| Plants Evaluated for Species of Conservation Concern - for the Flathead National Forest Draft Forest Plan and Draft Environmental Impact Statement Statement Amblyodon dealbatus Amblyodon moss | Conservation Categories G3G5 | Is the species known to occur in the plan area? Yes | in the Plan Area | · · | Habitat Description Fens, wetlands, often calcareous. |
|---|------------------------------------|---|--|------------|--|
| Amerorchis rotundifolia Roundleaf orchid | SOC, RFSS | Yes | 5 occurrences on forest; last documented observation in 1995 (2013 undocumented) | plan area. | Spruce forest ecotones around fens or along streams, often in substrate influenced by limestone. |

| Carex chordorrhiza Creeping sedge | SOC, RFSS | Yes | 2 observations on forest, last documented in 2007 (last seen in 2012). 5 within 15 mi of the forest. | | Wet, organic soil of fens in the montane zone. |
|-----------------------------------|-----------|-----|--|--|--|
| Carex lacustris Lake-bank sedge | SOC, RFSS | Yes | 3 observations on forest, last documented in 2013. 1 within 15 mi of the forest. | Based on extensive field surveys since the early 1990s, peatland habitat conditions are stable in the plan area. | Marshes and fens. |

| Cypripedium parviflorum Small yellow lady's-slipper | RFSS | Yes | 15 observations on forest, last documented in 2013. Populations typically have a large number of individuals. There are many populations on other ownerships within the forest as well as near the forest boundary. | Stable | since the 1980s, associated peatland and wetland habitat conditions are stable in the plan area. | Fens, damp mossy woods, seepage areas, and moist forest-meadow ecotones in the valley to lower montane zones. |
|---|--------------------|-----|---|-----------------|--|---|
| Cypripedium passerinum Sparrow's-egg lady's-slipper | SOC, RFSS, S2S3 | Yes | 10 populations on forest, last documented in 2013. 30 within 15 mi of the forest. | Presumed stable | since the early 1990s, peatland habitat conditions are stable in the plan area. | Mossy, moist, or seepy places in coniferous forests and forest ecotones adjacent to fens, often on calcareous substrates. |

| Drosera anglica English sundew | SOC, RFSS | Yes | 19 observations on forest, last documented in 2013. 10 populations within 15 mi of the forest. | since the early 1990s, peatland habitat conditions are stable in the | With spaghnum moss in wet, organic soils of fens in the montane zone. |
|--|---------------|-----|--|--|--|
| Drosera linearis Slenderleaf sundew | SOC, RFSS, S2 | Yes | 2 observations on forest, last documented in 1988. | since the early 1990s, peatland habitat conditions are stable in the | Wet, organic soil of fens in the montane zone. Resides in specialized, limited habitat. |

| Drosera rotundifolia Roundleaf sundew | None | Yes | Generally not tracked due to lack of regional listing and state status as SOC. Found in most peatlands supporting any <i>Drosera</i> species. | Stable | | In sphagnum fens in montane zone. |
|--|-----------|-----|---|-----------------|--|--|
| Eleocharis rostellata Beaked spikerush | SOC, RFSS | Yes | 3 observations on forest, last documented in 1995 (adjacent populations found in 2003). 5 observations within 15 mi of the forest. | Presumed stable | since the early 1990s, peatland habitat conditions are stable in the | Wet, often alkaline soils, associated with warm springs or fens in the valley and foothills zones. |

| 5 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | COC DECC | lv | 0 | B | December 2011 - Cold | W |
|--|---------------|-----|--------------------------------|----------------------|--------------------------------------|---------------------------|
| Eriophorum gracile | SOC, RFSS | Yes | 9 observations on forest, last | Presumed stable | | Wet, organic soil of fens |
| Slender cottongrass | | | documented in 2013. 16 | | , , , | from low to moderate |
| | | | observations within 15 mi of | | habitat conditions are stable in the | elevations. |
| | | | the forest. | | plan area. | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 600 BE66 60 | l. | | c 1 | 5 1 |) |
| Liparis loeselii | SOC, RFSS, S2 | Yes | | Some populations may | _ | Wet, organic soils of |
| Loesel's twayblade | | | | be declining. | , | calcareous fens in the |
| | | | observations nearby on state | | habitat conditions are stable in the | valley and montane |
| | | | and TNC lands. The rarest | | plan area. | zones. |
| | | | and most geographically | | | |
| | | | restricted orchid species in | | | |
| | | | Montana. | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | I | I | | l l |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Lycopodiella inundata | SOC, RFSS, S2 | Yes | 3 populations on forest and 1 | Dracumad stahla | Based on extensive field surveys | Wet, organic soil of |
|-----------------------|-----------------|------|--------------------------------|-----------------|----------------------------------|--------------------------|
| | 30C, N 33, 32 | 1163 | | | • | _ |
| Northern bog clubmoss | | | on private land within forest | | since the early 1990s, peatland | nutrient-poor fens in |
| | | | boundary. | | | the valley and lower |
| | | | | | plan area. | montane zones. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Meesia triquetra | SOC, RFSS, S2 | Yes | 5 observations on forest, last | Presumed stable | Based on extensive field surveys | Collected on forest from |
| Meesia moss | 300, 111 33, 32 | 163 | documented in 2013. 1 | | | fen and peat dome at |
| Wicesia 111033 | | | | | | base of slope, fed by |
| | | | population on TNC lands in | | | |
| | | | Swan Valley and 4 more pops | | plan area. | perennial springs; also |
| | | | within 15 mi of the forest. | | | collected from shallow |
| | | | | | | pool and wet sphagnum |
| | | | | | | lawn. Also found at |
| | | | | | | edge of pond in the |
| | | | | | | wilderness. |
| | | | | | | |
| | 1 | I | 1 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Scheuchzeria palustris Pod grass | SOC, RFSS | Yes | 27 observations on forest, last documented in 2013. 14 observations within 15 mi of the forest. | since the early 1990s, peatland habitat conditions are stable in the plan area. | Wet, organic soil of fens in the valley and montane zones, usually with Sphagnum moss. |
|--|---------------|-----|--|--|--|
| Scorpidium scorpioides Scorpidium moss | SOC, RFSS, S2 | Yes | 2 observations on forest, last documented in 1999. 17 observations within 15 mi of the forest. | Based on extensive field surveys since the early 1990s, peatland habitat conditions are stable in the plan area. | Found on wet soil in calcareous seeps and fens. |

