																over 0.01 application rate, Plant occurs in a		
										MIIH	MIIH				provide	habitat unlikely to burn and/or unlikely to		
	Beck water-														protection	have retardant applications, Riparian		
plant - vascular	marigold	Bidens beckii											No	Yes	p. otcotion	buffers likely to provide protection		
-																MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	deer fern	Blechnum spicant							MIIH			MIIH	No	No	Yes	habitat potentially impacted		
																	Yes - Impacts not	
																	expected across entire	
			MIIH	MIIH							MIIH				Yes		population in one year.	
	Mount Sapphire															application rate, habitat potentially	Final determination	
plant - vascular	rockcress	Boechera fecunda											Yes	Yes		impacted.	MIIH.	
																MIIH- Not G1/G2, One or more forests		
	upward-lobed								MIIH	MIIH					Yes	over 0.01 application rate, habitat		
plant - vascular	moonwort	Botrychium ascendens											No	Yes		potentially impacted		
																MIIH- Not G1/G2, One or more forests		
			MIIH						MIIH	MIIH		MIIH			Yes	over 0.01 application rate, habitat		
plant - vascular		Botrychium crenulatum											No	Yes		potentially impacted		
	western		MIIH							MIIH					Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	moonwort	Botrychium hesperium											No	No		habitat potentially impacted		
	1	0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1														NAME AND CA (CO. N		
alant	lanceleaf	Botrychium lanceolatumvar.							MIIH			MIIH			Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
plant - vascular	moonwort	Lanceolatum											No	No		. , .		
mlant wassulan	linearleaf	Batrushium linears							MIIH			MIIH	N-	N	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
plant - vascular	moonwort	Botrychium lineare											No	No				
nlant vessules	Mingan Island	Bata sahiyan minaanana							MIIH			MIIH	No	No	Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	moonwort mountain	Botrychium minganense											INO	No		habitat potentially impacted MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	moonwort	Botrychium montanum							MIIH			MIIH	No	No	Yes	habitat potentially impacted		
piant - vascular	leathery grape-	BOLTYCHIUM MONEUMAN											No	No		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	fern	Botrychium multifidum				MIIH							No	No	Yes	habitat potentially impacted		
piant - vasculai	Terri	Boti yemam marenjaam											INO	INO		MIIH- Not G1/G2, One or more forests		
			МІІН						MIIH	MIIH	MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	neculiar moonwort	Botrychium paradoxum	1411111						IVIIII I	1411111	1411111		No	Yes	163	potentially impacted		
p.u	pecana. mechanic	20th yernam paradoxam											110	103		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	stalked moonwort	Botrychium pedunculosum							MIIH	MIIH			No	No	Yes	habitat potentially impacted		
	northern															MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	moonwort	Botrychium pinnatum							MIIH			MIIH	No	No	Yes	habitat potentially impacted		
		, ,														MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	least moonwort	Botrychium simplex				MIIH			MIIH			MIIH	No	No	Yes	habitat potentially impacted		
															No, riparian	MIIH- Not G1/G2, One or more forests		
										MIIH	MIIH				buffers likely to	over 0.01 application rate, Plant occurs in a		
										IVIIITI	IVIIIH				provide	habitat unlikely to burn and/or unlikely to		
															protection	have retardant applications. Riparian		
plant - vascular	watershield	Brasenia schreberi											No	Yes		buffers likely to provide protection		
	a bug-on-a-stick								MIIH			MIIH			Voc	MIIH- Not G1/G2, No use over 0.01,		
plant - non-vascular	moss	Buxbaumia aphylla							IVIIII			IVIIII	No	No	Yes	habitat potentially impacted		
	a bug-on-a-stick		_	]					MIIH			MIIH			Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - non-vascular	moss	Buxbaumia viridis							IVIIIII			141111	No	No	163	habitat potentially impacted		
	broadfruit								MIIH			MIIH			Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	mariposa lily	Calochortus nitidus							1411111			1411111	No	No	163	habitat potentially impacted		
						МІІН									Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular		Campanula aparinoides											No	No		habitat potentially impacted		
	Constance's								MIIH			MIIH			Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	bittercress	Cardamine constancei		ļ					1				No	No	. 55	habitat potentially impacted		
1						МІІН							1		Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	foxtail sedge	Carex alopecoidea											No	No		habitat potentially impacted		

								<u> </u>				T	T		Habitat		1	
			eaverhead-	Bitterroot		Dakota Prairie	Flathead	Helena-Lewis	Idaho-	Kootenai	Lolo	Nez-Perce	Species Rank		potentially	Initial Determination from National	Species occurs on more	tree, shrub, succulent
Category	Common name scientific name	me L	Deerlodge		Gallatin	Grasslands		and Clark	Panhandle			Clearwater	G1/G2?	Use over 0.01	impacted?	Screen Process	than 1 unit?	life form?
															Yes, but riparian			
															buffers likely to			
										MIIH					provide	MIIH- Not G1/G2, No use over 0.01,		
													l	l	protection	habitat potentially impacted, Riparian		
plant - vascular	big-leaf sedge Carex amplifo	olia										-	No	No		buffers likely to provide protection		
									MIIH			MIIH	l	l	Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	Buxbaum's sedge Carex buxbau	umii	-										No	No		habitat potentially impacted		
															Yes, but riparian	MIIH- Not G1/G2, One or more forests		
															buffers likely to	over 0.01 application rate, habitat		
									MIIH	MIIH	MIIH				provide	potentially impacted, but riparian buffers		
plant - vascular	creeping sedge	rrhiza											No	Yes	protection	likely to provide protection		
piant - vasculai	creeping seage Carex chorao	niiizu	+									+	INO	res		likely to provide protection		
															Yes, but riparian			
									MIIH						buffers likely to	MIIH- Not G1/G2, No use over 0.01,		
									IVIIII						provide	habitat potentially impacted, but riparian		
plant - vascular	bristly sedge Carex comoso	<i>a</i>											No	No	protection	buffers likely to provide protection		
piant - vasculai	bristly sedge Carex corrost	u l	+									+	No	No		buriers likely to provide protection		
															Yes, but riparian			
									NAULI						buffers likely to	MIIH- Not G1/G2, No use over 0.01,		
									MIIH						provide	habitat potentially impacted, but riparian		
plant - vascular	yellow sedge Carex flava												No	No		buffers likely to provide protection		
piant - vascular	yellow sedge Carex jiava		-									-	No	INO		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	handsome sedge	s a				MIIH							No	No	Yes	habitat potentially impacted		
piant - vasculai	manusome seuge Curex Joinnos	su .	+									+	No	No		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	heavy sedge Carex gravido	a											No	No	Yes	habitat potentially impacted		
piant - vasculai	neavy seage Carex graviate	u	-										INO	INO		MIIH- Not G1/G2, No use over 0.01,		
			MIIH												voc hut rinarian	habitat potentially impacted, Riparian		
plant - vascular	Idaho sedge Carex idahoa	,	IVIIIII										No	No		buffers likely to provide protection		
plant - vascalar	iduno scuge curex ruunou	'											140	140		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	lake-bank sedge Carex lacustri	ris											No	No	Voc	habitat potentially impacted		
plant vascalar	lake bark seage   earex racastri	15											140	140		MIIH- Not G1/G2, One or more forests		
						міін			MIIH			MIIH			Yes	over 0.01 application rate, habitat		
plant - vascular	bristly-stalk sedge   Carex leptale	ea l										"""	No	Yes		potentially impacted		
prant radiana.	ansay stancesage carenteptane		+										110	163		MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
															,paa	Riparian buffers likely to provide		
plant - vascular	pale sedge Carex livida												No	No		protection		
•																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
				MIIH					MIIH						No, riparian	unlikely to have retardant applications.		
																Riparian buffers likely to provide		
plant - vascular	poor sedge Carex magelle	lanica											No	No		protection		
																MIIH- Not G1/G2, No use over 0.01, Plant		
		1														occurs in a habitat unlikely to burn and/or		
										MIIH					No, riparian	unlikely to have retardant applications.		
																Riparian buffers likely to provide		
plant - vascular	prairie sedge Carex prairea	a l											No	No		protection		
																MIIH- Not G1/G2, One or more forests		
										MIIH	MIIH				No, riparian	over 0.01 application rate, Plant occurs in a	ı	
										IVIIII	IVIIII				NO, Hparian	habitat unlikely to burn and/or unlikely to		
	glaucus beaked															have retardant applications, Riparian		
plant - vascular	sedge Carex rostrati	ta											No	Yes		buffers likely to provide protection		
												MIIH			uas but riparian	MIIH- Not G1/G2, No use over 0.01,		
	many-headed											IVIIII			yes, but riparian	habitat potentially impacted, but riparian		
plant - vascular	sedge Carex synchn	nocephala											No	No		buffers likely to provide protection		
											<u> </u>					MIIH- Not G1/G2, One or more forests		
		1								MIIH					Vac hut rinarian	over 0.01 application rate, habitat		
										1711111					Yes, but riparian	potentially impacted but riparian buriers		
plant - vascular	sheathed sedge Carex vagina	ıta											No	No		likely to provide protection		

			Beaverhead-		Custer-	Dakota Prairie		Helena-Lewis	Idaho-			Nez-Perce		1	Habitat			
Catagoni	Camman nama	asiantifia nama	Deerlodge	Bitterroot	Gallatin	Grasslands	Flathead	and Clark	Panhandle	Kootenai	Lolo	Clearwater	Species Rank		potentially	Initial Determination from National	"	ore tree, shrub, succulent
Category	Common name	scientific name				-							G1/G2?	Use over 0.01	impacted?	Screen Process MIIH- Not G1/G2, One or more forests	than 1 unit?	life form?
	Cavilla indian		MIIH												V			
	Coville indian	Contillatoracillatora	IVIIIH	MIIH									N.	V	Yes	over 0.01 application rate, habitat		
plant - vascular	paintbrush	Castilleja covilleana											No	Yes		potentially impacted		
																MILL Not C1/C2 No use over 0.01 Plant		
						MIIH									No	MIIH- Not G1/G2, No use over 0.01, Plant		
													l	l		occurs in a habitat unlikely to burn and/or		
plant - vascular	smooth gooseroot	Chenopodium subglabrum				_						-	No	No		unlikely to have retardant applications.		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
	bulb-bearing water															Riparian buffers likely to provide		
plant - vascular	hemlock	Cicuta bulbifera											No	No		protection		
												МІІН			Yes	MIIH- G1/G2, No use over 0.01, habitat		
fungi	French Crane's-bill	Cladonia andereggii											Yes	No	163	potentially impacted		
																MIIH- Not G1/G2, One or more forests		
				MIIH						MIIH	MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	diamond clarkia	Clarkia rhomboidea											No	Yes		potentially impacted		
											NI				NI- talus			
plant - vascular	sand springbeauty	Claytonia arenicola									INI		No	Yes	INI- Laius	NI-Talus		
																MIIH- Not G1/G2, No use over 0.01, Plant		
	pustulate tarpaper									MIIH					No	occurs in a habitat unlikely to burn and/or		
fungi	lichen	Collema curtisporum											No	No		unlikely to have retardant applications.		
	maiden blue eyed															MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	mary	Collinsia parviflora				MIIH							No	No	Yes	habitat potentially impacted		
•																MIIH- Not G1/G2, One or more forests		
												МІІН			Yes	over 0.01 application rate, habitat		
plant - vascular	Pacific dogwood	Cornus nuttallii											No	No	163	potentially impacted		
piant ractana	. deme degreed	001114011111111111111111111111111111111											110	110		MIIH- Not G1/G2, One or more forests		
										MIIH					Yes	over 0.01 application rate, habitat		
plant - vascular	pale corydalis	Corydalis sempervirens								IVIIIII			No	No	163	potentially impacted		
plant Vascalar	Missouri foxtail	Coryphantha (Escobaria)										+	INO	NO		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	cactus	missouriensis				MIIH							No	No	Yes	habitat potentially impacted		
piant - vasculai	cactus	IIII330UITEII3I3										+	INO	INO		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	Torroy's satis ava	Cryptantha torreyana				MIIH							No	No	Yes	habitat potentially impacted		
piant - vascular	Torrey's cat's-eye	Cryptantna torreyana										-	INO	INO		MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
						MIIH									No, riparian	unlikely to have retardant applications,		
													1			Riparian buffers likely to provide		
plant - vascular	shining flatsedge	Cyperus bipartitus											No	No		protection		
	white lady's-					MIIH									Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	slipper	Cypripedium candidum				_							No	No		habitat potentially impacted		
																MIIH- Not G1/G2, One or more forests		
	clustered lady's-								MIIH	MIIH	MIIH	MIIH			Yes	over 0.01 application rate, habitat		
plant - vascular	slipper	Cypripedium fasciculatum											No	Yes		potentially impacted		
																MIIH- Not G1/G2, One or more forests		
	small yellow lady's			MIIH						MIIH	MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	slipper	Cypripedium parviflorum											No	Yes		potentially impacted		
																MIIH- Not G1/G2, One or more forests		
		Cypripedium parviflorum							MIIH						Yes	over 0.01 application rate, habitat		
plant - vascular	slipper	var. pubescens											No	Yes		potentially impacted		
																MIIH- Not G1/G2, One or more forests		
	sparrow's-egg									MIIH	MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	lady's-slipper	Cypripedium passerinum		<u>                                       </u>							<u></u>		No	Yes	<u>                                     </u>	potentially impacted		
						<b>.</b>									NI -	MIIH- Not G1/G2, No use over 0.01, Plant		
	showy lady's-					MIIH									No	occurs in a habitat unlikely to burn and/or		
plant - vascular	slipper	Cypripedium reginae											No	No		unlikely to have retardant applications.		
	Daubenmire's															MIIH- Not G1/G2, No use over 0.01,		
		i .	1	1							ı	MIIH	1	1	Yes	habitat potentially impacted	i	1

			Beaverhead-	D:44.0	Custer-	Dakota Prairie	Flash	Helena-Lewis	Idaho-	Vaataus!	1-1-	Nez-Perce	Species Barl	1	Habitat potentially	Initial Determination from National	Species accurs on more tree chrub successent
Category	Common name	scientific name	Deerlodge	Bitterroot	Gallatin	Grasslands	Flathead	and Clark	Panhandle	Kootenai	Lolo	Clearwater	Species Rank G1/G2?	Use over 0.01	1.	Screen Process	Species occurs on more tree, shrub, succulent than 1 unit? life form?
category	Common name	Scientific flame											G1/G2:	Ose over 0.01	impacteu:	Screen Frocess	than 1 unit:
																MIIH- Not G1/G2, No use over 0.01, Plant	
		Dendrolycopodium							MIIH	MIIH					No	occurs in a habitat unlikely to burn and/or	
plant - vascular	treelike clubmoss	dendroideum											No	No		unlikely to have retardant applications.	
																MIIH- Not G1/G2, One or more forests	
	north Idaho									MIIH	MIIH				Yes	over 0.01 application rate, habitat	
plant - vascular	monkeyflower	Diplacus (Mimulus) clivicola											No	Yes		potentially impacted	
	dwarf purple			МІІН											Yes	MIIH- Not G1/G2, No use over 0.01,	
plant - vascular	monkeyflower	Diplacus (Mimulus) nanus											No	No		habitat potentially impacted	
																MIIH- Not G1/G2, One or more forests	
	Idaho dwarf-			MIIH								MIIH			No	over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to	
plant - vascular	primrose	Douglasia idahoensis											No	No		have retardant applications.	
piant - vascular	primose	Douglusia luulloelisis										+	INO	INO		nave retardant applications.	
																MIIH- Not G1/G2, One or more forests	
																over 0.01 application rate, Plant occurs in a	
			MIIH	MIIH						MIIH	MIIH				No, riparian	habitat unlikely to burn and/or unlikely to	
																have retardant applications. Riparian	
plant - vascular	English sundew	Drosera anglica											No	Yes		buffers likely to provide protection	
	J 2		1									1	1	1		MIIH- Not G1/G2, No use over 0.01, Plant	
						l										occurs in a habitat unlikely to burn and/or	
									MIIH						No, riparian	unlikely to have retardant applications.	
	oblong-leaved														' '	Riparian buffers likely to provide	
plant - vascular	sundew	Drosera intermedia											No	No		protection	
																MIIH- Not G1/G2, One or more forests	
										MIIH					No, riparian	over 0.01 application rate, Plant occurs in a	1
										IVIIIII					No, riparian	habitat unlikely to burn and/or unlikely to	
	slenderleaf															have retardant applications, Riparian	
plant - vascular	sundew	Drosera linearis											No	Yes		buffers likely to provide protection	
																MIIH- Not G1/G2, One or more forests	
				MIIH					MIIH	MIIH	MIIH				No, riparian	over 0.01 application rate, Plant occurs in a	
																habitat unlikely to burn and/or unlikely to	
plant - vascular	crosted shieldforn	Dryopteris cristata											No	Vac		have retardant applications, Riparian buffers likely to provide protection	
piant - vascular	crested shieldlern	Dryopteris cristata					<u></u>						No	Yes		MIIH- Not G1/G2, No use over 0.01, Plant	
																occurs in a habitat unlikely to burn and/or	
			MIIH												No, riparian	unlikely to have retardant applications,	
			IVIIIII												NO, riparian	Riparian buffers likely to provide	
plant - vascular	heaked spikerush	Eleocharis rostellata											No	No		protection	
plant vascalar	beaked spikerdsii	Eleberiaris rosteriata											140	ivo .		MIIH- Not G1/G2, No use over 0.01, Plant	
						l										occurs in a habitat unlikely to burn and/or	
						l			MIIH						No, riparian	unlikely to have retardant applications.	
															' '	Riparian buffers likely to provide	
plant - vascular	marsh willowherb	Epilobium palustre											No	No		protection	
						l										MIIH- Not G1/G2, One or more forests	
			MIIH	MIIH		l			MIIH	MIIH	MIIH	MIIH			No, riparian	over 0.01 application rate, Plant occurs in a	
			IVIIII	IVIIII		l			IVIIII	IVIII⊓	IVIIII	IVIIII			ivo, riparian	habitat unlikely to burn and/or unlikely to	
						l										have retardant applications, Riparian	
plant - vascular	giant helleborine	Epipactis gigantea											No	Yes		buffers likely to provide protection	
						MIIH									Yes	MIIH- Not G1/G2, No use over 0.01,	
plant - vascular	marsh horsetail	Equisetum palustre											No	No	103	habitat potentially impacted	
						MIIH									Yes	MIIH- Not G1/G2, No use over 0.01,	
plant - vascular	meadow horsetail	Equisetum pratense											No	No	1.03	habitat potentially impacted	
		Ericameria discoidea var.	1			l										MINI N. 1 64 /65 11	
	1.21	discoidea (Haplopappus	MIIH	MIIH		l									No	MIIH- Not G1/G2, No use over 0.01, Plant	
	whitestem	macronema var.				l							<b>.</b>	l		occurs in a habitat unlikely to burn and/or	
plant - vascular	goldenbush	macronema)		N.:								+	No	No	NII 41 1	unlikely to have retardant applications.	
plant - vascular	Idaho fleabane	Erigeron asperugineus	NI	NI							l	l	No	No	NI-Alpine	NI-Alpine	

			Beaverhead-		Custer-	Dakota Prairie	-1	Helena-Lewis	Idaho-			Nez-Perce	Consider Desir	1	Habitat	Intain Data main at an Constitution	Consideration	
Catagory	Common name	scientific name	Deerlodge	Bitterroot	Gallatin	Grasslands	Flathead	and Clark	Panhandle	Kootenai	Lolo	Clearwater	Species Rank G1/G2?	Use over 0.01	potentially	Initial Determination from National Screen Process	<u>Species occurs on mo</u> <u>than 1 unit?</u>	tree, shrub, succulent life form?
Category	Common name	Scientific flame										+	G1/G2:	Use over 0.01	iiipacteu :	Screen Process	than 1 unit:	ille formr
																MIIH- Not G1/G2, No use over 0.01, Plant		
	Evermann			MIIH											No	occurs in a habitat unlikely to burn and/or		
plant - vascular	fleabane	Erigeron evermannii											No	No		unlikely to have retardant applications.		
	Lackschewitz'														NI- Alpine and			
plant - vascular	fleabane	Erigeron lackschewitzii											No	Yes	talus	NI-Alpine and talus		
	nodding wild					міін									Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	buckwheat	Eriogonum cernuum				IVIIII							No	No	163	habitat potentially impacted		
	V					МІІН									No	MIIH- Not G1/G2, No use over 0.01, Plant		
	Visher's												1			occurs in a habitat unlikely to burn and/or		
plant - vascular	buckwheat	Eriogonum visheri										-	No	No		unlikely to have retardant applications.		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
	alam dan					MIIH				MIIH					No, riparian	unlikely to have retardant applications.		
	slender	Salarah a mana ana aita											<b>.</b>			Riparian buffers likely to provide		
plant - vascular	cottongrass	Eriophorum gracile										+	No	No		protection MIIH- Not G1/G2, No use over 0.01, Plant		
1													1					
									MIIH						No rinaria-	occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
	green-keeled								MIIH						No, riparian	Riparian buffers likely to provide		
plant - vascular	cottonsedge	Eriophorum viridicarinatum											No	No		protection		
piant - vasculai	cottonseage	Eriophoram vinaicarmatam										+	No	No		protection		
																MIIH- Not G1/G2, No use over 0.01, Plant		
	wingstem	Erythranthe (Mimulus)							MIIH			MIIH			No	occurs in a habitat unlikely to burn and/or		
plant - vascular	monkeyflower	alsinoides											No	No		unlikely to have retardant applications.		
plant vascalar	monkeynower	dismoracs											140	140		MIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
										MIIH		MIIH			No, riparian	unlikely to have retardant applications.		
	stalk-leaved	Erythranthe (Mimulus)								1411111		1411111			ivo, ripariari	Riparian buffers likely to provide		
plant - vascular	monkeyflower	ampliata											No	No		protection		
	short-flowered	Erythranthe (Mimulus)														MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	monkeyflower	breviflora								MIIH			No	No	Yes	habitat potentially impacted		
-	thinsepal	Erythranthe (Mimulus)																
plant - vascular	monkeyflower	hymenophylla										NI	Yes	No	NI- Cliffs	NI-Cliffs		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
			MIIH	MIIH											No, riparian	unlikely to have retardant applications.		
	primrose	Erythranthe (Mimulus)														Riparian buffers likely to provide		
plant - vascular	monkeyflower	primuloides											No	No		protection		
						міін									Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	burning bush	Euonymus atropurpureus											No	No	163	habitat potentially impacted		
						міін							1		No	MIIH- Not G1/G2, No use over 0.01, Plant		
	northern bog												<u> </u>			occurs in a habitat unlikely to burn and/or		
plant - vascular	bedstraw	Galium labradoricum				$\vdash$						1	No	No		unlikely to have retardant applications		
																MIIH- Not G1/G2, No use over 0.01, Plant		
													1			occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
plant vaccules	creeping	Caulthoria hisaidula											l <sub>No</sub>	No		Riparian buffers likely to provide		
plant - vascular	snowberry	Gaultheria hispidula										+	No	No		protection MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	prairie gentian	Gentiana affinis				MIIH							No	No	Yes	habitat potentially impacted		
piant - vasculai	hianie gennan	Gentiunu ujjinis	+			-						+	No	No		manital potentially impacted	+	
																MIIH- Not G1/G2, One or more forests		
													1			over 0.01 application rate, Plant occurs in a	J	
															No, riparian	habitat unlikely to burn and/or unlikely to	Ί	
1													1			have retardant applications, Riparian		
plant - vascular	Macoun's gentian	Gentianopsis macounii											No	Yes		buffers likely to provide protection		
Piurit Vasculai	IMIGCOUIT 3 BEILLIGH	Geridanopsis macdanii	1								l	İ	INO	163	I	Daniers incry to provide protection	Ĭ.	1

			Beaverhead-		Custer-	Dakota Prairie		Helena-Lewis	Idaho-			Nez-Perce	Consider St.		Habitat	Initial Determination for a Notice of	Constant and the control of the cont	Anna Anna Correct
C-4		! <b>*!f</b> !	Deerlodge	Bitterroot	Gallatin	Grasslands	Flathead	and Clark	Panhandle	Kootenai	Lolo	Clearwater	Species Rank		potentially	Initial Determination from National	Species occurs on more	
Category	Common name	scientific name	-										G1/G2?	Use over 0.01	impacted?	Screen Process	than 1 unit?	life form?
																MIIH- Not G1/G2, One or more forests		
																over 0.01 application rate, Plant occurs in a		
			MIIH							MIIH	MIIH				No, riparian	habitat unlikely to burn and/or unlikely to		
																have retardant applications, Riparian		
plant - vascular	hiker's gentian	Gentianopsis simplex											No	Yes		buffers likely to provide protection		
	1 101												1	1.00		, , , , , , , , , , , , , , , , , , , ,		
																MIIH- Not G1/G2, No use over 0.01, Plant		
				MIIH											No	occurs in a habitat unlikely to burn and/or		
plant - vascular	spiny greasebush	Glossopetalon nevadense											No	No		unlikely to have retardant applications.		
																MIIH- Not G1/G2, One or more forests		
	northern														No	over 0.01 application rate, Plant occurs in a	1	
	rattlesnake-														INO	habitat unlikely to burn and/or unlikely to		
plant - vascular	plantain	Goodyera repens											No	Yes		have retardant applications		
	Britton's dry rock								NI	NI	NI				NI- Cliffs			
plant - non-vascular	moss	Grimmia brittoniae							141	141			Yes	Yes	TVI CIIII3	NI-Cliffs		
																MIIH- Not G1/G2, One or more forests		
									MIIH	MIIH	MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	Howell's gunweed	Grindelia howellii											No	Yes		potentially impacted		
l						МІІН									Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	northern oak fern	Gymnocarpium dryopteris	-										No	No		habitat potentially impacted		
		Halimadahaa mandana		MIIH								MIIH			Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	puzziing rockcress	Halimolobos perplexa	1										No	No		habitat potentially impacted		
plant vaccular	hoary frostweed	Helianthemum bicknellii				MIIH							No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
plant - vascular	noary mostweed	Helianthemani bickhelili						1					No	No		MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
															No, riparian	unlikely to have retardant applications,		
															ivo, ripariari	Riparian buffers likely to provide		
plant - vascular	water star-grass	Heteranthera dubia											No	No		protection		
piant tassana.	Tracer star grass	Trecerationer a dazid	1										110	110		MIIH- Not G1/G2, One or more forests		
	western perl-			MIIH						MIIH	MIIH				Yes	over 0.01 application rate, habitat		
plant - vascular	flower	Heterocodon rariflorum											No	Yes	163	potentially impacted		
•		,														MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH			MIIH			No, riparian	unlikely to have retardant applications.		
																Riparian buffers likely to provide		
plant - non-vascular	hookeria moss	Hookeria luscens											No	No		protection		
	wooly					MIIH									Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	beachheather	Hudsonia tomentosa				IVIIIII							No	No	Tes	habitat potentially impacted		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
	larger Canadian St												l.,	L.		Riparian buffers likely to provide		
plant - vascular	John's-wort	Hypericum majus	1									<u> </u>	No	No		protection		1
															, ,	MIIH- Not G1/G2, One or more forests		
plant - vascular	scalepod	Idahoa scapigera		MIIH							MIIH		No	Vos	Yes	over 0.01 application rate, habitat potentially impacted		
Piant - vasculai	scalepou	Tuuriou scupiyeru		<del> </del>		-						1	No	Yes		MIIH- Not G1/G2, No use over 0.01, Plant		+
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
									1 <b>V</b> 111111						140, Hparian	Riparian buffers likely to provide		
plant - vascular	harlequin blueflag	Iris versicolor											No	No		protection		
1													1			MIIH- Not G1/G2, One or more forests		1
																over 0.01 application rate, Plant occurs in a	,	
			MIIH												No	habitat unlikely to burn and/or unlikely to		
plant - vascular	Hall's rush	Juncus hallii											No	Yes		have retardant applications		
															.,	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	latah tule pea	Lathyrus bijugatus								MIIH			No	No	Yes	habitat potentially impacted		
															V	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	prairie pinweed	Lechea stricta	<u>                                     </u>	<u>                                       </u>		MIIH						<u>                                     </u>	No	No	Yes	habitat potentially impacted		<u>1                                    </u>
						NAIII:									Vas	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	mountain star-lily	Leucocrinum montanum				MIIH						I	No	No	Yes	habitat potentially impacted		

						2.1.1.2.11									Habitat			
			Beaverhead- Deerlodge	Bitterroot	Custer- Gallatin	Dakota Prairie Grasslands	Flathead	Helena-Lewis and Clark	Idaho- Panhandle	Kootenai	Lolo	Nez-Perce Clearwater	Species Rank		potentially	Initial Determination from National	Species occurs on more	•
Category	Common name	scientific name	Deerlouge		Gallatill	Grassiarius		and Clark	raillallule			Clear water	G1/G2?	Use over 0.01	impacted?	Screen Process	than 1 unit?	<u>life form?</u>
																MIIH- Not G1/G2, One or more forests		
															No, riparian	over 0.01 application rate, Plant occurs in a		
															' '	habitat unlikely to burn and/or unlikely to		
													1			have retardant applications, Riparian		
plant - vascular	northern wildrye	Elymus innovatus											No	Yes		buffers likely to provide protection		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
						MIIH									No, riparian	unlikely to have retardant applications,		
	yellow widelip															Riparian buffers likely to provide		
plant - vascular	orchid	Liparis loeselii											No	No		protection		
										MIIH					No	MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
plant - vascular	Geyer's biscuitroot	Lomatium geyeri											No	No		unlikely to have retardant applications.		
												МІІН			No	MIIH- Not G1/G2, No use over 0.01, Plant		
	salmonflower															occurs in a habitat unlikely to burn and/or		
plant - vascular	bicuitroot	Lomatium salmoniflorum											No	No		unlikely to have retardant applications.		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH	MIIH					No, riparian	unlikely to have retardant applications.		
	northern bog															Riparian buffers likely to provide		
plant - vascular	clubmoss	Lycopodiella inundata											No	No		protection		
plant - vascular	running-pine	Lycopodium lagopus								MIIH			No	No	NI-Alpine	NI-Alpine		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
		Lysimachia europaea														Riparian buffers likely to provide		
plant - vascular	arctic starflower	(Trientalis arctica)											No	No		protection		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
															' '	Riparian buffers likely to provide		
plant - non-vascular	meesia moss	Meesia longiseta											No	No		protection		
-																		
																MIIH- Not G1/G2, One or more forests		
																over 0.01 application rate, Plant occurs in a	a	
				MIIH						MIIH	MIIH				No, riparian	habitat unlikely to burn and/or unlikely to		
																have retardant applications, Riparian		
plant - non-vascular	meesia moss	Meesia triquetra											No	Yes		buffers likely to provide protection		
		7											1	1.00				
																MIIH- Not G1/G2, No use over 0.01, Plant		
						MIIH									No	occurs in a habitat unlikely to burn and/or		
plant - vascular	dwarf mentzelia	Mentzelia pumila											No	No		unlikely to have retardant applications.		
		P · · · ·	1	1								1	1	1	1	,		
												1	1			MIIH- Not G1/G2, One or more forests		
												[	1			over 0.01 application rate, Plant occurs in a	a	
						MIIH						1	1		No, riparian	habitat unlikely to burn and/or unlikely to		
												1	1			have retardant applications, Riparian		
plant - vascular	bog buckbean	Menyanthes trifoliata										1	No	Yes		buffers likely to provide protection		
Plant Tastalai	208 Sackbean	enyantnes trijonata	+									<b> </b>	1.10	1.03	+	MIIH- Not G1/G2, One or more forests		
											MIIH	1	1		Yes	over 0.01 application rate, habitat		
plant - vascular	Oregon bluebells	Mertensia hella									IVIIII I	1	No	Yes	163	potentially impacted		
piant vascaiai	OLCPOIL DIGEDEII2	ereensia bella	1	+								<del>                                     </del>	1,40	103	<del> </del>	potentially impacted		
												[	1			MIIH- Not G1/G2, No use over 0.01, Plant		
	streamside					MIIH						[	1		No	occurs in a habitat unlikely to burn and/or		
plant - vascular	bluebells	Mertensia ciliata										[	No	No		unlikely to have retardant applications.		
plant - vascular plant - vascular	storm saxifrage	Micranthes tempestiva	NI	NI								<del> </del>	No Yes	Yes	NI- Alpine	NI-Alpine		
piant - vasculai	Jenin Janii age	imeranties tempestiva	INI	INI								<del>                                     </del>	163	163	ivi- Aipine	THE PROPERTY OF THE PROPERTY O		
												1	1			MIIH- Not G1/G2, No use over 0.01, Plant		
	alpine foxtail			MIIH						MIIH		1	1		No	occurs in a habitat unlikely to burn and/or		
fungi	lichen	Nadahniaria suhdinaran										[	No	No				
fungi	lichen	Nodobryoria subdivergens	1	L							L	<u> </u>	No	No	L	unlikely to have retardant applications.	1	

	1										1	1			Habitat		<u> </u>	
			Beaverhead-	Bitterroot	Custer-	Dakota Prairie	Flathead	Helena-Lewis	Idaho-	Kootenai	Lolo	Nez-Perce	Species Rank		potentially	Initial Determination from National	Species occurs on more	tree, shrub, succulent
Category	Common name	scientific name	Deerlodge		Gallatin	Grasslands		and Clark	Panhandle			Clearwater	G1/G2?	Use over 0.01	impacted?	Screen Process	than 1 unit?	life form?
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
						MIIH										unlikely to have retardant applications,		
1	6															Riparian buffers likely to provide		
plant - vascular	sensitive fern	Onoclea sensibilis										1	No	No		protection		
																MIIH- Not G1/G2, One or more forests		
																over 0.01 application rate, Plant occurs in a		
						MIIH				MIIH						habitat unlikely to burn and/or unlikely to		
																have retardant applications, Riparian		
plant - vascular	adder's tongue	Ophioglossum pusillum											No	No		buffers likely to provide protection		
-	stalked-pod																	
plant - vascular	locoweed	Oxytropis podocarpa	NI										No	Yes	NI-Alpine	NI-Alpine		
	Lemhi		MIIH	MIIH											Vos	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	beardtongue	Penstemon lemhiensis	IVIIII	IVIIIII									No	No		habitat potentially impacted		
	Payette			MIIH											Voc	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	beardtongue	Penstemon payettensis											No	No		habitat potentially impacted		
		0										MIIH			Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	goldback fern	Pentagramma triangularis											No	No		habitat potentially impacted		
																MIIH- Not G1/G2, No use over 0.01,		
												MIIH			Yes, but riparian	habitat potentially impacted, but riparian		
plant - vascular	sweet coltsfoot	Petasites frigidus											No	No		buffers likely to provide protection		
p.a	311000 001131000	, etasites jiigiaas										+	110			zancio inici, to provide protection		
															Yes, but riparian			
									MIIH			MIIH			buffers likely to	MIIH- Not G1/G2, No use over 0.01,		
		Petasites frigidus var.													provide	habitat potentially impacted, but riparian		
plant - vascular	alpine butterbur	palmatus											No	No		buffers likely to provide protection		
	northern								MIIH	MIIH					Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	beechfern	Phegopteris connectilis											No	No		habitat potentially impacted		
		01.1				МІІН									Ι ۷Δς	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	allysum-lear phlox	Phlox alyssifolia											No	No		habitat potentially impacted MIIH- Not G1/G2, One or more forests		
		Phlox kelseyi var.	MIIH								MIIH					over 0.01 application rate, habitat		
plant - vascular	Missoula phlox	missoulensis	1411111										No	Yes		potentially impacted		
P		Physaria carinata ssp.										1		1.00		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	keeled bladderpoo	1 '	MIIH										No	No	I Voc	habitat potentially impacted		
	beautiful	Physaria carinata ssp.	NAULI													MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	bladderpod	pulchella	MIIH										No	No	Yes	habitat potentially impacted		
	Bitterroot			NI											NI-Alpine			
plant - vascular	bladderpod	Physaria humilis											Yes	No		NI-Alpine		
		a				міін										MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	limber pine	Pinus flexilis				<del>                                     </del>						<del> </del>	No	No		habitat potentially impacted MIIH- Not G1/G2, One or more forests		
		Polygonum douglasii ssp.	MIIH									1				over 0.01 application rate, habitat		
plant - vascular	Austin's knotweed		IVIIII									1	No	Yes		potentially impacted		
<b>P</b> : : : : : : :																MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	western polypody	Polypodium glycyrrhiza										MIIH	No	No		habitat potentially impacted		
									MIIH						Ves	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	Braun's hollyfern	Polystichum braunii							IVIIII				No	No		habitat potentially impacted		
	lanceleaf					міін										MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	cottonwood	Populus x acuminata											No	No	163	habitat potentially impacted		
												1				MIIH- Not G1/G2, One or more forests		
											MIIH					over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to		
	blunt-leaved											1				have retardant applications, Riparian		
plant - vascular	pondweed	Potamogeton obtusifolius										1	No	Yes		buffers likely to provide protection		
r	1		1									1	1	1		MIIH- Not G1/G2, One or more forests		
		Potentilla nivea var.	MIIH													over 0.01 application rate, habitat		
plant - vascular	fiveleaf cinquefoil	pentaphylla										1	No	Yes		potentially impacted		
			MIIH												Vos	MIIH- G1/G2, No use over 0.01, habitat		
plant - vascular	alkali primrose	Primula alcalina	IVIIII1										Yes	No	162	potentially impacted		

Company   Comp		T				<u> </u>						1			1			1	
Company   Comp				Beaverhead-		Custer-	Dakota Prairie		Helena-Lewis	Idaho-	_		Nez-Perce			Habitat			
Mail:   Mail				1 1	Bitterroot			Flathead	1 1		Kootenai	Lolo	Clearwater	1 -					
Miles   1000/01/20   101/19 p	Category	Common name	scientific name	Beenlouge		Guildein	Grassianas		una ciark	- annunuic			Cicui Water	G1/G2?	Use over 0.01			than 1 unit?	life form?
March   Marc																			
																	I		
Math   Standard   Math   Mat				MIIH															
Part   Section   Part																	Riparian buffers likely to provide		
Part   Vestalist   Part   Vestalist   Part   Vestalist   Part	plant - vascular	mealy primrose	Primula incana											No	No		protection		
Part     Part     Part     Part     Part     Part     Part     Part     Part     Part   Part     Part																			
Marie   Annie   Anni																No	MIIH- Not G1/G2, No use over 0.01, Plant		
Materian   Provinces   Provi																INO	occurs in a habitat unlikely to burn and/or		
Part - Versidad   Part - Ver	plant - vascular	dwarf wooly-head	ls Psilocarphus brevissimus								MIIH			No	No		unlikely to have retardant applications.		
Section   Sect		beartooth large-	Pyrrocoma (Haplopappus)																
Section   Sect		flowered	carthamoides var.													Yes	MIIH- Not G1/G2, No use over 0.01,		
Page 1999   Page	plant - vascular													No	No				
Design   Section   Control   Contr														1					
Pater - serventular and serven	plant - vascular	1 - '											MIIH	No	No	Voc	1		
ADDIT TOO VOORSIAN PORT TOO VOORSIAN TOURS AND TO TOO VOORSIAN TOURS AND TO TOO VOORSIAN TOURS AND TO TOO VOORSIAN TOURS AND TO TOO VOORSIAN TOURS AND TOURS	piant ractain.	Bornerin	im ta vari senengena											110	110				
plant - variouslaw (miss)  Addition																			
plant versicalar worker practice and processor of the pro		a rhizomnium								MIIH			MIIH						
Aller Vascular variety of the control of the contro	plant non veceules		Dhizamaium nudum											N	N				
Date: vascular of infrired charactery and the charactery of the ch	piant - non-vascular	111055	httizottitiium nuaum				<b> </b>						-	INO	INO		,		
Milet - vescular vescular vescular vescular vescular vescular seguinations. No. No. No. No. No. No. No. No. No. No																			
plant - vacaular willow Solin profession (Solin																			
plant - vascular with believed by thychosproare abo plant - vascular generatory plant										MIIH									
plant - vascular operatory general production of the production of																	1 .		
plant - vascular plant - vascular plant - vascular plant - vascular plant - vascular plant - vascular of the plant - vascular	plant - vascular	white beaksedge	Rhynchospora alba											No	No		protection		
plant - vascular pod grass Scheen/presipution Mills Mill		eastern prickly					MIIII									Ves	MIIH- Not G1/G2, No use over 0.01,		
Mills Mills	plant - vascular	gooseberry	Ribes cynosbati				IVIIII							No	No	res	habitat potentially impacted		
Miles   Mile	plant - vascular	Barratt's willow	Salix barrattiana											No	Yes	NI-Alpine	NI-Alpine		
Miles   Mile																•	MIIH- Not G1/G2, No use over 0.01, Plant		
plant - vascular houry willow Soliv candido  Mill Mill Mill Mill Mill Mill Mill Mil																			
plant - vascular nony willow Solic condido No No No Riparana Deffers likely to provide protection willing to the restant application.  plant - vascular nony willow Solic pedicinis No No No No No No No No No No No No No										MIIH									
plant - vascular    Dear - vascular   Dear - vas																			
Mill Mill Mill Mill Mill Mill Mill Mill	nlant - vascular	hoary willow	Salix candida											No	No				
plant - vascular bog willow Solie pedicellor/s  plant - vascular bog willow Solie pedicellor/s  No No No No No No No No No No No No No N	plant - vascalar	noary winow	Sanx canada											140	140				
plant - vascular   bog willow   Soliv pedicelleris   No. / Fight in Plant   Solitor																			
plant -vascular bog willow Solik pedicellars No No No No No No No No No No No No No																			
plant - vascular bog willow Solic pedicelloris NI No No No No No No No No No No No No No							MIIH			MIIH									
plant - vascular  Weber's saw-wort  Will Will Mill Mill Mill Mill Mill Mill														L.					
plant - vascular weber's saw wort. Soussurea weber  Mili Mili Mili Mili Mili Mili Mili Mil	plant - vascular	bog willow	Salix pedicellaris											No	No		protection		
plant - vascular welter burush buffers likely to provide protection  plant - vascular welter burush subterminalis  plant - vascular a scorpidium moss Scorpidium scorpioides  plant - vascular showned as the short seed of the subtraction of th				NI NI												NI- Alpine			
Milh Milh Milh Milh Milh Milh Milh Milh	plant - vascular	Weber's saw-wor	t Saussurea weberi											No	No		NI-Alpine		
Milh Milh Milh Milh Milh Milh Milh Milh																			
Milh Milh Milh Milh Milh Milh Milh Milh																			
plant - vascular  plant - vasc					N 41111					N 41111						Nia diasaisa	over 0.01 application rate, Plant occurs in a		
plant - vascular pod grass Scheuchzeria palustris No Yes buffers likely to provide protection  Milh Milh Milh Milh Milh Milh Milh Milh				MIIIH	IVIIIH					IVIIIH	MIIH	MIIH				No, riparian	habitat unlikely to burn and/or unlikely to		
plant - vascular pod grass Scheuchzeria palustris No Yes buffers likely to provide protection  Milh Milh Milh Milh Milh Milh Milh Milh																	have retardant applications, Riparian		
Milh Not GI/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection.  No No No No No No No No No No No No No N	plant - vascular	pod grass	Scheuchzeria palustris											No	Yes				
Milh Milh Milh Milh Milh Milh Milh Milh																	-		
Milh Milh Milh Milh Milh Milh Milh Milh							I										MIIH- Not G1/G2, One or more forests		
Schoenoplectus plant - vascular water bulrush subterminalis  No Yes  Milh Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to burn and/or unlikely to have retardant applications. Riparian buffers likely to burn and/or unlikely to have retardant applications. Riparian buffers likely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection  No No No Milh-Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection  No No No will-Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to burn an																			
Schoenoplectus   Scho										MIIH	MIIH	MIIH							
plant - vascular water bulrush subterminalis bullish subterminalis bullish subterminalis bullish subterminalis bullish subterminalis bullish b			Schoenonlectus																
MIIH Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to provide protection  No No No No Milli- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to provide protection  No No No Milli- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to burn and/or unlikely to have retardant applications.  No No No No Milli- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.  MIIII- Not G1/G2, No use over 0.01, Milli- Not G1/G2, No use over 0.01,	plant - vascular	water hulrush												No.	Yes				
MIIH No No No No No No No No No No No No No	piant - vasculai	Water bull usir	Sasterminans				<del>                                     </del>						<del> </del>	140	103				
plant - non-vascular a scorpidium moss Scorpidium scorpioides  No No No No No No No No No No No No No N							I												
plant - non-vascular a scorpidium moss Scorpidium scorpioides  No No No No No No No No No No No No No N							I												
plant - non-vascular a scorpidium moss   Scorpidium scorpioides   No No No   Protection   No No No   No No No   No No No No No No No No No No No No No							I				MIIH								
Plant - vascular shoshonea Shoshonea pulvinata  No No No No Mill- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.  Mill- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to have retardant applications.  Mill- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to have retardant applications.  Mill- Not G1/G2, No use over 0.01,																			
plant - vascular shoshonea Shoshonea pulvinata Shoshonea pulvinata Shoshonea pulvinata Shoshonea pulvinata Shoshonea Shoshonea Shoshonea pulvinata Shoshonea	plant - non-vascular	a scorpidium mos	s Scorpidium scorpioides										ļ	No	No		protection		
plant - vascular shoshonea Shoshonea pulvinata Shoshonea pulvinata Shoshonea pulvinata Shoshonea pulvinata Shoshonea Shoshonea Shoshonea pulvinata Shoshonea																			
plant - vascular shoshonea Shoshonea pulvinata No No unlikely to have retardant applications.  MIII- Not G1/G2, No use over 0.01,																No			
MIIH- Not G1/G2, No use over 0.01,																INU			
MIIH- Not G1/G2, No use over 0.01,	plant - vascular	shoshonea	Shoshonea pulvinata	<u>                                       </u>			l						<u> </u>	No	No		unlikely to have retardant applications.	<u>                                       </u>	
																V ·	MIIH- Not G1/G2, No use over 0.01,		
I I I I I I I I I I I I I I I I I I I	plant - vascular	zigzag goldenrod	Solidago flexicaulis				MIIH							No	No		habitat potentially impacted		

	1	1			<u> </u>						1	1		1	Habitat			
			Beaverhead-	Bitterroot	Custer-	Dakota Prairie	Flathead	Helena-Lewis	Idaho-	Kootenai	Lolo	Nez-Perce	Species Rank		potentially	Initial Determination from National	Species occurs on more	tree. shrub. succulent
Category	Common name scientific nam	ne	Deerlodge	Ditterroot	Gallatin	Grasslands	· iatircaa	and Clark	Panhandle	Rootellai	20.0	Clearwater	G1/G2?	Use over 0.01		Screen Process	than 1 unit?	life form?
<u> </u>																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH			MIIH			No, riparian	unlikely to have retardant applications.		
	Mendocino														-	Riparian buffers likely to provide		
plant - non-vascular	peatmoss Sphagnum me	endocinum											No	No		protection		
						MIIH									V	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	alkali sacaton Sporobolus ai	roides				IVIIIH							No	No	Yes	habitat potentially impacted		
									MIIH						Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	small twistedstalk Streptopus st	reptopoides							IVIIIII				No	No	163	habitat potentially impacted		
															No, riparian	MIIH- Not G1/G2, No use over 0.01, Plant		
															buffers likely to	occurs in a habitat unlikely to burn and/or		
									MIIH						provide	unlikely to have retardant applications.		
	Symphyotrich	I													protection	Riparian buffers likely to provide		
plant - vascular	boreal aster (Aster juncifo	rmis)											No	No	p. coccus.	protection		
												МІІН		L.	Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	Idaho kittentails Synthyris plat	ycarpa				-						-	No	No		habitat potentially impacted		
nlant vessuls:	suppright T-U	iflarum				NI			l			1	No	No.	NI- Dunes and	NI Dunos and outerens		
plant - vascular	sunbright Talinum parvi	jiorum										1	No	No	outcrops	NI-Dunes and outcrops		
			MIIH						l						Vac	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
plant - vascular	alpine meadowrue   Thalictrum al	ninum	IVIIIH										No	Vos	Yes	potentially impacted		
piant - vascular	alpine meadowrde <i>munctrum di</i>	Ulliulli										-	No	Yes		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	Sierra marsh fern Thelypteris ne	pyadansis							MIIH			MIIH	No	No	Yes	habitat potentially impacted		
piant - vasculai	Tonestus (Ha											+	INO	INO		mabitat potentially impacted		
plant - vascular	Idaho goldenweed   aberrans	σιομαρμαίς		NI									No	No	NI- Cliffs	NI-Cliffs		
piant - vasculai	silky townsend-											+	NO	INO		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	daisy Townsendia e	exscana				MIIH							No	No	Yes	habitat potentially impacted		
plant vascarar	Hooker's	лосири											140	140		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	townsend-daisy Townsendia h	nookeri				MIIH							No	No	Yes	habitat potentially impacted		
<b>P</b>												1		1.10		MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									міін			МІІН			No, riparian	unlikely to have retardant applications.		
	western false														,,	Riparian buffers likely to provide		
plant - vascular	asphodel Triantha occid	dentalis											No	No		protection		
																MIIH- Not G1/G2, No use over 0.01, Plant		
																occurs in a habitat unlikely to burn and/or		
									MIIH						No, riparian	unlikely to have retardant applications.		
	Hudson's Bay														-	Riparian buffers likely to provide		
plant - vascular	bulrush Trichophorum	n alpinum											No	No		protection		
																MIIH- Not G1/G2, One or more forests		
			MIIH							MIIH		1			No, riparian	over 0.01 application rate, Plant occurs in a		
			.*!!!!							1411111		1			ivo, ripariali	habitat unlikely to burn and/or unlikely to		
												1				have retardant applications, Riparian		
plant - vascular	tufted club-rush Trichophorum	cespitosum										1	No	Yes		buffers likely to provide protection		
												1				MIIH-G1/G2, No use over 0.01, Plant		
									l			1				occurs in a habitat unlikely to burn and/or		
									l			MIIH			No, riparian	unlikely to have retardant applications.		
mlant co	Dauglas deve-	alasii							l			1	V	N -		Riparian buffers likely to provide		
plant - vascular	Douglas' clover	yıasıı										1	Yes	No		protection		
				N 41111								1			V	MIIH- Not G1/G2, One or more forests		
nlant vaccules	wooly hoad clover Trifelium	canhalum	MIIH	MIIH					l		MIIH	1	No	Vos	Yes	over 0.01 application rate, habitat		
plant - vascular	wooly-head clover   Trifolium erio	cepnulum				<del>                                     </del>						1	No	Yes		potentially impacted MIIH- Not G1/G2, One or more forests		
	Trifalium	nnocarpon var.	MIIH	MIIH					l		MIIH	1			Vaa			
plant - vascular	hollyleaf clover amplifolium	ποται μοτι νατ.	IVIIII	IVIIII					l		IVIIIH	1	No	Vas	Yes	over 0.01 application rate, habitat potentially impacted		
Piurit - Vascuidi	nonyicai ciovei umpiijoiium											+	. 10	Yes		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	plumed clover	nosum							l			MIIH	No	No	Yes	habitat potentially impacted		
France Pascaldi	p.a.nea ciovei Injohani piai											+		1.40		MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	purple sandgrass	urea				MIIH			l			1	No	No	Yes	habitat potentially impacted		
Plant Pascaidi	Par pie sariagrass   Tripiasis parp									<u> </u>	I	1	1.10	1.40	<u> </u>	nasitat potentially impacted	1	

# 20230707\_PlantFungiSensitiveSpecies

			Beaverhead-	Bitterroot	Custer-	Dakota Prairie	Flathead	Helena-Lewis	Idaho-	Kootenai	Lolo	Nez-Perce	Species Rank	Habitat potentially	Initial Determination from National	Species occurs on more	tree, shrub, succulent
Category	Common name	scientific name	Deerlodge	Ditterioot	Gallatin	Grasslands	Hatricau	and Clark	Panhandle	Kootenai	LOIO	Claamustan	1 '	I I' '	Screen Process	than 1 unit?	life form?
															MIIH- Not G1/G2, No use over 0.01, Plant		
															occurs in a habitat unlikely to burn and/or		
										MIIH				No, riparian	unlikely to have retardant applications.		
	flatleaf														Riparian buffers likely to provide		
plant - vascular	bladderwort	Utricularia intermedia											No	No	protection		
															MIIH- Not G1/G2, No use over 0.01, Plant		
															occurs in a habitat unlikely to burn and/or		
									MIIH					-,	unlikely to have retardant applications.		
															Riparian buffers likely to provide		
plant - vascular	small cranberry	Vaccinium oxycoccos											No	No	protection		
plant - vascular	California false- hellebore	Veratrum californicum	МІІН	МІІН									No	No, riparian Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications, Riparian buffers likely to provide protection		
	great-spurred									міін				Yes	MIIH- Not G1/G2, No use over 0.01,		
plant - vascular	violet	Viola selkirkii								IVIIIII			No	No	habitat potentially impacted		
															MIIH- Not G1/G2, One or more forests		
	Idaho barren								MIIH		MIIH	MIIH		Yes	over 0.01 application rate, habitat		
plant - vascular	strawberry	Waldsteinia idahoensis											No	Yes	potentially impacted		

VERSION: 6/27/2023

Filter constant   Mile   Mil	Category	Common name	scientific name	Bighorn	Black Hills	Grand Mesa, Uncompahgre and Gunnison	Medicine Bow- Routt and Thunder Basin NG	Nebraska, Samuel R. McKelvie NFs and Oglala, Buffalo Gap and Fort Pierre NGs	Rio Grande	Arapahoe- Roosevelt and Pawnee NG	Pike-San Isabel, Cimmaron Comanche NG	San Juan	Shoshone	White River	G1/G2	Use over	Habitat potentially impacted	Initial Determination from National Screen Process	Simple Determination
Part   Section   Part		stonecrop gilia	Aliciella sedifolia			NI						NI			Yes	Yes	NI- Alpine	NI- Alpine	NI
Marker   M	•	, ,	Aquilegia														<u> </u>	MIIH- G1/G2, No use over 0.01, habitat potentially	
Martin consistent   Martin content   M	plant - vascular	Rydberg's golden columbine	chrysantha								MIIH				Yes	No	Yes	impacted	MIIH
Martin Controlled   Mart																		MIIH-G1/G2, No use over 0.01, Plant occurs in a	
Section 4.5   Process of 1979   Company of 1970   Company of 197			Aquilegia				MIIH											habitat unlikely to burn and/or unlikely to have	
Mart   Mart	plant - vascular	Laramie columbine	laramiensis												Yes	No	No		MIIH
Description   1987   1988			Armeria maritima												T				
Miles   Mile	plant - vascular	Siberian sea thrift	ssp. sibirica				NI			NI	NI			NI	No	No	NI- Alpine	NI- Alpine	NI
Bird - Name   Miles																		MIIH- Not G1/G2, No use over 0.01, habitat potentially	/
Part   Security   Part   Perturbation   Part   Part   Perturbation   Part	plant - vascular	wheel milkweed	Asclepias uncialis							MIIH	IVIIIH				No	No	Yes	impacted	MIIH
Set   Set   Marked																		MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
Part - Verseight							MIIH	MIIH										habitat unlikely to burn and/or unlikely to have	
Part   Very Name	plant - vascular	Barr's milkvetch	Astragalus barrii												No	No	No	retardant applications.	MIIH
plant standard	-		Astragalus															MIIH G1/G2, No use over 0.01, habitat potentially	
Part - Security   Part - Sec	plant - vascular	violet milkvetch	iodopetalus									MIIH			Yes	No	Yes	impacted	MIIH
Part - Security   Part - Sec																			/
Part   Very color   Part   P							MIIH			MIIH	МІІН			MIIH	No		Yes, but		
Millsour or Archaelas	plant - vascular	park milkvetch	Astragalus leptaleus													No	1 '		МІІН
Missour C. Archardista   Consumers our or indiversible   Con	·	· ·													1		†	i i	
Pate - Securical   Pate - Secu		Missouri, or Archuleta										МІІН			Yes			MIIH- G1/G2. No use over 0.01, habitat potentially	
Debt. vescular	nlant - vascular														1	No	Yes		МІІН
Pater - Vascolary   Act of Minister   Act of M	piant vascalar	iniiikveten	namistratus													110	103		
plant - vascular	nlant - vascular	Aztec milkvetch	Astragalus provimus									MIIH			No	No	Ves		
Pater - vesscriate   Supple - Control - Cont	piant - vascalai	Aztee mikveten	Astragalas proximas												1	140	103	·	
Miles	nlant - vascular	Rinley's milkyetch	Astragalus rinlevi												No	No	Ves	1	
Pater - Vesscular	piant - vasculai	Mipley 3 milkvetch														INO	163	•	
Panta - vascular   Sovie, or prairie monoword   Sovie, or prairie monowo	nlant vaccular	triangloglobo moonwort		MIIH						MIIH	MIIH		MIIH	MIIH	No	No	Vos	1	' <b> </b>
Destate   Continue	piant - vasculai	trianglegiobe moonwort			<del> </del>						<u> </u>	-	1		1	INO	163	·	
Paint - vascular   Decider monoword   Decider mon	plant vaccular	lows or prairie meanwart	1 '		MIIH		MIIH			MIIH					No	No	Vos		
Definit - vascular   Definit	piant - vascular	lowa, or prairie moonwort											-			INO	res	·	
plant - vascular shorth methods residue winding maniposal lity of circle from the following particular short of the following part of the following particular short of the following particular short of the following particular short of the following part of the following particular short of the following partic	mlant vacaular	no audio e ma a a numert		MIIH		MIIH	MIIH								No	N	Ves		
Dant - vascular vinding mariposal lily Revosus Mills Not GAYE, Nouse over 0.01, habitat potentially mills Mi	-		,			NAUU I					NAUL I		-	NAUL I	N-			•	IVIIII
plant - vascular of care solipercoided Mills No vest foot application rate, his bitat potentially mapaced, but special parties or the plant - vascular plant vascular praise, or Wyoming dodder Cycloides Mills Mi	piant - vascular	Smooth northern-rockcress				MIIH					MIIH			IVIIIH	INO	INO	Mi- Alpine	•	INI
plant - vascular ostall sedge	alant manulan	idi													No	<b>.</b>	V	1	·
plant - vascular fostall sedge Gorex dispecsible Mill Mill Mill Mill Mill Mill Mill Mi	plant - vascular	winding mariposa iliy	Jiexuosus		-								1		1	NO	Yes	•	
plant - vascular   Total sedge   Cark clindra   Milh   Mil					MIIH		MIIH								No	l	l.,	1	
plant - vascular lesser panicled sedge Carex diandra Milh Milh Milh Milh Milh Milh Milh Milh	plant - vascular	roxtaii sedge	Carex alopecolaea		-								1		1	NO	Yes	·	MIIH
plant - vascular lesser panicled sedge Gorex diondra lesser panicled sedge Gorex diondra lesser panicled sedge Gorex diondra lesser panicled sedge Gorex livid sedge gorex liv																		• •	
plant - vascular livid sedge Corex livida MilH MilH MilH MilH MilH MilH MilH No Ves, but final fat GLIGZ, No use over 0.01 application rate, habitat potentially impacted, but Riparian buffers with plant - vascular sandhil goosefoot cycloides MilH MilH MilH MilH MilH MilH MilH MilH				MIIH			MIIH	MIIH		MIIH	MIIH	MIIH	MIIH	MIIH	No		1		
plant - vascular livid sedge	plant - vascular	lesser panicied sedge	Carex alanara		-								1		1	No	riparian		MIIH
Pant - vascular   Ivid sedge   Carex Ivida   Carex Ivida   Sandhill goosefoot   Sand																			
plant - vascular sandhill goosefoot cycloides							MIIH			MIIH	MIIH		MIIH	MIIH	No		1 '		
plant - vascular sandhill goosefoot cycloides	plant - vascular	livia seage														No	riparian		
plant - vascular prairie, or Wyoming dodder Cuscuta plattensis Milh  plant - vascular mountain lady's slipper montanum  plant - vascular mountain lady's slipper montanum  plant - vascular lesser yellow lady's slipper parvificarum  Wyoming, or Wind River plant - vascular tansymustard  Descurainia torulosa  No No Yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted Milh  Milh Milh Milh Milh Milh Milh Milh Milh										MIIH	MIIH				No		l.,		
plant - vascular plant is prairie, or Wyoming dodder Cuscute platensis Cypripedium mountain lady's slipper monatonum Milh monatorial mountain lady's slipper monatonum Milh Milh Milh Milh Milh Milh Milh Milh	plant - vascular	sandniii goosefoot	cyclolaes													No	Yes	1	MIIH
plant - vascular mountain lady's slipper montanum MIIH MIIH MIIH MIIH MIIH MIIH MIIH No Yes Impacted MIIH-Not GI/G2, No use over 0.01, habitat potentially montanum MIIH MIIH MIIH No Yes Impacted MIIH-Not GI/G2, No use over 0.01 application rate, MIIH-Not GI/G2, No use over 0.01 application rate, MIIH-Not GI/G2, No use over 0.01 application rate, MIIH-Not GI/G2, No use over 0.01 application rate, MIIH-Not GI/G2, No use over 0.01 application rate, MIIH-Not MIIH No Yes, but MIIH-Not MIIH-No No riparian likely to provide protection MIIH-Not							MIIH								Yes		l.,		l
plant - vascular mountain lady's slipper montanum Milh (Cypripedium Cypripedium Milh Milh Milh Milh Milh Milh Milh Milh	plant - vascular	prairie, or Wyoming dodder	· '													No	Yes	•	
plant - vascular   mountain lady's slipper   montanum   Milh   Mi	1		1	MIIH											No	<b>.</b> .	<u></u>		
plant - vascular lesser yellow lady's slipper parviflorum MIIH MIIH MIIH MIIH MIIH MIIH MIIH MII	plant - vascular	mountain lady's slipper	montanum	ļ									1		1	No	Yes		MIIH
plant - vascular lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum plant - vascular lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum lesser yellow lady's slipper parviflorum likely to provide protection MIIH  Wyoming, or Wind River lesser yellow lady's slipper parviflorum likely to four even 0.01, Plant occurs in a habitat unlikely to burne and/or unlikely to have retardant applications. MIIH  Plant - vascular clawless, or Gary's Peak draba Draba exunguiculata Draba exunguiculata NI NI NI NI Yes No NI- Alpine NI- Alp																	1 .		
Wyoming, or Wind River tansymustard  Descurainia torulosa  NI  NI  NI  NI  NI  NI  NI  NI  NI  N				MIIH	MIIH		MIIH			MIIH	MIIH	MIIH		MIIH	No		1		
Wyoming, or Wind River tansymustard  Descurainia torulosa  NI  NI  NI  NI  NI  NI  NI  NI  NI  N	plant - vascular	lesser yellow lady's slipper	parviflorum										1		1	No	riparian		MIIH
plant - vascular tansymustard Descurainia torulosa																			
plant - vascular clawless, or Gary's Peak draba Draba exunguiculata NI NI NI NI NI NI NI NI NI NI NI NI NI		-											MIIH		Yes				
plant - vascular clawless, or Gary's Peak draba Draba exunguiculata   No NI- Alpine   NI- Alpine	plant - vascular	tansymustard	Descurainia torulosa													No	No	retardant applications.	MIIH
plant - vascular clawless, or Gary's Peak draba Draba exunguiculata   No NI- Alpine   NI- Alpine							NI			NI	NI			NI	Yes				
plant - vascular Smith's draba Draba smithii NI NI Yes No NI- Alpine NI- Alpine NI NI MIIH Yes Yes, but MIIH G1/G2, No use over 0.01, habitat potentially	•	clawless, or Gary's Peak draba	Draba exunguiculata				141			141	IVI				103	No			NI
MIIH Yes Yes, but MIIH G1/G2, No use over 0.01, habitat potentially	plant - vascular						NI			NI	NI			NI	Yes	No		NI- Alpine	NI
	plant - vascular	Smith's draba	Draba smithii								NI	NI			Yes	No	NI- Alpine	NI- Alpine	NI
							· ·												
plant - vascular   Weber's draba, or whitlowgrass   Draba weberi   No   Irinarian   Impacted Riparian huffers likely to provide protection   MIIH											MIIH			MIIH	Yes		Yes, but	MIIH G1/G2, No use over 0.01, habitat potentially	
Into priparters introduced in participation of the provided provid	plant - vascular	Weber's draba, or whitlowgrass	Draba weberi	<u> </u>	<u>L</u>						<u> </u>	<u> </u>	<u>L</u>	L	<u>L</u>	No	riparian	impacted, Riparian buffers likely to provide protection	MIIH

