

Navigating Murky Waters: Mapping the Impact of Sackett in New Mexico



The Good News...

No Change to the federal definition of a wetland

"Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

The Good News...

The new ruling basically concurred with Scalia plurality in the Rapanos :

"waters of the United States" can only refer to "relatively permanent, standing or flowing bodies of water," not "occasional," "intermittent," or "ephemeral" flows. Furthermore, A mere "hydrological connection" is not sufficient to qualify a wetland as covered by the CWA; it must have a "continuous surface connection" with a "water of the United States"

The Challenges...

Agencies and the courts will be left to interpret:

...“waters” may fairly be read to include only those wetlands that are, as a practical matter, indistinguishable from waters of the United States, such that it is difficult to determine where the water ends and the wetland begins.

The Challenges...

Key terms/concepts that are unclear:

Relative Permanence:

“relatively permanent, standing or continuously flowing bodies of water forming geographic features’ that are described in ordinary parlance as ‘streams, oceans, rivers, and lakes”

Continuous Surface Connection:

Wetlands that have “a continuous surface connection to bodies that are ‘waters of the United States’ in their own right, so that there is no clear demarcation between ‘waters’ and wetlands.”

Relative Permanence

Relatively Permanent Standard

Relatively permanent waters include tributaries that have flowing or standing water year-round or continuously during certain times of year and can vary geographically.

Relatively permanent waters do not include tributaries with flowing or standing water for only a short duration in direct response to precipitation.

Adjacent Wetlands

Adjacent has been revised by the Court to mean having a continuous surface connection.

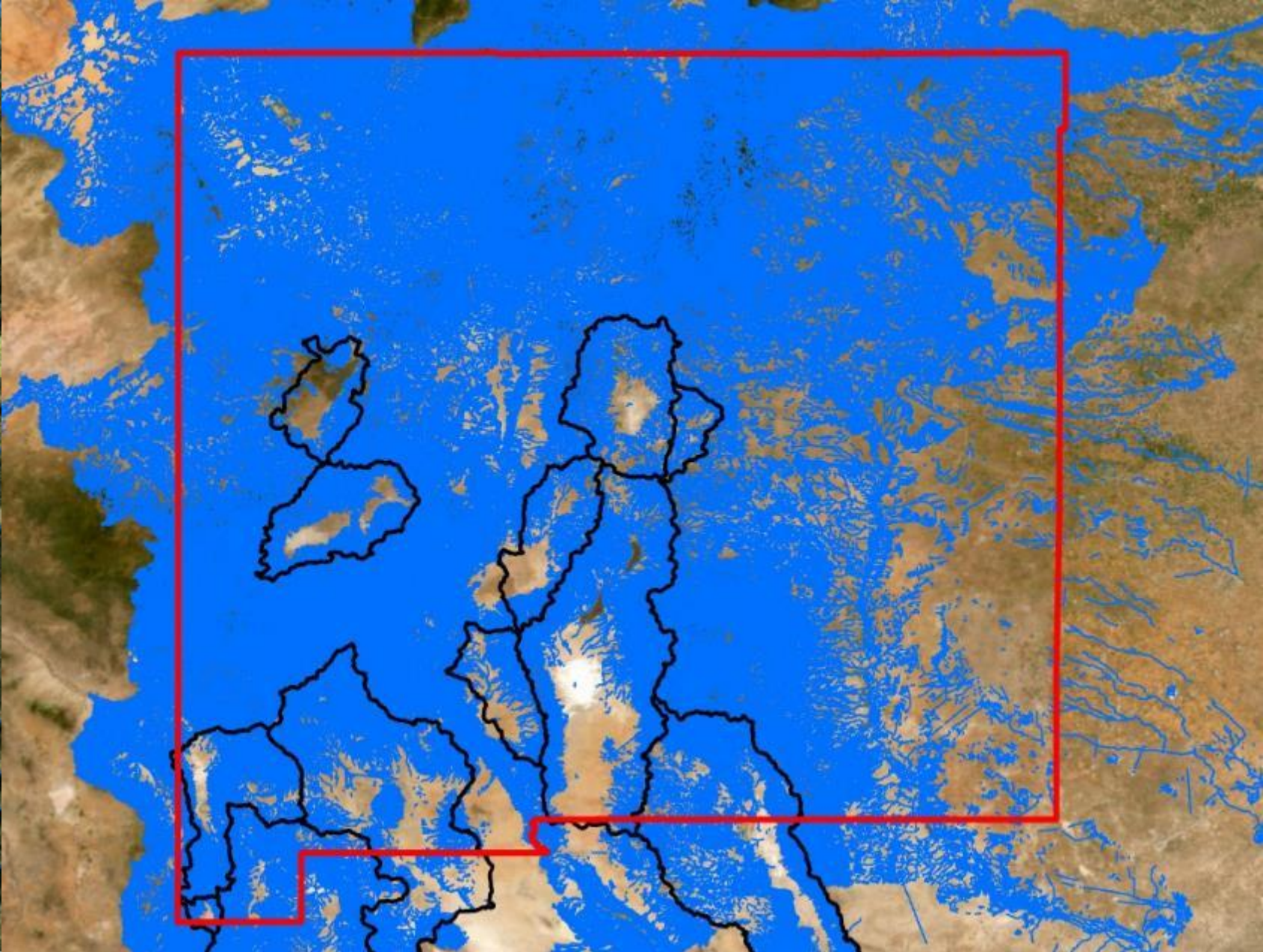
Jurisdictional adjacent wetlands include: Wetlands that are adjacent to a water, relatively permanent jurisdictional impoundment, or relatively permanent tributary.