| Sphagnum magellanicum Magellan's peatmoss | SOC, S1 | Yes | 2 observations on forest, last documented in 2013. | - | Rich fens, peatlands (Schofield 1992). |
|---|---------|-----|--|---|--|
| Trichophorum alpinum Hudson's Bay bulrush | SOC, S2 | Yes | 1 population on the forest and 2 within 15 mi of the forest. | since the early 1990s, peatland habitat conditions are stable in the plan area. | Wet, cold organic soil of fens and slopes in the montane and subalpine zones. Sphagnum lawns and other very wet places. |

| Trichophorum cespitosum | SOC, RFSS, S2 | Yes | 9 observations on forest, last | Presumed stable | Based on extensive field surveys | Wet meadows and |
|-------------------------|---------------|-----|--------------------------------|-----------------|--------------------------------------|------------------------|
| Tufted club-rush | | | documented in 2013. 10 | | since the early 1990s, peatland | sphagnum-dominated |
| | | | observations within 15 mi of | | habitat conditions are stable in the | fens in the montane to |
| | | | the forest. | | plan area. | alpine zones. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Relevant Threats in the Plan Area Hydrologic changes that may affect the groundwater-dependent habitat. | • | Is this species identified as an SCC for the DEIS? | Rationale for SCC Determination Insufficient information on the status of the species in the plan area. | Best Available Scientific Information Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS05010. |
|---|-----|--|--|--|
| Hydrologic changes that may affect the groundwater-dependent habitat; changes to canopy cover; riparian zone disturbances; collection | Yes | Yes | the plan area since the early 1990s have documented only 5 occurrences; low population numbers and restricted | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMORC01010. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Competition with invasive vegetation; changes to hydrology | Yes | Yes | the plan area since the early 1990s have documented only 2 occurrences; low population numbers and restricted | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMCYP032U0. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|--|-----|-----|--|--|
| Changes to hydrology | Yes | Yes | the plan area since the early 1990s have documented only 3 occurrences; low population numbers and restricted | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMCYP036W0. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Collection, habitat alteration, changes to hydrology, and road construction and maintenance are potential threats | Yes | No | Substantial number of observations and high number of individuals in those populations; riparian and wetland habitats are protected from management activities. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMORCOQ090. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|---|-----|-----|---|--|
| Main threats to populations appear to be from potential hydrologic changes; road construction; riparian zone disturbances; collection | Yes | Yes | Small population sizes and restricted ecological conditions (habitat) within the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMORCOQOAO. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Changes to hydrology | Yes | No | Many observations. Management activities are not a threat. No risk to persistence. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDDRO02010. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|----------------------|-----|-----|--|--|
| Changes to hydrology | Yes | Yes | the plan area; although the populations are within wilderness, the species has very low population numbers and restricted ecological | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDDRO02060. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Changes to hydrology | Yes | No | Abundant in many peatlands. Many observations. Management activities are not a threat. No risk to persistence. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDDRO02070. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|--------------------------------------|-----|-----|--|--|
| Vulnerable to hydrologic alteration. | Yes | Yes | the plan area since the early 1990s have documented only 3 occurrences; low population numbers and restricted | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMCYP091P0. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Vulnerable to activities that may alter the hydrology of occupied sites. | Yes | | the plan area since the early 1990s have documented 9 occurrences, with low population sizes in most cases; small populations and restricted ecological conditions (habitat) within the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMCYP0A080. Chadde, S.W., et al . 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|---|-----|-----|--|---|
| Potentially threatened by land-use conversion, habitat fragmentation, and forest management practices; unknown causes of decline appear to be a factor as well; changes to hydrology. | Yes | Yes | the plan area since the early 1990s have documented only 3 occurrences; low population numbers and restricted ecological conditions (habitat) within the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMORC1M040. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Land-use conversion, habitat fragmentation, wetland drainage, and succession are considered low-level threats. Changes to hydrology | Yes | Yes | the plan area since the early 1990s have documented only 3 occurrences; low population numbers and restricted ecological conditions (habitat) | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPLYC03060. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|---|-----|-----|---|---|
| Changes to hydrology | Yes | Yes | the plan area since the early 1990s have documented only 5 occurrences; low population numbers and restricted | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS4L020. Chadde, S.W., et al . 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Changes to hydrology | Yes | No | Many observations. Management activities are not a threat. No risk to persistence. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMSCH02010. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|----------------------|-----|-----|---|--|
| Changes to hydrology | Yes | Yes | the plan area since the early 1990s have documented only 2 occurrences; low population numbers and restricted ecological conditions (habitat) within the plan area; | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS6V010. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Changes to hydrology | Yes | | the plan area since the early 1990s have documented only 2 occurrences; low population numbers and restricted ecological conditions (habitat) within the plan area; restricted to rich fens. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS6Z0M0. Chadde, S.W., et al . 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
|----------------------|-----|----|--|---|
| Changes to hydrology | Yes | No | | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMCYPOA010. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |

