

Sustaining Minnesota's Biodiversity: Why and How?

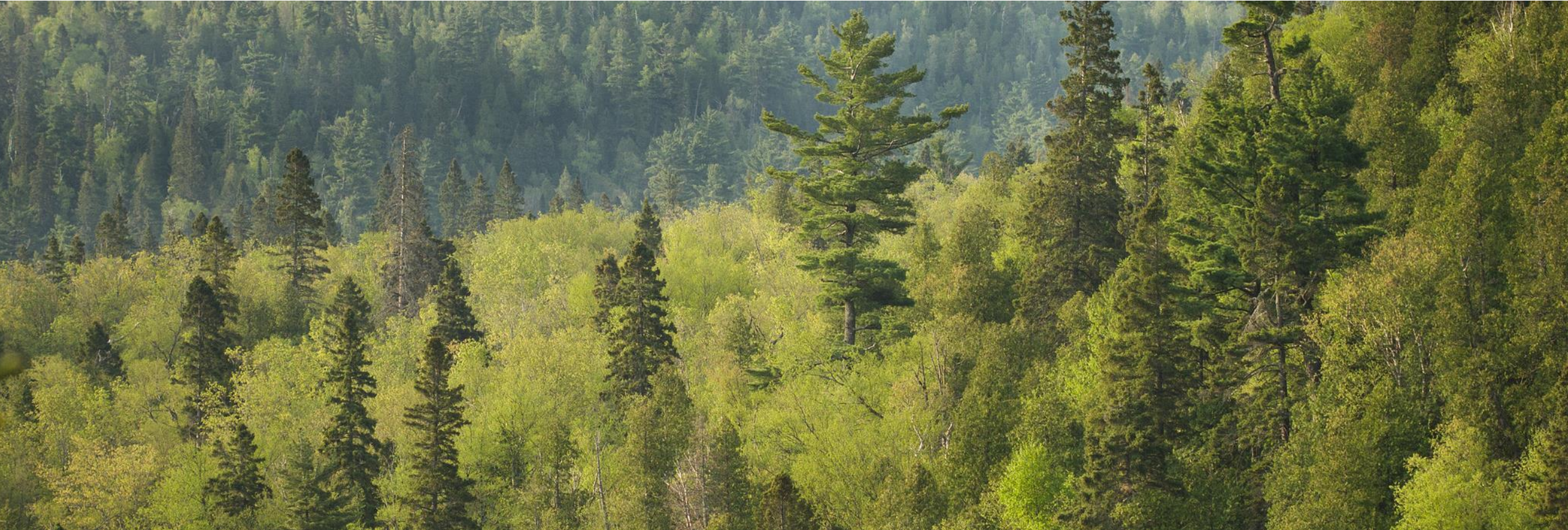


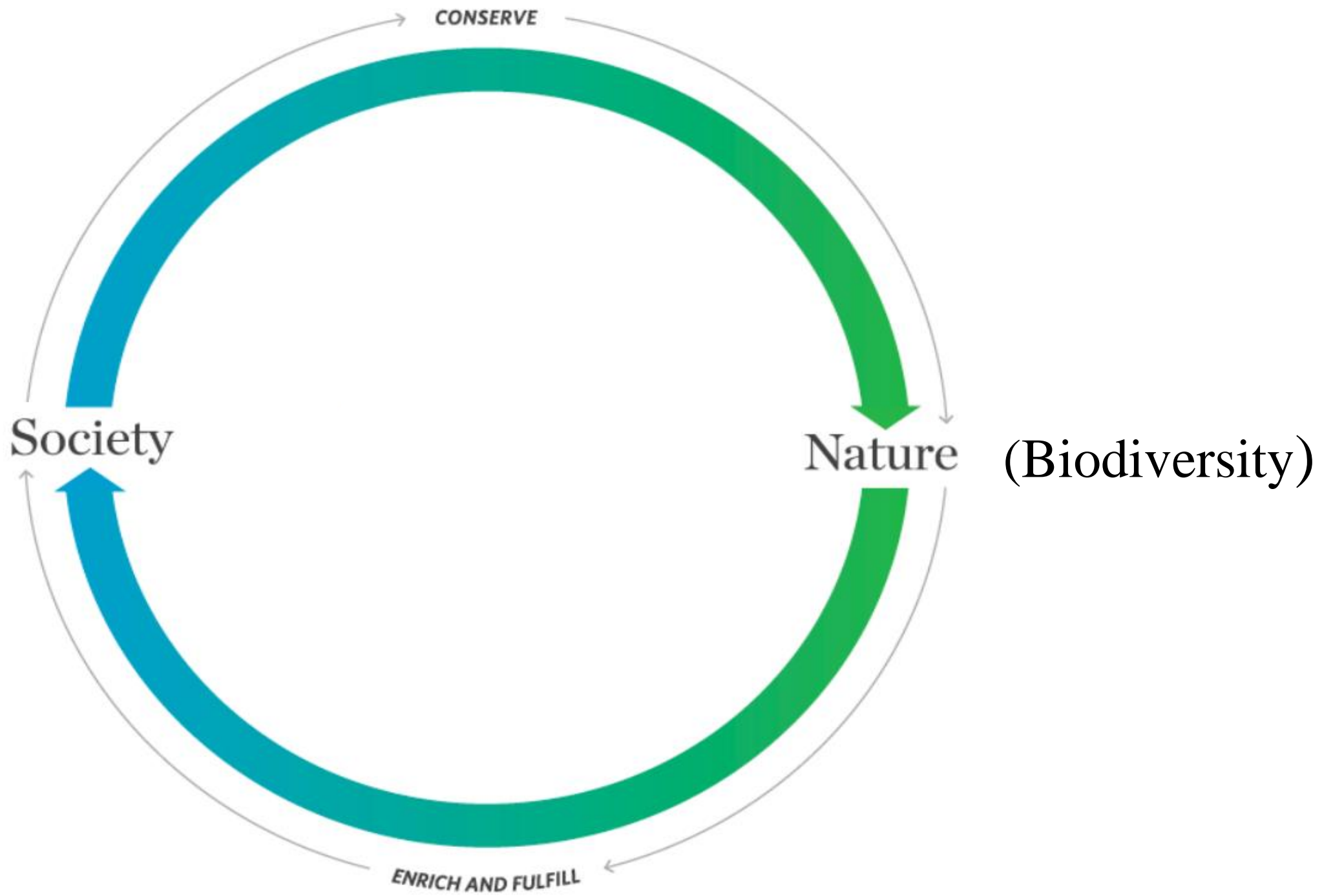
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The Nature
Conservancy



nature.org

Meredith Cornett, Jim Manolis,
Andrea Brandon, Mark White,
Natalie McCormack



Biodiversity

Minnesota's Wildlife Action Plan 2015-2025



dnr.state.mn.us/mnwap/index.html

Minnesota Scientific and Natural Areas Program

- Protects water and soil
- Filters pollution
- Cycles nutrients
- Provides food, medicine
- Recreation, tourism, inspiration
- Contributes to climate stability & carbon storage