Category	Common name	scientific name	Bighorn	Black Hills	Grand Mesa, Uncompahgre and Gunnison	Medicine Bow- Routt and Thunder Basin NG	Nebraska, Samuel R. McKelvie NFs and Oglala, Buffalo Gap and Fort Pierre NGs	Rio Grande	Arapahoe- Roosevelt and Pawnee NG	Pike-San Isabel, Cimmaron Comanche NG	San Juan	Shoshone	White River	G1/G2	Use over	Habitat potentially impacted	Initial Determination from National Screen Process	Simple Determination
																	MIIH- Not G1/G2, No use over 0.01 application rate,	
plant vacquiar	English sundow	Drocora analica	MIIH								MIIH	MIIH		No	No.	No	Plant occurs in a habitat unlikely to burn and/or	MIIH
plant - vascular	English sundew	Drosera anglica													No	No	unlikely to have retardant applications.  MIIH- Not G1/G2, No use over 0.01 application rate,	IVIIIH
					MIIH	MIIH			MIIH	MIIH			MIIH	No		Yes, but	habitat potentially impacted, but Riparian buffers	
plant - vascular	roundleaf sundew	Drosera rotundifolia													No	riparian	likely to provide protection	MIIH
																	MIIH- Not G1/G2, No use over 0.01 application rate,	
						MIIH								No		Yes, but	habitat potentially impacted, but Riparian buffers	
plant - vascular	elliptic, or slender spikerush	Eleocharis elliptica													No	riparian	likely to provide protection	MIIH
	giant helleborin, or stream			MIIH						MIIH	МІІН		МІІН	No		Yes, but	MIIH- Not G1/G2, No use over 0.01 application rate, habitat potentially impacted, but Riparian buffers	'
plant - vascular	orchid	Epipactis gigantea									1411111			100	No	riparian	likely to provide protection	МІІН
		Eriogonum								MIIH				Yes			MIIH- G1/G2, No use over 0.01, habitat potentially	
plant - vascular	Brandegee's buckwheat	brandegeei								IVIIII				res	No	Yes	impacted	MIIH
		ļ												l			MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
plant - vascular	dropleaf buckwheat	Eriogonum exilifolium				MIIH			MIIH					No	No	No	habitat unlikely to burn and/or unlikely to have retardant applications.	МІІН
piant - vasculai	dropiear buckwireat	exinjonani													INO	INO	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	TVIIII
						MIIH	MIIH							No			habitat unlikely to burn and/or unlikely to have	
plant - vascular	Visher's buckwheat	Eriogonum visheri													No	No	retardant applications.	MIIH
																	MIIH- Not G1/G2, No use over 0.01 application rate,	'
1	Chamisso's bristlegrass or	Eriophorum ,	MIIH		MIIH					MIIH	MIIH	MIIH	MIIH	No	l	Yes, but	habitat potentially impacted, but Riparian buffers	
plant - vascular	cottongrass	chamissonis													No	riparian	likely to provide protection  MIIH- Not G1/G2, No use over 0.01 application rate,	MIIH
	slender bristlegrass or		MIIH		MIIH	MIIH	MIIH		MIIH	MIIH	MIIH	MIIH	MIIH	No		Yes, but	habitat potentially impacted, but Riparian buffers	
plant - vascular	cottongrass	Eriophorum gracile													No	riparian	likely to provide protection	MIIH
			MIIH			MIIH			MIIH	MIIH		MIIH		No			MIIH- Not G1/G2, No use over 0.01, habitat potentially	/
plant - vascular	plains rough fescue	Festuca hallii	IVIIII			IVIIII			IVIIII	IVIIII		IVIIII		INO	No	Yes	impacted	MIIH
1	11. 6. 11.1											MIIH		No	<b>.</b>		MIIH- Not G1/G2, No use over 0.01, habitat potentially	-
plant - vascular	roundleaf orchid	Galearis rotundifolia													No	Yes	impacted MIIH-G1/G2, No use over 0.01 application rate, Plant	MIIH
											MIIH			Yes			occurs in a habitat unlikely to burn and/or unlikely to	
plant - vascular	Ione mesa snakeweed	Gutierrezia elegans													No	No	have retardant applications.	MIIH
		Ipomopsis																
		aggregata ssp.				MIIH			MIIH					No			MIIH- Not G1/G2, No use over 0.01, habitat potentially	
plant - vascular	scarlet gilia	weberi													No	Yes	impacted MIIH- Not G1/G2, No use over 0.01 application rate,	MIIH
																	Plant occurs in a habitat unlikely to burn and/or	
		Kobresia			MIIH	MIIH			MIIH	MIIH		MIIH	MIIH	No		No, but	unlikely to have retardant applications, Riparian	
plant - vascular	simple bog sedge	simpliciuscula													No	Riparian	buffers likely to provide protection	MIIH
		Lesquerella										MIIH		Yes			MIIH- G1/G2, No use over 0.01, habitat potentially	
plant - vascular	Fremont's bladderpod	fremontii										1			No	Yes	impacted	MIIH
plant - vascular	Pagosa Springs bladderpod	Lesquerella pruinosa									MIIH			Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted	МІІН
plant vascalar	r agosa springs bladderpod	zesquerena pramosa													140	103	MIIH- Not G1/G2, No use over 0.01, habitat potentially	
							MIIH							No		Yes, but	impacted, but Riparian buffers likely to provide	
plant - vascular	yellow widelip orchid	Liparis loeselii													No	riparian	protection	MIIH
1		Lycopodium		MIIH										No	l		MIIH- Not G1/G2, No use over 0.01, habitat potentially	
plant - vascular	groundcedar	complanatum Xanthisma													No	Yes	impacted MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	MIIH
		(Machaeranthera)			MIIH	MIIH				MIIH	MIIH		MIIH	No			habitat unlikely to burn and/or unlikely to have	
plant - vascular	Colorado tansyaster	coloradoensis													No	No	retardant applications.	MIIH
	·	Malaxis															MIIH- Not G1/G2, No use over 0.01 application rate,	
		monophyllos var.				MIIH			MIIH	MIIH				No		Yes, but	habitat potentially impacted, but Riparian buffers	I
plant - vascular	white adder's-mouth orchid	brachypoda Mimulus										1	1		No	riparian	likely to provide protection	MIIH
plant - vascular	Rocky Mountan, budding, or Weber monkeyflower	Mimulus gemmiparus				MIIH			MIIH	MIIH				Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted	MIIH
piant - vasculai	Weber monkeynower	genninparas										+		1	INO	103	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	1771111
										MIIH				No			habitat unlikely to burn and/or unlikely to have	
plant - vascular	Bill's neoparrya	Neoparrya lithophila													No	No	retardant applications.	MIIH
plant - vascular	Pike's Peak alpineparsely	Oreoxis humilis								NI				Yes	No	NI- Alpine	NI- Alpine	NI

			Bighorn	Black Hills	Grand Mesa, Uncompahgre and Gunnison	Medicine Bow- Routt and Thunder Basin NG	Nebraska, Samuel R. McKelvie NFs and Oglala, Buffalo Gap and Fort Pierre NGs	Rio Grande	Arapahoe- Roosevelt and Pawnee NG	Pike-San Isabel, Cimmaron Comanche NG	San Juan	Shoshone	White River		Use over	Habitat potentially		Simple
Category	Common name	scientific name					and Fort Pierre NGS							G1/G2	0.01	impacted	Initial Determination from National Screen Process	Determination
											MIIH			Yes			MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have	
plant - vascular	mancos shale packera	Packera mancosana									IVIIII			162	No	No	retardant applications.	МІІН
<b>F</b>															1			
			MIIH			MIIH			MIIH	MIIH	MIIH	MIIH	MIIH	No			MIIH- Not G1/G2, One or more forests over 0.01	
	, , , , , , , , , , , , , , , , , , ,					14						"""			ļ.,		application rate, Plant occurs in a habitat unlikely to	
plant - vascular	Kotzebue's grass of Parnassus	Parnassia kotzebuei										-			No	No	burn and/or unlikely to have retardant applications.  MIIH-G1/G2, No use over 0.01, Plant occurs in a	MIIH
	Absaroka, or Absaroka Range	Penstemon										MIIH		Yes			habitat unlikely to burn and/or unlikely to have	
plant - vascular	beardtongue	absarokensis													No	No	retardant applications.	MIIH
			MIIH											No			MIIH- Not G1/G2, No use over 0.01, habitat potentiall	
plant - vascular	Cary's beardtongue	Penstemon caryi												110	No	Yes	impacted	MIIH
plant - vascular	Degener's beardtongue	Penstemon degeneri								MIIH				Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted	MIIH
piant - vasculai	Degener's beardtongue	Penstemon										<del> </del>			INO	163	MIIH- Not G1/G2, No use over 0.01, habitat potentiall	
plant - vascular	Harrington's beardtongue	harringtonii				MIIH			MIIH				MIIH	No	No	Yes	impacted	MIIH
		Physaria															_	
		didymocarpa var.	MIIH											Yes	ļ		MIIH- G1/G2, No use over 0.01, habitat potentially	
plant - vascular	common twinpod	lanata	-									1		-	No	Yes	impacted MIIH-G1/G2, No use over 0.01, Plant occurs in a	MIIH
											MIIH			Yes			habitat unlikely to burn and/or unlikely to have	
plant - vascular	cushion bladderpod	Physaria pulvinata													No	No	retardant applications.	MIIH
																	MIIH-G1/G2, No use over 0.01, Plant occurs in a	
	silver, or west silver	Physaria									MIIH			Yes			habitat unlikely to burn and/or unlikely to have	
plant - vascular	bladderpod	scrotiformis										-			No	No	retardant applications.  MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	MIIH
																	habitat unlikely to burn and/or unlikely to have	
		Platanthera		MIIH										No		No, but	retardant applications. Riparian buffers likely to	
plant - vascular	lesser roundleaved orchid	orbiculata													No	Riparian	provide protection	MIIH
	Rock, or Rocky Mountain								NI	NI				Yes		NI- Cliffs and		
plant - vascular	cinqefoil	Potentilla rupincola										-			No	Outcrops	NI- Cliffs and Outcrops	NI 
										MIIH		MIIH		No		Yes, but	MIIH- Not G1/G2, No use over 0.01, habitat potentiall impacted, but Riparian buffers likely to provide	ly
plant - vascular	Greenland primrose	Primula egaliksensis								1411111		""""		140	No	riparian	protection	MIIH
	·															i i	MIIH G1/G2, No use over 0.01, habitat potentially	
										MIIH			MIIH	Yes		Yes, but	impacted, but Riparian buffers likely to provide	
plant - vascular	Porter's false needlegrass	Ptilagrostis porteri													No	riparian	protection	MIIH
		Pyrrocoma carthamoides var.										MIIH		No			MIIH- Not G1/G2, No use over 0.01, habitat potentiall	lv
plant - vascular	largeflower goldenweed	subsquarrosa										I WIIIII		140	No	Yes	impacted	MIIH
		,																
		Pyrrocoma	MIIH									MIIH		No			MIIH- Not G1/G2, No use over 0.01, habitat potentiall	
plant - vascular	tranquil goldenweed	clementis var. villosa													No	Yes	impacted	MIIH
plant - vascular	many-stemmed goldenweed	Pyrrocoma integrifolia										MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentiall impacted	MIIH
plant - vascular	ice cold buttercup	Ranunculus grayi			NI	NI			NI	NI		NI	NI	No	No	NI-Alpine	NI- Alpine	NI
	<u> </u>	3 . /										1		<u> </u>	1	<u> </u>	MIIH- Not G1/G2, No use over 0.01, habitat potentiall	ly
		Rubus arcticus ssp.	MIIH		MIIH	MIIH			MIIH	MIIH			MIIH	No		Yes, but	impacted, but Riparian buffers likely to provide	
plant - vascular	dwarf raspberry	acaulis										1			No	riparian	protection	MIIH
																	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have	
											MIIH			Yes		No, but	retardant applications.Riparian buffers likely to	
plant - vascular	Arizona willow	Salix arizonica													No	1	provide protection	MIIH
																	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
												MIIH		No			habitat unlikely to burn and/or unlikely to have	
alant	Demostile : "	Callin ba										''''''				No, but	retardant applications. Riparian buffers likely to	
plant - vascular	Barratt's willow	Salix barrattiana												-	No	Riparian	provide protection  MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	MIIH
																	habitat unlikely to burn and/or unlikely to have	
				MIIH	MIIH	MIIH			MIIH	MIIH	MIIH		MIIH	No		No, but	retardant applications, Riparian buffers likely to	

			Bighorn	Black Hills	Grand Mesa, Uncompahgre and Gunnison	Medicine Bow- Routt and Thunder Basin NG	Nebraska, Samuel R. McKelvie NFs and Oglala, Buffalo Gap and Fort Pierre NGs	Rio Grande	Arapahoe- Roosevelt and Pawnee NG	Pike-San Isabel, Cimmaron Comanche NG	San Juan	Shoshone	White River		Use over	Habitat potentially		Simple
Category	Common name	scientific name					u							G1/G2	0.01	impacted	Initial Determination from National Screen Process	Determination
																	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
										MIIH		MIIH		No			habitat unlikely to burn and/or unlikely to have	
															l	No, but	retardant applications. Riparian buffers likely to	l
plant - vascular	blueberry willow	Salix myrtillifolia										1			No	Riparian	provide protection	MIIH
																	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have	
				MIIH		MIIH			MIIH	MIIH			MIIH	No		No. bus	· · · · · · · · · · · · · · · · · · ·	
mlant vacaular	autuman willow	Calinapiania													No	No, but	retardant applications, Riparian buffers likely to	МІІН
plant - vascular	autumn willow	Salix serissima													No	Riparian	provide protection	
plant - vascular	bloodroot	Sanguinaria canadensis		MIIH										No	No	Vos	MIIH- Not G1/G2, No use over 0.01, habitat potentiall impacted	MIIH
piant - vascular	bloodroot	cunuuensis				+						+			INO	Yes	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
																	habitat unlikely to burn and/or unlikely to have	
		Schoenoplectus					MIIH							No		No, but	retardant applications. Riparian buffers likely to	
plant - vascular	Hall's bulrush	hallii													No	Riparian	provide protection	МІІН
piant - vascalai	Tidii 3 buil usii	nam										+			INO	Mparian	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	IVIIII I
																	habitat unlikely to burn and/or unlikely to have	
		Selaginella				MIIH								No		No, but	retardant applications, Riparian buffers likely to	
plant - vascular	club spikemoss	selaginoides													No	Riparian	provide protection	МІІН
piant tastana.	eras spinerriess	serageraes										1			110	i i pariari	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
												МІІН		No			habitat unlikely to burn and/or unlikely to have	
plant - vascular	Shoshone carrot	Shoshonea pulvinata													No	No	retardant applications.	МІІН
		,															MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
																	habitat unlikely to burn and/or unlikely to have	
		Sphagnum			MIIH	MIIH				MIIH	MIIH		MIIH	No		No, but	retardant applications, Riparian buffers likely to	
plant - non-vascular	sphagnum	angustifolium													No	Riparian	provide protection	MIIH
-																	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
										NAUU				N-			habitat unlikely to burn and/or unlikely to have	
					MIIH					MIIH	MIIH		MIIH	No		No, but	retardant applications, Riparian buffers likely to	
plant - non-vascular	baltic sphagnum	Sphagnum balticum													No	Riparian	provide protection	MIIH
		Thalictrum			NI								NI	Yes				
plant - vascular	Cathedral Bluff meadowrue	heliophilum			INI								IVI	163	No	NI-Talus	NI-Talus	NI
		Townsendia															MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
		condensata var										MIIH		No			habitat unlikely to burn and/or unlikely to have	
plant - vascular	cushion Townsend daisy	anomola													No	No	retardant applications.	MIIH
						MIIH					MIIH			No			MIIH- Not G1/G2, No use over 0.01, habitat potentiall	
plant - vascular	largeflower triteleia	Triteleia grandiflora												_	No	Yes	impacted	MIIH
																	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a	
			MIIH		MIIH	MIIH	MIIH		MIIH	MIIH	MIIH	MIIH	MIIH	No			habitat unlikely to burn and/or unlikely to have	
															1	No, but	retardant applications, Riparian buffers likely to	
plant - vascular	lesser bladderwort	Utricularia minor												-	No	Riparian	provide protection	MIIH
	A	166												l		Van but	MIIH- Not G1/G2, No use over 0.01, habitat potentiall	ly
	American cranberrybush, or	Viburnum opulus		MIIH		MIIH							MIIH	No	 	Yes, but	impacted, but Riparian buffers likely to provide	
plant - vascular	mooseberry	var. americanum	-			-						1		-	No	riparian	protection	MIIH
mlant vacanton	Callinda vialat	Viola collei-lii		MIIH		MIIH			MIIH	MIIH				No	No	Vac	MIIH- Not G1/G2, No use over 0.01, habitat potentiall	MIIH
plant - vascular	Selkirk's violet	Viola selkirkii		<u> </u>	<u> </u>	<u> </u>			ļ		L				No	Yes	impacted	IVIIIH

VERSION: 6/27/2023

Region 2 Plants

Common Name	Scientific Name	AS	CAR CIB	CC	oc (	COR	GIL	KAI	LIN	PRE	SFE	TON			Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
													G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	life form?	
TUFTED SAND VERBENA	Abronia bigelovii												Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
DIMA INDIAN MALLOW	Ab. dilaa aasiabii					N CTTT						2 4777	27	37	27	to burn and/or unlikely to have retardant applications.			
PIMA INDIAN MALLOW	Abutilon parishii				N	MIIH						MIIH	No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
WRIGHT'S DOGWEED	Adenophyllum wrightii var.						MIIH						No	No	No	MIIH- Not G1/G2. No use over 0.01, Plant occurs in a habitat			
	wrightii															unlikely to burn and/or unlikely to have retardant applications.			
TONTO BASIN AGAVE	Agave delamateri			M	IIH					MIIH		MIIH	Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
HOHOKAM AGAVE	Agave murpheyi				-				1			MIIH	Yes	No	No	retardant applications.  MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
TOTORAW AGAVE	Agave mulpheyi											MIIH	res	INO	NO	to burn and/or unlikely to have retardant applications.			
SANTA CRUZ STRIPED	Agave parviflora ssp.				N	MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
AGAVE	parviflora															habitat potentially impacted, fire is a threat to the species			
PHILLIPS' AGAVE	Agave phillipsiana			M	IIH					MIIH			Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
TRELEASE AGAVE	A mayor a a b a ttii wa w											_	177	37	27	retardant applications.			
TRELEASE AGAVE	Agave schottii var. treleasei				N	MIIH							Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
SACRED MOUNTAIN AGAVE	Agave verdensis			M	IIH								Yes	No	No	MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
																to burn and/or unlikely to have retardant applications.			
PAGE SPRINGS AGAVE	Agave yavapaiensis			M	IIH								Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
OCCUPANTO CAMON	A 11'															to burn and/or unlikely to have retardant applications.			
GOODDING'S ONION	Allium gooddingii	MIIH		M	IIIH		MIIH		MIIH				Yes	Yes	Yes	MIIH- G1/G2, One or more forests over 0.01 application rate, Fire			
SAIYA	Amoreuxia gonzalezii				N	MIIH							Yes	Yes	Yes	is a threat to the species WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
	7 III O O O O O O O O O O O O O O O O O				1	WIIIII							103	103	103	potentially impacted, Exclusion mapping recommended on	no .	no no	in soil until they diminish in a couple
																forests ove 0.01 to reduce determination to MIIH			years. Final determination MIIH.
LARGE-FLOWERED BLUE	Amsonia grandiflora				N	MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
STAR																potentially impacted, Exclusion mapping recommended on			in soil until they diminish in a couple
																forests ove 0.01 to reduce determination to MIIH			years. Final determination MIIH.
MOGOLLON DEATH CAMAS	Anticlea mogollonensis (=Zigadenus m.)						MIIH						Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted,			
CHAPLINE'S COLUMBINE	Aquilegia chaplinei (=A.				-				MIIH			-	No	Yes	No	Fire is a threat to the species  MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	chrysantha var. chaplinei)												110	100	110	Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
CHIRICAHUA ROCK CRESS	Arabis tricornuta				N	MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on			in soil until they diminish in a couple
																forests ove 0.01 to reduce determination to MIIH			years. Final determination MIIH.
MT DELLENDALIOLI	A															WW. 2004 CA 102 W	** *		
MT. DELLENBAUGH SANDWORT	Arenaria aberrans			M	IIIH			MIIH		MIIH		MIIH	Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on	Yes - Impacts not expected across entire	no	perennial
																	population in one year.		
																	Final determination MIIH.		
LEMMON MILKWEED	Asclepias lemmonii				N	MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	,	<u></u>								<u></u>					<u> </u>	habitat potentially impacted, Fire is a threat to the species			
GREENE MILKWEED	Asclepias uncialis ssp.	MIIH			N	MIIH	MIIH			MIIH		I	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
ZUNI MILKVETCH	uncialis Astragalus accumbens							<del>                                     </del>					NI-	V-	NI-	habitat potentially impacted			
ZOINI WIILKVETUH	Asiragaius accumbens												No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
GUMBO MILKVETCH	Astragalus ampullarius	-			-+		-	MIIH	+			-	Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
													1	[ ]	1	to burn and/or unlikely to have retardant applications.			
TALL MILKVETCH	Astragalus altus								MIIH				Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on			in soil until they diminish in a couple
																forests ove 0.01 to reduce determination to MIIH			years. Final determination MIIH.
MA OLUBEIO (CORRESTORIO								<u> </u>					1	1					
MAGUIRE'S (COPPERMINE) MILKVETCH	Astragalus cobrensis var. maguirei				N	MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application			
MARBLE CANYON	Astragalus cremnophylax	-			+		-	MIIH	+				Yes	No	No	rate, habitat potentially impacted, Fire is a threat to the species MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
	var. hevronii							141111					105	110	110	to burn and/or unlikely to have retardant applications.			
MILKVETCH	var. 110 vi orini																		<del> </del>
MILKVETCH CLIFF MILKVETCH	Astragalus cremnophylax var. myriorrhaphis							MIIH					Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			

Common Name	Scientific Name	AS	CAR CI	IB	COC	COR	GIL	KAI	LIN	PRE	SFE	TON		1	Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
													G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	life form?	
VILLOUS GROUNDCOVER	Astragalus humistratus	MIIH					MIIH						No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
MILKVETCH	var. crispulus															Plant occurs in a habitat unlikely to burn and/or unlikely to have			
III IA OLII IOA MILIO/ETOLI	<u>'</u>															retardant applications.			
HUACHUCA MILKVETCH	Astragalus hypoxylus					MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on forests ove 0.01 to reduce determination to MIIH			in soil until they diminish in a coupl years. Final determination MIIH.
																lorests ove 0.01 to reduce determination to will i			years. Final determination wifff.
KERR'S MILKVETCH	Astragalus kerrii								MIII			-	Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
	nonaganae nomi								IVIIIII				103	103	103	potentially impacted, Exclusion mapping recommended on	110	lio lio	in soil until they diminish in a couple
																forests ove 0.01 to reduce determination to MIIH			years. Final determination MIIH.
CHACO MILKVETCH	Astragalus micromerius												No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
													1			Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
PAGOSA MILKVETCH	Astragalus missouriensis												No	No	No	MIIH- Not G1/G2, No forests over 0.01 application rate, Plant			
	var. humistratus															occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
RIPLEY MILKVETCH	Astragalus ripleyi												No	No	Yes	MIIH- Not G1/G2, No forests over 0.01 application rate, habitat			
RUSBY'S MILKVETCH	A - to to to- d	-										_				potentially impacted			
KOSBA.2 MITKAFICH	Astragalus rusbyi				MIIH			MIIH					No	No	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
ONE-FLOWERED	Astragalus wittmannii									1		_	Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
MILKVETCH	Astragalus Wittinannii												168	1 68	INO	Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
AYENIA	Ayenia jaliscana (= A.				MIIH								No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
	truncata)												1			No known occurrences on FS			
SIERRA BLANCA	Besseya oblongifolia								NI					Yes	No	NI- Alpine			
KITTENTAILS																			
CRENULATE MOONWORT	Botrychium crenulatum				MIIH								No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
BUSH-VIOLET	Browallia eludens					MIIII							V	V	V	WII MIII C1/C2 II 0.011:t:t- 1-1:t-t			1 Cihh+1:f1
BOSH-VIOLET	browailia eluderis					MIIH							Yes	Yes	Yes	WII or MIIH- G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on	no	no	annual - Species has short life cycle; occurring on moist soils of temporar
																forests ove 0.01 to reduce determination to MIIH			streams. This would be post fire
																AND COLOR OF			season. Per Region no need for
																			avoidance mapping. Final
																			determination MIIH.
PECOS MARIPOSA LILY	Calochortus gunnisonii												No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
OLUI TEDILI	var.											_							
CHILTEPIN	Capsicum annuum var. glabriusculum					MIIH							No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	giabriascalarri															Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
CHIHUAHUAN SEDGE	Carex chihuahuensis					MIIH						MIIH	No	Yes	Yes, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
CHILIDALIOAN SEDGE	Carex criminandensis					MIIII						WIIII	NO	I es	res, out riparian	habitat potentially impacted, Riparian buffers likely to provide			
																protection			
COCHISE SEDGE	Carex ultra (=C.spissa var.				MIIH	MIIH				MIIH		MIIH	No	Yes	Yes, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	ultra)												1		,	habitat potentially impacted, Riparian buffers likely to provide			
																protection			
KAIBAB PAINTBRUSH	Castilleja kaibabensis							MIIH					Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
																to burn and/or unlikely to have retardant applications.			
WHITE MOUNTAINS	Castilleja mogollonica	MIIH											Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
PAINTBRUSH	04:11 - 1 4 -	-										_				to burn and/or unlikely to have retardant applications.			
TRANS-PECOS INDIAN PAINTBRUSH	Castilleja nervata					MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, No known occurrences on FS			
SANTA CRUZ STAR LEAF	Choisya mollis					MIIH				1		_	Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
674171 61162 61741 EE74	Onoisya moilis					WIIIII							168	1 68	INO	Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
TUSAYAN RABBITBRUSH,	Chrysothamnus molestus	1			MIIH			MIIH					No	No	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
DISTURBED RABBITBRUSH																Plant occurs in a habitat that is unlikely to have retardant			
														1		applications. Also, this species needs fire to maintain its habitat.			
ARIZONA BUGBANE	Cimicifuga arizonica				MIIH			MIIH				MIIH	Yes	No	No, but riparian	MIIH- G1/G2, One or more forests over 0.01 application rate,			
														1		plant is within riparian corridors already mapped for aquatic			
																protection			
GILA THISTLE	Cirsium gilense	MIIH					MIIH	[	1	1		Ι	No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
MOCOLLON TURE	Often frame or	1							1	-				1		Name (1/22 )			
MOGOLLON THISTLE	Cirsium parryi ssp. mogollonicum				MIIH				1	1			Yes	No	Yes, but riparian	MIIH- G1/G2, No use over 0.01, habitat potentially impacted,			
	mogonomicum	1			l	1			1					1	l	Riparian buffers likely to provide protection	1		

Common Name	Scientific Name	AS	CAR CI	IB	COC	COR	GIL	KAI	LIN	PRE	SFE	TON			Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
WRIGHT'S MARSH THISTLE	Circium wrightii					<u> </u>	<u> </u>						G1/G2	0.01	impacted	Initial Determination from National Screen Process Addressed in BA	than 1 unit?	life form?	
WRIGITI 3 WARSIT ITIISTEE	Cirsium wiigniii															Addressed in BA			
ARIZONA LEATHERFLOWER,	Clematis hirsutissima var. hirsutissima				MIIH			MIIH	N/A				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
MEXICAN HEMLOCK PARSLEY	Conioselinum mexicanum					MIIH							Yes	Yes	Yes	MIIH- G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, No known occurrences on FS			
SANTA CRUZ BEEHIVE CACTUS	Corypantha recurvata					MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
SMOOTH BABYBONNETS	Coursetia glabella					MIIH							No	Yes	Yes	habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
WOOTON'S HAWTHORN	Crategus wootoniana						MIIH		MIIH				Yes	Yes	Yes	habitat potentially impacted MIH- G1/G2, One or more forests over 0.01 application rate,			
YELLOW LADY'S-SLIPPER	Cypripedium parviflorum	MIIH					MIIH		MIIH				No	Yes	Yes	habitat potentially impacted, Fire is a threat to the species  MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	var. pubescens (=C.							ļ								habitat potentially impacted			
GENTRY INDIGO BUSH	Dalea tentaculoides				MIIH								Yes	No	No, but riparian	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications, but Riparian buffers likely to provide protection			
ALPINE LARKSPUR	Delphinium alpestre													No	No	NI- Alpine			
ROBUST LARKSPUR	Delphinium robustum												Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
METCALFE'S TICK-TREFOIL	Desmodium metcalfei				MIIH	MIIH	MIIH			MIIH			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
HEIL'S ALPINE	Draba heilii								-					No	No	habitat potentially impacted  NI- Alpine			
WHITLOWGRASS SMALL-HEADED	Ericamaria miaracanhala												37	N.	N	MILICIACO N. AND DE CONTROL OF THE C			
GOLDENWEED	Ericameria microcephala (=Haplopappus m.)												Yes	No	No	MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
GUADALUPE RABBITBRUSH									MIIH				No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	texensis (=Chrysothamnus															Plant occurs in a habitat unlikely to burn and/or unlikely to have			
MOGOLLON FLEABANE	Erigeron anchana					-	-					MIIH	Yes	No	Yes	retardant applications.  MIH- G1/G2, No use over 0.01, habitat potentially impacted			
												IVIIII	1 03	140	163				
ARID THRONE FLEABANE	Erigeron arisolius					MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no	no	annual or perrenial - Plant occurs in grasslands, often on moist and rocky soils. Per Region no need for avoidance mapping. Final determination MIIH.
HELIOGRAPH PEAK FLEABANE	Erigeron heliographis					MIIH							Yes	Yes	Yes	MIIH- G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, Fire is a threat to the species			decimination (film).
HESS' FLEABANE	Erigeron hessii						MIIH						Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
CHIRICAHUA FLEABANE	Erigeron kuschei					MIIH	+					-	Yes	Yes	No	to burn and/or unlikely to have retardant applications.  MIH-G1/G2, One or more forests over 0.01 application rate,			
	J												1.00	1 00	1.0	Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications. Fire is a threat to the species			
FISH CREEK FLEABANE	Erigeron piscaticus											MIIH	Yes	No	Yes	MIH- G1/G2, No use over 0.01, habitat potentially impacted, plant is within riparian corridors already mapped			
ROCK FLEABANE	Erigeron saxatilis				MIIH			MIIH		MIIH			No	Yes	No	MIIH- Not G1/G2,One or more forests over 0.01 application rate,			
																Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
SIVINSKI'S FLEABANE	Erigeron sivinskii					+	+	<del> </del>	1			-	Yes	Yes	No	MIH-G1/G2, One or more forests over 0.01 application rate,			
													103	163	110	Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
PECOS FLEABANE	Erigeron subglaber												Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
HEATHLEAF WILD	Eriogonum ericifolium var.	MIIH			MIIH				+	MIIH			No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
BUCKWHEAT	ericifolium															Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
MORTON WILD BUCKWHEAT	Eriogonum mortonianum							MIIH					Yes	No	Yes	MIIH- GI/G2, No use over 0.01, habitat potentially impacted, No known occurrences on FS			
RIPLEY WILD BUCKWHEAT	Eriogonum ripleyi				MIIH				+	MIIH		MIIH	Yes	Yes	No	MIIH- G1/G2, One or more forests over 0.01 application rate,			
																Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
ATWOOD WILD	Eriogonum thompsonae					+	+	MIIH	+				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted.			
BUCKWHEAT	var.															No known occurrences on FS			
VILLARD'S PINCUSHION CACTUS	Escobaria villardii								MIIH				Yes	Yes	No	MIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
	I	1				1	1	1	1	1			1	1	1	retardant applications.	I	I	1

	Scientific Name	AS	CAR CIE	3	COC	COR	GIL	KAI	LIN	PRE	SFE	TON			Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
													G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	life form?	
WISLIZENI GENTIAN	Gentianella wislizeni	MIIH				MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	Yes - Impacts not	no	annual
																potentially impacted, Exclusion mapping recommended on	expected across entire		
																forests over 0.01 to reduce determination to MIIH	population in one year.		
																	Final determination MIIH.		
SHOOTINGSTAR	Geranium dodecatheoides								MIIH				Yes	Yes	No, but riparian	MIIH-G1/G2, One or more forests over 0.01 application rate,			
GERANIUM																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications, Riparian buffers likely to provide			
BARTRAM STONECROP	Graptopetalum bartramii					MIIH								Yes		Addressed in BA			
FLAGSTAFF PENNYROYAL	Hedeoma diffusum				MIIH	-		MIIH	-	MIIH		_	No	Yes	V	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
LAGSTAFF FEMNTROTAL	rieueoma umusum				MIIH			MIIH		MIIH			NO	res	Yes	habitat potentially impacted	1		
ARIZONA SNEEZEWEED	Helenium arizonicum	MIIH			MIIH			1					No	No	Yes	MIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
		.,,,,,,,											1.0		1 65	mparted			
ARIZONA SUNFLOWER	Helianthus arizonensis	MIIH			MIIH								Yes	No	Yes	MIIH G1/G2, No use over 0.01, habitat potentially impacted,			
RUTTER'S FALSE	Heterotheca rutteri					MIIH							Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
GOLDENASTER																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
EASTWOOD ALUM ROOT	Heuchera eastwoodiae	MIIH			MIIH					MIIH		MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,	,		
ADIZONA ALLIM DOOT	11							<u> </u>	1						**	habitat potentially impacted			
ARIZONA ALUM ROOT	Heuchera glomerulata	MIIH				MIIH						MIIH	No	Yes	Yes, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate,	1		
																habitat potentially impacted, Riparian buffers likely to provide			
CANDIA ALLIM DOOT	I la colo a va modala alla							-				_	17	37	27	some protection			
SANDIA ALUM ROOT	Heuchera pulchella												Yes	Yes	No	MIIH- G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
CAPITAN PEAK ALUMROOT	Houghers woodsignhile					1		1	NIT	1		-	v	37	No	NI- G1/G2, Use over 0.01 application rate, Talus Scree habitat			
AFITAN FEAR ALUMNOOT	r leuchera woodsiaphila								NI				Yes	Yes	NO	unlikely to burn and/or unlikely to have retardant applications.			
COLEMAN'S CRESTED	Hexalectris colemanii				MIIH			<del> </del>		+			Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
CORALROOT	Troxido de la constitución				1411111								103	110	103	William G1/G2, 110 use over 0.01, habitat potentially impacted			
CHISOS MT. CRESTED	Hexalectris revoluta							1	MIIH				Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
CORALROOT																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
WOOTON'S ALUMROOT	Heuchera wootonii								MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
																habitat potentially impacted			
ARIZONA CORALROOT	Hexalectris spicata var.					MIIH		MIIH	MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	arizonica							ļ								habitat potentially impacted			
TEXAS PURPLE-SPIKE	Hexalectris warnockii					MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on			in soil until they diminish in a couple
																forests over 0.01 to reduce determination to MIIH			years. Species may remain below ground for several years. Final
																			determination MIIH.
MOGOLLON HAWKWEED	Hieracium brevipilum (=H.	МПН					MIIH	+	+				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			determination with.
	fendleri var. mogollense)	WIIIII					IVIIII						140	110	103	William Not G1/G2, No use over 0.01, habitat potentially impacted			
RUSBY HAWKWEED	Hieracium abscissum (=					MIIH	MIIH	1					Yes	Yes	Yes	WII => MIIH G1/G2, Use over 0.01 application rate, habitat	Yes - Impacts not	no	threatened by loss of habitat due to
	Н.															potentially impacted, Exclusion mapping recommended on	expected across entire		wildfire, therefore avoidance area
	rusbyi)															forests over 0.01 to reduce determination to MIIH	population in one year.		mapping would be detrimental
																	Final determination MIIH.		
NEW MEXICO BITTERWEED						MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	neomexicana															habitat potentially impacted, No known occurrences on FS			
TALL BITTERWEED	Hymenoxys brachyactis												No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
SIERRA BLANCA CLIFF DAISY	Ionactis elegans								MIIH				Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
AIST	(=Chaetopappa e.)															Plant occurs in a habitat unlikely to burn and/or unlikely to have			
KAIBAB BLADDERPOD	Losquerella kaihahanais				-	-	+	MITT	+	+			NI-	NI-	NI-	retardant applications.			<u> </u>
VIDYD DFYDDEKLOD	Lesquerella kaibabensis							MIIH					No	No	No	MIIH- Not G1/G2, use not over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
LEMON LILY	Lilium parryi				$\vdash$	MIIH	-	+	+	-		_	No	Yes	No, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	a pan ji					WIIIII							110	103	110, out riparian	Plant occurs in a habitat unlikely to burn and/or unlikely to have	1		
					l				1			1				retardant applications, Riparian buffers likely to provide			
WOOD LILY	Lilium philadelphicum					1	1	1	MIIH	1			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			<u> </u>
	,,				l								1	1		habitat potentially impacted,			
	1					MIIH		1	1	1			Yes	Yes	No, but riparian	MIIH-G1/G2, One or more forests over 0.01 application rate,			
CHIRICAHUA MUDWORT	Limosella pubiflora											-							•
CHIRICAHUA MUDWORT	Limosella pubiflora															Plant occurs in a habitat unlikely to burn and/or unlikely to have			

Common Name	Scientific Name	AS	CAR	CIB	COC	COR	GIL	KAI	LIN	PRE	SFE	TON			Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
													G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	life form?	
ALAMOS DEER VETCH	Lotus alamosanus				MIIH								No	No	No, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
															1	Riparian buffers likely to provide protection			
HORSESHOE DEER VETCH	Lotus mearnsii var. equisolensis											MIIH	No	No	No	MIIH- Not G1/G2, No use over 0.01 application rate,			
HUACHUCA MOUNTAINS LUPINE	Lupinus huachucanus					MIIH							Yes	Yes	Yes	MIIH- G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, Fire is a threat to the species			
BROADLEAF LUPINE	Lupinus latifolius ssp. leucanthus									MIIH			No	Yes	Yes, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Riparian buffers likely to provide protection			
LEMMON'S LUPINE	Lupinus lemmonii					MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH			in soil until they diminish in a couple years. Final determination MIIH.
MAPLELEAF FALSE SNAPDRAGON	Mabrya acerifolia (=Maurandya a.)											MIIH	Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
SUPINE BEAN	Macroptilium supinum					MIIH							Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH			in soil until they diminish in a couple years. Final determination MIIH.
ARIZONA MANIHOT	Manihot davisiae				MIIH								No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
CHAMA BLAZING STAR	Mentzelia conspicua												Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
SPRINGER'S BLAZING STAR	Mentzelia springeri												No	No	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
WIGGINS MILKWEED VINE	Metastelma mexicanum (=Cynanchum wigginsii)					MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Fire is a threat to the species			
LADIES'-TRESSES	Microthelys rubrocallosa (=Schiedeella r., Spiranthes								MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, Fire is a threat to the species			
SOUTHWESTERN MUHLY	Muhlenbergia palmeri (=M.				MIIH								Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
SYCAMORE CANYON MUHLY	Muhlenbergia elongata (=M.					MIIH							No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
HEARTLEAF GROUNDSEL	xerophila)  Packera cardamine	MIIH					MIIH					_	No	No	Yes	retardant applications.  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
	(=Senecio cardamine)	MIIII																	
TOUMEY GROUNDSEL	Packera neomexicana var. toumeyi (=Senecio n. var.						MIIH					MIIH	No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
SPELLENBERG'S GROUNDSEL	Packera spellenbergii (=Senecio s.)												No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
VIRLET PASPALUM	Paspalum virletii					MIIH							No	Yes	Yes	MIIH- Not G1/G2, Use over 0.01, habitat potentially impacted,			
ARIZONA PASSIONFLOWER	Passiflora arizonica					MIIH							No	Yes	Yes	No known occurrences on FS MIIH- Not G1/G2, Use over 0.01, habitat potentially impacted			
BEARDLESS CHINCHWEED	Pectis imberbis															Addressed in BA			
KAIBAB PINCUSHION CACTUS	Pediocactus paradinei							MIIH					Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, fire			
FICKEISEN PINCUSHION	Pediocactus	<del>                                     </del>				+		MIIH	+	+			-	+		is a threat to species  Adressed in BA, Federally endangered; no critical habitat mapped			
CACTUS	peeblesianus var.				l											standard indirect indirec			
CHIHUAHUA SCURF-PEA	Pediomelum pentaphyllum					MIIH							Yes	Yes	Yes	MIIH- G1/G2, use over 0.01 application rate, habitat potentially impacted, no known occurrences on FS			
VERDE BREADROOT	Pediomelum verdiensis				MIIH					MIIH		MIIH	Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	1	no	
																potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	expected across entire population in one year. Final determination MIIH.		
LYNGHOLM'S BRAKEFERN	Pellaea lyngholmii				MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, fire is a threat to species			
ALAMO PENSTEMON	Penstemon alamosensis								MIIH				No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
					L_								<u> </u>			Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
GUADALUPE PENSTEMON									MIIH				No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,			
	regalis															Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			

also dormant unless rainy season

Common Name	Scientific Name	AS	CAR	CIB	coc	COR	GIL	KAI	LIN	PRE	SFE	TON			Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
													G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	life form?	
SUNSET CRATER BEARDTONGUE	Penstemon clutei				MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
CATALINA BEARDTONGUE	Penstemon discolor	1			_	MIIH		1		-			Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	nerennial - able to withstand nitrates
													T CS	105		potentially impacted, Exclusion mapping recommended on		lio lio	in soil until they diminish in a coupl
																forests over 0.01 to reduce determination to MIIH			years. Threatened by invasive specie
																			therefore include monitoring of any
																			known occupied habitat where retatrdant is used and mitigate if
																			invasives are present and increase.
																			Final determination MIIH.
MAGUIRE'S BEARDTONGUE	Penstemon linarioides	MIIH					MIIH						No	No	Yes	MIIH- Not G1/G2, Use over 0.01, habitat potentially impacted,			
	ssp.															No known occurrences on FS			
METCALFE'S PENSTEMON	Penstemon metcalfei						MIIH						Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, fire			
FLAGSTAFF	Penstemon nudiflorus			+	MIIH			MIIH	+	MIIH			Yes	Yes	Yes	is a threat to species WII or MIIH G1/G2, Use over 0.01 application rate, habitat	Yes - Impacts not	no	perennial
BEARDTONGUE													T CS	100	103	potentially impacted, Exclusion mapping recommended on	expected across entire		pereimiui
																forests over 0.01 to reduce determination to MIIH	population in one year.		
																	Final determination MIIH.		
SAN MATEO PENSTEMON	Penstemon pseudoparvus												No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate	,		
CHIRICAHUA ROCKDAISY	Perityle cochisensis				_	МПП		<u> </u>	-	ļ			V	V	No	habitat potentially impacted, Fire is a threat to species		1	
CHIRICALIDA ROCKDAIST	Pentyle cochisensis					MIIH							Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
SALT RIVER ROCKDAISY	Perityle gilensis var.											MIIH	Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
	salensis																		
FISH CREEK ROCKDAISY	Perityle saxicola											MIIH	Yes	No	No	MIIH- G1/G2, No use over 0.01, Plant occurs in a habitat unlikely	y		
CLOUDCROFT	Phacelia cloudcroftensis								MIIH				Yes	Yes	Yes	to burn and/or unlikely to have retardant applications. WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	annual - species may be threatened
SCORPIONWEED	Triaccila cioadcionerisis								IVIIIII				168	1 65	i es	potentially impacted, Exclusion mapping recommended on	lio	IIO	by potential increase of invasive
																forests over 0.01 to reduce determination to MIIH			species; however avoidance areas
																			could impact ability to protect town
																			of Cloudcroft. Include monitoring of
																			any known occupied habitat where retatrdant is used and mitigate if
																			invasives are present and increase.
																			Final determination MIIH.
ARIZONA PHLOX	Phlox amabilis	MIIH		1	MIIH			MIIH		MIIH		MIIH	Yes	Yes	Yes	MIIH- G1/G2, Use over 0.01, habitat potentially impacted, fire is			
																a threat to species			
BROADLEAF GROUND CHERRY	Physalis latiphysa					MIIH							Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
CHERKI																Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
ALCOVE BOG ORCHID	Platanthera zothecina			+	MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
					1.1111								100			manus perentana			
HINCKLEY'S POLEMONIUM						MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate	,		
LILLAL A DAL ANILIZIAZO DE	ssp. hinckleyi							ļ	-							habitat potentially impacted			
HUALAPAI MILKWORT	Polygala rusbyi				MIIH					MIIH		MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate habitat potentially impacted	,		
WHITE-FLOWERED	Potentilla albiflora					MIIH							Yes	Yes	Yes	MIIH- G1/G2, Use over 0.01, habitat potentially impacted, fire is			
CINQUEFOIL																a threat to species			
CHIRICAHUA CINQUEFOIL	Potentilla rhyolitica var.					MIIH							Yes	Yes	Yes	MIIH- G1/G2, Use over 0.01, habitat potentially impacted, fire is			
LILLA CLILICA CINOLIETOII	chiricahuensis					) (TTT						_	37	37	27	a threat to species			
HUACHUCA CINQUEFOIL	Potentilla rhyolitica var. rhyolitica					MIIH							Yes	Yes	No	MIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
	,															retardant applications.			
MEXICAN TANSY ASTER	Psilactis gentryi					MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate			
	(=machaeranthera															habitat potentially impacted			
WHISK FERN	Psiilotum nudum					MIIH							No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate			
		1														Plant occurs in a habitat unlikely to burn and/or unlikely to have			
DAVIDSON'S CLIFF	Pteryxia davidsonii	MIIII			-	-	MIIII	<del>                                     </del>	+	<del>                                     </del>		-	Vac	No	Vas	retardant applications.		1	
CARROT	i teryxia davidsofili	MIIH					MIIH						Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, fire is a threat to species			
PARISH'S ALKALI GRASS	Puccinellia parishii	MIIH				<u> </u>	1	<u> </u>	<b>†</b>	<u> </u>			Yes	No	Yes	MIH- G1/G2, No use over 0.01, habitat potentially impacted, fire	:	1	
	<u> </u>							<u></u>	<u> </u>	<u></u>						is a threat to species		<u> </u>	
GRAND CANYON ROSE	Rosa stellata ssp. abyssa				I			MIIH	1				No	No	No	MIIH-Not G1/G2, No use over 0.01, Plant occurs in a habitat			
EDITEDIO DOCE	Poor woodeii va#-	-			1 1			<u> </u>				_	N	N.	37 1	unlikely to burn and/or unlikely to have retardant applications.			
ERTTER'S ROSE	Rosa woodsii var. ertterae				MIIH								No	No	Yes, but riparian	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	,		
	1	1				<u> </u>		<u> </u>	1	<u> </u>			<u> </u>		Į	Riparian buffers likely to provide protection	1		Į

Common Name	Scientific Name	AS	CAR	CIB	coc	COR	GIL	KAI	LIN	PRE	SFE	TON			Habitat			shrub,	Perennial or annual?
														Use over	potentially		Species occurs on more	succulent	
													G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	life form?	
SIERRA BLANCA	Potentilla sierrae-blancae								MIIH				No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate	,		
CINQUEFOIL																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
DI LIMEDIO DOOK	D att a same								-						** *	retardant applications.			
BLUMER'S DOCK	Rumex orthoneurus	MIIH			MIIH	MIIH						MIIH	No	Yes	Yes, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate.	,		
																habitat potentially impacted, 300 foot riparian buffer likely to provide some protection.			
																provide some protection.			
ARIZONA WILLOW	Salix arizonica	MIIH											No	No	No, but riparian	MIIH- G2G3, Use over 0.01 for one or more forests, 300 foot			
BEBB'S WILLOW	Salix bebbiana	MIIH			MIIH			-	-			_	No	No	No, but riparian	riparian buffer likely to provide protection.  MIIH- Not G1/G2, One or more forests over 0.01 application rate.			
DEDD O WILLOW	Salix Debblaria	MIIH			MIIIH								NO	INO	No, but riparian	300 foot riparian buffer likely to provide protection.	'		
GALIURO SAGE	Salvia amissa					MIIH						MIIH	Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	Yes - Impacts not	no	riparian obligate
																potentially impacted, Exclusion mapping recommended on	expected across entire		
																forests over 0.01 to reduce determination to MIIH	population in one year.		
																	Final determination MIIH.		
MEARNS SAGE	Salvia dorrii ssp. mearnsii				MIIH					MIIH			No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate	,		
																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
																retardant applications.			
CHIRICAHUA MOUNTAIN	Samolus vagans					MIIH							Yes	Yes	Yes, but riparian	MIIH- G1/G2, Use over 0.01 application rate, habitat potentially			
BROOKWEED								<u> </u>								impacted, But, plant is within streams already mapped.			
MIMBRES FIGWORT	Scrophularia macrantha						MIIH						Yes	No	Yes	MIH- G1/G2, No use over 0.01, habitat potentially impacted, fire	;		
NEW MEXICAN	Sedum integrifolium ssp.				_			-	NI			_		Yes	No	is a threat to the species			
STONECROP	neomexicana								INI					res	No	NI- Alpine			
HUACHUCA GROUNDSEL	Senecio multidentatus var.					MIIH		1					No	Yes	Yes	MIIH- Not G1/G2, Use over 0.01 application rate, habitat			
	huachucanus (=s.															potentially impacted, but Fire is a threat to the species			
NODDING BLUE-EYED	Sisyrinchium cernuum					MIIH		1					No	Yes	Yes, but riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate,	,		
GRASS																habitat potentially impacted, some protection through riparian			
																buffers			
GUADALUPE MOUNTAINS	Solidago wrightii var.								MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate	,		
GOLDENROD	guadalupensis							<u> </u>							.,	habitat potentially impacted			
GUADALUPE MESCAL BEAN	guadalupensis								MIIH				Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
	gaaaaaponolo															retardant applications.			
PORSILD'S STARWORT	Stellaria porsildii					MIIH	MIIH	+	+				Yes	Yes	Yes	MIH-G1/G2, Use over 0.01 application rate, habitat potentially			
	otonana poronan					IVIIIII	IVIIII						103	103	103	impacted, but Fire is a threat to the species			
LEMMON'S STEVIA	Stevia lemmonii					MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate.	,		
																habitat potentially impacted, Fire is a threat to the species			
GUADALUPE	Streptanthus sparsiflorus								MIIH				Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate,			
JEWELFLOWER																Plant occurs in a habitat unlikely to burn and/or unlikely to have			
									1							retardant applications.			
PINOS ALTOS FLAME FLOWER	Talinum humile					MIIH	MIIH						Yes	Yes	Yes		Yes - Impacts not	no	
LOWER																potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	expected across entire population in one year.		
																locests over 0.01 to reduce determination to wifff	Final determination MIIH.		
																	T IIIII GOVERNMENTON IVIIII		
TEPIC FLAME FLOWER	Talinum marginatum			1		MIIH		1					Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no	no	perennial - able to withstand nitrates
																potentially impacted, Exclusion mapping recommended on			in soil until they diminish in a couple
																forests over 0.01 to reduce determination to MIIH			years. Final determination MIIH.
ARAVAIPA WOODFERN	Thelypteris puberula var.					MIIH						MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate.	,		
	sonorensis							1	1							habitat potentially impacted			
SONORAN NOSEBURN	Tragia laciniata					MIIH		1	1	1		Ι	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate	,		
MOCOLLON CLOVED	Tuife lives la prince a cons	2 (1777				1	2 0777	1	1	1			17	27	17	habitat potentially impacted			
MOGOLLON CLOVER	Trifolium longipes ssp. neurophyllum (=T.	MIIH					MIIH						Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
	neurophyllum)																		
	Tumamoca macdougallii	<del> </del>				MIIH	+	+	1	+			No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate,	+	-	
TUMAMOC GLOREREDDY	i amamoca macuuuyalli	ĺ				17111171		1	1			l .	INU	1 08	INO	Plant occurs in a habitat unlikely to burn and/or unlikely to have	'[		
TUMAMOC GLOBEBERRY		1				1									i	12 mile Second in a magnat unincery to ourn and/or unincery to flave			
TUMAMOC GLOBEBERRY																			
TUMAMOC GLOBEBERRY SHADE VIOLET	Viola umbraticola					MIIH		-	<u> </u>			_	No	Yes	Yes	retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01 application rate.			

# 20230707\_PlantFungiSensitiveSpecies

Use over G1/G2 Use ov	Common	Name .	Scientific Name	AS	CAR	CIB	coc	COR	GIL	KAI	LIN	PRE	SFE	TON		Habitat			shrub,	Perennial or annual?
															Use over	potentially		Species occurs on more	succulent	
															0.01	impacted	Initial Determination from National Screen Process	than 1 unit?		

P\* = species is proposed for federal listing, and will be removed from the RFSS list if/once the final rule is published implementing the Federal protections provided by the ESA.