| Changes to hydrology | Yes | Yes | Extensive peatland surveys in | Montana Natural Heritage Program |
|----------------------|-----|-----|---------------------------------|---|
| | | | the plan area since the early | (MNHP) database records. Montana Field |
| | | | 1990s have documented 9 | Guide, Montana Natural Heritage Program, |
| | | | occurrences; low population | http://fieldguide.mt.gov/speciesDetail.asp |
| | | | numbers and restricted | x?elcode=PMCYP0Q060. Chadde, S.W., et |
| | | | ecological conditions (habitat) | al . 1998. Peatlands on National Forests of |
| | | | within the plan area. | the Northern Rocky Mountains: ecology |
| | | | | and conservation. Gen. Tech. Rep. RMRS- |
| | | | | GTR-11. Ogden, UT: U.S. Dept. of |
| | | | | Agriculture, Forest Service, Rocky |
| | | | | Mountain Research Station. 75 p. |
| | | | | |
| | | | | |
| | | | | |

| Plants Evaluated for Species of Conservation Concern - for the Flathead National Forest Draft Forest Plan and Draft Environmental Impact Statement Statement Bidens beckii Beck water-marigold | Conservation Categories SOC, RFSS, S2 | Is the species known to occur in the plan area? Yes | Distribution and Abundance in the Plan Area 1 observation on the forest (1998) and 10 within 15 mi of the forest. | Population Trend in the Plan Area Unknown | Habitat Trend in the Plan Area Aquatic habitats have been stable in the plan area. | Habitat Description Still or slow-moving water of lakes, rivers, and sloughs in the valleys, 0.1-3 m deep. |
|--|---|---|---|---|--|--|
| Heteranthera dubia Water star-grass | SOC, RFSS, S1S2 | Yes | 1 population on forest, last documented in 1998. 1 population within 15 mi of the forest. | Unknown | Aquatic habitats have been stable in the plan area. | Shallow water of riverine sloughs and backwaters in the valleys |
| Potamogeton obtusifolius Blunt-leave pondweed | SOC, RFSS | Yes | 3 observations on forest, last documented in 2007. Several populations on other lands within forest boundary. | Unknown | Aquatic habitats have been stable in the plan area. | Shallow water of lakes, ponds, and sloughs in the valley, foothill, and montane zones |

| Schoenoplectus subterminalis Water bulrush | SOC, RFSS | Yes | 5 observations on forest, last documented in 2013. | Unknown | Aquatic habitats have been stable in the plan area. | Found in open water and boggy margins of ponds, lakes, and sloughs at 0.1-3 m depth in the valley, foothill, and montane zones. |
|--|-----------|-----|--|---------|---|---|
| Verrucaria kootenaica Speck lichen | SOC, G2 | Yes | 1 population on the forest and 1 within 15 mi of the forest. | Unknown | Likely stable | On calcareous rock near streams. Specifically, it grows on stable limestone rocks below the high water line of large streams |

| Relevant Threats in the Plan Area No species-specific threats reported | Is there sufficient scientific information available to conclude substantial concern for long-term persistence in the plan area? Yes | Is this species identified as an SCC for the DEIS? | Rationale for SCC Determination Management activities not a threat to habitat; population trend unknown. | Best Available Scientific Information Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDAST6A010. |
|--|---|--|---|--|
| Vulnerable to changes in hydrology, water quality and recreational impacts; no species-specific threats reported | Yes | No | Management activities not a threat to habitat; population trend unknown. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMPON03010. |
| Vulnerable to changes in hydrology, water quality and recreational impacts; no species-specific threats reported | Yes | No | Management activities not a threat to habitat; population trend unknown. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMPOT030R0. |

| drainage of wetlands such as beaver ponds and bogs and the lack of disturbance, succession resulting from | Yes | No | Management activities not a threat to habitat; population trend unknown. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp |
|---|-----|----|---|---|
| the removal of beavers from the environment. Riparian zone disturbances; no species-specific threats reported | | | | x?elcode=PMCYP0Q1G0. |
| tineats reported | | | | |
| | | | | |
| No species-specific threats identified. | No | No | Management activities not a threat to habitat; population trend unknown, and no inventory data available. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLT0032270. |
| | | | | |