dnr.state.mn.us/snap/biodiversity.html

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Natural climate solutions

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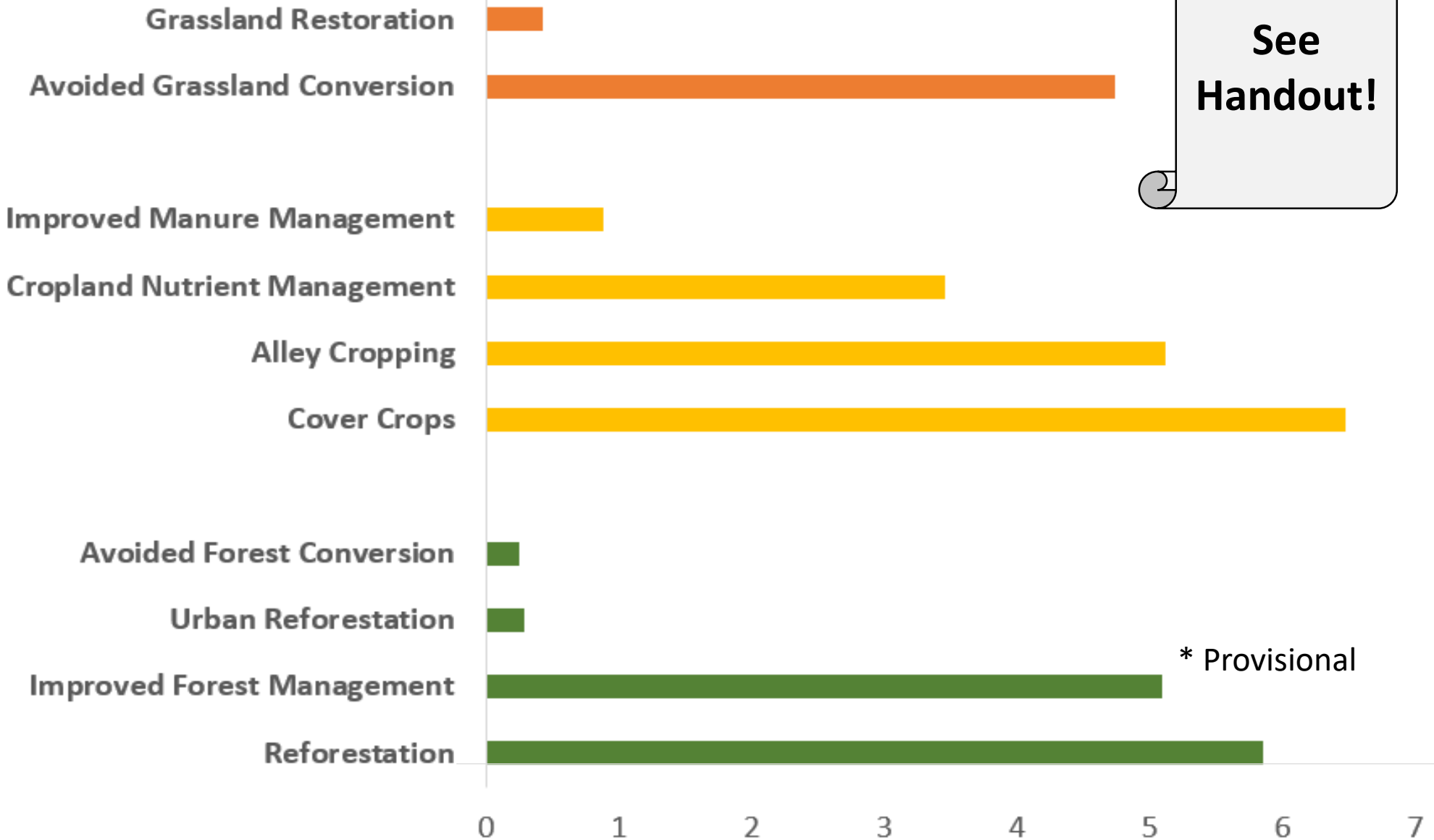
ENVIRONMENTAL STUDIES

Natural climate solutions for the United States

Joseph E. Fargione^{1*}, Steven Bassett², Timothy Boucher³, Scott D. Bridgman⁴, Richard T. Conant⁵, Susan C. Cook-Patton^{3,6}, Peter W. Ellis³, Alessandra Falcucci⁷, James W. Fourqurean⁸, Trisha Gopalakrishna³, Huan Gu⁹, Benjamin Henderson¹⁰, Matthew D. Hurteau¹¹, Kevin D. Kroeger¹², Timm Kroeger³, Tyler J. Lark¹³, Sara M. Leavitt³, Guy Lomax¹⁴, Robert I. McDonald³, J. Patrick Megonigal⁶, Daniela A. Miteva¹⁵, Curtis J. Richardson¹⁶, Jonathan Sanderman¹⁷, David Shoch¹⁸, Seth A. Spawn¹³, Joseph W. Veldman¹⁹, Christopher A. Williams⁹, Peter B. Woodbury²⁰, Chris Zganjar³, Marci Baranski²¹, Patricia Elias³, Richard A. Houghton¹⁷, Emily Landis³, Emily McGlynn²², William H. Schlesinger²³, Juha V. Siikamäki²⁴, Ariana E. Sutton-Grier^{25,26}, Bronson W. Griscom³

Natural Climate Solutions in Minnesota

See Handout!



