The View from Above

Combining varied conservation goals to identify and manage sustainable landscapes

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Tapping the Wisdom of the Crowd

Premise*: *Multiple well-respected organizations and agencies are coming out with maps or datasets reflecting their priorities, but each considers different questions, different values, different scales, and/or different principles. As a result, there is not a consistent or cross-cutting understanding of priority landscapes across the country.

We set out to:

- Assess how various analyses of conservation value compliment or diverge from each other to identify "consensus landscapes" that are persistently important and therefore should be a priority for action
- Compare this information with land ownership and conservation status to identify priority landscapes and potential changes to management strategies, particularly on Federal and State owned lands

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Mapping Varied Priorities

- Five datasets were compared that represent common conservation goals:
  - **Biodiversity:** NatureServe's Map of Biodiversity Importance (MoBI) –Summed Range Size Rarity of Imperiled Species in the United States
  - **Resilience:** The Nature Conservancy's Resilient and Connected Landscapes
  - **Carbon:** UNEP World Conservation Monitoring Centre (WCMC) - Above and below ground biomass carbon and soil organic carbon
  - **Farmland:** USDA Natural Resource Conservation Service (NRCS) SSURGO – Farmland subclass
  - **Equity and Access:** University of Michigan – Multidimensional Index of Deep Disadvantage

- The predicted cost of acquisition was also considered
  - **Biodiversity:** Boston University's PLACES Lab Fair Market Value

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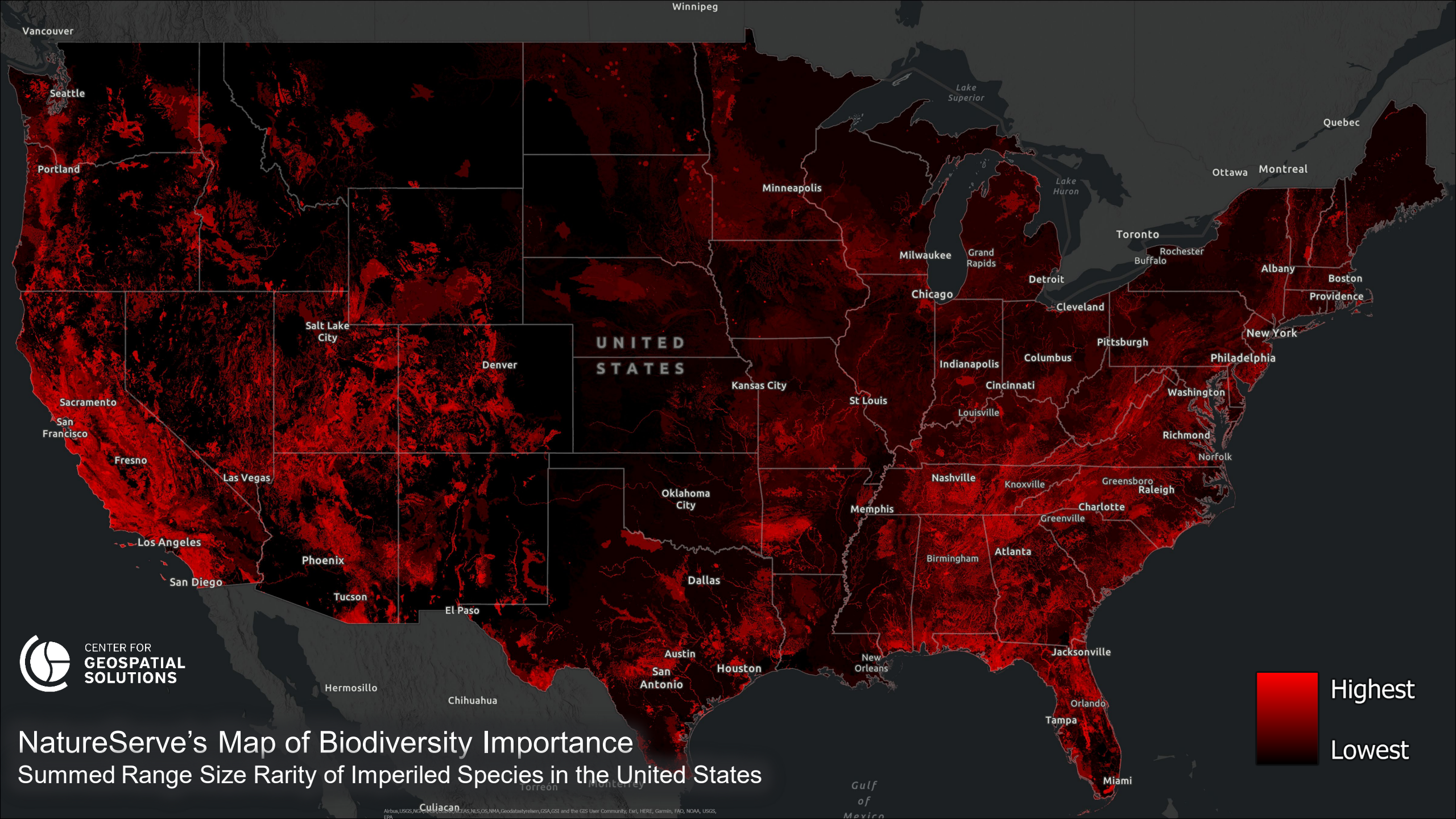