So, How Was NM Modelled

Publicly Available National Datasets

- National Hydrography Dataset- (connectivity)
- National Wetlands Inventory (adjacent wetlands)
- State of NM Assessed Waters (relative permanence)

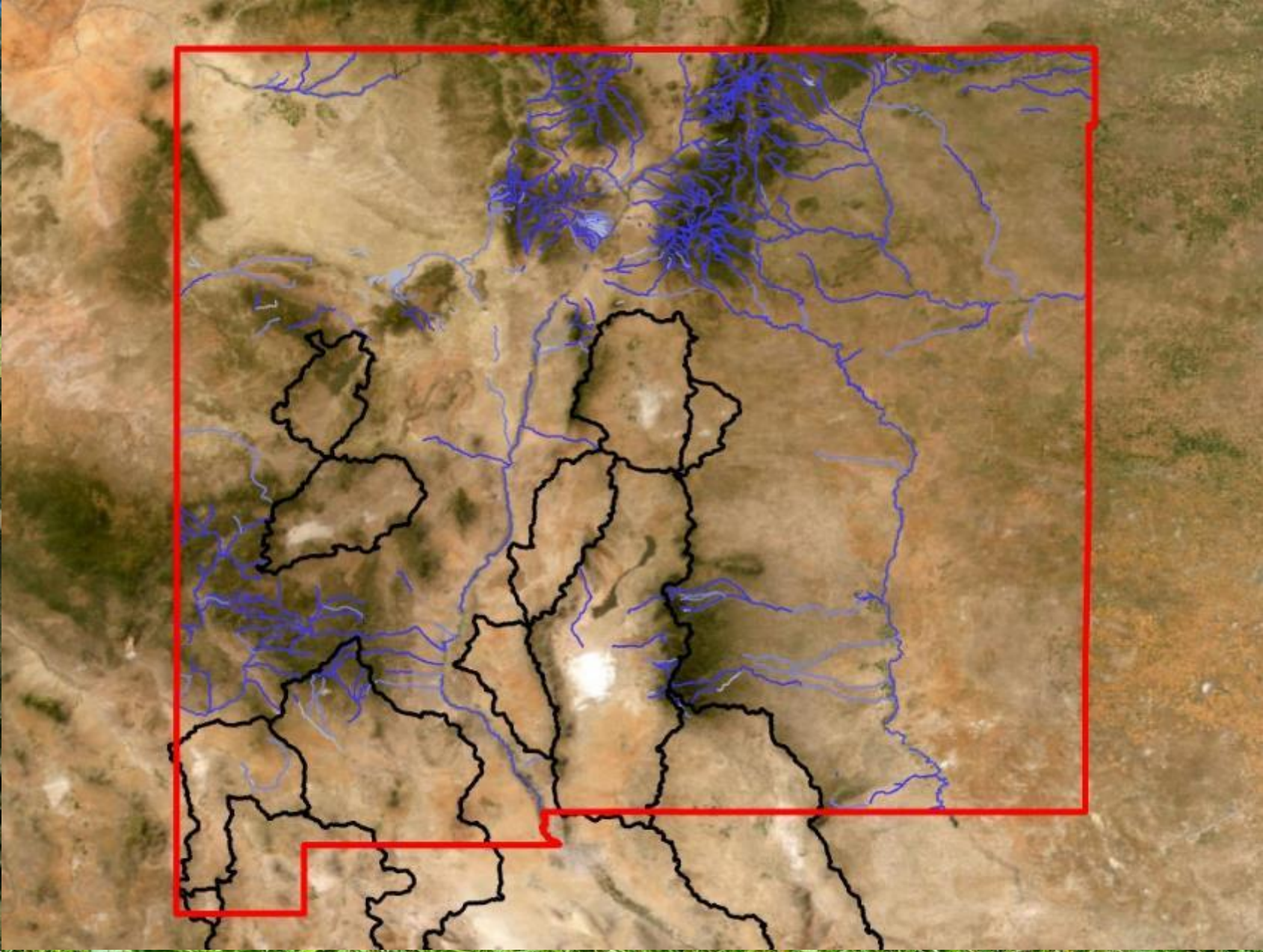
NHD



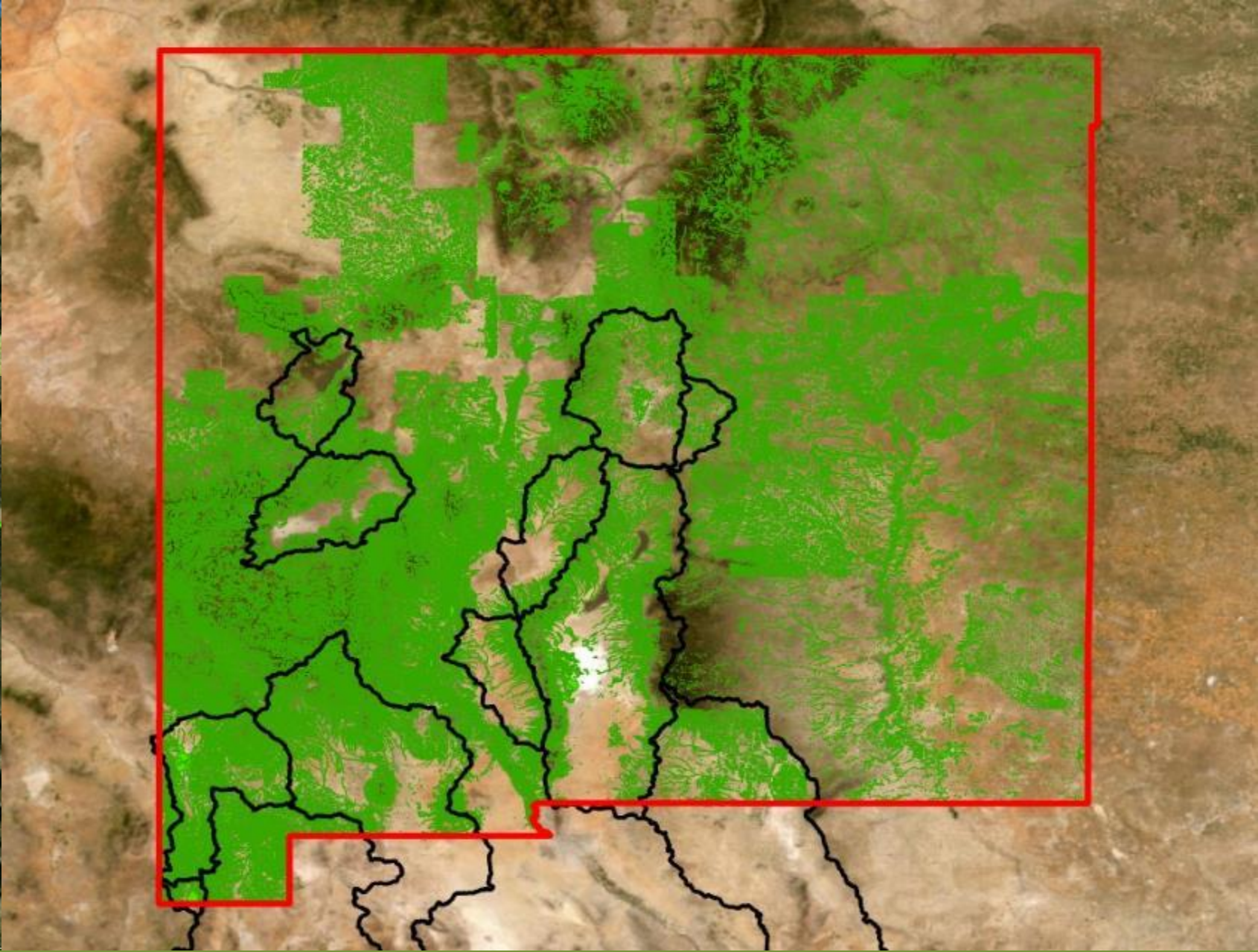
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Assessed Streams



