Implementing Minnesota's Wildlife Action Plan (WAP) 2015-25

The Landscape Habitat Approach

The WAP Premises:

1. Resilient ecological systems are essential for species and ecosystems to adapt to change.
2. Collaboration across programs and disciplines is essential.
3. Conservation actions are more effective when planned and implemented at multiple scales (landscape/watershed and site).

Characteristics of a landscape habitat approach:

1. Local habitat decisions are considered in the context of a larger habitat system across the landscape.

2. Consideration is given to ecological interactions among lands and waters; to biological diversity at species, community and landscapes scales, and to the ecological processes and functions that support quality wildlife habitats in a changing climate.

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

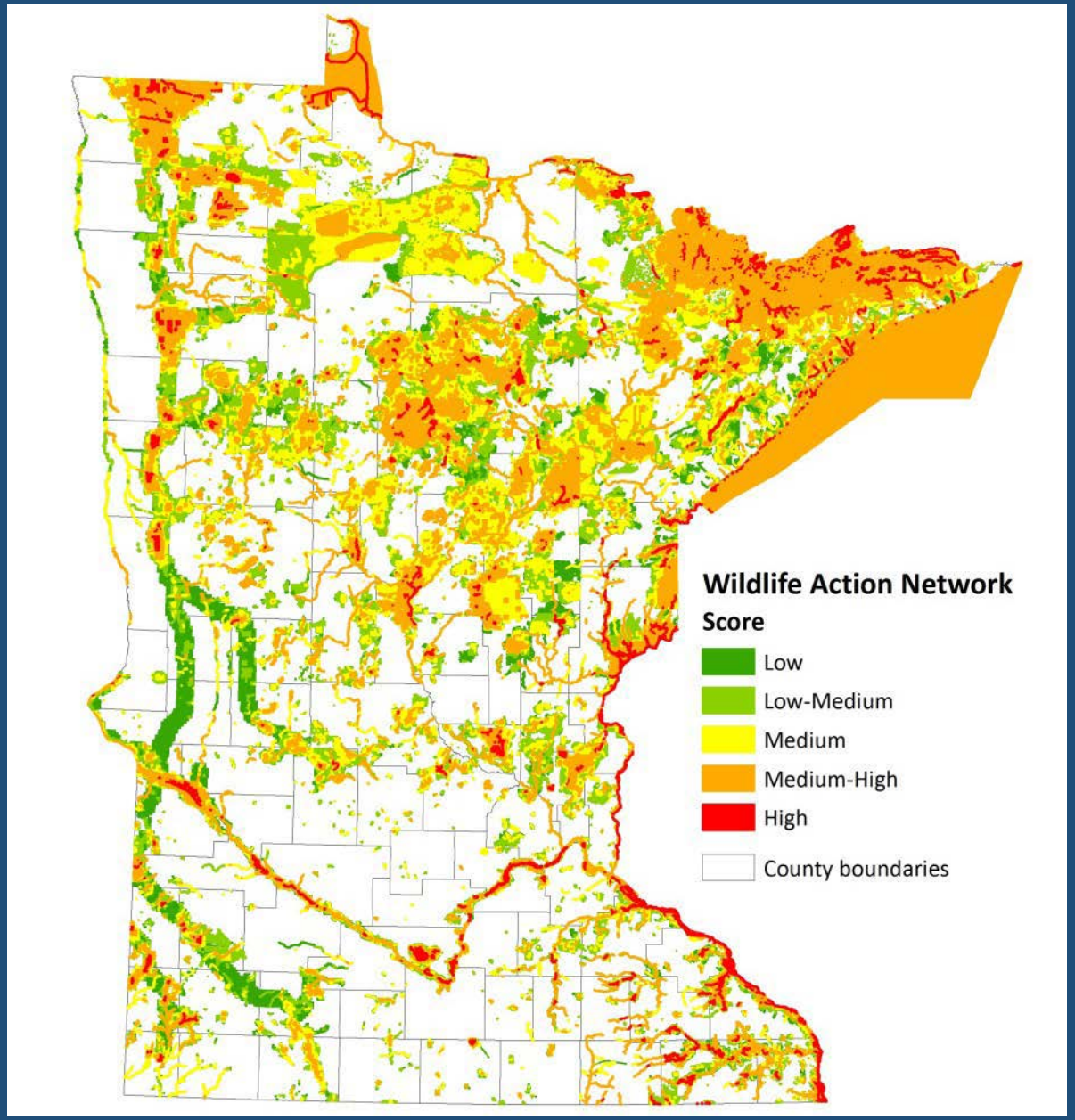
Characteristics of a landscape habitat approach con't:

3. Land managers collaborate in the:

   - Establishment of conservation objectives at the landscape scale.
   - Identification and implementation of site level conservation actions to achieve the landscape scale objectives and targets over time.
   - Implementation of adaptive management and effectiveness measures at landscape and site scales.