| Plants Evaluated for Species of Conservation Concern - for the Flathead National Forest Draft Forest Plan and Draft Environmental Impact Statement Statement | Conservation Categories | Is the species known to occur in the plan area? | Distribution and Abundance in the Plan Area | Population Trend in the Plan Area | Habitat Trend in the Plan Area | Habitat Description |
|---|----------------------------|---|---|--|-----------------------------------|--|
| Epipactis gigantea Giant helleborine | SOC, RFSS, S2S3 | Yes | 13 observations on forest (about 11 populations), last | Stable in many sites, but effects from invasive species in | Presently stable | Stream banks, lake margins, fens with springs and seeps, often near thermal waters. |
| Ophioglossum pusillum Adder's tongue | SOC, RFSS | Yes | 11 observations on forest, last documented in 2013. 25 observations located within 15 mi of the forest. | Presumed stable | Presumed stable | Wet meadows, margins of fens, and gravelly moist soil in the valley and montane zones. |
| Petasites frigidus var. frigidus Arctic sweet coltsfoot | SOC, RFSS, S2 | Yes | 4 populations known on forest and 3 within 15 mi of the forest. | One population has been extirpated. | Most habitat presumed stable. | Swamps, fen margins, and riparian seeps within open forest and meadows in the valley and foothill zones. |

| Ī | Ranunculus orthorhynchus | SOC, S1S2 | No | Not on forest but 1 population is | Not known to occur in | Not known to occur in | Streambanks and moist |
|---|--------------------------|-----------|----|-----------------------------------|-----------------------|-----------------------|-----------------------|
| | Straightbeak buttercup | | | adjacent to the boundary. | the plan area | the plan area | meadows in the |
| | | | | | | | montane zone. |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Relevant Threats in the Plan Area | for long-term persistence in the plan area? | Is this species identified as an SCC for the DEIS? | Rationale for SCC Determination | Best Available Scientific Information |
|---|---|--|---|--|
| Recreation, exotic species, water development, livestock grazing, urban development, timber harvest, and utility line maintenance. Changes to hydrology; road construction and maintenance; riparian zone disturbances; found in timber sales, such as Cedar Flats on HHRD. | Yes | | sizes at some sites. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMORC11010. Chadde, S.W., et al. 1998. Peatlands on National Forests of the Northern Rocky Mountains: ecology and conservation. Gen. Tech. Rep. RMRS-GTR-11. Ogden, UT: U.S. Dept. of Agriculture, Forest Service, Rocky Mountain Research Station. 75 p. |
| Changes to hydrology | Yes | | the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPOPH020F0. |
| Riparian zone disturbances; changes to hydrology; road use, construction and maintenance; timber harvest; culvert replacement has already extirpated one site on SBRD | Yes | | surveys in the plan area since the early 1990s have documented only 4 occurrences; low population numbers | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDAST71014. |

| Invasive species and trampling have | No | No | Not known to occur in the plan area | Montana Natural Heritage Program |
|--------------------------------------|----|----|-------------------------------------|--|
| been identified as potential threats | | | | (MNHP) database record. Montana Field |
| | | | | Guide, Montana Natural Heritage Program, |
| | | | | http://fieldguide.mt.gov/speciesDetail.asp |
| | | | | x?elcode=PDRAN0L1Y0. |
| | | | | |

| | Conservation Categories | Is the species known to occur in the plan area? | Distribution and Abundance in the Plan Area | Population Trend in the Plan Area | Habitat Trend in the Plan Area | Habitat Description |
|--|----------------------------|---|---|--------------------------------------|-----------------------------------|--|
| | SOC, G3 | | 11 observations on the forest and 10 within 15 mi of the forest. A Montana endemic known from 3 population clusters. These are in the Mission Mtns, Swan Range and the Rocky Mtn Front Range. | Presumed stable | | Sparsely vegetated, stony soil or talus derived from limestone in the subalpine and alpine zones. |
| <i>Draba densifolia</i> Dense-leaf draba | SOC, S2 | Yes | 1 population on the forest (Elkcalf Mtn.) | Presumed stable | | Gravelly, open soil of rocky slopes and exposed ridges in the montane to alpine zones. Generally on dry sites. |

| Erigeron lackschewitzii Lackschewitz' fleabane | SOC, RFSS, G3 | Yes | 6 observations on forest, last documented in 2001. 25 observations within 15 mi of the forest. | Presumed stable | Presumed stable | Open, gravelly, calcareous soil and talus on ridgetops in the alpine and subalpine zones. |
|--|---------------|-----|--|-----------------|-----------------|---|
| Papaver pygmaeum Alpine glacier poppy | SOC, S2S3 | Yes | 1 observation on forest and 5 within 15 mi of the forest. | Unknown | Presumed stable | Sparsely vegetated, stony soil of exposed slopes and ridge tops in the alpine zone. |
| Physaria saximontana var. dentata Rocky Mountain twinpod | SOC, G3T3 | Yes | 1 pop on forest and 6 within 15 mi of the forest. | Unknown | Presumed stable | Typically found in limestone-derived talus, fellfields, and gravelly slopes at moderate to high elevations. |
| Polystichium kruckebergii Kruckeberg's swordfern | SOC, S2S3 | Yes | 1 observation on forest (1997) and 1 within 15 mi of the forest. | Unknown | Presumed stable | Cliff crevices and talus slopes in montane to alpine zones. |
| Potentilla nivea var. pentaphylla Five-leaf cinquefoil | SOC, RFSS | Yes | 2 observations on forest, last documented in 1985. | Unknown | Presumed stable | Dry, gravelly soil of exposed ridges and slopes in the montane to alpine zones. |