NWI

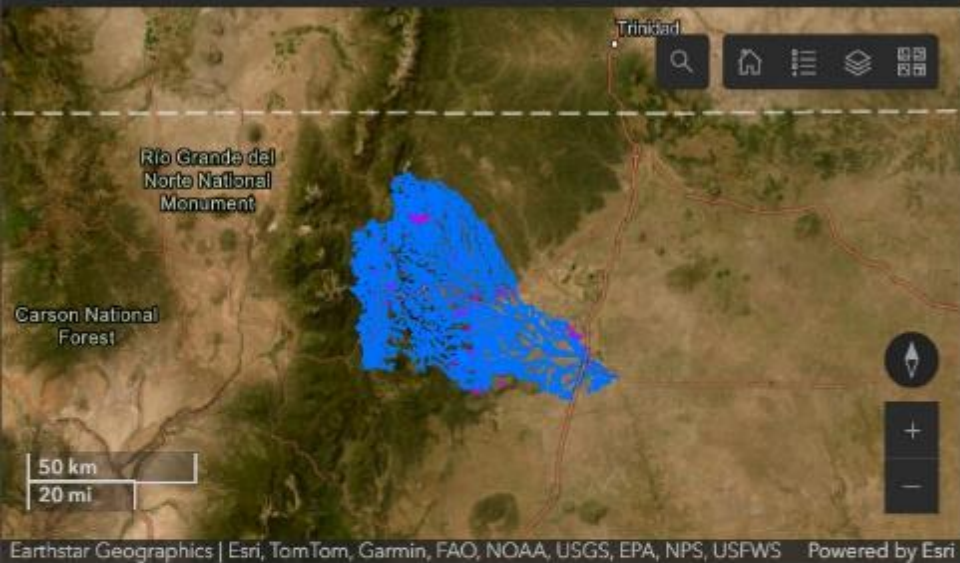


Model Selection Conditions

Generalized Selection Criteria

- Traditionally Navigable Waters (sub-set NHD)
- Perennial Waters Connected to TNW (assessed streams)
- Adjacent Wetlands with Flooded Water Regimes
- Deepwater Habitats Removed

Kennedy (Rapanos) Scenario

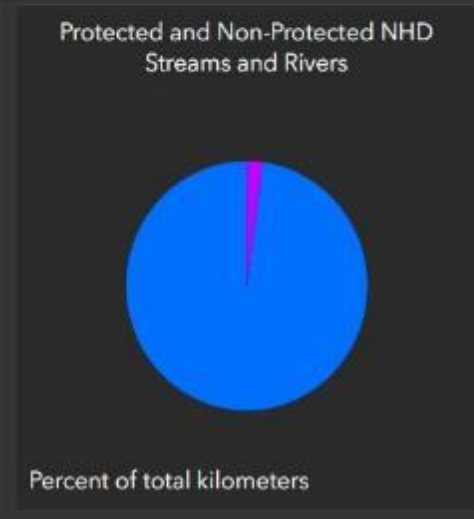
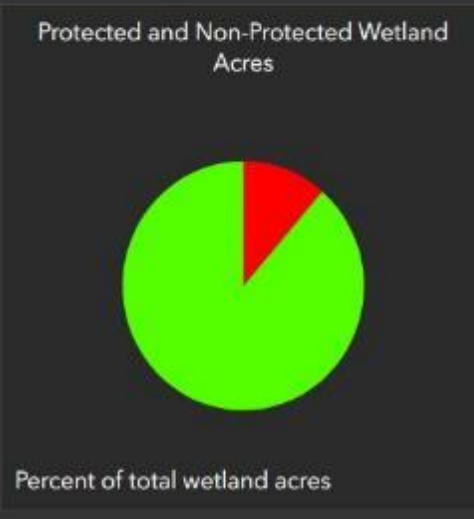