Version: 6/27/2023

Region 3 Plants

Common name	Scientific Name	ASH	BOI	В-Т	CAR	СНА	DIX	FIS	ним	M-L	PAY	SAL	SAW	TAR	ТОІ	W-C	G1/G2	Use over	Habitat	Initial Determination from National Screen Process	more than 1 unit?	succulent	
Pink agoseris	Agoseris lackschewitzii			MIIH								MIIH		MIIH			No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		iiie form?	
Wonderland Alice flower	Aliciella (=Gilia) caespitosa						MIIH	MIIH									Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
Chatterley Onion	Allium geyeri var. chatterleyi									MIIH							Yes	No	Yes	retardant applications.  MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Swamp onion	Allium madidum										MIIH						No	No	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Tolmie's onion	Allium tolmiei var. persimile		MIIH								MIIH						No	Yes	Yes	MIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Candystick	Allotropa virgata									1	MIIH						No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Sweet-flowered rock jasmine	Androsace chamaejasme ssp. carinata			MIIH						NI				MIIH			No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted M-L habitat in alpine			
Charleston angelica	Angelica scabrida														MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Wheeler's angelica	Angelica wheeleri															MIIH	Yes	Yes	No	MIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
Meadow pussytoes	Antennaria arcuata								MIIH								165	ies	NO	retardant applications.  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Charleston pussytoes	Antennaria soliceps								IVIIII I						NI		No	No	Yes	NI- Talus slopes			
Link Trail columbine	Aquilegia flavescens var. rubicunda														INI		Yes	No	No				
		NAUL I								MIIH							Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Graham columbine	Aquilegia grahamii	MIIH															Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Rosy King's sandwort	Arenaria kingii ssp. rosea														MIIH		Yes	No	Yes	MIH- G1/G2, No use over 0.01, habitat potentially impacted			
Petiolate wormwood	Artemisia campestris ssp. borealis var. petiolata	MIIH															Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Eastwood milkweed	Asclepias eastwoodiana								MIIH						MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Clokey milkvetch	Astragalus aequalis														MIIH		v	N	N.	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Larger than			
Leat Diver milleretals	Actragalus ampis amissi					MIIH											Yes	No	No	normal fire is a threat to the species			
Lost River milkvetch	Astragalus amnis-amissi					MIIIA				ļ			? MIIH				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Goose Creek milkvetch	Astragalus anserinus												? MIIIT				Yes	No	Yes	MIH-G1/G2, No use over 0.01, habitat potentially impacted, No known occurrences on FS			
Lemhi milkvetch	Astragalus aquilonius					MIIH							? MIIH				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Bicknell milkvetch	Astragalus consobrinus							MIIH		?МІІН							Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Meadow milkvetch	Astragalus diversifolius var. diversifolius			MIIH		MIIH								MIIH			Yes	No	Yes, but	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection			
Dana milkvetch	Astragalus henrimontanensis						MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH		r	perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Isely's milkvetch	Astragalus iselyi									MIIH							No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Starvling milkvetch	Astragalus jejunus var. jejunus			MIIH	MIIH												No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Long Valley milkvetch	Astragalus johannis-howellii														MIIH		Yes	No	Yes	MIH- G1/G2, No use over 0.01, habitat potentially impacted			
Broad-pod freckled milkvetch	Astragalus lentiginosus var. latus								MIIH								Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Navajo Lake milkvetch	Astragalus limnocharis var. limnocharis						MIIH													WII or MIIH G1/G2, Use over 0.01 application rate, habitat	no		perennial - able to withstand nitrates in soil until they
																	Yes	Yes	Yes	potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH		d	diminish in a couple years. Final letermination MIIH.
Table Cliff milkvetch	Astragalus limnocharis var. tabulaeus						MIIH										Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
Lee Canyon milkvetch	Astragalus oophorus var. clokeyanus														MIIH		Yes	No	No	retardant applications.  MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Lavin's egg milkvetch	Astragalus oophorus var. lavinii														MIIH		Yes	No	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
Payson's milkvetch	Astragalus paysonii			MIIH	+						MIIH			MIIH			No	No	Yes	retardant applications.  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Spring Mountain milkvetch	Astragalus remotus														MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Lamoile Canyon milkvetch	Astragalus robbinsii var. occidentalis								MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
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Common name	Scientific Name	ASH	BOI B-T	CAR	СНА	DIX	FIS	ним	M-L	PAY	SAL	SAW	TAR	тоі	W-C	G1/G2	Use over	Habitat			succulent	
Toquima milkvetch	Astragalus toquimanus													MIIH					Initial Determination from National Screen Process MIIH- G1/G2, No use over 0.01, habitat potentially impacted	more than 1 unit?	life form?	
currant milkvetch	- '							MIIH								Yes	No	Yes	, , , , , , , , , , , , , , , , , , , ,			
	Astragalus uncialis							IVIIII								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
White Cloud milkvetch	Astragalus vexilliflexus var. nubilus				MIIH					MIIH		MIIH				Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	Yes - Impacts not expected across entire population in one year. Final determination MIIH.	no	perennial
Guard milkvetch	Astragalus zionis var. vigulus					MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Bodie Hills rockcress	Boechera (=Arabis) bodiensis													MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Grouse Creek rockcress	Boechera (=Arabis) falcatoria							MIIH								Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Spring Mountains rockcress	Boechera (=Arabis) nevadensis													NI		Yes	No	No	NI-cliffs,talus			
Washoe tall rockcress	Boechera (=Arabis) rectissima var. simulans													MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Galena Creek rockcress	Boechera (=Arabis) rigidissima var. demota													MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Ophir rockcress	Boechera (=Arabis) ophira													MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Tiehm rockcress	Boechera (=Arabis) tiehmii													NI		No	No	No	NI- Bare rock/talus/scree			
Upswept moonwort	Botrychium ascendens													MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Dainty moonwort	Botrychium crenulatum	MIIH											MIIH	MIIH	MIIH	No	No	Yes, but	MIIH- Not G1/G2, No use over 0.01, habitat potentially			
Slender moonwort	Botrychium lineare	MIIH						?MIIH		?MIIH		MIIH		MIIH	MIIH	No			impacted, but riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application			
Paradox moonwort	Botrychium paradoxum					MIIH										No	Yes	Yes	rate, habitat potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application			
Little grape	Botrychium simplex											MIIH				No	Yes	Yes	rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application			
																No	Yes	Yes	rate,habitat potentially impacted			
Moosewort	Botrychium tunux													NI		No	No	No	NI-Alpine scree			
Beautiful Bryum	Bryum calobryoides		MIIH									MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Cascade reedgrass	Calamagrostis tweedyi									MIIH						No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Cusick camas	Camassia cusickii									MIIH						No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Seaside sedge	Carex incurviformis		NI		NI											No	No	No	NI-tundra			
Black and purple sedge	Carex luzulina var. atropurpurea		MIIH													No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Tioga Pass sedge	Carex tiogana													MIIH		Yes	No	Yes	MIH-G1/G2, No use over 0.01, habitat potentially impacted			
Aquarius paintbrush	Castilleja aquariensis					MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Christ's Indian paintbrush	Castilleja christii											MIIH				Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no	no	perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Tushar paintbrush	Castilleja parvula var. parvula					NI	NI									Yes	Yes	No	NI-Alpine			
Reveal paintbrush	Castilleja parvula var. revealii					MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Centennial rabbitbrush	Chrysothamnus parryi ssp. montanus												MIIH			Yes	No	Yes	MIH-G1/G2, No use over 0.01, habitat potentially impacted			determination Willia.
Flexible alpine collomia	Collomia debilis var. camporum						1				NI					Yes	No	No	NI-Scree,Talus			
Wasatch fitweed	Corydalis caseana spp. brachycarpa						+			-					MIIH				MIIH- G1/G2, Use over 0.01 application rate, habitat potentially			
Creutzfeldt-flower cryptanth							1								1	Yes	Yes	Yes, but	impacted, Riparian buffers likely to provide protection MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
Yellow-white catseye	Cryptantha ochroleuca					MIIH	1		MIIH			-			-	Yes	No	No	to burn and/or unlikely to have retardant applications.  MIIH-G1/G2, One or more forests over 0.01 application rate,			
1 chow-white catseye	oryptantina outiloicaca					IVIIITI										Yes	Yes	No	Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Bodie Hills draba	Cusickiella quadricostata													MIIH		Yes	No	Yes	MIH-G1/G2, No use over 0.01, habitat potentially impacted			
			<del>                                     </del>	<u> </u>	1	1	1	<u> </u>	1		I	1	1	<u> </u>	1	1	1	<u> </u>	<u> </u>	ļ	l l	

Pinnate spring-parsley					CAR	СНА	DIX	FIS	ним	M-L	PAY	SAL	SAW	TAR	TOI	W-C	G1/G2		Habitat potentially	Initial Determination from National Screen Process	more than 1 unit?	succulent life form?	
	Cymopterus beckii				+		MIIH	-		-			+	1	-	-	1		Posentiany	WII or MIIH G1/G2, Use over 0.01 application rate, habitat	more than 1 unit? Yes - Impacts not		perennial
I made spring pursey	Symoptor as Session									MIIH							Yes	Yes	Yes		expected across entire population in one year. Final determination MIIH.		perennai
Davis' wavewing	Cymopterus davisii												MIIH				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Douglas' biscuitroot	Cymopterus douglassii					MIIH						MIIH	MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Goodrich biscuitroot	Cymopterus goodrichii														NI		Yes	No	No	NI-Scree,Talus			
Cedar Breaks biscuitroot	Cymopterus minimus						MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Brownie ladyslipper	Cypripedium fasciculatum	MIIH														MIIH	No	Yes	Yes, but	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Lesser yellow lady's slipper	Cypripedium parviflorum (Cypripedium calceolus var. parviflorum)															MIIH	No	Yes	Yes, but	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Wyoming tansymustard	Descurainia torulosa			NI													Yes	No	No	NI-Scree, cliffs			
Wasatch shooting star	Dodecatheon utahense															MIIH	Yes	Yes	No, but	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection			
Idaho douglasia	Douglasia idahoensis		MIIH								?MIIH		?MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Abajo peak draba	Draba abajoensis									MIIH							No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Arid draba	Draba arida														NI		Yes	No	No	NI-Alpine, Talus			
Star draba	Draba asterophora var. asterophora														NI		Yes	No	No	NI-Alpine, Talus			
Wasatch Draba	Draba brachystylis														MIIH	MIIH	Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Burke's draba	Draba burkei															NI	Yes	Yes	No	NI-Alpine			
Rockcress draba	Draba globosa (=D. densifolia var. apiculata)	NI		NI		NI							NI			NI	No	Yes	No	NI-Alpine			
Jaeger draba	Draba jaegeri														MIIH		Yes	No	No, but	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection			
Maguire draba	Draba maguirei															MIIH	Yes	Yes	No, but	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection			
Serpentine draba	Draba oreibata var. serpentina								?NI						NI		Yes	No	No	NI-cliffs and talus			
Charleston draba	Draba paucifructa														MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Pennell draba	Draba pennellii								MIIH								Yes	No	No	MIIH-G1/G2, No use over $0.01$ , Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Mt. Belknap draba	Draba ramulosa							NI									Yes	No	No	NI-talus above timberline			
Santaquin draba	Draba santaquinensis															NI	Yes	Yes	No	NI-Cliffs and outcrops			
Creeping draba	Draba sobolifera						NI	NI									Yes	Yes	No	NI-Alpine tundra and talus			
Stanley's whitlow-grass	Draba trichocarpa					MIIH							MIIH				Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Nevada willowherb	Epilobium nevadense							MIIH							MIIH		No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Spring Mountain goldenweed	Ericameria compacta (=Haplopappus compactus)														MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Pine Valley goldenweed	Ericameria crispa (=Haplopappus crispus)						MIIH										Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Narrow-leaf goldenweed	Ericameria discoidea var. linearis (=Haplopappus macronema var.linearis)			MIIH													No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Abajo daisy	Erigeron abajoensis									NI							Yes	No	No	NI-Alpine			
Carrington daisy	Erigeron carringtonae									MIIH							Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Snake Mountain erigeron	Erigeron cavernensis								NI								Yes	No	No	NI-cliffs			
Cronquist daisy	Erigeron cronquistii															NI	Yes	Yes	No	NI-cliffs and talus			

Common name	Scientific Name	ASH	BOI	В-Т	CAR	СНА	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	ТОІ	W-C	G1/G2	Use over 0.01	Habitat potentially	Initial Determination from National Screen Process	more than 1 unit? life form?	
Garrett's fleabane	Erigeron garrettii															NI	Yes	Yes	No	NI-cliffs		
Kachina daisy	Erigeron kachinensis			1		1				MIIH	1						Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Woolly daisy	Erigeron lanatus			NI													No	No	No	NI-Alpine		
Maguire daisy	Erigeron maguirei			1		1		MIIH									No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat		
LaSal daisy	Erigeron mancus									NI							Yes	No	No	unlikely to burn and/or unlikely to have retardant applications.  NI-Alpine		
Untermann daisy	Erigeron untermannii	MIIH		+	1	+				111	-						Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Widtsoe buckwheat	Eriogonum aretioides			+			MIIH				<del> </del>						165	140	165	MIIH-G1/G2, One or more forests over 0.01 application rate,		
																	Yes	Yes	No	Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Elsinore buckwheat	Eriogonum batemanii var. ostlundii							MIIH									No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Desert buckwheat	Eriogonum brevicaule var. desertorum												MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Welsh buckwheat	Eriogonum capistratum var. welshii					MIIH											Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Sunflower Flat buckwheat	Eriogonum douglasii var. elkoense								MIIH	1	1						Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Toiyabe buckwheat	Eriogonum esmeraldense var.														MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Clokey buckwheat	toiyabense Eriogonum heermannii var. clokeyi										1				MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Lewis's buckwheat	Eriogonum lewisii			+					MIIH		<del> </del>									MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat		
																	No	No	No	unlikely to burn and/or unlikely to have retardant applications.		
Logan buckwheat	Eriogonum loganum (=E. brevicaule var. loganum)															MIIH	Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no no	perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Guardian buckwheat	Eriogonum meledonum					MIIH							MIIH				Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Altered andesite buckwheat	Eriogonum robustum														MIIH		Yes	No	No	MIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Clokey greasebush	Glossopetalon clokeyi														NI		Yes	No	No	NI-cliffs		
Smooth dwarf greasebrush	Glossopetalon pungens var. glabra (=G.pungens)														NI		Yes	No	No	NI-cliffs		
Puzzling halimolobos	Halimolobos perplexa var. perplexa										MIIH						No	Yes	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Canyon sweetvetch	Hedysarum occidentale var. canone									MIIH							Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Jones goldenaster	Heterotheca jonesii						MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Sierra Valley ivesia	Ivesia aperta var. aperta														MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Dog Valley ivesia	Ivesia aperta var. canina														MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Charleston ivesia	Ivesia cryptocaulis														NI		Yes	No	No	NI-Alpine		
Jaeger ivesia	Ivesia jaegeri			1		1					1				NI		Yes	No	No	NI-cliffs,boulders, outcrops		
Plumas ivesia	Ivesia sericoleuca														?MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, but No known occurrences on FS		
Utah ivesia	Ivesia utahensis			1		1										NI	Yes	Yes	No	NI-Alpine		
Wasatch jamesia	Jamesia americana var. macrocalyx							-			1		-			NI	Yes	Yes	No	NI- rock scree in alpine		
Zion jamesia	Jamesia americana var. zionis				1		NI									INI	Yes	Yes	No	NI-cliffs and slickrock slopes		
Basin jamesia	Jamesia tetrapetala			1		1			NI								Yes	No	No	NI-cliffs		
Grimes lathyrus	Lathyrus grimesii				1				NI								Yes	No	No	NI- scree		
Wasatch pepperwort	Lepidium montanum var. alpinum															MIIH	Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no no	perennial, biennial - able to withstand nitrates in soil until they diminish in a couple years. However, per Region only 8 occurrences at high elevation in "damp" rocky areas therefore recommend avoidance area around known occurrences. Final determination MIIH.

Common name	Scientific Name	ASH	BOI	В-Т	CAR	СНА	DIX	FIS	ним	M-L	PAY	SAL	SAW	TAR	TOI	W-C	G1/G2	Use over	Habitat potentially	Initial Determination from National Screen Process	more than 1 unit?	succulent	
Neeses' peppergrass	Lepedium montanum var. neeseae						MIIH										Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have	more than 1 unit:	ine torm:	
Hazel's prickly phlox	Leptodactylon pungens ssp. hazeliae										MIIH						No	No	No	retardant applications.  MIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Garrett bladderpod	Lesquerella garrettii															NI	Yes	Yes	No	NI-alpine talus and crevices			
Hitchcock bladderpod	Lesquerella hitchcockii var. hitchcockii														MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Payson bladderpod	Lesquerella paysonii			MIIH	MIIH									MIIH			No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Maguire lewisia	Lewisia maguirei								MIIH								Yes	No	No	MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Sacajawea's bitterroot	Lewisia sacajaweana		WII => MIIH			MIIH					MIIH	MIIH	MIIH				Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	Yes - Impacts not expected across entire population in one year. Final determination MIIH.	no	perennial
Canyonlands lomatium	Lomatium latilobum									MIIH							Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Three-ranked hump-moss	Meesia triquetra														MIIH		No	No	Yes, but	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection			
Goodrich stickleaf	Mentzelia goodrichii	MIIH															Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Bank monkeyflower	Mimulus clivicola										MIIH						No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Fish Lake naiad	Najas caespitosa							MIIH									No	No	No	NI-aquatic			
Idaho pennycress	Noccaea idahoensis var. aileeniae (=Thlaspi aileeniae)					MIIH							MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Shevock rockmoss	Orthotrichum shevockii														MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Spjut's brittle-moss	Orthotrichum spjutii														MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Challis crazyweed	Oxytropis besseyi var. salmonensis					MIIH											No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Beaver Mountain groundsel	Packera (=Senecio) castoreus							NI									Yes	No	No	NI- Alpine above timberline			
Podunk groundsel	Packera (=Senecio) malmstenii						MIIH										Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Arctic poppy	Papaver radicatum var. pygmaeum	NI														NI	Yes	Yes	No	NI- Alpine talus and scree			
Naked-stemmed parrya	Parrya nudicaulis		1	NI													Yes	No	No	NI- Alpine talus			
Paria breadroot	Pediomelum pariense						MIIH										Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
Stemless beardtongue	Penstemon acaulis var. acaulis	MIIH															No	No	Yes	retardant applications.  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Dune penstemon	Penstemon arenarius														?MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, No			
Red Canyon beardtongue	Penstemon bracteatus						MIIH										No	Yes	Yes	known occurrences on FS  MIIH- Not G1/G2, One or more forests over 0.01 application			
Cache beardtongue	Penstemon compactus				MIIH											MIIH	Yes	Yes	No	rate, habitat potentially impacted  MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have			
Elegant penstemon	Penstemon concinnus		-	_					?MIIH											retardant applications.  MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat			
Idaho penstemon	Penstemon idahoensis												MIIH				No	No	No	unlikely to burn and/or unlikely to have retardant applications. No MIIH-G1/G2, One or more forests over 0.01 application rate,			
																	Yes	Yes	No	Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Charleston beardtongue	Penstemon leiophyllus var. keckii														NI		Yes	No	No	NI- Bare rock/talus/scree			
Lemhi penstemon	Penstemon lemhiensis											MIIH					No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Mt. Moriah penstemon	Penstemon moriahensis								MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Little penstemon	Penstemon parvus						MIIH	MIIH									Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	Yes - Impacts not expected across entire population in one year. Final determination MIIH.	no	perennial
Pinyon penstemon	Penstemon pinorum						MIIH										Yes	Yes	Yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Bashful penstemon	Penstemon pudicus								MIIH								Yes	No	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			

Common name	Scientific Name	ASH	BOI B-T	CAR	СНА	DIX	FIS	HUM	M-L	PAY	SAL	SAW	TAR	ТОІ	W-C			Habitat			succulent	
Rhizome beardtongue	Penstemon rhizomatosus							NI								Yes	No	No	/ Initial Determination from National Screen Process  NI- Talus, scree, outcrops	more than 1 unit?	life form?	
Wassuk beardtongue	Penstemon rubicundus													MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Jaeger beardtongue	Penstemon thompsoniae ssp. jaegeri				-	1								MIIH			No		MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Ward beardtongue	Penstemon wardii						MIIH						-			Yes		Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Inconspicuous phacelia	Phacelia inconspicua							?MIIH					-			Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, but			
Small-flower phacelia	Phacelia minutissima		MIIH					MIIH				?MIIH				Yes	No	Yes	No known occurrences on FS  MIIH- Not G1/G2, One or more forests over 0.01 application			
-													ļ	MIIH		No	Yes	Yes	rate, habitat potentially impacted			
Mono phacelia	Phacelia monoensis													MIII		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Salmon twin bladderpod	Physaria didymocarpa var. lyrata										MIIH		MIIH			Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Creeping twinpod	Physaria integrifolia v. monticola		NI													No	No	No	NI- cliffs and barrens			
Whitebark Pine	Pinus albicaulis		* ×		×			×		×	×	×	×	×					Addressed in BA			
Altered andesite popcorn flower	Plagiobothrys glomeratus													MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Marsh's bluegrass	Poa abbreviata ssp. marshii				NI			NI			NI	NI		NI		Yes	Yes	No	NI- alpine scree and talus			
White Mountain skypilot	Polemonium chartaceum					1								MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		<del></del>	
Williams combleaf	Polyctenium williamsii					1								MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
Angell cinquefoil	Potentilla angelliae					MIIH							-						to burn and/or unlikely to have retardant applications.  MIIH-G1/G2, One or more forests over 0.01 application rate,			
																Yes	Yes	No	Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Cottam cinquefoil	Potentilla cottamii											MIIH			NI	Yes	Yes	No	NI- Alpine UWC; MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or			
Sagebrush cinquefoil	Potentilla johnstonii						-	MIIH					-						unlikely to have retardant applications.  MIH- G1/G2, No use over 0.01, habitat potentially impacted			
Alkali primrose	Primula alcalina												MIIH			Yes	No	Yes	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely			
Ruby Mountain primrose	Primula capillaris							NI					<u> </u>			Yes	No	No	to burn and/or unlikely to have retardant applications.  NI- Alpine tundra			
								IN.					ļ			Yes	No	No	•			
Nevada primrose	Primula cusickiana var. nevadensis (=P. nevadensis)							NI								Yes	No	No	NI- Alpine			
Greenland primrose	Primula egaliksensis		MIIH													No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Bugleg goldenweed	Pyrrocoma (=Haplopappus) insecticruris		MIIH									MIIH				No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Radiate goldenweed	Pyrrocoma radiata (=Haplopappus radiatus)									MIIH			1			No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Bartons' blackberry	Rubus bartonianus									MIIH						Yes	No	Yes, but	MIIH- G1/G2, No use over 0.01, habitat potentially impacted;			
Arizona willow	Salix arizonica					MIIH	MIIH						-						MIH-G1/G2, One or more forests over 0.01 application rate,			
									MIIH							Yes	Yes	No, but	Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection			
Weber's saussurea	Saussurea weberi		NI													No	No	No	NI- alpine talus			
Tobias' saxifrage	Saxifraga bryophora var. tobiasiae									MIIH						No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Tolmie's saxifrage	Saxifraga tolmiei var. ledifolia									NI						No	No	No	NI- alpine			
Musinea groundsel	Senecio musiniensis					1			NI							Yes	No	No	NI- alpine talus			
Mono ragwort	Senecio pattersonensis					1								NI		Yes	No	No	NI- alpine talus			
Clokey silene	Silene clokeyi				+	1	1							NI		Yes	No	No	NI- alpine talus			
Nachlinger silene	Silene nachlingerae		+ + +					MIIH							+ -	Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Maguire campion	Silene petersonii					MIIH	?MIIH		MIII								-		MIIH- Not G1/G2, One or more forests over 0.01 application			
Railroad Valley globemallow	Sphaeralcea caespitosa var. williamsiae					1	1	MIIH	MIIH							No	Yes	Yes	rate, habitat potentially impacted  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Rock-tansy	Sphaeromeria capitata					MIIH										No	No	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application			
	,													MIIH		No	Yes	Yes	mili-Not Gride, one of more forests over 0.01 application rate, habitat potentially impacted  MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Low sphaeromeria	Sphaeromeria compacta															Yes	No	Yes				
Masonic Mountain jewelflow	Streptanthus oliganthus													MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			

Common name	Scientific Name	ASH	BOI	B-T	CAR	СНА	DIX	FIS	ним	M-L	PAY	SAL	SAW	TAR	TOI	W-C	G1/G2	Use over	Habitat		succuler	+
																		0.01	potentially	Initial Determination from National Screen Process more than 1	· ·	—
Soft aster	Symphyotrichum molle (=Aster mollis)			MIIH									1				No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		_
Charleston kittentails	Synthyris ranunculina														MIIH		Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Caespitose greenthread	Thelesperma caespitosum	MIIH															Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Uinta green thread	Thelesperma pubescens															MIIH	Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Bicknell thelesperma	Thelesperma subnudum var. alpinum						MIIH	MIIH									Yes	Yes		WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH  Yes - Impacts not expected across er population in one Final determination.	ear.	perennial
Wavy-leaf thelypody	Thelypodium repandum					MIIH											No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Alpine goldenweed	Tonestus (=Haplopappus) alpinus														MIIH		Yes	No	No	MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Barneby woody aster	Tonestus (=Aster) kingii var. barnebyana							MIIH									Yes	No	No	MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Sevier townsendia	Townsendia jonesii var. lutea							MIIH									No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Charleston ground daisy	Townsendia jonesii var. tumulosa														MIIH		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Short-slyle tofieldia	Triantha occidentalis ssp. brevistyla										MIIH						No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Currant Summit clover	Trifolium andinum var. podocephalum								MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Leiberg's clover	Trifolium leibergii								MIIH								No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Rollins clover	Trifolium macilentum var. rollinsii														MIIH		Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Charleston violet	Viola charlestonensis														MIIH		No	No	No	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Smith violet	Viola franksmithii															NI	Yes	Yes	No	NI-Cliffs		
Lithion violet	Viola lithion								MIIH								Yes	No	No	MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Idaho range lichen	Xanthoparmelia idahoensis											MIIH					Yes	No	No	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		

Version: 6/28/2023

Region 4 Plants

ronia alpina ronia nana ssp. covillei ronia villosa var. aurita ranthoscyphus parishii var. ramsii ranthoscyphus parishii var. ramsii	Common Name  Santa Lucia fir  alpine sand verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery puncturebract	Angeles	Cleveland	Eldorado	Inyo Klamati	n Lassen	LTBMU	Los Padres MIIH	Mendocino	Modoc	Plumas	San Bernardino	Sequoia National Monument	Shasta- Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	<u>G1/G2</u>	<u>Use</u> <u>over</u> <u>0.01</u>	Habitat potentially impacted	Initial Determination from National Screen Process Will or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	Species occures on more than 1 unit?	tree, shrub, succulent life form?	perennial - able to withstand nitrates in soil until they diminish in a couple years. Final
ronia alpina ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	Santa Lucia fir  alpine sand verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery	Angeles		Eldorado	Inyo Klamath	n Lassen	LTBMU	Padres MIIH	Mendocino	Modoc	Plumas	1	1	1	Sierra	Six Rivers	Stanislaus	Tahoe	<u>G1/G2</u>			WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
ronia alpina ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	Santa Lucia fir  alpine sand verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery							MIIH						,								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
ronia alpina ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	alpine sand verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH					MIIH														habitat potentially impacted, Exclusion mapping			
ronia alpina ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH					MIIH						1								1 1 6 1 0000			lin a couple years. Final
ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH											1					Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	yes	determination MIIH.
ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH											<u> </u>					163	163	163	WII or MIIH G1/G2, Use over 0.01 application rate,	110	yes	determination willi.
ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	verbena Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH								1	1										habitat potentially impacted, Exclusion mapping			
ronia nana ssp. covillei ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	Coville's dwarf abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH																V	V		recommended on forests over 0.01 to reduce			Only occurs on Inyo National
ronia villosa var. aurita anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	abronia chaparral sand verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH							+	+			-					Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	Forest.
anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	verbena Abrams' flowery puncturebract Cienega Seca flowery		MIIH									MIIH							No	Yes		application rate, habitat potentially impacted			
anthoscyphus parishii var. ramsii anthoscyphus parishii var. negensis	Abrams' flowery puncturebract Cienega Seca flowery		MIIH			1				İ												MIIH- Not G1/G2, One or more forests over 0.01			
ramsii anthoscyphus parishii var. negensis	puncturebract Cienega Seca flowery					-		-	1	-		MIIH							No	Yes		application rate, habitat potentially impacted			
anthoscyphus parishii var. negensis	Cienega Seca flowery			1 1				МІІН											No	Yes		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
negensis																			110	103	103	application rate, habitat potentially impacted			
	puncturebract																					MIIH- Not G1/G2, One or more forests over 0.01			
rostis hooveri		I I								-		MIIH							No	Yes	Yes	application rate, habitat potentially impacted			C4
rostis hooveri																						WII or MIIH G1/G2, Use over 0.01 application rate,			64 records in 2 counties, perennia - able to withstand nitrates in soil
rostis hooveri																						habitat potentially impacted, Exclusion mapping			until they diminish in a couple
rostis hooveri	Hoover's																					recommended on forests over 0.01 to reduce			years. Final determination MIIH.
	bentgrass					-		MIIH		-									Yes	Yes	Yes	determination to MIIH	no	no	
										1												WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
																						recommended on forests over 0.01 to reduce			in a couple years. Final
um hickmanii	Hickman's onion							MIIH											Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																							Yes - Impacts not		
																							·		
um howellii var. clokeyi	Mount Pinos onion	MIIH						MIIH											Yes	Yes	Yes	determination to MIIH		no	
																							Yes - Impacts not		
um jepsonii	Jepson's onion										MIIH						MIIH		Yes	Yes	Yes	determination to MIIH	The determination with	no	
																									perennial - able to withstand
																									nitrates in soil until they diminish
um marvinii	Yucaipa onion											MIIH							Yes	Yes	Yes		no	no	in a couple years. Final determination MIIH.
•	,																						Yes - Impacts not		determination mini
																							expected across entire		
	throobracted																								
um tribracteatum	onion			MIIH													MIIH		Yes	Yes	Yes		Final determination Wilh.	no	
																					NI- Talus ,				
um yosemitense	Yosemite onion																NI		No	Yes	outcrops	NI- Talus , outcrops			
isocarnus scahridus	· ·								NI					NII		NII			No	Voc	NII seroo	NII seroo			
socarpus scabridus							+		141					141		141			INU	163					
tennaria marginata	everlasting											MIIH							No	Yes					
	dimorphic																								
urrriinum subcordatum						-	+	1	MIIH	+	+			+					No	Yes			+ -		
abis rigidissima var. demota	rock cress						MIIH	1		1								MIIH	No	Yes					
-											1			1											perennial - able to withstand
										1				1								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
etostanhylos cruzensis	,							MILL		1				1					Voc	Voc	Voc		P.O.	VCC	in a couple years. Final
noonapriyioo Giuzeriolo	manzaniia			<del>   </del>		+	+	IVIIII		+	+			+					162	162			110	yes	determination MIIH. perennial - able to withstand
										1												habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
	Little Sur																					recommended on forests over 0.01 to reduce			in a couple years. Final
				$\vdash$		-	1	MIIH		1	+			-		$\vdash$			Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
rtostapnylos glandulosa ssp. brielensis		MIIH										MIIH							No	Yes					1
	Hoover's						1	1	1	1	1			<b>†</b>						- 55					
ctostaphylos hooveri	manzanita							MIIH		1									No	Yes		application rate, habitat potentially impacted			
				1													7	Т	T			WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
	Santa Lucio									1															nitrates in soil until they diminish
ctostaphylos luciana	manzanita							MIIH		1									Yes	Yes	Yes		no	ves	in a couple years. Final determination MIIH.
							1			1	1			<b>†</b>									Yes - Impacts not	1	perennial - able to withstand
																						WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		nitrates in soil until they diminish
	Niggon							1	1	1				1								habitat potentially impacted, Exclusion mapping	population in one year.		in a couple years. Final
etostanhylos nissenana				МІН													МІІН		Voc	Voc	Vec		Final determination MIIH.	VOC	determination MIIH.
iur iur iscontinab.	m howellii var. clokeyi  m jepsonii  m marvinii  m tribracteatum  m yosemitense cocarpus scabridus ennaria marginata errhinum subcordatum ois rigidissima var. demota oostaphylos cruzensis oostaphylos glandulosa ssp. rielensis oostaphylos hooveri	m howellii var. clokeyi  m jepsonii  Jepson's onion  m marvinii  Yucaipa onion  threebracted onion  m yosemitense  Yosemite onion  scabrid alpine tarplant  White-margined everlasting  dimorphic snapdragon  Galena Creek rock cress  Arroyo de la Cruz manzanita  ostaphylos cruzensis  Little Sur manzanita  ostaphylos glandulosa ssp. sostaphylos glandulosa ssp. inelensis  ostaphylos hooveri  San Gabriel manzanita  Hoover's manzanita  ostaphylos luciana  Nissenan	m howellii var. clokeyi  Mount Pinos onion  MIIH  Jepson's onion  m marvinii  Yucaipa onion  threebracted onion  m yosemitense  Yosemite onion  scabrid alpine tarplant  White-margined everlasting  dimorphic snapdragon  Galena Creek rock cress  Arroyo de la Cruz manzanita  ostaphylos cruzensis  Arroyo de la Cruz manzanita  bostaphylos glandulosa ssp. ostaphylos glandulosa ssp. ostaphylos glandulosa ssp. ostaphylos hooveri  San Gabriel manzanita  hootaphylos hooveri  Santa Lucia manzanita  Nissenan	m howellii var. clokeyi  Mount Pinos onion  MIIH  Jepson's onion  threebracted onion  yosemite onion  scabrid alpine tarplant White-margined everlasting dimorphic snapdragon Galena Creek rock cress  Arroyo de la Cruz manzanita  ostaphylos glandulosa ssp. sostaphylos glandulosa ssp. sostaphylos hooveri  Little Sur manzanita  Sanda Alpie manzanita  MIIH Hoover's manzanita  Santa Lucia manzanita  Santa Lucia manzanita  Nissenan	m howellii var. clokeyi  Mount Pinos onion  MIIH  m jepsonii  Jepson's onion  threebracted onion  m tribracteatum  m yosemitense  Yosemite onion  scabrid alpine tarplant  White-margined everlasting  dimorphic snapdragon  Galena Creek rock cress  ostaphylos cruzensis  Arroyo de la Cruz manzanita  ostaphylos edmundsii ostaphylos glandulosa ssp. rielensis  postaphylos hooveri  scataphylos luciana  Missenan	m howellii var. clokeyi  Mount Pinos onion  MIIH  m jepsonii  Jepson's onion  threebracted onion  MIIH  Yucaipa onion  MIIH  yosemitense  Yosemite onion  scabrid alpine tarplant  White-margined everlasting dimorphic snapdragon slar Galena Creek rock cress  Arroyo de la Cruz manzanita ostaphylos cruzensis  Arroyo de la Cruz manzanita  Little Sur manzanita ostaphylos glandulosa ssp. rielensis ostaphylos hooveri  Sana Gabriel manzanita ostaphylos hooveri  Sana Lucia manzanita  Nissenan	m howellii var. clokeyi  Mount Pinos onion  Milh  m jepsonii  Jepson's onion  m tribracteatum  m tribracteatum  m yosemitense  Yosemite onion scabrid alpine tarplant tarplant dimorphic snapdragon shapdragon shinum subcordatum snapdragon sis rigidissima var. demota  Arroyo de la Cruz manzanita  Arroyo de la Cruz manzanita  Little Sur manzanita sostaphylos glandulosa ssp. sostaphylos glandulosa ssp. sostaphylos glandulosa ssp. sostaphylos hooveri  Santa Lucia manzanita  Nissenan	m howellii var. clokeyi  Mount Pinos onion  Milh  m jepsonii  Jepson's onion  threebracted onion  m tribracteatum  m yosemitense  Yosemite onion scabrid alpine tarplant vocarpus scabridus  White-margined everlasting dimorphic snapr'agon Galena Creek rock cress  Milh  Arroyo de la Cruz manzanita  Arroyo de la Cruz manzanita  Little Sur manzanita  Little Sur manzanita  Little Sur manzanita  Little Sur manzanita  San Gabriel manzanita  Milh Hower's manzanita  Sataphylos glandulosa ssp. rielensis Hoover's manzanita  Sataphylos luciana  Nissenan	m howellii var. clokeyi  Mount Pinos onion  MIIH  m jepsonii  Jepson's onion  m marvinii  Yucalpa onion  MIIH  m tribracteatum  m tribracteatum  m yosemitense  Yosemite onion  scalarid alpine  tarplant  white-margined  everlastiling  dimorphic  snapdragon  Salena Creek  rock cress  Arroyo de la Cruz  manzanita  staphylos cruzensis  Arroyo de la Cruz  manzanita  Little Sur  manzanita  Little Sur  manzanita  Little Sur  manzanita  Salena Creek  staphylos demundsii  manzanita  Little Sur  manzanita  MIIH  MIIH  MISSenan  Nissenan	m howellii var. clokayi Mount Pinos onion MIIH  m jepsonii Jepson's onion  m marvinii Yucaipa onion  threebracted onion  m yosemitense Yosemite onion scabridus tarplant britaria marginata everlasting dimorphic snapdragon snapdragon sis rigidissima var. demota  Arroyo de la Cruz manzanita  Arroyo de la Cruz manzanita  Saflaphylos cruzensis  Little Sur manzanita  Saflaphylos glandulosa ssp. staphylos glandulosa ssp. staphylos luciana  Nissenan  Miih  Mii	m howellii var. clokeyi Mount Pinos onion Milh  m jepsonii Jepson's onion  m marvinii Yucaipa onion  m tribracteatum onion Milh  m yosemitense Vosemite onion Scabrid alpine tarpiant White-margined evertisating dimorphic snapriagon sianginata evertisating dimorphic snapriagon siangidissima var. demota rock cress  Arroyo de la Cruz manzanita  Arroyo de la Cruz manzanita  sataphylos cruzensis manaranita  bis rigidissima var. demota Uitte Sur manzanita  sataphylos glandulosa ssp. manzanita  hower's manzanita  Milh	m howeliti var. clokeyi Mount Pinos onion MiliH  m jepsonii Jepson's onion MiliH  m marvinii Yucalpa onion MiliH  m tribracteatum orion MiliH  m yosemitense Yosemite onion scabrid alpine tephant tephant tephant dimorphic straightightightightightightightightightight	m howelli var. clokeyi Mount Pinos onion MilH  m jepsonii Jepson's onion  m manvinii Yucaipa onion  threebracted onion  m tribracteatum threebracted onion  m yosemitense yosemite onion  scabrid alpine tarplant  tarplant  milH	m howeliii var. clokeyi Mount Pinos onion MillH  m jepsonii Jepson's onion  m manvinii Yucalpa onion  m tribracteatum onion  m tribracteatum onion  m yosemitense yosemite onion ocarpus acabridus tarplant tarplant staplant staplant staplant onion  MillH	m howellii var. clokeyii Mount Pinos onion MilH  m japsonii Jepson's onion MilH  m maninii Yusaipa onion MilH  m tribracteatum onion MilH  m tribracteatum onion MilH  m scamitarise Yosemite onion scabiti alpine Itariti Ita	m howelli var. cickeyi Mount Pinos orion MilH  m japsonii Jepson's orion  m marvinii Yucaipa orion  m tribracteatum  m pasemilanae  Yosemile onion  scaturidad dipine  tarpiant  vocarpus scabridus  tarpiant  vocarpus scabridus  tarpiant  white margined  everifacting  white margined  scaturidad aprine  tarpiant  white margined  vocarpus scabridus  tarpiant  white margined  vocarpus scabridus  tarpiant  ANIIII  NIIIII  ANIIIIIIII  ANIIIIIIII	m howelli var clokeyi Mount Pinos onion Millel Mill	m papaonii Japaonis onion Millel Mill	m howelili sar. clokeyi Mount Pinus orion Milli	m howelli var. cloteryi  Mount Pinos osion  Milit  Jepson's osion  Jepson's Jepson's osion  Milit  Wrecharded  m rativactostum  ontion  Milit  Wrecharded  Milit  Wrecharded  Milit  Wrecharded  Milit  Wrecharded  Milit  Wrecharded  Milit  Wrecharded  Milit  Wrecharded  Milit  Wrecharded  Milit  No  No  No  No  No  No  No  No  No  N	m howelil var. colleys         Mount Pines onton.         Mills         Yes.         Yes.         Yes.           m papsonii         Jepson's onton.         Jepson's onton.         Mills         Mills         Yes.         Yes.           m marvisal         Viscalga onton.         Ves.         Yes.         Yes.         Yes.           m fillionactealum         Onton.         Mills         Yes.         Yes.         Yes.           m fillionactealum         Onton.         Nill.         Nill.	## Processiver closelys*    Mount Pince orion	m country or chear in the control of	Moult Price using  Moult Price u	The register of the second of closely.  When there are will be a second of the second

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															Sequoia							<u>Use</u>	<u>Habitat</u>			tree, shrub,	
category	Scientific Name	Common Name	Angeles	Cleveland	l Eldorado	Inyo	Klamath	Lassen	LTBMU	Los Padres	Mendocino	Modoc	Plumas	San Bernardino	National Monument	Shasta- Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	over 0.01	potentially impacted	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent life form?	
plant - vascular	Arctostaphylos obispoensis	Bishop manzanita								MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Arctostaphylos parryana subsp.																							MIIH- Not G1/G2, One or more forests over 0.01			
vascular	tumescens	Interior manzanita	MIIH						1					MIIH							No GU -	Yes	Yes	application rate, habitat potentially impacted			
plant -		Santa Margarita																			unrankab	.	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Arctostaphylos pilosula	manzanita						1		MIIH											le?	Yes	Yes	application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Arctostaphylos rainbowensis	Rainbow manzanita		MIIH																	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	yes	in a couple years. Final determination MIIH.
plant -		Refugio																						MIIH- Not G1/G2, One or more forests over 0.01		•	
vascular plant -	Arctostaphylos refugioensis	manzanita						1		MIIH											No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Arenaria lanuginosa ssp. saxosa	rock sandwort			<u> </u>		_			<u> </u>				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular	Astragalus anxius	troubled milk- vetch										МІІН									Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	area. Final determination MIIH.
plant -		San Bernardina			1				1	1													103	MIIH- Not G1/G2, One or more forests over 0.01		110	
vascular plant -	Astragalus bernardinus	milk-vetch			-		-	1	1	<u> </u>	-		<u> </u>	MIIH	-	<u> </u>					No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Astragalus bicristatus	crested milkvetch	MIIH											MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Astragalus cimae var. sufflatus	inflated milkvetch																			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vasculai	Astragatus cimac var. sumatus	milatoa milikvotori								1			1								140	163	163	application rate, habitat potentially impacted			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish in a couple years. Map avoidance
plant -																								recommended on forests over 0.01 to reduce			area. Final determination MIIH.
vascular plant -	Astragalus deanei	Deane's milkvetch Jacumba	1	MIIH			_	1	1												Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	
vascular	Astragalus douglasii var. perstrictus	milkvetch		MIIH																	No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			Only occurs on Sequoia National
plant -		Walker Pass																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			Forest.
vascular	Astragalus ertterae	milkvetch						ļ	ļ						MIIH						Yes	Yes	Yes	determination to MIIH	no	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			
plant -	Andrews to be a series to a series Hill	Long Valley																						recommended on forests over 0.01 to reduce			Only occurs on Inyo National
vascular	Astragalus johannis-howellii	milkvetch			1		-														Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no	Forest.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -		Lemmon's																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Astragalus Iemmonii	milkvetch							ļ			MIIH	MIIH							MIIH	Yes	Yes	Yes	determination to MIIH		no	
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular		lens-pod milkvetch											МІІН								Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	area. Final determination MIIH.
																								Mill or Mills C4/C3. Her party C C4	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -	Actrogalus Inntiginasus var antarius	San Antonio	MILL											MILL							V	V.	V	recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Astragalus lentiginosus var. antonius	milkvetti	IVIII		1					<del>                                     </del>				IVIIIH							Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -	Astragalus lentiginosus var.	Kern Plateau																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	kernensis	milkvetch													MIIH						Yes	Yes	Yes	determination to MIIH		no	annual all all all all all all all all all
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
mle :: t		Dir Da - 1/4 "																						habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular	Astragalus lentiginosus var. sierrae	Big Bear Valley milkvetch												MIIH							Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	area. Final determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,			
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			Only occurs on Inyo National
vascular	Astragalus monoensis	Mono milkvetch																			Yes	Yes	Yes	determination to MIIH	no		Forest.
1																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
1.																								habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular	Astragalus oocarpus	Descanso milkvetch		MIIH																	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	area. Final determination MIIH.
	1	1	1																								

	T	1	1	1	1		<u> </u>	<u> </u>	I	1	I	1	1		1	1	1				1			1			
															Sequoia							<u>Use</u>	Habitat			tree, shrub	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Los Padres	Mendocino	Modoc	Plumas	San Bernardino	National Monument	Shasta- Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	over 0.01	potentially impacted	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent lif	e <u> </u>
plant -			Ĭ			,										<u> </u>								MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Astragalus pachypus var. jaegeri	Jaeger's milkvetch Modoc Pateau	1	MIIH	+									MIIH		<u> </u>					No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Astragalus pulsiferae var. coronensis											MIIH	MIIH							MIIH	No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant -	Astragalus pulsiferae var. pulsiferae	Pulsifer's milkvetch											MIIH								Voc	Voc	Voc	recommended on forests over 0.01 to reduce determination to MIIH	no		area. Final determination MIIH.
vascular plant -	Astragalus pulsiferae var. pulsiferae	Suksdorf's											IVIIII								Yes	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01	no	no	
vascular	Astragalus pulsiferae var. suksdorfii	milkvetch		1	1			MIIH								ļ					No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Astragalus ravenii	Raven's milkvetch																			Yes	Yes	NI-Alpine	NI-Alpine			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			
plant -		Little Kern River																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			Only occurs on Sequoia National
vascular	Astragalus shevockii	milkvetch													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	Forest.
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant -		Tidestrom's																						application rate, Plant occurs in a habitat unlikely to			
vascular	Astragalus tidestromii	milkvetch												MIIH							No	Yes	No	burn and/or unlikely to have retardant applications.	Was Investored		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Astragalus webberi	Webber's milkvetch											MIIH							MIIH	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -		Parish's																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Atriplex parishii	brittlescale		MIIH										MIIH							Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,		no	perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -	Secretaria atamana ara atatanta	San Simeon								WII =>												,	.,	recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Baccharis plummerae ssp. glabrata	baccharis		+						MIIH						<u> </u>					Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	yes	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -		big-scale																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Balsamorhiza macrolepis	balsamroot			MIIH						MIIH		MIIH						MIIH		Yes	Yes	Yes	determination to MIIH	rillal determination willi.	no	
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant -		Oregon																						application rate, Plant occurs in a habitat unlikely to			
vascular	Bensoniella oregona	bensoniella		-	-													MIIH			No	Yes	No	burn and/or unlikely to have retardant applications.	Was decreased and		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Beochera evadens	Hidden Rockcress													MIIH				MIIH		Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
																											perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish in a couple years. Fire dependent
plant -																								recommended on forests over 0.01 to reduce			species. Final determination MIIH.
vascular plant -	Bloomeria humilis	dwarf goldenstar Bodie Hills	-	1	1				-	MIIH											Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	
vascular	Boechera bodiensis	rockcress		<u>L</u>	<u> </u>										<u> </u>			l			No	Yes	Yes	application rate, habitat potentially impacted			
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -	Sandan and	Constance's																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Boechera constancei	rockcress		+	+			MIIH		-			MIIH		-	+					Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,		no	perennial - able to withstand
		1																						habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Boechera johnstonii	Johnston's rockcress												MIIH							Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -	-	Koehler's		†	+																163	163	162	MIIH- Not G1/G2, One or more forests over 0.01	110	110	determination WIIIA.
vascular	Boechera koehleri	rockcress			-													MIIH			No	Yes	Yes	application rate, habitat potentially impacted			noronnial abla to with the tand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -	Danahara nasi-teli	Dorights												F 4112 1								,		recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Boechera parishii	Parish's rockcress		+	1								-	MIIH	-						Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,	no	no	determination MIIH. perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Boechera peirsonii	Peirson's rockcress												MIIH							Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	200	200	in a couple years. Final determination MIIH.
ivasculdi	Doodriora politionili	100101033	1	1	1			i																	110	110	ueteriiiiidtion iviiifi.

plant - vascular Boechera pinzliae Pinzl's rockcress  Yes No unlikely retardat habitat potentially imp. recommended on fores	Species occures on months from National Screen Process than 1 unit?		
category Scientific Name Common Name Angeles Cleveland Eldorado Inyo Klamath Lassen LTBMU Padres Mendocino Modoc Plumas Bernardino Monument Trinity Sierra Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Boechera pinzliae Pinzl's rockcress Pinzl's rockcress Pinzl's Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Shevock's Shevock's Shevock's Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Shevock's Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Shevock's Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Shevock's Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Shevock's Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - vascular Six Rivers Stanislaus Tahoe G1/G2 Q.01 impacted Initial Determination of MIIH-G1/G2, One or material plant - va	n from National Screen Process than 1 unit?		
plant - vascular Boechera pinzliae Pinzl's rockcress Pinzl's rockcress Pinzl's rockcress Will or Mill G1/G2, Use habitat potentially import recommended on forest		form?	
plant - vascular Boechera pinzliae Pinzl's rockcress Pinzl's rockcress Pinzl's rockcress Will or Mill G1/G2, Use habitat potentially import recommended on forest	more forests over 0.01 application		
plant - Shevock's Will or MilH G1/G2, Ust habitat potentially imprecommended on forest recommended on forest recommended on forest recommendations.	a habitat unlikely to burn and/or		
habitat potentially imprecommended on forest recommended on forest recommended on forest recommendations.			perennial - able to withstand
	npacted, Exclusion mapping	A	nitrates in soil until they diminish
vascular Boechera shevockii rockcress Yes Yes determination to MIIIH	rests over 0.01 to reduce	/	in a couple years. Final
	ne or more forests over 0.01	no	determination MIIH.
	itat potentially impacted		
	ne or more forests over 0.01 itat potentially impacted		
plant - MIIH- Not G1/G2, One	ne or more forests over 0.01		
	itat potentially impacted ne or more forests over 0.01		
	itat potentially impacted		
	ne or more forests over 0.01		
	itat potentially impacted ne or more forests over 0.01		
	itat potentially impacted		
	ne or more forests over 0.01 itat potentially impacted		
plant - common   MilH- Not G1/G2, One	ne or more forests over 0.01		
	itat potentially impacted ne or more forests over 0.01		_
	itat potentially impacted		
	ne or more forests over 0.01 itat potentially impacted		
plant - Paradox Milh- Not G1/G2, One	ne or more forests over 0.01	+	
	itat potentially impacted ne or more forests over 0.01		
	itat potentially impacted		
	ne or more forests over 0.01 itat potentially impacted		
	ne or more forests over 0.01	+	
	itat potentially impacted		
plant - vascular Botrychium tunux moosewort NI No Yes NI-Alpine	NI-Alpine		
plant - vascular Botrychium yaaxudakeit Giant moonwort NI No Yes NI-Alpine	NII Alaina		
To to the little of the little	NI-Alpine Use over 0.01 application rate,		
	npacted, Exclusion mapping	A = 0	Only occurs on Sequoia National
plant -   recommended on fores   vascular   Brodiaea insignis   Kaweah brodiea   Yes Yes   Yes   determination to MIIH   Yes Yes   Yes	rests over 0.01 to reduce	no	Forest.
NUL - MULI CA (C2 1)	les aves 0.01 analisation rate		perennial - able to withstand
	Jse over 0.01 application rate, npacted, Exclusion mapping	A	nitrates in soil until they diminish in a couple years. Map avoidance
plant - recommended on forest	rests over 0.01 to reduce	A	area. Final determination MIIH.
vascular Brodiaea orcuttii Orcutt's brodiaea MIIH Yes Yes Yes determination to MIIH	IH no	no	perennial - able to withstand
	Use over 0.01 application rate,	A	nitrates in soil until they diminish
	npacted, Exclusion mapping rests over 0.01 to reduce	A = 0	in a couple years. Map avoidance area. Final determination MIIH.
vascular Brodiaea rosea Brodiaea Yes Yes Yes determination to MIIH		no	area. Tinar accermination Willin.
Will or Milh G1/G2 Us	Use over 0.01 application rate,	A = 0	perennial - able to withstand nitrates in soil until they diminish
habitat potentially impa	npacted, Exclusion mapping	A = 0	in a couple years. Map avoidance
plant - Santa Rosa basalt recommended on forest vascular Brodiaea santarosae brodiaea MIIH recommended on forest vascular brodiaea Santarosae brodiaea MIIH see the santarosae brodiaea MIIH see the santarosae brodiaea Santarosae brodiaea MIIH see the santarosae brodiaea Santarosae brodi	rests over 0.01 to reduce	no	area. Final determination MIIH.
Vestural Districts State of the	110	110	
	ne or more forests over 0.01 itat potentially impacted		
Vastulai Didulla bolanden Bolanden Struchia Willin	itat potentiany impacteu	+	
	ne or more forests over 0.01 itat potentially impacted		
vascular Buxbaumia viridis   Stick   MIIH MIIH   MIIH MIIH   MIIH MIIH   No Yes Yes application rate, habita	near potentially impacted	+	+
	ne or more forests over 0.01 itat potentially impacted		
plant - Clubhair mariposa MilH- Not G1/G2, One	ne or more forests over 0.01	+	+
	itat potentially impacted ne or more forests over 0.01		
	itat potentially impacted		<u>                                       </u>
	ne or more forests over 0.01		
Insertion   Colorbortus clayatus var gracilis   IIIv   MIIII	ne or more forests over 0.01	+	+
vascular Calochortus clavatus var. gracilis lily MIIH MIIH MIIH MIIH MIIH Not G1/G2, One vascular Calochortus dunnii lily No Yes Yes application rate, habita plant - Dunn's Mariposa MIIH- Not G1/G2, One vascular Calochortus dunnii No Yes Yes application rate, habita		1	1

			1	T	T	1	1		1	1	1	1	1			1											
										Los				San	Sequoia National	Shasta-						<u>Use</u> over	<u>Habitat</u> potentially		Species occures on more	tree, shrub, succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monument	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	0.01		Initial Determination from National Screen Process	than 1 unit?	form?	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -		Inyo County star-																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Calochortus excavatus	tulip																			Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -		Weed's mariposa																			l l			MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Calochortus fimbriatus	Greene's	MIIH				-	-	1	MIIH		<u> </u>									No	Yes	Yes	application rate, habitat potentially impacted			
vascular	Calochortus greenei	mariposa lily					МІІН									МІІН					No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		long-haired star																			- 10			MIIH- Not G1/G2, One or more forests over 0.01			
vascular	longebarbatus	tulip						MIIH				MIIH				MIIH					No	Yes	Yes	application rate, habitat potentially impacted			
																											perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
plant -		San Luis																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			in a couple years. Map avoidance area. Final determination MIIH.
vascular	Calochortus obispoensis	mariposa lily								MIIH											Yes	Yes	Yes	determination to MIIH	no	no	area. I mai determination wiin.
plant -	,	Munz's mariposa																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Calochortus palmeri var. munzii	lily												MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Calochortus palmeri var. palmeri	Palmer's mariposa lily	MIIH							MIIH				MIIH	MIIH						l Na	Vaa	V	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Calochortus pairneri var. pairneri	manposa iliy	IVIIII						+	IVIIII				IVIIII	IVIIII						No	Yes	Yes	application rate, habitat potentially impacted			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
									1	1			1		1									habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant -		Siskiyou mariposa	a																					recommended on forests over 0.01 to reduce			area. Final determination MIIH.
vascular	Calochortus persistens	lily					MIIH														Yes	Yes	Yes	determination to MIIH	no	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant -		San Luis Obispo																						recommended on forests over 0.01 to reduce			area. Final determination MIIH.
vascular	Calochortus simulans	mariposa lily								MIIH											Yes	Yes	Yes	determination to MIIH	no	no	
plant -		alkali mariposa	MIIH											MIIH	MIIH							.,	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Calochortus striatus	foothill mariposa	IVIIIH		-		_	-	-	-				MIIH	MIIH						No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Calochortus weedii var. intermedius	lily		MIIH																	No	Yes	Yes	application rate, habitat potentially impacted			
plant -		Shirley Meadows																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Calochortus westonii	star tulip													MIIH						No	Yes	Yes	application rate, habitat potentially impacted			
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire		
plant -		small-flowered																						recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Calycadenia micrantha	calycadenia								MIIH	MIIH							MIIH			Yes	Yes	Yes	determination to MIIH	i illai determination willi.	no	
		Butte County																									
plant -	Calvandania annonitifalia	western											міін									.,	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Calycadenia oppositifolia	rosinweed dwarf western			-		_	-	-	-			MIIH								No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Calycadenia villosa	rosinweed								MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
								1				1									"				Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular		Pygmy Pussypaws												MIIH	МІІН						Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -		Mono Hot Springs	<del>                                     </del>		<del> </del>			1		1				1411111	IVIIII						163	163	ies	MIIH- Not G1/G2, One or more forests over 0.01		110	Only occurs on Sierra National
vascular		evening primrose	<u>L</u>	<u>L</u>			L	<u>L</u>	<u></u>	<u>L</u>	L		<u>L</u>	<u>L</u>							No	Yes	Yes	application rate, habitat potentially impacted			Forest
																								WII or MIIH G1/G2, Use over 0.01 application rate,			
		11																						habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant - vascular	Camissoniopsis hardhamiae	Hardham's evening-primrose								МІІН											Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	multiple counties. Final determination MIIH.
vastuidi	Carriosomopsis naturialillae	570mig-pillillose	+	+	+		_	+	+	WHAT	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<b>†</b>						163	162	163	WII or MIIH G1/G2, Use over 0.01 application rate,	110	110	perennial - able to withstand
									1	1			1		1									habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Castle Crags							1	1			1		1									recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Campanula shetleri	harebell	-													MIIH					Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -									1	1			1		1									recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Campanula wilkinsiana Greene	Wilkins' bellflower	1				MIIH		1							MIIH					Yes	Yes	Yes	determination to MIIH		no	
plant -		white					I											T						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Canbya candida	pygmypoppy	MIIH	-	-		_	-	-	-				MIIH	MIIH						No	Yes	Yes	application rate, habitat potentially impacted	1		
plant - vascular	Carex obispoensis	San Luis Obispo sedge								MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Jusculai	Caron obiopoundio	Jugo	+	+	1			1	+	IVIIII I	<del>                                     </del>	<b> </b>	<b> </b>	<del>                                     </del>	1	1					140	163	163	WII or MIIH G1/G2, Use over 0.01 application rate,			
1																								habitat potentially impacted, Exclusion mapping			
	1	ı	1	1	1			1		1			1		1	1					1			recommended on forests over 0.01 to reduce			Occurs only on Inyo National
plant - vascular	Carex tiogana	Tioga pass sedge							1	1	1	1	1	1	1	1					!		Yes	determination to MIIH			Forest

		1		1	1 1				1				1							1 1	1					
														Sequoia							Use	<u>Habitat</u>			tree, shrub,	
category Scientific Name	Common Name	Angolos	Cleveland	Eldorado	Invo	Klamath	Laccon	LTBMU	Los	Mendocino	Modoc	Dlumac	San Bernardino	National	Shasta-	Sierra	Civ Divore	Stanislaus	Tahoo	G1/G2	<u>over</u> 0.01	potentially	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent life form?	
category Scientific Name	Common Name	Aligeles	Cieveianu	Eldorado	iliyo	Namatn	Lassen	LIBIVIO	Paures	Mendocino	WIOGOC	Piulilas	bernarumo	wonument	Trillity	Sierra	Six Rivers	Stariisiaus	Tanoe	<u>G1/G2</u>	0.01	impacted	initial Determination from National Screen Process	Yes - Impacts not	IOTHE	
																							WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant																							habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year.		
plant - vascular Carlquistia muirii	Muir's raillardella								MIIH					MIIH						Yes	Yes	Yes	determination to MIIH	Final determination MIIH.	no	
,																							WII or MIIH G1/G2, Use over 0.01 application rate,			
																							habitat potentially impacted, Exclusion mapping			
plant - vascular Carpenteria californica	tree anemone																			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	yes	Only occurs on Sierra National Forest
vasculai Carponiona Camonnoa	area anomone																			163	163	163	WII or MIIH G1/G2, Use over 0.01 application rate,	110	yes	perennial - able to withstand
																							habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -	Mt. Gleason's paintbrush	MILL																					recommended on forests over 0.01 to reduce			in a couple years. Final
vascular Castilleja gleasonii	pairitorusri	IVIIII																		Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no	determination MIIH.
																							WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
	San Bernardino																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular Castilleja lasiorhyncha	Mountains owl's clover		МІІН										MIIH							Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -	CIOVCI		1411111										IVIIIII							163	163	163	MIIH- Not G1/G2, One or more forests over 0.01		110	
vascular Castilleja plagiotoma	Mojave paintbrush	MIIH							MIIH				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
	claspingleaf wild					T	7		MIIH								T			<sub>N-</sub> ]	V4 -	Ve -	MIIH- Not G1/G2, One or more forests over 0.01			
vascular barbarae	cabbage Lemmon's	1	-	+					IVIIIH					-	-					No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01	-		
vascular Caulanthus lemmonii	jewelflower								MIIH				<u></u>							No	Yes	Yes	application rate, habitat potentially impacted		<u> </u>	<u>                                      </u>
plant -	Payson's																ĺ						MIIH- Not G1/G2, One or more forests over 0.01			
vascular Caulanthus simulans	jewelflower	1	MIIH	-									MIIH	-	-					No	Yes	Yes	application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																							habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -	lakeside																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular Ceanothus cyaneus	ceanothus		MIIH																	Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
plant - vascular Chaenactis suffrutescens	Shasta chaenactis					MIIH									MIIH					No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vasculai Ondendella sumulescens	Oriasta oriacriactis	1				IVIIII									IVIIII					IVO	163		WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																							habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - Chlorogalum pomeridianum var.	dwarf aganragt								MILL														recommended on forests over 0.01 to reduce			in a couple years. Final
vascular minus	dwarf soaproot								IVIIII											Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,	no	no	determination MIIH.
																							habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
	Blakeley's																						recommended on forests over 0.01 to reduce			multiple counties. Final
vascular Chorizanthe blakleyi plant -	spineflower Brewer's								MIIH											Yes	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01	no	no	determination MIIH.
vascular Chorizanthe breweri Wats.	spineflower								MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
																								Yes - Impacts not		
																							WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire		
plant -	San Fernando																						recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular Chorizanthe parryi var. fernandina	Valley spineflower	MIIH							MIIH											Yes	Yes	Yes	determination to MIIH		no	
plant -	Parry's	MILL	MILL										MILL										MIIH- Not G1/G2, One or more forests over 0.01			
vascular Chorizanthe parryi var. parryi	spineflower	MIIH	MIIH										MIIH							No	Yes		application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			
																							habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -	straight-awned																						recommended on forests over 0.01 to reduce			multiple counties. Final
vascular Chorizanthe rectispina	spineflower white-bracted	1		+					MIH						-					Yes	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01	no	no	determination MIIH.
vascular Chorizanthe xanti var. leucotheca	spineflower												MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
																								Yes - Impacts not		
																							WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -	Bolander's																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		Only occurs on Sierra and Sequoia
vascular Cinna bolanderi	woodreed													MIIH						Yes	Yes	Yes	determination to MIIH	The second secon	no	National Forests
plant -	California	F 4111 1							N 4112 1				F 4112.2										MIIH- Not G1/G2, One or more forests over 0.01			
vascular Cladium californicum	sawgrass	MIIH	-	+					MIIH				MIIH		-					No	Yes		application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			<u> </u>
																							habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
	Small's southern																						recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
vascular Clarkia australis	clarkia	-																MIIH		Yes	Yes	Yes	determination to MIIH	no	no	area. Final determination MIIH.
plant - vascular Clarkia biloba ssp. australis	Mariposa clarkia																	MIIH		No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		1		1										1	1			-					MIIH- Not G1/G2, One or more forests over 0.01			
vascular Clarkia borealis ssp. borealis	northern clarkia														MIIH					No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular Clarkia gracilis ssp. albicaulis	white-stemmed clarkia						MIIH					MIIH								No	Yes		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
orarnia gracino sop. amicauno	- unitid	1		1								.viiii i			1					INU	163		WII or MIIH G1/G2, Use over 0.01 application rate,			
																							habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -	lolon starts								N.4111.1												,		recommended on forests over 0.01 to reduce			multiple counties. Final
vascular Clarkia jolonensis	Jolon clarkia	<u> </u>	L	1				<u> </u>	HIIIVI	<u> </u>	<u> </u>		<u> </u>	L	1				<u> </u>	Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.