| Saussurea densa Dwarf saw-wort | SOC, S2S3 | Yes | 2 populations on the forest and 11 within 15 mi of the forest. | Unknown | Presumed stable | Calcareous soil of talus slopes and rocky, open slopes in the alpine zone. |
|--|-----------|-----|--|---------|-----------------|---|
| Solorina bispora Chocolate chip lichen | SOC, S1S2 | Yes | 1 observation on forest and 1 within 15 mi of the forest. | Unknown | Presumed stable | On calcareous soil or humus on moist sites in alpine to subalpine habitats. |
| Solorina spongiosa Fringed chocolate chip lichen | SOC, S1S2 | Yes | 1 observation on the forest and 1 within 15 mi of the forest. | Unknown | Presumed stable | In moist moss mats on soil, adjacent to spring, seeps, waterfalls, and creeks; in alpine/subalpine zones. |

| Synthyris canbyi Mission Mountain kittentails | SOC, G2G3, S2S3 | Yes | 5 observations on the forest and 5 within 15 mi of the forest. | Presumed stable | Presumed stable | Open, rocky, usually calcareous soil of talus slopes and windswept ridge tops in the subalpine and alpine zones. |
|---|-----------------|-----|--|-----------------|-----------------|--|
| Tortula norvegica Norwegian tortula moss | SOC, S1 | Yes | 1 population known on the forest. | Unknown | Presumed stable | On soil and rock, arctic and alpine to about 8900 feet (Lawton 1971). |

| Area Grows at high elevations in rock and scree fields that generally are not subject to | Is there sufficient scientific information available to conclude substantial concern for long-term persistence in the plan area? Yes | Is this species identified as an SCC for the DEIS? | populations or habitat; occurs in wilderness and roadless areas at high | Best Available Scientific Information Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, |
|--|--|--|---|---|
| disturbance or other threats. | | | elevations. | http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDBRA0K130. |
| No species-specific threats identified. | No | No | | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDBRA110W0. |

| Minor impacts from recreational use possible. | Yes | No | Occurs in alpine habitats in wilderness; no known risks to persistence | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDAST3M5W0. |
|---|-----|----|---|--|
| Alpine habitat is generally not subject to serious disturbance. | No | No | Occurs in alpine habitats; historic record on the forest; no known risks to persistence | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDPAP0H0G0. |
| No species-specific threats identified. | No | No | Occurs in alpine habitats; no known risks to persistence | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDBRA220L1. |
| Habitat is generally remote, limiting the potential for negative impacts. | No | No | 0 | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPDRYOROCO. |
| No species-specific threats identified. | No | No | Occurs in alpine habitats; no recent population data; no known risks to persistence | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDROS1B152. |

| Minor impacts from recreational use possible. | No | No | Occurs in alpine habitats in wilderness; no known risks to persistence | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDAST8B0E0. |
|---|----|----|---|--|
| No species-specific threats identified. | No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLLEC4G010. |
| No species-specific threats identified. | No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLT0028030. |

| Occurrences restricted to | Yes | No | Occurs in alpine habitats in wilderness; | Montana Natural Heritage Program |
|------------------------------|-----|----|--|--|
| high elevation, open, rocky | | | no known risks to persistence. | (MNHP) database records. Montana Field |
| slopes in the Mission and | | | | Guide, Montana Natural Heritage Program, |
| Swan Ranges. As such, | | | | http://fieldguide.mt.gov/speciesDetail.asp |
| habitat is not generally | | | | x?elcode=PDSCR1W020. |
| prone to human disturbance | | | | |
| and most occurrences are in | | | | |
| designated wilderness areas, | | | | |
| which provide further | | | | |
| protection. | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| No species-specific threats | No | No | Insufficient information on the status | Montana Natural Heritage Program |
| identified. | | | of the species in the plan area. | (MNHP) database records. Montana Field |
| | | | | Guide, Montana Natural Heritage Program, |
| | | | | http://fieldguide.mt.gov/speciesDetail.asp |
| | | | | x?elcode=NBMUS7L0H0. |
| | | | | |

| Plants Evaluated for Species of Conservation Concern - for the Flathead National Forest Draft Forest Plan and Draft Environmental Impact Statement Statement | Conservation Categories | Is the species known to occur in the plan area? | Distribution and Abundance in the Plan Area | Population Trend in the Plan Area | Plan Area | _ | Relevant Threats in the Plan Area |
|---|----------------------------|---|--|--------------------------------------|-----------------|--|--|
| Aloina brevirostris Aloina moss | SOC, G3G5, S1 | Yes | 1 on forest and 2 within 15 mi of the forest. Historical. | Unknown | | Found on calcareous soil and on overturned tree bases. May also be a pioneer species on road cuts and river banks. | No species-specific threats identified. |
| Asplenium trichomanes Maidenhair spleenwort | None | Unknown | 1 historical collection that may have been on the forest. | Unknown | Presumed stable | | No species-specific threats identified. |
| Botrychium ascendens Upward-lobed moonwort | SOC, RFSS, G3 | Yes | 3 observations on forest, last documented observation in 2004. | Unknown | | elevations, including roadsides and other disturbed habitats. | May be threatened by changes in the hydrology of its streamside habitat and also by small animal herbivory and flooding. Invasive plant invasion. Herbicide from roadside treatments. Road construction; timber harvest. |