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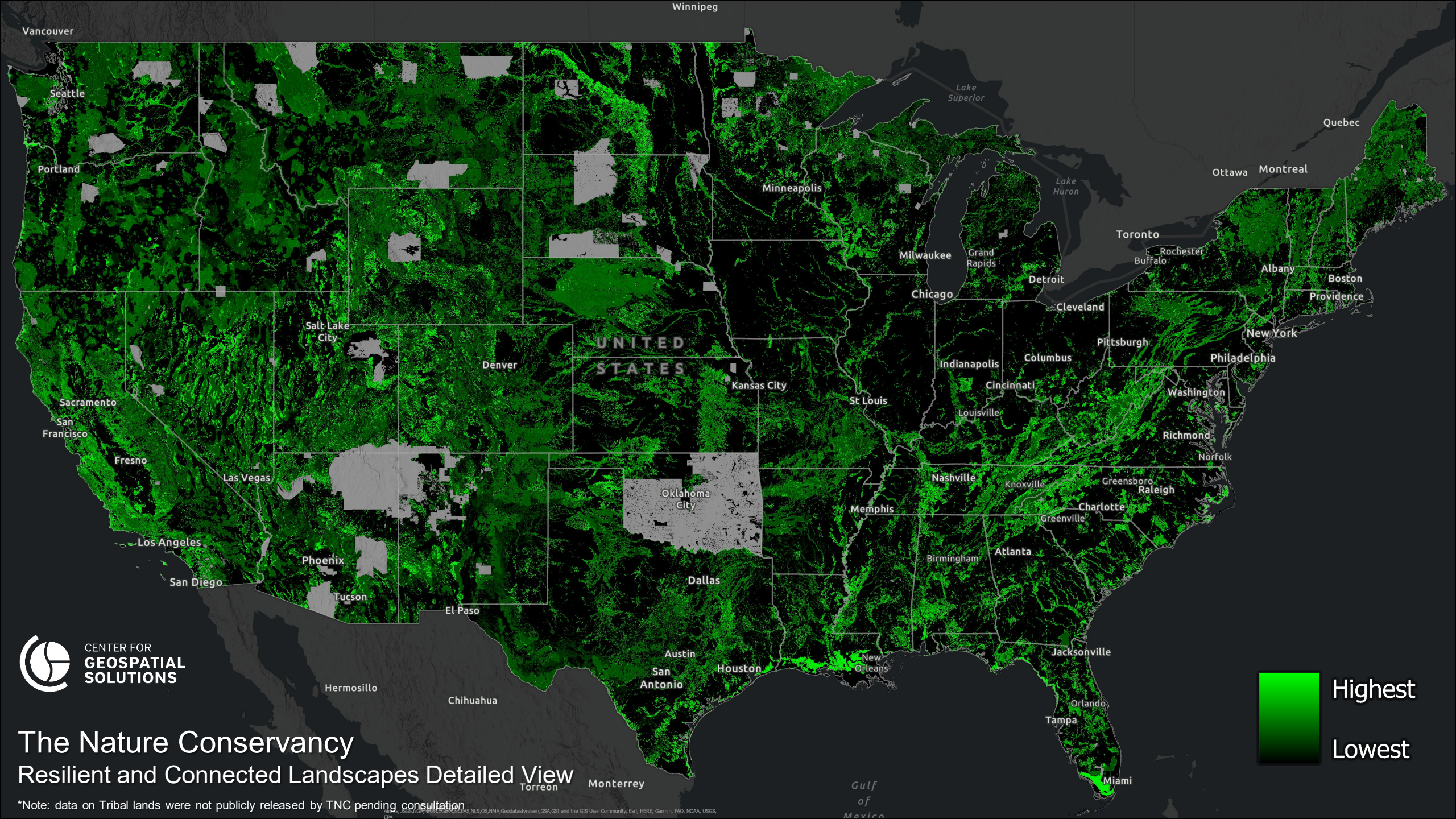
NatureServe's Map of Biodiversity Importance

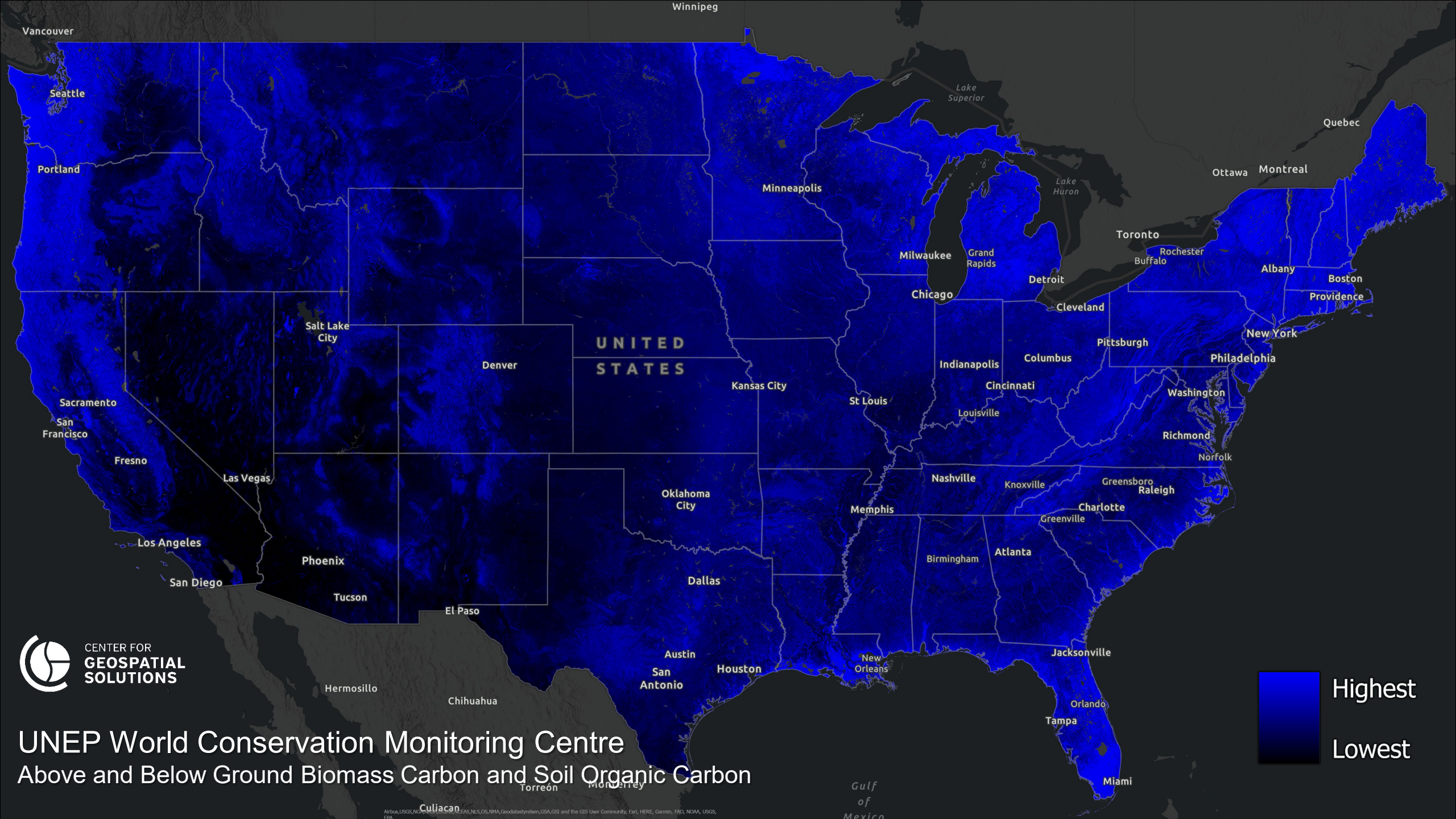
Summed Range Size Rarity of Imperiled Species in the United States