	1	I	1	1	1		1			1	1					1	1				1			T	1		
															Sequoia							Use	Habitat			tree, shrub,	
										Los					National	Shasta-						<u>over</u> <u>0.01</u>	potentially		Species occures on more	succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monument	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	form?	
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Clarkin linevulate Lauria 8 Lauria	Managal alaukia																	MIIH			.,	.,	recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular plant -	Clarkia lingulata Lewis & Lewis	Merced clarkia		1															MIIH		Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01		no	
vascular	Clarkia mildrediae ssp. mildrediae	Mildred's clarkia						MIIH					MIIH								No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			annual. Many occurrences in
nlant																								habitat potentially impacted, Exclusion mapping			multiple counties. Species responds well to fire. Final
plant - vascular	Clarkia mosquinii	Mosquin's clarkia											MIIH								Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	determination MIIH.
plant -		Pierson's spring																			100						
vascular	Claytonia lanceolata var. peirsonii	beauty	NI				_							NI							Yes	Yes	NI- scree	NI- scree			
plant - vascular	Collomia larsenii	talus collomia						NI				NI				NI					No	Yes	NI-Talus	NI-Talus			
Vasculai	Conornia rarscriii	tarao conornia						- 111								- "					140	163	IVI-Talu3	IVI-Talus			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
		D																						habitat potentially impacted, Exclusion mapping			in a couple years. Occurs only on
plant - vascular	Collomia rawsoniana	Rawson's flaming trumpet																			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	Sierra Natinal Forest
plant -	Cordylanthus eremicus ssp.	Kern Plateau		1	T																1.53			MIIH- Not G1/G2, One or more forests over 0.01			
vascular		bird's-beak													MIIH						No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Cordylanthus tenuis ssp. pallescens	pallid bird's beak					l									MIIH					No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Cryptantha circumscissa var.	Rosette cushion	+	1	1					-						IVIII I		$\vdash$			INU	162	162	application rate, habitat potentially impacted			
vascular	rosulata	cryptantha		<u> </u>											NI						No	Yes	NI-Alpine	NI-Alpine			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Cryptantha crinita	silky cryptantha						MIIH													Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year. Final determination MIIH.		
plant -																								recommended on forests over 0.01 to reduce	i ilai determination wiii i.		
vascular	Cryptantha incana	Tulare cryptantha					<u> </u>								MIIH						Yes	Yes	Yes	determination to MIIH		no	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			
plant -		bristlecone																						recommended on forests over 0.01 to reduce			Occurs only on Inyo National
vascular	Cryptantha roosiorum	cryptantha																			Yes	Yes	Yes	determination to MIIH	no	no	Forest
Fungi	Cudonia monticola						MIIH									МІІН		МІІН			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		clustered lady's																			140	163	163	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Cypripedium fasciculatum	slipper					MIIH	MIIH			MIIH		MIIH			MIIH		MIIH		MIIH	No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Cypripedium montanum	mountain lady's slipper			MIIH		MIIH	MIIH			MIIH	MIIH	MIIH			MIIH		MIIH	MIIH	MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Vasculai	Cypripedium montanum	slippei		<u> </u>	IVIIII		IVIIII	IVIIII			IVIIII	IVIIIII	IVIIIII			IVIIII		IVIIIII	IVIIII	IVIIII	INU	res	162	application rate, habitat potentially impacted			
plant - non-																											
vascular	Dacryophyllum falcifolium	tear drop moss					_			NI											Yes	Yes	NI- cliffs	NI- cliffs			
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant -																								application rate, Plant occurs in a habitat unlikely to			
vascular	Dedeckera eurekensis	July gold																			No	Yes	No	burn and/or unlikely to have retardant applications.			
							l																				annual. Many occurrences in one county and into Baja California.
																								WII or MIIH G1/G2, Use over 0.01 application rate,			Species occurs in open, disturbed
							l																	habitat potentially impacted, Exclusion mapping			areas in chaparral and is fire
plant -	Dainandra flavikus i	Ta and a decimal cont		No.																				recommended on forests over 0.01 to reduce			adapated. Final determination
vascular	Deinandra floribunda	Tecate tarplant		MIIH			-											$\vdash$			Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no	MIIH.
							l																	WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Doinandra mehavanaia	Mojovo torrit	NAUL I	NAUL I										NATIO 1	NAUU I							V	V	recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular plant -	Deinandra mohavensis Delphinium hesperium ssp.	Mojave tarplant Cuyamaca	IVIII	IVIII			_		<del>                                     </del>	<del>                                     </del>		1	<del>                                     </del>	IVIIII	WIIIM			$\vdash$			Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01		no	+
vascular	cuyamacae	larkspur	<u> </u>	MIIH			L			<u> </u>				MIIH	<u> </u>					<u></u>	No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Delphinium hutchinsoniae	Monterey larkspur					l			MIIH											Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -	,	unexpected																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Delphinium inopinum	larkspur	1												MIIH	ļ		$\sqcup$			No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Delphinium parryi ssp. purpureum	Mount Pinos larkspur								MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vascuiai	- s.p.iiiiaiii pairyi ssp. paipaicaiii	I a wohai	1					L	L	.viiit i	1										110	163	163	population rate, habitat potentially illipacted	1	<u> </u>	L

				Т	1	1			1	I	1		Т	1	T	1	1			1	1			1	1	
															Sequoia							<u>Use</u>	<u>Habitat</u>			tree, shrub,
catogony	Scientific Name	Common Name	Angolos	Cleveland	Eldorado	Invo	Klamath	Laccon	ITRMII	Los	Mendocino	Modoc	Plumas	San Bernardino	National	Shasta-	Sierra	Siv Divore	Stanislaus	Tahoo	G1/G2	<u>over</u> <u>0.01</u>	potentially	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent life form?
category	Scientific Name	Common Name	Aligeles	Cievelana	Lidorado	illyo	Kiamatii	Lassen	LIDIVIO	raures	Wiendocino	IVIOUOC	riumas	Dernardino	Iviolidilieli	. I I I I I I I I I I I I I I I I I I I	Sierra	JIX INIVEIS	Stamslaus	Tanoe	01/02	0.01	impacteu	initial Determination from National Screen Process	than 1 unit:	IOIIII
plant -																								MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to		
vascular	Delphinium purpusii	Purpus' larkspur													MIIH						No	Yes	No	burn and/or unlikely to have retardant applications.		
plant -	Delahining	umbrelle lerkenur								MIIH												V	V	MIIH- Not G1/G2, One or more forests over 0.01		
vascular	Delphinium umbraculorum	umbrella larkspur								MIIH											No	Yes	Yes	application rate, habitat potentially impacted	Yes - Impacts not	
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire	
																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year.	
Fungi	Dendrocollybia racemosa	branched collybia					MIIH		MIIH				МІІН			MIIH		MIIH	MIIH	MIIH	Yes	Yes	Yes	determination to MIIH	Final determination MIIH.	no
plant -	Diagratus manualtamais	Tulare County													Name							.,	.,	MIIH- Not G1/G2, One or more forests over 0.01		
vascular plant -	Dicentra nevadensis	bleedingheart Mount Laguna	1		1				-				1	1	MIIH	1				1	No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01		
vascular	Dieteria asteroides var. lagunensis	aster		MIIH																	No	Yes	Yes	application rate, habitat potentially impacted		
plant -	Dieteria canescens var. ziegleri	Ziegler's aster												MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
vascular plant -	Dieteria cariesceris var. Ziegieri	Ziegiei 3 astei	1											IVIIII		1				1	INO	res	163	application rate, habitat potentially impacted		
vascular	Draba asterophora var. asterophora	Lake Tahoe draba	a		NI				NI										NI		Yes	Yes	NI - Alpine	NI - Alpine		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire	
																								habitat potentially impacted, Exclusion mapping	population in one year.	
plant -	Duraha antaunahana wasi mananana	Cup Laka draha			MIIH				MIIH										MIII			V		recommended on forests over 0.01 to reduce	Final determination MIIH.	
vascular	Draba asterophora var. macrocarpa	Cup Lake diaba	1		IVIIII				IVIIII				1		<u> </u>				IVIIII		Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire	
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.	
vascular	Draba carnosula	Mt. Eddy draba					MIIH									MIIH		MIIH			Yes	Yes	Yes	determination to MIIH	Final determination winn.	no
plant -	Draba cruciata	Mineral King draba							MIIH						MIIH						No	Vee	Vee	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
vascular plant -	Di apa ci uciata	Sweetwater							IVIIIII				1		IVIIII						INO	Yes	Yes	application rate, habitat potentially impacted		
vascular	Draba incrassata	Mountains draba																			No	Yes	NI-Alpine	NI-Alpine		
plant - vascular	Draba monoensis	White Mountains draba																			Yes	Yes	NI-Alpine	NI-Alpine		
																							r	·		
plant -																								MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to		
vascular	Draba saxosa	rock draba												MIIH							No	Yes	No	burn and/or unlikely to have retardant applications.		
																								MILL C1/C2 One or more female area 0.01 and institut		
plant -		Mount Whitney																						MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or		
vascular	Draba sharsmithii	draba																			Yes	Yes	No	unlikely to have retardant applications.		
																								WII or MIIH G1/G2, Use over 0.01 application rate,		perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping		in a couple years. Map avoidance
plant -	Drymocallis cuneifolia Var. cuneifolia	Wedgeleaf												MILL							V	Vaa	Vee	recommended on forests over 0.01 to reduce		area. Final determination MIIH.
vascular	Diginocaliis curiellolla var. curiellolla	woodbeauty			+								1	IVIIITI		1					Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire	
plant -																1								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.	
vascular	Drymocallis cuneifolia var. ewanii	Ewan's cinquefoil	MIIH											MIIH							Yes	Yes	Yes	determination to MIIH		no
plant -		San Bernardino Mountains																						MIIH- Not G1/G2, One or more forests over 0.01		
vascular	Dudleya abramsii ssp. affinis	dudleya												MIIH							No	Yes	Yes	application rate, habitat potentially impacted		
plant - vascular	Dudleya cymosa ssp. costafolia	Pierpoint Springs liveforever													MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
plant -	Dudieya cymosa 35p. costaiolia	San Gabriel River	-												IVIIII	1					INU	ies	163	MIIH- Not G1/G2, One or more forests over 0.01		
vascular	Dudleya cymosa ssp. crebrifolia	dudleya	MIIH										1								No	Yes	Yes	application rate, habitat potentially impacted		
		San Gabriel																						MIIH-G1/G2, One or more forests over 0.01 application		
plant -	D # 4 ***	Mountains																						rate, Plant occurs in a habitat unlikely to burn and/or		
vascular	Dudleya densiflora	dudleya	MIIH		-							-	-	+	-					-	Yes	Yes	No	unlikely to have retardant applications.		
																								MIIH-G1/G2, One or more forests over 0.01 application		
plant -	Dudleva multicaulia	many-stemmed	MIIH	KALL																	V	Vac	NI.	rate, Plant occurs in a habitat unlikely to burn and/or		
vascular	Dudleya multicaulis	dudleya	IVIIII	MIIH						<del>                                     </del>		<del>                                     </del>	+	+							Yes	Yes	No	unlikely to have retardant applications.  WII or MIIH G1/G2, Use over 0.01 application rate,		perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping		nitrates in soil until they diminish
plant - vascular	Dudleya viscida	sticky dudleya		MIIH												1					Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	in a couple years. Final yes determination MIIH.
- 5000101		, ,	1					1		<u> </u>		-	1	1	1	1			1	-	1					, juccernination will t.

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										Los				San	Sequoia National	Shasta-						<u>Use</u> <u>over</u>	<u>Habitat</u> potentially		Species occures on more	tree, shrub, succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo Kla	amath L	assen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino		1	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	0.01		Initial Determination from National Screen Process	than 1 unit?	form?	
																		ĺ	ĺ								perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
		5 " 6 1/ "																						habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant -	Elegabaria tartia ulmia	Butterfly Valley spike rush											MILL											recommended on forests over 0.01 to reduce			area. Final determination MIIH.
vascular	Eleocharis torticulmis	spike rusii			+		-+	-					IVIIII			-				-	Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,	no	no	perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Snow Mountain																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Epilobium nivium	willowherb									MIIH										Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
	7																				- 144						determination mini
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant -		Grants Pass																						rate, Plant occurs in a habitat unlikely to burn and/or			
vascular	Epilobium oreganum	willowherb					MIIH									MIIH		MIIH			Yes	Yes	No	unlikely to have retardant applications.			
plant -		Dlifton's																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Eremogone cliftonii	eremogone						MIIH					MIIH								No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Eremogone macradenia var.	Forest Camp	MIIH																			.,	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	arcuifolia	sandwort	IVIIIH																		No	Yes	Yes	application rate, habitat potentially impacted			
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant -		yellow-flowered	1		1				1			1			1									rate, Plant occurs in a habitat unlikely to burn and/or			
vascular	Eriastrum luteum	eriastrum								MIIH											Yes	Yes	No	unlikely to have retardant applications.			
plant -		Brandegee's	1	1	1																			MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Eriastrum tracyi	wooly-star	<u>L</u>	<u>L</u>	<u></u>			MIIH	<u></u>		MIIH	L	L	<u>L</u>	MIIH	MIIH					No	Yes	Yes	application rate, habitat potentially impacted	<u>                                     </u>		
												ľ											_	WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Gilman's																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Ericameria gilmanii	goldenbush																			Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
plant -	Evine was via manusi wan inawita	Parry's rabbitbrush												MIIH										MIIH- Not G1/G2, No use over 0.01, habitat potentially			
vascular plant -	Ericameria parryi var. imula	Tabbilbiusii												IVIIITI		-					No	Yes	Yes	impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Erigeron aequifolius	Hall's daisy													MIIH						No	Yes	Yes	application rate, habitat potentially impacted			
- Tubulai																1					-10			WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Mad River																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Erigeron maniopotamicus	fleabane daisy																MIIH			Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -																								MIIH- Not G1/G2, No use over 0.01, habitat potentially			
vascular	Erigeron miser	starved fleabane							MIIH											MIIH	No	Yes	Yes	impacted			
																								MIII MIIII CA /C2   II 0 04   1 1 1 1 1 1-	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire		
plant -																								recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Erigeron multiceps	Kern River daisy													MIIH						Yes	Yes	Yes	determination to MIIH	i illai determination willi.	no	
plant -																					- 144			MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Erigeron uncialis var. uncialis	limestone daisy																			No	Yes	Yes	application rate, habitat potentially impacted			
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant -																								rate, Plant occurs in a habitat unlikely to burn and/or			
vascular	Eriogonum alpinum	Trinity buckwheat	<u> </u>	<del>                                     </del>			MIIH									MIIH					Yes	Yes	No	unlikely to have retardant applications.	-		
plant -	Eriogonum breedlovei var. breedlovei	Piute buckwheat	1		1				1			1			MIIH						No.	Voc	Ves	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	DI GEUIUVEI	i-inte prickwileat	<u> </u>	+	+				<u> </u>			<del>                                     </del>	<del>                                     </del>	<b>—</b>	IVIIII	+					No	Yes	Yes	application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
			1		1				1			1			1									habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Butterworth's																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Eriogonum butterworthianum	buckwheat								MIIH											Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
									1						1			l						habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	<u>_</u>	vanishing wild	1						1			1			1									recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Eriogonum evanidum	buckwheat	<u> </u>	MIIH										MIIH		1					Yes	Yes	Yes	determination to MIIH	V 1 1	yes	
			1		1				1			1			1									Will or Mill C1/C2 Hes over 0.01 and lineting with	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -		Klamath Mountain																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Eriogonum hirtellum	buckwheat		1	1		MIIH		1						1			MIIH			Yes	Yes	Yes	determination to MIIH	a. actermination will.	yes	
plant -		southern alpine	1	1	1				İ			İ		1	İ	1								MIIH- Not G1/G2, One or more forests over 0.01			
platit -	Eriogonum kennedyi var. alpigenum	buckwheat	MIIH							MIIH				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
vascular		Jack's wild					T											T			T			MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	I Fair and a second but a strong control of the second control of	buckwheat	ļ						MIIH										MIIH		No	Yes	Yes	application rate, habitat potentially impacted			
vascular plant - vascular	Eriogonum luteolum var. saltuarium		1		1				1					MIIH	1						N.c.	Var	Ve -	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant - vascular plant -	Eriogonum microthecum var.	Johnston's	NATIO 1	1						1	i	1	1	· WIIIH	ı						No	Yes	Yes	application rate, habitat potentially impacted	i		
vascular plant - vascular plant - vascular	Eriogonum microthecum var. johnstonii	buckwheat	MIIH	-									<b>†</b>			<del>                                     </del>		- 1				+			+		
vascular plant - vascular plant - vascular plant -	Eriogonum microthecum var. johnstonii Eriogonum microthecum var. lacus-	buckwheat Big Bear Lake	MIIH																				Yes	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant - vascular plant - vascular	Eriogonum microthecum var. johnstonii Eriogonum microthecum var. lacus- ursi	buckwheat Big Bear Lake buckwheat	MIIH											MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vascular plant - vascular plant - vascular plant - vascular	Eriogonum microthecum var. johnstonii Eriogonum microthecum var. lacus-	buckwheat Big Bear Lake	MIIH										MIIH										Yes	MIIH- Not G1/G2, One or more forests over 0.01			

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		T	1	1	1	1	1 1		1		1	1	1	1	ı	Т	<del></del>			l	П Т	-			1		
															Sequoia							<u>Use</u>	<u>Habitat</u>			tree, shrub,	
category	Scientific Name	Common Name	Angeles	Cleveland	l Eldorado	Inyo	Klamath	Lassen	LTBMU	Los Padres	Mendocino	Modoc	Plumas	San Bernardino	National Monumen	Shasta- t Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	<u>over</u> <u>0.01</u>	potentially impacted	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent life form?	
																							-	Mill and Mills Cold Co. Harris and Od and Fred Co.			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish in a couple years. Map avoidance
plant -		Snow Mountain																						recommended on forests over 0.01 to reduce			area. Final determination MIIH.
vascular	Eriogonum nervulosum	buckwheat Kings River	-								MIIH					-					Yes	Yes	Yes	determination to MIIH	no	yes	
plant - vascular	Eriogonum nudum var. regirivum	buckwheat													MIIH						No	Yes		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Eriogonum ovalifolium var.	Monarch																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	monarchense	buckwheat	-												MIIH	-					No	Yes		application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Eriogonum prociduum	prostrate buckwheat						MIIH				MIIH									No	Yes		application rate, habitat potentially impacted			
																											perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish in a couple years. Map avoidance
plant -		Barron's																						recommended on forests over 0.01 to reduce			area. Final determination MIIH.
vascular	Eriogonum spectabile	buckwheat						MIIH													Yes	Yes	Yes	determination to MIIH	no	yes	
plant - vascular	Eriogonum tripodum	tripod buckwheat			MIIH						MIIH										No	Yes		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vasculai	Linegorium arpodum	tripod buckwricat			IVIIII						IVIIII										INO	163		WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Eriogonum twisselmannii	Twisselmann's buckwheat													МІІН						Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	yes	in a couple years. Final determination MIIH.
plant -		Ahart's sulphur													1411111						163	163		MIIH- Not G1/G2, One or more forests over 0.01	110	yes	determination winn.
vascular	Eriogonum umbellatum var. ahartii	flower											MIIH								No	Yes		application rate, habitat potentially impacted			
plant - vascular	Eriogonum umbellatum var. glaberrimum	green buckwheat										MIIH									No	Yes		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Eriogonum umbellatum var.	groon buokwilout																			140	163		MIIH- Not G1/G2, One or more forests over 0.01			
vascular	torreyanum	Torrey buckwheat	<u> </u>						MIIH											MIIH	No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Eriogonum ursinum var. erubescens	blushing wild buckwheat					NI									NI					No	Yes	NI-Talus,scree	NI-Talus,scree			
vasculai	Enogonam arsmam var. crasescens	buokwiicat	1	1			141									141					INO	163	INI-Talus,scree	ivi-raius,scree			
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant - vascular	Eriogonum wrightii var. olanchense	Olancha Peak buckwheat																			No	Yes		application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Vasculai	Enegonam wights var. dandrenee	Buokwilout																			140	163	NO	burn and/or unincely to have retained applications.	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -		Congdon's woolly																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Eriophyllum congdonii	sunflower																	MIIH		Yes	Yes	Yes	determination to MIIH	i illai determination willi.	no	
plant -		Fort Tejon woolly																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Eriophyllum lanatum var. hallii	sunflower	-		-					MIIH						-					No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			annual. Many occurrences in
nlant		Vacamita waally																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			multiple counties across multiple federal jurisdictions. Final
plant - vascular	Eriophyllum nubigenum	Yosemite woolly sunflower																	MIIH		Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -		Henderson's fawn																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Erythronium hendersonii	lily	-				MIIH									-		MIIH			No	Yes		application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			
																								habitat potentially impacted, Exclusion mapping			
plant -		manyflower																						recommended on forests over 0.01 to reduce			Occurs only on Sierra National
vascular plant -	Erythronium pluriflorum	fawnlily Kaweah Lakes														-					Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	Forest
vascular	Erythronium pusaterii	Fawn Lily													MIIH						No	Yes		application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -		Pilot Ridge fawn																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Erythronium taylori	lily		<u> </u>							<u> </u>			<u></u>		<u></u>		<u> </u>	MIIH		Yes	Yes		determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Erythronium tuolumnense	Tuolumne fawnlily	,	<u> </u>												<u> </u>			MIIH		Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -	Eucopholia violia Dradaha	wousidet					M									N.4		MIIH						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Eucephalis vialis Bradshaw	wayside aster	1	+	+		MIIH		-		-			<del>                                     </del>	-	MIIH		MIIH			No	Yes	Yes	application rate, habitat potentially impacted	+		
			1													1								MIIH- Not G1/G2, One or more forests over 0.01			
plant - nor		brook pocket	1				MIIH						MIIH			1			MILL		,	Ve -		application rate, Plant occurs in a habitat unlikely to			
vascular	Fissidens aphelotaxifolius	moss	1	+	+		IVIIIH		1	-	-	-	MIIM		1	+			MIIH		No	Yes	No	burn and/or unlikely to have retardant applications.	+		
			1													1								MIIH- Not G1/G2, One or more forests over 0.01			
plant - nor	1-	minute pocket	1							MIIH			MIIH			1		MIIH				,		application rate, Plant occurs in a habitat unlikely to			
vascular plant -	Fissidens pauperculus	moss Caribu coffee	1	+	+		$\vdash$		1	IVIIIH	-	-	MIIM		1	+		IVIIIH			No	Yes		burn and/or unlikely to have retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01	+		
vascular	Frangula purshiana ssp. ultramafica				<u></u>			MIIH		<u></u>		<u></u>	MIIH								No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Eranara uma susa sis	Umpqua green-					N.4											N 4112 1						MIIH- Not G1/G2, No use over 0.01, habitat potentially			
vascular	Frasera umpquaensis	gentian		1			MIIH		<u> </u>		l	<u> </u>	<u> </u>	1	<u> </u>	MIIH		MIIH	l		No	Yes	Yes	impacted			

_				1				1	1			1				_					1			1	1		
															Sequoia							<u>Use</u>	Habitat			tree, shrub,	
	Coloni (Contract)			61	F1.1 1 -		M1			Los				San	National	Shasta-		c: p:	<b>C</b> 1 1	T.1	64/63	<u>over</u>	potentially	Living National States	Species occures on more	succulent life	2
category plant -	Scientific Name	Greenhorn	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monumen	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	0.01	impacted	Initial Determination from National Screen Process MIIH- Not G1/G2, One or more forests over 0.01	than 1 unit?	form?	
vascular	Fritillaria brandegeei	fritillary													MIIH						No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not		
																								habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -		Butte County																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Fritillaria eastwoodiae	frittilaria						MIIH					MIIH			MIIH				MIIH	Yes	Yes	Yes	determination to MIIH		no	
plant - vascular	Fritillaria falcata	talus fritillary								NI											Yes	Yes	NI-Talus	NI-Talus			
		,																			1	100		WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Fritillaria liliacea	fragrant fritillary								MIIH											Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -																					1.03	1.03		MIIH- Not G1/G2, One or more forests over 0.01		110	determination with.
vascular	Fritillaria ojaiensis	Ojai fritillary								MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Fritillaria striata	striped adobe lily													MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vasculai	Trimaria otriata	ou.pou duozoy														1					110	103	103	WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Fritillaria viridea	San Benito fritillary								MIIH											Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
vasculai	Transla vinded	San Jacinto								1411111					<u> </u>	1					Tes	163	163	determination to winn	110	110	determination with.
plant -		Mountains																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Galium angustifolium ssp. jacinticum	bedstraw Cone Peak		MIIH			-							MIIH	<u> </u>	-					No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Galium californicum ssp. luciense	bedstraw								MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
plant -		California																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Galium californicum ssp. primum	bedstraw												MIIH	1	-					No	Yes	Yes	application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Santa Lucia																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular plant -	Galium clementis	bedstraw					-			MIIH					<u> </u>	-				-	Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	determination MIIH.
vascular	Galium glabrescens ssp. modocense	Modoc bedstraw										MIIH									No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -		San Gabriel																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Galium grande	bedstraw	MIIH																		Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
plant -	0	Hardham's																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Galium hardhamiae	bedstraw Warner Mountain								MIIH						-				-	No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Galium serpenticum ssp. warnerense											MIIH									No	Yes	Yes	application rate, habitat potentially impacted			
plant -	O and the same of																							MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Gentiana fremontii	moss gentian			1		<del>                                     </del>					-		MIIH	<del>                                     </del>	1					No	Yes	Yes	application rate, habitat potentially impacted			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
		Mandadina																						habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular	Gentiana setigera	Mendocino gentian																MIIH			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	area. Final determination MIIH.
plant -	9	San Bernardino																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Gilia leptantha ssp. leptantha	gila			1									MIIH							No	Yes	Yes	application rate, habitat potentially impacted	N		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Gilia yorkii	Monarch Gilia													MILL						Var	Voc	Voc	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	200	Occurs only on Sierra and Sequoia National Forests
vascular plant -	Oma yorkii	Mission Canyon	1	<del>                                     </del>			<b>-</b>		<u> </u>	<del>                                     </del>	<b> </b>		<del>                                     </del>	-	IVIIII					<del>                                     </del>	Yes	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01	1	no	INGLIUTIAI FULESES
vascular	Githopsis diffusa ssp. filicaulis	bluecup	1	MIIH																	No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -																								recommended on forests over 0.01 to reduce			multiple counties. Final
vascular	Harmonia doris-nilesiae	Nile's madia														MIIH					Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Hammanda atat tiri "	04-14-1																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Harmonia stebbinsii	Stebbins' madia	+	-	1		<del>                                     </del>		}		MIIH		-	1	-	MIH				-	Yes	Yes	Yes	determination to MIIH		no	
plant - non-		Blandow's bog														1								MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Helodium blandowii	moss			MIIH		MIIH	MIIH	MIIH			MIIH	MIIH	1	MIIH				MIIH	MIIH	No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			
plant -		Jaeger's																						recommended on forests over 0.01 to reduce			Occurs only on the Inyo National
vascular	Hesperidanthus jaegeri	caulostramina	1	<u> </u>			L		<u> </u>	<u> </u>	<u> </u>				<u> </u>	1					Yes	Yes	Yes	determination to MIIH	no	no	Forest

r					1	1		-																			T 1
															Sequoia							<u>Use</u>	Habitat			tree, shrub,	
										Los					National	Shasta-						<u>over</u>	potentially		Species occures on more	succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monument	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	<u>G1/G2</u>	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	form?	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand
plant -																								recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Hesperocyparis forbesii	Tecate cypress		MIIH																	Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
l		0																						habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Hesperocyparis stephensonii	Cuyamaca cypress		МІІН																	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	yes	in a couple years. Final determination MIIH.
Vasculai	riesperoeypans stephensonii	бургосо		1411111																	163	163	163	WII or MIIH G1/G2, Use over 0.01 application rate,	TIO	yes	determination with.
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -		drymaria-like																						recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
vascular	Hesperolinon drymarioides	dwarf flax									MIIH					_					Yes	Yes	Yes	determination to MIIH	no	no	area. Final determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -		monarch																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Heterotheca monarchensis	goldenaster													MIIH						Yes	Yes	Yes	determination to MIIH		no	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -		Kern Canyon																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Heterotheca shevockii	goldenaster													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -																								MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Heuchera abramsii	Abrams' alumroot	MIIH	MIIH						MIIH		<u> </u>		MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Heuchera caespitosa	urn-flowered alumroot	MIIH							MIIH				MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	nous cucopiicou	shaggy-haired																			140	103	103	MIH- Not G1/G2, One or more forests over 0.01			
vascular	Heuchera hirsutissima	alumroot												MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -		Desired a laminary																				l l		MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Heuchera parishii	Parish's alumroot			-									MIIH							No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Horkelia cuneata ssp. Puberula	mesa horkelia	MIIH	MIIH						MIIH				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -	,																										
vascular	Horkelia cuneata ssp. sericea	Kellogg's horkelia								NI											No	Yes	NI-Dunes	NI-Dunes			
plant - vascular	Horkelia hendersonii	Henderson's horkelia					NI														Yes	Voc	NI- above	NI- above treeline			
plant -	Tiorkella Heridersoriii	White Mountains					INI														res	Yes	treeline	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Horkelia hispidula	horkelia																			No	Yes	Yes	application rate, habitat potentially impacted			
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire		
plant -					WII =>																			recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Horkelia parryi	Parry's horkelia			MIIH														MIIH		Yes	Yes	Yes	determination to MIIH		no	
plant -	Hadalla to to a	D b b																				l l		MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Horkelia truncata	Ramona horkelia		MIIH																	No	Yes	Yes	application rate, habitat potentially impacted WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Kern Plateau																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Horkelia tularensis	horkelia													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
												1												habitat potentially impacted, Exclusion mapping			in a couple years.Map avoidance
plant -		Barton Flats																						recommended on forests over 0.01 to reduce			areas. Final determination MIIH.
vascular	Horkelia wilderae	horkelia										<u> </u>		MIIH							Yes	Yes	Yes	determination to MIIH	no	no	
plant - vascular	Horkelia yadonii	Santa Lucia horkelia								MIIH		1									No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		short-leaved			1																140	163	163	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Hulsea brevifolia	hulsea	<u></u>		<u> </u>				MIIH						MIIH				MIIH		No	Yes	Yes	application rate, habitat potentially impacted			
alaus .		San Gabriel																					-	MIIII Not CA (C2 Occupant)		-	
plant - vascular	Hulsea vestita ssp. gabrielensis	Mountains sunflower	MIIH							МІІН		1		MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		out in owe of			1									141/1111							140	163	163	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Hulsea vestita ssp. pygmaea	pygmy alpinegold	MIIH	<u> </u>	<u> </u>		<u> </u>		<u> </u>			<u>L</u>	<u> </u>	MIIH	MIIH	<u></u>		l			No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Wanna takka ata t	California wild																						MIIH-Any combination, but Riparian buffers likely to		-	
vascular plant -	Iliamna latibracteata	hollyhock	-	-	1		$\vdash$					ļ				MIIH		MIIH			Yes	Yes	Yes	provide protection  MUH. Not G1/G2. One or more forests over 0.01			
plant - vascular	Imperata brevifolia	California satintail	MIIH							MIIH				MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	p																							MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Iris hartwegii ssp. columbiana	Tuolumne iris										ļ							MIIH		No	Yes	Yes	application rate, habitat potentially impacted			
1																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Iris munzii	Munz's iris													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
		•																	-								

	1		T	1	1	1	1	I	I		ı	1			1	1	_			I		I I		I	1		
															Sequoia							<u>Use</u>	<u>Habitat</u>			tree, shrub,	
satagam.	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Imus	Klamath	Laccon	LTDMILL	Los	Mendocino	Madas	Diumas	San Bernardino	National	Shasta-	Siorro	Civ Divore	Ctanislaus	Tahaa	<u>G1/G2</u>	over 0.01	potentially	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent life form?	
category	Scientific Name	Common Name	Aligeles	Cieveianu	Eluorauo	iliyo	Klaillatii	Lassen	LIBIVIO	Paures	Mendocino	IVIOGOC	Piulilas	bernarumo	Wonumen	Trillity	Sierra	SIX RIVEIS	Stanislaus	Tanoe	<u>G1/G2</u>	0.01	impacteu	initial Determination from National Screen Process	Yes - Impacts not	IOIIII	
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -		Sierra Valley																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Ivesia aperta var. aperta	ivesia											MIIH							MIIH	Yes	Yes	Yes	determination to MIIH	Tillal determination willi.	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Ivesia aperta var. canina	Dog Valley ivesia																		MIIH	Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								MILLON MILL CA (C2) Have seen 0.04 and live live seeks			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish in a couple years.Map avoidance
plant -		silver-haired																						recommended on forests over 0.01 to reduce			areas. Final determination MIIH.
vascular	Ivesia argyrocoma var. argyrocoma	ivesia												MIIH		-					Yes	Yes	Yes	determination to MIIH	no	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping			in a couple years.Map avoidance
plant -	Ivesia callida	Tahquitz ivesia												MIIL							Vaa	V	Yes	recommended on forests over 0.01 to reduce			areas. Final determination MIIH.
vascular plant -	IVESIA CAIIIGA	Castle Crags		+										IVIIIITI		1					Yes	Yes	res	determination to MIIH	no	no	
vascular	Ivesia longibracteata	ivesia														NI					Yes	Yes	NI-cliffs	NI-cliffs			
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -							l									1								recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Ivesia paniculata	Ash Creek ivesia										MIIH									Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -							MIIH									MIIH								recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Ivesia pickeringii	Pickering's ivesia					MIIH								-	MIIH					Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Ivesia sericoleuca	Plumas ivesia							MIIH				MIIH							MIIH	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
																1						144			Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Ivesia webberi	Webber's ivesia											MIIH							MIIH	Yes	Yes	Yes	determination to MIIH	Tindi determination	no	Map avoidance areas
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -		Red Bluff dwarf																						recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
vascular	Juncus leiospermus var. leiospermus							MIIH													Yes	Yes	Yes	determination to MIIH	no	no	area. Final determination MIIH.
plant - vascular	Juncus luciensis	Santa Lucia dwaft rush						MIIH		МІІН			MIIH							MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vasculai	ourious rusionisis	ruori																			INO	163	163	application rate, habitat potentially impacted			perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			in a couple years.Map avoidance areas. Final determination MIIH.
vascular	Lathyrus biflorus	twoflower peavine																MIIH			Yes	Yes	Yes	determination to MIIH	no	no	areas. Tillar determination Willi.
																							-	WII or MIIH G1/G2, Use over 0.01 application rate,			· · ·
plant -							l									1								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			annual. Many occurrences in multiple counties. Final
vascular	Layia heterotricha	pale-yellow layia								MIIH		<u> </u>									Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																1								WII or MIIH G1/G2, Use over 0.01 application rate,			annual Manuary
plant -							l									1								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			annual. Many occurrences in multiple counties. Map avoidance
vascular	Layia jonesii	Jones' layia								MIIH											Yes	Yes	Yes	determination to MIIH	no	no	area. Final determination MIIH.
			1													1								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -		Heat-leaved					l									1								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Lepechinia cardiophylla	pitcher sage		MIIH																	Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
plant -	Lepechinia fragrans	fragrant pitcher sage	MIIH											MIIH							No	Yes	Voc	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vascular	Lopcomina nagrano	Jago	IVIIITI	1	1				<u> </u>					IVIIITI	1	1					INU	162	Yes	application rate, habitat potentially impacted	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -																								habitat potentially impacted, Exclusion mapping	population in one year.		
vascular	Lepechinia rossii	ross' pitcher sage	MIIH				l			MIIH						1					Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	yes	
		Santa Rosa														1											
plant - vascular	Leptosiphon floribundus ssp. hallii	Mountains leptosiphon												MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		Mt. Tedoc	1	1	1					<del>                                     </del>					1	1					140	163	163	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Leptosiphon nuttallii ssp. howellii	linanthus								<u> </u>	MIIH					MIIH					No	Yes	Yes	application rate, habitat potentially impacted			

	1			1																					1		
															Sequoia							<u>Use</u>	Habitat			tree, shrub,	
										Los				San	National	Shasta-						over	potentially		Species occures on more	succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo K	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monument	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	<u>over</u> <u>0.01</u>		Initial Determination from National Screen Process	than 1 unit?	form?	
plant -	I and a in home as well at the	Madan linanthus													NAUL I						l		.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Leptosiphon serrulatus	Madera linanthus Warner Springs		1								-	+		MIIH			-			No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Lessingia glandulifera var. tomentos			MIIH																	No	Yes	Yes	application rate, habitat potentially impacted			
plant -		short-sepaled																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Lewisia brachycalyx	lewisia	MIIH	MIIH										MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Lewisia cantelovii	wet cliff lewisia											MIIH			МІІН		l		МІІН	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Vascalai	Levilor dantelevii	Wot oiiii rounoid																			140	163	163	application rate, habitat potentially impacted	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
		Canadania																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Lewisia congdonii	Congdon's bitterroot													MIIH				MIIH		Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
Vascalai		J.1.011001																			163	163	163	determination to will	Yes - Impacts not	110	
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Lewisia disepala	Yosemite lewisia													MIIH						Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
Vasculai	Lewisia dicopala	Toodinito lowidia													1411111						163	163	163	determination to will i		110	
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant -		Kallanda landala																						application rate, Plant occurs in a habitat unlikely to			
vascular	Lewisia kelloggii ssp. kelloggii	Kellogg's lewisia	1		MIIH				MIIH				MIIH	-				MIIH	MIIH	MIIH	No	Yes	No	burn and/or unlikely to have retardant applications.			
																		l						MIIH- Not G1/G2, One or more forests over 0.01			
plant -		Hutchison's																						application rate, Plant occurs in a habitat unlikely to			
vascular	Lewisia kelloggii ssp. hutchisonii	lewisia			MIIH			MIIH	MIIH				MIIH			MIIH			MIIH	MIIH	No	Yes	No	burn and/or unlikely to have retardant applications.			
																		l						WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not		
																								habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -		long-petaled																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Lewisia longipetala	Iewisia			MIIH				MIIH											MIIH	Yes	Yes	Yes	determination to MIIH		no	
plant -	Laurinia apparitifalia	Lone Mountain lewisia																MIIH			No.	Van	Vee	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Lewisia oppositifolia	lewisia																IVIIII			No	Yes	Yes	application rate, habitat potentially impacted	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Lewisia serrata	Saw-toothed lewisia			MILL															MILL	Vaa	Van	Vee	recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Lewisia Serrata	lewisia		1	IVIIII															IVIIII	Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,		no	perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -																								recommended on forests over 0.01 to reduce			in a couple years. Final
vascular plant -	Lewisia stebbinsii	Stebbins' lewisia									MIIH			ļ				_			Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	determination MIIH.
vascular	Lilium parryi	Iemon lily	MIIH	MIIH										MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -	, ,	Parish's																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Limnanthes alba ssp. parishii	meadowfoam		MIIH										MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Limnanthes floccosa ssp. bellingeriana	Bellinger's meadowfoam						MIIH										l			No	Voc	Voc	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			Man avoidance areas
vascular	bellingeriana	meadowidam						IVIIII										-			INO	Yes	Yes	application rate, habitat potentially impacted	Yes - Impacts not		Map avoidance areas.
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Linanthus concinnus	San Gabriel linanthus	МІІН											MIIH							Voc	Voc	Voc	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
vascular	Linantinas concinitas	manuas	- IVIIII I		<u> </u>		+						+	Willia		<del> </del>		_	-	1	Yes	Yes	Yes	determination to will i		110	perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
1.																								habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular	Linanthus jaegeri	San Jacinto prickly phlox												МІІН				l			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	areas. Final determination MIIH.
vasculdi		priority priiox	<del>                                     </del>	1	<del>                                     </del>		+		$\vdash$			<del>                                     </del>	+	WIIIT		<del>                                     </del>		<b>—</b>	<del>                                     </del>	1	162	163	162	WII or MIIH G1/G2, Use over 0.01 application rate,	110	110	
																		l						habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -	Linear three Lift "	Baldwin Lake																l						recommended on forests over 0.01 to reduce			single county. Map avoidance
vascular plant -	Linanthus killipii	linanthus	-	-	-								-	MIIH		-			-	-	Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	area. Final determination MIIH.
piant - vascular	Linanthus orcuttii	Orcutt's linanthus	МІІН	MIIH																	No	Yes	Yes	application rate, habitat potentially impacted			
			1	1																	1		. 65	processing impacted	Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
nlast																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Lomatium roseanum	adobe parsley						MIIH				MIIH	MIIH								Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -		Stebbins'	1																		1.53			MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Lomatium stebbinsii	Iomatium	ļ		ļ														MIIH	ļ	No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Lonicera subspicata var. subspicata	Santa Barbara								MIIH											NI.	Vac	Va-	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Lonicera subspicata var. subspicata	noneysuckle	1	1	1					IVIIII	L	L	1	1	I	1			L	L	No	Yes	Yes	application rate, habitat potentially impacted			

		-1	1		1		1		ı	1			1	1	1	_	1			1	1			1	1 1		
															Sequoia							<u>Use</u>	<u>Habitat</u>			tree, shrub,	
	Calantifia Nama	Common Nama		Classalasad	Fldamada		Klamath		LTDAMI	Los			Diamen	San	National	Shasta-	C:	Ci. Divers	Chamialana	Tabaa	61/63	<u>over</u> <u>0.01</u>	potentially	Initial Data was in ation from National Course Dances	Species occures on more	succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	inyo	Klamath	Lassen	LIBMO	Padres	Mendocino	Modoc	Plumas	Bernardino	ivionument	Irinity	Sierra	SIX KIVERS	Stanislaus	Tanoe	G1/G2	0.01	impacted	Initial Determination from National Screen Process WII or MIIH G1/G2, Use over 0.01 application rate,	than 1 unit?	form?	perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Lupinus antoninus	Anthony Peak lupine									MIIH										Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
vasculai	Eupinus antoninus	партте			+						IVIIII			+							res	res	162	WII or MIIH G1/G2, Use over 0.01 application rate,	110	110	determination Willh.
																								habitat potentially impacted, Exclusion mapping			
plant - vascular	Lupinus citrinus var. citrinus	orange lupine																			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	Occurs only on Sierra National Forest
Vasculai	Euphrus Chimus var. Chimus	orange rapine			1									1							163	163	163	WII or MIIH G1/G2, Use over 0.01 application rate,	no no	110	Torest
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant - vascular	Lupinus constancei	The Lassics lupine																МІІН			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	multiple counties. Map avoidance areas. Final determination MIIH.
Vascalai		i apinio																			163	103	163	WII or MIIH G1/G2, Use over 0.01 application rate,	110	110	dreas. Final determination with.
																								habitat potentially impacted, Exclusion mapping			
plant - vascular	Lupinus duranii	Mono Lake lupine																			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	Occurs only on Inyo National Forest
plant -	zapinae da. a.m.	mone zane rapine																			163	103	163	MIIH- Not G1/G2, One or more forests over 0.01	110	110	Torest
vascular	Lupinus latifolius var. barbatus	bearded lupine										MIIH									No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -																								recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Lupinus lepidus var. ashlandensis	Mt. Ashland lupine	е				MIIH														YES	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			
plant -		Hockett Meadows	3																					recommended on forests over 0.01 to reduce			
vascular	Lupinus lepidus var. culbertsonii	lupine													MIIH						No	Yes	Yes	determination to MIIH	no	no	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -		San Luis Obispo																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Lupinus Iudovicianus	lupine	1		1					MIIH				1		1					Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -		Father Crowley's																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Lupinus padre-crowleyi	lupine			-									-							Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant - vascular	Lupinus peirsonii	Peirson's lupine	MIIH																		No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Malacothamnus palmeri var.	Carmel Valley																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	involucratus	bush mallow			-					MIIH				-		-					No	Yes	Yes	application rate, habitat potentially impacted			
vascular	Malacothamnus palmeri var. lucianu	Arroyo Seco bush s mallow	'							MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		Santa Lucia bush																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Malacothamnus palmeri var. palmer Malacothrix saxatilis var.	mallow Carmel Valley			-					MIIH				-							No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	arachnoidea	malacothrix								MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Malaxis monophyllos var.	white addersmouth																						MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to			
vascular	brachypoda	orchid												MIIH							No	Yes	No, riparian	burn and/or unlikely to have retardant applications.			
plant -	M	California manina												MIIH								,	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Marina orcuttii var. orcuttii	California marina	1		+								1	MIIH	1	1		-		1	No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			map avoidance areas
vascular	Matelea parviflora	spearleaf												MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
																								MIIH- Not G1/G2, One or more forests over 0.01		·	
plant - non-		broad-nerved																						application rate, Plant occurs in a habitat unlikely to			
vascular	Meesia uliginosa	hump-moss			MIIH		MIIH	MIIH	MIIH			MIIH	MIIH	MIIH	MIIH	MIIH			MIIH	MIIH	No	Yes	No	burn and/or unlikely to have retardant applications.			
plant - vascular	Mentzelia inyoensis	Inyo blazing star																			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			Occurs only on Inyo National Forest
vascular	Wichizella Iliyoelisis	myo biazing stal	+	+	+					<u> </u>		<del>                                     </del>	<del>                                     </del>	1	-	+			-	<del>                                     </del>	INO	162	162	application rate, habitat potentially impacted	+		rorest
plant - non-		elongate copper																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Mielichhoferia elongata	moss					MIIH				MIIH		MIIH	-	MIIH	MIIH		MIIH	MIIH	MIIH	No	Yes	Yes	application rate, habitat potentially impacted	Vec Immediate		
																								WII => MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - non- vascular	Mielichhoferia shevockii	Shevock's copper moss		МІІН						MIIH					MIIH				MIIH		Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
vasculai			1											1							163	163	163	acternment to mill!		110	+
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant -		Two-colored																						rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers			
vascular	Mimulus discolor	monkeyflower					<u></u>								MIIH						Yes	Yes	No, riparian	likely to provide protection			
plant -	Mimuluo ayanaaa	ephemeral					M	MIII				Milli												MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Mimulus evanescens	monkeyflower			<u> </u>		MIIH	MIIH				MIIH		1	<u> </u>			l	l	<u> </u>	No	Yes	Yes	application rate, habitat potentially impacted			

		<u> </u>	T		I		Ι	l							l	I	Ι			Ι				T	1		
										Los				San	Sequoia National	Shasta-						<u>Use</u> <u>over</u>	<u>Habitat</u> potentially		Species occures on more	tree, shrub, succulent life	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	l .	1	Sierra	Six Rivers	Stanislaus	Tahoe	<u>G1/G2</u>	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	form?	
plant -		San Bernardino Mountain																						WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			annual. Many occurrences in multiple counties. Map avoidance
vascular	Mimulus exiguus	monkeyflower			-									MIIH						_	Yes	Yes	Yes	determination to MIIH	no Yes - Impacts not	no	areas. Final determination MIIH.
																								WII => MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Mimulus filicaulis	slender-stemmed monkeyflower																	MIIH		Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
																									Yes - Impacts not		
																								WII => MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -		slenderstalk																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Mimulus gracilipes	monkeyflower			-										MIIH						Yes	Yes	Yes	determination to MIIH	Yes - Impacts not	no	
																								WII => MIIH G1/G2, Use over 0.01 application rate,	expected across entire		
plant -		Kaweah																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular	Mimulus norrisii	monkeyflower													MIIH						Yes	Yes	Yes	determination to MIIH	rillal determination willi.	no	
																								WII => MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Mimuluo nulahalluo	pansy monkeyflower																	MILL			V	V	recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Mimulus pulchellus	monkeynower	<u> </u>	+	-					-									IVIIII		Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,		no	
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant - vascular	Mimulus purpureus	purple monkeyflower												MIIH							Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	multiple counties. Map avoidance areas. Final determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate,			
plant -		Kelso Creek																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			annual. Many occurrences in single county. Map avoidance
vascular	Mimulus shevockii	monkeyflower													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	areas. Final determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -		The Lassics																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular plant -	Minuartia decumbens	sandwort	-		+		-											MIIH			Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	determination MIIH.
vascular	Minuartia rosei	peanut sandwort														MIIH					No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Minuartia stolonifera	Scott Mountain sandwort					MIIH									MIIH					Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -		Jokerst's																						MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to			
vascular	Monardella australis ssp. jokersti	monardella	MIIH											MIIH							No	Yes	No	burn and/or unlikely to have retardant applications.			
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Monardella beneolens	sweet-smelling monardella													MIIH						Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
																									Yes - Impacts not		
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -	Managed all a Salla W"	Follett's						NA:																recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular plant -	Monardella follettii	monardella felt-leaved			1			MIIH					MIIH							MIIH	Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01		no	
vascular	Monardella hypoleuca ssp. lanata	monardella		MIIH																	No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Monardella linoides ssp. oblonga	flax-like monardella								MIIH					MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Manardalla maarantha aan hallii	Hall's manardalla	MILL	MIII										MIIL								V	V	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Monardella macrantha ssp. hallii	Hall's monardella San Felipe	MIIH	MIIH	+									MIIH							No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Monardella nana ssp. leptosiphon	monardella	-	MIIH										MIIH		-					No	Yes	Yes	application rate, habitat potentially impacted			peropoial while to with the state
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -	Monardella palmeri	Palmer's monardella								MILL											Vac	Voc	Voc	recommended on forests over 0.01 to reduce	20		in a couple years. Final
vascular plant -		monaruena			1					IVIIII											Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	HU	determination MIIH.
vascular	Monardella saxicola	rock monardella	MIIH	-										MIIH							No	Yes	Yes	application rate, habitat potentially impacted			nonemial ablate with the d
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand nitrates in soil until they diminish
nlant		Stehhins'																						habitat potentially impacted, Exclusion mapping			in a couple years. Map avoidance
plant - vascular	Monardella stebbinsii	Stebbins' monardella			<u> </u>		<u> </u>						MIIH		<u> </u>						Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	areas. Final determination MIIH.
		-																									

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															Sequoia							Use	Habitat			tree, shrub,	
	Colon Manager			St	F1.1					Los			<b>DI</b>	San	National	Shasta-		s: s:	C1 1-1	T.1	64 /63	over	potentially		Species occures on more	succulent life	2
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo Ki	lamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monument	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	<u>G1/G2</u>	0.01	impacted	Initial Determination from National Screen Process WII or MIIH G1/G2, Use over 0.01 application rate,	than 1 unit?	form?	
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant - vascular	Navarretia ojaiensis	Ojai navarretia								MIIH											Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	multiple counties. Final determination MIIH.
plant -		Baja																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Navarretia peninsularis	pincushionplant yellow bur	MIIH	MIIH						MIIH				MIIH	MIIH			$\vdash$			No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Navarretia prolifera ssp. lutea	navarretia			МІІН																No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			annual. Many occurrences in multiple counties. Final
plant -		Piute Mountains																						recommended on forests over 0.01 to reduce			determination MIIH. Only occurs
vascular	Navarretia setiloba	Navarretia		1											MIIH						Yes	Yes	Yes	determination to MIIH	no	no	on Sequoia National Forest.
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -		Chimney Creek																						recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
vascular plant -	Nemacladus calcaratus Nemacladus secundiflorus var.	nemacladus Robbins'		-	<u> </u>										MIIH						Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	areas. Final determination MIIH.
vascular	robbinsii	nemacladus	MIIH							MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			annual Many occurrences in
plant -		Twisselman's																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			annual. Many occurrences in multiple counties. Map avoidance
vascular	Nemacladus twisselmannii	nemacladus													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	areas. Final determination MIIH.
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			perennial - able to withstand nitrates in soil until they diminish
plant -		California snow-																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular plant -	Neviusia cliftonii	wreath		-												MIIH					Yes	Yes	Yes	determination to MIIH	no	yes	determination MIIH.
vascular	Nolina cismontana	Chaparral beargrass		MIIH						MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -		Northern adder's-																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Ophioglossum pusillum	tongue short-joint		-							MIIH					MIIH					No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Opuntia basilaris var. brachyclada	beavertail	MIIH											MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Oreonana purpurascens	purple mountain parsley													MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Orconana parparascens	woolly mountain-													IVIIII						NO	163	163	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Oreonana vestita	parsley	MIIH											MIIH	MIIH						No	Yes	Yes	application rate, habitat potentially impacted			
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant -		Plumas alpine																						rate, Plant occurs in a habitat unlikely to burn and/or			
vascular plant -	Oreostemma elatum	aster Rock Creek		-				MIIH					MIIH								Yes	Yes	No	unlikely to have retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Orobanche valida ssp. valida	broomrape	MIIH							MIIH				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,			Occurs on rock outcrop openings within chaparral. Primary habitat
																								habitat potentially impacted, Exclusion mapping			unlilkely to be treated with
plant - non-	Outle atrials one trailine arii	Kellman's bristle																					.,	recommended on forests over 0.01 to reduce			retardant. Final determination
vascular	Orthotrichum kellmanii	moss								IVIIII											Yes	Yes	Yes	determination to MIIH WII or MIIH G1/G2, Use over 0.01 application rate,	no	no	MIIH.
																								habitat potentially impacted, Exclusion mapping			
plant - non- vascular	Orthotrichum praemorsum	?							MIIH												Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH			
	·			1					-															MIIH- Not G1/G2, One or more forests over 0.01			
Fungi plant -	Otidea smithii	Smith's otidea Rock-loving point		1										-				MIIH			No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Oxytropis oreophila var. oreophila	vetch	MIIH	<u>L</u>										MIIH	<u> </u>			L_			No	Yes	Yes	application rate, habitat potentially impacted			
																							-	WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -		San Bernardino																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Packera bernardina	ragwort												MIIH							Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant - vascular	Packera eurycephala var. lewisrosei	cut-leaved ragweed						міін					MIIH								No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
	, , , , , , , , , , , , , , , , , , ,	3																				1.1.		WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -	Packera ganderi	Gander's ragwort																						habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
vascular		<u> </u>	L	MIIH	L								L		<u> </u>			┖			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -	Packera hesperia	western senecio																N						MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	,	fringed grass-of-		+										1	-			MIIH			No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Parnassia cirrata var. cirrata	Parnassus	MIIH											MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant -	Parnassia cirrata var. intermedia	fringed grass-of- parnassus					MIIH									MIIH					Yes	Voc	Voc	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.		
vascular	। वागवञ्जव जाग्वाव var. ॥॥सामास्याव	pamassus		1	L		wiill f				L	<u> </u>	L	L	<u> </u>	WHITT				1	res	Yes	Yes	determination to with		IIU	

										Loc				San	Sequoia National	Shasta-						<u>Use</u>	<u>Habitat</u>		Species occures on more	tree, shrub,	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo Ki	lamath L	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	ı	1	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	over 0.01	potentially impacted	Initial Determination from National Screen Process	Species occures on more than 1 unit?	succulent life form?	
																								WII or MIIH G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -		Dudley's																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish
vascular	Pedicularis dudleyi	lousewort								MIIH											Yes	Yes	Yes	determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -		Howell's																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Pedicularis howellii	lousewort					MIIH											MIIH			No	Yes	Yes	application rate, habitat potentially impacted			
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant - non	-																							application rate, Plant occurs in a habitat unlikely to			
vascular	Peltigera gowardii	Goward's watefan			MIIH		MIIH	MIIH	MIIH		MIIH		MIIH		MIIH	MIIH		MIIH	MIIH	MIIH	No	Yes	No	burn and/or unlikely to have retardant applications.			
plant -	Penstemon californicus	California penstemon		MIIH										MIIH							No	Vee	Vee	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Feristerion californicus	pensternon		IVIIII										IVIIITI							NO	Yes	Yes	application rate, habitat potentially impacted	Yes - Impacts not		
																								WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
		1																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Penstemon personatus Keck	close-throated beardtongue						МІІН					МІІН							МІІН	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -	r enstemon personatus Neck	Susanville						IVIIIII					IVIIII							IVIIIII	163	163	163	MIIH- Not G1/G2, One or more forests over 0.01		110	
vascular	Penstemon sudans	beardtongue						MIIH					MIIH								No	Yes	Yes	application rate, habitat potentially impacted			
																								NAULU CA /CO Occupanto de contracto de contr			
plant -		Tracy's																						MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or			
vascular	Penstemon tracyi	beardtongue														MIIH					Yes	Yes	No	unlikely to have retardant applications.			
plant -		slender																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Pentachaeta exilis ssp. Aeolica	pentachaeta								MIIH											No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Petrophyton caespitosum ssp. Acuminatum	marble rockmat													MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
																							103	approacion rate, napitat potentiany impacted	Yes - Impacts not		
																								WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
																								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Phacelia cookei	Cooke's phacelia					МІІН									MIIH					Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
		'																			100				Yes - Impacts not		
																								WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
nlant		Scott Valley																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Phacelia greenei	phacelia					МІІН									MIIH					Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -		•																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Phacelia inundata	playa phacelia					MIIH	MIIH				MIIH									No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Phacelia inyoensis	Inyo phacelia																			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vasculai	Triacena myoerisis	inyo phacena																			NO	163	163	WII or MIIH: G1/G2, Use over 0.01 application rate,			
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -	Phonolin konkii	Santiago Peak		MIIILI																			W	recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
vascular plant -	Phacelia keckii	phacelia Mono County		IVIIII																	Yes	Yes	Yes	determination to MIIH MIIH- Not G1/G2, One or more forests over 0.01	no	no	areas. Final determination MIIH.
vascular	Phacelia monoensis	phacelia																			No	Yes	Yes	application rate, habitat potentially impacted			
																									Yes - Impacts not		
																								WII or MIIH: G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire		
plant -		Nine-Mile Canyon																						recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		Only occurs on Inyo and Sequoia
vascular	Phacelia novenmillensis	phacelia													MIIH						Yes	Yes	Yes	determination to MIIH		no	National Forests
plant -	Dhacalia atah himaii	Ctabbinal abassiis																		NAUL I		.,	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Phacelia stebbinsii	Stebbins' phacelia	+	<del>                                     </del>	MIIH				-		-	-	<del> </del>			-				MIIH	No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01	+		
Fungi	Phaeocollybia olivacea						MIIH						MIIH			MIIH		MIIH		MIIH	No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
nlant		Rig Roor Valley																						habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Phlox dolichantha	Big Bear Valley phlox												MIIH							Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -		i i																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Pinus albicaulis	Whitebark Pine		<u> </u>	MIIH		MIIH	MIIH	MIIH		MIIH	MIIH	MIIH		MIIH	MIIH		MIIH	MIIH	MIIH	No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Plagiobothrys collinus var. ursinus	Cooper's popcorn flower												MIIH							No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vascuidi	, lagiobourrys commus var. ursirius	HOWCI		-									-	WIIIT							NU	162	162	WII or MIIH: G1/G2, Use over 0.01 application rate,			
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -	Diaminhathur a mariahii	Parish's																					.,	recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
vascular	Plagiobothrys parishii	popcornflower	-								-										Yes	Yes	Yes	determination to MIIH WII or MIIH: G1/G2, Use over 0.01 application rate,	no	no	areas. Final determination MIIH.
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
		hooked																						recommended on forests over 0.01 to reduce			multiple counties. Map avoidance
plant -	Plagiobothrys uncinatus	popcornflower	1							MIIH			ļ								Yes	Yes	Yes	determination to MIIH	no	no	areas. Final determination MIIH.
plant - vascular	r lagiobotinys uncinatus	<u> </u>																									
•	Tragiopolitry's difficultus																							WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
•	r rayiobotinys uncinatus	Yosemite bog																						WII or MIIH: G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final