Total Wetland Acres in the Watershed

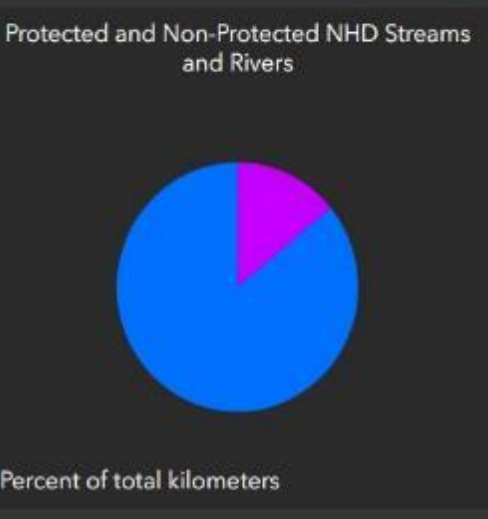
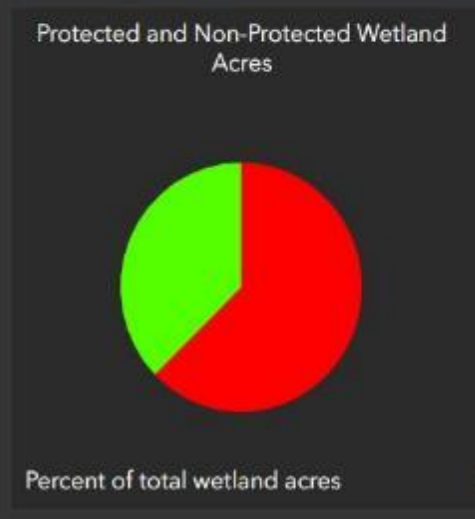
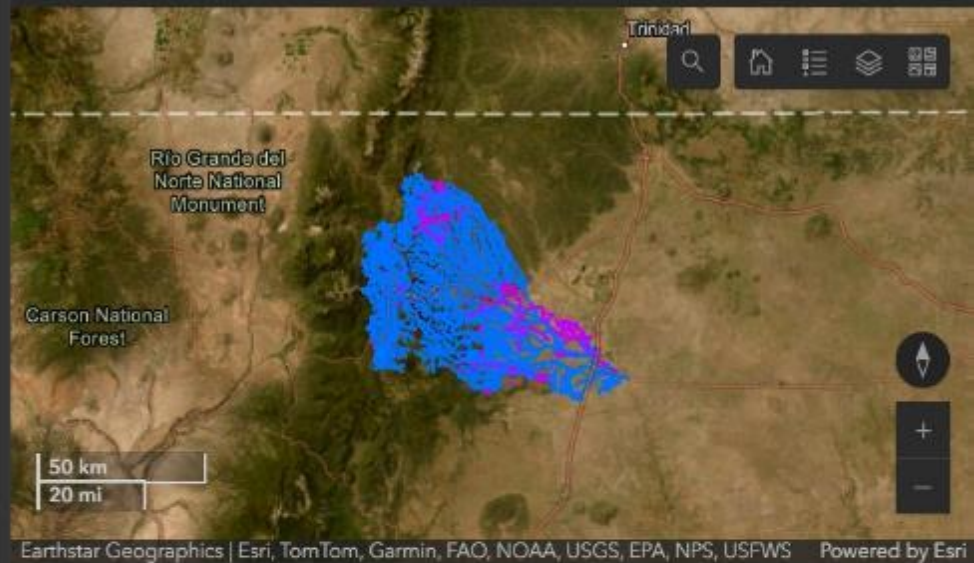
20k

Total Kilometers of NHD Stream and Rivers in Watershed

4k



Sackett Scenario



Kennedy (Rapanos) Scenario



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Protected and Non-Protected Wetland Acres



Percent of total wetland acres

Protected and Non-Protected NHD Streams and Rivers



Percent of total kilometers

Total Wetland Acres in the Watershed

965

Total Kilometers of NHD Stream and Rivers in Watershed

4k

Sackett Scenario



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Protected and Non-Protected Wetland Acres