The Wildlife Action Network

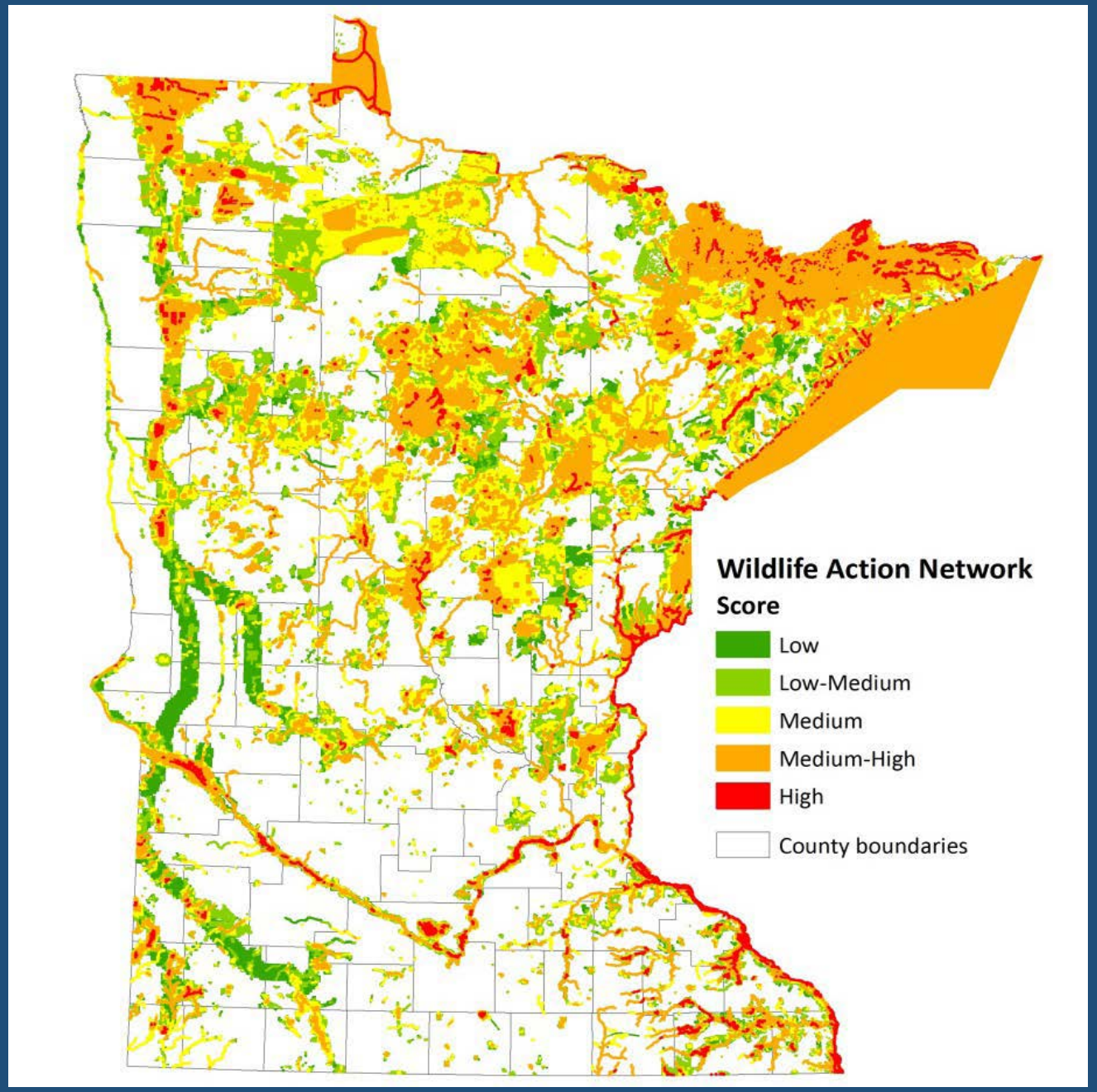
The 2015-2025 Wildlife Action Plan identifies a prioritized Wildlife Action Network that can aid land managers and other conservation partners in implementing a landscape-scale, habitat approach.