			1	Τ	1						1	<u> </u>		1	1	1											
										Los				San	Sequoia National	Shasta-						<u>Use</u> <u>over</u>	<u>Habitat</u> potentially		Species occures on more	tree, shrub, succulent life	
ategory	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	1	1	Sierra	Six Rivers	Stanislaus	Tahoe	<u>G1/G2</u>	0.01		Initial Determination from National Screen Process	than 1 unit?	form?	
lant - ascular	Poa sierrae	Sierra blue grass			MIIH			MIIH					MIIH							MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
																								MILL CA /C2 One or more forests over 0.04 and lighting			
olant -																								MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or			
vascular	Polemonium chartaceum	Mason's sky pilot					MIIH									MIIH					Yes	Yes	No	unlikely to have retardant applications.			
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant - vascular	Polyctenium williamsiae	Williams's combleaf																			Yes	Yes	No	rate, Plant occurs in a habitat unlikely to burn and/or			
plant -	Foryclerium williamsiae	Morefield's			+																res	res	NO	unlikely to have retardant applications.			
vascular	Potentilla morefieldii	cinquefoil																			Yes	Yes	NI-Alpine	NI-Alpine WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Potentilla rimicola	cliff cinquefoil												MIIH							Yes	Voc	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no		in a couple years. Final
rasculai	i otentina minicola	ciiii ciiiqueioii			+									IVIIII							res	Yes	162	WII or MIIH: G1/G2, Use over 0.01 application rate,	110	110	determination MIIH. perennial - able to withstand
alant																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
olant - vascular	Prosartes parvifolia	Suskiyou bells																MIIH			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
olant -	Purrocoma lucido	eticky pyrrocomo						MIIH					MIIH							MIIH	No	Voc	Voc	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Pyrrocoma lucida	sticky pyrrocoma Bear Valley						IVIIII					IVIIIT					$\vdash$		IVIIII	INO	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Pyrrocoma uniflora var. gossypina	pyrrocoma												MIIH		ļ					No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Quercus dumosa	Nuttal's scrub oak								MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
																									Yes - Impacts not		
																								WII or MIIH: G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -	D																							recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Raillardella pringlei	showy raillardella			+		MIIH									MIIH					Yes	Yes	Yes	determination to MIIH		no	
plant - nor																								MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Ramalina thrausta	angelhair														-		MIIH			No	Yes	Yes	application rate, habitat potentially impacted WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Ribes canthariforme	Moreno currant		MIIH																	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	ves	in a couple years. Final determination MIIH.
plant -		Columbia yellow														1								MIIH- Not G1/G2, One or more forests over 0.01		703	determination with.
vascular	Rorippa columbiae	cress			+		MIIH	MIIH				MIIH				MIIH					No	Yes	Yes	application rate, habitat potentially impacted			
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant - vascular	Rorippa subumbellata	Tahoe yellow cress							MIIH												Yes	Yes	No	rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
vasculai	ronppa dabambonata	0.000																			163	163	NO	WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -																								habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish in a couple years. Final
vascular	Rupertia hallii	Hall's scurf-pea						MIIH													Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant - vascular	Saltugilia latimeri	Latimer's woodland gilia												MIIH	MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Vasculai	Saltugilla latilileli	woodiana gilia			+									IVIIII	IVIIII I						INO	res	162	WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Sanicula maritima	adobe sanicle								МІІН											Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant - vascular	Sanicula tracyi	Tracy's sanicle																MIIH			No	Yes	Voc	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vascular	Sanicula tracyi	Tracy's Sariicie																IVIII			INO	162	Yes	WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular	Satureja chandleri	San Miguel savory	y	MIIH																	Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	in a couple years. Final determination MIIH.
plant -		American																						MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to			
vascular	Scheuchzeria palustris	scheuchzeria	1					MIIH													No	Yes	No, riparian	burn and/or unlikely to have retardant applications.			
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant -	Outro a march of	black bog rush,												B 4117 1								Ţ.		application rate, Plant occurs in a habitat unlikely to			
vascular plant -	Schoenus nigricans Scutellaria bolanderi ssp.	black sedge	1							-		-	-	MIIH				$\vdash \vdash$			No	Yes	No, riparian	burn and/or unlikely to have retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01			
vascular	austromontana	southern skullcap	MIIH	MIIH										MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
																								WII or MIIH: G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		perennial - able to withstand nitrates in soil until they diminish
																								habitat potentially impacted, Exclusion mapping	population in one year.		in a couple years. Final
plant - vascular	Sedum albomarginatum	Feather River stonecrop						MIIH					МІІН								Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	ves	determination MIIH.
vascuidi	occum abomarymatam	отопонор	1					William			<u> </u>		AVIII I	ı	I	1					162	152	163	acternination to will!		усэ	<u> </u>

	T	1		1																				1	T	ı	T
										Los				San	Sequoia National	Shasta-						<u>Use</u> over	<u>Habitat</u> potentially		Species occures on more	tree, shrub,	
category	Scientific Name	Common Name	Angeles	Cleveland	Eldorado	Inyo I	Klamath	Lassen	LTBMU	Padres	Mendocino	Modoc	Plumas	Bernardino	Monument	Trinity	Sierra	Six Rivers	Stanislaus	Tahoe	G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	form?	
plant -	On the second	Davidson's																				11		MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Sedum niveum	stonecrop	-										1	MIIH		1		-		1	No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sedum obtusatum ssp. paradisum	Canyon Creek stonecrop														MIIH		MIIH			No	Yes	Yes	application rate, habitat potentially impacted			
Vascalai	Seam estacatam cop. paracicam	0.00.00																			110	163	163	application rate, habitat potentially impacted			
																								MIIH-G1/G2, One or more forests over 0.01 application			
plant -																								rate, Plant occurs in a habitat unlikely to burn and/or			
vascular	Senecio pattersonensis	Mono ragwort														1					Yes	Yes	No	unlikely to have retardant applications.			
																								Mill on Millie Cd /C2. How over 0.01 and lighting rate			annual Manu annumanas in
																								WII or MIIH: G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping			annual. Many occurrences in multiple counties, on three
plant -		Hammitt's clay-																						recommended on forests over 0.01 to reduce			mountains and protected on other
vascular	Sibaropsis hammittii	press		MIIH																	Yes	Yes	Yes	determination to MIIH	no	no	lands. Final determination MIIH.
plant -		Cuesta Pass																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sidalcea hickmanii ssp. anomala	checkerbloom								MIIH						1					No	Yes	Yes	application rate, habitat potentially impacted			
plant - vascular	Sidalcea hickmanii ssp. hickmanii	Hickman's checkerbloom								MIIH											No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
plant -	Зиансеа пісктаніі ззр. пісктаніі	Parish's								IVIIII								_			INU	165	ies	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sidalcea hickmanii ssp. parishii	checkerbloom	MIIH							MIIH				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -		Pillsbury																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sidalcea hickmanii ssp. pillsburiensis										MIIH										No	Yes	Yes	application rate, habitat potentially impacted			
plant -	Cidalasa maskiffama asa dalasa	dwarf												MIIH							l	,	.,	MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Sidalcea malviflora ssp. dolosa	checkerbloom salt spring										-	-	MIIH	-	1		_			No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sidalcea neomexicana	checkerbloom	MIIH							MIIH				MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -		chickweed starry																						MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sidotheca caryophylloides	puncturebract	MIIH							MIIH				MIIH	MIIH						No	Yes	Yes	application rate, habitat potentially impacted			
		white-margined																						MIIH- Not G1/G2, One or more forests over 0.01			
plant - vascular	Sidotheca emarginata	starry puncturebract												MIIH							No	Yes	Yes	application rate, habitat potentially impacted			
plant -	ge.e	long-stiped																				1.65	100	MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Silene occidentalis ssp. longistipitata							MIIH													No	Yes	Yes	application rate, habitat potentially impacted			Map avoidance areas.
plant -		Klamath Mountain	1																					MIIH- Not G1/G2, One or more forests over 0.01			
vascular plant -	Silene salmonacea	catchfly Serpentine			1								1		1	MIIH		_			No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Silene serpentinicola	catchfly																MIIH			No	Yes	Yes	application rate, habitat potentially impacted			
		<u> </u>																			1	1					
																								MIIH- Not G1/G2, One or more forests over 0.01			
plant -	Olas mina kirana kana nina a	timberland blue-																				11		application rate, Plant occurs in a habitat unlikely to			
vascular	Sisyrinchium longipes	eyed grass		-								-	-	MIIH				_			No	Yes	No, riparian	burn and/or unlikely to have retardant applications.  WII or MIIH: G1/G2, Use over 0.01 application rate,			
																								habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant -	Streptanthus albidus ssp.	most beautiful																						recommended on forests over 0.01 to reduce			multiple counties. Final
vascular	peramoenus	jewelflower								MIIH											Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -	Chrantonthus as man actuic	southern jewelflower	MIIH	MIIH						MIIH				MIIH										MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Streptanthus campestris	Jeweillowei	IVIIIITI	IVIIIITI						IVIIII				IVIIII							No	Yes	Yes	application rate, habitat potentially impacted WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
																								habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant -		Piute Mountains																						recommended on forests over 0.01 to reduce			in a couple years. Final
vascular	Streptanthus cordatus var. piutensis	,													MIIH						Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant -	Streptanthus fenestratus	Tehipite Valley jewelflower													MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
vascular plant -	C. Optariarao remediatas	Alpine jewel-	+	1	1							+	+			1					INU	163	162	MIIH- Not G1/G2, One or more forests over 0.01			+
vascular	Streptanthus gracilis	flower	<u></u>									<u></u>									No	Yes	Yes	application rate, habitat potentially impacted			
																1								WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant -		Howell's																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			nitrates in soil until they diminish
vascular	Streptanthus howellii	jewelflower																MIIH			Yes	Yes	Yes	determination to MIIH	no	no	in a couple years. Final determination MIIH.
		Ī	1		1							1	1		1							-			Yes - Impacts not		
																								WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
-lant		Trinity Diver										1			1	10/11								habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular	Streptanthus oblanceolatus	Trinity River jewelflower														WII =>		МІІН			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
vasculai	Spranting Objurioodiated	J	1	1	1							1	1					2007			162	163	163	accentitudion to milit		110	
plant -		Masonic Mountain	ı																					MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Streptanthus oliganthus	jewelflower		-	<del>                                     </del>											1		-			No	Yes	Yes	application rate, habitat potentially impacted	Van Imagestees		
																								WII or MIIH: G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
											1	1												habitat potentially impacted, Exclusion mapping	population in one year.		
plant -																								recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular	Stylocline masonii	Mason's neststraw	MIH		<del>                                     </del>					MIIH		1	-		MIIH						Yes	Yes	Yes	determination to MIIH		no	
plant - non-																								MIIH- Not G1/G2, One or more forests over 0.01			
vascular	Sulcaria badia	none									MIIH					MIIH		MIIH			No	Yes	Yes	application rate, habitat potentially impacted			
	· · · · · · · · · · · · · · · · · · ·	1			1											1								1			

	T					<u> </u>		ı .	I								1					I	<del></del>		T
													Sequoia							<u>Use</u>	Habitat			tree, shrub,	
Calandific Name	Campanan Nama		Clausiand	Fldamada		Managh		LTDAM	Los		Diverse	San	National	Shasta-	C:	Ci Di	Chamialana	Tabaa		over	potentially	Initial Determination from National Course Brosses	Species occures on more	succulent life	
category Scientific Name	Common Name	Angeles	Cleveland	Eldorado	inyo	Klamath	Lassen	LIBMO	Pagres	Mendocino Modoc	Piumas	Bernardino	ivionumen	Trinity	Sierra	SIX RIVERS	Stanislaus	ranoe	G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit? Yes - Impacts not	form?	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
, alone	San Bernardino																					habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular Symphyotrichum defoliatum	aster	MIIH	MIIH						MIIH			MIIH	MIIH						Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
- John John John John John John John John																						determination to mini	Yes - Impacts not	110	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
plant -																						habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular Tauschia howellii	Howell's tauschia					MIIH										MIIH		MIIH	Yes	Yes	Yes	determination to MIIH	Final determination winn.	no	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,			perennial - able to withstand
plant	Porn/o																					habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - vascular Tetracoccus dioicus	Parry's tetracoccus		МІІН																Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	yes	in a couple years. Final determination MIIH.
																							Yes - Impacts not	,	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
plant -	Howell's																					habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce	population in one year. Final determination MIIH.		
vascular Thelypodium howellii ssp. howellii	thelypody						MIIH			MIIH									Yes	Yes	Yes	determination to MIIH	Tinui determination viiin.	no	
plant -	Sonoran maiden																					MIIH- Not G1/G2, One or more forests over 0.01			
vascular Thelypteris puberula var. sonorensis	velvety false	MIIH							MIIH		-	MIIH		-					No	Yes	Yes	application rate, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01			
vascular Thermopsis californica var. semota	lupine		MIIH																No	Yes	Yes	application rate, habitat potentially impacted			
																									perennial - able to withstand
																						WII or MIIH: G1/G2, Use over 0.01 application rate,			nitrates in soil until they diminish
plant -	Santa Ynez false																					habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce			in a couple years. Species requires disturbance. Final determination
vascular Thermopsis macrophylla	lupine								MIIH										Yes	Yes	Yes	determination to MIIH	no	no	MIIH.
																							Yes - Impacts not		
																						WII or MIIH: G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping	expected across entire population in one year.		
plant -																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular Thermopsis robusta	false lupine					MIIH										MIIH			Yes	Yes	Yes	determination to MIIH		no	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant -																						recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular Thysanocarpus rigidus	rigid fringepod	MIIH	MIIH									MIIH		-					Yes	Yes	Yes	determination to MIIH	Voc. Impacts not	no	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant - vascular Tracyina rostrata	beaked tracyina									MIIH						MIIH			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
vascular Tracyma rostrata	beaked tracytria									IVIIIII	1			1		IVIIIII			res	res	162	determination to with	Yes - Impacts not	110	
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	expected across entire		
																						habitat potentially impacted, Exclusion mapping	population in one year.		
Fungi Tricholomopsis fulvescens	none					MIIH				МІІН						MIIH			Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	Final determination MIIH.	no	
plant -																				.03		MIIH- Not G1/G2, One or more forests over 0.01		110	
vascular Trifolium bolanderi	Bolander's clover																		No	Yes	Yes	application rate, habitat potentially impacted			
																						WII or MIIH: G1/G2, Use over 0.01 application rate,	Yes - Impacts not expected across entire		
																						habitat potentially impacted, Exclusion mapping	population in one year.		
plant -											1											recommended on forests over 0.01 to reduce	Final determination MIIH.		
vascular Trifolium dedeckerae	Dedecker's clover		1	1							-	1	MIIH			_			Yes	Yes	Yes	determination to MIIH WII or MIIH: G1/G2, Use over 0.01 application rate,		no	perennial - able to withstand
											1											habitat potentially impacted, Exclusion mapping			nitrates in soil until they diminish
plant - non-	Coastal																					recommended on forests over 0.01 to reduce			in a couple years. Final
vascular Triquetrella californica	triquetrella		-	-					MIIH		-			1					Yes	Yes	Yes	determination to MIIH	no	no	determination MIIH.
plant - vascular Tritelia ixioides ssp. cookii	Cook's tritelia								MIIH		1								No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
												1		1								WII or MIIH: G1/G2, Use over 0.01 application rate,			
1																						habitat potentially impacted, Exclusion mapping			annual. Many occurrences in
plant - vascular Tropidocarpum capparideum	caper-fruited tropidocarpum								МІІН		1								Yes	Yes	Yes	recommended on forests over 0.01 to reduce determination to MIIH	no	no	multiple counties. Final determination MIIH.
Tropidoda parii dapparidearii	opiacourpuiii			1					10.001		1	1	<u> </u>	1					103	103	163	Section de William	110	110	acte. minution will i.
Viola primulifolia L. ssp. Occidentalis											1											MIIH- Not G1/G2, One or more forests over 0.01			
plant -	western has vistet															MIIH			Ne	Vos	No risesia	application rate, Plant occurs in a habitat unlikely to			
vascular	western bog violet	1	I	I		l l		I	l	l l	I	1	I	1		IVIII	l	I	No	Yes	No, riparian	burn and/or unlikely to have retardant applications.			

VERSION 7/6/2023

Region 5 Plants

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		/M-5	5	19	MB	Š	OL		JMA-W	1G-0F	DE	3	MAI	Σ	8	R.	SIL	A-OF	N N	WAW	₹			Habitat			tree, shrub,	
C-iAifi- Na	Camaran Nama	Š							Σ	5								5				04/02	Use over	potentially	Initial Determination from Matter I Company	Species occurs on more	succulent	
Scientific Name	Common Name																NI					G1/G2	0.01	impacted	Initial Determination from National Screen Process	than 1 unit?	lite form?	Perrennial or Annual?
Abronia umbellata ssp. breviflor	ra Pink sand-verbena																					No	No	No	NI- Beach habitat MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Achnatherum hendersonii	Henderson's ricegrass												MIIH		MIIH			MIIH		MIIH		No	Yes	Yes	potentially impacted			
Achnatherum nevadense	Nevada needlegrass												MIIH					MIIH		MIIH		No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Achnatherum richardsonii	Richardson's ricegrass					MI	IIH	ı	MIIH									MIIH		MIIH		No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
													MIIH		MIIH			MIIH		MIIH						Yes - Impacts not expected		
																									Will of Willi'l G 1/GZ, GSe over 0.01 application rate, habitat potentially	across entire population in one year. Final		
Achnatherum wallowaense	Wallowa ricegrass																					Yes	Yes	Yes		determination MIIH.	no	perennial
Adiantum jordanii	California maiden-hair											MIIH				MIIH			MIIH			No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
	D: 1					MI	IIH																		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Agoseris aurantiaca var. carnea					+	+					MIIH			MIIH						-	MIIH	No	Yes	Yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Agoseris elata Agrostis howellii	Tall agoseris Howell's bentgrass			_		_				MIIH										-		No	Yes	Yes	potentially impacted MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Agrostis mertensii	Northern bentgrass			-	-	NI													+	1		Yes No	Yes	No	NI-Alpine			
_	-												MIIH	MIIH		MIIH	NI	MIIH		MIIH						Yes - Impacts not expected		
																									Will of William O 1/Oz, Ose Over 0.01 application rate, habitat potentially	across entire population in one year. Final		
Albatrellus avellaneus	Fungus																					Yes	Yes	Yes	reduce determination to MIIH	determination MIIH.	no	
Allium campanulatum	Sierra onion					MI	IIH		MIIH													No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
								ı	MIIH									MIIH								Yes - Impacts not expected		
																									Will of Will 1 G 1/GZ, Gae over 0.01 application rate, habitat potentially	across entire population in one year. Final		
Allium dictuon	Blue mountain onion																					Yes	Yes	Yes		determination MIIH.	no	perennial
Allium geyeri var. geyeri	Geyer's onion																			MIIH		No	Yes	Yes	potentially impacted			
Allium peninsulare	Peninsular onion															MIIH						No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Ammannia robusta	Ammannia	NI						1	NI													No	No	No	NI- Shoreline and islands along the Columbia River, in riparian mudflats, lakeshores			
Anastrophyllum minutum	Liverwort										MIIH	MIIH	MIIH	MIIH		MIIH		MIIH	MIIH	MIIH	MIIH	No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
, alasa spinyilain niinatain	2.75.7751									MIIH				MIIH		MIIH	NI		MIIH		MIIH	NO				Yes - Impacts not expected		
																									Will of Willi'l G 1/GZ, GSe over 0.01 application rate, habitat potentially	across entire population in one year. Final		
Andreaea schofieldiana	Moss																					Yes	Yes	Yes	reduce determination to MIIH	determination MIIH.	no	
Anemone patens var. multifida	Pasqueflower					MI	IIH															No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Antennaria corymbosa	Meadow pussy-toes		MIIH					ľ	MIIH													No	Yes	Yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, riparian buffers likely to provide protection			
Arabis crucisetosa	Cross-haired rockcress							ľ	MIIH													No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Arabis modesta	Rogue canyon rockcress															MIIH						No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Arabis olympica	Olympic nuttall's rockcress						NI															Yes	No use on Forest	NI-Scree	NI-Scree, No use on forest			
Arctoparmelia incurva	Lichen			MIIH																		No	No	Yes, wildfire is a threat	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but fire is a threat to the species			
Arctostaphylos hispidula	Gasquet manzanita															MIIH						N-	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Arnica viscosa	Shasta arnica										NI	NI				NI			NI		NI	No	Yes	No	NI-Scree			
Artemisia campestris ssp.		NI																						NI-Sandy, open				
borealis var. wormskioldii	Northern wormwood				-												NI	-	-			No	No use on	areas, riparian	NI-Sandy, open areas, riparian			
Artemisia pycnocephala	Coastal sagewort				-							MIIH				MIIH		-	MIIH		MIIH	No	Forest	No	NI- No use on forest, coastal beach plant MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Asplenium septentrionale	Grass-fern																					No	Yes	No	occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
																				MIIH					MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant			
Asplenium viride	Green spleenwort																					No	Yes	No	applications.			
						MI	IIH		MIIH									1								Yes - Impacts not expected across entire population in		
																									impacted, Exclusion mapping recommended on forests over 0.01 to	one year. Final		
Astragalus arrectus Astragalus arthurii	Palouse milk-vetch Arthur's milk-vetch		-	+	+				MIIH						-			-	+-	-		Yes	Yes	Yes	reduce determination to MIIH MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	determination MIIH.	no	perennial
nouayaius ai ii iui ii	Attitut a Hilly-vetCH			+	+	+	NI		***************************************									+	+	+		No	No use on	162	min - 1401 O 1702, 140 use over 0.01, habitat potentially impacted			
Astragalus australis var. cottoni	II.			$\perp$		$\perp$												1				No	Forest	NI- Alpine,	NI- Alpine, No use on Forest			
Astragalus cusickii var. cusickii Astragalus diaphanus var.	Cusick's milk-vetch South fork john day milk-		-	+	+	+	+		MIIH				MIIH	-	MIIH			MIIH	+-	+		No	No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
diurnus	vetch																					No	Yes	Yes	potentially impacted			

Marie Section			1 4	1	١۵	Ιø	-	- L	a	1~	S	-	-	I <del>-</del>	1-	S		~	Iα	5	_		1	1		T	****	
Margine marker   Marg			3-W/	S	18	₩	OKA	OLY	A-W/	9	DES	₹	MA	Ε̈́	8	R	SIL	A-OF	N	WAW	₹			Habitat			tree, shrub,	
Part			S.						Š	18								D N					1	l. ,		·		
Manufact Service Members   Manufact Service Me												MIIH										G1/G2	0.01			than 1 unit?	life form?	Perrennial or Annual?
Morey Amendment of Manusch (Manusch)	Astragalus lemmonii	Lemmon's milk-vetch		MIIL			MIIL	NII											1			Yes	No	riparian				
Magning members of members of the proper series of	Astragalus microcystis	Least bladdery milk-vetch		IVIIII			IVIIII	INI														No	Yes	Yes	potentially impacted			
Mangalang Mang	Astragalus misellus var. misellu	Pauper milk-vetch											MIIH					MIIH				No	Yes	Yes	potentially impacted			
Designation   Product of the progression   Product of the produc	Astragalus peckii	Peck's milk-vetch									MIIH	MIIH			MIIH							No	Yes	Yes	potentially impacted			
Part   Part	Astragalus tegetarioides	Bastard kentrophyta											MIIH		MIIH							No	Yes	Yes				
Mathematic plane   Mathematic														MIIH								Yes	No	Yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Mathematican   Math	Barbilophozia lycopodioides	Liverwort								MIIH		MIIH	MIIH	MIIH				MIIH		MIIH	MIIH	No	Yes	Yes				
Processed Company   Proc	Bartramionsis lescurii	Moss				MIIH		NI														No	No	No				
Part of the suppose   Part of the suppose	Bartramiopolo foccarii	111000														MIIH						NO	1.0	1.0	MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant			
Decision successional Supersupersupersupersupersupersupersupers	Bensoniella oregana	Bensonia																				No	Yes	No, riparian	applications.Riparian buffers likely to provide protection			
Part of such standard   Part	Blepharostoma arachnoideum	Liverwort									MIIH			MIIH			NI		MIIH		MIIH	No	Yes	Yes				
Percent selection	Boechera atrorubens	Sickle-nod rockcress								MIIH				MIIH				MIIH				No	Yes	Yes				
Matter problems   Matter pro		•		-							+									NI	NI	Yes	Yes					
Decidence occopied   M. Adam concorder   M.																				MIIH								
Output   Description   Descr	·																					No	Yes	No	applications.			
Desprish concerned   1	Bolandra oregana	Oregon bolandra	MIIH	MIIH	MIIH		MIIH	NII					MIIH		MIIH				-	MIIH		No	No	Yes				
Consider conversed	Botrychium ascendens	Upward-lobed moonwort		IVIIII I		IVIIII I	IVIIII	141	IVIIII I						IVIIII 1							No	Yes	Yes				
Controllation (Controllation (Cont	Botrychium campestre	Prairie moonwort											MIIH							MIIH		No	Yes	Yes	potentially impacted			
March   Marc	Botrychium crenulatum	Crenulate moonwort		MIIH			MIIH		MIIH			S	MIIH		MIIH			MIIH		MIIH		No	Yes	Yes				
March   Marc	Botrychium hesperium	Western moonwort		MIIH			MIIH		MIIH				MIIH					MIIH		MIIH		No	Yes	Yes				
Bellythin Briefer   Service mountain   Service mo	Zou you wan nooponam			MIIH			MIIH		MIIH		+		MIIH					MIIH		MIIH		NO			poormany impactor	Yes - Impacts not expected		
Enclosed minimum   Service mornant   Service m																												
Mornor	Botrychium lineare	Slender moonwort																				Yes	Yes	Yes			no	perennial
Excipation montanum   Mountain graps-from   Mountain graps-from   Mult	Botrychium lunaria	Moonwort											MIIH	MIIH	MIIH			MIIH		MIIH		No	Yes	Yes				•
Septy-chium paradoxum   Twin-spiked moorward   Mini	•												MIIH	MIIH	MIIH			MIIH		MIIH	MIIH	NO	,	,	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Stalled monwort	-	<u> </u>		MIIH	+		MIIH	-	MIIH		-		MIIH		MIIH			MIIH	+	MIIH		No	Yes	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Sale de monward	Botrychium paradoxum	Twin-spiked moonwart		MIIH		MIIH	MIIH	_	MIIH				MIIH					MIIH		MIIH		No	Yes	Yes				
Bothy-chium pumicola   Pumico grapo-firm	Botrychium pedunculosum	Stalked moonwort									ļ	ļ										No	Yes	Yes	potentially impacted			
Brachydontium olympicum Moss  Dear Broadsea  Dear B	Botrychium pumicola	Pumice grape-fern									MIIH	MIIH				MIIH			MIIH		MIIH	No	Yes	Yes	potentially impacted			
Sordiaca terrestris   Dwarf brodiaca											MIIH			MIIH														
Broglossur gracile Fugus	Brachydontium olympicum	Moss					-										NII					Yes	Yes No Use on	No	Only Suspected on a forest over 0.01			
Bryoria bloclor Lichen							_										INI		1		MIILI	No		Yes				
Bryum calobryoides Moss Moss Moss Moss Moss Moss Moss Mo					+		+	-			-						NI		+		IVIIII	No	No Use on	Yes	iii			
Bupleurum americanum Bupleurum Bupleurum Bupleurum Brewer's reedgrass Brewer's readgrass Brewer's reedgrass							-				-		MIIH	MIIH		MIIH	NI		MIIH		MIIH	No	Forest	Yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Bupleurum Bupleu	Bryum calobryoides	Moss			+		_	_			_									MIIH		No	Yes	Yes				
Calicium adspersum Lichen Lich	Bupleurum americanum	Bupleurum																				No	Yes	Yes	potentially impacted			
Calliergon richardsonii  Calliergon richardsonii  Callochortus greenei  Greene's mariposa-iliy  Calochortus howellii  Howell's mariposa-iliy  Calochortus longebarbatus var. peckii  Peck's mariposa-iliy  Calochortus macrocarpus var. maculosus  Calochortus macrocarpus var. maculosus  Calochortus macrocarpus var. maculosus  Calochortus macrocarpus var. maculosus  Calochortus in Milh M	Calamagrostis breweri	Brewer's reedgrass									MIIH			МІІН					MIIH			No	Yes	Yes, riparian				
Callergon richardsonii Moss  Calochortus greenei Greene's mariposa-lily  Calochortus howellii Howell's mariposa-lily  Calochortus longebarbatus var. peckii Peck's mariposa-lily  Calochortus macrocarpus var. macrocarpus var. macrocarpus var. Calochortus in macrocarpus var. macro	Calicium adspersum	Lichen											NAUL I		NAUL I				-		MIIH	No	No	Yes				
Calochortus howellii  Calochortus longebarbatus var. peckii  Peck's mariposa-lily  Calochortus macrocarpus var. maculosus  Calochortus mariposa-lily  Milh No No No Yes Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Milh Not G1/G2, No use over 0.01, habitat potentially impacted  Calypogeia sphagnicola  Liverwort  Milh Milh Milh Milh Milh Milh Milh Milh	•												IVIIIH		MIIH			MIIH		MIIH		No	Yes	Yes	potentially impacted			
Calochortus longebarbatus var. peckii Peck's mariposa-lily Peck's maripo	Calochortus greenei	Greene's mariposa-lily					-					MIIH				MIILI						No	No	Yes				
peckii Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No Yes Peck's mariposa-lily   No No Yes Peck's mariposa-lily   No No Yes Peck's mariposa-lily   No No Yes Peck's mariposa-lily   No No Yes Peck's mariposa-lily   No No Yes Peck's mariposa-lily   No No Yes Peck's mariposa-lily   No No No Yes Peck's mariposa-lily   No No No Yes Peck's mariposa-lily   No No No Yes Peck's mariposa-lily   No No No No No Yes Peck's mariposa-lily   No No No No No No Yes Peck's mariposa-lily   No No No No No No No No No No No No No		Howell's mariposa-lily														IVIIII I						No	Yes	Yes	potentially impacted			
Calochortus macrocarpus var. maculosus Green-band mariposa-lily Calochortus umpquaensis Umpqua mariposa-lily  Calophortus umpquaensis Umpqua mariposa-lily  Calophortus umpquaensis Umpqua mariposa-lily  Calophortus umpquaensis Umpqua mariposa-lily  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Calophortus umpquaensis  Umpqua mariposa-lily  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		Peck's mariposa-lilv											MIIH		MIIH							No	Yes	Yes				
Calochortus umpquaensis Umpqua mariposa-lily Milh No No No Yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted  Calypogeia sphagnicola Liverwort Milh Milh Milh Milh Milh Milh Milh Milh	Calochortus macrocarpus var.				+			+	MIIH		1							MIIH	<u> </u>	MIIH					MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Calypogeia sphagnicola  Liverwort  Milh Milh Milh Milh Milh Milh Milh Milh		+			+		+				-								MIIL			No	Yes	Yes				
Calypogeia sphagnicola Liverwort   No Yes Yes potentially impacted   MIIIH   M					+			+		+	+			MIIH		MIIH	MIIH				MIIH	No	INO	res	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
	Calypogeia sphagnicola	Liverwort	-		+	_	MIIH	_	MIIH	-	_	-	MIIH	-	_		_	MIIH	+			No	Yes	Yes				
Calyptrigium roseum Kosy pussypaws	Calyptridium roseum	Rosy pussypaws																				No	Yes	Yes	potentially impacted			

Scientific Name  Common Name  Scientific Name  Common Name  Common Name  Species occurs on more succulent life form? Perrennial or Annual?			₹.	7	l <u>e</u>	BS	3	۲	4	<u>۳</u>	ES	\ <u>\{</u>	AL.	Ε	동	RS	2	<u>۳</u>	<b>₽</b>	8	=		1	Τ			tree,	
Part			RG-V	8	6	Σ	ğ	0	A-A		٥	ļ <u>"</u>	Σ	Σ	8	~	S	MA-6	5	N N	>			1		C		
March   Marc	Scientific Name	Common Name	ם ס						5									] 5				G1/G2	1	l. ,	Initial Determination from National Screen Process			Perrennial or Annual?
Part Confect Segret   Part Confect Segret																MIIH												perennial - able to withstand
Control   Cont																												•
Section   Process   Proc																						Yes	Yes	Yes	reduce determination to MIIH	no	no	
Control Process	Camissonia pusilla	Washoe suncup				MIIL	-			-	1	MIIH						+	+			No	No	Yes				
Composition of Manual Members 1	Campanula lasiocarpa	Alaska harebell				IVIIII						ļ			ļ	ļ				ļ		No	No	No	burn and/or unlikely to have retardant applications.			
Control profession   Control	Campylium stellatum	Moss									МІІН	MIIH	МІІН	MIIH	МІІН	MIIH		МІІН	МІІН	MIIH		No	Yes	Yes				
Content without the content with the c	Cardamine pattersonii	Saddle Mountain bittercress															NI					No	Forest	Yes	NI- No use on forest			
Control property   Control pro	Carex anthoxanthea	Yellow-flowered sedge						NI														No		Yes				
Construction	Carex atrosquama	Blackened sedge											MIIH							MIIH		No	Yes	Yes				
Canada   C	Carex brevicaulis	Short stemmed sedge															NI					No		Yes				
Control Security   Control Sec	Carex capillaris	Hairlike sedge		MIIH			MIIH													MIIH		No	Yes	Yes, riparian				
Consecution   Consequent   Co											MIIH	MIIH		MIIH		MIIH				MIIH	MIIH							
Control studies	Carex capitata	Capitate sedge					MILL															No	Yes	No, riparian	applications.			
Construction	Carex chordorrhiza	Cordroot sedge					IVIIII															No	Yes No Use on	Yes, riparian				
Control Cont	Carex circinata	Coiled sedge						NI														No		Yes				
Control Accordance   Control	Carex comosa	Bristly sedge										MIIH		МІІН		МІІН						No	Yes	Yes, riparian	buffers likely to provide protection			
Control Activity   Control Act	Carex concinna	Low northern sedge																		MIIH		No	Yes	Yes, riparian				
Concess Angles   Conc	Carex cordillerana	Cordilleran sedge		MIIH								MIIH	MIIH					MIIH		MIIH		No	Yes	Yes				
Care commandamental standard sequential standa	Carex densa	Dense sedge	МІІН		MIIH																	No	No	Yes, riparian				
Contract   Professional programs   Contract Contract   Contract	Carex diandra	Lesser panicled sedge		MIIL			_			MIIH	MIIH	MIIH	MIIH	MIIH	MIIH	MIIH		MIIH	MIIH	MIIH	MIIH	No	Yes	Yes, riparian				
Core regressions	Carex eburnea	Bristleleaf sedge																				No	No	Yes	buffers likely to provide protection			
Care Marketon Service Servic	Carey gynocrates	Vellow had sedde		MIIH			MIIH													MIIH			Voc	No riparian	occurs in a habitat unlikely to burn and/or unlikely to have retardant			
Emplions (Different nerve serighe   1		Tellow bog seage					MIIH															NO	103	ivo, ripariari	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Control (Allahor)   Cont		Different nerve sedge																				No	Yes	No, riparian				
Care idation   Idaho sedge													MIIH		MIIH			MIIH		MIIH								
Carex kismathonisis   A sodigo																									Will of Milh G1/G2, Ose over 0.01 application rate, habitat potentially	1 1		
Carex Manathemsis	Carex idahoa	Idaho sedge			-		-	_	-							MIIH		-	-			Yes	Yes	yes		determination MIIH.	no	-
Cares (Indicating a Sender sedge   1	Carex klamathensis	A sedge																				Vac	Yes	VPS	impacted, Exclusion mapping recommended on forests over 0.01 to	no	no	which are within avoidance areas.
Carex inside   Carex inside   Carex inside   Carex inside   Pales sadge	Car ox mamarionois	7. oo ago									MIIH	MIIH	MIIH	MIIH	MIIH	MIIH		MIIH	MIIH	MIIH	MIIH	163	1	,	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant	110		That decermination with
Carex macrochaetal  Large-awn sedge  Milk Milk Milk Milk Milk Milk Milk Milk	Carex lasiocarpa	Slender sedge																				No	Yes	No, riparian	applications. Riparian buffers likely to provide protection			
Carex macrochaeta Large-awn sedge Mills Mi	Carex livida	Pale sedge									MIIH			MIIH		MIIH	NI				MIIH	No	Yes	yes				
Carex media Intermediate sedge I	Carex macrocephala	Bighead sedge															NI					No	No	NI-Beaches				
Carex media Intermediate sedge	Carex macrochaeta	Large-awn sedge	IVIIIH		MIIIH	IVIIIH				MIIH							INI					No	Yes	yes,riparian	potentially impacted, but riparian buffers likely to provide protection			
Carex nardina Spikenard sedge	Carex media	Intermediate sedge					MIIH						MIIH							MIIH		No	Yes	yes,riparian	potentially impacted, but riparian buffers likely to provide protection			
Carex nardina  Spikenard sedge  Sierra nerved sedge  Sierra sedge  Sierra nerved sedge  Sierra nerved sedge  Sierra sedge  Sierra nerved sedge  Sierra sedge  Sierra nerved sedge  Sierra sedge  Sierra nerved sedge  Sierra sedge  Sierra sedge  Sierra nerved sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge  Sierra sedge	Carex micropoda	Pyrenaean sedge											MIIH					MIIH		MIIH		No	Yes	yes,riparian	potentially impacted, but riparian buffers likely to provide protection			
Carex nervina Sierra nerved sedge	Carex nardina	Spikenard sedge											MIIH	MIIH					MIIH	MIIH		No	Yes	No	occurs in a habitat unlikely to burn			
Carex pauciflora  Few-flowered sedge  Milh Milh Milh Milh Milh Milh Milh Milh	Carex nervina	Sierra nerved sedge														MIIH						No	Yes	Yes				
Carex pelocarpa  New sedge  Carex pelocarpa  New sedge  Milh	Carex obtusata	Blunt sedge						NI														No		Yes	NI- No use on forest			
Carex pelocarpa  New sedge  New sedge  New sedge  New sedge  New sedge  New sedge  No, iparian	Carex pauciflora	Few-flowered sedge				MIIH	MIIH	NI														No	Yes	yes				
Carex proposita  Smokey Mtn. sedge  Milh Milh Milh Milh Milh Milh Milh Milh	'	Ů											MIIH							MIIH								
Carex proposita  Smokey Mtn. sedge  MIII MIIIH MIIIH  Carex retrorsa  Retrorse sedge  MIIIH Not C1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection  MIIIH Not C1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection  MIIIH Not C1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection  MIIIH Not C1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection  Carex saxatilis  Russet sedge  NI NI NI NI NI NI NI NI NI NI NI NI NI N	Carex pelocarpa	New sedge	NAUL I	NAUL I	NAULI	NAULI	NAULI															No	Yes	No, riparian	applications. Riparian buffers likely to provide protection			
Carex retrorsa  Retrorse sedge  Retrorse sedge  Retrorse sedge  Retrorse sedge  Retrorse sedge  Retrorse sedge  Retrorse sedge  MIIH	Carex proposita	Smokey Mtn. sedge	IVIIIH	IVIIIH	MIIIH	IVIIIH	IVIIIH			ļ												No	Yes	No	occurs in a habitat unlikely to burn			
Carex rostrata  Beaked sedge  MIIH MIIH MIIH MIIH  Carex saxatilis  Russet sedge  MIIH Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection  MIIH MIIH MIIH  MIIH MIIH  MIIH MIIH  MIIH MIIH  No Yes Yes, riparian  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection  Canadian single-spike  NI NI NI NI NI NI NI NI NI NI NI NI NI N	Carex retrorsa	Retrorse sedae								MIIH	MIIH		MIIH	MIIH	MIIH			MIIH		MIIH		No	Yes	No. rinarian	occurs in a habitat unlikely to burn and/or unlikely to have retardant			
Carex saxatilis  Russet sedge  NI  NI  NI  NI  NI  NI  NI  NI  NI  N		,		MIIH	1	MIIH	MIIH			+	1					+		+	+	+		INO	Vac	1	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Canadian single-spike NI NI NI NI				+	+	+	+	+	+	+	+	MIIH	MIIH	<del>                                     </del>		+	<del>                                     </del>	MIIH	+	MIIH	-	No	res	1	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
	Carex saxatilis	ū				NI	NI	NI	-		+			-		$\vdash$	-	+	+	$\vdash$	-	No	Yes	Yes, riparian	potentially impacted, but riparian butters likely to provide protection			
	Carex scirpoidea ssp. scirpoid																					No	Yes	NI-Alpine	NI-Alpine			

		K	COL	e e	BS		3	Γ	4	NC .	ES	<b>\</b>	AL	E	8	RS	2	NC N	AP	8							tree,	
		RG-K	٦٥	١	Σ	Ì	5	0	A-A	RG-C	٥	Ē	Σ	Σ	8	~	S	MA-C	5	N A	>				Habitat	Constitution of the Consti	shrub,	
Scientific Name	Common Name	5							5	0								j				G1	L/G2	Use over 0.01	potentially impacted	Species occurs on more Initial Determination from National Screen Process than 1 unit?	succulent life form?	Perrennial or Annual?
Carex scirpoidea ssp.	Alaskan single-spiked												NI								NI		,					
stenochlaena	sedge			_	MIIH	M	IIH N	JI									-		_		_	No		Yes	NI- Cliffs	NI- Cliffs MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Carex stylosa	Long-styled sedge							"														No		Yes	Yes, riparian	potentially impacted, but riparian buffers likely to provide protection MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant		
Carex subnigricans	Dark alpine sedge												MIIH							MIIH		No		Yes	No	occurs in a habitat unlikely to burn		
			MIIH			М	IIH																			MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant		
Carex sychnocephala	Many-headed sedge					_							MIIH				+	MIIH	-	MIIH	+	No		Yes	No, riparian	applications. Riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Carex tahoensis	Tahoe sedge		MIIH			_										1	_		_		_	No		Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Carex tenera var. tenera	Quill sedge																					No		Yes	Yes, riparian	potentially impacted, but riparian buffers likely to provide protection		
Carex tenuiflora	Sparseflower sedge		MIIH			М	IIH															No		Yes	Yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Carex vallicola	Valley sedge					М	IIH															No		Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Carex vernacula	Native sedge										MIIH	MIIH	MIIH	MIIH				MIIH	MIIH	MIIH	MIII	H No		Yes	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Castilleja chlorotica											MIIH	MIIH					1							Voc		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Castilleja collegiorum	Green-tinged paintbrush Collegial paintbrush					-						MIIH				-	-	-			-	No Yes	s	No	Yes	potentially impacted  MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Castilleja cryptantha	Obscure indian-paintbrush				MIIH	М	IIH										1							Ves		MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
	·		+													+	+	MIIH		MIIH	+	Yes	S	165		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Castilleja flava var. rustica	Rural paintbrush					_											+		-	MIIH	+	No		Yes	yes	potentially impacted MilH-G1/G2, One or more forests over 0.01 application rate, Plant occurs		
Castilleja fraterna	Fraternal paintbrush																					Vas		Yes	No, riparian	in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection		
	F																1			MIIH	$\top$	100	,			MIIH-G1/G2, One or more torests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Castilleja rubida	Purple alpine paintbrush																					Yes	s	Yes		Riparian buffers likely to provide protection		
Castilleja schizotricha	Split-hair paintbrush															MIIH						No		Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Castilleja thompsonii	Thompson's paintbrush													MIIH								No		No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Castilleja viscidula	Sticky paintbrush												MIIH					MIIH		MIIH		No		Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Cephaloziella spinigera	Liverwort									MIIH	MIIH	MIIH		MIIH		MIIH	NI		MIIH		MIII	H No		Yes	Yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Chaenactis suffrutescens	Shasta pincushion															MIIH								Voc		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
	·		+		MIIH	М	IIH									+	+				+	No		165	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant		
Chaenactis thompsonii	Thompson's chaenactis					_							MIIH				-		-	_	-	No		Yes	no	occurs in a habitat unlikely to burn  MIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Chaenactis xantiana	Desert chaenactis					_										MIIH	NI		_	_	_	No		Yes	yes	potentially impacted MilH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Chamonixia caespitosa	Fungus																					No		Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant		
Cheilanthes covillei	Coville's lip-fern															MIIH						No		Yes	no	occurs in a habitat unlikely to burn		
Cheilanthes feei	Fee's lip-fern										NI	NI	NI		NI					NI		No		Yes	NI-cliffs	NI-cliffs MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant		
Cheilanthes intertexta	Coastal lipfern											MIIH				MIIH						No		Yes	No	occurs in a habitat unlikely to burn		
Chlorogalum angustifolium	Narrow-leaved amole															MIIH						No		Yes	yes	MIIH- Not G1/G2, One or more torests over 0.01 application rate, habitat potentially impacted		
Chloropyron maritimum ssp.	Dt. Davea hirdle healt																NI							No use on	NI-coastal salt	All Alexander from the		
palustre Choiromyces venosus	Pt. Reyes bird's-beak Fungus		+	+		_	-							MIIH		+	+		+		MIII	H No		forest No	marshes ves	NI- No use on forest  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Chrysolepis chrysophylla var.	-	MIIH		MIIH	1		N	NI.									1				$\top$	140						
chrysophylla	Golden chinquapin		MIIH	_		M	IIH									1	-		-		_	No		No	Yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant		
Chrysosplenium tetrandrum	Northern golden-carpet		IVIIII I			IVI																No		Yes	no	occurs in a habitat unlikely to burn MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant		
Cia andia and dana and aria	T:															MIIH	NI				MIII	Н		.,		occurs in a habitat unlikely to burn and/or unlikely to have retardant		
Cicendia quadrangularis	Timwort		MIIH	MIIH	I MIIH	М	IIH									+	-		-	-	+	No		Yes		applications. Riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant		
Cicuta bulbifera	Bulb-bearing water-hemlock																					No		Yes		occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection		
Cirsium remotifolium var.		MIIH		MIIH													1											
remotifolium	Weak thistle		-	-		_										+	NI		-		_	No		No No use on	yes NI- bluffs along	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Cladidium bolanderi Claytonia multiscapa ssp.	Lichen Pacific lance-leaved					M	IIH N	JI								-			_	_	_	No		forest	seashore	NI-Bluffs along seashore, No use on forest		
pacifica	springbeauty	L		[				-			L	L	L									No		Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Coeloglossum viride	Long-bract frog orchid		MIIH			М	IIH															No		Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Collinsia sparsiflora var. brucea	ae Few-flowered collinsia	MIIH		MIIH																		No		No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Collomia mazama	Mt. Mazama collomia					$\top$					MIIH	MIIH		İ		MIIH			MIIH		$\top$	No		Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Comastoma tenellum	Slender gentian			$\top$	$\dashv$	M	IIH		MIIH				MIIH		1	1	1	MIIH	$\top$	MIIH	+			Vac	VOC	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Comasionia lenellum	Sienuei gentian	<u> </u>												<u> </u>		1						No		168	yes	poteriuary impacieu		

		₹	7		SS	3		[₹	l K	ES	5	7	F	E	S	2	×.	4	}	=		<del> </del>	1	tree,	
		₽-92   W-92	8	٥	Ξ	ě	ō	A-K	RG-C	₫	2	Ž	Σ	8	~	S	MA-C		WA	>		l	Habitat	shrub,	
Scientific Name	Common Name	٥						5									5				G1/G2	Use over 0.01	potentially impacted	Species occurs on more   succuler   Initial Determination from National Screen Process   than 1 unit?   life form	? Perrennial or Annual?
Conostomum tetragonum	Moss									MIIH			MIIH							MIIH	No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn	
Coptis aspleniifolia	Spleenwort-leaved goldthread			MIIH	MIIH	MIIH	NI															Vas	1/05	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted	
				MIIH	MIIH	MIIH	NI						MIIH						1	MIIH	No	les .	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Coptis trifolia Cortinarius barlowensis	Three-leaf goldthread Fungus												MIIH			NI		MIIH		MIIH	No No	No	yes	potentially impacted  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	
Cortinarius pavelekii	Fungus															NI					Yes	No use on forest	yes	NI- No use on forest	
·		MIIH		MIIH					MIIH				MIIH		MIIH					MIIH				MIIH- Not G1/G2, One or more torests over U.U1 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant	
Corydalis aquae-gelidae	Cold-water corydalis							-	-								MIIH		+		No	Yes	no, riparian	applications. Riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cryptantha grandiflora	Clearwater cryptantha																IVIIII				No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cryptantha milo-bakeri	Milo baker's cryptantha			ļ											IVIIII						No	Yes	yes	potentially impacted	
Cryptantha rostellata	Beaked cryptantha	MIIH		MIIH		-					MIIH				MIIH		MIIH		MIIH		No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cryptantha simulans	Pine woods cryptantha		MIIH	-		MIIH			-			MIIH							MIIH		No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cryptogramma stelleri	Steller's rockbrake					-		-	-						MIIH	-			-		No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cryptomitrium tenerum	Liverwort	MIIILI													IVIIII						No	Yes	yes	potentially impacted MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to	
Cusickiella douglasii	Douglas' draba	MIIH																			No	No	no	burn and/or unlikely to have retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant	
Cymopterus nivalis	Snowline spring-parsley											MIIH									No	Yes	no	occurs in a habitat unlikely to burn	
Company to a suppriment to	Chart nainted asmerus									MIIH					MIIH									MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant	
Cyperus acuminatus	Short-pointed cyperus									MIIH				MIIH			MIIH		MIIH		No	Yes	no, riparian	applications. Riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cyperus lupulinus ssp. lupulinu				-		-		+	MIIH			MIIH			MIIH		MIIH	MIIH	MIIH		No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cypripedium fasciculatum	Clustered lady's-slipper		MIIH			MIIH		1											+		No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Cypripedium parviflorum  Dactylina arctica	Yellow lady's-slipper Lichen			NI		NI		-	-										+		No	Yes	yes NI-Alpine	potentially impacted  NI-Alpine	
•		MIIH		MIIH		MIIH															No	les .	Ni-Aiplile	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Damasonium californicum	Fringed waterplantain							+	+						MIIH				+		No	Yes	yes	potentially impacted  MIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Delphinium nudicaule  Delphinium nuttallii	Red larkspur Nutall's larkspur							+	MIIH				MIIH						+		No No	Yes No	yes	potentially impacted  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	
Delphinium viridescens	Wenatchee larkspur					MIIH															Voc	Yes	yes, riparian	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection	
2 orprimmarii viinadoconio	Weilateries lamepai	MIIH	MIIH	MIIH	MIIH	MIIH	NI	MIIH											+		163		7,	MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant	
Dermatocarpon meiophyllizum	Lichen														L						No	Yes	no, riparian	applications. Riparian buffers likely to provide protection	
Dicentra pauciflora	Few-flowered bleedingheart														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted	
Didymodon norrisii	Moss														MIIH						No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn	
Diphasiastrum complanatum	Ground cedar									MIIH		MIIH	MIIH				MIIH		MIIH	MIIH	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted	
Diplacus bolanderi	Bolander's monkeyflower														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted	
Diplacus congdonii	Congdon's monkeyflower														MIIH						No	Yes	VPS	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted	
Diplacus cusickii	Cusick's monkeyflower	MIIH		MIIH		+		MIIH											+		140	No	,sc	hilli- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.	
Dipiacus cusickii	Cusick's Monkeyllower							1			MIIH								1		No	NO			
Diplacus tricolor	Three-colored monkeyflower						NI	-	-							NI			+		No	No No use on	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	
Dodecatheon austrofrigidum	Frigid shootingstar					MIIH		-	-										+		Yes	forest	no, riparian	NI- No use on forest  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Draba aurea	Golden draba					MIIH	NII	-	-										+		No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
Draba cana	Lance-leaved draba														MIIH						No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant	
Draba howellii	Howell's whitlow-grass														IVIIII						No	Yes	no	occurs in a habitat unlikely to burn MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs	
Draba taylori	Taylor's draba					MIIH															Yes	Yes	No	in a habitat unlikely to burn and/or unlikely to have retardant applications.	
Dracocephalum parviflorum	American dragonhead											MIIH					MIIH		MIIH		No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn	
Dryas drummondii var. drummondii	Drummond's mountain- avens		MIIH		MIIH	MIIH	NI														No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn	
			MIIH			MIIH															1.0			MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant	
Dryopteris cristata	Crested shield-fern				1	1			MIII	MILL	MIII :	MIRT	MIII	MI		NI:	NAPE I	NA	NA	M	No	Yes	no, riparian	applications. Riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant	
Elatine brachysperma	Short seeded waterwort								MIIH	MIIH	MIIH	MIIH	MIIH	MIIH		INI	MIIH	MIIH	MIIH	MIIH	No	Yes	no, riparian	applications. Riparian buffers likely to provide protection	
Eleocharis bolanderi				+	+	+	+	1	+		MIIH	MIIH		MIIH		<del>                                     </del>	MIIH	1	MIIH		NO	Voc	no, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	
LIGOCHARIS DOIANGEN	Bolander's spikerush	<u> </u>		1	1				1	<u> </u>		<u> </u>	<u> </u>	1	<u> </u>	<u> </u>	1	1		<u> </u>	No	162	yes	potentially impacted	

Specimen   Common Name   Specimen Common Na	expected lation in	ts not expecte population in	sh suc life	tree, shrub, acculent e form?	t Perrennial	or Annual?
Second   Common Name	expected lation in	ts not expecte population in	re suc life	cculent		or Annual?
March   Marc	expected lation in	ts not expecte	ted	e form?	? Perrennial	l or Annual?
Enterlights bringings   Moss	lation in	population in				
The process of the	lation in	population in				
## Antidother accoldabilities   Purples   Purp	lation in	population in				
Fundamental Continues of Continues and Con		nal	no			
Entote-procedure   Fungues   Fungu	H. n		no			
Enterthedroof facicularies   March   M						
Entotholodon fascicularis  Unerwort  Dischard Control						
Entended for facicularies  Expended on Seguential Dependence Selection of the Control of the Con						
Epidolium accignary   Congon willow-herb						
Epidoministry pygmaea   Sisklyou willow-herb						
Effective programs   Down't evening-printone						
Erigeron evinus  Siskiyou daisy  Erigeron cervinus  Erigeron davisi  E						
Erigeron aliceae Alice's fleabane II II II II II II II II II II II II II						
Erigeron cervinus Sieklyou daisy						
Erigeron davisiti Engelmann's daisy   Milet						
Erigeron daysigi Engelman's dalsy  White cushion erigeron  White cushion  White cushion erigeron  White cushion erigeron  White cushion erigeron  White cushion erigeron  White cushion erigeron  Whit	<del> </del>					
Erigeron disparipilus White cushion erigeron   No   Ves   No   No   Ves   No   No   No   No   No   No   No   N	$\frac{1}{1}$					
Erigeron howellis  Cregor daley  Mill  Figeron peregrinus var.  Thompson's wandering dalisy  Cliff daisy  No No  No  No  No  No  No  No  No  No	<del>-</del>					
Erigeron peregrinus var. Thompson's wandering daisy  Thomp						-
Erigeron petregrinus var. In Imposon's wandering daisy  Cilif daisy  Cilif daisy  Cilif daisy  No No Ves  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  No No Ves  Nataphine  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  Cilif daisy  Cilif daisy  No No Ves  Nataphine  Nataphine  Cilif daisy  No No Ves  Nataphine  Cilif daisy  Cilif daisy  Cilif daisy  Cilif daisy  Cilif daisy  Cilif daisy  No No Ves  Nataphine  Nataphine  Cilif daisy						
Erigeron petrophilus Cliff daisy  Erigeron salishii Salish fleabane  NI NI NI NI NI NI NI NI NI NI NI NI NI N						
Erigeron petrophilus Ciff daisy	$\longrightarrow$					
Erigeron stanselliae Stansell's daisy  Erigeron stanselliae Stansell's daisy  Erigeron stanselliae Stansell's daisy  Erigeron stanselliae Stansell's daisy  Erigeron stanselliae Stansell's daisy  Milh NI  Erioderma sorediatum  Lichen  Milh NI  Milh No  Ves  yes  potentially impacted, but No known occurrences on FS  Milh Not G1/G2, One or more forests over 0.01 application rate, habitat  Eriogonum prociduum  Prostrate buckwheat  Eriogonum salicornioides  Playa buckwheat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh No  No  Yes  yes  No  no  andir-G1/G1/G1/G2, No use over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 application rate, habitat  Milh Not 13/G2, One or more forests over 0.01 app						
Erigeron stanselliae Stansell's daisy						11
Erigeron stanselliae Stansell's daisy	/ /				*	able to withstand soil until they
Erioderma sorediatum  Lichen  Milh Ni  No  No  No  No  No  No  No  No  No	/ /					a couple years.
Eriogonum cusickii Cusick's buckwheat	no		no		Final deterr	mination MIIH.
Eriogonum cusickii  Cusick's buckwheat  Lobb's buckwheat  Lobb's buckwheat  Lobb's buckwheat  Eriogonum prociduum  Prostrate buckwheat  Eriogonum salicornioides  Playa buckwheat  Eriogonum umbellatum var.  Eriogonum umbellatum var.						
Eriogonum lobbii Lobb's buckwheat   No Yes yes potentially impacted   No Yes yes potentially impacted   MilH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted   MilH-Not G1/G2						
Eriogonum prociduum  Prostrate buckwheat  Prostrate buckwheat  Prostrate buckwheat  No no and/or unlikely to have retardant applications.  MillH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Prostrate buckwheat  MillH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  MillH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted						
Eriogonum salicornioides Playa buckwheat Milh No Yes yes Milh-Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted  Eriogonum umbellatum var.						
Eriogonum umbellatum var.						
glaberrimum Green buckwheat   No No yes MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	-+		-			
Eriogonum villosissimum Acker Rock wild buckwheat						
Eriophorum chamissonis Russet cotton-grass						
MIIH MIIH MIIH MIIH MIIH MIIH MIIH MIIH						
Eriophorum viridicarinatum Green keeled cotton-grass occurs in a habitat unlikely to burn and/or unlikely to have retardant No Yes no, riparian applications. Riparian buffers likely to provide protection						
Eritrichium nanum var.  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant						
elongatum Pale alpine forget-me-not No Ves no occurs in a habitat unlikely to burn    No Ves no occurs in a habitat unlikely to burn   MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to						
burn and/or unlikely to have retardant applications. Riparian buffers likely						
Eryngium petiolatum Oregon coyote-thistle No no, riparian to provide protection No no, riparian to provide protection						
Erythranthe hymenophylla monkeyflower NI-cliffs NI-cliffs NI-cliffs						
Erythranthe inflatula Disappearing monkeyflower MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant						
MIIH- Not G1/G2. One or more forests over 0.01 application rate, habitat						
Erythranthe patula Stalk-leaved monkeyflower Milh Milh Milh Milh Milh Milh Milh Milh	$\longrightarrow$		-		-	
Erythranthe pulsiferae Pulsifer's monkey-flower	1					
Erythranthe suksdorfii Suksdorf's monkey-flower   100						
Erythronium elegans Coast range fawn-lily No use on forest yes NI- No use on forest						
Erythronium howellii Howell's adder's-tongue MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	<u></u>					
Erythronium quinaultense Quinault fawnlily	<u></u>					
MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			-			
Eschscholzia caespitosa Gold poppy			ı			

