

The Central Grasslands Roadmap

Grasslands Assessment Map

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Grassland Dialogue January 2024



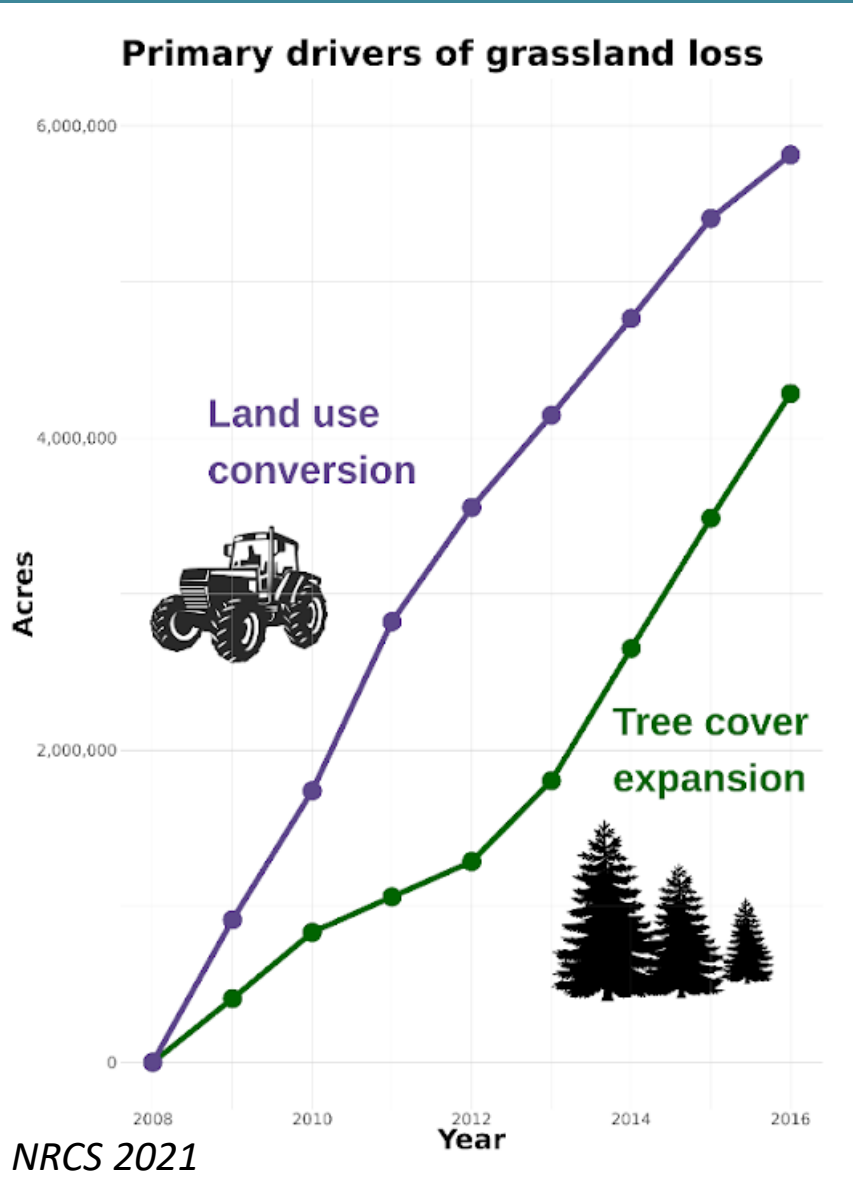
Central Grasslands Assessment Map

- A new tool to support the future of our grasslands
- 1st ever assessment of the state of the biome using consistent data layers
- Updated annually



The Top Drivers of Grassland Loss in the Great Plains Biome: Land Use Conversion & Woody Encroachment

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2023

Plowprint



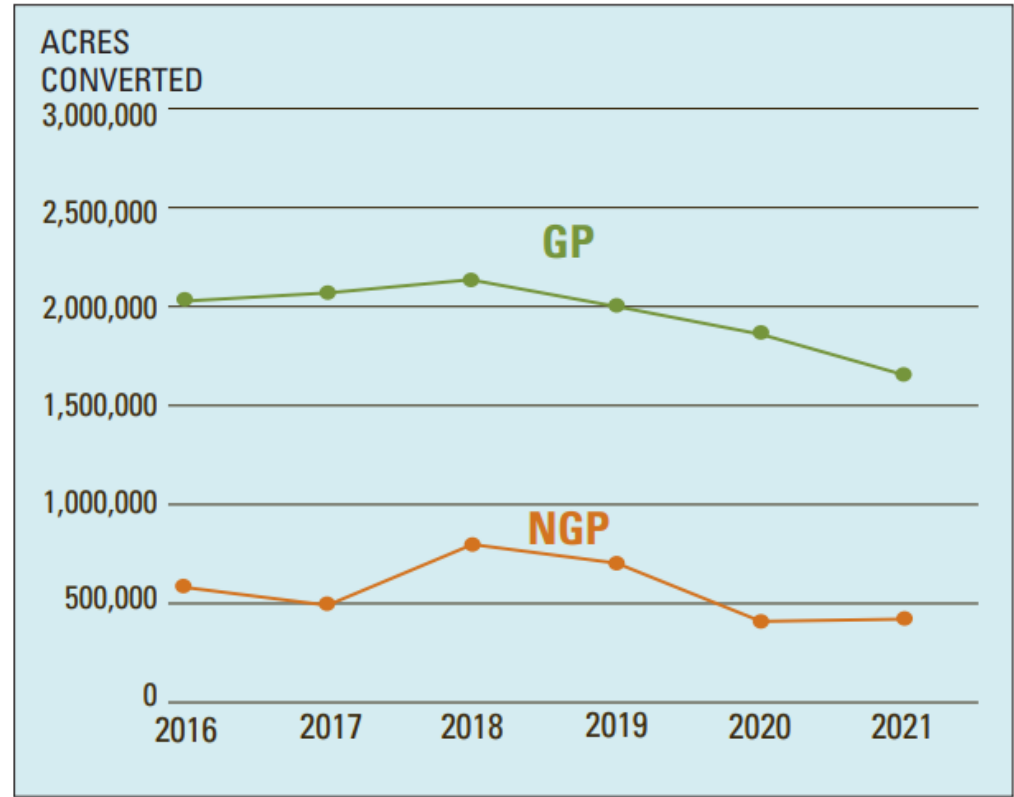
The destruction of grasslands across the Great Plains continues at an unsustainable pace.