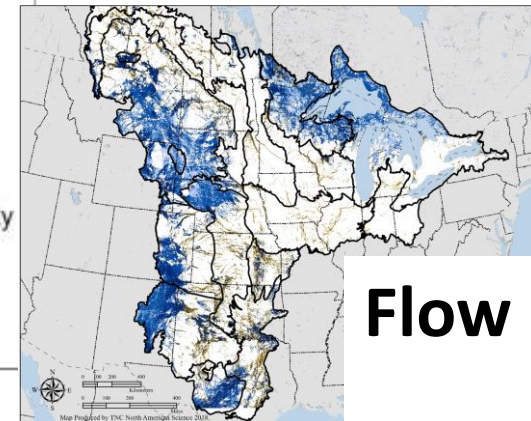
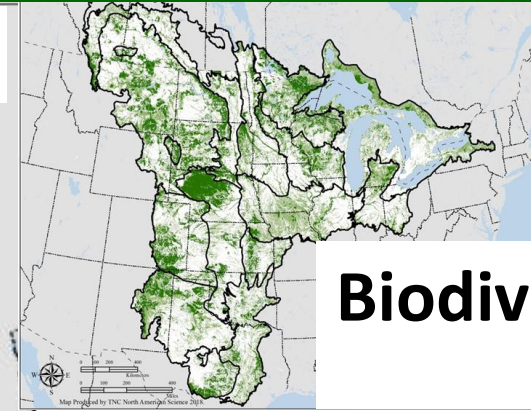
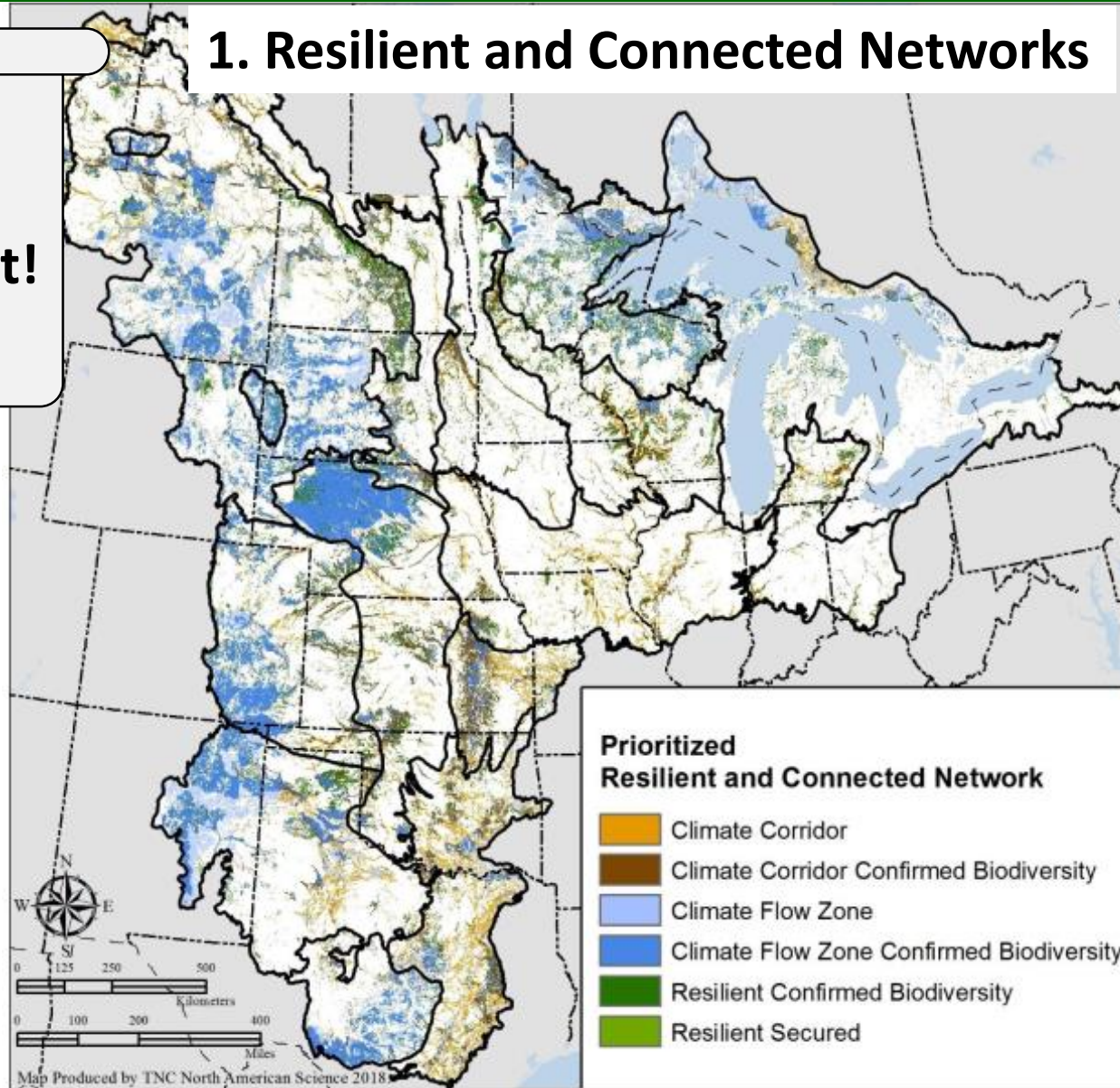
* Provisional



Helping Biodiversity Adapt to Climate Change

1. Resilient and Connected Networks

See
Handout!



