

# Minnesota DNR's High Conservation Values (HCVs): Categories 1-3

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**Intent:** This list of High Conservation Values (HCVs) is intended to replace the initial HCVs listed under HCV Categories 1-3<sup>1</sup> in Table 2 (page 21) in Minnesota DNR's "Framework for Identifying, Managing, and Monitoring High Conservation Value Forests on State Lands," dated September 5, 2007.

**Guidance for Application:** With the exception of old-growth forests<sup>2</sup>, which by definition are automatically High Conservation Value Forests (HCVFs), DNR will identify HCVFs based on a combination of the HCVs listed under any of the three categories presented below. Within sites identified as HCVFs, management must maintain or enhance the identified HCVs. Since many occurrences of HCVs will be maintained or enhanced under existing DNR policy and other Principles in the FSC-US National Forest Management (FM) Standard, not all sites with one (or more) HCVs need be considered HCVFs. Rather, DNR will choose sites with the highest biodiversity significance (typically from among MCBS Sites of Outstanding or High Biodiversity Significance) within an ECS Section where the identified examples of HCVs are not otherwise maintained or enhanced.

**Context:** Portions of this document have been taken from the FSC-US National FM Standard (Principle 9 and Appendix F) and the FSC HCVF Assessment Framework. Both of these documents can be found on the FSC-US website at <http://www.fscus.org/>. Text taken directly from these documents is presented in italics. Specific HCVs have been identified and approved by DNR's interdisciplinary statewide HCVF Workgroup.

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**HCV Category 1:** *"HCV forest areas containing globally, regionally<sup>3</sup>, or nationally significant<sup>4</sup> concentrations of biodiversity values (e.g., endemism, endangered species, refugia)."*

**Definition of "Significant Concentrations of Biodiversity Values":** *"Areas that contain concentrations of rare/threatened/endangered species, natural communities, or other biodiversity values that occur in numbers, frequency, quality, and/or density that are sufficiently outstanding to be considered unique or highly important in comparison with other areas within the ecoregion."* (HCVF Assessment Framework).

HCV 1 always includes:

- a. G1 (globally critically imperiled) and G2 (globally imperiled) species<sup>5</sup>
- b. S1 (state endangered) and S2 (state threatened) species
- c. Federal endangered and threatened species

Other biodiversity values that are usually HCVs include:

- d. Federal candidate species and species proposed for state endangered and threatened status<sup>6</sup>
- e. Regionally significant concentrations of rare species<sup>7</sup>
- f. Significant concentrations of rare or uncommon species within the same taxonomic group (e.g., orchid bogs with several/many orchid species, sites with concentrations of spotted and four-toed salamanders)
- g. Outstanding examples of Key Habitats for Species of Greatest Conservation Need (SGCNs)<sup>8</sup>

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***HCV Category 2: "HCV forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distributions and abundance."***

**Context:** "HCV 2 includes relatively contiguous areas of forest (which may be crossed by land management roads or public roads). At the minimum these forests are likely to be thousands or tens of thousands of acres in size. However, "large" is relative to ecoregion landscape context (particularly the size of forested blocks in the ecoregion) and might be smaller or larger than this figure as indicated by consultation with regional experts. In ecoregions where natural forests are heavily fragmented by forest type conversion or land use conversion, the increased value of small occurrences of remaining natural forest should also be included in the assessment. The forest may be in single or multiple ownerships." (From FSC HCVF Assessment Framework).

Relatively large contiguous blocks of late successional forests or forests recovering from a natural disturbance are typically examples of HCV2. Intact large landscape areas with a mix of forest age classes may also be included, especially where the forest age class distribution approximates that created by natural disturbance regimes.

Factors that help identify large landscape level forests include:

- Size
- Lesser levels of human disturbance
  - Timber harvest
  - Fire suppression
  - Alteration of the natural hydrology (ditching, drainage, flooding)
- Connectivity between larger forest/wetland areas

General guidance by province for identifying HCVs in Category 2:

## Laurentian Mixed Forest Province

- a. Large forest or peatland/wetland blocks (generally > 4,000 acres)
- b. Contiguous blocks > 500 acres
  - i. of late successional forest managed for old-growth characteristics. (May include Old Forest Management Complexes (OFMCs) and Special Management Zones (SMZs) around designated old-growth stands.)
  - ii. that host rare, threatened, or endangered species.