WWF's most recent Plowprint analysis found that **in 2021, the year that this report analyzes, plow-up destroyed 1.6 million acres of grasslands across the US and Canadian portions of the Great Plains.** Within the Northern Great Plains region of the ecosystem—currently one of the world's four most intact temperate grasslands—the number of plowed acres was over 400,000 acres in 2021 alone. **In total, 32 million acres have fallen to the plow since 2012,** when WWF first began tracking grasslands conversion across the region.

**1.6 MILLION ACRES
PLOWED
IN A SINGLE YEAR**

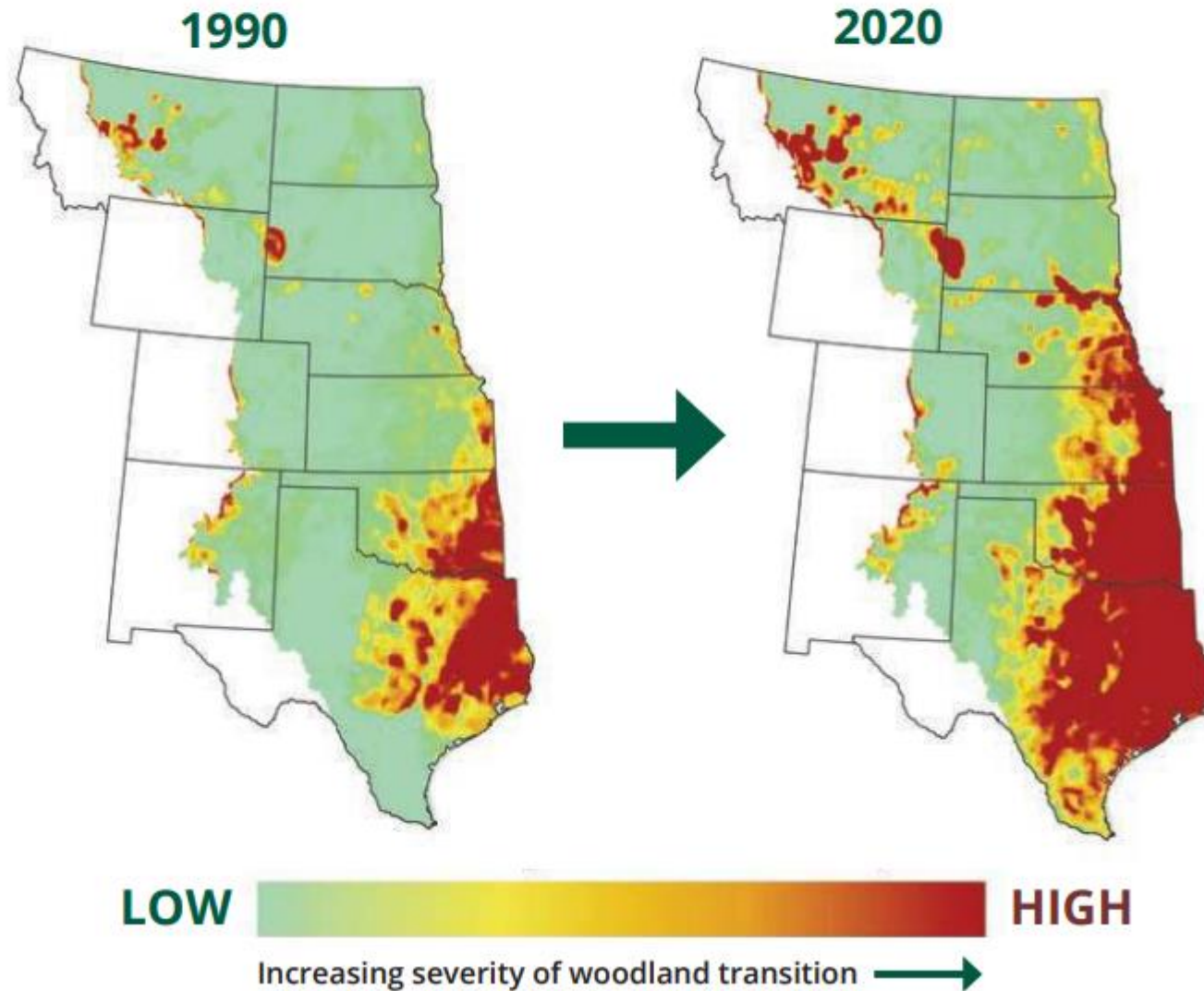
(An area larger than the state of Delaware)