The Nature Conservancy

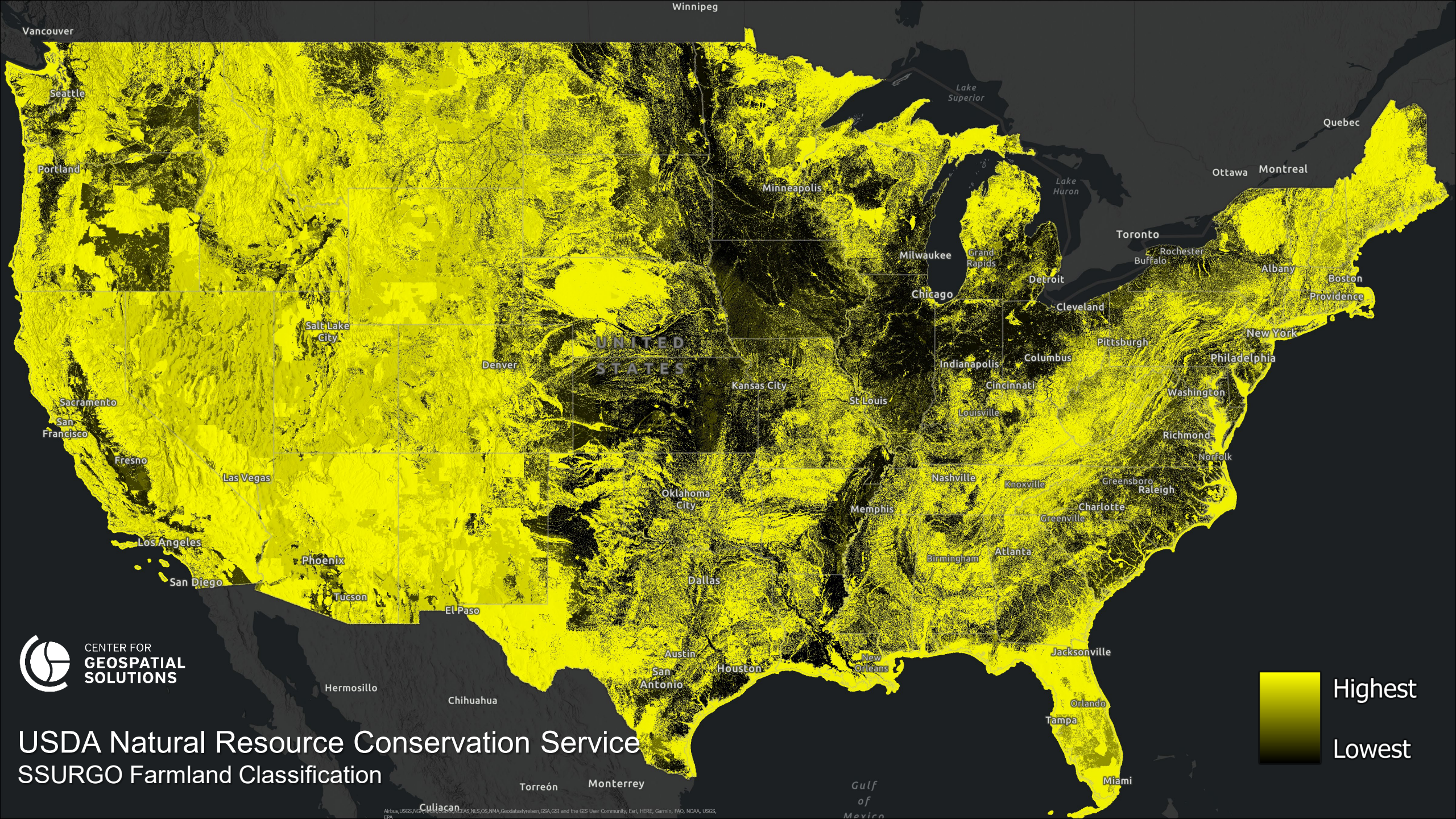
Resilient and Connected Landscapes Detailed View

*Note: data on Tribal lands were not publicly released by TNC pending consultation



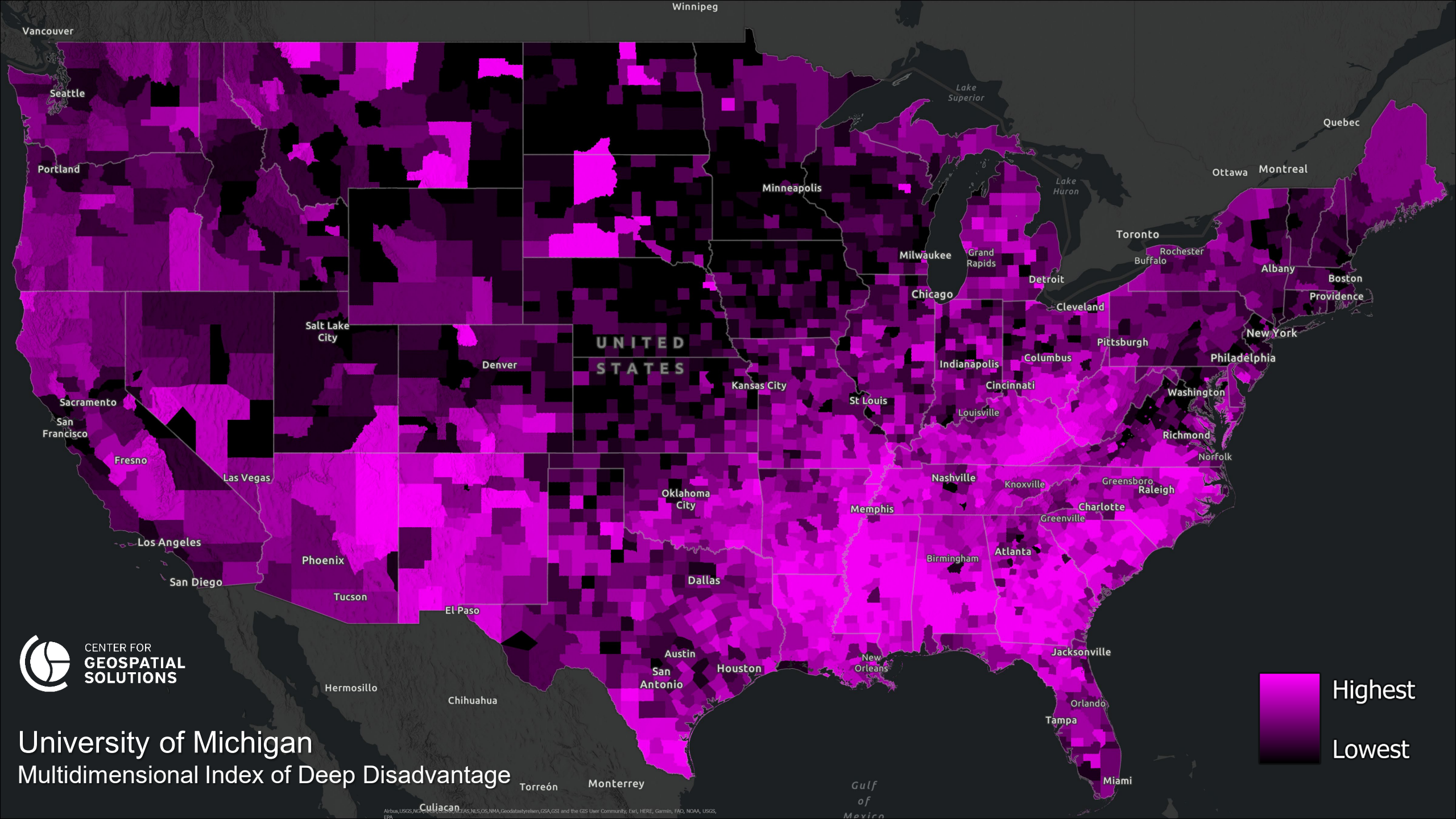
UNEP World Conservation Monitoring Centre