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		/\ -5	8	15	Σ	OKV	00	A-W	9	DE	₹	MA	Σ	Ö	R.	SIL	A-OF	<u>B</u>	WAW	₹			Habitat			tree, shrub,	
		l g						ΣŠ	12								2					Use over	potentially	·	ecies occurs on more	succulent	
Scientific Name	Common Name									MIIH			MIIH							MIIH	G1/G2	0.01	impacted	Initial Determination from National Screen Process  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	than 1 unit?	lite form?	Perrennial or Annual?
Eucephalus gormanii	Gorman's aster							_					1					MIIH			No	Yes	yes	potentially impacted			
Eucephalus vialis	Wayside aster		MIIH		MIIH	MIIH		+								-		MIIIH	-	MIIH	No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Eurybia merita	Arctic aster																	MIIH			No	Yes	no	occurs in a habitat unlikely to burn  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Frasera umpquaensis	Umpqua swertia														МІІН			MIIH		MIIH	No	Yes	yes	potentially impacted			
Fritillaria camschatcensis	Black lily			MIIH	MIIH								MIIH			NI					No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Galium serpenticum ssp. warnerense	Warner mt. bedstraw										MIIH										No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
										MIIH	MIIH				MIIH			MIIH		MIIH				Yes -	- Impacts not expected		
																								Will of Will 1 G 1/G2, Ose over 0.01 application rate, habitat potentially	ss entire population in year. Final		
Gastroboletus vividus	Fungus																				Yes	Yes	yes	reduce determination to MIIH determination d	rmination MIIH.	no	
Gaultheria hispidula	Creeping snowberry		MIIH		MIIH																No	No	yes, riparian	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection			
Gentiana douglasiana	Swamp gentian				MIIH	MIIH		1													1	Van	1000	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
			+		MIIH	MIIH												+			No	res	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Gentiana glauca Gentiana newberryi var.	Glaucous gentian					-	_	+	-	MIIH	MIIH		-	-	MIIH	-	-	MIIH	+	MIIH	No	Yes	yes	potentially impacted			
newberryi	Newberry's gentian																				No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
															MIIH												perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to			nitrates in soil until they diminish in a couple years.
Gentiana plurisetosa	Elegant gentian																				Yes	Yes	yes	reduce determination to MIIH	1	no	Final determination MIIH.
Gentiana prostrata	Moss gentian																		MIIH		No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
	-														MIIH												perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially			nitrates in soil until they diminish in a couple years.
Gentiana setigera	Waldo gentian																				Yes	Yes	yes	impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	ı	no	Final determination MIIH.
Geum rivale	Water avens		MIIH			MIIH															No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Geum rossii var. depressum	Ross' avens					NI															No	Yes	NI-cliffs and talus	NI-cliffs and talus			
·																			MIIH		No		iai a	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Geum rossii var. turbinatum	Slender-stemmed avens					-										NI			+		No	No use on	no	occurs in a habitat unlikely to burn			
Gilia millefoliata	Seaside gilia			MIIH	-	-	+	MIIH	1				-	-		-	-	-	+		Yes	forest	NI-dunes	NI- Dunes, No use on forest  MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to			
Githopsis specularioides	Common blue-cup							ļ			NAIII I										No	No	no	burn and/or unlikely to have retardant applications.  MIIH-G1/G2, No use over U.U1, Plant occurs in a habitat unlikely to burn			
Cratiala hataraaanala	Dagga laka hadga bugaan										MIIH													and/or unlikely to have retardant applications. Riparian buffers likely to			
Gratiola heterosepala	Boggs lake hedge-hyssop							+	MIIH	MIIH			MIIH			NI		MIIH		MIIH	Yes	No	no, riparian	provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Gymnomitrion concinnatum	Liverwort							_	-						MIIL			MIIH		MIIH	No	Yes	yes	potentially impacted	I		
															IVIIII I			IVIIII I		IVIIII					- Impacts not expected ss entire population in		
	_																							impacted, Exclusion mapping recommended on forests over 0.01 to	year. Final		
Gymnomyces fragrans Gymnomyces nondistincta	Fungus Fungus				-		-	+	1				MIIH								Yes	Yes	yes	reduce determination to MIIH determination to MIIH determination to MIIH- G1/G2, No use over 0.01, habitat potentially impacted	rmination MIIH.	no	
, ,													1		MIIH						res		, , ,	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Hackelia bella	Beautiful stickseed					MIIH		+								-			-		No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Hackelia cinerea	Gray stickseed	MIIH						MIIH											-		No	Yes	no	occurs in a habitat unlikely to burn  MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to			
Hackelia diffusa var. diffusa	Diffuse stickseed	IVIIII I						IVIIII I													No	No	no	burn and/or unlikely to have retardant applications.			
Hackelia hispida var. disjuncta	Sagebrush stickseed					MIIH															No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
Hackelia hispida var. hispida	Rough stickseed					NI															No	Yes	NI-cliffs, talus	NI-cliffs, talus			
Hackelia taylorii	Taylor's stickseed					MIIH															Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Haplomitrium hookeri	Liverwort								MIIH	MIIH			MIIH			NI				MIIH	No	Yes	No	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
•										MIIH	MIIH	MIIH	MIIH	MIIH	MIIH		MIIH	MIIH	MIIH	MIIH	NO	V		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Harpanthus flotovianus Hastingsia bracteosa var.	Liverwort				+		+	+							MIIH				+		No	res	yes, riparian	potentially impacted, but riparian buffers likely to provide protection  MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted,			
atropurpurea	Purple-flowered rush-lily																				Yes	Yes	yes, riparian	but riparian buffers likely to provide protection			
Hastingsia bracteosa var. bracteosa	Large-flowered rush-lily														MIIH						Vac	Yes	yes, riparian	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Hedysarum occidentale	Western hedysarum	MIIH	+	MIIH		+	NI	+	+	<u> </u>			+	+		+	+	+	+	-	nes No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Heliotropium curassavicum	Salt heliotrope									MIIH	MIIH	MIIH		MIIH			MIIH		MIIH		No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
·	·					+		+	+	MIIH			MIIH	+		+	+		+	MIIH	INU	1	1	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Helvella crassitunicata	Fungus					+		+	NI				NI	-		NI		-	-	NI	No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
Herbertus aduncus ssp. aduncu	us Liverwort																				No	Yes	NI-cliffs	NI-cliffs			
		-		-																				<del></del>	•		

		4	14	_	BS	}	ΓΥ	Į Ķ	l K	ES	<b>N</b>	AL	Ε	15	RS	2	8	₽.	3	Ę			Τ	tree,
		₽-92	8	٥	ĮΞ	ě	ō	A-A-W	RG-C	٥	3	Ž	Σ	0	2	S	MA-C	5	W	>			Habitat	shrub,
Scientific Name	Common Name	5						5									5				G1/G2	Use over 0.01	potentially impacted	Species occurs on more   succulent   Initial Determination from National Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   than 1 unit?   life form?   Perrennial or Annual Screen Process   than 1 unit?   than 1 unit   than 1 unit?   than 1 unit   th
Hesperocyparis bakeri	Baker's cypress														MIIH						No	Yes	VPS	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
ricoperocypano baken	Daker 3 cypress	MIIH		MIIH		MIIH	NI														NO	163	yes	MIIH- Not G17G2, One or more forests over 0.01 application rate, Plant
Heterotheca oregona	Oregon goldenaster																				No	Yes	no, riparian	occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection
Hieracium horridum	Shaggy hawkweed														MIIH					MIIH	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
Horkelia hendersonii	Henderson's horkelia														NI						Yes	Yes	NI-Alpine	NI-Alpine
Horkelia tridentata ssp. tridentat	ta Three-toothed horkelia														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
Hydrocotyle verticillata	Whorled marsh-pennywort															NI					No	No use on forest	yes, riparian	NI- No use on forest
Hypogymnia pulverata	Lichen															NI					No	No use on forest	NI-sand dunes	NI- No use on forest
Hypotrachyna riparia	Lichen								MIIH				MIIH							MIIH	Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted
Iliamna latibracteata	California globe-mallow														MIIH			MIIH		MIIH	Yes	Yes	yes, riparian	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection
Impatiens noli-tangere	Western jewel-weed				MIIH																No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
Ipomopsis tenuituba	Rydberg's gilia											MIIH		MIIH			MIIH		MIIH		No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
Isoetes minima	Midget quillwort							MIIH													Yes	No	yes, riparian	MIIH- G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection
Isoetes nuttallii	Nuttall's quillwort	MIIH		MIIH																	No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
Ivesia shockleyi	Shockley's ivesia					-	NI	<u> </u>			MIIH										No	No use on	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
lwatsukiella leucotricha	Moss			-														NI		NII	No	forest	yes Ni- aquauc,	NI- No use on forest
																							Dropped from 2019 Rare,	
																							Threatened and	
																							Endangered Non-vascular	
																							Plants, Algae, Lichen, and	
																							Fungi Species of Oregon	
																							(ORBIC 2019) due to being	
																							synonymous	
																							Jamesoniella autumnalis, a	
Jamesoniella autumnalis var. heterostipa	Liverwort																					No	common species.	NI- aquatic
Juncus hemiendytus var.	Liverwort			+	-	+		<u> </u>	-					MIIH							NO	NO	эресіез.	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian
abjectus	Least rush																				No	No	yes, riparian	buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat
Juncus howellii	Howell's rush	MIIH		MIIH		MIIH		MIIH													No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection
Juncus kelloggii	Kellogg's rush	MIIH		MIIH					MIIH												No	No	yes, riparian	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection
Juncus tiehmii	Tiehm's rush										MIIH										No	No	yes, riparian	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection
Juncus triglumis var. albescens																			MIIH		No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection
			+	+						MIIH		MIIH					MIIH		MIIH	MIIH	No	V	f	MIIH- Not G1/G2, One or more torests over 0.01 application rate, habitat
Jungermannia polaris Kalmia procumbens	Liverwort Alpine azalea		+	+	NI	NI															No No	Yes	yes, riparian NI-Alpine	potentially impacted, but riparian buffers likely to provide protection  NI-Alpine
Kalmiopsis fragrans	Fragrant kalmiopsis			+														MIIH			No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
Keckiella lemmonii	Bush beardtongue														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
Kobresia myosuroides	Bellard's kobresia											MIIH							MIIH		No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
Kobresia simpliciuscula	Simple kobresia																		MIIH		No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn
Kurzia makinoana	Liverwort														MIIH	NI					Yes	Yes	No	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.
															MIIH	NI				MIIH				WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially  Yes - Impacts not expected across entire population in
Lactarius silviae	Fungus					1			L							L	L	L			Yes	Yes	yes	impacted, Exclusion mapping recommended on forests over 0.01 to one year. Final determination to MIIH.
Lasthenia glaberrima	Smooth goldfields	MIIH		MIIH																	No	No	yes, riparian	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection
Lathrocasis tenerrima	Delicate gilia					MIIH															No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted
Lathyrus holochlorus	Thin-leaved peavine																			MIIH	Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted
Leioderma sorediatum	Lichen				MIIH		NI									NI					No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
Leptogium burnetiae	Lichen	MIIH	1	1		1			1												No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
Leptogium cyanescens	Lichen		1	MIIH	MIIH		NI														No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted
Leptosiphon bolanderi	Baker's linanthus	MIIH		MIIH																	No	No	no	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.
1 1	ı	<u> </u>											1				<u> </u>	1			1	1	1	

		3-WA	100	GIP	MBS	OKW	ОГУ	4-WA	G-OR	DES	FWI	MAL	MTH	H OCH	RRS	SIU	A-OR	UMP	WAW	WIL			Habitat			tree, shrub,	
Calantifia Nama	Common Nama	g						Σ	Š								D Z		_		C1 /C2	Use over 0.01	potentially	Initial Determination from National Course Duscos	Species occurs on more than 1 unit?	succulent	Perrennial or Annual?
Scientific Name Lewisia columbiana var.	Common Name								MIIH				MIIH					MIIH		MIIH	G1/G2	0.01	impacted	Initial Determination from National Screen Process  MIII- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to	than I unit:	ille lorilis	Perrennial or Annuals
columbiana	Columbia lewisia																				No	No	no	burn and/or unlikely to have retardant applications.			
Lewisia leeana	Lee's lewisia														MIIH			MIIH			No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
Limbella fryei	Moss															NI					Yes	No use on forest	no	NI- No use on forest			
Limnanthes alba ssp. gracilis	Slender meadow-foam														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Limnanthes floccosa ssp. bellingeriana	Bellinger's meadow-foam														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Limonium californicum	Western marsh-rosemary															NI					No	No use on forest	no	NI- No use on forest			
Lipocarpha aristulata	Aristulate lipocarpha	MIIH		MIIH				MIIH	MIIH	MIIH	MIIH	MIIH		MIIH			MIIH		MIIH		N-	Yes	yes, riparian	MIIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Listera borealis	Northern twayblade											MIIH					MIIH	+	MIIH		NO	Vac	yoo, npanan	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
					-				MIIH	-			MIIH		MIIH	NI	+	MIIH	-	MIIH	No	res	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Lobaria linita	Lichen									NI								-			No	Yes	yes	potentially impacted			
Lobelia dortmanna	Water lobelia													-	MIIH		-	+			No	Yes	NI-aquatic	NI-aquatic  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Lomatium engelmannii	Englemann's desert-parsley													<u> </u>					MILL		No	Yes	yes	potentially impacted			anno mistorial de la contidencia
																			IVIIII					WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially			perennial - able to withstand nitrates in soil until they
	D 16 % 11 %																							impacted, Exclusion mapping recommended on forests over 0.01 to			diminish in a couple years.
Lomatium erythrocarpum	Red-fruited lomatium						+											-	MIIH		Yes	Yes	yes	reduce determination to MIIH	no	no	Final determination MIIH. perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially			nitrates in soil until they
Lomatium greenmanii	Greenman's desert-parsley																				V	Yes	Wes	impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH		no	diminish in a couple years. Final determination MIIH.
Lomatum greenmanii	Oreenman's desert-parsiey					MIIH								1	+		+	+			Yes	165	yes	reduce determination to with	no	110	perennial - able to withstand
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially			nitrates in soil until they
Lomatium knokei	Desert-parsley																				Voc	Yes	ves	impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no		diminish in a couple years. Final determination MIIH.
Lomatium laevigatum	Smooth desert-parsley	MIIH		MIIH															1		No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	no .		i mai determination witti.
Lomatium ochocense	Ochoco lomatium													MIIH							Yes	No	no	MIIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Lomatium pastorale	Meadow Iomatium																MIIH	1	MIIH		res	V		MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Lomatium rollinsii	Rollins' Iomatium				+		-	MIIH											1		Yes No.	No	ves	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Lomatium suksdorfii	Suksdorf's desert parsley	MIIH		MIIH					MIIH												No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Lomatium tamanitchii	Ribseed biscuitroot	MIIH																			No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Lomatium tarantuloides	Spider biscuitroot											MIIH					MIIH		MIIH		Voc	Yes	no	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
Lomatium watsonii	Watson's desert parsley								MIIH				MIIH					+			Yes No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Lophozia gillmanii	Liverwort									MIIH	MIIH	MIIH	MIIH		MIIH		MIIH	MIIH	MIIH		No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
									MIIH				MIIH			NI		1		MIIH	NO	N-		MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian			
Lophozia laxa	Liverwort														MIIH			+			No	No	yes, riparian	buffers likely to provide protection MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Lotus stipularis	Stipuled trefoil											MIIH						-			No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Luina serpentina	Colonial luina											IVIIII I			ļ			1			No	Yes	yes	potentially impacted			
Lupinus aridus ssp. ashlandens	is Mt. Ashland lupine														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Lupinus lepidus var. cusickii	Cusick's lupine		$\perp$									MIIH									Yes	Yes	yes	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, , but No known occurrences on FS			
Lupinus tracyi	Tracy's lupine														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Luzula arcuata ssp. unalaschcensis	Alaska curved woodrush			MIIH	MIIH	MIIH															No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Lycopodiella inundata	Bog club-moss	MIIH	MIIH	MIIH	MIIH	1	NI		MIIH	MIIH	MIIH		MIIH			NI				MIIH	No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Lycopodium dendroideum	Treelike clubmoss	1	MIIH		MIIH	MIIH															No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Macowanites mollis	Fungus	<u> </u>	+		1	1	1		MIIH	<del>                                     </del>			MIIH				<u> </u>	†	1		Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Malaxis monophyllos var.	White adder's-mouth orchid				MIIH																	N-		MIIII Net C1/C2 No			
brachypoda  Marsupella condensata	Liverwort	+	+	+	+	+	+	-	NI	+	-	-	NI	+	+	-	+	+	-	NI	No No	No	yes NI-Alpine	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted  NI-Alpine			
Marsupella emarginata var.		<del>                                     </del>				+	+	1		<del>                                     </del>			NI				1	NI	1	NI	140	1					
aquatica	Liverwort				-	1		1	MIIH	MIIH			MIIH	1	1			-		MIIH	No	No	NI-aquatic	NI-aquatic MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Marsupella sparsifolia	Liverwort								Fillivi	Fillivi			INIIII							I VIIII 1	No	Yes	no, riparian	occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection			

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		) <sub>-6</sub>	8	15	Σ	O K	0	M		ָבָּי   -	DE	¥	MA	Σ	8	R.	SIL	A-OF	<u>B</u>	NAN	₹			Habitat			tree, shrub,	
		g						Į Ž		5								2					Use over	potentially	·	pecies occurs on more	succulent	
Scientific Name	Common Name	MIIH		MIIH					N	IIIH						MIIH						G1/G2	0.01	impacted	Initial Determination from National Screen Process  Ves	than 1 unit? s - Impacts not expected	life form?	Perrennial or Annual?
																										oss entire population in		
Meconella oregana	White fairypoppy																					Voo	Yes	VPS	impacted, Exclusion mapping recommended on forests over 0.01 to one	e year. Final ermination MIIH.	no	annual
Micranthes tischii	Tisch's saxifrage			+	+	+	NI	+	-										+	+		Yes	No use on	yes	NI- No use on forest	emination with.	110	annual
Microcalicium arenarium	Lichen								N	IIIH									+	1	MIIH	Yes	forest	ves	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Micromonolepis pusilla	Red poverty weed	MIIH																					No	-	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
			-	MIIH	MIIH	-		-	_							1	+		+	+		No	NO	IIIO .	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian			
Microseris borealis	Northern microseris	-	-	-	-	_		_								MIIH	+		+	+		No	No	yes, riparian	buffers likely to provide protection MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Monardella purpurea	Siskiyou monardella						.										1		1			No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Monolepis spathulata	Prostrate poverty-weed					MIIF	1															No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
Montia diffusa	Branching montia	MIIH	MIIH	MIIH	MIIH	MIII	H NI													1		No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Muhlenbergia glomerata	Marsh muhly		MIIH																			No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
											MIIH	MIIH	MIIH		MIIH			MIIH		MIIH					MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant			
Muhlenbergia minutissima  Mythicomyces corneipes	Annual dropseed Fungus					_		_		IIIH				MIIH			-		-		MIIH	No	Yes	no, riparian	applications. Riparian buffers likely to provide protection  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
	<u> </u>							-	IV		MIIH			MIIH							MIIH	No	NO	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Navarrotia tagotina	Liverwort  Marigold navarretia	MIIH	-	MIIH	-	_		_								-	+		+	-		No	Yes	yes	potentially impacted			
Navarretia tagetina		IVIIII I		IVIIII												MIIH				1		No	INO	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Nemacladus capillaris	Slender nemacladus					MIII		_									-		-			No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Nicotiana attenuata	Coyote tobacco						<u> </u>															No	Yes	yes	potentially impacted			
Niebla cephalota  Oenothera caespitosa ssp.	Lichen	MIIH	-	-	MIIH	_	NI	_								-	NI		+	-		No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
marginata	Tufted evening primrose																					No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Ophioglossum pusillum	Adder's-tongue	MIIH	MIIH	MIIH	MIIH		NI			1	MIIH		MIIH	MIIH	MIIH	MIIH	NI	MIIH	MIIH	MIIH	MIIH	No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Orthocarpus bracteosus	Rosy owl-clover	MIIH		MIIH																		No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Orthodontium gracile	Moss															MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Orthodontium pellucens	Moss															MIIH						No	Yes	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
·			-	+	+	+			_							MIIH	+		+	+		NO	v	,	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Orthotrichum hallii	Moss			+	+	-		-	-							MIIH	NI		+	+		No	Yes	no	occurs in a habitat unlikely to burn  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Otidea smithii	Fungus				MIIH	MIII	ı NI	_									-		-			No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Oxytropis campestris var. gracili	is Yellowflower locoweed																					No	Yes	yes	potentially impacted			
Packera bolanderi var. harfordii	Harford's ragwort	MIIH		MIIH	MIIH	MIIH	1															No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection			
Packera porteri	Porter's butterweed				MIIH	MIII	1															N.	Ves	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
Pannaria rubiginella	Lichen													MIIH			NI			+	MIIH	NO .	No	110	,			
								-						MIIH			NI					No	NO	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to			
Pannaria rubiginosa	Lichen Kotzebue's grass-of-			-	-	MIII	+	_									+		+	-		No	No	no	burn and/or unlikely to have retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Parnassia kotzebuei	parnassus																					No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
Parnassia palustris var. tenuis	Northern grass-of- parnassus						NI															N-	No use on forest	yes, riparian	NI- No use on forest			
•		+	-	+	+	MIII	1	+	-+								+		+	+		No	lorest	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Pedicularis pulchella	Mountain lousewort			MIIH	MIIH	MIIF	1	-									1		+	+		No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Pedicularis rainierensis	Mt. Rainier lousewort															MIIH			MIIH		MIIH	No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Pellaea andromedifolia	Coffee fern															IVIIII			IVIIII		IVIIII	No	Yes	yes	potentially impacted			
Pellaea brachyptera	Sierra cliffbrake					MIIF	1															No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Pellaea breweri	Brewer's cliff-brake				MIIH	MIIF	H NI															No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
Pellaea bridgesii	Bridges' cliff-brake												MIIH					MIIH		MIIH			Vac	200	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
Pellaea mucronata ssp.	California birds-foot cliff-	+	-	+	+	+		+	-+							MIIH	+		+	+		No	163	IIIO .	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
californica	brake																					No	Yes	no	occurs in a habitat unlikely to burn			
Peltolepis quadrata	Liverwort												MIIH					MIIH		MIIH		No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn			
Penstemon barrettiae	Barrett's penstemon	MIIH		MIIH						IIIH			MILL		<u> </u>			Name :		NA::: 7		Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Penstemon deustus var. variabilis	Variable hot-rock penstemon	MIIH		MIIH					ľ	IIIH			MIIH					MIIH		MIIH		No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted			
Penstemon eriantherus var.					$\top$	MIIF	1	$\neg$															1	1	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
whitedii Penstemon glaucinus	Whited's penstemon Blue-leaved penstemon	1	+		+	-		_	-			MIIH				1	-		+	+	-	No	Yes	yes	potentially impacted  MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
i chatemon giaucinus	Bide-leaved peristerriori	1															1			1		NO	140	l <sub>les</sub>	IMINITE NOT 01/02, NO use over 0.01, natital potentially impacted			

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		N-9	8	5	Σ	OKV	0	A-W.	99	9	≧	Σ	Σ	8	#	SI	IA-0	Σ	WAV	×			Habitat		tree, shrub,	
Scientific Name	Common Name	ដ						2	5								5				G1/G2	Use over 0.01	potentially impacted	Species occurs on mo Initial Determination from National Screen Process than 1 unit?		nt   n?   Perrennial or Annual?
										MIIH				MIIH							G1/G2	0.01	iiiipacteu	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	lile ioiii	refrential of Annuals
Penstemon peckii	Peck's penstemon							MIIH			1				1		MIIH		MIIH		No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Penstemon pennellianus	Blue Mountain penstemon	MIIH		MIIH		MIIH		MIIH			1				-	-					No	Yes	yes	potentially impacted  MilH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Penstemon wilcoxii	Wilcox's penstemon																				No	Yes	yes	potentially impacted		
											MIIH				МІІН			MIIH						Yes - Impacts not experiment of the control of the		
																								impacted, Exclusion mapping recommended on forests over 0.01 to one year. Final		
Perideridia erythrorhiza	Red-rooted yampah					MIIH					-								-		Yes	Yes	yes	reduce determination to MIIH determination MIIH.  MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs	no	perennial
Petrophytum cinerascens	Chelan rockmat			-		-					+	1			+	NI			1		Yes	Yes No use on	no	in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Phacelia argentea	Silvery phacelia					1					1				MIIH	INI					Yes	forest	NI-dunes	NI- No use on forest MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Phacelia leonis	Siskiyou phacelia							ļ							IVIIII I						No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Phacelia minutissima	Dwarf phacelia					MIIH		MIIH				MIIH					MIIH		MIIH		No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection		
Phacelia tetramera	Dwarf phacelia							MIIH									MIIH				No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Phaeoclavulina abietina	Fungus								MIIH				MIIH		MIIH		MIIH	MIIH		MIIH	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Phaeocollybia gregaria	Fungus															NI					Yes	No use on forest	ves	NI-No use on forest		
Phaeocollybia oregonensis	Fungus								MIIH				MIIH			NI					Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted	_	
Phemeranthus spinescens	Spinescent fameflower													MIIH							No	No	no	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Phlox hendersonii	Henderson's phlox											MIIH	MIIH				MIIH				No	Yes	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Phlox multiflora	·											MIIH					MIIH		MIIH		NO	V	,,,,	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Phlox multillora Phlox solivagus	Many-flowered phlox Lonely phlox							MIIH			1				1						No Yes	No	yes	potentially impacted  MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
g				+							+	<del>                                     </del>			MIIH				<del>                                     </del>		103		1			This bryophyte is active from November to May, then becomes
Phymatoceros phymatodes	Liverwort																				Yes	Yes	yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	no	dormant. All but invisible during the dry season. Dormancy during the fire season limits the potential for impacts to this species. Final Determination MIIH.
Pilophorus nigricaulis	Lichen								MIIH				MIIH							MIIH	Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted		
Pilularia americana	American pillwort					MIIH				MIIH	MIIH	MIIH		MIIH	MIIH						No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Pinus albicaulis	Whitebark pine		MIIH	MIIH	MIIH	MIIH	NI			MIIH	MIIH	MIIH	MIIH		MIIH		MIIH	MIIH	MIIH	MIIH	No	Yes	yes	Covered in BA		
Pinus flexilis	Limber pine																		MIIH		No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Piptatheropsis exigua	Little ricegrass											MIIH					MIIH				No	Yes	yes	Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Plagiobothrys figuratus ssp.															MIIH									MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant		
corallicarpus	Coral seeded allocarya																				No	Yes	no, riparian	applications. Riparian buffers likely to provide protection MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Plagiobothrys greenei	Greene's popcorn flower														MIIH						No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection		
Plagiobothrys salsus	Desert allocarya										MIIH										No	No	yes, riparian	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but riparian buffers likely to provide protection		
Platanthera chorisiana	Choris' bog-orchid				MIIH	MIIH															No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Platanthera obtusata	Small northern bog-orchid																		MIIH		No	Yes	Yes	MIIH- Not G1/G2, One or more torests over 0.01 application rate, habitat potentially impacted		
	Oregon semaphoregrass			+		+					MIIH	MIIH			+				MIIH		NO	V		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Pleuropogon oregonus									<del> </del>		+				MIIH		-	MIIH			No	res	yes, riparian	potentially impacted, but riparian buffers likely to provide protection  MIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	-	
Poa rhizomata	Timber bluegrass Profuse-flowereed mesa					1					MIIH	1			+				1		No	Yes	yes	potentially impacted		
Pogogyne floribunda	mint																				No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
Polemonium carneum Polemonium viscosum	Great polemonium	MIIH		MIIH		NII	NI				1				1						No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted		
	Skunk polemonium	MIIH		MIIH		INI									MIIH			MIIH		MIIH	No	Yes	NI-Alpine, talus	NI-Alpine, talus MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Polystichum californicum Polytrichastrum sexangulare va	California sword-fern					+				MIIH	MIIH		MIIH		-	-		MIIH		MIIH	No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
vulcanicum	Moss																				No	Yes	yes	potentially impacted		
Polytrichum strictum	Moss											MIIH	MIIH			NI		MIIH		MIIH	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Porella bolanderi	Liverwort														MIIH			MIIH			No	Yes	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Potamogeton diversifolius	Rafinesque's pondweed					1				NI	NI	NI		NI	†	†	NI		NI		No	Yes	NI-aquatic	NI-aquatic	+	
Potentilla breweri	Brewer's cinquefoil			MIIH		MIIH															No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Potentilla glaucophylla var. perdissecta	Diverse-leaved cinquefoil					MIIH															No	Yes	yes, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Potentilla nivea	Snow cinquefoil					MIIH					1	1			1	1			1		No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn		
. Storiding rivou	Short offiquotoff	<u> </u>				1		L			1	1	<u> </u>		1	1		1	1		INU	1.00	1			

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Mathematical Control of Control			M-9	8	₫	Σ	OK	0	A-W,	9	DE	\$	MA	Σ	8	RR	SII	IA-OI	Σ	WAV	8			Habitat			tree, shrub,	
Note that is a stand   Constitution of the control of the contro	Calandida Nama	CN	Š						5	5								2				04/02	1	1. ,	In third Debaumin stirm from National Course Decay	· .		
Property State	Scientific Name	Common Name											MIIH					MIIH				G1/G2	0.01	impacted	Initial Determination from National Screen Process		ille form?	Perrennial or Annual?
Martin Charles   Mart																										7 7		
No.   Land   White considered   Control   Co	Potentilla versicolor var. darrach	nii Darrach's cinquefoil																				Yes	Yes	yes			no	
Marie appring	Potentilla villosa	Villous cinquefoil												MIIH							MIIH	No	No	No				
Properties   Pro	Preissia quadrata	Liverwort								MIIH	MIIH		MIIH	MIIH				MIIH		MIIH		No	Yes	No				
Production of the control of the c																MIIH						V	Vac	no	MIIH-G1/G2, One or more forests over 0.01 application rate, Plant occurs			
Mathematical particular   Mathematical par	·										MIIH	MIIH	MIIH			MIIH		MIIH		MIIH		Yes	163		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Medicina elements  Medicina elem								NI														No		yes, riparian				
Manufacture   Manufacture											MIIH	MIIH	MIIH	MIIH		MIIH	NI	MIIH	MIIH	MIIH	MIIH	No	iorest	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Proposed proposed   Proposed proposed   Proposed proposed   Proposed proposed   Proposed proposed proposed   Proposed proposed				-				-					MIIH					MIIH		MIIH		No	Yes	yes				
Processor Manual	Ptilidium pulcherrimum	Liverwort	1	+			MIIH	+														No	Yes	yes				
Profession	_ *	Sticky goldenweed					IVIIII I															No	Yes	yes				
Properties   Pro		Panicled goldenweed										MIIH										No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Committed decreases   Committed Section   Co	Pvrrocoma scaberula	Rough pyrrocoma							MIIH									MIIH		MIIH		No	Yes	ves				
Committed review	,	3 17										MIIH				MIIH			MIIH						MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant			
Self-counting particular   Self-counting parti	Racomitrium depressum	Moss																				No	Yes	no, riparian	applications. Riparian buffers likely to provide protection			
Planet for columns	Rafinesquia californica	California chicory														MIIH						No	Yes	yes	potentially impacted			
Removable cooling bettiered in the property of	Ramalina pollinaria	Lichen												MIIH		MIIH	NI		MIIH		HIIM	No	Yes	Yes				
Part	Ramalina thrausta	Lichen		MIIH	MIIH			NI														No	No	yes				
Mathematical Responded   Mathematical Respon	Denumentus es eleves	Caalayla hystorous				MIIH		NI																	burn and/or unlikely to have retardant applications. Riparian buffers likely			
Restruction between the color of the color o	Ranunculus cooleyae	Cooley's bullercup	MIIH		MIIH			1	MIIH													No	No	no, riparian	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to			
Particular   Production   Pro	Ranunculus populago	Mountain buttercup																				No	No	no, riparian				
Parameter   Red-levery	Ranunculus triternatus	Dalles mt. buttercup	MIIH		MIIH					MIIH				MIIH								Yes	No	yes				
Principage	Rhamnus ilicifolia	Redberry														MIIH						No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
Ribosopon narione Fingus Fingu	Rhizopogon alexsmithii	Fungus									MIIH			MIIH							MIIH	Yes	Yes	yes				
Rhopogon davidepous Fungus Fun	Rhizopogon brunneifibrillosus	Fungus												MIIH								Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			truttle species that occurs
Principogon chamaleoninus   Fungus																MIIH												subterranean within fairly dense
Principle																												habitat is unllikely, and retardant
Rhizopogon clavitisporus  Fung	Rhizopogon chamaleontinus	Fungus																				Yes	Yes	yes		no		
Rhizopogon clavitisponus Fungu														MIIH		MIIH	NI				MIIH							
Ehizopogon clavisporus Fingus																												
Fibiopogon ellipsosporus Fungu	Rhizopogon clavitisporus	Fungus																				Yes	Yes	yes		determination MIIH.	no	
Phizopogon ellipsosporus  Fung														МІІН		MIIH									Will ar Mill C4/C2 Has over 0.04 application rate, behitet patentially			
Rhizopogon exiguus Fung	Dhinananana	F																					L.		impacted, Exclusion mapping recommended on forests over 0.01 to	one year. Final		
Rhizopogon exiguus  Fungus  Fu	Knizopogon ellipsosporus	Fungus						1		MIIH				MIIH		MIIH	NI		MIIH		MIIH	Yes	Yes	yes	reduce determination to with		no	
Rhizopogon exiguus Fung																										across entire population in		
Rhizopogon masoniae Fungus  Rhizopogon masoniae Fungus  Will or MiHH G1(62, Use over 0.01 application rate, habitat potentially impacted. Exclusion mapping recommended on forests over 0.01 application rate, habitat decremination to Milling across extraction in magning recommended on forests over 0.01 application rate, habitat decremination to Milling across extraction in magning recommended on forests over 0.01 application rate, habitat decremination to Milling across extraction in magning recommended on forests over 0.01 application rate, habitat decremination to Milling across extraction in magning recommended on forests over 0.01 application rate, habitat decremination to Milling across extraction in magning recommended on forests over 0.01 application rate, habitat decremination to Milling across extraction to Mi	Rhizopogon exiguus	Fungus																				Yes	Yes	yes			no	
Rhizopogon masoniae Fungus  Rhizopogon masoniae Fungus  Milh No Fungus  Milh N	Rhizopogon inquinatus	Fungus																	MIIH		MIIH	Yes	No	yes	MIIH- G1/G2, No use over 0.01, habitat potentially impacted			
Rhizopogon masoniae  Fungus  F														MIIH		MIIH												
Rhynchospora alba White beakrush Whi																									impacted, Exclusion mapping recommended on forests over 0.01 to	one year. Final		
Rhynchospora alba White beakrush No Yes yes, riparian potentially impacted, but riparian buffers likely to provide protection Milh-No Uses, riparian potentially impacted, but riparian buffers likely to provide protection Milh-No Uses, riparian riparian buffers likely to provide protection Milh-No Uses, riparian riparian buffers likely to provide protection Milh-No Uses, riparian riparian buffers likely to provide protection Milh-No Uses, riparian vigrarian buffers likely to provide protection Milh-No Uses over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection Milh-No Uses over 0.01 application rate, habitat potentially impacted. Description of the provide protection with the potentially impacted provide protection with the potentially impacted protection with the potentially impacted protection with the potentially impacted provide protection with the potentially impacted protection with the potentially impacted with the potentia	Rhizopogon masoniae	-						+						MIIH		MIIH	NI				MIIH	Yes	Yes	yes		determination MIIH.	no	
Ribes cereum var. colubrinum  Ribes oxyacanthoides ssp.  Irirgium  Idaho gooseberry	Rhynchospora alba	White beakrush						-	MIIL													No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
irriguum Idaho gooseberry Idaho gooseber		Wax currant					ļ															No	No	yes, riparian	riparian buffers likely to provide protection			
Ribes wolfii Wolf's currant Wolf's currant No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No No yes Milh- Not G1/G2, No use over 0.01, habitat potentially impacted No No No yes Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat No No Yes No No No yes Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat No No No yes Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat No No No yes Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat No No No yes Milh- No No No yes Milh- Not G1/G2, One or more forests over 0.01 application rate, habitat No No No yes Milh- No No		Idaho gooseberry		MIIH			MIIH		MIIH													No	Yes	yes, riparian				
Romanzoffia thompsonii Thompson's mistmaiden Milh Milh Milh Milh Milh Milh Milh Milh	Ribes wolfii								MIIH	ļ									ļ			No	No	yes				
Romanzoffia thompsonii Thompson's mistmaiden	Rivulariella gemmipara	Liverwort	1	+	_		+	+	1	NI	NI	NI		NI		NI		<u> </u>	NI		NI MIIH	Yes	Yes	NI-aquatic				
	Romanzoffia thompsonii	Thompson's mistmaiden	Miller		NAIII :			1		MIII	MIII	MIII	MILL		MIIL					MIIL		No	Yes	yes	potentially impacted			
	Rorippa columbiae	Columbia cress	IVIIII		IVIIII					INIII	INIII	IVIIIT	(VIIII	WIIIFI	IVIIII	ıvııı⊓				ıVIIIFI		No	Yes	yes, riparian				

March   Marc			14	1	Lo	100			14	1~	L (A	I =	-	1 -	T =	l so		I ~	I o	1	1	_	1	1		T	*	
Part   Part			/M-6	8	18	₩	OKW	OL	A-W,	90.9	DE	3	MA	Ε̈́	8	R	SIL	A-OF	₹	WAW	\$			Habitat			tree, shrub,	
Material Methods	Calambidia Nama	Common Name	Š						Š	5								2				64 /63	1	ı. <i>'</i>	Initial Determination from National Server Dunces	1 -		
Process   Proc			MIIH	MIIH	MIIH		MIIH		MIIH	MIIH	MIIH	MIIH	MIIH	MIIH	MIIH		NI	MIIH	MIIH	MIIH	MIIH	G1/G2	0.01		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat	than 1 unit?	lite form:	Perrennial or Annual?
Property of the property of		Lowland toothcup			+		MIIH		+													No	Yes	yes, riparian				
Processing Control of the Control	Rubus arcticus ssp. acaulis	Nagoonberry	-		_				1	1								1	-	MIII	-	No	Yes	yes	potentially impacted			managed abla to withstand
State   Stat	Rubus bartonianus	Bartonberry																				Yes	Yes	yes	impacted, Exclusion mapping recommended on forests over 0.01 to	no	no	nitrates in soil until they diminish in a couple years.
Martin   M	Russula idahoense	Fungus												MIIH			NI				MIIH	Yes	No	yes				
Chan   Chan	Salix candida	Hoary willow		MIIH			MIIH															No	Yes	yes, riparian				
Section of Control where   C	Salix farriae	Farr's willow											MIIH					MIIH		MIIH		No	Yes	yes, riparian				
Manufacture   Manufacture		Glaucus willow																				No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
Color color   Color co	Salix maccalliana	Maccall's willow		MIIH			MIIH															No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection			
Public consistent	Salix nivalis	Snow willow											MIIH							MIIH		No	Yes	yes, riparian				
Extra constitution	Salix pseudomonticola	False mountain willow		MIIH			MIIH															No	Yes	yes, riparian				
Part	Salix sessilifolia	Soft-leafed willow	MIIH																			No	No	ves riparian				
March   Marc			1										MIIH		MIIH			MIIH		MIIH			Voc		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Self-legs defined from 150.  Certified and confidence from 150.  C			1		+				+					MIIH		MIIH	NI		MIIH		MIIH	No	165	yes, ripariari	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Properties   Pro		Fungus											MIIH							MIIH		No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant			
Search   S		Wedge-leaf saxifrage	-				MIIH													-		No	Yes	no, riparian	applications. Riparian buffers likely to provide protection			
Self-self-colors (1996) Brogeristicine (1996) Brogeristicine (1996) Brogeristicine (1996) Brogeristicine (1996) Brogeristicine (1996) Brogeristic	Saxifraga cernua	Nodding saxifrage	_				MIIH									MIIH				_		No	Yes	no, riparian	applications. Riparian buffers likely to provide protection			
New Processor Advanced   New Processor Advan	Saxifragopsis fragarioides	Joint-leaved saxifrage																				No	Yes	no	occurs in a habitat unlikely to burn and/or unlikely to have retardant			
Scheachtrasia	Scapania obscura	Liverwort												MIIH					MIIH		MIIH	No	No	no				
Schedulum dinicidodriseum   Mose		Scheuchzeria								MIIH	MIIH	MIIH		MIIH		MIIH			MIIH		MIIH	No	Yes	ves. riparian				
Schemic decided manipulation and included reference in the control of the contr		- Contracting								MIIH	MIIH	MIIH	MIIH	MIIH	MIIH	MIIH		MIIH		MIIH		NO		,,.,	potentially impacted, sat ripation said to meny to provide procession	Yes - Impacts not expected		
Schoenpelectus subterminals   Water dubrutah   Water du	Schistidium cinclidodonteum	Moss																				Yes	Yes	yes	impacted, Exclusion mapping recommended on forests over 0.01 to	one year. Final		
Schrödisch mortitolia Liverwort   Liverwor	Schoenoplectus subterminalis	Water clubrush									MIIH	MIIH		MIIH		MIIH	NI		MIIH		MIIH	No	Yes	ves riparian				
Serious pendulus	·										MIIH			MIIH					MIIH		MIIH	No	Yes		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
California field didestingue Mile Mile Mile Mile Mile Mile Mile Mil			1						+	1		MIIH				MIIH			1			NO	Von		MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Sculpria marginata Moss MIH MIH MIH MIH MIH MIH MIH MIH MIH MIH		California fetid														MIIH						No	ies	yes, ripariari	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat			
Scriberian marginata Moss Scriberian grass Mill*	Scoliopus bigelovii	adderstongue	MIIH	MIIH	MIIH		MIIH		MIIH										-			No	Yes	yes				
Sedum moranii  Rogue River stonecrop  Rogue River stonecrop  Rogue River stonecrop  Oregon white-top aster  Oregonensis var.  Oregonensis						MIIL			ļ										-			No	Yes	yes, riparian				
Sedum moranii Rogue River stonecrop Rogue Ri	Scribneria bolanderi	Scribner's grass	IVIIII		IVIIII I	IVIIII			+							MIIH			1			No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			perennial - able to withstand
Sedim moranii Rogue River stonecrop																											ves -	nitrates in soil until they
Oregon white-top aster  White-topped aster  Wh		Rogue River stonecrop	MIIH															-	+			Yes	Yes	yes				
Sesuvium verrucosum Verrucose sea-pursiane   Milh		Oregon white-top aster																				No	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted			
Sidalcea hendersonii Henderson's sidalcea   MilH MilH MilH MilH MilH MilH MilH MilH			MIIH		MIIH					MIIH												No	No	yes				
Sidalcea hirtipes  Bristly-stemmed sidalcea  MIIH  MII		·			+		-		+	1		MIIH					NI	-	-		-	No	No No use on	yes				
Sidalcea hirtipes Bristly-stemmed sidalcea   yes No yes, riparian   buffers likely to provide protection   Milh No yes, riparian   buffers likely to provide protection   Milh No yes, riparian   buffers likely to provide protection   Milh No yes, riparian   buffers likely to provide protection   Milh No yes, riparian   buffers likely to provide protection   Milh No yes, riparian   buffers likely to provide protection   Milh No yes, riparian   buffers likely to provide protection   Milh No yes   Milh No			MIIH		MIIH				_	MIIH				MIIH			NI		-			No	forest	no				
Sidene hookeri ssp. bolanderi Silene hookeri ssp. bolanderi Silene seelyi Silene seelyi Sieri seelyi Sidene seelyi	Sidalcea hirtipes	Bristly-stemmed sidalcea	ļ							ļ						MIIL			-			Yes	No	yes, riparian				
Silene hookeri ssp. bolanderi  Silene scouleri ssp. scouleri  Silene scouleri ssp. scouleri  Silene scouleri ssp. scouleri  Silene scouleri ssp. scouleri  Silene scouleri ssp. scouleri  Silene scouleri ssp. scouleri  Silene seelyi  Milih  Mi	Sidalcea malviflora ssp. patula	Coast checker bloom															<u> </u>	-	1			No	Yes	yes	potentially impacted			
Silene seelyi seely's silene  Milh- Not G1/G2, One or more torests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.  Sisyrinchium montanum var.  Milh- Not G1/G2, No use over 0.01, habitat potentially impacted, but		•	1		$\perp$				1	1						FIIIIVI						No	Yes	yes	potentially impacted			
Silene seelyi seely's silene occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.  Sisyrinchium montanum var. MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted, but	Silene scouleri ssp. scouleri	Scouler's catchfly	-	MIIH	$\perp$	-	MIIH	_	MIIH										+-	-		No	No	yes				
	•	seely's silene		NA:::::																$\perp$		No	Yes	no	occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.			
	-	Strict blue eyed-grass		IVIIII																		No	No	yes, riparian				

Scientific Name	Common Name	CRG-WA	100	GIP	MBS	ОКМ	ОГУ	UMA-WA	CRG-OR	DES	FWI	MAL	МТН	ОСН	RRS	SIU	UMA-OR	UMP	WAW	WIL	G1/G2	Use over	Habitat potentially impacted	Species occurs on Initial Determination from National Screen Process than 1 unit?	more succ	ree, irub, culent form? Perrennial or Annual?
		MIIH		MIIH		MIIH			MIIH				MIIH							MIIH				Yes - Impacts not ex	-	
																								WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to one year. Final	tion in	
Sisyrinchium sarmentosum	Pale blue-eyed grass																				Yes	Yes	yes	reduce determination to MIIH determination MIIH	. no	perennial
Solanum parishii	Parish's horse-nettle														MIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Solorina saccata	Lichen		NI		NI		NI														No	Yes	NI-Alpine	NI-Alpine		
Combonada a shi a sa	Manage and an														MIIH									WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to		perennial - able to withstand nitrates in soil until they diminish in a couple years.
Sophora leachiana	Western sophora		MIIH					MIIH				1	+								Yes	Yes	yes	reduce determination to MIIH no MIIH-Not G1/G2, No use over 0.01, habitat potentially impacted, but	yes - t	tree Final determination MIIH.
Spartina pectinata	prairie cordgrass	MIIH			+	MIIL		MIIH				-	-								No	No	yes, riparian	riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Spiranthes porrifolia	Western ladies-tresses	IVIIII				IVIIII		IVIIII													No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection		
Splachnum sphaericum	Moss									MIIH	MIIH	MIIH	MIIH	MIIH	MIIH	NI	MIIH	MIIH	MIIH	MIIH	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Stagnicola perplexa	Fungus												MIIH		MIIH			MIIH		MIIH	No	Yes	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Stanleya confertiflora	Biennial stanleva											MIIH										V	·	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, ,		
Stereocaulon spathuliferum	Lichen											1	NI							NI	Yes	No	NI-Talus	but No known occurrences on FS  NI-Talus		
Streptanthus glandulosus ssp.					+							1	+		MIIH						140		1	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
josephinensis	Common jewel flower																				No	Yes	yes	potentially impacted		
Streptanthus howellii	Howell's streptanthus														MIIH							Vac	Wee.	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH		perennial - able to withstand nitrates in soil until they diminish in a couple years. Final determination MIIH.
Streptopus streptopoides	Kruhsea			+			+		MIIH		1	1	MIIH	+							No.	No	yes	MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	110	That determination wiff.
Suksdorfia violacea	Violet suksdorfia				1				MIIH				MIIH				MIIH		MIIH			Van	voc rinorion	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
		MIIH		MIIH					MIIH			1	MIIH								No	res	yes, riparian	potentially impacted, but riparian buffers likely to provide protection  MIH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn		
Sullivantia oregana	Oregon sullivantia				MIIH	MIIL		MIIH				MIII					MIILI		MIIH		Yes	No	No	and/or unlikely to have retardant applications.  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Swertia perennis	Swertia				IVIIII	IVIIII I		IVIIII I				IVIIII I					IVIIII I		IVIIIII		No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection		
Synthyris pinnatifida var. lanuginosa	featherleaf kittenstails						NI														N-	No use on forest	Wes	NI-No use on forest		
-															MIIH						NO	101000	jes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to		perennial - able to withstand nitrates in soil until they diminish in a couple years.
Tauschia howellii Tauschia stricklandii	Howell's tauschia Strickland's tauschia					-	-						MIIH								Yes	Yes	yes	reduce determination to MIIH no MIIH- Not G1/G2, No use over 0.01, habitat potentially impacted	no	Final determination MIIH.
					+		+					1	1,4,111.			NI					No	No use on	yes			
Teloschistes flavicans	Lichen				+				MIIH			-	MIIH		-	NI	MIIH		MIIH	MIIH	No	forest	NI-dunes	NI-Dunes, No use on forest  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Tetraphis geniculata	Moss Slender-flowered evening-											-			MILL						No	Yes	yes	potentially impacted		
Tetrapteron graciliflorum	primrose														IMIIH						No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Texosporium sancti-jacobi	Lichen							MIIH		MIIH	MIIH	MIIH	MIIH	MIIH			MIIH				N-	Vec	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
,					+		-					1	1						MIIH		NO	103	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Thalictrum alpinum	Alpine meadowrue	-		+	+						-	MIIH		MIIH	1		MIIH		MIIH		No	Yes	yes	potentially impacted  Yes - Impacts not ex	rnootod	
Thelypodium eucosmum	Arrow-leaf thelypody																				Yes	Yes	yes	WII or MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, Exclusion mapping recommended on forests over 0.01 to reduce determination to MIIH	tion in	perennial, biennial
	l		MIIH	MIIH	MIIH	MIIH	NI			MIIH	1		MIIH			NI				MIIH				MilH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant		
Tholurna dissimilis	Lichen	-			+	+	+			-	-	MIIH	-	MIIH	MIIH		MIIH	-	MIIH		No	Yes	no	applications.  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Tortula mucronifolia	Moss					1	+			-	1	ļ	-	ļ	1				MIIH		No	Yes	yes	potentially impacted  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Townsendia montana	Mountain townsendia		$\perp$		1	1					1										No	Yes	yes	potentially impacted MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Townsendia parryi	Parry's townsendia																		MIIH		No	Yes	yes	potentially impacted		
Toxicoscordion exaltatum	Giant death camas					1					L			1	MIIH					L	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Trematodon asanoi	Moss									MIIH	MIIH		MIIH					MIIH		MIIH	Yes	Yes	yes	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, , but no known occurrences on FS units over 0.01		
Trifolium douglasii	Douglas' clover							MIIH				MIIH					MIIH		MIIH		Yes	Yes	yes, riparian	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, but riparian buffers likely to provide protection		
Trifolium thompsonii	Thompson's clover					MIIH								1							No	Yes	ves	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
·	·		MIIH	+	+	1	+				†	MIIH	+	+	+				MIIH		NU	V	,	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Triglochin palustris	Slender bog arrowgrass	-	-	+	+		+			-	+	-	+		MIIH						No	Yes	yes, riparian	potentially impacted, but riparian buffers likely to provide protection  MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat		
Trillium kurabayashii	Siskiyou trillium																				No	Yes	yes	potentially impacted		

		CRG-WA	TOD	Š	GIP	MBS	OKW	OLY	UMA-WA	CRG-OR	DES	FWI	MAL	МТН	ОСН	RRS	SIU	UMA-OR	UMP	WAW	WIL		Use over	Habitat potentially	1 ·		
Scientific Name	Common Name																					G1/G2	0.01	impacted	Initial Determination from National Screen Process than 1 unit?	life form?	Perrennial or Annual?
Trillium parviflorum	Small-flowered trillium	MIIH			MIIH																	Yes	Yes	yes	MIIH G1/G2, Use over 0.01 application rate, habitat potentially impacted, but no known occurrences on FS over 0.01		
Tritomaria exsecta	Liverwort										MIIH	MIIH	MIIH	MIIH	MIIH	MIIH	NI	MIIH	MIIH	MIIH	MIIH	No	Yes	yes	MIIH- Not G1/G2, One or more forests over 0.01 application rate, habitat potentially impacted		
Trollius albiflorus	American globeflower												MIIH							MIIH		No	Yes	no	MIIH- Not G1/G2, One or more torests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Umbilicaria lambii	Lichen			ı	MIIH			NI														Yes	No	no	MilH-G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Umbilicaria rigida	Lichen					NI	NI	NI														No	Yes	NI- Alpine	NI- Alpine		
Jsnea lambii	Lichen			ı	MIIH	MIIH																No	No	no	MIIH- Not G1/G2, No use over 0.01, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Usnea nidulans	Lichen																NI					No	No use on forest	yes	NI- No use on forest		
Utricularia gibba	Humped bladderwort																NI					No	No use on forest	NI- aquatic	NI- Aquatic, No use on forest		
Utricularia intermedia	Flat-leaved bladderwort	NI	NI	·	NI	NI		NI														No	Yes	NI- aquatic	NI- aquatic		
Jtricularia minor	Lesser bladderwort									NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	No	Yes	NI- aquatic	NI- aquatic		
Utricularia ochroleuca	Northern bladderwort											NI		NI			NI	NI	NI		NI	No	Yes	NI- aquatic	NI- aquatic		
Vaccinium myrtilloides	Velvet-leaf blueberry		MII	IIH			MIIH															No	Yes	no	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications.		
Viola primulifolia ssp. occidentalis	Western bog violet															MIIH						No	Yes	no, riparian	MIIH- Not G1/G2, One or more forests over 0.01 application rate, Plant occurs in a habitat unlikely to burn and/or unlikely to have retardant applications. Riparian buffers likely to provide protection		
Wolffia borealis	Dotted water-meal						+	+		NI	+	1	+	NI	1	+	NI	+	NI	1	NI	No.	No	NI- aquatic	NI- aquatic		
Wolffia columbiana	Columbia water-meal					<del>                                     </del>	+	+		NI	1	1	+	NI		NI	NI		NI	+	NI	No	Yes	NI- aquatic	NI- aquatic		

Version 7/3/2023

Region 6 Plants

category	Common name	Scientific name	NFs of Alabama	Daniel Boone	Chattahoochee- Oconee	Cherokee	NFs of Florida	Kisatchie	NFs of Mississppi	George Washington and Jefferson	Ouachita	Ozark	NFs of North Carolina	Sumter	l	Land Between the Lakes	Savannah River	Comments
plant - vascular	Fraser fir	Abies fraseri				MIIH				NI			MIIH					
plant - vascular	trailing white monkshood	Aconitum reclinatum				MIIH				NI			MIIH					
plant - non- vascular	a liverwort	Acrobolbus ciliatus				MIIH							MIIH					
plant - vascular	Appalachian bugbane	Actaea rubifolia								NI						NI		
plant - vascular	earleaf false foxglove	Agalinis auriculata										NI						
plant - vascular	Jackson false foxglove	Agalinis filicaulis					MIIH	NI	NI									
plant - vascular		Agalinis skinneriana						NI										
•		Ageratina luciae-brauniae		NI														
plant - vascular	incised agrimony	Agrimonia incisa	NI				MIIH		NI						NI			
fungi	witch's-hair lichen	Alectoria fallacina								NI			MIIH					
plant - vascular	lillydale onion	Allium oxyphilum								NI								
plant - vascular	Ouachita false indigo	Amorpha ouachitensis									NI	NI						
plant - vascular	panicled false indigo	Amorpha paniculata						NI							NI			
plant - vascular	Louisiana blustar	Amsonia ludoviciana						NI										
plant - non- vascular	a liverwort	Anastrophyllum saxicola				MIIH							MIIH					
	spreading rockcress	Arabis patens			1					NI			MIIH					1
plant - vascular	southern threeawn	Aristida simpliciflora	NI		1				NI	<del> </del>								1
fungi	hot dots	Arthonia kermesina	1,1,1		1	MIIH			- '''	<del> </del>			MIIH					1
fungi	old birch spots	Arthopyrenia betulicola											MIIH					1
fungi	shell lichen	Arthopyrenia degelii				MIIH							MIIH					1
	southern milkweed	Asclepias viridula					MIIH											1
•	spleenwort	Asplenium x heteroresilens											MIIH					
plant - vascular	Soxman's milkvetch	Astragalus soxmaniorum						NI							NI			1
•	blue wild indigo	Baptisia australis var. aberrans											MIIH					
plant - vascular		Baptisia megacarpa	NI															
plant - vascular	+ '	Bartonia texana					1	1	<u> </u>	<u> </u>		<u> </u>	1	1	NI			
plant - non- vascular		Bazzania nudicaulis				MIIH				NI			MIIH					
	Amerucan barberry	Berberis canadensis		NI	MIIH					NI			MIIH					
		Boltonia montana								NI								
·		Botrychium jenmanii	NI			MIIH			NI	NI			MIIH					
		Buckleya distichophylla				MIIH				NI			MIIH					
plant - vascular		Calamovilfa arcuata		NI							NI							
•		Callirhoe bushii									NI	NI						
		Calopogon multiflorus					MIIH						MIIH					
		Calopogon oklahomensis						NI	NI									
plant - non- vascular	Carolina campylopus moss												MIIH					

Region 8 Plants

category	Common name	Scientific name								George Washington			NFs of			Land		
category	Common name	Scientific flame	NFs of Alabama	Daniel Boone	Chattahoochee- Oconee	Cherokee	NFs of Florida	Kisatchie	NFs of Mississppi	and Jefferson	Ouachita	Ozark	North Carolina		1	Between the Lakes	Savannah River	Comments
plant - vascular	small mountain bittercress	Cardamine clematitis			MIIH	MIIH				NI			MIIH					'   
plant - vascular	Bryson's sedge	Carex brysonii	NI							NI								
plant - vascular	Chapman's sedge	Carex chapmanii					MIIH						MIIH					
plant - vascular	dixie sedge	Carex communis var.												NI				
		amplisquama												INI				
plant - vascular	cypressknee sedge	Carex decomposita	NI				MIIH	NI	NI		NI							
plant - vascular	ravine sedge	Carex impressinervia	NI						NI				MIIH					
plant - vascular		Carex juniperorum		NI														_
plant - vascular	waterfall's sedge	Carex latebracteata									NI							_
plant - vascular	variable sedge	Carex polymorpha								NI								_
plant - vascular		Carex radfordii			MIIH								MIIH	NI				_
plant - vascular	•	Carex schweinitzii								NI								1
plant - vascular	a sedge	Carex timida									NI							_
plant - vascular	· ·	Castanea pumila var. ozarkensis						NI			NI	NI						
plant - vascular	pineland butterfly pea	Centrosema arenicola					MIIH											
plant - non-	a liverwort	Cephalozia pleniceps var.											MIIH					
vascular		carolinana											IVIIII					
plant - non-	a liverwort	Cephaloziella spinicaulis				MIIH				NI			MIIH					
vascular						IVIIIII				INI			IVIIIII					_
plant - non-	a liverwort	Cheilolejeunea evansii	NI		MIIH	MIIH							MIIH	NI NI				
vascular			'\'		1411111	1411111								141				_
plant - vascular		Chelone cuthbertii			MIIH					NI			MIIH					1
plant - vascular		Chelone obliqua var erwiniae											MIIH					
plant - vascular	Le Conte's thistle	Cirsium lecontei											MIIH					
plant - vascular		Cleistesiopsis bifaria	NI	NI	MIIH	MIIH	MIIH		NI	NI			MIIH					
plant - vascular		Clematis addisonii								NI								
plant - vascular	Virginia whitehair leather flower	Clematis coactilis								NI								
plant - vascular		Clematis viticaulis					1			NI								1
plant - vascular		Clinopodium dentatum					MIIH											
plant - vascular		Coelorachis tuberculosa	NI				MIIH											
plant - vascular		Collinsonia tuberosa					1				1		MIIH					1
plant - vascular		Collinsonia verticillata		NI	MIIH	MIIH	1				1			NI				1
plant - vascular		Corallorhiza bentleyi								NI								
plant - vascular		Coreopsis latifolia				MIIH							MIIH					
plant - vascular		Crataegus ashei							NI									
plant - vascular		Crataegus triflora	NI						NI									
plant - vascular		Crataegus warneri													NI			
plant - vascular		Ctenium floridanum					MIIH											
plant - vascular		Cuscuta attenuata									NI							
plant - vascular		Cyperus grayoides						NI							NI			

category	Common name	Scientific name	Alabama	Daniel Boone	Chattahoochee- Oconee	Cherokee	NFs of Florida	Kisatchie	NFs of	George Washington and Jefferson	Ouachita	Ozark	NFs of North Carolina	Sumter	1	Land Between the Lakes	Savannah River	Comments
plant - vascular	Kentucky lady's slipper	Cypripedium kentuckiense	NI	NI				NI			NI	NI			NI			
plant - vascular	Hall's prairie clover	Dalea hallii													NI			
plant - vascular	Alabama larkspur	Delphinium alabamicum	NI															
plant - vascular	tall larkspur	Delphinium exaltatum								NI			MIIH					_
plant - vascular	Newton's larkspur	Delphinium newtonianum									NI	NI						
plant - vascular	glade larkspur	Delphinium treleasei										NI						
plant - vascular	cream ticktrefoil	Desmodium ochroleucum							NI									
plant - vascular	mountain bush honeysuckle	Diervilla rivularis	NI			MIIH							MIIH					
plant - vascular		Dionaea muscipula											MIIH					†
plant - vascular		Diplophyllum obtusatum						+							<del> </del>			1
vascular	averwore	D.p.ophynam obtasatam											MIIH					
plant - non-	a liverwort	Diplophyllum taxifolium																•
vascular		var. mucronatum											MIIH					
		Dodecatheon frenchii		NI				<u> </u>										1
·		Draba aprica						<u> </u>			NI	NI						1
plant - non-		Drepanolejeunea																1
vascular		appalachiana				MIIH							MIIH					
plant - vascular	Topeka purple coneflower	• •													NI			
plant - vascular	mudbabies	Echinodorus tenellus	NI				MIIH			NI								1
		Elymus churchii									NI	NI						
plant - vascular	Mackenzie's blue wildrye	Elymus glaucus ssp. mackenziei									NI							
plant - vascular	gulf pipewort	Eriocaulon koernickianum									NI	NI						
plant - vascular	Florida thoroughwort	Eupatorium anomalum					MIIH											
	Darlington's glade spurge	Euphorbia purpurea								NI			MIIH					
plant - vascular	thistleleaf aster	Eurybia eryngiifolia	NI				MIIH											
-		Eurybia saxicastellii		NI														
-	Texas fescue	Festuca versuta									NI							
plant - non-	Appalachian fissidens	Fissidens appalachensis				F ATTL							N 41111					
vascular	moss					MIIH							MIIH					
plant - non-	Hall's fissidens moss	Fissidens hallii											MIIH					
vascular													IVIII					]
		Forestiera godfreyi					MIIH											]
plant - vascular		Fothergilla major	NI		MIIH	MIIH							MIIH	NI				]
plant - non- vascular	a liverwort	Frullania appalachiana			MIIH	MIIH							MIIH					
plant - non- vascular	a liverwort	Frullania donnellii					MIIH						MIIH					