RATE OF GRASSLAND CONVERSION 2016-2021



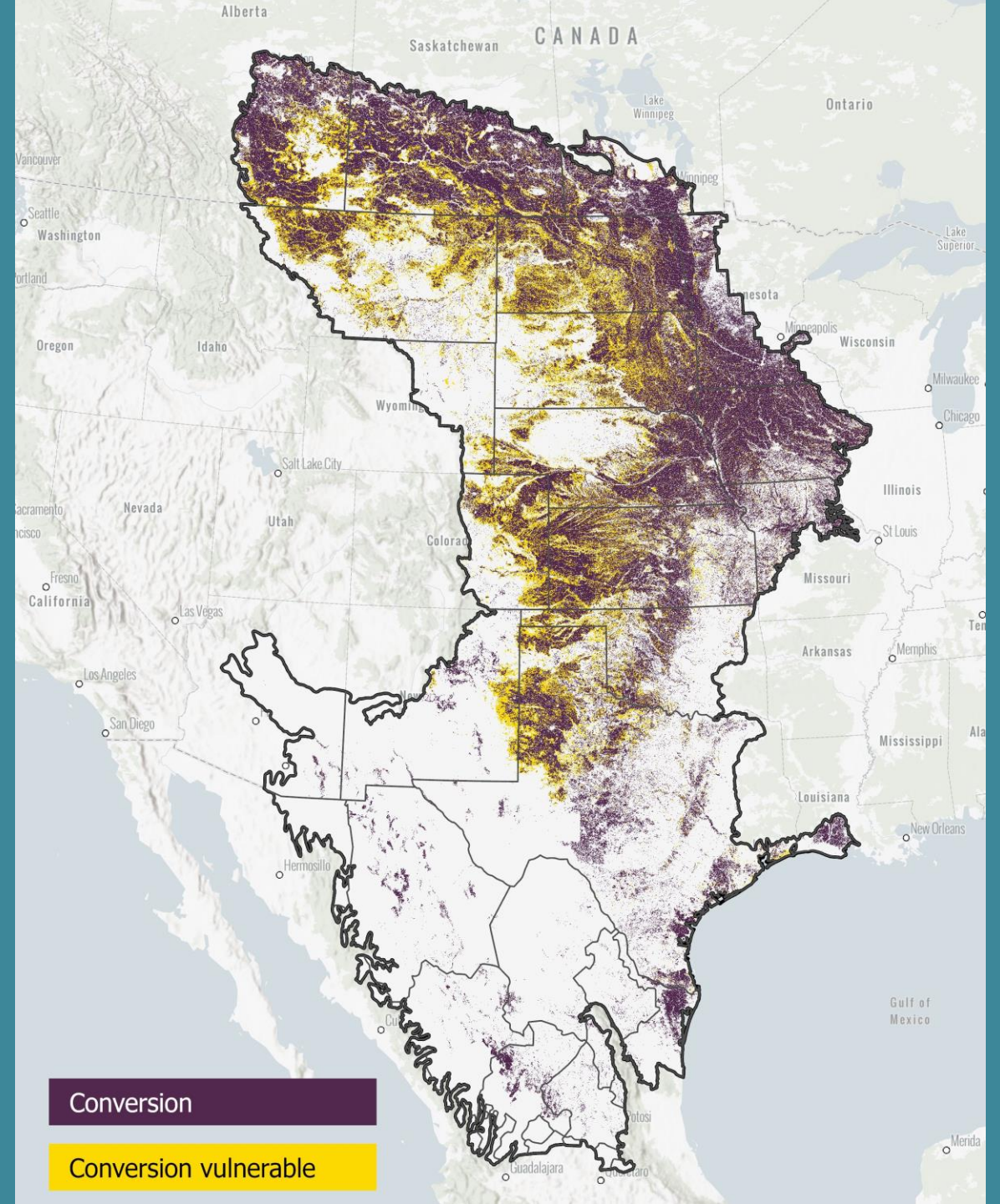
www.Plowprint.org

The Great Plains Biome is Collapsing Due to Woody Encroachment



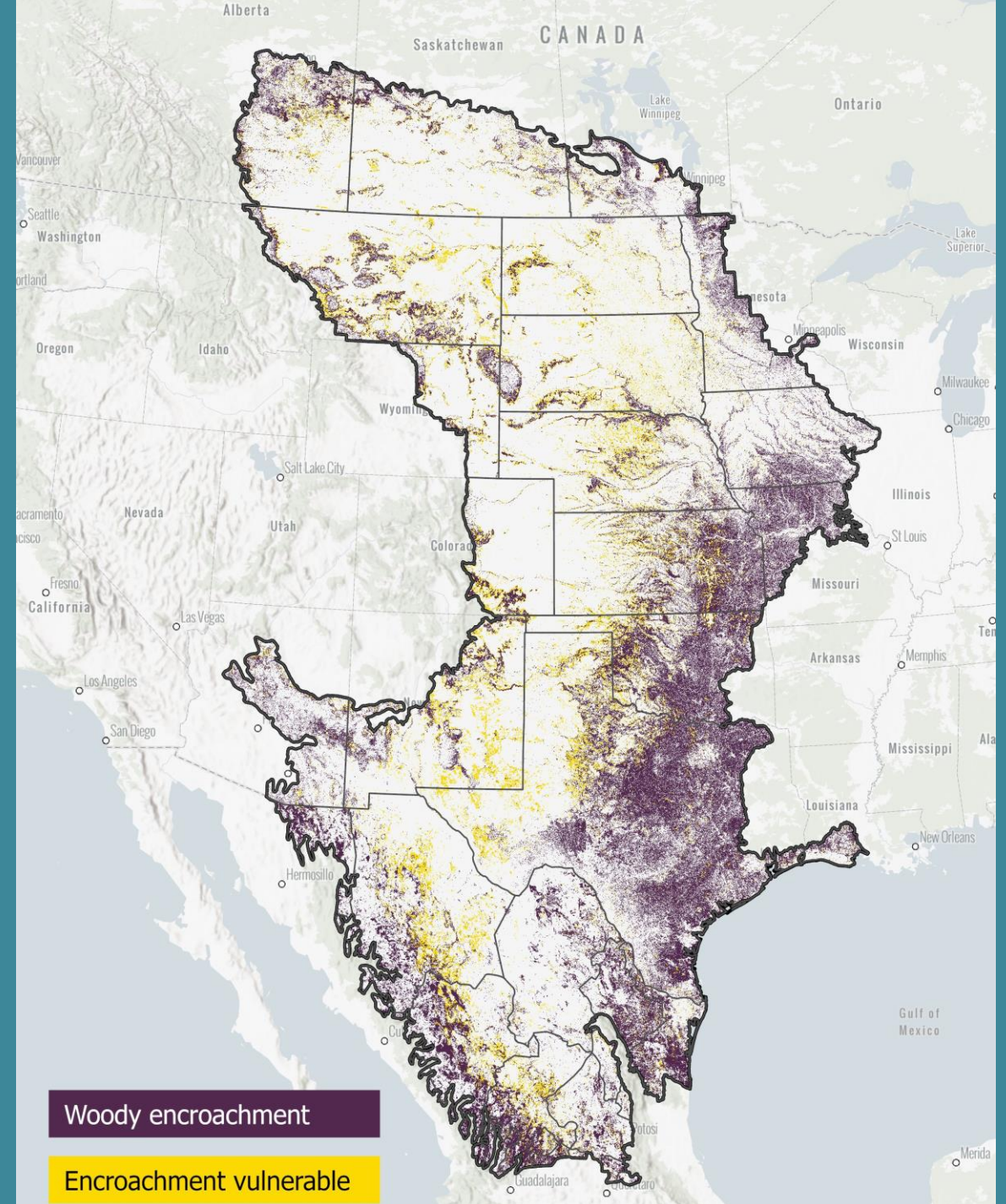
Row-crop Conversion

- WWF Plowprint
 - Tracks cumulative footprint of row-crop agriculture
 - Annually updated (2008-present)
- Conversion Risk Analysis
 - Uses previous conversion and a suite of parameters to estimate risk of future conversion