## Tallgrass Aspen Parklands Province

- a. Large complexes of natural vegetation (generally > 1,000 acres)
- b. Other criteria from the 2005-2009 Lake States Standard which has been included in the 2010-2014 FSC-US National FM Standard (Central Hardwood Region and Northwoods Region)
  - i. Old forests/mixed ages stands that includes trees > 120<sup>9</sup> years old (with a minimum size of 40 - 100 acres)
  - ii. Intact forest blocks in an agriculturally dominated landscape
  - iii. Intact forest blocks with concentrations of vernal pools

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Eastern Broadleaf Forest Province<sup>10</sup> (from FSC 2005-2009 Lake States Standard - Central Hardwood Region)

- a. Intact forest blocks > 1000 acres
- b. Old forests/mixed ages stands that includes trees > 120<sup>9</sup> years old (with a minimum size of 40 - 100 acres)
- c. Intact forest blocks in an agriculturally dominated landscape
- d. Intact forest blocks with concentrations of vernal pools

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**HCV Category 3:** "*HCV forest areas that are in or contain rare, threatened, or endangered ecosystems.*"

- a. Viable examples of G1 and G2 native plant communities
- b. Viable examples of S1 and S2 native plant communities
- c. Viable examples of S3 native plant communities in ECS Sections where they are particularly rare, as well as, outstanding examples of native plant communities (based on relative rarity or quality within the ECS Section), including native plant communities at the edge of their range
- d. Pine stands of natural origin
- e. Old-growth forests (always HCVFs)
- f. Primary forests<sup>11</sup>
- g. Roadless areas > 500 acres<sup>12</sup> with unique attributes (*e.g., intact forests in highly roaded areas, rare plant communities, etc.*)

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## Endnotes:

<sup>1</sup> As of August 2011 (date this document was last updated), DNR is still operating in an "Interim HCVF Approach," focusing on HCV Categories 1-3. Efforts to identify specific HCVs in Categories 4-6 will begin once final HCVFs are identified.

<sup>2</sup> DNR's Old-Growth policies sufficiently cover all Old-Growth related requirements in the FSC-US National FM Standard.

<sup>3</sup> Region = ECS Section.

<sup>4</sup> Terms such as "Significant", "Outstanding", "Intact", or "Block" are relative terms based upon such things as population or community size, dynamics and structure; location; landscape context, rarity, and species habitat requirements.

<sup>5</sup> G-ranks are determined by NatureServe. See [NatureServe.org](http://NatureServe.org)

<sup>6</sup> Species proposed for state endangered or threatened status are those for which designation under the administrative rule making process has been proposed but not completed.

<sup>7</sup> "Rare" species, in the context of MNDNR's HCVF Approach, are defined as those species designated as Species of Special Concern, Species in Greatest Conservation Need (SGCNs) identified in the State Wildlife Plan, as well as state Threatened and Endangered Species.

<sup>8</sup> Key Habitats for SGCNs in each ECS Subsection are listed in the State Wildlife Plan.

<sup>9</sup> Lake States Central Hardwood Standard indicates a minimum age of 160 years; however, DNR's threshold for old growth is 120 years.

<sup>10</sup> These criteria may apply to the southern and western portion of the Laurentian Mixed Forest Province within the Central Hardwood Region

<sup>11</sup> "Primary forest is any forest that has never had significant human disturbance, usually taken to mean never logged. This may include young forest after natural disturbance, such as young post-fire jack pine." Source: Frelich, Lee. Forest Dynamics and Disturbance Regimes. Cambridge University Press. 2002. For purposes of HCVFs, primary forests are identified by a lack of human disturbance in the area, are usually old growth, and must be at least 3 acres in size. Pine encroachment or natural regeneration following a fire or blowdown in a previously logged area do not meet the intent or definition of primary forests. DNR's Old Growth Management Guidelines apply where primary forests exist.

<sup>12</sup> The FSC-US Assessment Framework defines roadless areas as forested areas without evidence of roads or skid trails. Potential roadless areas should be reviewed using aerial photos, other documentation including local Area notes, or on-the-ground surveys for evidence of roads or skid trails.