Above and Below Ground Biomass Carbon and Soil Organic Carbon



USDA Natural Resource Conservation Service

SSURGO Farmland Classification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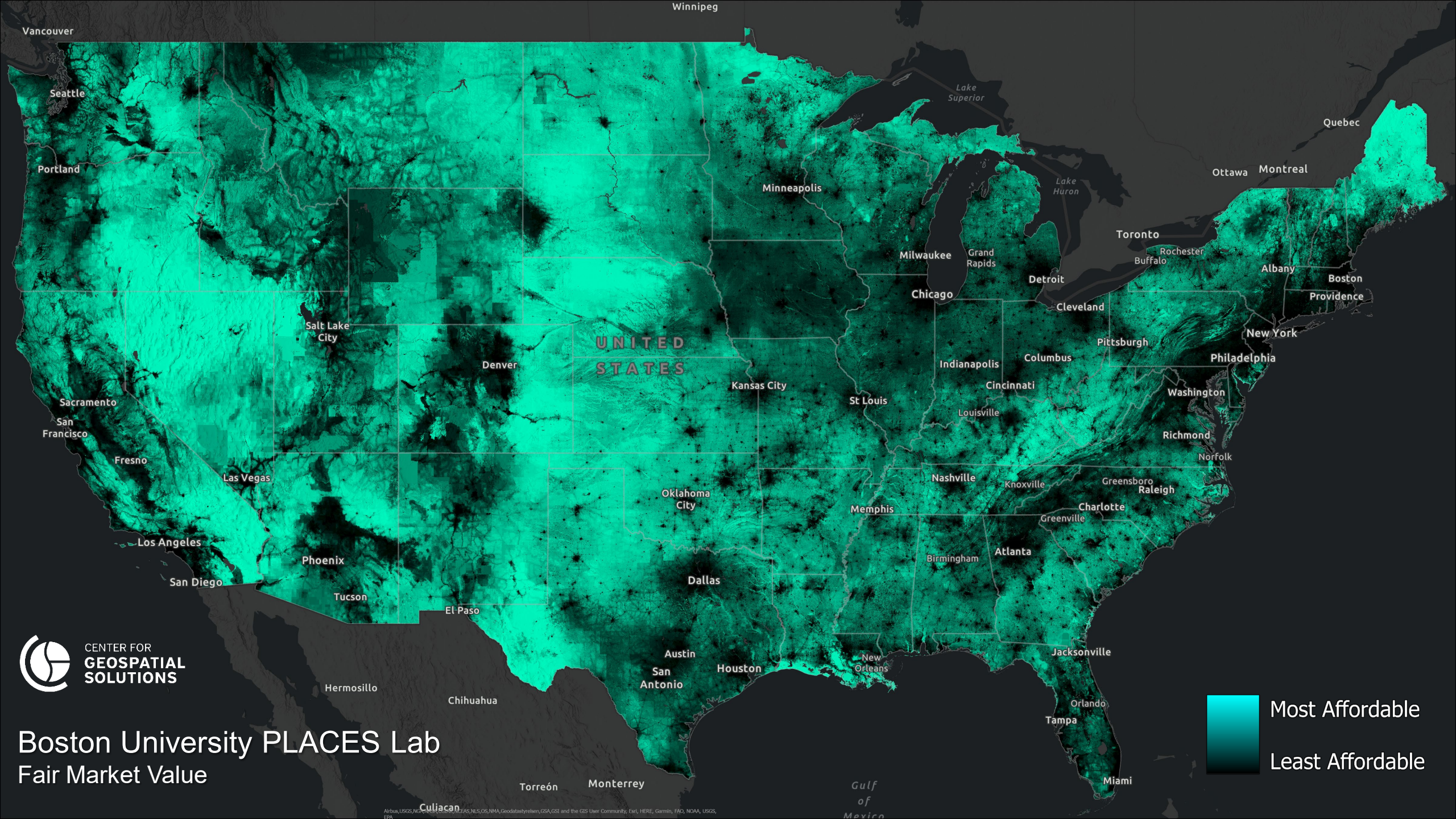
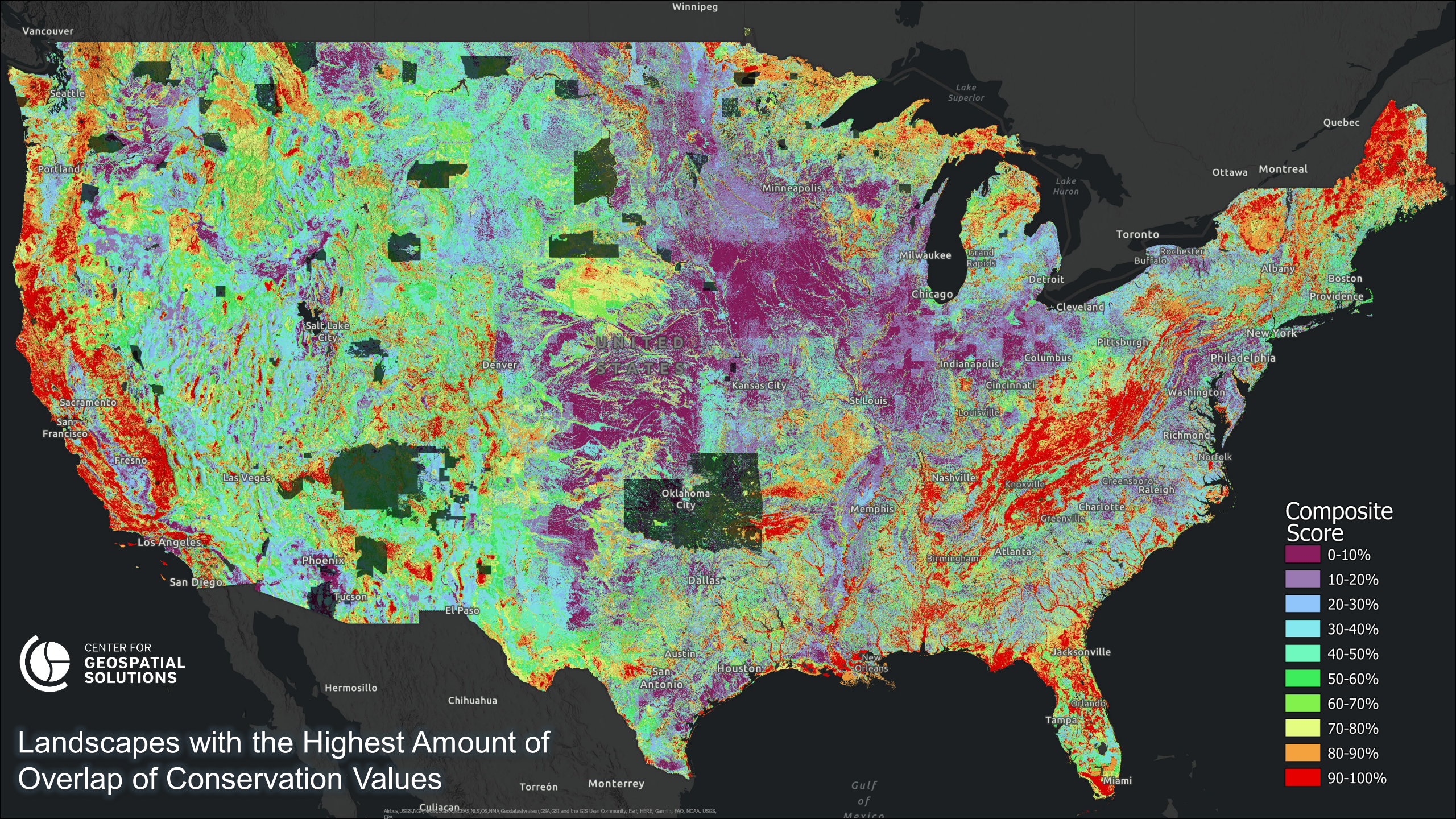
University of Michigan
Multidimensional Index of Deep Disadvantage
Highest
Lowest