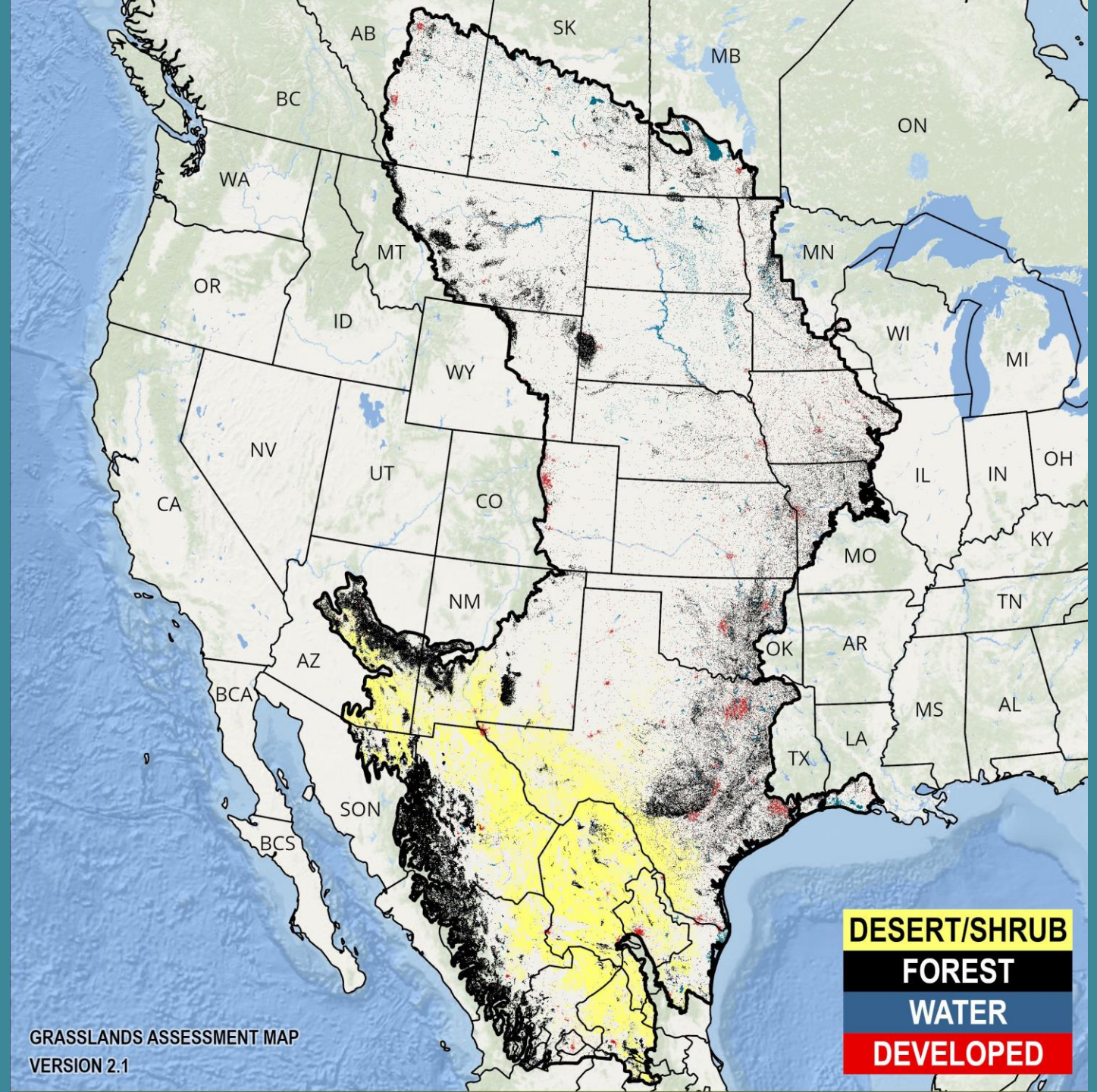
Woody Encroachment

- Rangeland Analysis Platform (RAP) / Rangeland Informatics (University of Nebraska Lincoln)
 - Annually updated
 - Identifies areas that are encroached or vulnerable
 - Regionally-specific