Within the WAN Implement Conservation Actions That:

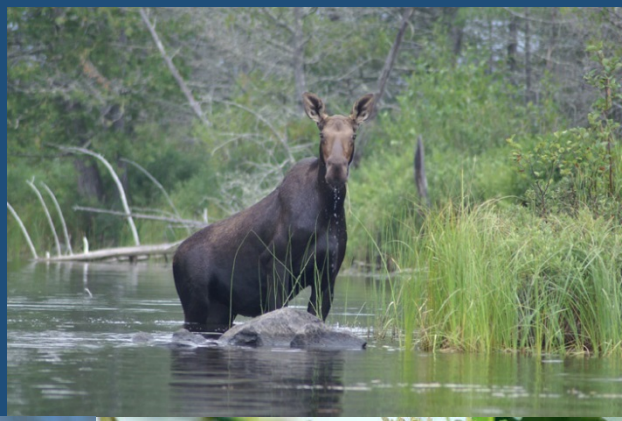
Sustain, enhance, protect or restore terrestrial and aquatic habitats for Species in Greatest Conservation Need (SGCN)* and other wildlife

*Native animals, nongame and game whose populations are rare, declining or vulnerable to decline…(MNWAP, page 15)

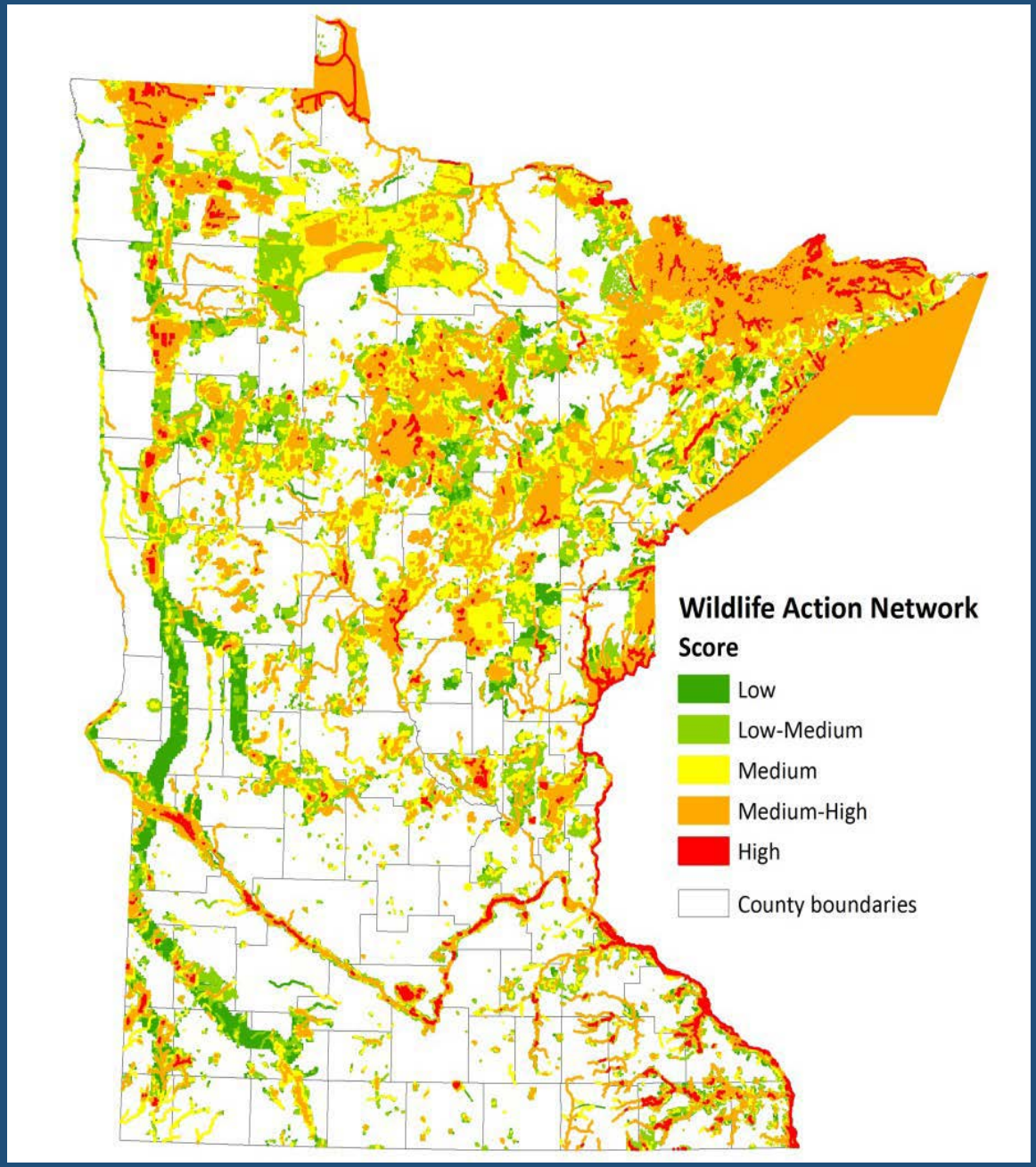


Prioritize Conservation Actions That Support…

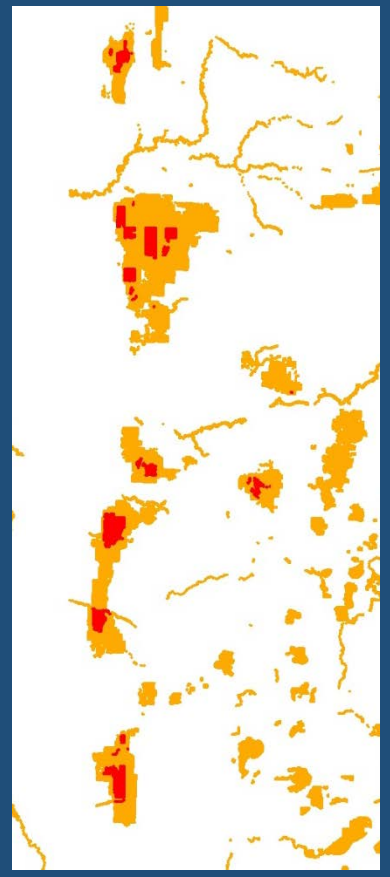
- Areas large enough to sustain biodiversity and ecological processes and functions in response to climate change and other stressors,
