

Revised Flathead National Forest Plan: Sensitive Wildlife, Aquatic and Plant Species Biological Evaluation- Summary of Determinations

The sensitive species in tables 1 and 2 are listed as known or suspected to occur on the Flathead National Forest, according to the Regional Forester's list dated February 25, 2011. Determinations are supported by analysis documented in the Final EIS, sections 3.2, 3.5.2, 3.7.4 and 3.7.5.

Table 1. Sensitive wildlife and aquatic/fish species determinations.

Species	No Impact	MIH ¹	LIH ²	BI ³	Brief rationale
Bald Eagle <i>Haliaeetus leucocephalus</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for terrestrial ecosystems and vegetation will protect very large trees used for nesting or roosting and limit the risk of disturbance during key time periods. Aquatic plan components will protect habitats used for feeding.
Black-backed Woodpecker <i>Picoides arcticus</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for terrestrial ecosystems and vegetation plan components for timber will protect burned forests used for nesting and feeding.
Bighorn Sheep <i>Ovis canadensis</i>	X				The revised forest plan will have no impact upon this species because it is only found in existing wilderness areas on a transient, occasional basis.
Common Loon <i>Gavia immer</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for aquatic ecosystems (including riparian management zones) and wildlife diversity will protect sites used for nesting and feeding and limit the risk of disturbance during key time periods.
Fisher <i>Pekania pennanti</i>		X			The fisher is not currently known to occur on the Flathead National Forest. Models indicate that the Forest provides habitat and that climate conditions may be more suitable for fisher in the future. Therefore, the revised forest plan includes a desired condition for fisher, as well as other plan components for terrestrial ecosystems & vegetation and riparian management zones that will protect very large trees (live and dead) used for denning and resting. A mosaic of successional stages will provide cover and feeding habitat. The plan may impact habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.
Flammulated Owl <i>Otus flammeolus</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for terrestrial ecosystems and vegetation and plan components for species of conservation concern will protect snags used for nesting and restore the forest structure needed for feeding and roosting.
Gray Wolf <i>Canis lupus</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for wildlife diversity (including those for big game habitat) will protect denning and rendezvous sites, provide for prey species, and limit the risk of disturbance during key time periods.
Harlequin Duck <i>Histrionicus histrionicus</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for aquatic ecosystems (including riparian management zones) and species of conservation concern will protect sites used for nesting and feeding and limit the risk of disturbance during key time periods.
(Townsend's) Western Big-eared Bat <i>Corynorhinus townsendii</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for wilderness, recommended wilderness, caves, aquatic ecosystems (including riparian management zones) and species of conservation concern will protect sites used for maternity roosts and hibernacula and limit the risk of disturbance during key time periods.

Species	No Impact	MIH ¹	LIH ²	BI ³	Brief rationale
Northern Bog Lemming <i>Synaptomys borealis</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for plan components for riparian management zones and special management areas will protect sites used for breeding and feeding.
Northern Leopard Frog <i>Rana pipiens</i>	X				The revised forest plan will have no impact upon this species because it is not known to occur on National Forest System lands.
Peregrine Falcon <i>Falco peregrinus anatum</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components will protect cliffs used for nesting and limit the risk of disturbance during key time periods. Aquatic plan components will protect habitats used for feeding.
Western Toad <i>Anaxyrus boreas</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for aquatic ecosystems (including riparian management zones) and wildlife diversity will protect sites used for nesting and feeding.
Wolverine <i>Gulo gulo luscus</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because plan components for infrastructure, suitability of motorized over-snow use, wilderness, and recommended wilderness management areas will protect sites used for denning, feeding and/or connectivity and limit the risk of disturbance during key time periods.
Western Pearlshell Mussel <i>Margaritifera falcata</i>	X				The revised forest plan will have no impact upon this species because it is not known to occur on National Forest System lands. There is only one known location off Forest in the Flathead Basin.
Westslope Cutthroat Trout <i>Oncorhynchus clarkii lewisi</i>		X			The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species because coarse filter plan components for aquatic ecosystems (including Riparian Management Zones, Watersheds, Conservation Watershed Network, and some Infrastructure) will provide for protection and maintenance of habitat conditions. Additional plan components address non-native species.