Masks

- Open Water
- Developed Areas
- Natural Forests
- Desert/shrublands

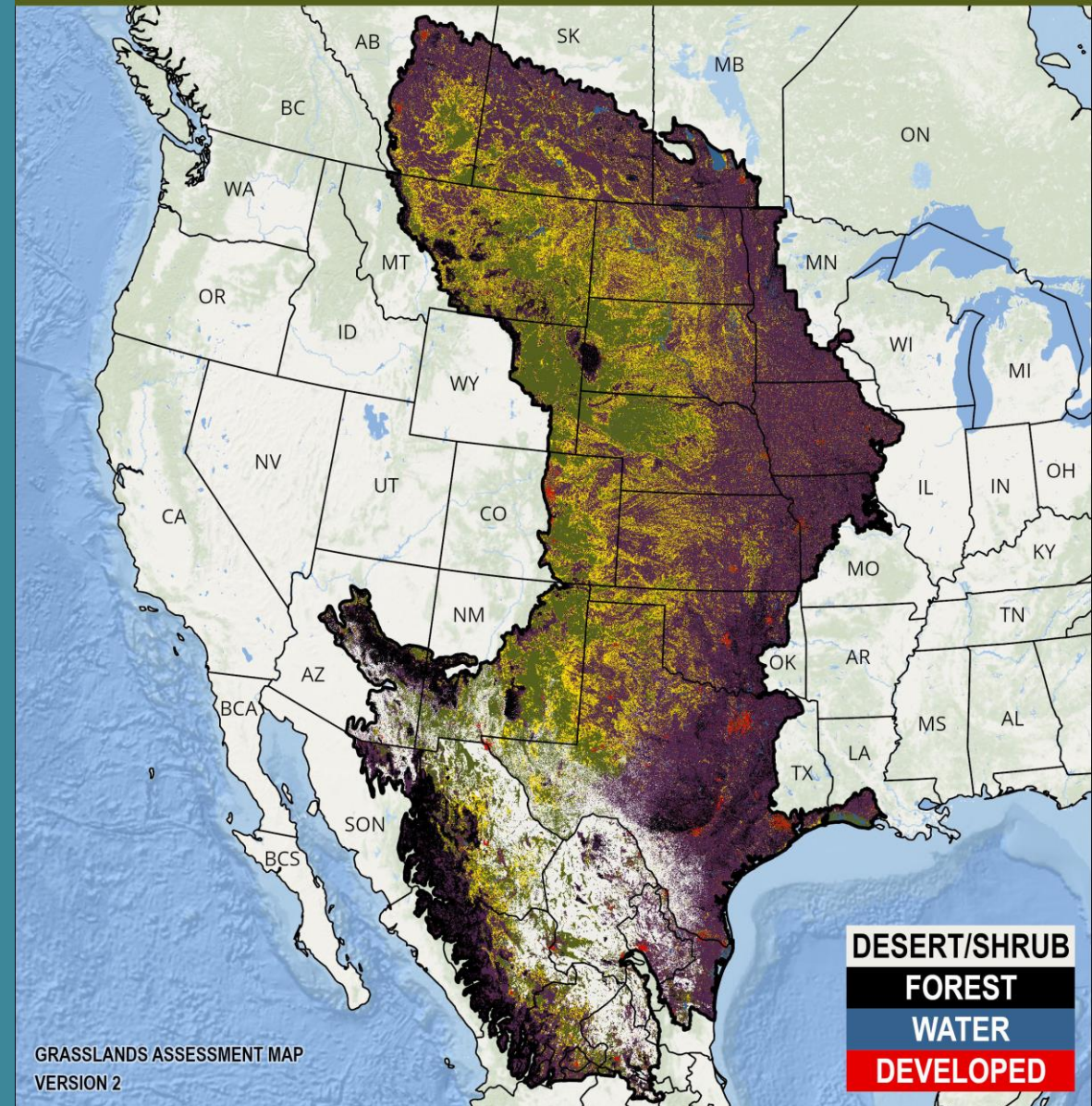


CENTRAL GRASSLANDS ROADMAP

SUPPORTING AND GROWING OUR CORE OF GRASSLANDS

Support and Grow our Core Grasslands

- Core Grasslands
- Vulnerable Grasslands
- Converted/Altered Grasslands



CONSERVATION CATEGORIZATION

CORE
GRASSLANDS

VULNERABLE
GRASSLANDS

CONVERTED/ALTERED
GRASSLANDS

CENTRAL GRASSLANDS ROADMAP

SUPPORTING AND GROWING OUR CORE OF GRASSLANDS

Core Grasslands

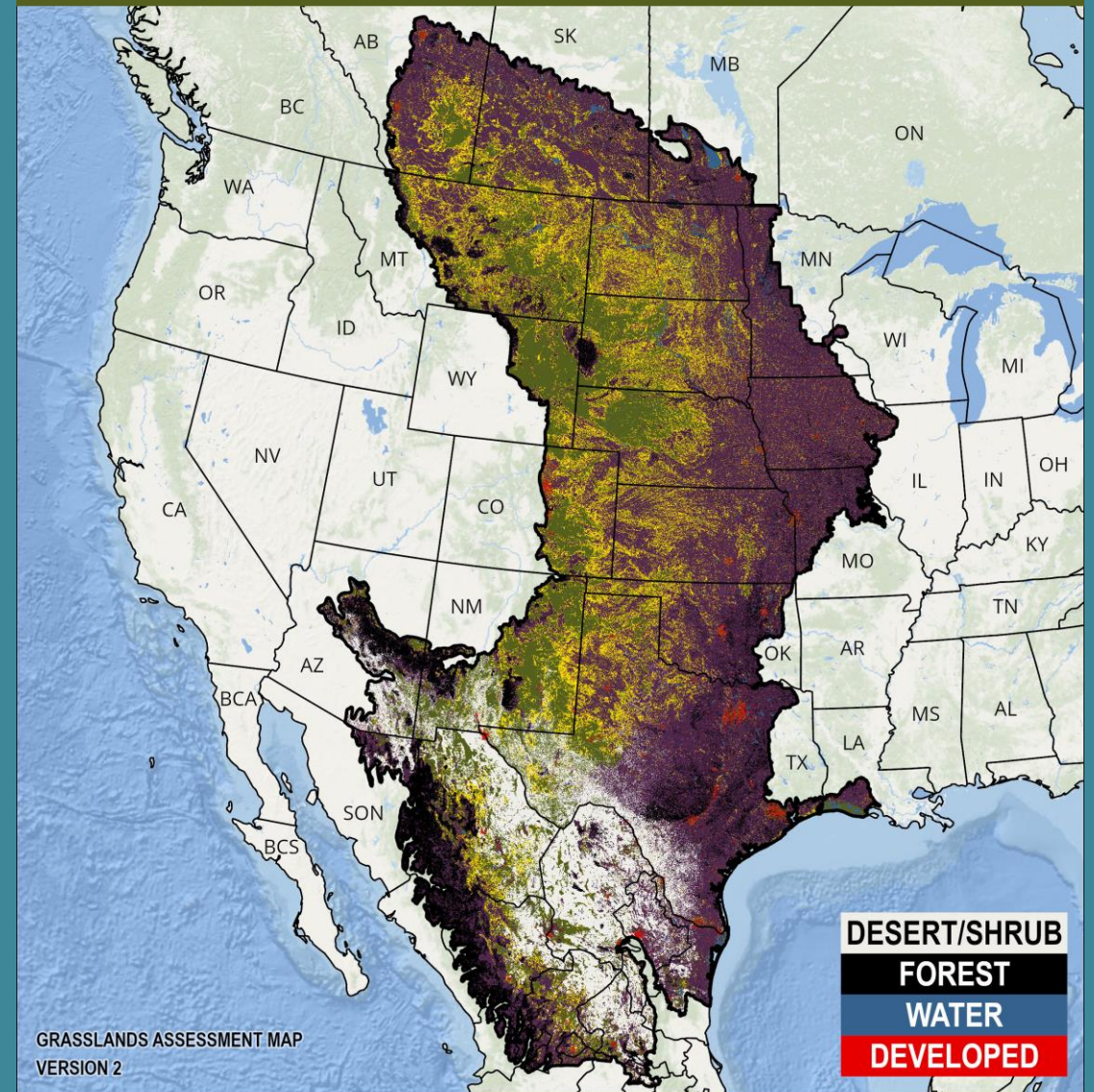
- Supporting sustainable range management practices
- Preventing seed trees and invasive shrubs from establishing
- Addressing invasive grasses and forbs