- Areas large enough to support species that require large territories,
- Areas that support species that require a habitat composed of certain successional stages,
- Connections that allow for species movements (establishment of new populations, gene flow, access to multiple habitats at different life stages or to areas for thermal regulation).



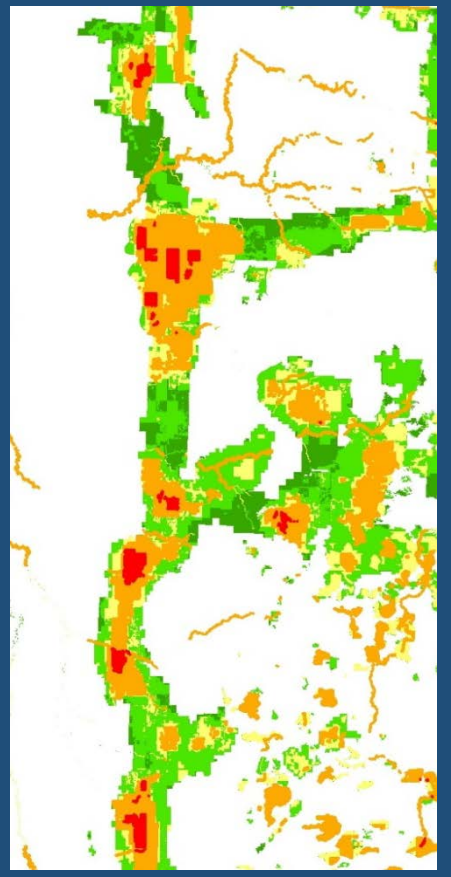
How to use the scored Wildlife Action Network to identify areas for prioritizing and implementing conservation projects benefiting SGCN and other wildlife