Boston University PLACES Lab

Fair Market Value



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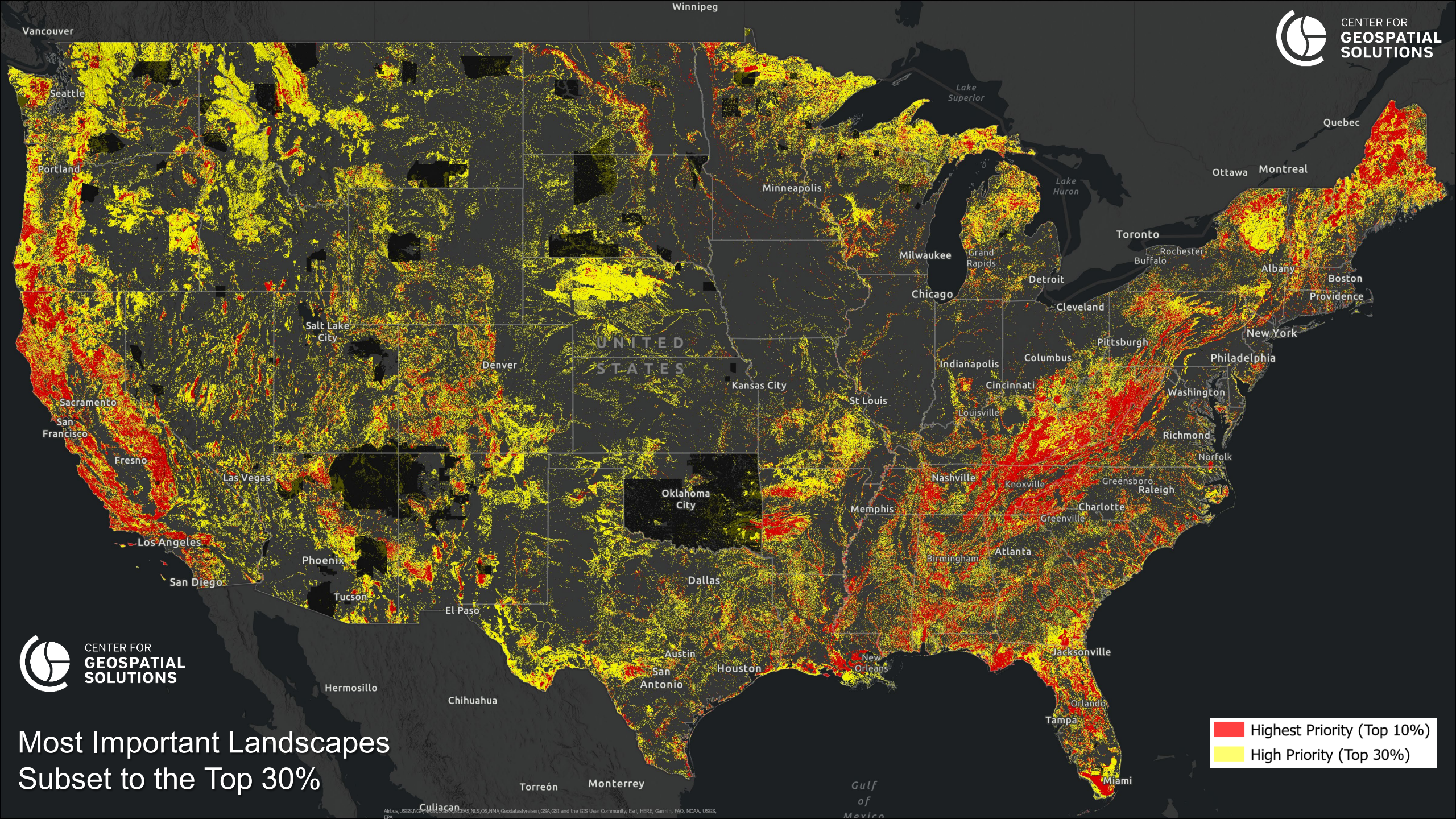
Landscapes with the Highest Amount of Overlap of Conservation Values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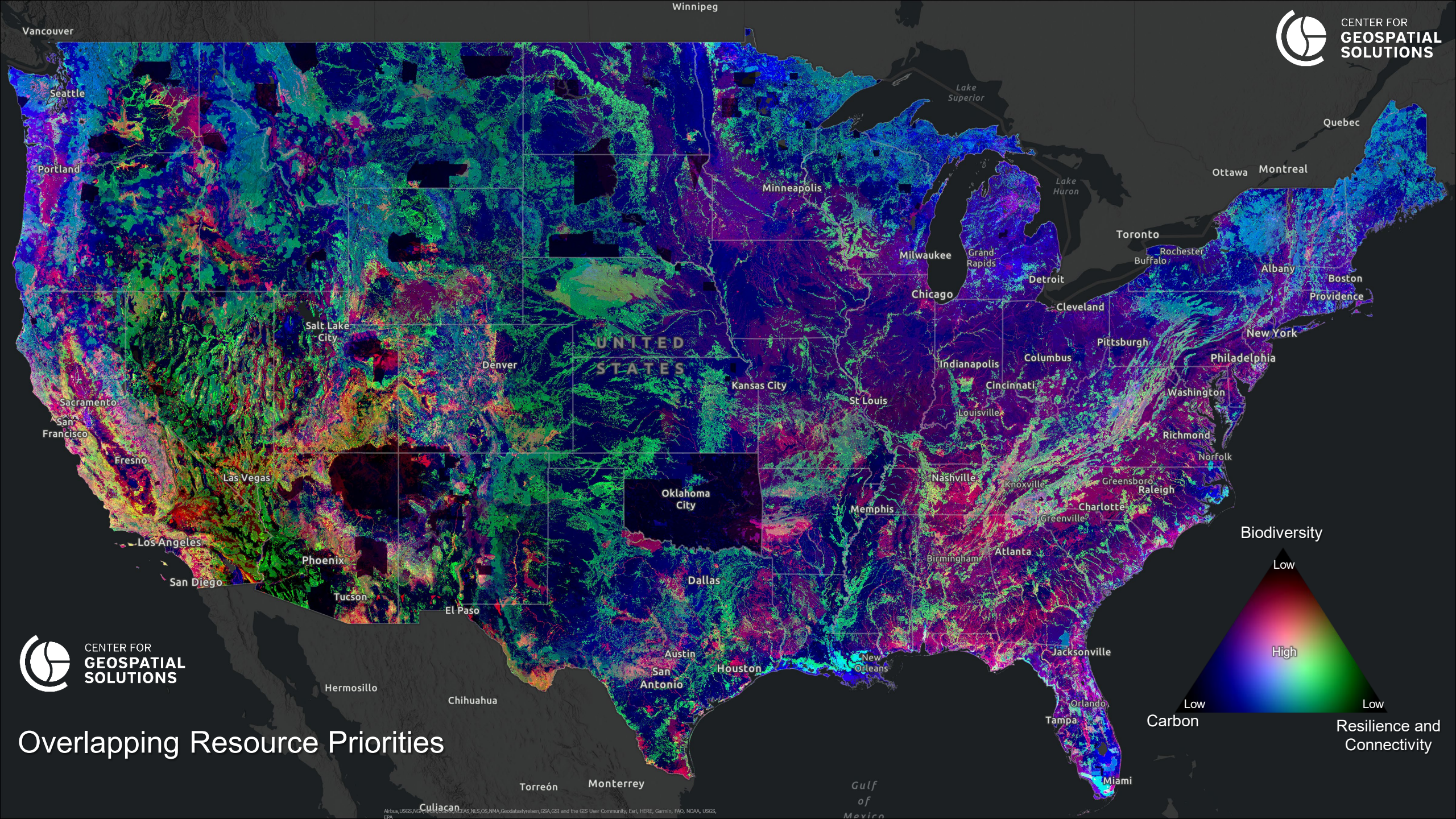
Highest Priority (Top 10%)
High Priority (Top 30%)