1. May Impact Individuals or Habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.

2. Likely to Impact Individuals or Habitat, with a consequence that the action may contribute towards federal listing or result in reduced viability for the population or species. Considered a trigger for a significant action in NEPA

3. Beneficial Impact to individuals or habitat.

Table 2. Sensitive plant species determinations

Species	No Impact	MIH ¹	LIH ²	BI ³	Brief rationale
Peatland/Fen habitat group					
<i>Amerorchis rotundifolia</i> Roundleaf orchid		X			<p>The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.</p> <p>Rationale:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ground disturbing activities may impact individuals or habitat; however impacts are avoided or minimized through site-specific design criteria and mitigation. <input type="checkbox"/> Revised plan components associated with terrestrial vegetation, riparian management zones, native plant diversity and soils protections will maintain or restore ecological conditions within the plan area that would provide for and support diversity of native plant species and communities, which includes sensitive plant species. <input type="checkbox"/> Fens and peatlands are further protected by plan components associated with riparian management zones that provide increased protections for these water features. <input type="checkbox"/> Additional protection to fens and peatlands is provided with the designation of special botanical areas (management area 3b) to eleven of the most distinctive fens on the Forest, with associated plan components that focus on protection of the botanical features. <input type="checkbox"/> The fen/peatland habitat group contains fourteen species of conservation concern. Plan components that ensure the conservation of plant SCC include desired conditions that support maintaining the ecological processes and habitat conditions that would contribute to the conservation of these species. Standards and guidelines specific to plant species diversity and plant species of conservation concern provide mitigation and protection measures to maintain species and habitats during planning and implementation of activities that may impact populations. These protections would also protect the sensitive plant species associated with these habitat.
<i>Carex chordorrhiza</i> Creeping sedge		X			
<i>Carex lacustris</i> Lake-bank sedge		X			
<i>Cypripedium parviflorum</i> Small yellow lady's-slipper		X			
<i>Cypripedium passerinum</i> Sparrow's-egg lady's-slipper		X			
<i>Drosera anglica</i> English sundew		X			
<i>Drosera linearis</i> Slenderleaf sundew		X			
<i>Eleocharis rostellata</i> Beaked spikerush		X			
<i>Eriophorum gracile</i> Slender cottongrass		X			
<i>Liparis loeselii</i> Loesel's twayblade		X			
<i>Lycopodiella inundata</i> Northern bog clubmoss		X			
<i>Meesia triquetra</i> Meesia moss		X			
<i>Scheuchzeria palustris</i> Pod grass		X			
<i>Scorpidium scorpioides</i> Scorpidium moss		X			
<i>Trichophorum cespitosum</i> Tufted club-rush		X			
Aquatic habitat group					
<i>Bidens beckii</i> Beck water-marigold		X			<p>The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.</p> <p>Rationale:</p>
<i>Heteranthera dubia</i> Water star-grass		X			
<i>Potamogeton obtusifolius</i> Blunt-leave pondweed		X			