1. Identify the high (red) and/or medium-high (orange) areas within the WAN.



2. Consider the <u>ecological functions or benefits</u> 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.



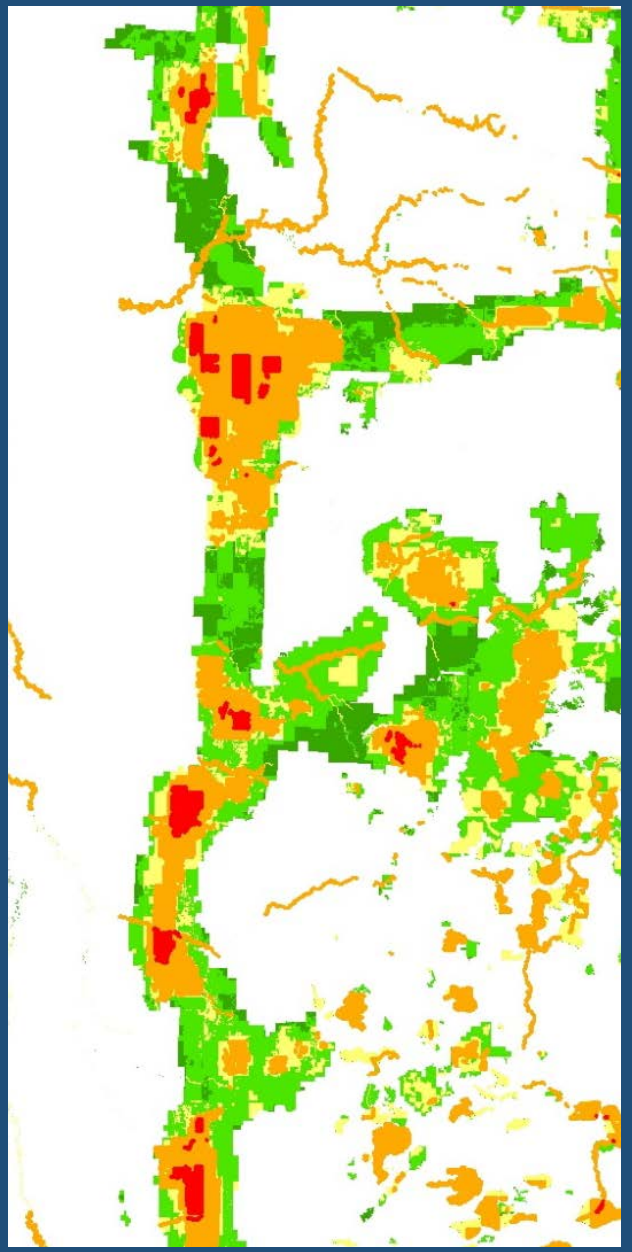
Examples of ecological functions or benefits which lower scored areas may provide

- Enhancement or restoration opportunities that increase the amount of quality habitat.