Most Important Landscapes
Subset to the Top 30%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Orlando
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Culiacan
Gulf of Mexico
Biodiversity
Low
High
Low
Low
Carbon
Resilience and Connectivity
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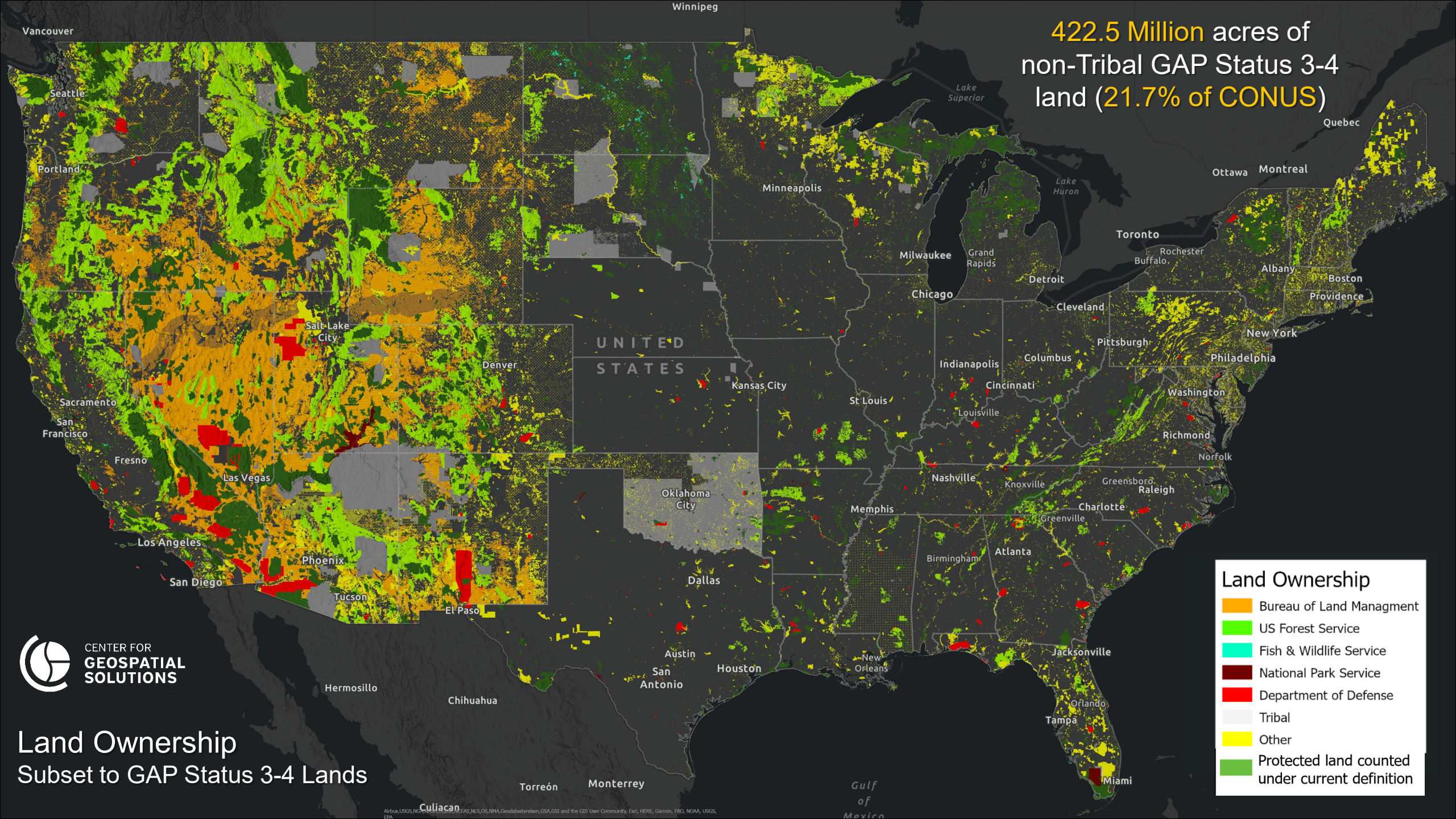
Overlapping Resource Priorities