Percent of total wetland acres

Protected and Non-Protected NHD Streams and Rivers

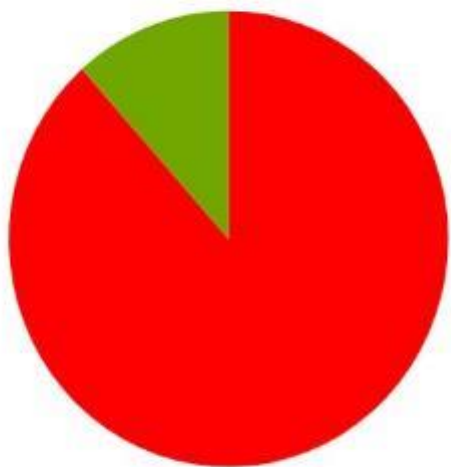


Percent of total kilometers

New Mexico Waters Protected and At Risk in the Wake of the Sackett Decision

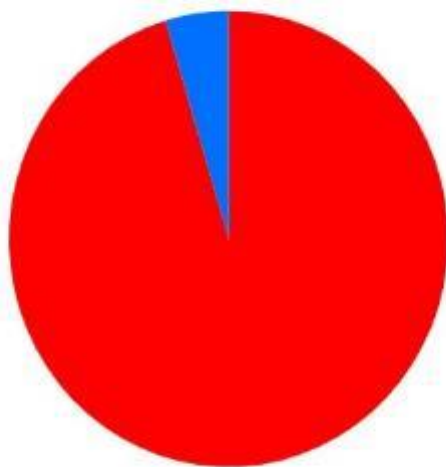
There is still a lot of uncertainty about how the 2023 US Supreme Court Sackett decision will be implemented. This mapping exercise represents a worst-case scenario in terms of removing protections from New Mexico's streams and wetlands.