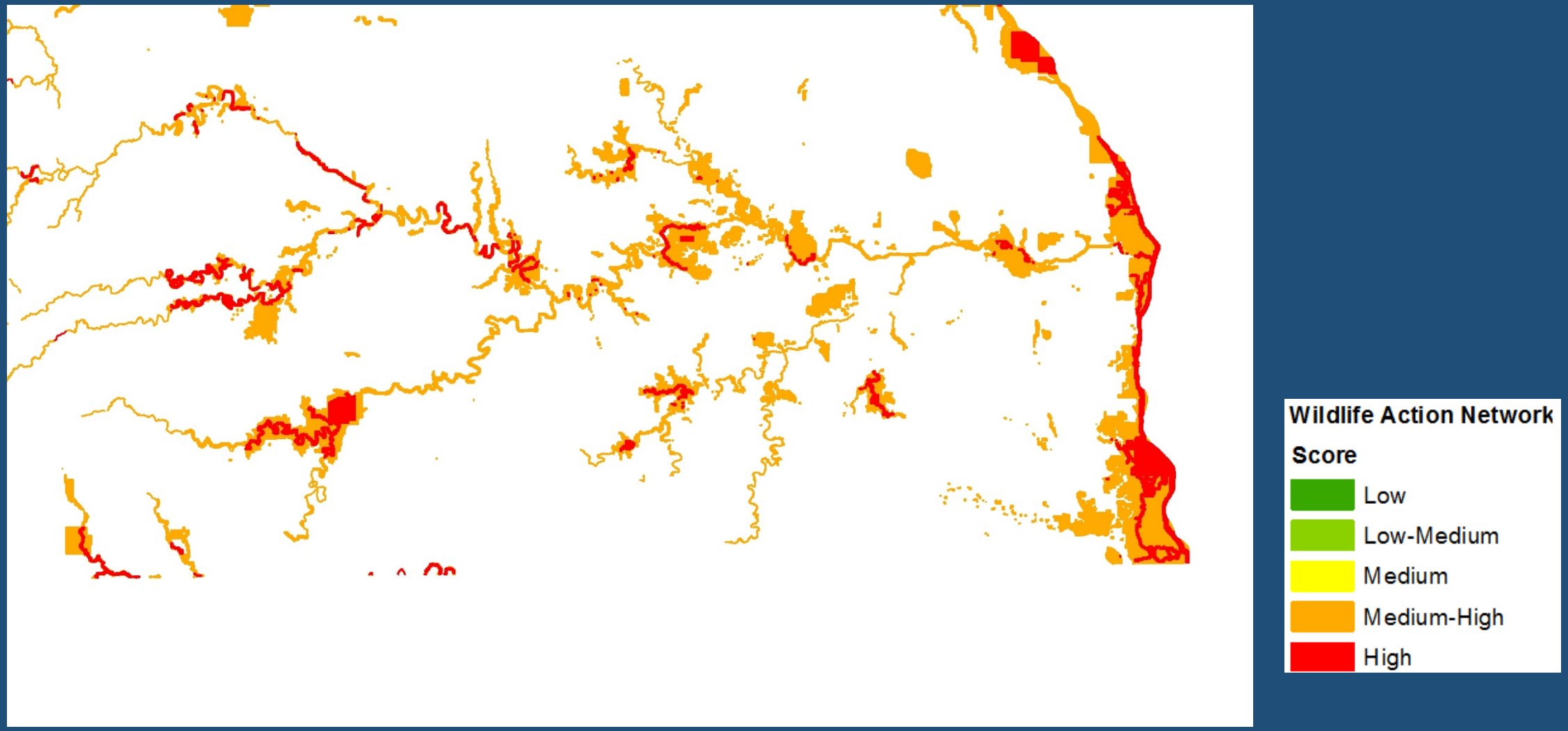
- Buffers against invasive species, pesticides, fertilizers, sediments, or other threats that could reduce habitat quality.

- Connectors:

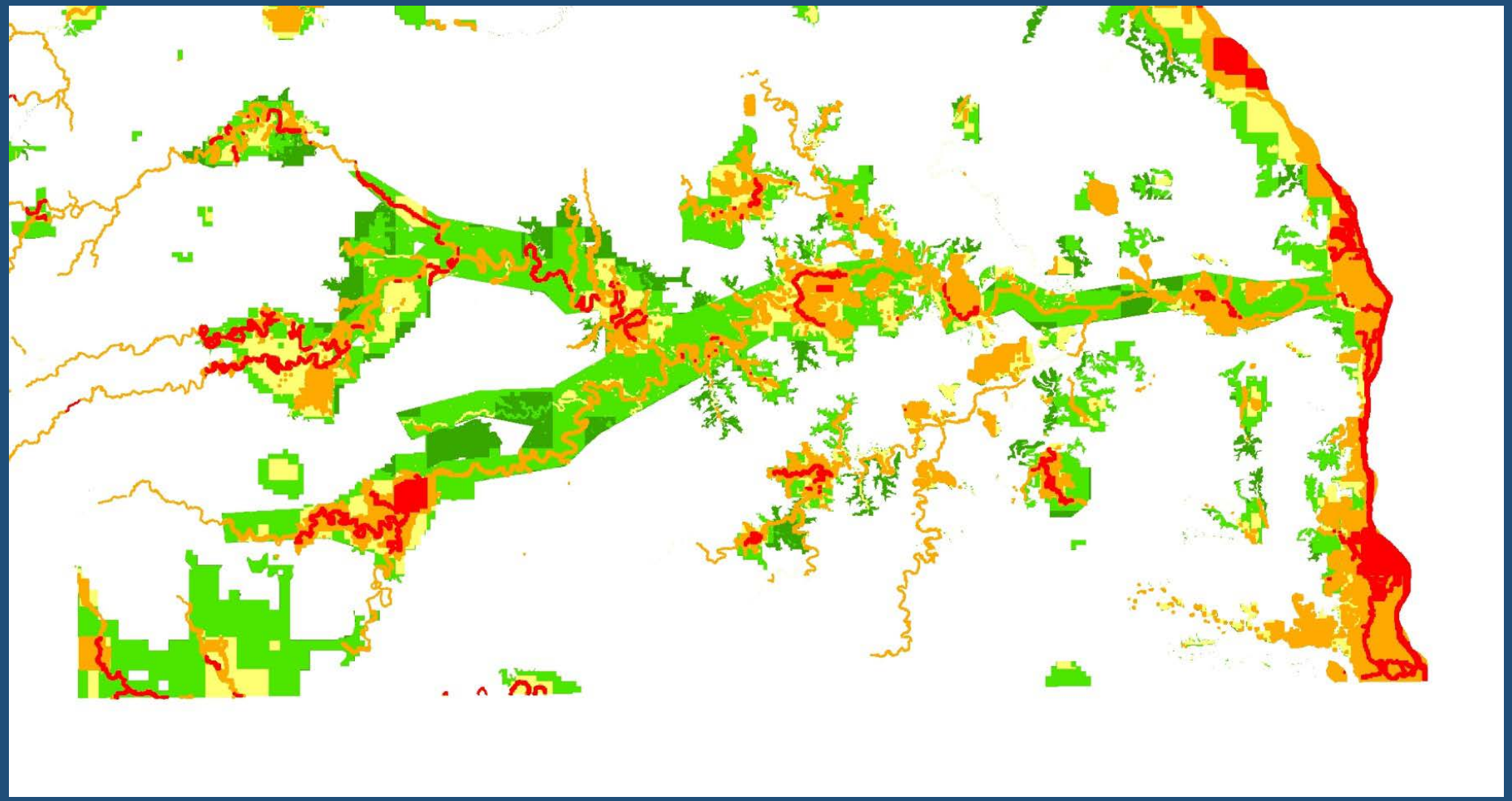
    - Connect habitat types (aquatic/wetland and associated upland habitats; cold to cool water reaches or warmer pools).
    - Connect habitats of varying successional stages (young and mature forests).
    - Maintain a continuum of predominantly native communities (mesic to xeric prairie, savanna to woodland/ forest) that benefit wildlife and may increase the communities' adaptive capacity to stressors, including climate change.



Root River high and medium-high WAN score



Root River high and medium-high WAN scores with lower scores as potential buffers or connectors



Wildlife Action Network

Score

- Low
- Low-Medium
- Medium
- Medium-High
- High

WAP Priority Ecological Communities

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**
- **Mesic hardwood forests**

Conservation Actions

- In most cases focusing 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 score 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 captured in the scoring of the WAN (WAP, p16. Criteria Used by Experts to Assess SGCN; Appendix E, Methods for Developing (and scoring) the WAN).

Focus on implementing conservation actions identified in the WAP (pp. 28-41)

Examples:

- Restore the hydrology of prairie streams, rivers and wetlands
- Enhance protection of Minnesota's peatlands and support efforts to recognize their importance at a global scale
- Continue or develop additional long-term species and habitat monitoring projects for early detection of changes in the resilience of ecological communities
- Develop best management practices for lowland conifer SGCN
- Implement landscape scale conservation plans such as MN Prairie Conservation Plan and Subsection Forest Resource Management Plans