422.5 Million acres of non-Tribal GAP Status 3-4 land (21.7% of CONUS)
Land Ownership
Bureau of Land Managment
US Forest Service
Fish & Wildlife Service
National Park Service
Department of Defense
Tribal
Other
Protected land counted under current definition
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Land Ownership
Subset to GAP Status 3-4 Lands
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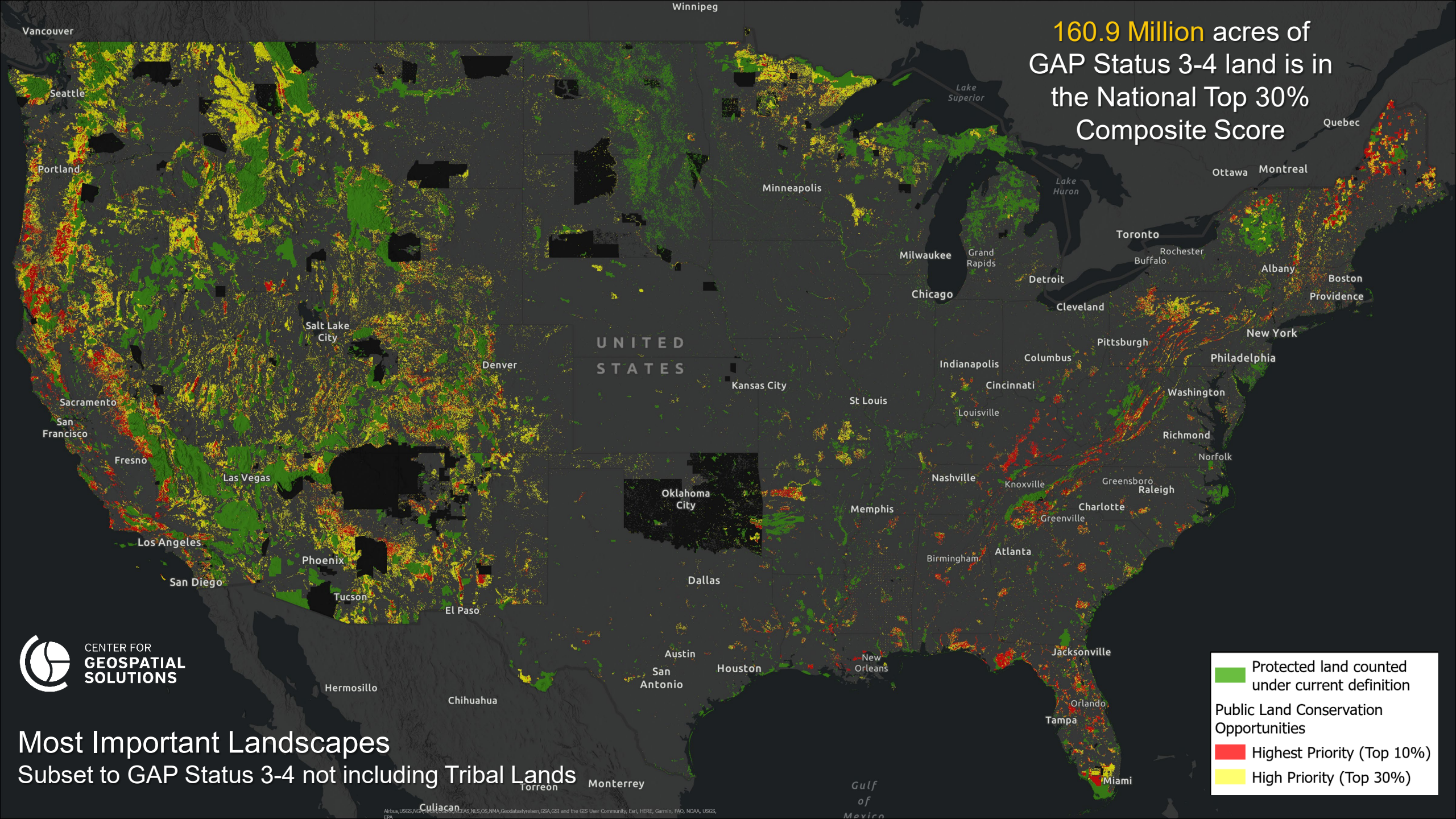
160.9 Million acres of GAP Status 3-4 land is in the National Top 30% Composite Score
Most Important Landscapes
Subset to GAP Status 3-4 not including Tribal Lands
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Protected land counted under current definition
Public Land Conservation Opportunities
Highest Priority (Top 10%)
High Priority (Top 30%)
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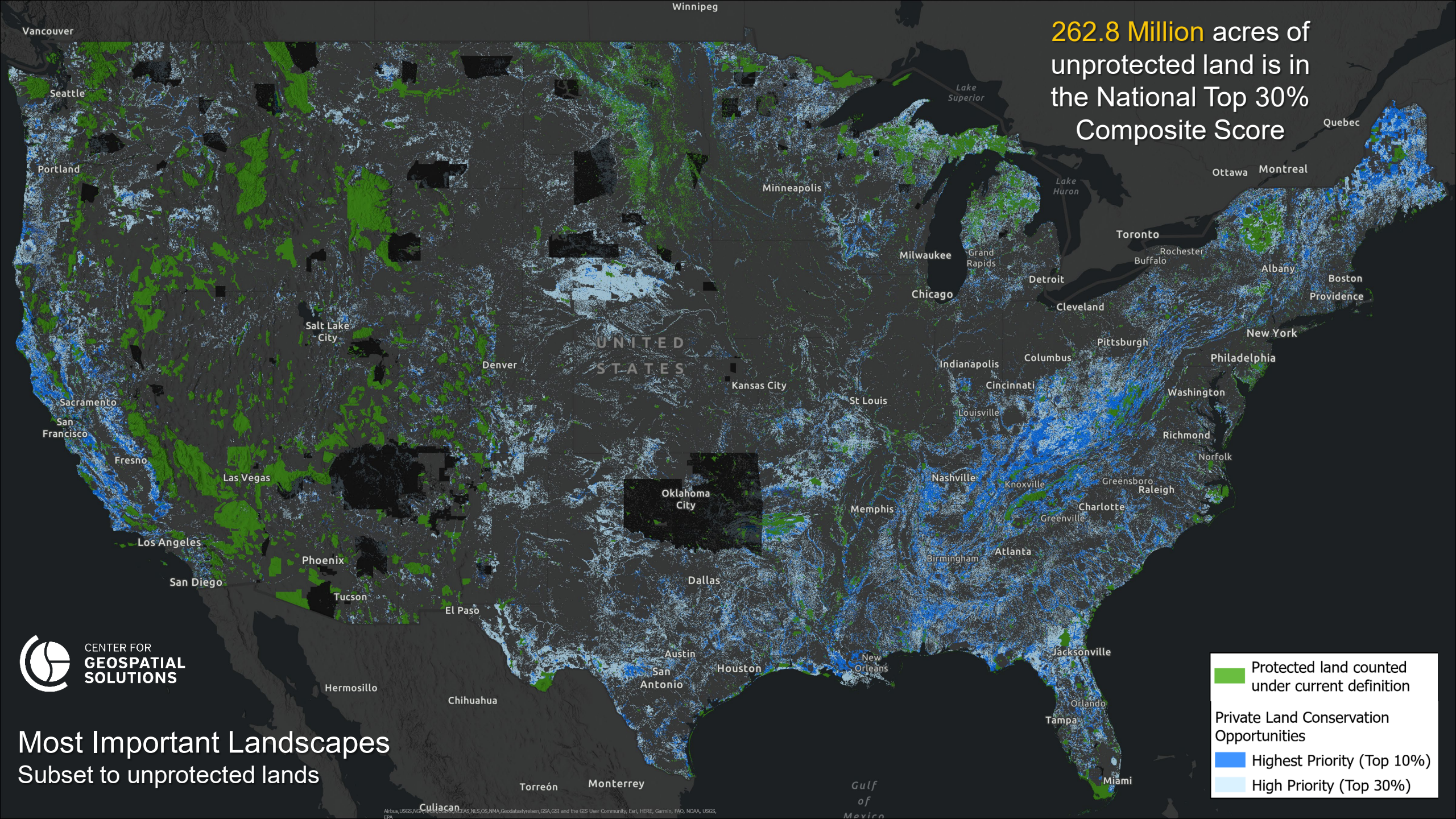