Vulnerable Grasslands

- Voluntarily retain vulnerable grasslands
- Address woody species encroachment
- Remove other annual invasive species
- Maintain connectivity with large blocks of existing grassland

Converted/Altered Grasslands

- Convert cropland on marginal soils back to grassland
- Remove woody species
- Improve productivity and ecosystem health
- Connect to larger blocks of existing grassland



CONSERVATION CATEGORIZATION

CORE
GRASSLANDS

186,575,192 acres

VULNERABLE
GRASSLANDS

133,808,659 acres

CONVERTED/ALTERED
GRASSLANDS

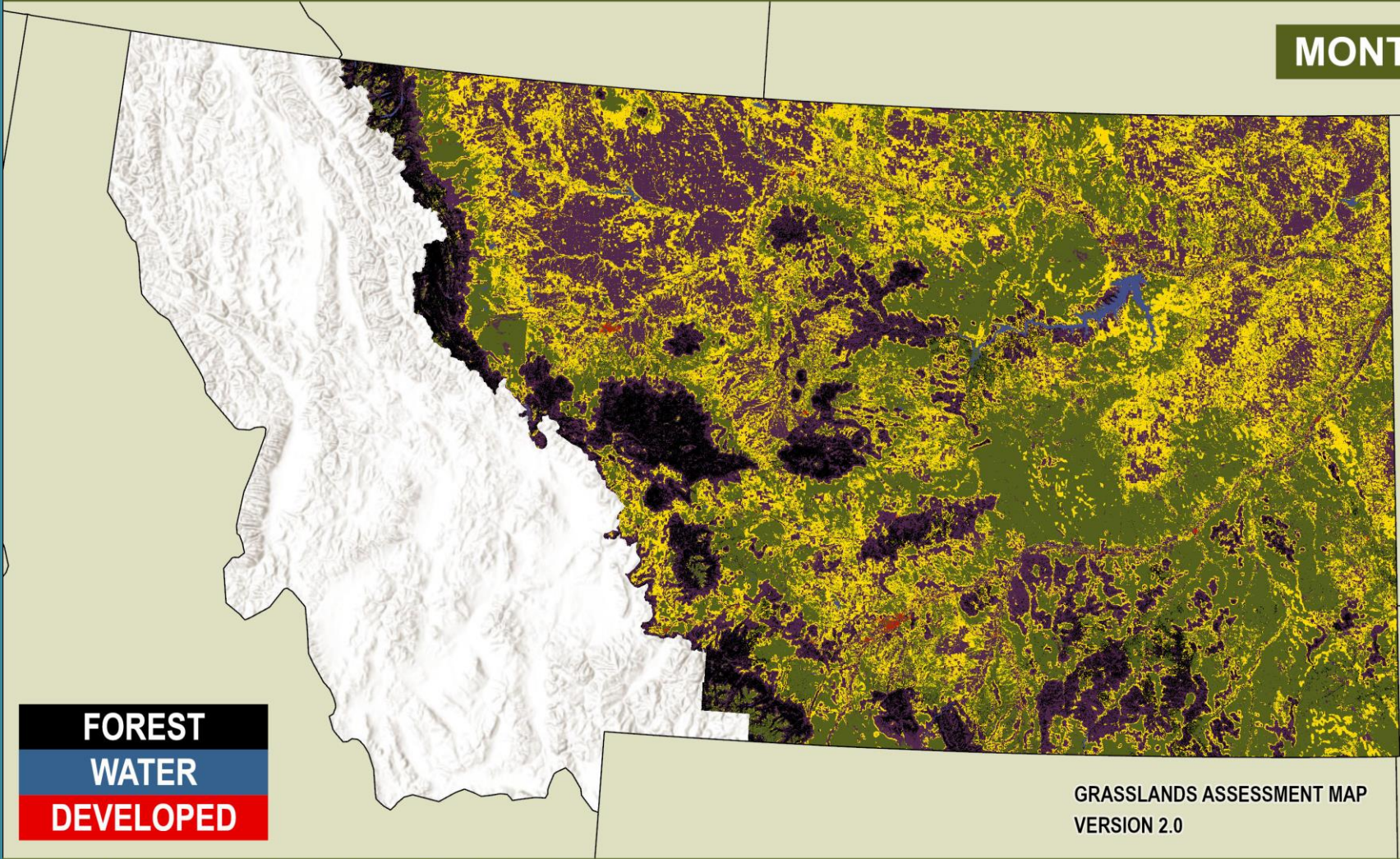
435,256,145 acres

*Maps are based on currently available data. Areas at risk of cultivation or converted to plowed land since 2009 are from Plowprint.com. Areas at risk to woody encroachment or infested by woody plants are from the Rangeland Analysis Platform (rangelands.app).