| Botrychium crenulatum | SOC, RFSS, G3 | Yes | 12 observations on forest, last | Unknown | Unknown | Various mesic sites from | Changes to hydrology; |
|---------------------------------------|---------------|-----|---------------------------------|-----------------|-----------------|---------------------------|--------------------------------------|
| Wavy moonwort | | | documented in 2006. | | | low to moderate | road construction; |
| | | | | | | elevations, including | recreation; timber |
| | | | | | | roadsides and other | harvest; Invasive plant |
| | | | | | | disturbed habitats. Sites | invasion. Herbicide |
| | | | | | | may be partially shaded | from roadside |
| | | | | | | or open. | treatments. |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Patruchium hasnarium | SOC, RFSS | Yes | 9 observations on forest, last | Presumed stable | Presumed stable | Various dry to mesic | Not advorcely impacted |
| Botrychium hesperium Western moonwort | 30C, KF33 | res | documented in 2007; frequent | Presumeu stable | Presumed stable | * | Not adversely impacted by management |
| Western moonwort | | | in northwest Montana and on | | | - | activities. |
| | | | forest. | | | subalpine, including | activities. |
| | | | iorest. | | | roadsides and other | |
| | | | | | | disturbed habitats. | |
| | | | | | | distarbed riabitats. | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Botrychium paradoxum Peculiar moonwort | SOC, RFSS, G3G4 | l . | 2 observations on forest, last documented in 2004. 1 within 15 mi of the forest. | Unknown | Presumed stable | Mesic meadows associated with spruce and lodgepole pine forests in the montane and subalpine zones; also found in springy western red cedar forests. | Threatened by grazing, trampling and off-road vehicle use. |
|--|-----------------|-----|--|---------|-----------------|--|---|
| Botrychium pedunculosum Stalked moonwort | SOC, RFSS, G2G3 | Yes | 2 observations on the forest; last documented in 2009. | Unknown | Presumed stable | most common habitats are western red cedar bottomlands. | Threats include cattle grazing, road building and maintenance, timber harvesting (incl. use of sites as staging areas), and recreational activities such as camping, horse riding, and ORV use. Fire suppression, which is allowing succession to proceed at many occupied sites, may also be an issue. |

| Brigantiaea praetermissa A lichen | S2S3 | Yes | 2 populations on the forest. Historical, last observed in 1977. | Unknown | Unknown | On conifer bark in low, moist forests. | Timber harvest is a potential threat. |
|--|------|---------|---|---------|---------|---|---|
| Callicladium haldanianum Callicladium moss | None | Unknown | 1 observation on the forest, pre- 1970. | Unknown | Unknown | | No species-specific threats identified. |
| Castilleja cervina Deer indian paintbrush | SOC | Unknown | 1 historical observation, possibly on the forest. | Unknown | Unknown | Grasslands and open coniferous forests in the valley and lower montane zones. | No species-specific threats identified. |

| Collema curtisporum | SOC, RFSS, G3, | Yes | 4 observations on forest, last | Unknown | Possibly a downward | Moist riparian forests, | Timber harvest; |
|------------------------|----------------|-----|---------------------------------|---------|-----------------------|---------------------------|-------------------------|
| Jelly lichen | S1 | | documented in 2006. | | trend due to declines | often in narrow | riparian zone |
| | | | | | in cottonwood stands. | sheltered valleys. | disturbances; change in |
| | | | | | | Substrate: trunk (bark) | native fire regime; |
| | | | | | | of Populus trichocarpa; | stand-replacing fires |
| | | | | | | occasionally on conifer | |
| | | | | | | twigs. | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Corydalis sempervirens | SOC, RFSS, S2 | Yes | 10 observations on forest, last | Unknown | Although a | Montane; rocky, | Main threat appears to |
| Pale corydalis | | | documented in 2004. | | disturbance species, | disturbed or eroding soil | be from fire exclusion; |
| | | | | | populations may | | invasive plant species |
| | | | | | disappear when | forest, often appearing | also threaten occupied |
| | | | | | conditions stabilize, | after fire. | habitat; succession; |
| | | | | | but more fires on the | | timber harvest. |
| | | | | | landscape may | | |
| | | | | | increase potential | | |
| | | | | | habitat as well. | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Cypripedium fasciculatum | SOC, RFSS | Yes | 3 observations on forest, last | Possibly declining | Possibly declining with | Montana occurrences | Threatened by logging, |
|----------------------------|-----------|-----|-----------------------------------|--------------------|-------------------------|-------------------------|-------------------------|
| Clustered lady's-slipper | | | documented in 2005 (last | | increase in fire on the | are mostly in warm, dry | road construction, |
| | | | observed in 2013). | | landscape. | mid-seral montane | development, fire |
| | | | | | | forest in the Douglas | suppression, change in |
| | | | | | | fir/ninebark and grand | native fire regime, |
| | | | | | | fir/ninebark habitat | stand-replacing fires, |
| | | | | | | types; occurs in mixed | and collecting. Surface |
| | | | | | | conifer stands with | disturbances and |
| | | | | | | western red cedar in | canopy elimination may |
| | | | | | | the plan area. | also negatively affect |
| | | | | | | | this species. |
| | | | | | | | |
| | | | | | | | |
| Dicranella grevilleana | SOC, S1 | Yes | 1 population documented on | Unknown | Unknown | Disturbed, damp, basic | No species-specific |
| Greville's dicranella moss | | | the forest (Silver Stairs Falls). | | | soil, usually at high | threats identified. |
| | | | | | | altitudes; on damp soil | |
| | | | | | | from the lowlands to | |
| | | | | | | 6500 feet, more | |
| | | | | | | common in the | |
| | | | | | | mountains (Lawton | |
| | | | | | | 1971). | |
| | | | | | | | |