Region 8 Plants

category	Common name	Scientific name	NFs of Alabama	Daniel Boone	Chattahoochee- Oconee	Cherokee	NFs of Florida	Kisatchie	NFs of Mississppi		Ouachita	Ozark	NFs of North Carolina	Sumter	NF&G of Texas	Land Between the Lakes	1	Savannah River	Comments
plant - vascular	i i	Gaylussacia brachycera								NI									
plant - vascular	harvestbells	Gentiana latidens											MIIH						
plant - vascular	wiregrass gentian	Gentiana pennelliana					MIIH												
plant - vascular	bent avens	Geum geniculatum				MIIH							MIIH	ļ	1			_	
plant - vascular	Great Smoky Mountain mannagrass	Glyceria nubigena											MIIH						
plant - vascular	West Indian dwarf polypody	Grammitis nimbata											MIIH						
fungi	sterling lips	Graphis sterlingiana											MIIH						1
fungi	a lichen	Gyalectidium																	1
		appendiculatum											MIIH						
plant - vascular	Appalachian oakfern	Gymnocarpium																	1
ľ	' '	appalachianum								NI									
fungi	Rock Gnome Lichen	Gymnoderma lineare			MIIH	MIIH				NI			MIIH						Addressed in BA
plant - vascular	Leonard's witch hazel	Hamamelis ovalis							NI						NI				1
plant - vascular	Florida hartwrightia	Hartwrightia floridana					MIIH												1
plant - vascular	hammockherb	Hasteola robertiorum					MIIH												1
plant - vascular	mock pennyroyal	Hedeoma graveolens					MIIH												1
plant - vascular	fewleal sunflower	Helianthus occidentalis																	1
		var. plantagineus						NI			NI								
plant - vascular	Smith's sunflower	Helianthus smithii	NI		MIIH														
fungi	Appalachian shield lichen	Heterodermia																	1
		appalachensis				MIIH				NI			MIIH						
fungi	a lichen	Heterodermia erecta			MIIH					NI			MIIH						1
plant - vascular	white alumroot	Heuchera alba								NI									1
plant - vascular	Arkansas alumroot	Heuchera villosa var. arkansana									NI								
plant - vascular	mountain heartleaf	Hexastylis contracta		NI									MIIH						1
•	North Fork heartleaf	Hexastylis rhombiformis											MIIH						1
plant - vascular	Harper's heartleaf	Hexastylis speciosa	NI																1
plant - non-	Sharp's homaliadelphus	Homaliadelphus sharpii																	1
vascular	moss	, ,											MIIH						
plant - vascular	Brown's waterleaf	Hydrophyllum brownei									NI								1
plant - non- vascular	hygrohypnum moss	Hygrohypnum closteri		NI		MIIH							MIIH						
plant - vascular	shoals spiderlily	Hymenocallis coronaria											<del> </del>	NI					
plant - vascular	Henry's spiderlily	Hymenocallis henryae					MIIH							<del>                                     </del>					
plant - vascular		Hymenophyllum tayloriae	NI		MIIH								MIIH						
plant - vascular	creeping St. Johnswort	Hypericum adpressum	1								NI	NI	1	1	1				1
fungi	Oosting's hypotrachyna lichen	Hypotrachyna oostingii								NI			MIIH						
fungi	Virginia hypotrachyna lichen	Hypotrachyna virginica				MIIH				NI			MIIH						
plant - vascular	longstalk holly	Ilex collina								NI			<del> </del>		<del>                                     </del>				1

Region 8 Plants

category	Common name	Scientific name	NFs of Alabama	Daniel	Chattahoochee- Oconee	Cherokee	NFs of Florida	Kisatshio	NFs of Mississppi	George Washington and Jefferson	Ouachita	Ozark	NFs of North Carolina	Sumter	NF&G of Texas	Land Between the Lakes		Savannah River	Comments
plant - vascular	yellow anisetree	Illicium parviflorum	Alaballia	boone	Oconee	CHEIOREE	MIIH	Kisatcille	Iviississppi	Jenerson	Ouacilita	Ozark	Caronna	Juinter	TEXAS	tile Lakes	Junque	Kivei	Comments
plant - vascular	narrowleaf morning-glory				1		IVIIIII												-
piarit - vascular	marrowlear morning-glory	ipomoeu snumuruiunu													NI				
plant - vascular	thin-wall quillwort	Isoetes microvela											MIIH						
plant - vascular	Tennessee quillwort	Isoetes tennesseensis				MIIH													
plant - vascular	butternut	Juglans cinerea	NI	NI	MIIH	MIIH			NI	NI		NI	MIIH	NI		NI			
plant - vascular	thickleaf water-willow	Justicia crassifolia					MIIH												
plant - vascular	pineland bogbutton	Lachnocaulon digynum	NI				MIIH	NI	NI						NI				
plant - vascular	golden gladecress	Leavenworthia aurea									NI								
fungi	a lichen	Lecanora masana								NI			MIIH						
plant - non- vascular	a liverwort	Lejeunea blomquistii			MIIH	MIIH							MIIH						
plant - non-	a liverwort	Lejeunea dimorphophylla			1														-
vascular	a liver wort	Гејеиней инпогрнорнуна											MIIH						
fungi	Appalachian dust bunnies	Lepraria lanata											MIIH						
plant - non- vascular	leptodontium moss	Leptodontium excelsum				MIIH							MIIH						
plant - non-	Sharp's leptohymenium	Leptohymenium sharpii																	•
vascular	moss												MIIH						
plant - non-	a liverwort	Leptoscyphus cuneifolius	1																1
vascular										NI									
plant - vascular		Lesquerella angustifolia									NI								
plant - vascular	Gulf blazing star	Liatris tenuis						NI							NI				
plant - vascular	turgid blazing star	Liatris turgida								NI			MIIH						<u> </u>
plant - vascular	Gray's lily	Lilium grayi				MIIH				NI			MIIH						
plant - vascular	panhandle lily	Lilium iridollae	NI																<u> </u>
plant - vascular	bog spicebush	Lindera subcoriacea	NI						NI				MIIH						<u> </u>
plant - vascular	Spring Hill flax	Linum macrocarpum	NI						NI										
plant - vascular	West's flax	Linum westii					MIIH												_
plant - vascular	pondspice	Litsea aestivalis					MIIH						MIIH						_
plant - non-	a liverwort	Lophocolea appalachiana				MIIH							MIIH					A	
vascular						1711111							1711111						
plant - vascular		Lotus unifoliolatus var. helleri			MIIH								MIIH						
plant - vascular	Fraser's yellow loosestrife		NI		MIIH	MIIH							MIIH	NI		NI			
plant - vascular	Curtiss' loosestrife	Lythrum curtissii			1		MIIH												1
plant - vascular	flameflower	Macranthera flammea	NI		1		MIIH		NI										1
plant - vascular	Ashe's magnolia	Magnolia ashei	<del> </del>		†		MIIH		<u> </u>						1				1
plant - vascular		Marshallia trinervia	†					1	<del> </del>			<del>                                     </del>	1	<del> </del>	†	<u> </u>			†
	buttons		NI					NI	NI										_
fungi	Culberson's black- parmelia	Melanelia culbersonii								NI								L	

										George									
anto com.	Common nome	Caiantifia nama								Washington			NFs of			Land			
category	Common name	Scientific name	NFs of	Daniel	Chattahoochee-		NFs of		NFs of	and			North		NF&G of	Between	El	Savannah	
			Alabama	Boone	Oconee	Cherokee	Florida	Kisatchie	Mississppi	Jefferson	Ouachita	Ozark	Carolina	Sumter	Texas	the Lakes	Junque	River	Comments
plant - non-	a liverwort	Metzgeria furcata var.											NAIILI						- I
vascular		setigera											MIIH						ı
plant - vascular	Godfrey's stitchwort	Minuartia godfreyi	NI																İ
plant - vascular	pygmypipes	Monotropsis odorata	NI	NI	MIIH	MIIH				NI			MIIH	NI					ı
plant - vascular	Florida pygmypipes	Monotropsis reynoldsiae					MIIH												ı
fungi	a lichen	Mycoporum biseptalum											MIIH						ı
plant - vascular	loose watermilfoil	Myriophyllum laxum	NI				MIIH		NI				MIIH						ı
plant - vascular	needleleaf waternymph	Najas filifolia					MIIH												ı
plant - non-	a liverwort	Nardia lescurii		NI	MIIH	MIIH				NI			MIIH						ı
vascular				INI	IVIIII	IVIIIII				INI			IVIIIII						ı
plant - vascular	fallflowering plantleaf	Nemastylis floridana					MIIH												ı
plant - vascular	Alabama snow-wreath	Neviusia alabamensis	NI									NI							ı
plant - vascular	Florida beargrass	Nolina atopocarpa					MIIH												ı
plant - non-	oncophorus moss	Oncophorus raui		NI															ı
vascular				IN.															ı
plant - vascular	piedmont ragwort	Packera millefolium			MIIH					NI			MIIH						ı
plant - vascular	serpentine ragwort	Packera serpenticola											MIIH						ı
plant - vascular	Carolina grass of	Parnassia caroliniana					MIIH												ı
	Parnassus						IVIIII												ı
plant - vascular	largeleaf grass of	Parnassia grandifolia			MIIH	MIIH	MIIH	NI	NI	NI		NI	MIIH						ı
	Parnassus				IVIIII	IVIIII	IVIIII	INI	IVI	INI		INI	IVIIII						ı
plant - vascular	Canby's mountain lover	Paxistima canbyi		NI						NI									ı
plant - vascular	oceanblue phacelia	Phacelia ranunculacea														NI			ı
plant - vascular	swordleaf phlox	Phlox buckleyi								NI									ı
plant - vascular	pineland false sunflower	Phoebanthus tenuifolius	NI				MIIH												ı
fungi	rosette lichen	Physcia pseuodspeciosa											MIIH						ı
plant - vascular	Godfrey's false	Physostegia godfreyi					MIIH												ı
	dragonhead						1011111												ı
fungi		Pilophorus fibula											MIIH						ı
plant - vascular		Pinckneya bracteata					MIIH												ı
plant - vascular		Pinguicula planifolia	NI				MIIH		NI										ı
plant - vascular		Pinguicula primuliflora	NI						NI										ı
plant - vascular	zigzag silkgrass	Pityopsis flexuosa					MIIH												İ
plant - non-	a liverwort	Plagiochila austinii				MIIH				NI			MIIH						İ
vascular	1.									ļ	1	ļ							İ
plant - non-	a liverwort	Plagiochila caduciloba			MIIH	MIIH							MIIH	NI					İ
vascular	1.				1						1	ļ							İ
plant - non-	a liverwort	Plagiochila corniculata				MIIH				NI			MIIH						İ
vascular																			İ
plant - non-	a liverwort	Plagiochila eurphyllon				MIIH							MIIH						İ
vascular		ssp. echinata				.*******													İ
plant - non-	a liverwort	Plagiochila sharpii											MIIH						İ
vascular																			İ
plant - non-	a liverwort	Plagiochila sullivantii		NI		MIIH				NI			MIIH						İ
vascular										'''									

										George Washington			NFs of			Land			
category	Common name	Scientific name	NFs of	Daniel	Chattahoochee-		NFs of		NFs of	and			North		NF&G of	Between	El	Savannah	
			Alabama	Boone	Oconee	Cherokee	Florida	Kisatchie	Mississppi	Jefferson	Ouachita	Ozark	Carolina	Sumter	Texas	the Lakes	Junque	River	Comments
plant - non-	a liverwort	Plagiochila virginica				MIIH				NI			MIIH						
vascular						IVIIII				INI			IVIIII						
plant - non-	Carolina plagiomnium	Plagiomnium				MIIH							MIIH						
vascular	moss	carolinianum				IVIIII							IVIIII						
plant - vascular	yellow fringeless orchid	Platanthera integra	NI				MIIH	NI	NI				MIIH		NI				
plant - non-	Pringle's platyhypnidium	Platyhypnidium pringlei											MIIH						
vascular	moss												IVIIII						
plant - vascular	bog bluegrass	Poa paludigena								NI									
plant - non-	Rabun bald feathermoss	Pohlia rabunbaldensis			MIIH								MIIH						
vascular					IVIIII								IVIIII						
plant - vascular	Hooker's milkwort	Polygala hookeri	NI				MIIH		NI				MIIH						]
plant - vascular	<u> </u>	Polygala leptostachys					MIIH		NI										]
plant - vascular	Cossatot Mountain	Polymnia cossatotensis									NI								
	leafcup						<u> </u>				INI	<u></u>			<u> </u>			<u> </u>	
plant - non-	Appalachian polytrichum	Polytrichum											MIIH						]
vascular	moss	appalachianum											IVIIII						
plant - non-	a liverwort	Porella japonica ssp.				MIIH							MIIH						
vascular		appalachiana				IVIIII							IVIIII						
plant - vascular	Hill's pondweed	Potamogeton hillii								NI									
plant - vascular	Tennessee pondweed	Potamogeton				NAHLI				NII									
		tennesseensis				MIIH				NI									
plant - vascular	barbed rattlesnakeroot	Prenanthes barbata						NI							NI	NI			]
plant - vascular	nodding rattlesnakeroot	Prenanthes crepidinea		NI												NI			]
plant - vascular	giant orchid	Pteroglossaspis ecristata					MIIH	NI	NI										]
plant - vascular	stone mountainmint	Pycnanthemum curvipes			MIIH	MIIH													
plant - vascular	Florida mountainmint	Pycnanthemum					NAULI												
		floridanum					MIIH												
plant - vascular	Torrey's mountainmint	Pycnanthemum torrei								NI			MIIH						]
plant - vascular	mapleleaf oak	Quercus acerifolia									NI	NI							
plant - vascular	Arkansas oak	Quercus arkansana	NI					NI											]
plant - vascular	Oglethorpe oak	Quercus oglethorpensis			MIIH				NI					NI					]
plant - non-	a liverwort	Radula sullivantii	NII			MIIH							MIIH	NII					]
vascular		<u> </u>	NI			IVIIIH						<u> </u>	IVIIIH	NI	<u> </u>			<u> </u>	
plant - non-	a liverwort	Radula tenax				MIIH				NI			MIIH						
vascular				<u>L</u>		IVIIIH	<u>L</u>	<u> </u>		INI	<u></u>	<u> </u>	IVIIIH		<u> </u>	<u> </u>		L	]
plant - non-	a liverwort	Radula voluta				MIIH							MIIH						]
vascular						IVIIIH	<u> </u>					<u></u>	IVIIIH		<u> </u>			<u> </u>	
plant - vascular	white meadowbeauty	Rhexia parviflora	NI				MIIH												
plant - vascular	panhandle	Rhexia salicifolia	NII				MIIH												]
	meadowbeauty		NI				IVIIII												]
plant - vascular	orange azalea	Rhododendron austrinum	NI				MIIH												
plant - vascular	Santee azalea	Rhododendron eastmanii		1										NI					1
plant - vascular		Rhododendron vaseyi		1	<u> </u>			1	<u> </u>			<u> </u>	MIIH	1	<u> </u>				1
plant - vascular		Rhynchospora crinipes	NI		1		MIIH	1	NI			<b>†</b>	1		<u> </u>				1

Region 8 Plants

category	Common name	Scientific name	NFs of Alabama	Daniel Boone	Chattahoochee- Oconee	Cherokee	NFs of Florida	Kisatchie	NFs of Mississppi	George Washington and Jefferson	Ouachita	Ozark	NFs of North Carolina	Sumter	NF&G of Texas	Land Between the Lakes	Savannah River	Comments
plant - vascular	shortbristle beaksedge	Rhynchospora galeana					MIIH						MIIH					
plant - vascular		Rhynchospora macra					MIIH	NI	NI				MIIH		NI			
plant - vascular	coastal beaksedge	Rhynchospora pleiantha	NI				MIIH						MIIH					
plant - non-	a liverwort	Riccardia jugata				MIIH							MIIH					
vascular						1411111							IVIIIII					
fungi	a lichen	Rinodina chrysomeleana			MIIH	MIIH												
plant - vascular	Hartweg's locust	Robinia hartwegii											MIIH					
plant - vascular	earned coneflower	Rudbeckia auriculata	NI															
plant - vascular	sunfacing coneflower	Rudbeckia heliopsidis	NI											NI				
plant - vascular	roughleaf coneflower	Rudbeckia scabrifolia						NI							NI			
plant - vascular	browneyed Susan	Rudbeckia triloba var.				MIIH							MIIH					
		pinnatiloba				IVIIIH							IVIIIH					
plant - vascular	nightflowering wild petunia	Ruellia noctiflora	NI				MIIH		NI									
plant - vascular	<b>-</b>	Salix floridana					MIIH											
plant - vascular		Sarracenia purpurea var.																
piant vascaiai		montana											MIIH					
plant - vascular		Saxifraga caroliniana				MIIH				<u> </u>			MIIH					
plant - vascular		Schisandra glabra	NI	NI	MIIH			NI	NI			NI						
plant - non-		Schlotheimia lancifolia	141	141	141111			141	141	<del> </del>		141						
vascular	moss												MIIH					
plant - vascular		Schoenolirion wrightii						NI						1	NI			
plant - vascular		Schoenoplectus hallii			1			1 111		<u> </u>					NI			
plant - non-		Scopelophila cataractae												1	ivi			
vascular	moss	Scoperoprima cataractae		NI									MIIH					
plant - vascular		Scutellaria arguta		NI		MIIH				<u> </u>			MIIH					
plant - vascular		Scutellaria saxatilis		NI		MIIH				NI			MIIH					
plant - vascular	-	Sedum nevii	NI	- 111		MIIH				1								
plant - vascular	•	Shortia galacifolia	<del>                                     </del>		MIIH	MIIH							MIIH	NI				
plant - vascular		Silene ovata		NI	MIIH	MIIH				NI		NI	MIIH					
plant - vascular		Silene regia	NI	1						1		NI						
plant - vascular		Silene subciliata	1					NI		1					NI			
plant - vascular	•	Silphium pinnatifidum	1		1			1	<u> </u>		1		1		<del>                                     </del>	NI		
plant - vascular		Silphium wasiotense	1	NI					<u> </u>						<u> </u>	† · · ·		
plant - vascular		Solidago albopilosa		NI														
plant - vascular		Solidago ouachitensis		1														
	goldenrod										NI	NI						
plant - vascular		Solidago plumosa	<u> </u>										MIIH					
plant - vascular		Solidago simulans	ļ		MIIH		ļ			ļ	-		MIIH			-		
plant - vascular	springflowering goldenrod	Solidago verna											MIIH					
plant - non- vascular	, -	Sphagnum flavicomans				MIIH				NI			MIIH					
plant - non- vascular	a liverwort	Sphenolobopsis pearsonii				MIIH				NI			MIIH					

										George Washington			NFs of			Land			
category	Common name	Scientific name	1	Daniel	Chattahoochee-		NFs of		NFs of	and			North			Between		Savannah	
			Alabama	Boone	Oconee	Cherokee	Florida	Kisatchie	Mississppi	Jefferson	Ouachita	Ozark	Carolina	Sumter		the Lakes	Junque	River	Comments
	· · · · · · · · · · · · · · · · · · ·	Spiranthes brevilabris	<u> </u>		-					-					NI				
	•	Spiranthes eatonii											MIIH						-
·		Spiranthes longilabris					MIIH		NI				MIIH						
•	· ·	Sporobolus curtissii	NI				MIIH												-
	<u> </u>	Stachys clingmanii	1			MIIH							MIIH						
fungi	Tennessee snow lichen	Stereocaulon tennesseense			MIIH	MIIH							MIIH						
fungi	spotted felt lichen	Sticta limbata											MIIH						
	l' *	Streptanthus squamiformis									NI								
plant - vascular		Stylisma abdita	1				MIIH												1
	Georgia aster	Symphyotrichum			1				<u> </u>				1	<u> </u>					1
13333131	_	georgianum	NI		MIIH								MIIH	NI					
plant - vascular		Symphyotrichum																	1
p.a		rhiannon											MIIH						
plant - vascular	guill fameflower	Talinum teretifolium		NI	MIIH					NI			MIIH						1
'	Sharp's pouncewort	Taxilejeunea sharpii		111						<del> </del>			1411111						1
vascular						MIIH													
plant - non- vascular	taxiphyllum moss	Taxiphyllum alternans											MIIH						
plant - vascular	Arkansas meadow-rue	Thalictrum arkansanum									NI								
plant - vascular	cutleaf meadowparsnip	Thaspium pinnatifidum	NI	NI		MIIH							MIIH						
plant - vascular	ashleaf goldenbanner	Thermopsis fraxinifolia			MIIH	MIIH							MIIH						
plant - vascular	Allegheny Mountain	Thermopsis mollis		NII		MIIH				NII			MIIH	NI					
	goldenbanner			NI		IVIIII				NI			IVIIII	INI					
plant - vascular	Aaron's rod	Thermopsis villosa			MIIH								MIIH						
plant - vascular	Ozark spiderwort	Tradescantia ozarkana									NI	NI							
plant - vascular	Kates Mountain clover	Trifolium virginicum								NI									
plant - vascular	trailing wakerobin	Trillium decumbens	NI			MIIH													
plant - vascular	delicate trillium	Trillium delicatum			MIIH														
plant - vascular	mottled wakerobin	Trillium discolor			MIIH								MIIH	NI					
plant - vascular	lanceleaf wakerobin	Trillium lancifolium			MIIH									NI					
plant - vascular	Ozark wakerobin	Trillium pusillum var.									NII	NII.							
		ozarkanum			<u>                                     </u>						NI	NI							
plant - vascular	jeweled wakerobin	Trillium simile			MIIH	MIIH							MIIH	NI					1
	Texas wakerobin	Trillium texanum													NI				
·	threebirds	Triphora trianthophora													N.:				1
		var. texensis													NI				
plant - vascular		Tsuga caroliniana				MIIH				NI			MIIH						1
•		Usnea angulata											MIIH						1
		Uvularia floridana	NI				MIIH		NI			1							1
·	Nutall's cornsalad	Valerianella nuttallii	1						<u> </u>		NI	NI	1	<u> </u>					1
•		Valerianella ozarkana	1						<u> </u>			NI	1	<u> </u>					1
		Valerianella palmeri									NI								1
1		Verbesina heterophylla			+		MIIH		<del>                                     </del>	<del>                                     </del>	+ · · · · ·		+	-	<del> </del>				1

Region 8 Plants

## 20230707\_PlantFungiSensitiveSpecies

category	Common name	Scientific name	ı	Daniel	Chattahoochee-		NFs of	le and his	NFs of	George Washington and		01	NFs of North			Land Between		Savannah	
			Alabama	Boone	Oconee	Cherokee	Florida	Kisatchie	Mississppi	Jetterson	Ouachita	Ozark	Carolina	Sumter	Texas	the Lakes	Junque	River	Comments
plant - vascular		Vernonia lettermannii		ļ							NI								4
plant - vascular	Ocala vetch	Vicia ocalensis					MIIH												1
plant - vascular	sand grape	Vitis rupestris		NI						NI	NI								1
plant - vascular	piedmont barren strawberry	Waldsteinia lobata			MIIH								MIIH	NI					
fungi	· ·	Xanthoparmelia monticola											MIIH						
plant - vascular	Drummond's yelloweyed grass	Xyris drummondii	NI				MIIH	NI	NI						NI				
plant - vascular	quillwort yelloweyed grass	Xyris isoetifolia	NI				MIIH												
plant - vascular	Kral's yelloweyed grass	Xyris longisepala	NI				MIIH												1
plant - vascular	Louisiana yelloweyed grass	Xyris louisianica					MIIH	NI											
plant - vascular	Harper's yelloweyed grass	Xyris scabrifolia	NI				MIIH	NI	NI						NI				

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				Chequamagon-	Green Mountain			Huron-	Mark				1			White
			Allegheny	Nicolet	and Finger Lakes	Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category	Common name	scientific name														
plant -															NI	
vascular	Deam's copperleaf	Acalypha deamii														
plant -							NI									
vascular	Blue Monkshood	Aconitum uncinatum										<u> </u>				
plant -		Actaea rubifolia											NI			
vascular	Appalachian Bugbane	(=Cimicifuga rubifolia)										<u> </u>				
plant -			NI													
vascular	red baneberry	Actaea rubra														
plant -						NI										NI
vascular		Adlumia fungosa														
plant -	small-flower false	Agalinia pauperculs var.			NI											
vascular	foxglove	paupercula														
plant -										NI						
vascular	Earleaf False Foxglove	Agalinis auriculata								141						
plant -									MIIH							
vascular	Skinner's False Foxglove	Agalinis skinneriana							IVIIIII							
plant -					NI											
vascular	yellow giant-hyssop	Agastache nepetoides			IVI											
plant -								NI								
vascular	Pale False-dandelion	Agoseris glauca						INI								
plant -					NI											
vascular	woodland agrimony	Agrimonia rostellata			INI											
plant -											NII					
vascular	northern bentgrass	Agrostis mertensii									NI					
plant -											NII					
vascular	Allegheny Onion	Allium allegheniense									NI					
plant -					N.I.											
vascular	Nodding Onion	Allium cernuum			NI											
plant -																
vascular	Lillydale Onion	Allium oxyphilum									NI					
fungi	yellow ribbon lichen	Allocetraria oakesiana												MIIH		
plant -		Amelanchier														
vascular	Bartram Shadbush	bartramiana	NI								NI					
plant -																
vascular	Roundleaf Orchid	Amerorchis rotundifolia		NI		NI										
plant -		,														<del>                                     </del>
vascular	Smooth False Indigo	Amorpha nitens											NI			
fungi	powdery almond lichen													MIIH		
plant -																
vascular	Wood Anemone	Anemone quinquefolia							MIIH							
plant -		Arabis holboellii var.														
vascular	second rock-cress	retrofracta												MIIH		
			<u> </u>	1	<u> </u>		<u> </u>	<u> </u>	1	1	1	ı	1	1	1	

			Allegheny	Chequamagon-		Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name	Allegheny	Nicolet	Cilippewa	and Finger Lakes	niawatiia	noosiei	Manistee	Twain	Wildewill	Iviolioligaliela	Ottawa	Silawilee	Superior	vvayne	Mountain
plant -																	<b>—</b>
vascular	smooth rock-cress	Arabis laevigata															NI
plant -																	NI
vascular	green rock-cress	Arabis missouriensis															
plant - vascular	Missouri rock-cress	Arabis missouriensis v. deamii		NI					NI								
plant -	IVIISSOUTT TOCK-CLESS	ucumi															
vascular	Spreading Rockcress	Arabis patens										NI					
plant -						NI											
vascular	Eastern Dwarf-mistletoe	Arceuthobium pusillum				INI											
plant -																	NI
vascular	Alpine Manzanita	Arctostaphylos alpina															
plant - vascular	Dragon's Mouth	Arethusa bulbosa															NI
plant -	Dragon's Wouth	Arethasa baibosa															
vascular	Arnica	Arnica lanceolata															NI
plant -															MIIH		
vascular	Northern Arnica	Arnica lonchophylla													IVIIII		
plant -														NI			
vascular plant -	black chokeberry	Aronia melanocarpa															
vascular	Poke Milkweed	Asclepias exaltata				NI											
plant -	T OKC WINKWCCG	riscrepius exartatu															<u>-</u>
vascular	green milkweed	Asclepias hirtella							NI								
plant -									NI								
vascular	dwarf milkweed	Asclepias ovalifolia							INI								
plant -	Decombo Millores and	Andrein							NI								
vascular plant -	Purple Milkweed	Asclepias purpurascens															
vascular	butterfly milkweed	Asclepias tuberosa				NI											
plant -																	
vascular	Bradley's Spleenwort	Asplenium bradleyi												NI			
plant -														NI			
vascular		Asplenium resiliens												141			
plant -	Walking-fern	Asalanium rhizanhullum					NI										
vascular plant -	Spleenwort	Asplenium rhizophyllum															
vascular	Maidenhair Spleenwort	Asplenium trichomanes													MIIH		
plant -	_	Asplenium trichomanes-															
vascular	Green Spleenwort	ramosum		NI													
plant -				NI											MIIH		
vascular	Alpine Milkvetch	Astragalus alpinus		141					ļ						iviiii i		
plant - vascular	Canadian Milkvetch	Astragalus canadensis					NI		NI				NI			NI	

Category	Common name	scientific name	Allegheny	Chequamagon- Nicolet	I I DIDDAWA	Green Mountain and Finger Lakes	Hiawatha	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White Mountain
plant -																	+ -
vascular	Cooper's Milkvetch	Astragalus neglectus					NI					NI	NI				
plant -	·	Astragalus robbinsii var.															1
vascular	Robbins' Milkvetch	minor															NI
plant -		Astragalus distortus var.										NII					
vascular	Ozark milkvetch	distortus										NI					
plant -	smooth yellow false					NI											
vascular	foxglove	Aureolaria flava				INI											
plant -	Fernleaf Yellow False					NI										NI	
vascular	Foxglove	Aureolaria pedicularia				INI										INI	
		Baeomyces (=Dibaeis)						NI									
fungi	Pink Dot Lichen	absoluta						INI									
plant -		Baptisia australis var.	NI									NI					
vascular	Blue Wild Indigo	australis	141									141					
plant -						NI											
vascular	Yellow Wild Indigo	Baptisia tinctoria				141											
plant -										MIIH				NI			
vascular	Twining Screwstem	Bartonia paniculata															
plant -							NI										
vascular	American Sloughgrass	Beckmannia syzigachne															
plant -	1													NI			
vascular	supplejack	Berchimia scandens															
plant -	NA/ilal Damania	Damila areata							NI								
vascular	Wild Parsnip	Berula erecta															
plant -	Dwarf White Birch	Betula minor															NI
vascular plant -	Dwarr white Birth	Betula minor															+
vascular	Hairy Woodmint	Blephilia hirsuta				NI											
plant -	Trairy Woodinint	biepiiliia iiii sutu															+
vascular	Drummond's rockcress	Boechera stricta				NI											
plant -	Drammona s rockeress	Bocchera stricta															+
vascular	Trianglelobe Moonwort	Botrychium ascendens			MIIH												
plant -	Thangleiese meeting	Bottyomam assemachs															+
vascular	Sparse-lobe Grapefern	Botrychium biternatum												NI		NI	
plant -																	+ -
vascular	Prairie Dunewort	Botrychium campestre			MIIH		NI										
plant -																	+ -
vascular	Scalloped Moonwort	Botrychium crenulatum			MIIH												
plant -	,	,															<del>                                     </del>
vascular	western moonwort	Botrychium hesperium					NI						NI		MIIH		
plant - vascular	Lanceleaf Grapefern	Botrychium lanceolatum var. angustisegmentum	NI		MIIH							NI			MIIH		

				Chequamagon-		Green Mountain			Huron-	Mark							White
Category	Common name	scientific name	Allegheny	Nicolet		and Finger Lakes	Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
plant -	Common name	Scientific flame															+
1.	Common Moonwort	Botrychium lunaria			MIIH										MIIH		
plant -	Common Woonwore	Doct yemam ranara															+
1.	Mingan Moonwort	Botrychium minganense		NI	MIIH								NI				
plant -	, ,	, ,															
1.	Little Goblin Moonwort	Botrychium mormo		NI	MIIH		NI		NI				NI		MIIH		
plant -		,															
vascular	leathery grapefern	Botrychium multifidum				NI											
plant -			NII	N.I.	N 41111	NII	NII.		NII.				NII				
vascular	Bluntlobe Grapefern	Botrychium oneidense	NI	NI	MIIH	NI	NI		NI				NI				
plant -				NII	NAIIII		NII										
vascular	Pale Moonwort	Botrychium pallidum		NI	MIIH		NI										
plant -				NI			NI		NI				NI				
vascular	Ternate Grapefern	Botrychium rugulosum		INI			INI		IVI				INI				
plant -													NI				
vascular	Least Grapefern	Botrychium simplex											INI				
plant -		Botrychium simplex var.	NI														
	little grapefern	tenebrosum	IVI														
plant -							NI										
	Spoon-leaf Moonwort	Botrychium spathulatum					141										
plant -									NI								
-	Sideoats Grama	Bouteloua curtipendula															
plant -														NI			
vascular	Nottoway Brome Grass	Bromus nottowayanus															
	pale-footed horsehair				MIIH												
fungi	lichen	Bryoria fuscescens															
plant - non-	Norway Bryoxiphium							NI									
	Moss	Bryoxiphium norvegicum															
plant -	DI diserte	0						NI						NI			
vascular	Bluehearts	Buchnera americana															
mla mt		Calamagrostis															l l
plant -	blue joint roodgrass	canadensis var.															NI
vascular plant -	blue-joint reedgrass	langsdorffii Calamagrostis porteri															
l'	Ofer Hollow Reedgrass	ssp. insperata								MIIH				NI			
plant -	Olei Hollow Reedgrass	Calamagrostis porteri															
l'	Porter's Reedgrass	ssp. porteri						NI									
plant -	i orter a needgrass	Calamagrostis									<del>                                     </del>						+
1.	purple reedgrass	purpurascens													MIIH		
	New England Northern	Calamagrostis stricta															+
-	Reed Grass	ssp. inexpansa				NI							NI				
plant -		ээрг шелринзи									<del> </del>						+
	Bush's Poppy-mallow	Callirhoe bushii								MIIH							
				I .	<u> </u>		I		l .		1			l			

			Allegheny	Chequamagon-		Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			Manistee	Twain							Mountain
plant -	Autumnal Water-	Callitriche		A.I.									All				
vascular	starwort	hermaphroditica		NI			NI						NI				
plant -	Twoheaded Water-																
vascular	starwort	Callitriche heterophylla		NI		NI									MIIH		
fungi	firedot lichen species	Caloplaca parvula		NI			NI						NI		MIIH		
plant -		, ,															
1.	Floating Marsh-marigold	Caltha natans													MIIH		
plant -																	
I.	Fairy Slipper	Calypso bulbosa		NI	MIIH		NI						NI				
plant -	run y Snpper	carypso barbosa									<del>                                     </del>						+
1.	Marsh Bellflower	Campanula aparinoides								MIIH							
plant - non-	rock-loving swan-	cumpunata aparmotacs															
i ·	_	Campulostalium savisala														NI	
vascular	necked moss	Campylostelium saxicola															+
plant -	Almina Dittananaa	Candanain a hallidifalia															NI
	Alpine Bittercress	Cardamine bellidifolia															
plant -																	NI
	Cutleaf Toothwort	Cardamine concatenata															
plant -						NI							NI				
	Large Toothwort	Cardamine maxima											, , ,				
plant -		Cardamine parviflora				NI											
vascular	Sand Bittercress	var. arenicola				141											
plant -															MIIH		
vascular	Cuckoo-flower	Cardamine pratensis													IVIIII		
plant -		Cardamine pratensis			NAIIII												
vascular	Cuckoo-flower	var. pratensis			MIIH												
plant -						N.I.											
vascular	Summer Sedge	Carex aestivalis				NI											
plant -																	
vascular	Winged Sedge	Carex alata												NI			
plant -	5 5	Carex aquatilis var.															
	Water Sedge	aquatilis				NI				MIIH							
plant -																	
I.	Hay Sedge	Carex argyrantha				NI											
plant -	-,	37															+
•	Awned Sedge	Carex atherodes	NI														
plant -	,ica scage	carex atherodes															+
l'	Star Sedge	Carex atlantica								MIIH				NI			
plant -	Jiai Jeuge	Carex atlantica spp.									-						+
1.	Atlantic codgo									MIIH							
	Atlantic sedge	Atlantica															+
plant -	la la alcas de a	Community of the second															NI
	black sedge	Carex atratiformis															
plant -				NI		NI											
vascular	Rocky Mountain Sedge	Carex backii															

			<u> </u>	Chequamagon-	 Green Mountain			Huron-	Mark							White
Catagory	Common name	scientific name	Allegheny	Nicolet	and Finger Lakes	l Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category plant -	Common name	Scientific flame														
vascular	Bailey's Sedge	Carex baileyi														NI
plant -																
vascular	Bigelow's Sedge	Carex bigelowii			NI											
plant -													NI			
vascular	Bromelike Sedge	Carex bromoides											INI			
plant -									MIIH							
vascular	Buxbaum's Sedge	Carex buxbaumii														
plant -	المانيانان ممام	Carror annillaria														NI
vascular plant -	hairlike sedge	Carex capillaris Carex capitata ssp.														+
vascular	Capitate Sedge	arctogena														NI
plant -	capitate seage	arecogena														
vascular	Cherokee Sedge	Carex cherokeensis											NI			
plant -																
vascular	Beautiful Sedge	Carex concinna				NI										
plant -					NI											
vascular	northern sedge	Carex cryptolepis			141											
plant -																NI
vascular	Clustered Sedge	Carex cumulata														<del>                                     </del>
plant - vascular	Cyprossknoo Sodgo	Carex decomposita											NI			
plant -	Cypressknee Sedge	curex decomposita														<del>                                     </del>
vascular	Hammock Sedge	Carex fissa var. fissa							MIIH							
plant -																
vascular	Dryspike Sedge	Carex foenea			NI											
plant -					NII											
vascular	Frank's sedge	Carex frankii			NI											
plant -									MIIH				NI		NI	
vascular	Giant Sedge	Carex gigantea											1,,,		141	<u> </u>
plant -		C							MIIH							
vascular plant -	Graceful Sedge	Carex gracillima														1
vascular	Hudson Bay Sedge	Carex heleonastes				NI										
plant -	Tidusoff Day Seuge	Curex heleonastes														<del>                                     </del>
vascular	pubescent sedge	Carex hirtifolia														NI
plant -	process see go	.,.														
vascular	greater bladder sedge	Carex intumescens											NI			
plant -															NII	
vascular	Juniper Sedge	Carex juniperorum													NI	
plant -	Broad Looseflower	Carex laxiflora var.							MIIH							]
vascular	sedge	laxiflora						ļ								
plant -	Chana Cadaa	Companies			NI											
vascular	Shore Sedge	Carex lenticularis		<u> </u>												

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			Allegheny	Chequamagon-	Chippewa	Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name	Allegicity	Nicolet	Cilippewa	and Finger Lakes	illawatila	11003101	Manistee	Twain	Wildewill	Wiononganeia	Ottawa	Jilawiice	Superior	wayne	Mountain
plant -		Carex livida var.															
vascular	Livid Sedge	radicaulis		NI													
plant -																NII	
vascular	Louisiana Sedge	Carex louisianica														NI	
plant -		Carex lucorum var.										NI					
vascular	blue sedge	austrolucorum										INI					
plant -									NI					NI			
vascular		Carex lupuliformis							141					141			
plant -		Carex magellanica	NI														
vascular	Boreal Bog Sedge	ssp.irrigua															
plant -	Materia de Carda a	Communication to the		NI		NI											
vascular	Michaux's Sedge	Carex michauxiana															
plant -	Dlack odgo Codgo	Caray niaramarainata												NI			
vascular plant -	Black-edge Sedge	Carex nigromarginata															
vascular	New England Sedge	Carex novae-angliae					NI								MIIH		
plant -	New Liigianu Seuge	Carex novae-angilae															
vascular	Fewseed Sedge	Carex oligosperma				NI											
plant -	_	Carex oxylepis var.															
vascular		pubescens								MIIH				NI			
plant -	i i p i i i i i i i i i i i i i i i i i	<b>,</b>															
vascular	Drooping Sedge	Carex prasina												NI			
plant -		•															
vascular	northern meadow sedge	Carex praticola													MIIH		
plant -							NII										
vascular	Richardson's Sedge	Carex richardsonii					NI										
plant -												NI					
vascular	Roan Mountain Sedge	Carex roanensis										IVI					
plant -															MIIH		
vascular	Short Sedge	Carex rossii															
plant -						NI			NI								
vascular	Schweinitz's Sedge	Carex schweinitzii															
plant -	Dulmah Cadaa	Carran asima aida a				NI	NI										NI
vascular	Bulrush Sedge	Carex scirpoidea															
plant - vascular	Dioecious Sedge	Carex sterilis								MIIH							
plant -	Dioecious Seage	Curex steriiis															
vascular	Straw Sedge	Carex straminea								MIIH							
plant -		Carex supina var															
vascular		spaniocarpa													MIIH		
plant -	Tour di otto souge	opa.nocai pa															
vascular	Many-headed Sedge	Carex sychnocephala		NI													
plant -	,	,								_							
vascular	Rigid Sedge	Carex tetanica								MIIH							

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			Allegheny	Chequamagon-		Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			Manistee	Twain							Mountain
plant -										MIIH							
vascular	Hairy-fruit Sedge	Carex trichocarpa								IVIIII							
plant -						NI											NI
vascular	Wiegand's Sedge	Carex wiegandii				IVI											141
plant -										MIIH							
vascular	Willdenow's Sedge	Carex willdenowii															
plant -										MIIH							
vascular	Pretty Sedge	Carex woodii															
plant -	white seeled sedes	Canavivanantian													MIIH		
vascular plant -	white-scaled sedge	Carex xerantica															-
vascular	sweet pignut hickory	Carya glabra				NI											
plant -	Sweet pignat nickory	carya giabra															+
vascular	sand hickory	Carya pallida												NI			
plant -	Sund mekory	Castanea pumila var.															
vascular	Ozark Chinquapin	ozarkensis								MIIH							
plant -	1 1 1 1 1 1																
vascular	pale painted cup	Castilleja septentrionalis															NI
plant -		Ceratophyllum															
vascular	Prickly Hornwort	echinatum				NI											
	eastern candlewax	Cetraria (=Ahtiana)		NII			NII										
fungi	lichen	aurescens		NI			NI										
plant -			NI											NI			
vascular	Blazing Star	Chamaelirium luteum	IVI											INI			
plant -		Chelone obliqua var.												NI			
vascular	Rose Turtlehead	speciosa												141			
plant -																	NI
vascular	Fogg's Goosefoot	Chenopodium foggii															
plant -	an attadintavanaan	China ambila na amulata												NI			
vascular plant -	spotted wintergreen	Chimaphila maculata															<del>                                     </del>
vascular	fringetree	Chionanthus virginicus														NI	
plant -	iringetree	Cilionantilus virginicus															<del>                                     </del>
vascular	Carolina Thistle	Cirsium carolinianum												NI		NI	
plant -	Caronna Triistic	en siann ear oinnianann															<del>                                     </del>
vascular	Hill's Thistle	Cirsium hillii							NI		NI						
fungi	Wain's Cup Lichen	Cladonia wainioi													MIIH		
plant -	,																
vascular	Yellow-wood	Cladrastis kentukea												NI			
	western blue																
plant -	virginsbower (PKA:	Clematis occidentalis				NI						NI					
vascular	Purple Clematis)	var. occidentalis															
plant -						NI											
vascular	Canada Horse-balm	Collinsonia canadensis				INI											

									]		<u> </u>	]		1			1 1
			Allegheny	Chequamagon-		Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			Manistee	Twain						-	Mountain
plant -						NII											
vascular	Squaw-root	Conopholis americana				NI											
plant -																	
vascular	Bentley's Coralroot	Corallorhiza bentleyi										NI					
plant -			NII														NII
vascular	Autumn Coralroot	Corallorhiza odontorhiza	NI														NI
plant -																	
vascular	Roundleaf Dogwood	Cornus rugosa										NI					
plant -																	
vascular	Douglas' Hawthorn	Crataegus douglasii					NI										
plant -		Crataegus intricata (syn															
vascular	A Hawthorn	= C. boyntonii)				NI											
plant -		, ,															
vascular	Fragile Rockbrake	Cryptogramma stelleri				NI	NI										
		71 3															
plant -		Cynoglossum							NI								
vascular	Northern Wild Comfrey	virginianum var. boreale															
plant -		J															
vascular	Finger Dog-shade	Cynosciadium digitatum												NI			
plant -	Tinger bog strade	cyrrosciaaiam aigicacam															
vascular	manyflower flatsedge	Cyperus lancastriensis												NI			
plant -	Ram's-head Lady's-	cyperus iunicustriciisis															
vascular	slipper	Cypripedium arietinum		NI	MIIH		NI		NI				NI		MIIH		
plant -	Small White Lady's-	Cypripediam unetinam															
vascular	slipper	Cypripedium candidum									NI						
vasculai	siippei	Сурпрешит синишит															
nlant	smaller yellow lady's	Cypripedium parviflorum											NII				
plant - vascular		var. makasin											NI				
vascular	slipper	var. makasm															
nlant	Greater Yellow Lady's-	Cuprinadium parviflarum				N.,							NII.	NII.			N.,
plant -	· ·	Cypripedium parviflorum				NI		NI					NI	NI			NI
vascular	slipper	var. pubescens															
plant -	Charles I and I and I are a	Control to a control				NI						NI	NI				
vascular	Showy Lady's-slipper	Cypripedium reginae															
plant -	St. Lawrence						NI								MIIH		
vascular	Bladderfern	Cystopteris laurentiana															
plant -	long-bracted green	, ,				NI											
vascular	orchid	Dactylorhiza viridis															
plant -									NI								
vascular	Robin Runaway	Dalibarda repens															
plant -												NI					
vascular	Tall Larkspur	Delphinium exaltatum										141					
plant -	Eastern Hay-scented	Dennstaedtia												NI			
vascular	Fern	punctilobula							<u> </u>					141			

				Chequamagon-		Green Mountain			Huron-	Mark		]					White
			Allegheny	Nicolet	i ( ninnewa	and Finger Lakes	Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category	Common name	scientific name		11100101		una i inger zanes			···u····otee								
	shag-belly stippleback	Dermatocarpon													MIIH		
fungi	lichen	moulinsii													1411111		
plant -			NI														
vascular	Tufted Hairgrass	Deschampsia cespitosa	141														
plant -															MIIH		
vascular	wavy hairgrass	Deschampsia flexuosa													IVIIIII		
plant -	Eastern Trailing							NII.									
vascular	Ticktrefoil	Desmodium humifusum						NI									
plant -		Desmodium				N.I.											
vascular	Panicledleaf Ticktrefoil	paniculatum				NI											
plant -																	
vascular	Perplexed Ticktrefoil	Desmodium perplexum				NI											
plant -																	
vascular	American Beakgrain	Diarrhena americana								MIIH							
		Dichanthelium															
plant -		dichotomum var.						NI									
I T	Cypress Panicgrass	dichotomum															
plant -	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1																
vascular	a rosette grass	Dichanthelium joorii												NI			
plant -	u : 000000 g: 000																
vascular	Ravenel's Witchgrass	Dichanthelium ravenelii												NI			
plant -	Naveners Wittengrass	Dichanthelium															
1 -	Yadkin's panicgrass	yadkinense												NI			
plant - non-	Taukiii 3 pariicgi a33	yaakiiieiise															
	Dichelyma Moss	Dichelyma capillaceum								MIIH						NI	
	Dichelyina ivioss	Біспетуппа сартасеатт			<u> </u>						<u> </u>			+			
plant -	Clada Farm	Dialarium auga comana		NI		NI											
	Glade Fern	Diplazium pycnocarpon															
plant -		Discount at its												NI			
	eastern leatherwood	Dirca palustris															
plant -	5 11 61							NI						NI			
	French's Shootingstar	Dodecatheon frenchii															
plant -	Open-ground Whitlow-									MIIH							
vascular	grass	Draba aprica															
plant -						NI											
	Rock Whitlow-grass	Draba arabisans															
plant -															MIIH		
	hoary draba	Draba breweri var. cana															
plant -							NI										
vascular	English Sundew	Drosera anglica					IVI										
plant -															MIIH		
vascular	Slenderleaf Sundew	Drosera linearis													IVIIII		
plant -			NI														
vascular	Mountain Woodfern	Dryopteris campyloptera	INI														

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			Allegheny	Chequamagon- Nicolet	Chippewa	Green Mountain and Finger Lakes	l Hiawatha	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White Mountain
Category	Common name	scientific name		Nicolet		and ringer takes			iviallistee	I Walli							IVIOUIILAIII
plant -	_									MIIH							
vascular	Log Fern	Dryopteris celsa															
plant - vascular	Spreading Woodfern	Dryopteris expansa		NI			NI										
plant -	Spreading Woodiem	Dryopteris exparisa															
vascular	Male Fern	Dryopteris filix-mas		NI		NI	NI										
plant -		Dryopteris fragrans var.															
vascular	Fragrant Fern	remotiuscula															NI
plant -					MIIH				NI	MIIH				NI			NI
vascular	Goldie's Woodfern	Dryopteris goldiana			IVIIIII				INI	IVIIIII				INI			INI
plant -									NI								
vascular	Purple Spikerush	Eleocharis atropurpurea															
plant - vascular	Flat-stem Spikerush	Eleocharis compressa					NI										
plant -	riat-stein Spikerusii	Eleocharis compressa															
vascular	Engelmann's Spikerush	Eleocharis engelmannii							NI								
plant -																	
vascular	Matted Spikerush	Eleocharis intermedia				NI											
plant -										MIIH							
vascular	Daggerleaf Spikerush	Eleocharis lanceolata								IVIIII							
plant -									NI								
vascular	small-fruited spikerush	Eleocharis microcarpa															
plant -	Duight Casaa Caileanash			NI	MIIH	NI									MIIH		
vascular plant -	Bright Green Spikerush	Eleocharis olivacea															
vascular	Ovate pikerush	Eleocharis ovata				NI											
plant -	Ovace pikerasii	Eleberraris ovaca															
vascular	Few-flowered Spikerush	Eleocharis quinqueflora		NI	MIIH												
plant -									NII								
vascular	Three-angle Spikerush	Eleocharis tricostata							NI								
plant -														NI			
vascular	Wolf's Spikerush	Eleocharis wolfii															
plant -	Connecto Mild Dice	Elimente alantena					NI										
vascular plant -	Smooth Wild Rye	Elymus glaucus															
vascular	Black Crowberry	Empetrum nigrum					NI										
plant -	Black Crowberry	Empetram mgram															
vascular	Trailing Arbutus	Epigaea repens						NI									
plant -						N.I.											
vascular	Marsh Willowherb	Epilobium palustre				NI											
plant -				NI													
vascular	Marsh Horsetail	Equisetum palustre		INI													
plant -	NA da	E. tar				NI											
vascular	Meadow Horsetail	Equisetum pratense														<u> </u>	

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			Allegheny	Chequamagon- Nicolet	Chippewa	Green Mountain and Finger Lakes	l Hiswisths	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White Mountain
Category	Common name	scientific name		THEOLET		una i inger zakes			Manistee	- Twaiii							Iviountum
plant -	1 (1 )														MIIH		
vascular	bitter fleabane	Erigeron acris															
plant -	Daisy Floabana	Frigaran hussanifalius					NI										
vascular plant -	Daisy Fleabane	Erigeron hyssopifolius															
vascular	Shale barren Buckwheat	Friogonum allenii										NI					
plant -	Shale barren backwheat	Lilogonam anemi															
vascular	Russet Cotton-grass	Eriophorum chamissonis		NI													
plant -																	
vascular	Rough Cotton-grass	Eriophorum tenellum	NI			NI											
plant -		•															
vascular	creeping eryngo	Eryngium prostratum												NI			
plant -		Erysimum capitatum										NII					
vascular	sanddune wallflower	var. capitatum										NI					
plant -			NI		MIIH								NI				
vascular	· · · · · · · · · · · · · · · · · · ·	Erythronium albidum	INI		IVIIITI								INI				
plant -	American Strawberry-									MIIH							
vascular	bush	Euonymus americanus								1411111							
plant -								NI									
vascular		Eupatorium album															
1		Eupatorium															
plant -		hyssopifolium var.												NI			
vascular		hyssopifolium															
nlo nt		Eupatorium purpureum				<b>.</b>											
plant - vascular	Sweet Joe-pyeweed	(=Eutrochium				NI											
plant -		purpureum) Eupatorium															
vascular		semiserratum								MIIH							
plant -	Thoroughwort	Serinserratani															
vascular	Upland Boneset	Eupatorium sessilifolium							NI								
plant -	Darlington's glade																
vascular		Euphorbia purpurea										NI					
plant -																	
vascular	Oakes' Eyebright	Euphrasia oakesii															NI
plant -						NII											
vascular	rough wood-aster	Eurybia radula				NI											
plant -									NI								
vascular	Rough Fescue	Festuca altaica							IVI								
plant -								NI			NI						
vascular	Cluster Fescue	Festuca paradoxa						141			141						
plant -																	NI
vascular	alpine red fescue	Festuca prolifera															
plant -			NI														
vascular	Queen-of-the-prairie	Filipendula rubra															

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			Allegheny	Chequamagon-	Chinnows	Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			Manistee	Twain							Mountain
plant - non-													NI				
vascular	liverwort species	Frullania selwyniana											INI				
plant -									NI								
vascular	Hairy Umbrella-sedge	Fuirena squarrosa															
plant - vascular	Showy Orchid	Galearis spectabilis	NI						NI				NI				
plant -	,	,															
vascular	Boreal Bedstraw	Galium kamtschaticum				NI	NI										NI
plant -			NI														
vascular	Creeping Snowberry	Gaultheria hispidula	INI														
plant -												NI					
vascular	Box Huckleberry	Gaylussacia brachycera															
plant -	Walle Cardia	Continue aller						NI						NI		NI	
vascular	Yellow Gentian	Gentiana alba Gentiana andrewsii var.															
plant - vascular	closed gentian	andrewsii								MIIH							
plant -	ciosed gentian	unarewsii															
vascular	Bottle Gentian	Gentiana clausa				NI											
plant -	Bottle delitial	Gentiana ciaasa															
vascular	narrowleaf gentian	Gentiana linearis											NI				
plant -																	<u> </u>
vascular	Striped Gentian	Gentiana villosa														NI	
plant -																	NI
vascular	Northern Comandra	Geocaulon lividum															INI
plant -																	NI
vascular	Mountain Avens	Geum peckii															
plant -									NI								
vascular	Prairie-smoke	Geum triflorum															
plant - vascular	Pale Avens	Geum virginianum								MIIH							
plant -	r die Averis	Geam virginianam															+
vascular	Arkansas Manna-grass	Glyceria arkansana												NI			
plant -	7																
vascular	Floating Mannagrass	Glyceria septentrionalis				NI											
plant -	lesser-rattlesnake	·															
vascular	plantain	Goodyera repens	NI														<u>                                     </u>
plant -	Checkered Rattlesnake-		NI														
vascular	plantain	Goodyera tesselata	141														
plant -	Quarterman's Hedge-										NI						
vascular	hyssop	Gratiola quartermaniae									'"						
plant -	A controlling O. L. 5	Gymnocarpium										NI					
vascular	Appalachian Oak Fern	appalachianum															<del>                                     </del>
plant -	Limestone Oak Fern	Gymnocarpium robertianum			MIIH		NI										
vascular	Liniestone Oak Fem	ווטטפונוטווטווו				l											

				Chequamagon-		Green Mountain			Huron-	Mark							White
Catagory	Common name	scientific name	Allegheny	Nicolet	I I DIDDAWA	and Finger Lakes	I Hiswisths	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category plant -	Common name	Hackelia deflexa var.															
vascular	Northern Stickseed	americana				NI											
	NOTHETTI Stickseed	umencunu															
plant - non-	coruco ctinular flanwort	Harnanthus scutatus				NI											
vascular	spruce stipular flapwort	nurpuntnus scututus															
plant -	Massalant	Hammina an alla huma aida a															NI
vascular	Mossplant	Harrimanella hypnoides															
	false indian plantain																
i ·	(PKA: Sweet-scented		NI									NI					
vascular	Indian-plantain)	Hasteola suaveolens															
plant -										MIIH				NI			
vascular	Swamp Sunflower	Helianthus angustifolius															
plant -							NI										
	Ashy Sunflower	Helianthus mollis															
plant -						NI											
vascular	Harsh Sunflower	Helianthus strumosus				141											
plant -														NI			
vascular	Kidneyleaf Mud-plantain	Heteranthera reniformis												INI			
	orange-tinted fringe				NAIIII												
fungi	lichen	Heterodermia obscurata			MIIH												
plant -												N.I.					
vascular	White Alumroot	Heuchera alba										NI					
plant -																	
vascular	little-flowered alumroot	Heuchera parviflora														NI	
plant -																	
vascular	Crested Coralroot	Hexalectris spicata										NI		NI			
plant -	veiny hawkweed (PKA:	,															
1	Rattlesnakeweed)	Hieracium venosum				NI											
plant -	,																
-	Featherfoil	Hottonia inflata								MIIH				NI			
plant -		i roccoma myraca															
	Appalachian Clubmoss	Huperzia appalachiana				NI									MIIH		
plant -	Apparacinari ciabinoss	таретия арраниетина															
-	Rock Clubmoss	Huperzia porophila												NI	MIIH		
plant -	MOCK CIADITIO33	Traperzia poropillia															
	Fir Clubmoss	Huperzia selago		NI			NI		NI				NI				
plant -	TH CIUDINO33	Traperzia selago															
	Goldenseal	Hydrastis canadensis									NI			NI			
plant -	Whorled Marsh-	Hydrocotyle verticillata			-						-			-			
-										MIIH							
	pennywort	var. verticillata			-						-			-			
plant -	Oneflower False	11 1.1												NI			
	Fiddleleaf	Hydrolea uniflora															
plant -	 	Hylotelephium												NI			
vascular	Allegheny Stonecrop	telephioides		<u> </u>	<u> </u>						1						