CENTRAL GRASSLANDS ROADMAP

SUPPORTING AND GROWING OUR CORE OF GRASSLANDS

MONTANA



FOREST
WATER
DEVELOPED

GRASSLANDS ASSESSMENT MAP
VERSION 2.0

CONSERVATION CATEGORIZATION

**CORE
GRASSLANDS**

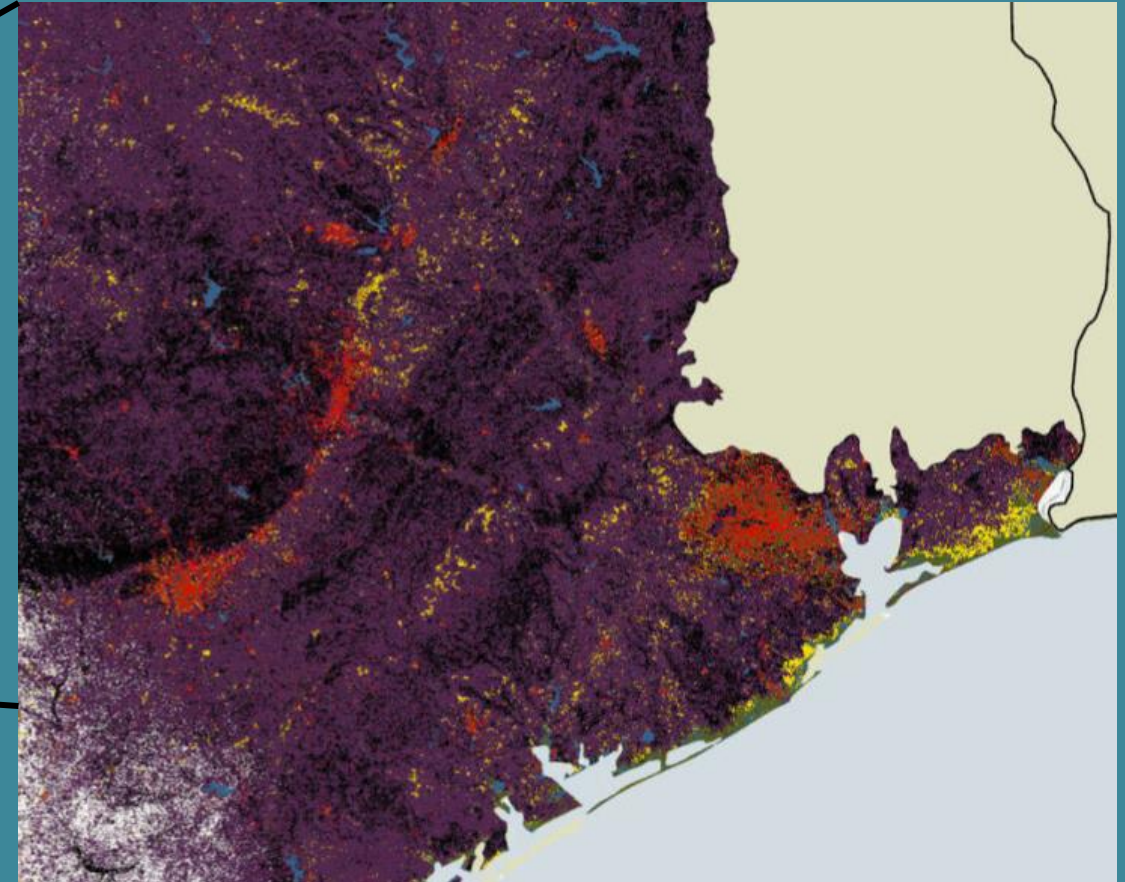
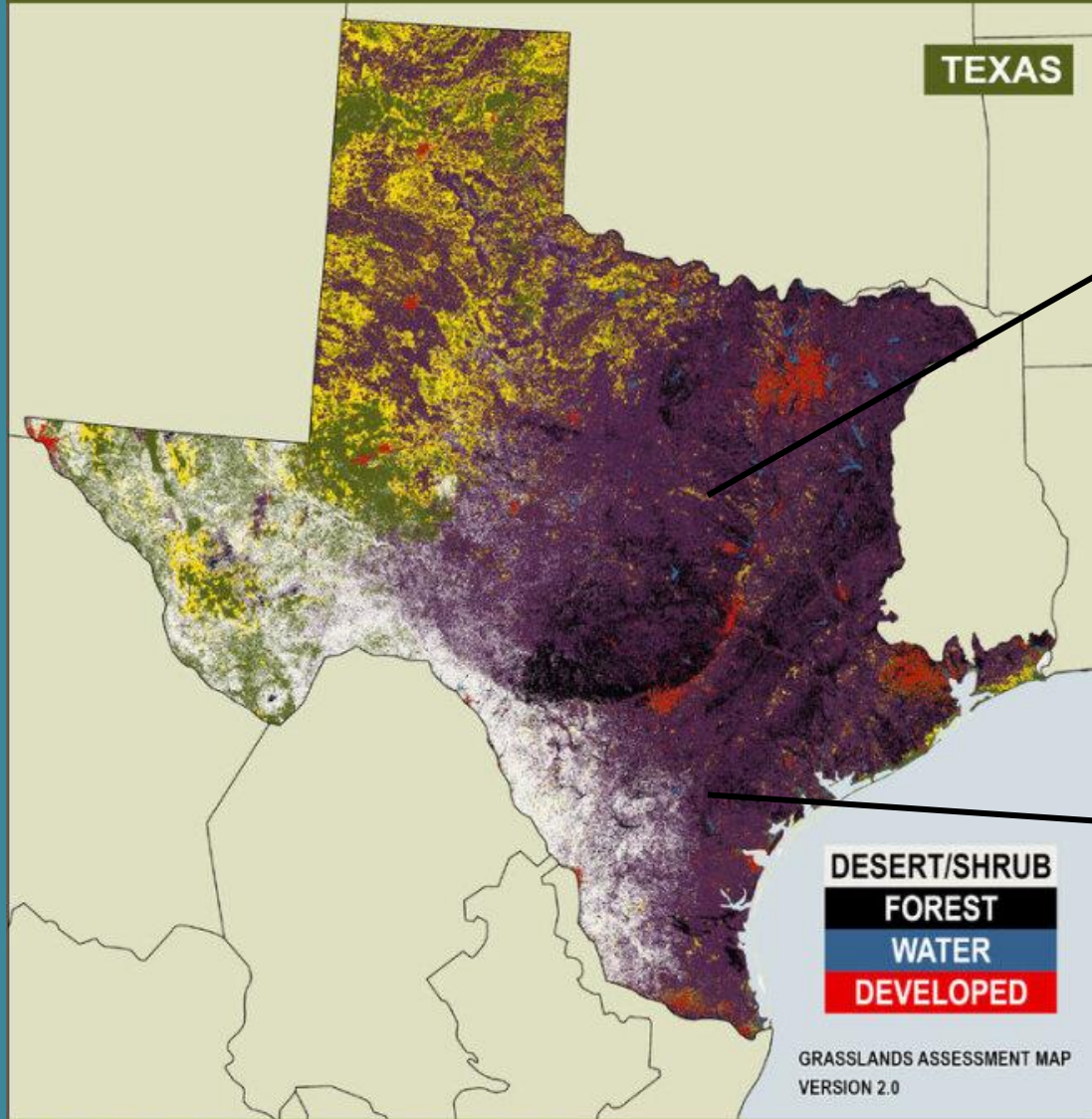
**VULNERABLE
GRASSLANDS**