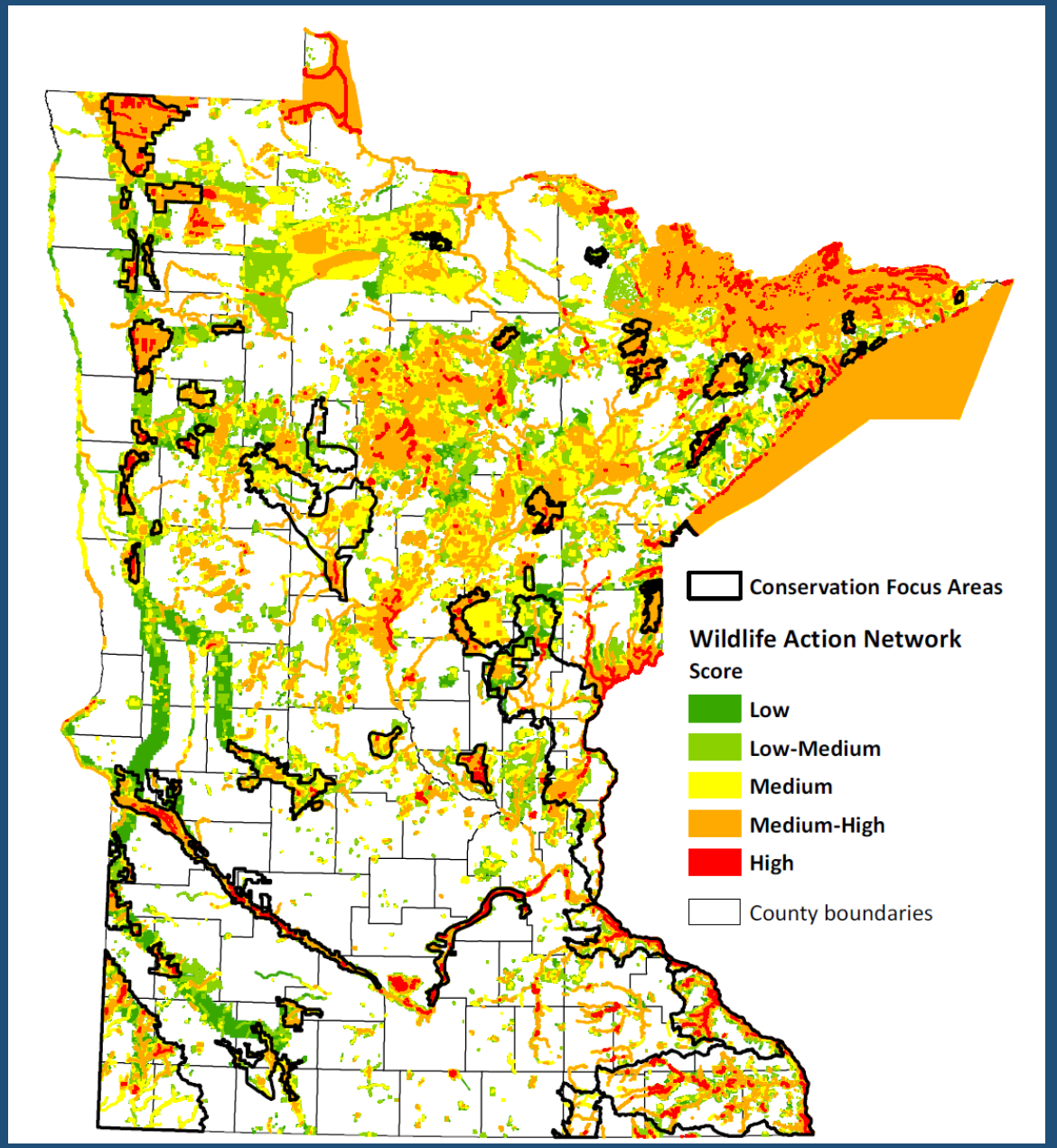
Conservation Focus Areas (CFAs)

Target: MN WAP Objective 1.2 sets a target of working in at least 6 Conservation Focus Areas by 2025

CFA Selection Process

- CFAs will be selected through partnership meetings, from the pool of thirty-six Conservation Focus Areas (CFAs) identified in the WAP.

- The pool of 36 CFAs were identified based on needs and opportunities for working with conservation partners. ***They do not represent, and are not a prioritization of, the most important areas for SGCN within the Wildlife Action Network.***



CFA Implementation

***Within selected CFAs, DEWR staff will work with partners to*:**

- Develop and implement specific and measurable objectives for the WAN that is located within the CFA. (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.)

- Develop an adaptive management and monitoring plan.

- Implement conservation actions and measure effectiveness.

The selected CFAs will be a priority for investing WAP resources to implement on-the-ground conservation projects and adaptive management (including effectiveness monitoring) that is directed at achieving WAP goals and objectives.

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

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 when:

- **Proposing or implementing conservation that would maintain, enhance, restore or protect habitats in the red and orange areas of the WAN**

- **Implementing conservation actions that contribute to the ability an ecological community identified in Objective 1.1 to adapt to climate change, even if the community is in lower-scored areas of the WAN.**

Conservation Focus Area

- **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.**

- **Once a CFA is established that information will be made available on the WAP website: mndnr.gov/mnwap.**

For more information on MN WAP, including shape and layer file of the WAN:

mndnr.gov/mnwap http://www.dnr.state.mn.us/mnwap/index.html