| Dryopteris cristata Crested shieldfern | SOC, RFSS | Yes | 7 observations on forest, last documented in 2009. | Unknown | forest margins of fens and swamps in the montane zone. | Land-use conversion and habitat fragmentation via the alteration of wetland habitats threaten this species. Commercial forestry in the northern portion of its range may impact this species. Changes to hydrology; road construction; riparian zone disturbances. |
|--|---------------|-----|--|-----------------|--|--|
| Grimmia brittoniae Britton's dry rock moss | SOC, RFSS, G2 | Yes | 1 site on forest (Bad Rock Canyon) | Presumed stable | _ | Threatened by proposed highway widening. Relatively low elevation habitat puts species at risk from human activities. |

| Grindelia howellii Howell's gumweed | SOC, RFSS, G3 | documented in 2009 (last observed 2013). Many | · ' | Possibly a downward trend due to invasive species impacts | disturbed soil adjacent to ponds and marshes, as well as similar human- created habitats, such as roadsides and grazed pastures. | howellii is also |
|-------------------------------------|-----------------|---|---------|---|---|---|
| Idahoa scapigera Scalepod | SOC, RFSS, S1S2 | 1 observation on forest, last documented in 2001. | Unknown | Stable | the lower montane zone. | Highly susceptible to negative impacts from invasive weeds, primarily spotted knapweed and cheatgrass, as well as hydrological changes. |

| Lathyrus bijugatus Latah Tule pea | SOC, RFSS, S2S3 | Yes (historical) | 1 record on forest, last documented in 1896 (historical occurrence); 2 populations occur within 15 mi of the forest; Kootenai NF population was observed in 2013. | Unknown | Unknown | Open ponderosa pine and western larch forests in the valley and lower montane zones. | Logging and soil disturbance. Change in native fire regime; succession. |
|--|-----------------|------------------|--|----------------|----------------|--|---|
| Lobaria hallii A lichen | SOC, S2 | Yes (historical) | One population on forest, last seen in 1989. 3 nearby observations on other lands, latest observation in 2007. | Unknown | Unknown | On bark and wood. Usually on <i>Populus</i> , though sometimes on other deciduous trees or shrubs. Moist lowland riparian areas. | No current information. |
| Lycopodium dendroideum Treelike clubmoss | SOC, RFSS, S2 | No | None on forest, but one population occurs in Glacier NP. | Not applicable | Not applicable | Moist, coniferous forest in the valley and lower montane zones. | Not applicable |

| Mimulus ampliatus Stalked-leaved monkeyflower | SOC, RFSS, G3 | Yes | 3 pops on forest and 5 within 15 mi of the forest. | Unknown | Unknown | moist soil along slopes, cliffs and streams from the valleys to the subalpine zone. | Soil disturbance, timber harvest and road construction are potential risks, but no specific threats identified. |
|---|---------------|-----|--|---------|---|---|---|
| Mimulus breviflorus Short-flowered monkeyflower | SOC, RFSS, S2 | Yes | 2 observations on forest, last documented in 2012. 3 populations within 15 mi of the forest. | Unknown | Potentially declining due to management activities. | soil among rock outcrops in coniferous forests or grasslands in the montane zone. | Soil disturbance; changes to hydrology; timber harvest activities and road construction. Found in Betty Baptiste on HHRD in opening surrounded by timber (in proposed harvest unit) |
| Parmeliella triptophylla Lead lichen | SOC, S1 | Yes | 1 population known on forest and 1 within 15 mi of the forest. | Unknown | Unknown | | Potentially at risk from logging and soil disturbance |

| Polygonum austiniae Austin's knotweed | RFSS | Yes | 2 observations on forest, last documented in 2009. | Unknown | Unknown | Gravelly, often shale- derived soil of open slopes and banks in the montane zone. | Invasive species, soil disturbance and grazing are potential impacts. |
|---|---------|------------------|---|----------------|----------------|--|---|
| Pseudocyphallaria anomala Netted specklebelly lichen | SOC, S1 | Yes (historical) | 1 population on forest (1989) and 1 other within 15 mi of the forest. | Unknown | Unknown | Generally on deciduous trees and shrubs; occasionally on coniferous trees; rarely on rock. | No species-specific threats identified. |
| Ramalina obtusata Hooded ramalina lichen | SOC, S2 | Yes (historical) | 1 population on forest (1989), 2 more nearby on other lands within forest, and 6 within 15 mi of the forest. | Unknown | Unknown | On tree and shrub bark in low elevation riparian forests. | |
| Vaccinium myrtilloides Velvetleaf huckleberry | SOC, S2 | No | None on forest, but 7 observations are adjacent to forest boundary (one within forest boundary on other ownership). | Not applicable | Not applicable | Moist to rather dry forests in the montane zone. | Not applicable |

| Is there sufficient scientific information available to conclude substantial concern for long-term persistence in the plan area? | Is this species identified as an SCC for the DEIS? | Rationale for SCC Determination | Best Available Scientific Information |
|--|--|---|--|
| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS03020. |
| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPASP021K0. |
| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPOPH010S0. Popovich, S., B. Legler, and D. Farrar. 2016. Cursory assessment of species of possible management concern for Ophioglossaceae of the Flathead National Forest. Unpublished report, on file at Flathead NF Supervisor's Office, Kalispell, Montana. 4 pp. |