**CONVERTED/ALTERED
GRASSLANDS**

*Based on currently available data. Plowed land consists of any area converted as of and since 2009 (see Plowprint.com). Encroached area is >5% woody vegetation.

CENTRAL GRASSLANDS ROADMAP

SUPPORTING AND GROWING OUR CORE OF GRASSLANDS



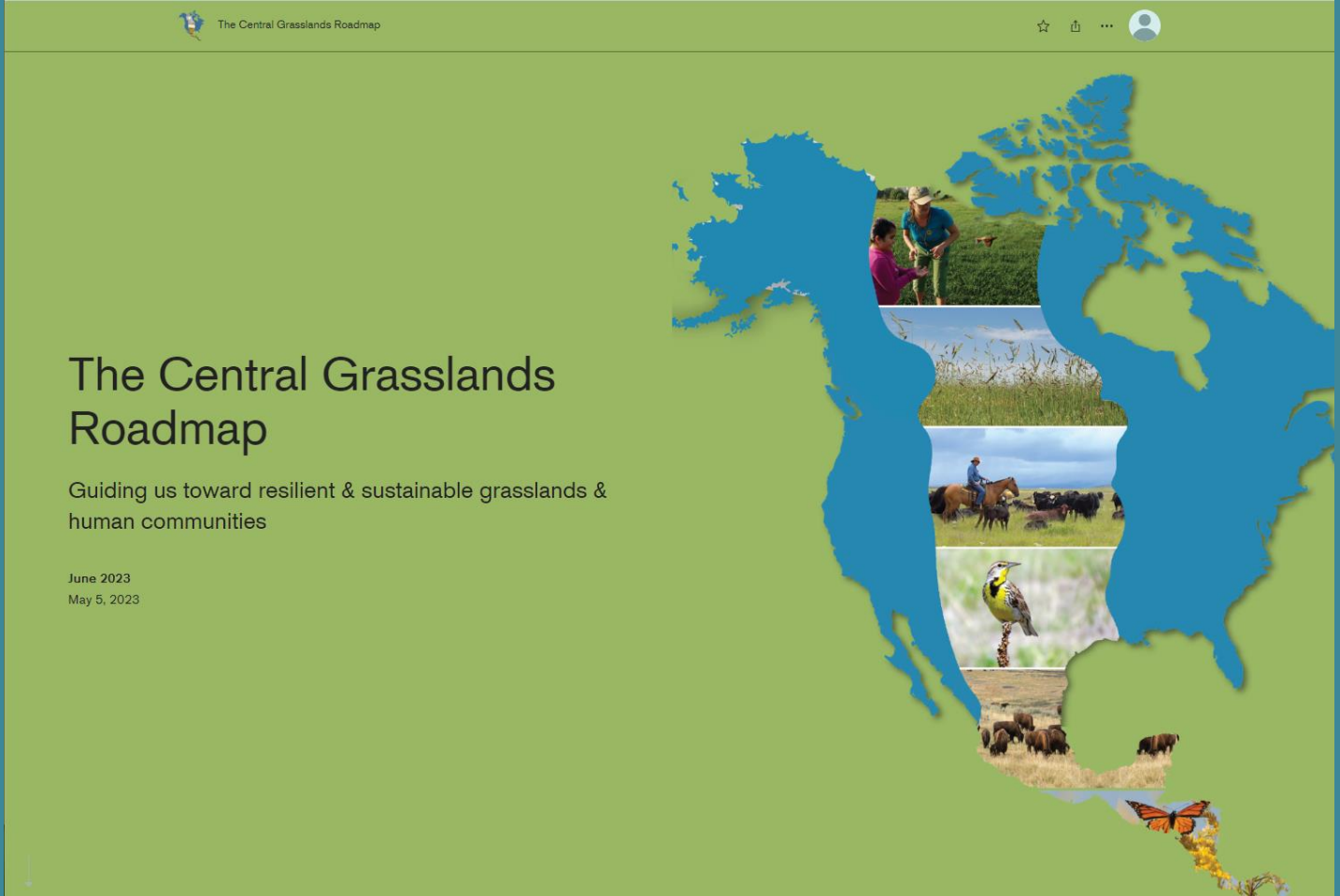
CONSERVATION CATEGORIZATION

CORE
GRASSLANDS

VULNERABLE
GRASSLANDS

CONVERTED/ALTERED
GRASSLANDS

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The Central Grasslands Roadmap

Guiding us toward resilient & sustainable grasslands & human communities

June 2023
May 5, 2023

<https://www.grasslandsroadmap.org/>

Questions

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