Species	No Impact	MIH ¹	LIH ²	BI ³	Brief rationale
<i>Schoenoplectus subterminalis</i> Water bulrush		X			<ul style="list-style-type: none"> Plan components associated with aquatic resources will maintain or restore ecological conditions within the plan area that would also provide for and protect habitat for aquatic plant species, including sensitive species, and result in low risk of impact to these species. These include desired conditions, and supporting standards and guidelines, to provide for resilient, diverse and sustainable aquatic plant and animal communities, maintain water quality, the physical integrity and flow of streams, and aquatic ecosystems free of invasive species.
Wetland/Riparian habitat group					
<i>Epipactis gigantea</i> Giant helleborine		X			<p>The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.</p> <p>Rationale:</p> <ul style="list-style-type: none"> Ground disturbing activities may impact individuals or habitat; however impacts are avoided or minimized through site-specific design criteria and mitigation. Plan components associated with terrestrial vegetation, riparian management zones, native plant diversity and soils protections will maintain or restore ecological conditions within the plan area that would provide for and support diversity of native plant species and communities, which includes sensitive plant species. The wetland/riparian habitat group contains two species of conservation concern. Plan components that ensure the conservation of plant SCC include desired conditions that support maintaining the ecological processes and habitat conditions that would contribute to the conservation of these species. Standards and guidelines specific to plant species diversity and plant species of conservation concern provide mitigation and protection measures to maintain species and habitats during planning and implementation of activities that may impact populations. These protections would also protect the sensitive plant species associated with these habitat.
<i>Ophioglossum pusillum</i> Adder's tongue		X			
<i>Petasites frigidus</i> var. <i>frigidus</i> Arctic sweet coltsfoot		X			
Alpine habitat group					
<i>Erigeron lackschewitzii</i> Lackschewitz' fleabane		X			<p>The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.</p> <p>Rationale:</p> <ul style="list-style-type: none"> Plan components associated with terrestrial vegetation and native plant diversity will maintain or restore ecological conditions within the plan area that would provide for and support diversity of native plant species and communities, which includes sensitive plant species.
<i>Potentilla nivea</i> var. <i>pentaphylla</i> Five-leaf cinquefoil		X			

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					<ul style="list-style-type: none"> Plan components specifically associated with restoration of the subalpine-associated whitebark pine plant communities and the ecological processes within these communities would benefit and restore habitat for other plant species, including sensitive species, associated with subalpine habitats. There is generally low risk of impact to plants in high alpine areas due to the remoteness of the habitat.
Mesic-Montane-Disturbance-Talus habitat group					
<i>Botrychium ascendens</i> Upward-lobed moonwort		X			<p>The revised forest plan may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduced viability for the population or species.</p> <p>Rationale:</p> <ul style="list-style-type: none"> Ground disturbing activities may impact individuals or habitat; however impacts are avoided or minimized through site-specific design criteria and mitigation. Plan components associated with terrestrial vegetation and native plant diversity will maintain or restore ecological conditions within the plan area that would provide for and support diversity of native plant species and communities, which includes sensitive plant species. Plan components that protect soils and limit ground disturbance when conducting management activities will simultaneously provide protection to sensitive plantspecies that are associated with upland habitats. The mesic-montane-disturbance-talus habitat group contains ten species of conservation concern. Plan components that ensure the conservation of plant SCC include desired conditions that support maintaining the ecological processes and habitat conditions that would contribute to the conservation of these species. Standards and guidelines specific to plant species diversity and plant species of conservation concern provide mitigation and protection measures to maintain species and habitats during planning and implementation of activities that may impact populations. These protections would also protect the sensitive plant species associated with these habitat.
<i>Botrychium crenulatum</i> Wavy moonwort		X			
<i>Botrychium hesperium</i> Western moonwort		X			
<i>Botrychium paradoxum</i> Peculiar moonwort		X			
<i>Botrychium pedunculosum</i> Stalked moonwort		X			
<i>Collema curtisporum</i> Jelly lichen		X			
<i>Corydalis sempervirens</i> Pale corydalis		X			
<i>Cypripedium fasciculatum</i> Clustered lady's-slipper		X			
<i>Dicranella schreberiana</i> Schreber's dicranella moss (syn = <i>Dicranella grevilleana</i>)		X			
<i>Dryopteris cristata</i> Crested shieldfern		X			
<i>Grimmia brittoniae</i> Britton's dry rock moss		X			
<i>Grindelia howellii</i> Howell's gumweed		X			
<i>Idaho scapigera</i> Scalpod		X			
<i>Lathyrus bijugatus</i> Latah Tule pea		X			
<i>Mimulus ampliatus</i> Stalked-leaved monkeyflower		X			

Species	No Impact	MIIH ¹	LIH ²	BI ³	Brief rationale
<i>Mimulus breviflorus</i> Short-flowered monkeyflower		X			
<i>Polygonum austinae</i> Austin's knotweed		X			

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