| No | No | Insufficient information on the status of the species in the plan area; possible taxonomic misidentifications with some populations. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPOPH010L0. Popovich, S., B. Legler, and D. Farrar. 2016. Cursory assessment of species of possible management concern for Ophioglossaceae of the Flathead National Forest. Unpublished report, on file at Flathead NF Supervisor's Office, Kalispell, Montana. 4 pp. |
|-----|----|---|--|
| Yes | No | Presumed to be sufficiently common and widespread, such that persistence in the plan area is probably secure; occurs in disturbed habitats. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPOPH010Q0. Popovich, S., B. Legler, and D. Farrar. 2016. Cursory assessment of species of possible management concern for Ophioglossaceae of the Flathead National Forest. Unpublished report, on file at Flathead NF Supervisor's Office, Kalispell, Montana. 4 pp. |

| Yes | Only 2 occurrences known in the plan area; low population numbers within the plan area; known threats from management activities. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPOPH010J0. PPopovich, S., B. Legler, and D. Farrar. 2016. Cursory assessment of species of possible management concern for Ophioglossaceae of the Flathead National Forest. Unpublished report, on file at Flathead NF Supervisor's Office, Kalispell, Montana. 4 pp. |
|-----|---|---|
| Yes | Only 2 occurrences known in the plan area; low population numbers within the plan area; known threats from management activities. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPOPH010T0. PPopovich, S., B. Legler, and D. Farrar. 2016. Cursory assessment of species of possible management concern for Ophioglossaceae of the Flathead National Forest. Unpublished report, on file at Flathead NF Supervisor's Office, Kalispell, Montana. 4 pp. |

| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLMTNHP003. |
|----|----|--|--|
| No | No | Insufficient information on the status of the species in the plan area; historical record. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS1C010. |
| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDSCR0D0B0. |

| v | l., | | |
|-----|-----|---------------------------------------|--|
| Yes | Yes | | Montana Natural Heritage Program |
| | | | (MNHP) database records. Montana Field |
| | | restricted ecological conditions | Guide, Montana Natural Heritage Program, |
| | | (habitat) within the plan area; known | http://fieldguide.mt.gov/speciesDetail.asp |
| | | threats from management activities. | x?elcode=NLTEST7900. |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Yes | Yes | _ | Montana Natural Heritage Program |
| | | (habitat) within the plan area; some | (MNHP) database records. Montana Field |
| | | management activities impact | Guide, Montana Natural Heritage Program, |
| | | populations. | http://fieldguide.mt.gov/speciesDetail.asp |
| | | | x?elcode=PDFUM030B0. |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Yes | sizes; risk to persistence from management activities. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PMORC0Q060. |
|-----|--|--|
| No | of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS28030. |

| Yes | | activities (timber harvest). | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPDRY0A090. |
|-----|--|---|--|
| Yes | | PNW and one of only a few narrow endemics in the region known at this | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NBMUS320A0. |

| Yes | grazing, and herbicide. Disturbance | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDAST470E0. |
|-----|---|--|
| Yes | Only 1 known occurrence in the plan area; low population numbers and restricted ecological conditions (habitat) within the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDBRA1G010. |

| No | No | Insufficient information on the status of the species in the plan area; historical occurrence, no recent observations. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDFAB25040. |
|----|----|--|---|
| No | No | Insufficient information on the status of the species in the plan area; historical occurrence, no recent observations. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLTEST7920. |
| No | No | Not known to occur in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PPLYC010B0. |

| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDSCR1B390. |
|-----|-----|---|--|
| Yes | Yes | Only 2 known occurrences in the plan area; low population numbers and restricted ecological conditions (habitat) within the plan area; 1 population in a proposed timber sale unit. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDSCR1B0L0. |
| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLT0020690. |

| No | No | Insufficient information on the status of the species in the plan area. | Montana Natural Heritage Program (MNHP) database records. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDPGN0L0X1. |
|----|----|--|--|
| No | No | Insufficient information on the status of the species in the plan area; historical occurrence, no recent observations. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLT0023860. |
| No | | Insufficient information on the status of the species in the plan area; historical occurrence, no recent observations. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=NLLEC3S210. |
| No | No | Not known to occur in the plan area. | Montana Natural Heritage Program (MNHP) database record. Montana Field Guide, Montana Natural Heritage Program, http://fieldguide.mt.gov/speciesDetail.asp x?elcode=PDERI180M0. |

| Conservation Category | Definition |
|-----------------------|---|
| G1 | NatureServe global rank 1: At high risk because of extremely limited and/or rapidly declining population numbers, range and/or habitat, making it highly vulnerable to global extinction. |
| G2 | NatureServe global rank 2: At risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to global extinction. |
| G3 | NatureServe global rank 3: Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas. |
| S1 | MNHP state rank 1: At high risk because of extremely limited and/or rapidly declining population numbers, range and/or habitat, making it highly vulnerable to extirpation in the state. |
| S2 | MNHP State rank 2: At risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to extirpation in the state. |
| RFSS | Regional Forester Sensitive Species |
| DM | Delisted (removed) from the Endangered Species Act list within the last five years, or delisted and still monitored by the regulatory agency |
| TC | Tribal concern |
| LC | Local concern |