Protected and At Risk Wetland Acres

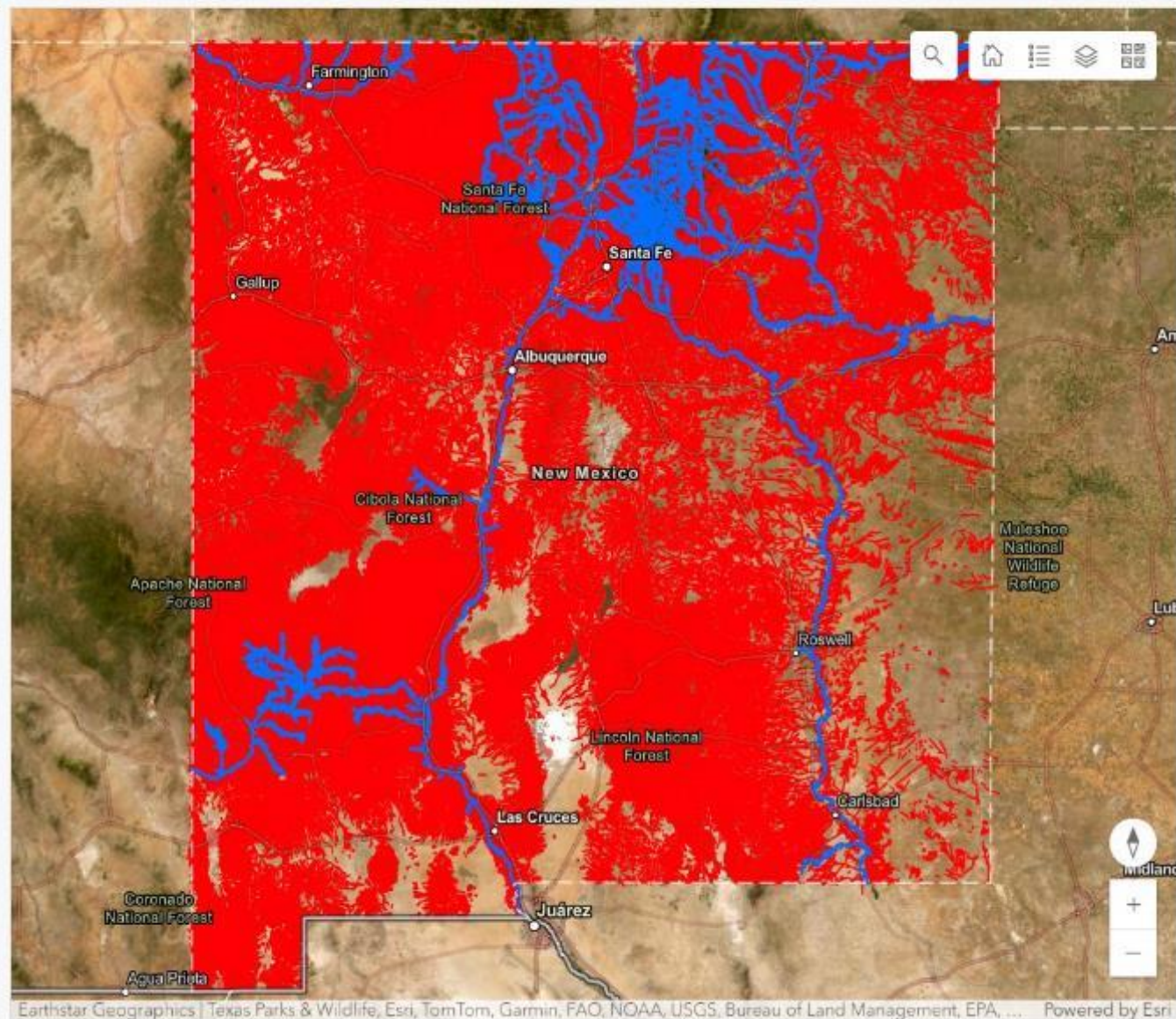


Percent of total wetland acres

Protected and At Risk NHD Streams and Rivers



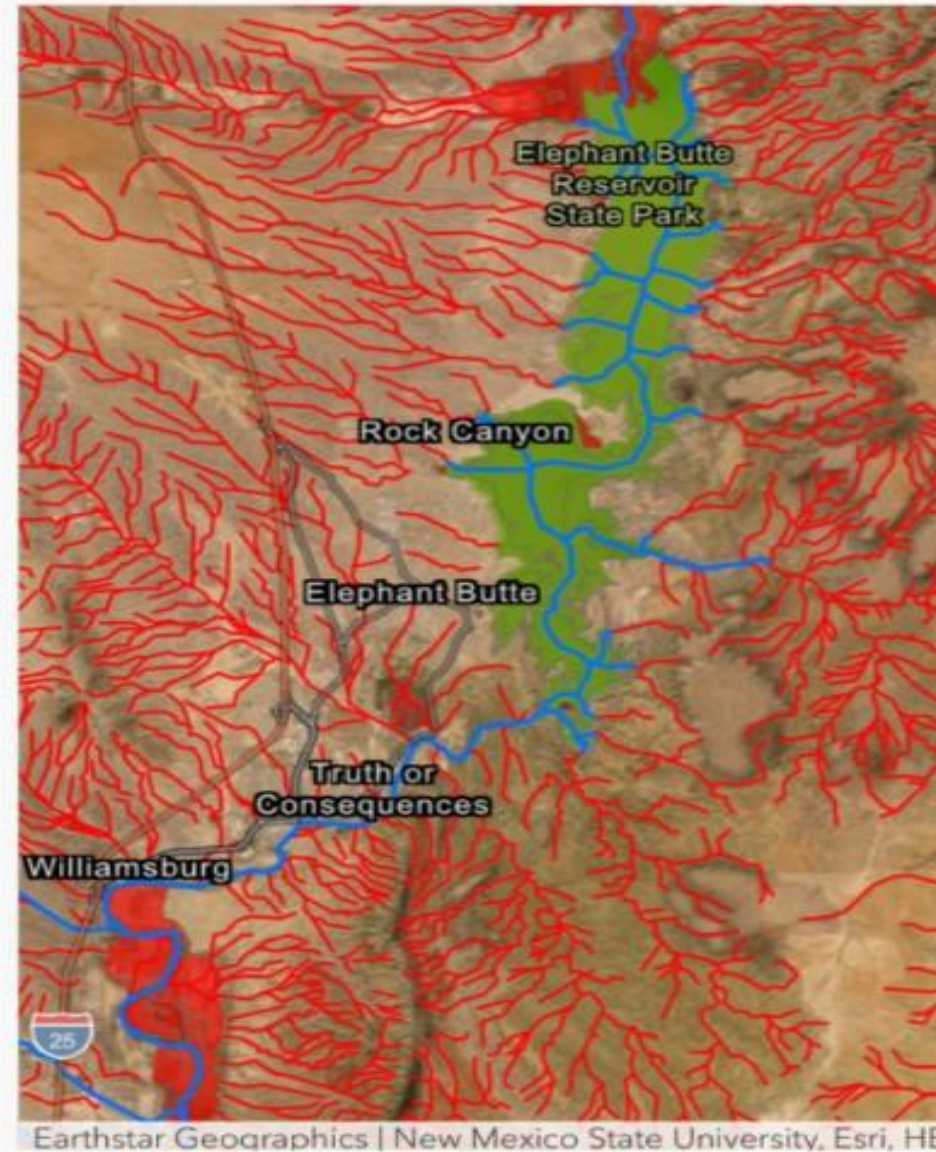
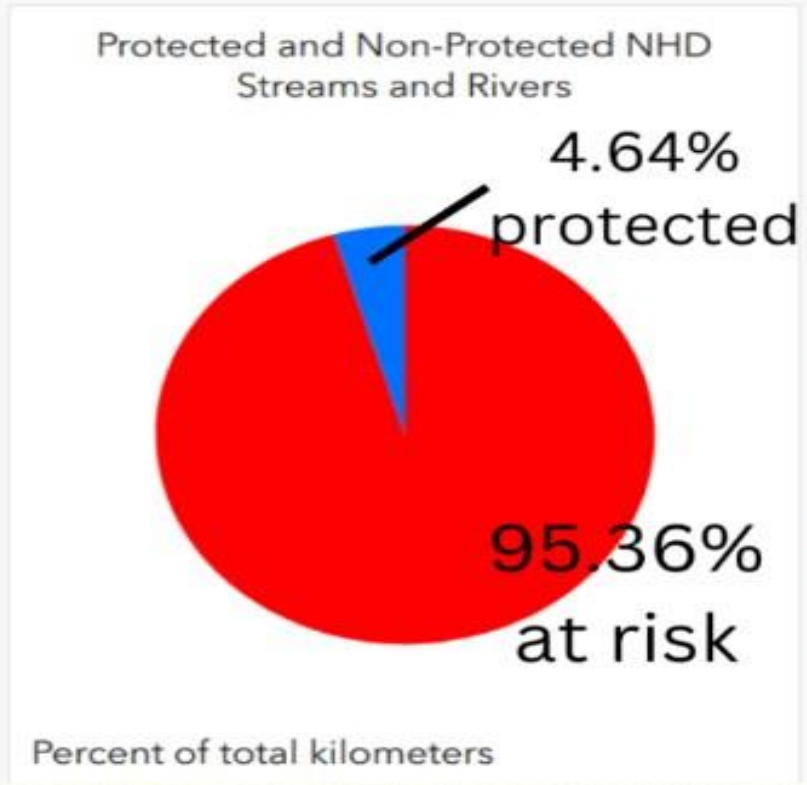
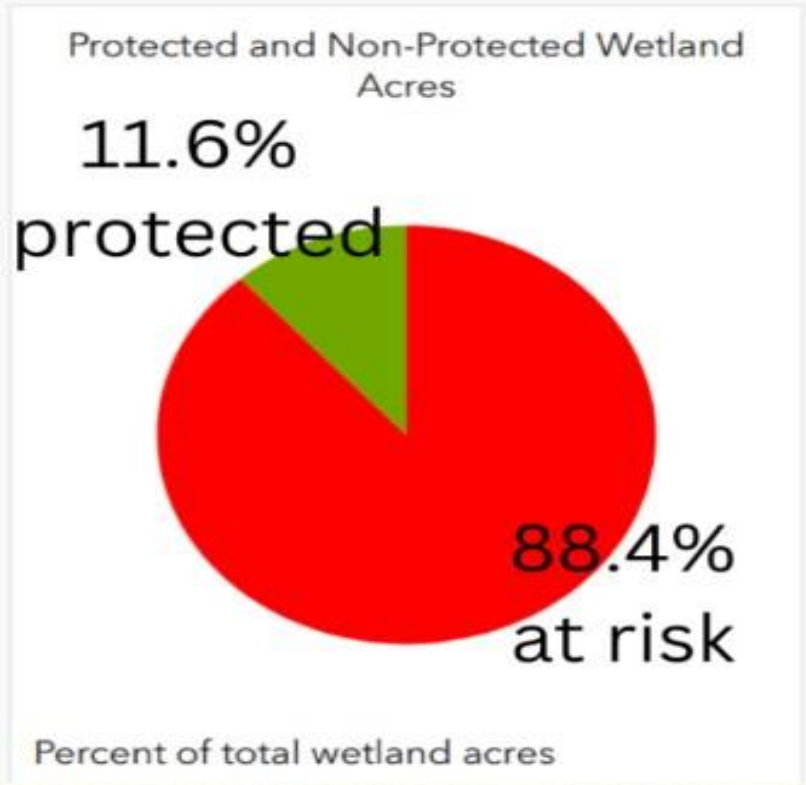
Percent of total kilometers



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New Mexico Waters Protected and At Risk in the Wake of the Sackett Decision

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Questions?

Andy Robertson
Executive Director
GeoSpatial Services
Saint Mary's University
aroberts@smumn.edu
507-457-8746



Saint Mary's
University
GEOSPATIAL SERVICES

