Implementing MN Wildlife Action Plan 2015-25 (WAP): The Habitat Approach

The WAP habitat approach is a landscape-scale approach to sustaining and enhancing terrestrial and aquatic habitats for Species in Greatest Conservation Need (SGCN) and other wildlife within a prioritized Wildlife Action Network (WAN). Local habitats are considered as part of a larger habitat system across the landscape. The landscape approach considers ecological interactions among lands and waters that contribute to biological diversity at species, community and landscapes scales, and maintain ecological processes and functions that sustain quality wildlife habitats.

The landscape operational scale may be defined by various means, but generally it is large enough to address a range of ecosystem processes and conservation objectives.

Characteristics of the landscape habitat approach:

Land managers collaborate in the:

- Establishment of conservation objectives and targets at a landscape scale.
- Identification and implementation of site level conservation actions to achieve the landscape scale objectives and targets over time.
- Implementation of adaptive management at landscape and site scales: Effectiveness measures are identified at multiple scales including site and landscape level.

The Wildlife Action Network:

The 2015-2025 Wildlife Action Plan identifies a prioritized Wildlife Action Network that can aid land managers and other conservation partners in implementing a landscape-scale, habitat approach that increases the effectiveness and efficiency of conservation actions by maintaining, enhancing, and restoring:

- Areas large enough to sustain biodiversity and ecological processes and functions,
- Areas that are large enough to support species that require large territories,
- Connections to allow for species movements (establishment of new populations, gene flow, access to multiple habitats at different life stages or to areas for thermal regulation),
- Areas that support species requiring a habitat complex composed of certain successional stages (i.e., time since disturbance)

How to use the WAN to identify priority areas for implementing conservation projects benefiting SGCN and other wildlife

Priority areas within the WAN are areas scored as high (red, score 5) and medium-high (orange, score 4). Within these priority areas implement conservation actions that address habitat loss, degradation and fragmentation, which the Wildlife Action Plan identifies as the primary causes of SGCN and other wildlife declines.

When developing and implementing conservation actions for the priority areas consider the ecological functions or benefits the associated lower scored areas 3,2,1 (yellow and greens) are providing, or could provide, to the priority areas. Implement conservation action within these lower scored sites that will maintain, enhance, or restore those functions. A few examples:

- Enhance or restore lower scored areas (scores 3, 2, 1) located *within* or *adjacent to* the priority areas (scores 5, 4), to increase the amount of quality habitat.
- Maintain or enhance lower scored areas *adjacent to* the priority sites to provide a buffer against invasive species, pesticides, fertilizers, sediments, or other threats that could reduce habitat quality.
- Maintain, enhance or restore lower scored areas *within* or *adjacent to* priority areas that:
    - Connect habitat types (e.g. aquatic/wetland and associated upland habitats)
    - Connect habitats of varying successional stages (e.g. young and mature forests)
    - Maintain a continuum of predominantly native communities (e.g. mesic to xeric prairie, savanna to woodland/ forest) that benefit wildlife and may increase the communities' capacity to adapt to stressors, including climate change.

Priority Ecological Communities:

Objective 1.1 (WAP, p. 39) prioritizes eight ecological communities which are thought to be most vulnerable to a changing climate: prairie stream ecosystems, high-diversity native prairie complexes, grassland-wetland complexes, peatlands, priority cold-water cisco lakes, cool-/cold-water streams, lowland conifer forests, and mesic hardwood forests. In most cases the above guidance to focus on the high scoring (5 red, and 4 orange) areas applies to these ecological communities as well.

However, some of these priority communities (peatlands, lowland conifer forests, cold-water systems for example) may be located in areas of the WAN that scored lower. This could be the result of less survey data being available for these areas, naturally lower levels of SGCN diversity, or we may be currently observing or expecting future negative impacts to habitats or species as a result of climate change, but these were not capture in the scoring of the WAN (WAP, p16. Criteria Used by Experts to Assess SGCN; Appendix E, Methods for Developing (and scoring) the WAN). In these areas focus on implementing conservation actions that promote resilience to a changing climate (WAP pp. 28-41).

Addressing Wildlife Action Plan priorities in project and/or funding proposals

If you are proposing conservation projects or implementing conservation actions that would maintain, enhance, restore or protect habitats in the priority areas (red and orange areas) of the WAN, it is appropriate to state in a grant proposal or planning document, that you are working in an area of the WAN prioritized in the WAP. It is also appropriate to state in a grant proposal or planning document, that you are working in an area of the WAN prioritized in the WAP if you are working to implement conservation actions that contribute to the ability of an ecological community identified in Objective 1.1 to adapt to climate change, even if these are in lower-scored areas of the WAN.

A shapefile of the WAN is available at: mndnr.gov/mnwap (See the resource section)

Effectiveness Monitoring

MN DNR is committed to working with partners to implement on-the-ground habitat management and effectiveness monitoring in at least six areas within the WAN. These areas will be selected through partnership meetings, from a pool of thirty-six Conservation Focus Areas (CFAs) identified in the WAP. Because monitoring and reporting on effectiveness is resource intensive, Minnesota has set a statewide target to work in at least six CFAs by 2025. The pool of 36 CFAs were identified based on needs and where opportunities exist for working with conservation partners***. The CFAs do not represent the most***

important areas for SGCN within the Wildlife Action Network. It is not appropriate to consider the pool of 36 CFAs as WAP priority areas. (Therefore, maps of the 36 CFAs are not available.)

Ecological and Water Resources staff will meet with internal and external partners to evaluate and select Conservation Focus Areas from the pool in their region. Partners will identify habitat objectives and effectiveness measures for the Wildlife Action Network (WAN) that is within the CFA boundary. (CFA boundaries often extend beyond the WAN because meeting conservation objectives for the WAN may require working outside of the WAN, e.g. within the larger watershed). Once a CFA has been selected by a group of partners, and objectives and effectiveness measures developed, then that CFA becomes a priority within the Wildlife Action Plan, and a map of the CFA will be made available on the WAP website (mndnr.gov/mnwap). **Only when a partnership has determined objectives and effectiveness measures for a CFA, would it be appropriate to reference that CFA as a WAP priority area.**