Helping Biodiversity Adapt to Climate Change

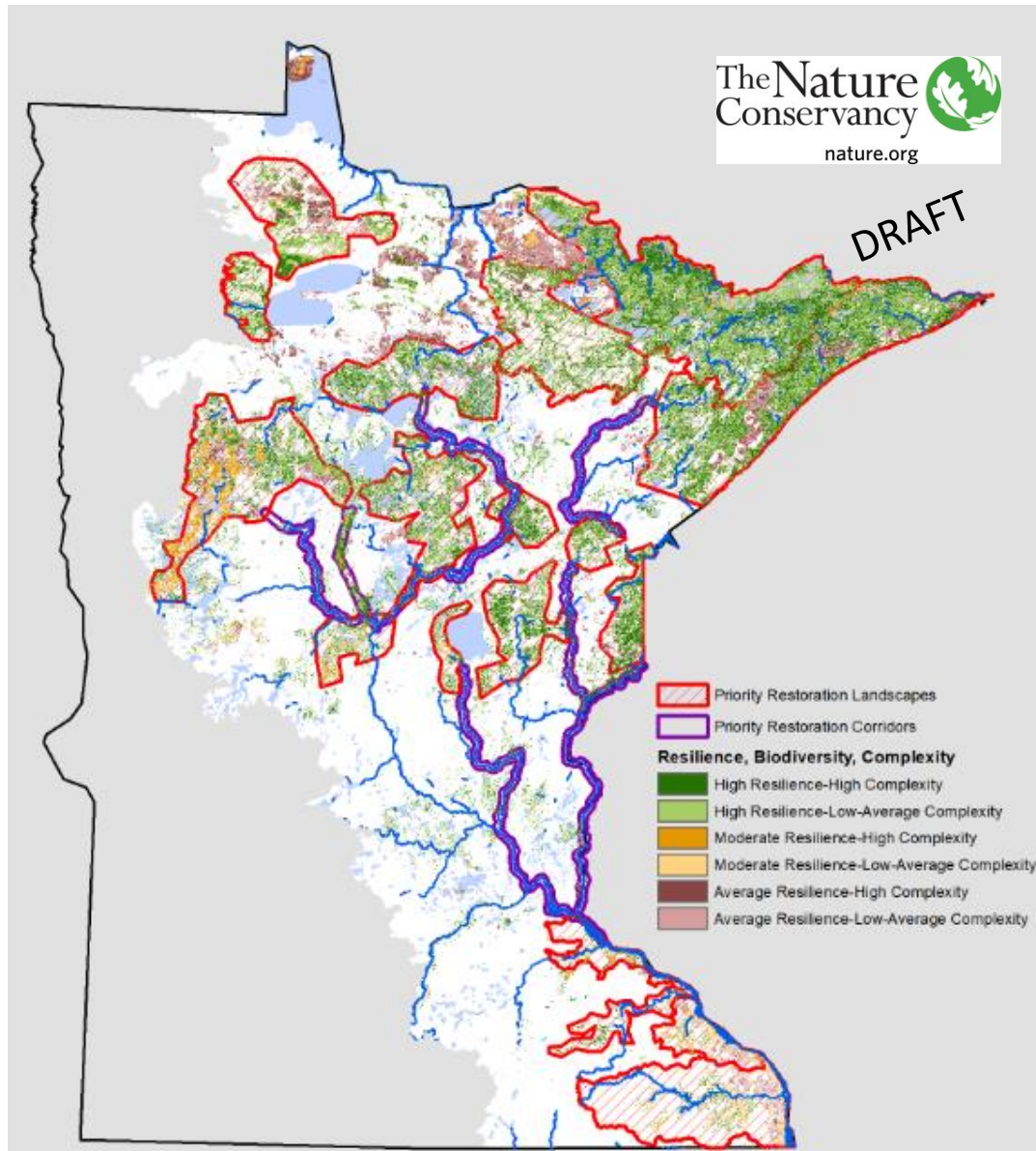


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Photos: John Gregor, Coldsnap Photography

2. Target restorations to climate resilient sites

3. Facilitate transitions through species adjustments

4. Enhance genetic diversity

Swanston et al. 2016. Forest Adaptation Resources: Climate Change Tools and Approaches for Land Managers.

Protect.

Restore.

Fund.



Greta Thunberg: 'We are ignoring natural climate solutions'

Film by Swedish activist and Guardian journalist George Monbiot says nature must be used to repair broken climate

[theguardian.com](https://www.theguardian.com)