				Chequamagon-	a	Green Mountain			Huron-	Mark						l	White
Category	Common name	scientific name	Allegheny	Nicolet		and Finger Lakes	l Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
plant -	Common name	Scientific flame															
vascular	Creeping St. John's-wort	Hvpericum adpressum							NI								
plant -	Orange-grass St. John's-																
vascular	wort	Hypericum gentianoides							NI								
plant -	Blue Ridge St. John's-	Hypericum															
vascular	wort	mitchellianum										NI					
plant -												NII					
vascular	Long-stalk Holly	llex collina										NI					
plant -											NII						
vascular	Butler's Quillwort	Isoetes butleri									NI						
plant -																NII	
vascular	Appalachian quillwort	Isoetes engelmannii														NI	
plant -						NI											
vascular	Western Lake quillwort	Isoetes lacustris				IVI											
plant -						NI											
vascular	a quillwort	Isoetes viridimontana				IVI											
plant -						NI			NI	MIIH				NI			
vascular	Large Whorled Pogonia	Isotria verticillata				IVI			IVI	IVIIIII				INI			
plant -			NI	NI	MIIH	NI	NI	NI	NI	MIIH		NI	NI	NI		NI	NI
vascular	Butternut	Juglans cinerea	141	141	1411111		141	141	141	1411111		141	141	141		141	
plant -									NI								
vascular	Short-fruit Rush	Juncus brachycarpus															
plant -			NI									NI					
vascular	Thread Rush	Juncus filiformis															
plant -				NI			NI								MIIH		
vascular	Moor Rush	Juncus stygius															
plant -		1.00													MIIH		
vascular	Creeping Rush	Juncus subtilis															
plant -	urahi ad Bada	1				NI						NI					
vascular	Highland Rush	Juncus trifidus															
plant -	Vacavila Buah	lumana na ani					NI		NI								
vascular	Vasey's Rush	Juncus vaseyi															<del>                                     </del>
plant - vascular	creeping juniper	Juniperus horizontalis															NI
plant -	creehing Jumper	Jumperus nonzontuns									<del>                                     </del>						<del>                                     </del>
vascular	Wild Pea	Lathyrus venosus														NI	
fungi	a lichen	Lecanora epanora													MIIH		<del>                                     </del>
plant -	a nonen	200411014 CPAIIOI4									<del> </del>				1911111		
vascular	Leggett's Pinweed	Lechea pulchella							NI								
plant -	-300										<del> </del>						<del>                                     </del>
vascular	Hairy Lespedeza	Lespedeza hirta				NI											
plant -	, ,																<del>                                     </del>
vascular	Violet Lespedeza	Lespedeza violacea				NI											
			<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	I	<u> </u>		

				Chaguamagan		Green Mountain			Huron-	Mark							White
Category	Common name	scientific name	Allegheny	Chequamagon- Nicolet		and Finger Lakes	Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
plant -	Large-flowered Ground-	Leucophysalis															
vascular	cherry	grandiflora		NI													
plant -	,	9															
vascular	American Dunegrass	Leymus mollis					NI										
plant -		Liatris scariosa var.															
vascular	Nieuwland's Blazing Star									MIIH							
plant -																	
vascular	Turgid Blazing Star	Liatris turgida										NI					
plant -	8																
vascular	Canada Lily	Lilium canadense				NI		NI									
plant -	Carrada Erry	Zinam canadense															
vascular	Turk's-cap Lily	Lilium superbum								MIIH				NI			
plant -	Turk 5 cap Lily	Linnaea borealis spp.															
vascular	twinflower	Americana										NI					
plant -	twiiiiowci	Americana															
vascular	Grooved Yellow Flax	Linum sulcatum							NI			NI					
plant -	Grooved reliow riax	Linum salcatum															
vascular	Large Twayblade	Liparis liliifolia							NI								
plant -	Large (Wayblade	Lipuris illiljoliu															
vascular	Yellow Widelip Orchid	Liparis loeselii								MIIH							
plant -	renow widelip Orcilia	Lipuris ideseili															
vascular	Dwarf Bulrush	Lipocarpha micrantha							NI								
plant -	Dwait Bullusti	просигрни ппстинини															
vascular	Auricled Twayblade	Listera auriculata					NI								MIIH		NI
plant -	Auticieu Twaybiaue	Listera darrediata															
vascular	Twayblade	Listera convallarioides															NI
plant -	Iwaybiaue	Listera convanarionaes															
vascular	Heartleaf Twayblade	Listera cordata										NI					NI
plant -	Tieartiear i waybiade	Littorella uniflora (=L.															
vascular	American Shoregrass	americana)		NI	MIIH	NI	NI						NI				
fungi	a lichen	Lobaria scobiculata													MIIH		
plant -	a lichen	Lobaria Scobicalata													IVIIII		
-	Creat Plue Labelia	Labalia sinhilitisa				NI											
vascular	Great Blue Lobelia	Lobelia siphilitica Lonicera dioica var.															
plant -	moutain hanavauakla													NI			
vascular	moutain honeysuckle	glaucescens															
plant -	Vallavy Hamayayakla	Laniaara flavo												NI			
vascular	Yellow Honeysuckle	Lonicera flava															
plant -	haim, hama,	Laniaana hinautu				NI											
vascular	hairy honeysuckle	Lonicera hirsuta									ļ						
plant -	C II C . II C . II									MIIH							
vascular	Small-fruit Seedbox	Ludwigia microcarpa															
plant -							NI								MIIH		
vascular	Small-flower Woodrush	Luzula parviflora															

				Charuamagan		Cross Mountain				Moule							\ \A/bito
			Allegheny	Chequamagon- Nicolet		Green Mountain and Finger Lakes	LHiawatha	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White Mountain
	Common name	scientific name															
l'	Northern Prostrate	Lycopodiella					NI										
	Clubmoss	margueritiae															
plant -		Lycopodiella							NI								
	Northern Bog Clubmoss	subappressa															
plant -																	NI
	Sitka clubmoss	Lycopodium sitchense															
plant -								NI									
	Umbrella Magnolia	Magnolia tripetala															
l'	White Adder's-mouth	Add to the book and			MIIH		NI		NI								
	Orchid	Malaxis brachypoda															
-	Bog Adder's-mouth	Add to the set of the			MIIH												
	Orchid	Malaxis paludosa															
plant -	a south we small a soul a	Adulus anasustifalis												NI			
	southrn crab apple	Malus angustifolia															
plant -	Hispid Falso Mallow	A dayly matery was belonied year									NI						
vascular	Hispid False Mallow	Malvastrum hispidum															
	NA sus sus subsults Daults unals																
	Monongahela Barbara's-											NI					
	buttons (previously	A A supele celline supere difference															
	Large-flowered)	Marshallia grandiflora															
plant -	Baldwin's Milkvine	Matalaa halduuniana								MIIH							
vascular plant -	Daiuwiii S iviiikviiie	Matelea baldwyniana															
-	Smith's Melicgrass	Melica smithii		NI													
plant -	Similiti s ivielicgi ass	IVIENCU SIIIICIIII															
I.	creeping cucumber	Melothria pendula												NI			
plant -	creeping cucumber	Weiotiiria periadia															
	Bog Buckbean	Menyanthes trifoliata										NI					
plant -	bog buckbean	Wienyuntnes trijonatu															
1.	Virginia Bluebells	Mertensia virginica							NI								
plant - non-	Virginia bidebelis	Wertensia virginica															
	a liverwort	Metzgeria crassipilis				NI											
plant - non-	a nverwore	Wictzgeria crassipilis															
•	forked veilwort	Metzgeria furcata								MIIH							
	Common Large	Wictzgeria jarcata															
	Monkeyflower	Mimulus guttatus											NI				
plant -	Monkeynower	Willington gattatas															
	Pitcher's Stitchwort	Minuartia patula									NI						
plant -	THE TOTAL STATE OF THE TANK OF	minadi da patala															
1.	Largeleaf Sandwort	Moehringia macrophylla		NI									NI		MIIH		
plant -	Largerear Januwort	Monarda fistulosa ssp.									<del>                                     </del>						
-	Smoke Hole Bergamot	brevis										NI					
plant -	Smoke Hole Belgamot	DI CVI3															
*	Red Mulberry	Morus rubra				NI											
Vascalar	nea maiberry	77701 43 1 451 4		<u> </u>	l		l		<u> </u>		<u> </u>			1	<u> </u>		

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			Allegheny	Chequamagon- Nicolet	Chinnewa	Green Mountain and Finger Lakes	Hiawatha	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White Mountain
Category	Common name	scientific name		Nicolet		and Finger Lakes			Wallistee	Iwalli							Wiodiftaili
plant -		Muhlenbergia					NI										
vascular	Soft-leaf Muhly	richardsonis					INI										
plant -													NI				
vascular	Bog Muhly	Muhlenbergia uniflora											INI				
plant -																	
-	low water-milfoil	Myriophullum humile				NI											
plant -		, ,															
	Farwell's Water-milfoil	Myriophyllum farwellii				NI											
plant -		, , , ,															
I -	Slender Waternymph	Najas gracillima			MIIH												
plant -	, ,	Najas guadalupensis ssp.															
l.	Southern Waternymph	olivacea			MIIH												
plant -	,	Neobeckia aquatica															1
I -	Lakecress	(=Armoracia lacustris)					NI										
plant -		Nuphar lutea ssp.							1								
-	Yellow Pond-lily	pumila											NI				
plant -	Tenow Fond my	parma															
-	Dwarf Water-lily	Nymphaea leibergii													MIIH		
plant -	Dwarr water my	rvympnaea reibergii															
	Blackgum	Nyssa sylvatica				NI											
	Narrowleaf Evening	ivy33d Sylvatica															+
l -	Primrose	Oenothera fruticosa								MIIH							
	Stemless Evening	ochothera jraticosa															<del> </del>
l -	Primrose	Oenothera triloba								MIIH							
plant -	111111030	Ochothera triloba															<del> </del>
-	Prairie Goldenrod	Oligoneuron album															NI
plant -	France Goldeniou	Oligorieuron dibum							1								<del> </del>
-	Alpine Arctic Cudweed	Omalotheca supina															NI
	Limestone Adder's-	Ophioglossum							1								<del> </del>
1		engelmannii						NI				NI					
	tongue Northern Adder's-	engennamm							1								<del> </del>
l'		Ophioglossum pusillum															NI
	tongue	Opinogiossum pusinum															
plant -	Clustered Broomrape	Orobanche fasciculata							NI								
	One-flowered	Oroburiche jusciculuta															
l'		Orohancha uniflaza			MIIH												
	Broomrape Ohio Orthotrichum	Orobanche uniflora															<del>                                     </del>
-	Ohio Orthotrichum	Orthotrich											NI				
	Moss	Orthotrichum ohioense															$\vdash$
plant -	Chilaga Cooset Cool	Oomoonhiss hantari													MIIH		NI
	Chilean Sweet-cicely	Osmorhiza berteroi									ļ						
plant -	Illiania Marandan di	Overlie illi verset						NI						NI			
vascular	Illinois Woodsorrel	Oxalis illinoensis															

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			Allegheny	Chequamagon-	Chippewa	Green Mountain	l Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			Manistee	Twain						,	Mountain
plant -																	NI
vascular		Oxyria digyna															
plant -		Oxytropis borealis var.													MIIH		
vascular		viscida															
plant -		Pachysandra procumbens						NI									
vascular plant -	Allegheny-spurge	procumbens															
vascular	Elegant Groundsel	Packera indecora													MIIH		
plant -																	
vascular	balsam squaw-weed	Packera paupercula														NI	
plant -	·					N.,				N 41111			N.11				
vascular	American Ginseng	Panax quinquefolius	NI	NI		NI		NI	NI	MIIH	NI		NI	NI			NI
plant -			NI														
vascular	·	Panicum philadelphicum	INI														
	brown-gray moss-														MIIH		
fungi	shingle lichen	Pannaria pezizoides															
plant -	la a a fa	Demosth along to since data				NI											
vascular plant -	bog fern Marsh Grass-of-	Parathelypteris simulata															
vascular		Parnassia palustris		NI													
plant -	1 411143343	Turriussia parastris															
	Silvery Nailwort	Paronychia argyrocoma										NI					NI
plant -	,	, 3,															
vascular	Yellow Nailwort	Paronychia virginica										NI					
plant -		Parthenium	NII														
vascular	Wild Quinine	integrifolium	NI														
plant -												NI					
vascular	Canby's Mountain-lover	Paxistima canbyi										1					
plant -		0 1: 1 : 1										NI					
vascular	Swamp Lousewort	Pedicularis lanceolata															
plant - vascular	Green Arrow-arum	Peltandra virginica				NI											
plant -	Green Arrow-arum	Pentanara virginica															
vascular	pale beardtongue	Penstemon pallidus														NI	
plant -	white-wand	r enseemen pamaas															
vascular		Penstemon tubaeflorus												NI			
plant -		Petasites frigidus var.															
vascular	Sweet Colt's-foot	palmatus			<u> </u>									<u> </u>	<u> </u>		NI
plant -		Petasites frigidus var.					NI						NI				
vascular	foot	sagittatus					INI						IVI				
plant -																NI	
vascular	buttercup scorpionweed	Phacelia covillei															
plant -	Franklink street	Dharalla for all "													MIIH		
vascular	Franklin's phacelia	Phacelia franklinii															

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			Allegheny	Chequamagon-		Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name	-0 - 7	Nicolet		and Finger Lakes			Manistee	Twain		<b>0</b>				,	Mountain
fungi	Wreath Lichen	Phaeophyscia leana												NI			
plant -		Phegopteris															
vascular	Broad Beechfern	hexagonoptera				NI							NI				
plant -		Phemeranthus															
vascular	Sunbright	parviflorus												NI			
plant -																	
vascular	Largeleaf Phlox	Phlox amplifolia						NI									
plant -																	
vascular	Swordleaf Phlox	Phlox buckleyi										NI					
plant -		Phlox maculata ssp.															
vascular	Spotted Phlox	pyramidalis								MIIH							
plant -		Phyllanthus															
vascular	Knotweed Leaf-flower	polygonoides								MIIH							
fungi	pale-bellied frost lichen	Physconia subpallida			MIIH												
plant -																	
vascular	Common Butterwort	Pinguicula vulgaris					NI										
plant -																	
vascular	Pitch Pine	Pinus rigida				NI											
plant -	Canadian (PKA: Canada	Piptatherum		NI			NI					NI			MIIH		NI
vascular	Mountain) Ricegrass	(=Oryzopsis) canadense															
plant -	Black-fruit Mountain-					NII.											
vascular	ricegrass	Piptatherum racemosum				NI											
plant -		Piptochaetium															
vascular	blackseed speargrass	avenaceum														NI	
plant -														N.I.			
vascular	Heartleaf Plantain	Plantago cordata												NI			
plant -																	
vascular	Yellow-fringe Orchid	Platanthera ciliaris								MIIH						NI	
plant -	Small Green Woodland																
vascular	Orchid	Platanthera clavellata			MIIH			NI		MIIH				NI			
plant -		Platanthera flava var.															
vascular	Southern Rein Orchid	flava								MIIH				NI			
plant -		Platanthera flava var.															
vascular	Pale-green Orchid	herbiola								MIIH							
plant -																	
vascular	Hooker's Orchid	Platanthera hookeri	NI						NI								
plant -		Platanthera hyperborea				A.1.											
vascular	fragrant green orchid	var. huronensis				NI											
plant -	Lesser Roundleaved																
vascular	Orchid	Platanthera orbiculata				NI											
plant -	Large Roundleaved	Platanthera orbiculata															
vascular	Orchid	var. macrophylla				NI											

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			Allegheny	Chequamagon-		Green Mountain	I∐iawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			Manistee	Twain							Mountain
-	Shriver's purple fringed											NI					
vascular	(PKA: Frilly) Orchid	Platanthera shriveri															
plant -		Platanthera					NI										
vascular	Alaska rein orchid	unalascensis					INI										
plant -														NII			
vascular	Grove Meadow Grass	Poa alsodes												NI			
		Poa horsesis ssp.															
plant -		Alpigena (PKA: Poa															NI
vascular	Alpine Meadow Grass	pratensis ssp. Alpigena)															
plant -		Poa laxa ssp.															
vascular	Wavy Bluegrass	fernaldiana															NI
plant -																	
vascular	Bog Bluegrass	Poa paludigena		NI					NI			NI					
plant - non-		, ,															
	Lescur's Pohlia Moss	Pohlia lescuriana					NI										
plant -		Polemonium occidentale		NI											MIIH		
l'	Western Jacob's-ladder	ssp. lacustre															
plant -		Polemonium															
-	Bog Jacob's-ladder	vanbruntiae				NI						NI					
plant -	208 34000 3 144401	Tania anciae															+
l'	Crossleaf Milkwort	Polygala cruciata							NI								
plant -	Crossical Williams	r orygana craciata															
-	Pink Milkwort	Polygala incarnata												NI		NI	
plant -	T IIIK IVIIIKWOTE	r orygana mearnata															
-	whorled milkwort	Polygala verticillata				NI											
plant -	wholled milkwort	Polygulu verticiliutu															<del>                                     </del>
	Halbard loof Toorthumb	Dolugonum grifolium								MIIH							
	Halberd-leaf Tearthumb	Polygonum arijollum															-
plant -	Develoe! Knotwood	Dalumanum dauglasii															NI
	Douglas' Knotweed	Polygonum douglasii															-
plant -	M. Sarana a Karata a a d	0.4													MIIH		NI
	Viviparous Knotweed	Polygonum viviparum															
plant -				NI											MIIH		
	Braun's Holly Fern	Polystichum braunii															<u> </u>
plant -								NI						NI			
	Prairie Parsley	Polytaenia nuttallii															<b></b>
plant -		Potamogeton			MIIH	NI			NI								
	Snail-seed Pondweed	bicupulatus				. **											
plant -		Potamogeton		NI		NI	NI								MIIH		
	Algae-like Pondweed	confervoides		141		141	141										
plant -				NI		NI											
vascular	Hill's Pondweed	Potamogeton hillii		141		141			<u> </u>								<u>                                      </u>

				Chequamagon-		Green Mountain			Huron-	Mark							White
Catanan			Allegheny	Nicolet		and Finger Lakes	Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
	Common name	scientific name															<u> </u>
plant -	Onlynd Dawdyyn ad	Potamogeton													MIIH		
	Oakes' Pondweed	oakesianus															
plant -									NI								
	spotted pondweed	Potamogeton pulcher															
plant -		Potamogeton										NI					
	Tennessee Pondweed	tennesseensis															
plant -													NI				
	Vasey's pondweed	Potamogeton vaseyi											141				
plant -						NI											
vascular	tall cinquefoil	Potentilla arguta				141											
plant -																	NI I
vascular	Robbins' Cinquefoil	Potentilla robbinsiana															NI
plant -																	
vascular	Boott's Rattlesnake-root	Prenanthes boottii															NI
plant -																	
vascular	bird's-eye primrose	Primula mistassinica											NI				
	fairy bells (PKA: Drops-	Prosartes hookeri var															†
·	of-gold)	hookeri											NI				
	5. 80.01	Prosartes trachycarpa															
plant -		(syn=Disporum													MIIH		
l ·	Roughfruit Fairybells	trachycarpum)													IVIIIII		
plant - non-	Roughiruit ruii ybelis	Pseudocyphellaria															
	yellow specklebelly	crocata			MIIH										MIIH		
plant -	yellow specklebelly	crocutu									-						-
	Ciant Dinadrans	Dtorospora andromodoa							NI				NI				
	Giant Pinedrops	Pterospora andromedea															
plant -	Decillate Manager at a section	0										NI					
	Beadle's Mountainmint	† ·															
plant -		Pycnanthemum							NI								
	Whorled Mountainmint																
plant - non-		Pylaisiadelpha											NI				
	Pylaisiadelpha Moss	tenuirostris															
plant -																	NI
	Pink Wintergreen	Pyrola asarifolia															141
plant -				NI		NI									MIIH		
vascular	Snowline Wintergreen	Pyrola minor		INI		IVI									IVIIIII		
plant -						NII											
vascular	Chinquapin Oak	Quercus muehlenbergii				NI											<u>                                     </u>
plant -														A.1.			
vascular	chestnut oak	Quercus prinus												NI			
plant -																	$\vdash$
1.	Nuttall's Oak	Quercus texana								MIIH							
plant -		,															$\vdash$
1.	Gmelin's Buttercup	Ranunculus gmelinii		NI									NI				
		Tanana giriciiii		1	I		<u> </u>	1	I .	1	<u> </u>	I	1	<u> </u>			

				Chaguamagan	Groop Mountain			] Huran	Mark				I			White
			Allegheny	Chequamagon- Nicolet	Green Mountain and Finger Lakes	LHiawatha	Hoosier	Huron- Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category	Common name	scientific name		Hicolet	una i inger zakes			Manistee	TWan							Wountain
plant -						NI										
vascular	Lapland Buttercup	Ranunculus Iapponicus														
plant -		Ranunculus			NI						NI					
vascular	Pennsylvania Buttercup															
plant -		Ranunculus										NI				
vascular	Prairie Buttercup	rhomboideus														
plant -		Rhamnus lanceolata ssp.									NI					
vascular	Lanceleaf Buckthorn	lanceolata									14.					
plant -	Maryland												NI			
vascular	Meadowbeauty	Rhexia mariana														
plant -								NI								
vascular	Handsome Harry	Rhexia virginica						141								
plant -		Rhinanthus monir ssp.														NI
vascular	little yellow-rattle	Groenlandicus														INI
plant -					NI											
vascular	Roseroot Stonecrop	Rhodiola rosea			IVI											
plant -		Rhododendron													NI	
vascular	Pink Azalea	periclymenoides													INI	
plant -				NI												
vascular	Brown Beakrush	Rhynchospora fusca		INI												
plant -		Rhynchospora											NII			
vascular	Clustered Beakrush	glomerata											NI			
plant -									N 4111 1							
vascular	Harvey's Beakrush	Rhynchospora harveyi							MIIH							
plant -								NII								
vascular	Bald Rush	Rhynchospora scirpoides						NI								
plant -			<b>A</b> 11								N.I.					
vascular	Bristly Black Currant	Ribes lacustre	NI								NI					
plant -																
vascular	Swamp Red Currant	Ribes triste	NI													
plant -																
vascular	smooth rose	Rosa blanda var. blanda									NI					
plant -		Rubus arcticus ssp.														
vascular	Dwarf Raspberry	acaulis				NI										
plant -																
vascular	Cloudberry	Rubus chamaemorus												MIIH		
plant -		Rubus pubescens var,														
vascular	dwarf red blackberry	pubescens									NI					
plant -	<u>,                                      </u>															
vascular	swamp blackberry	Rubus semisetosus												MIIH		
		Rudbeckia fulgida var.														
plant -		speciosa (syn = R. fulgida											NI			
vascular	Sullivant Coneflower	var. sullivanti)														

	1			T					1 1		I	1	I	I	ı	Ī	1 1
			Allegheny	Chequamagon-	I DIDDOM/2	<b>Green Mountain</b>	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name	, <b>,</b>	Nicolet	opposid	and Finger Lakes			Manistee	Twain		and an area	0000000		oupono.	33.7.10	Mountain
plant -										D 41111							
vascular	Narrowleaf Pink	Sabatia brachiata								MIIH							
plant -														NI			
vascular	Longbeak Arrowhead	Sagittaria australis												INI			
plant -																	NI
	Northern Willow	Salix argyrocarpa															
plant -						NI											
	hoary willow	Salix candida															
plant -		C. P. Sandala					NI										
	sand dune willow	Salix cordata															
-	New England Dwarf Willow	Salix herbacea															NI
vascular plant -	Willow	Salix Herbacea															+
· ·	bog willow	Salix pedicellaris				NI											
plant -	DOG WIIIOW	Sunx pedicenaris															+
·	Satiny Willow	Salix pellita					NI								MIIH		
plant -	Sutiny Timoti	Sanx penrea															
I -	Canada burnet	Sanguisorba canadensis									NI						
	Canadian	jeungunen en en en en en en en en en en en en															
· ·	Blacksnakeroot	Sanicula canadensis				NI											
plant -																	
vascular	Small's Sanicle	Sanicula smallii						NI						NI			
plant -	Largefruit																NI
vascular	Blacksnakeroot	Sanicula trifoliata															NI
plant -															MIIH		
	Nodding Saxifrage	Saxifraga cernua													1711111		
plant -												NI					
		Saxifraga michauxii															
plant -	White Mountain					NI									MIIH		NI
	Saxifrage	Saxifraga paniculata															
plant -	Alata Baral Carifornia	Confirmed to the															NI
	Alpine Brook Saxifrage	Saxifraga rivularis															
plant - vascular	Early Saxifrage	Cavifraga virginiancia												NI			
plant -	Early Saxillage	Saxifraga virginiensis Scheuchzeria palustris															
-	American Scheuchzeria	ssp. americana				NI											
plant - non-	American Scheuchzerla	ουρ. americana												-			+
	Schistostega Moss	Schistostega pennata					NI								MIIH		
plant -		Schoenoplectus															
1.	Canby's Bulrush	etuberculatus								MIIH							
plant -	.,																
· ·	Hall's Bulrush	Schoenoplectus hallii							NI								
plant -						A.I.								1			
1	Torrey's Bulrush	Schoenoplectus torreyi				NI			NI								

				Chequamagon-		Green Mountain			Huron-	Mark				1			White
Catagoni	Common nome	scientific name	Allegheny	Nicolet	( ninnew/a	and Finger Lakes	l Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category plant -	Common name	Scientific name															$\vdash$
vascular	Stalked Bulrush	Scirpus pedicellatus	NI														
plant -		, ,												NII.			
vascular	Leafy Bulrush	Scirpus polyphyllus												NI			
plant -														NI			
vascular	Little-head Nutrush	Scleria oligantha															<u> </u>
plant - vascular	Few-flower Nutrush	Scleria pauciflora							NI					NI			
plant -	Tew nower reactusts	Sciena padeijiora															
vascular	Whip Nutrush	Scleria triglomerata							NI								
plant -										MIIH							
vascular	Bush's Skullcap	Scutellaria bushii								IVIIIII							
plant -	Dook Chulleon	Cautallavia aguatilia						NI				NI				NI	
vascular plant -	Rock Skullcap	Scutellaria saxatilis															<del>                                     </del>
vascular	Meadow Spike-moss	Selaginella apoda				NI											
plant -		land a second															
vascular	Ledge Spike-moss	Selaginella rupestris				NI											
plant -						NI											
vascular	Russet Buffaloberry	Shepherdia canadensis															
plant - vascular	Arizona Cinquefoil	Sibbaldia procumbens															NI
plant -	Anzona cinqueron	Silene acaulis var.															
vascular	Moss Campion	exscapa															NI
plant -													NI				
vascular	Snowy Campion	Silene nivea											INI				
plant -		City												NI			
vascular plant -	Ovate Catchfly	Silene ovata															
vascular	Royal Catchfly	Silene regia									NI						
plant -	,	Silene virginica var.															
vascular	Fire Pink	robusta										NI					
plant -														NI			
vascular	Whorled Rosinweed	Silphium trifoliatum															
plant - vascular	Pointed Blue-eyed-grass	Sisyrinchium				NI											
plant -	Tollited blue-eyed-grass	ungustijonum															
vascular	Eastern Blue-eyed-grass	Sisyrinchium atlanticum				NI		NI	NI								
plant -		Sisyrinchium montanum	NI														
vascular	Strict Blue-eyed Grass	var. crebrum	IVI														
plant -		Sisyrinchium montanum											NI				
vascular	Strict Blue-eyed Grass	var. montanum Sisyrinchium															
plant - vascular	Michaux's Blue-eyed- grass	mucronatum				NI											
vasculai	B1 033	macronatam		<u> </u>	<u> </u>						<u> </u>			l			

								1			]		I			'
			Allegheny	Chequamagon-	Green Mountain	Hiawatha	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet	and Finger Lakes			Manistee	Twain							Mountain
plant -								NI								
vascular	Blue-eyed-grass	Sisyrinchium strictum						INI								
plant -					NI											
vascular	Roundleaf Goldenrod	Solidago patula			IVI											
plant -		Solidago simplex ssp.			NI											
	Rand's Goldenrod	randii			IVI											
plant -					NI											
	Squarrose Goldenrod	Solidago squarrosa			141											
plant -					NI											
	Elmleaf Goldenrod	Solidago ulmifolia			141											
plant -		Sparganium		NI												
	Northern Bur-reed	glomeratum		141												
plant -					NI											
	small bur-reed	Sparganium natans														
plant - non-		Sphagnum														NI
vascular	Anderson's Sphagnum	andersonianum														141
plant - non-		Sphagnum														NI
vascular	Angerman's Sphagnum	angermanicum														141
plant - non-																NI
	Sphagnum	Sphagnum flavicomans														141
plant - non-					NI											
	beautiful peatmoss	Sphagnum pulchrum			141											
plant -	Yellow Nodding Ladies'-						NI	NI								
vascular	tresses	Spiranthes ochroleuca					141	IVI								
plant -													NI			
vascular	Twisted Ladies'-tresses	Spiranthes vernalis											INI			
plant - non-														MIIH		
vascular	brilliant red dung moss	Splachnum rubrum												IVIIIII		
plant -						NI		NI								
	Northern Dropseed	Sporobolus heterolepis				INI		INI								
plant -											NI					
vascular	hyssopleaf hedgenettle	Stachys aspera									IVI					
-	bog stitchwort (PKA;				NI											
vascular	bog chickweed)	Stellaria alsine			IVI											
plant -		Stellaria borealis ssp.	NI								NI					
vascular	Boreal Starwort	borealis	INI								IVI					
plant -						NI										
	Long-stalked Stitchwort	Stellaria longipes				IVI										
plant -													NI			
vascular	Star Chickweed	Stellaria pubera											INI			
plant -							NI						NI			
		Stenanthium gramineum					INI						INI			
fungi	Snow Lichen	Stereocaulon pileatum										NI				

		1		T		<u> </u>			]		1	]					
			Allegheny	Chequamagon- Nicolet	I I DIDDOM/2	Green Mountain and Finger Lakes	Hiawatha	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Micolet		and ringer takes			ivianistee	iwain							Mountain
	Beauvois' Spotted Felt				MIIH												
fungi	Lichen	Sticta beauvoisii			IVIIII												
fungi	Spotted Felt Lichen	Sticta fuliginosa			MIIH										MIIH		
plant -																	
vascular	Clasping Twisted-stalk	Streptopus amplexifolius		NI													
plant -											1						
1.	Sheathed Pondweed	Stuckenia vaginata			MIIH												
plant -																	
l ·	American Snowbell	Styrax americanus												NI			
plant -		o oyr am amendanas			1						<del> </del>			1			+
	Bigleaf Snowbell	Styrax grandifolius												NI			
plant -	Digical Showbell	Styrax grananjonas															+
vascular	Awlwort	Subularia aquatica			MIIH										MIIH		
	AWIWOIL	Subularia aquatica															
plant -	an accide a min i	C. was a b a wise was a culb wa				NI											
	snowberry	Symphoricarpos albus															
plant -		Symphyotrichum								MIIH							
	Tradescant Aster	dumosum var. strictior															
plant -		Symphyotrichum				NI											
	Crooked-stem Aster	prenanthoides															
plant -		Symphyotrichum							NI								
vascular	Western Silvery Aster	sericeum							141								
plant -														NI			
vascular	Guyandotte Beauty	Synandra hispidula												INI			
plant -												NII					
vascular	Mountain Pimpernel	Taenidia montana										NI					
plant -																	
vascular	Canada Yew	Taxus canadensis	NI		MIIH				NI			NI					
plant - non-	Brown's Tetrodontium	Tetrodontium															
*	Moss	brownianum					NI										
plant -																	
	Veined Meadowrue	Thalictrum venulosum					NI										
plant -		Thelypteris															+
-	New York Fern	noveboracensis											NI	NI			
plant -	heart-leaved foam-										<del> </del>						<del>                                     </del>
vascular	flower	Tiarella cordifolia		NI									NI				
plant -	nower	riarena coranjona															+
-	Crinpled Cranefly	Tinularia discolor	NI							MIIH							
-	Crippled Cranefly	Tipularia discolor															+
plant -	atials, tofiald:	Totioldia alutin										NI					
	sticky tofieldia	Tofieldia glutinosa															+
plant -															MIIH		
-	Scotch False Asphodel	Tofieldia pusilla															
plant -										MIIH				NI			
vascular	Pale False Mannagrass	Torreyochloa pallida															

									]		1	]		I			
			Allegheny	Chequamagon- Nicolet	Chinnous	Green Mountain	I ∐iawatha	Hoosier	Huron- Manistee	Mark Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name		Nicolet		and Finger Lakes			ivianistee	iwain							Mountain
plant - non-												NI					
vascular	Ammons' Tortula Moss	Tortula ammonsiana										IVI					
plant -										MIIH							
	Ozark Spiderwort	Tradescantia ozarkana								IVIIIII							
plant -														NI			
	heartleaf noseburn	Tragia cordata															
l ·	Lesser Marsh St. John's-									MIIH							
vascular	wort	Triadenum tubulosum															
plant - non-															MIIH		
	wollywort	Trichocolea tomentella															<u> </u>
plant -		Trichomanes						NI				NI		NI			
	Bristle Fern	boschianum															<u> </u>
plant -								NI									
	Weft Fern	Trichomanes intricatum															_
plant -									NI								
	Clinton's Bulrush	Trichophorum clintonii															
plant -	5 1 5								NI								
	False Pennyroyal	Trichostema brachiatum															1
plant -	Fouls of Dissessing	Trichostema							NI								
	Forked Bluecurls	dichotomum															
plant - vascular	Narrowleaf Bluecurls	Trichostema setaceum										NI					
plant -	Ivaliowical blucculis	Thenosterna setaceani															
1	Buffalo Clover	Trifolium reflexum						NI						NI			
plant -		, i i i i i i i i i i i i i i i i i i i															
1	Kate's Mountain Clover	Trifolium virginicum										NI					
plant -		, ,															
I -	Whip-poor-will Flower	Trillium cernuum				NI											
plant -		Trillium pusillum var.															
vascular	Ozark Trillium	ozarkanum								MIIH							
plant -														NII			
vascular	green trillium	Trillium viride												NI			
plant -	Threebirds (PKA:											NII		NII			NII
vascular	Nodding Pogonia)	Triphora trianthophora										NI		NI			NI
plant -									NI								
vascular	Purple Sandgrass	Triplasis purpurea							IVI								
	granulating rocktripe														MIIH		
	lichen	Umbilicaria hirsuta													IVIIIII		
	Beard Lichen	Usnea angulata			MIIH												
	Beard Lichen	Usnea longissima		NI									NI				
fungi	red beard lichen	Usnea rubicunda			MIIH												
·	Hidden-fruit				MIIH										MIIH		
vascular	Bladderwort	Utricularia geminiscapa															

				Chequamagon-		Green Mountain			Huron-	Mark							White
			Allegheny	Nicolet	Chippewa	and Finger Lakes	l Hiawatha	Hoosier	Manistee	Twain	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	Mountain
Category		scientific name															
plant -	Northeastern	III da la da cara da la				NI									MIIH		
vascular	Bladderwort	Utricularia resupinata															
plant -	a a ufaliata la allument					NI											
vascular	perfoliate bellwort	Uvularia perfoliata															
plant -	Northorn Bluchorn	Vaccinium haraala															NI
vascular plant -	Northern Blueberry	Vaccinium boreale															
vascular	Dwarf Huckleberry	Vaccinium cespitosum		NI			NI						NI				
	Dwait nucklebelly	vacciniani cespitosani															
plant -	Doorborn	Vaccinium staminoum												NI			
vascular	Deerberry	Vaccinium stamineum															
plant -	Alpino Divohorny	Vaccinium uliainocum				NI											
vascular	Alpine Blueberry	Vaccinium uliginosum															
plant -	Manustain Hairara	Vahladas atvanumavas															NI
vascular		Vahlodea atropurpurea				<u> </u>											
plant -		Valeriana edulis var.									NI						
vascular	Hairy Valerian	ciliata															
plant -	March Malacia	Malada a Palaca		NI													
vascular	Marsh Valerian	Valeriana uliginosa															
plant -										MIIH							
vascular		Valerianella ozarkana															
plant -	American alpine																NI
vascular	•	Veronica wormskjoldii															
plant -		Veronicastrum 				NI											
vascular		virginicum															
fungi		Verrucaria marmorea									NI						
plant -		Viburnum molle (syn = V.								MIIH							
vascular		ozarkense)															
plant -		Viburnum opullus L. var.										NI					
vascular	American cranberrybush																
plant -		Viburnum				NI											
vascular	downy arrow-wood	rafinesqueanum															
plant -										MIIH							
vascular	Northern Arrow-wood	Viburnum recognitum								.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
plant -												NI					
vascular		Viola appalachiensis															
plant -	Southern Woodland							NI									
vascular	Violet	Viola hirsutula						- '''									
plant -															MIIH		
vascular		Viola lanceolata															
plant -		Viola novae angliae ssp.											NI				
vascular	subspecies	grisea											. 41				
plant -									NI								
vascular	New England blue violet	Viola novae-angliae							.,,								

## 20230707\_PlantFungiSensitiveSpecies

			<u> </u>	1	1	1			1 1		1	1 1		I	1		1 1
			Allegheny	Chequamagon-	Chippewa	Green Mountain	l Hiswsths	Hoosier	Huron-	Mark	Midewin	Monongahela	Ottawa	Shawnee	Superior	Wayne	White
Category	Common name	scientific name	,	Nicolet		and Finger Lakes			Manistee	Twain						•	Mountain
plant -	New England Violet	Viola novae-angliae ssp.											NI				
vascular	subspecies	novae-angliae											INI				
plant -			NII														
vascular	Great-spurred Violet	Viola selkirkii	NI														
plant -												NI					
vascular	Sand Grape	Vitis rupestris										IVI					
plant -								NI									
vascular	Appalachian Vittaria	Vittaria appalachiana						INI									
plant -								NI									
vascular	Barren Strawberry	Waldsteinia fragarioides						INI									
plant -															MIIH		
vascular	northern woodsia	Woodsia alpina													IVIIIII		
plant -						NI									MIIH		
vascular	Smooth Woodsia	Woodsia glabella				IVI									IVIIIII		
plant -	Rocky Mountain														MIIH		
vascular	woodsia	Woodsia scopulina													IVIIIII		
plant -								NI		MIIH		NI					
vascular	Netted Chainfern	Woodwardia areolata						141		1411111		141					
plant -	Slender Yelloweyed									MIIH							
vascular	Grass	Xyris torta								1411111							
plant -		Zizania aquatica var.							NI								
vascular	Indian wild rice	aquatica							141								
plant -													NI				
vascular	Meadow Zizia	Zizia aptera											141				

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Category	Common name	scientific name	Chugach	Tongass
plant - vascular	Eschscholtz's little nightmare	Aphragmus eschscholtzianus		NI
plant - vascular	Spatulate moonwort fern	Botrychium spathulatum		NI
plant - vascular	Moosewort fern	Botrychium tunux		NI
plant - vascular	Moonwort, no common name	Botrychium yaaxudakeit		NI
plant - vascular	Edible thistle	Cirsium edule var. macounii		NI
plant - vascular	Sessileleaf scurvygrass	Cochlearia sessilifolia		
plant - vascular	Spotted lady's slipper	Cypripedium guttatum		
plant - vascular	Mountain lady's slipper	Cypripedium montanum		NI
plant - vascular	Large yellow lady's slipper	Cypripedium parviflorum var. pubescens		NI
plant - vascular	Calder's loveage	Ligusticum calderi		NI
fungi	Lichen, no common name	Lobaria amplissima		NI
plant - vascular	Pale poppy	Papaver alboroseum		NI
plant - vascular	Alaska rein orchid	Piperia unalascensis		NI
plant - vascular	Lesser round-leaved orchid	Platanthera orbiculata		NI
plant - vascular	Kruckeberg's swordfern	Polystichum kruckebergii		NI
plant - vascular	Unalaska mist-maid	Romanzoffia unalaschcensis		NI
plant - vascular	Henderson's checkermallow	Sidalcea hendersonii		NI
plant - vascular	Dune tansy	Tanacetum bipinnatum subsp. huronense		NI

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# Appendix B: Intrusion Data (2012 – 2019)

Table B-1. Aerial fire retardant intrusion events into terrestrial avoidance areas, waterways and waterway buffers on National Forest System Lands

Year	Number of fires with intrusions	Number of intrusion reports on FS lands <sup>1</sup>	Number of intrusions that entered water	number of intrusions that entered the buffer only	number of intrusions that entered terrestrial TES avoidance areas	Number of accidental intrusions	Number of intrusions due to exception	Total number of fires	Total retardant used (gallons) in year	Estimated number of drops delivered by aircraft (gallons/1800)	percent of fires with intrusions (%)	Total intrusions divided by estimated drops (%)
2012	39	72	15	55	2	52	20	7725	8,540,914	4745	0.50%	1.52%
2013	31	54	18	34	2	42	12	7588	12,218,348	6788	0.41%	0.80%
2014	31	37	16	20	1	33	4	6910	8,896,234	4942	0.45%	0.75%
2015	27	50	33	16	1	40	10	6835	11,594,937	6442	0.40%	0.78%
2016	31	60	26	27	7	46	14	5772	19,021,716	10568	0.54%	0.57%
2017	35	75	48	24	3	65	10	6869	18,943,573	10524	0.51%	0.71%
2018	35	88	45	38	5	76	12	5739	16,376,813	9098	0.61%	0.97%
2019	15	21	12	3	6	15	6	5412	6,769,496	3761	0.28%	0.56%
TOTAL	244	457	213	217	27	369	88	52850	102,362,031	56868	0.46%	0.80%

# Appendix C: Noxious Weed Risk Assessment

## Affected Environment

The Forest Service Manual (FSM) 2900 (USDA Forest Service 2011) defines the term "Noxious Weed" based on the same meaning as found in the Plant Protection Act of 2000. The term "noxious weed" means any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment. The term typically describes species of plants that have been determined to be undesirable or injurious in some capacity. Federal noxious weeds are regulated by USDA-Animal and Plant Health Inspection Service under the Plant Protection Act of 2000, which superseded the Federal Noxious Weed Act of 1974. State statues for noxious weeds vary widely, with some States lacking any laws defining or regulating noxious weeds. Depending on the individual State law, some plants listed by a State statute as "noxious" may be native plants which that State has determined to be undesirable. When the species are native, they are not considered invasive species by the Federal Government. However, in most cases, State noxious weed lists include only exotic (nonnative) species.

Nonnative invasive species are species that are not native (are alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Executive Order 13112). For the purposes of this discussion both definitions will be combined into the term nonnative invasive species (NNIS).

NNIS are currently damaging biological diversity and ecosystem integrity of lands within and outside National Forests nationwide. Invasive plant species reduce the quality of native habitat by displacing native species, altering nutrient and fire cycles, degrading soil structure, and decreasing the quality and availability of forage for wildlife (Mack et al 2000). Invasive plants spread between National Forest System lands and neighboring areas, affecting all land ownerships.

In the United States, invasive species are the second leading cause of native species endangerment and extinction, and their costs to society have been estimated at \$120 billion annually (Crowl et al. 2008; Pimentel et al. 2000, 2005).

Current data for known infestations at the regional level are shown in table 7, although this data is an underestimate due to varying levels of data entry into the National Resource Manager system. The data presented does not account for synonyms and typos in species names or overlapping polygons of multiple nonnative invasive species. As indicated in table 7, there are currently 1,100 species and 4,473, 367 infested acres catalogued in the national Forest Service GIS database.

Table C-1. Number of species and infested acres in Forest Service Regions.

Region	Number of species	Infested acres
1	135	1,393,106
2	118	1,170,418
3	158	265,532

Region	Number of species	Infested acres
4	178	702,634
5	298	119,012
6	310	368,949
8	253	228,852
9	357	205,111
10	263	19,748
Nationwide	1,100	4,473,367

Table 8 shows the twenty species with the largest number of infested acres in the NRM database. Species with the largest infested acres may not be high priority for treatment on individual units, because their widespread nature does not allow for the opportunity to control or eradicate them. However, these species are treated when they threaten specific resources, and impact vegetation diversity. Poland and others (2021) provide examples of problem invasive species by broad geographic regions that do not correspond directly to Forest Service Regions. These are:

Northwest region- Himalayan blackberry, Japanese knotweed, giant hogweed, Dalmatian toadflax, cheatgrass, knapweeds, medusahead and ventata.

Southwest region- buffelgrass, musk thistle, saltcedar, Russian olive, yellow starthistle, spotted knapweed, diffuse knapweed, meadow knapweed, broadleaved pepperweed, bull thistle, Scotch thistle, musk thistle, Canada thistle, Scotch broom and French broom.

Great Plains region- smoothbrome, crested wheatgrass, Kentucky bluegrass, Johnsongrass, buffelgrass, absinth wormwood, whitetop, Russian olive, field brome and tumble mustard.

Midwest region- garlic mustard, Japanese barberry, common buckthorn, exotic honeysuckles, tree of heaven, reed canary grass, phragmites, purple loosestrife and Eurasian watermilfoil.

Northeast region- mentions most of the species in the Midwest region along with Norway maple, Oriental bittersweet, black swallow-wort, pale swallow-wort, autumn olive, Japanese knotweed, kudzu and multiflora rose

Southeast and Caribbean region- cogongrass, Chinese privet, common water hyacinth, Old World climbing fern, Japanese climbing fern and Chinese tallow

Table C-2. Species in NRM database with the highest amount of infested acres on Forest Service Units.

Common name	Scientific name	Infested acres
Canada thistle	Cirsium arvense	665,919
spotted knapweed	Centaurea stoebe ssp. micranthos	639,023
nodding plumeless thistle	Carduus nutans	295,259
gypsyflower	Cynoglossum officinale	199,415
cheatgrass	Bromus tectorum	198,817
leafy spurge	Euphorbia esula	148,613

Common name	Scientific name	Infested acres
yellow star-thistle	Centaurea solstitialis	129,269
Dalmatian toadflax	Linaria dalmatica	122,667
rush skeletonweed	Chondrilla juncea	112,230
bull thistle	Cirsium vulgare	110,796
meadow hawkweed	Hieracium caespitosum	110,011
oxeye daisy	Leucanthemum vulgare	100,573
common mullein	Verbascum thapsus	97,287
butter and eggs	Linaria vulgaris	95,805
sericea lespedeza	Lespedeza cuneata	74,740
broadleaved pepperweed	Lepidium latifolium	67,084
diffuse knapweed	Centaurea diffusa	63,136
Scotch cottonthistle	Onopordum acanthium	61,373
common St. Johnswort	Hypericum perforatum	60,577
hardheads	Acroptilon repens	47,215

## NNIS and Retardant

Disturbance from wildfire, regardless of retardant application or not, modifies ecosystem processes and favors early successional plant species (Vitousek et al. 1996). Due to their aggressive nature, many nonnative invasive plants exploit the initial decreases in competition (Harrod and Reichard 2001) and the flush of nutrients after fire (Certini 2005), essentially outcompeting many native early seral plants. The effects of retardant, fire, and associated fire suppression actions tend to overlap and may not always be distinguishable since all three activities may result in conditions that favor the establishment or spread of NNIS. Despite these confounding effects, this analysis focuses on those areas where fire retardant would be applied.

Fire retardants could be applied wherever a wildfire occurs, and no one ecosystem can represent the variety of site conditions that are found in all areas where wildland fire is possible. Retardant application can occur in various types of vegetation communities including annual and perennial grasslands, conifer forests, summer and fall hardwood forests, sagebrush with grass, intermediate brush, southern rough vegetation, and mixed chaparral areas.

Fire is a process integral to the function of most temperate wildland ecosystems. Lightning-caused and anthropogenic fires have influenced the vegetation of North America profoundly for millennia (Brown and Smith 2000, Pyne 1982). In some cases, fire has been used to manipulate the species composition and structure of ecosystems to meet management objectives, including control of nonnative invasive plant species (DiTomaso et al. 2006, Grace et al. 2001, Keeley 2001), yet under some conditions, fire can increase abundance of nonnative invasive plants (Goodwin et al. 2002). In those cases, the abundance of nonnative invasive plants may subsequently alter fire behavior and fire regimes, sometimes creating new, self sustaining invasive plant/fire cycles (Brooks et al. 2004). These altered fire regimes can reduce native species diversity and alter ecosystem functions. Therefore, in some instances, differentiating the impacts from retardant application and fire itself can be difficult.

## **Analysis Area**

The affected environment area associated with this project includes all NFS lands, which comprise approximately 193 million acres.

## Effects Analysis

Because of the national scope of this document, this section presents a qualitative analysis. The following information is used to provide a baseline to analyze effects: 1) phytotoxic effects to individual plants and impacts to vegetation diversity, 2) historical fire and retardant application over the past 10 years. The spatial extent of this analysis includes all National Forest System lands (193 million acres) and the temporal extent is the next 5 to 20 years, which allows time for nonnative invasive species controls to be effective at a forest scale. It is expected that fire retardant application and product constituents will remain similar to those analyzed in this document during this timeframe. Retardant use is expected to increase in the future, but not at a scale that would make future impacts be inconsistent with those described in the current analysis.

## **Cumulative Effects Analysis**

We use the following assumptions in the cumulative effects analysis: all other fire suppression tools will continue to be used; all other policies and direction associated with control and treatment of invasive species nationally and locally will continue; and Forest Service fire preparedness and suppression budgets will not increase which implies no changes in the way the Forest Service would fight fires.

### Overview of Issues Addressed

Application of retardants may result in impacts to vegetation; the following are issue indicators measuring these potential impacts:

- Average annual retardant use
- Potential increases in nonnative invasive species from aerially applied fire retardant
- Potential impacts to vegetation diversity from fertilizer effects

## Methodology

Each National Forest maintains a list of noxious weeds and nonnative, invasive pest plants. This analysis assumes that all forests will continue to implement NNIS treatment strategies at local levels; treatments may include: early detection, rapid response and treatment of new invasive plant sites, increased emphasis on protecting and restoring healthy native plant communities, long-term site goals providing mechanisms to link treatment to prevention, revegetation/restoration and monitoring in an integrated and adaptive process. Because we cannot know when and where retardant may be used in the future or whether NNIS species would be present or what impacts may result, our analysis is necessarily broad scale and qualitative.

Nonnative invasive plant management that would be implemented in and near areas where fire retardant may be applied due to proximity to fires include: Burned Area Emergency Rehabilitation Program, Forest Service Handbook 2509.13 and USDA Guide to Noxious Weed Prevention Practices (USDA 2001b, Fire Management Section). These programs provide specialized guidance and instruction to prevent invasive weed establishment and spread.

## **Environmental Consequences**

#### Potential Direct and Indirect Effects Common to All Sensitive Species

Increased nitrogen and phosphorus from fire retardants may increase the distribution or density of NNIS and indirectly reduce native plant diversity where retardant is applied. Most NNIS species are good competitors and opportunistic. Increases in densities of NNIS may also attract more herbivores to these areas as a result of increased forage, thus providing additional potential for spread of NNIS from redistribution of propagules into other non-infested areas. Strips of retardant application may additionally provide a pathway for NNIS to establish into non-infested areas given favorable climatic and site-specific conditions.

Most studies conducted on retardant effects to plant communities were short term (1–3 years); they show minor short-term effects and note that longer-term studies may be necessary to fully understand or evaluate effects. One longer term study, evaluating effects of phorphorus fertilizer treatment on nutrient deficient sandy soils in Australia, reported potential for changes in plant community diversity after 22 years. These results may indicate that changes to plant diversity within the application zone of retardant may occur under certain circumstances and specific environmental or climatic conditions. Sufficient data do not exist to definitively predict a shortor long-term effect at this programmatic level of analysis. It is important to note, however, that national, regional and forest level NNIS programs, as well as those associated with fire, to control and eradicate NNIS would continue to be implemented at the local level. Changes in nitrogen and phosphorus inputs into bogs, grasslands, and freshwater wetlands have been shown to promote the invasion of nonnative plants (Tomassen et al. 2004, Green and Galatowitsch 2002). The 300foot buffer (no retardant application) for all waterways would reduce potential for retardant (nitrogen and phosphorus) entering water bodies. In most cases, except for the use of retardant in an exception or an intrusion, the 300 foot waterway avoidance buffer would eliminate impacts on aquatic and riparian plant diversity in these areas from invasions of NNIS species resulting from retardant use.

As described in the botanical biological evaluation, studies of magnesium chloride have focused on the application of formulations used for dust abatement. While the studies found magnesium chloride to affect the health of tree species and other vegetation, the difference in application rates and methods do not make these studies a good predictor of the impacts to NNIS. Some NNIS species may thrive after the application of magnesium chloride based aerial retardant, but the current studies do not focus enough on vegetation diversity to draw any conclusions. Additionally, the one time application may not have as much impact on vegetation as repeated roadside applications for dust abatement. While Goodrich and others (2008) found that more severely damaged vegetation on treated vs. untreated roads, the majority of vegetation in the study was determined to be healthy. Vegetation health was also influenced by slope position along roads.

The spatial extent of potential impacts from increases in NNIS resulting from the fertilizing effects of aerially applied retardant depends on the presence or proximity of nonnative invasive species to the retardant application site, the area (size) of application, and the post-application nonnative invasive treatment. Aerially applied retardant is typically applied in swaths across the landscape (50–100 feet wide by up to 800 feet long per drop). At the scale of this analysis (193 million acres) and the unknown future application sites of aerially applied retardant, it is only reasonable to conclude that there may be the potential for an increase of NNIS under certain site-specific conditions. It could, however, be hypothesized that the potential effect may be increased

in areas where NNIS are more prevalent such as urban interface areas, near roads, or other disturbed areas where NNIS occur compared to more remote areas of NFS lands.

As a result of other NNIS treatment strategies that are ongoing at the local level and the fact that retardant is applied annually to only 0.0044 -0.0117 percent of the total National Forest System land base (8,586-22, 552 acres annually), the estimated impacted areas are quite small in comparison to other activities that occur across NFS lands (such as recreation, fuel treatments, logging, grazing, and fire). The scale of impact is still small in relation to the total amount of infested acres catalogued in the national database. If the retardant was only applied on acres infested with NNIS only 0.001- 0.005 percent of all infested acres would be impacted. The overall impact of retardant is expected to be small in the national context, but impacts to certain resources like Threatened, Endangered and Sensitive species could potentially be high at the local level of the application site.

#### **Cumulative Effects**

Multiple activities occur on NFS lands (recreation, timber projects, grazing, roads, fires, etc) that have the potential to impact the establishment and spread of NNIS species. The relevant actions to cumulative effects are focused on aerially applied retardant only and actions similar to retardant effects. Assumptions and actions that may contribute to cumulative effects of aerially applied fire retardant at the national scale are listed below.

#### Assumptions

- Policy, direction, and local treatment and eradication of NNIS for Forest Service projects will continue.
- All other Federal and State fire fighting agencies will continue to use retardant under current guidelines and assumed they would be applying retardant at about the same percentages of land base annually as the Forest Service.
- All other Federal and State fire suppression tools will continue to be used.

#### Actions that may contribute to cumulative effects

- Use of fertilizers on private timberland and agricultural lands,
- Other State and Federal agencies applying aerial fire retardant, and
- Results of fire providing nutrient availability to NNIS

Cumulative effects are likely to be negligible because of the small amount of area affected by retardant each year, spread widely across the United States. Cumulative effects are unlikely but possible under certain scenarios.

Fertilization is uncommon on National Forest System land, and unlikely to add to nutrients in areas where fire retardant has been used. However, the private forest industry can and often does use fertilizers within inholdings on some forests. In addition, fire and fire retardant can be used on other ownerships in the same vicinity and at the same time as retardant is used on National Forest System land. Cumulative effects resulting in increases in NNIS or changes in vegetation diversity as a result of aerially applied retardant are unlikely but possible where retardant is applied under

these scenarios. As discussed earlier, the Forest Service will continue to implement NNIS and weed control measures as directed by national, regional and local level programs.

Wildfire releases soil nutrients and may add to local nutrient levels in soils thereby providing a similar fertilizing input as retardant. There has been little research on the combined effects of wildfire and retardant use on soil nutrient levels and it is probable that one effect would mask the other. Since this analysis focuses on retardant use, the effects of wildfire are not considered in detail.

NNIS may increase in abundance or extent in some areas where retardant is applied, but NNIS may also increase in the absence of aerial retardant use through ground disturbance from the use of ground suppression resources. The overall impact of aerial retardant on NNIS is expected to be minimal at the national level because the amount of area that will be treated is small. Existing NNIS treatment strategies would be implemented based on local site specific conditions and national, regional, or forest approved plans.

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# **Appendix D: Retardant Application Potential**

Retardant application potential for each forest and identification of those forests where retardant is used on more than 0.01 percent of the land base annually, based upon 2012 to 2019 retardant use data.

Region	Forest	Retardant Application Potential	Is retardant used on more than 0.01 percent of land base annually?
1	Beaverhead-Deerlodge	moderate	No
1	Bitterroot	moderate	No
1	Custer Gallatin	low	No
1	Dakota Prairie grasslands	very low	No
1	Flathead	very low	No
1	Helena-Lewis and Clark	moderate	Yes
1	Idaho-Panhandle	moderate	No
1	Kootenai	moderate	No
1	Lolo	high	Yes
1	Nez Perce - Clearwater	high	No
2	Arapaho & Roosevelt	low	No
2	Bighorn	very low	No
2	Black Hills	very low	No
2	Grand Mesa Uncompangre and Gunnison	very low	No
2	Medicine Bow-Routt	moderate	No
2	Nebraska	very low	No
2	Pike and San Isabel	moderate	No
2	Rio Grande	very low	No
2	San Juan	moderate	No
2	Shoshone	moderate	No
2	White River	moderate	No

Region	Forest	Retardant Application Potential	Is retardant used on more than 0.01 percent of land base annually?
3	Apache-Sitgreaves	low	No
3	Carson	very low	No
3	Cibola	moderate	Yes
3	Coconino	moderate	No
3	Coronado	high	Yes
3	Gila	moderate	No
3	Kaibab	very low	No
3	Lincoln	moderate	Yes
3	Prescott	high	Yes
3	Santa Fe	moderate	No
3	Tonto	high	Yes
4	Ashley	very low	No
4	Boise	high	Yes
4	Bridger-Teton	high	No
4	Caribou-Targhee	very low	No
4	Dixie	high	Yes
4	Fishlake	low	No
4	Humboldt-Toiyabe	high	No
4	Manti-La Sal	low	No
4	Payette	high	Yes
4	Salmon-Challis	moderate	No
4	Sawtooth	moderate	No
4	Uinta-Wasatch-Cache	high	Yes
5	Angeles	high	Yes
5	Cleveland	high	Yes

Region	Forest	Retardant Application Potential	Is retardant used on more than 0.01 percent of land base annually?
5	Eldorado	high	Yes
5	Inyo	high	Yes
5	Klamath	high	Yes
5	LTBMU	very low	No
5	Lassen	moderate	Yes
5	Los Padres	high	Yes
5	Mendocino	mod	Yes
5	Modoc	high	Yes
5	Plumas	high	Yes
5	San Bernardino	high	Yes
5	Sequoia	high	Yes
5	Shasta-Trinity	high	Yes
5	Sierra	high	Yes
5	Six Rivers	high	Yes
5	Stanislaus	high	Yes
5	Tahoe	high	Yes
6	Columbia River Gorge	very low	No
6	Colville	low	No
6	Deschutes and Ochoco	high	Yes
6	Fremont-Winema	moderate	No
6	Gifford Pinchot	low	No
6	Malheur	high	Yes
6	Mt. Baker-Snoqualmie	none	No
6	Mt Hood	very low	No
6	Okanogan-Wenatchee	high	Yes

Region	Forest	Retardant Application Potential	Is retardant used on more than 0.01 percent of land base annually?
6	Olympic	none	No
6	Rogue River-Siskiyou	high	Yes
6	Siuslaw	none	No
6	Umatilla	moderate	Yes
6	Umpqua	moderate	No
6	Wallowa-Whitman	high	Yes
6	Willamette	low	No
8	Chattahoochee-Oconee	very low	No
8	Cherokee	very low	No
8	Daniel Boone	none	No
8	El Yunque	none	No
8	Francis Marion & Sumter	none	No
8	George Washington and Jefferson	none	No
8	Kisatchie	none	No
8	Land Between the Lakes NRA	none	No
8	National Forests in Alabama	none	No
8	National Forests in Florida	very low	No
8	National Forests in Mississippi	none	No
8	National Forests and Grasslands in Texas	very low	No
8	National Forests in North Carolina	very low	No
8	Ouachita	none	No
8	Ozark-St. Francis	none	No
9	Allegheny	none	No
9	Chequamegon-Nicolet	none	No
9	Chippewa	very low	No
9	Green Mountain and Finger Lakes	none	No
9	Hiawatha	none	No

Region	Forest	Retardant Application Potential	Is retardant used on more than 0.01 percent of land base annually?
9	Hoosier	none	No
9	Huron-Manistee	none	No
9	Mark Twain	very low	No
9	Midewin	none	No
9	Monongahela	none	No
9	Ottawa	none	No
9	Shawnee	none	No
9	Superior	very low	No
9	Wayne	none	No
9	White Mountain	none	No
10	Chugach	none	No
10	Tongass	none	No