262.8 Million acres of unprotected land is in the National Top 30% Composite Score
Most Important Landscapes
Subset to unprotected lands
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Protected land counted under current definition
Private Land Conservation Opportunities
Highest Priority (Top 10%)
High Priority (Top 30%)
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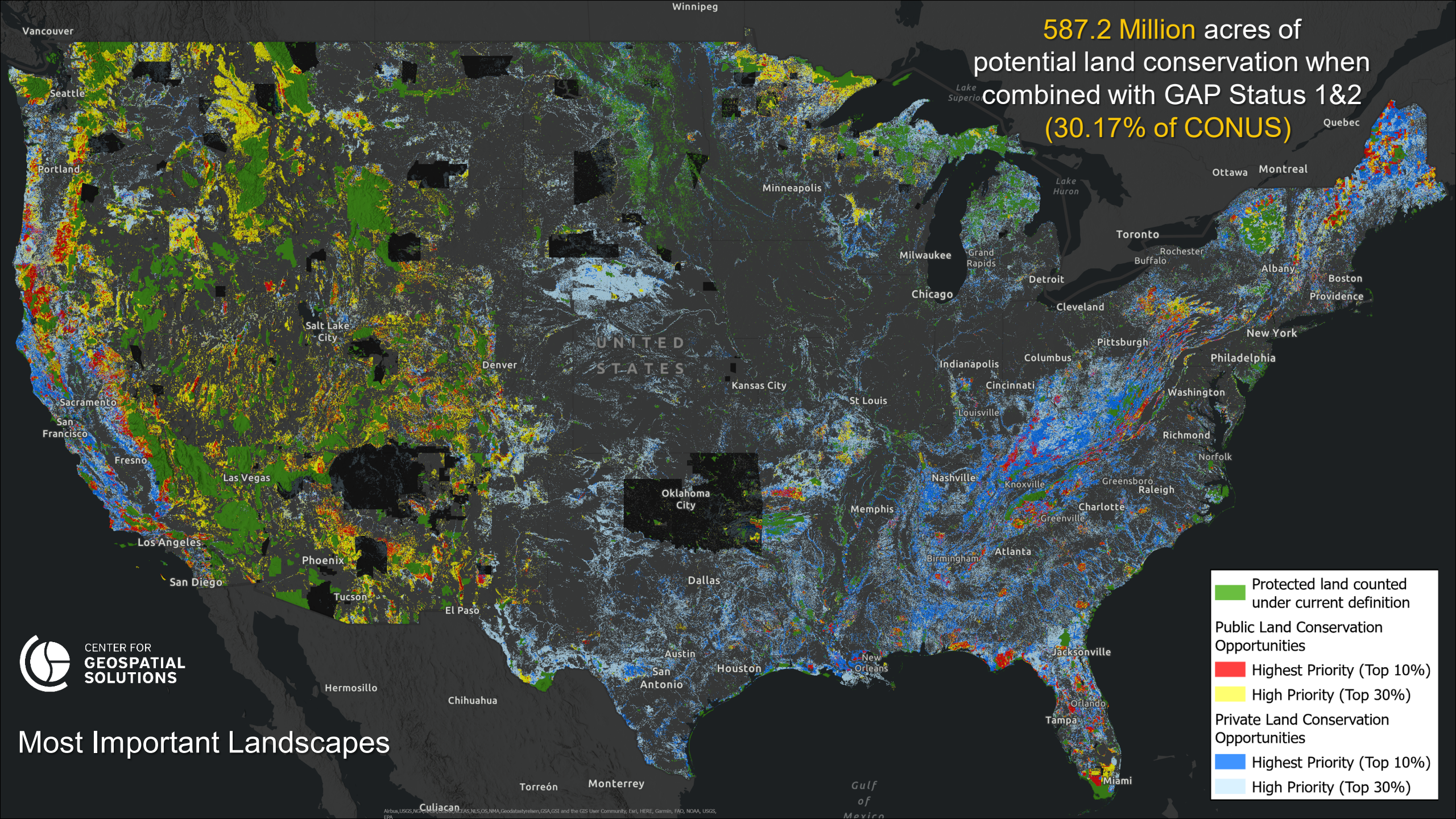
587.2 Million acres of potential land conservation when combined with GAP Status 1&2 (30.17% of CONUS)
Protected land counted under current definition
Public Land Conservation Opportunities
Highest Priority (Top 10%)
High Priority (Top 30%)
Private Land Conservation Opportunities
Highest Priority (Top 10%)
High Priority (Top 30%)
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