

Agenda Item X

Forest System Indicators

Report

Presented by:
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Fourth Report in Series

- Forest Overview
- Forest Health
 - Fire Return Interval Departure
 - Wildfire Threat to Ecosystems
 - Pest Impacts & Threat
- Forest Biomass/Carbon Storage

Highlights

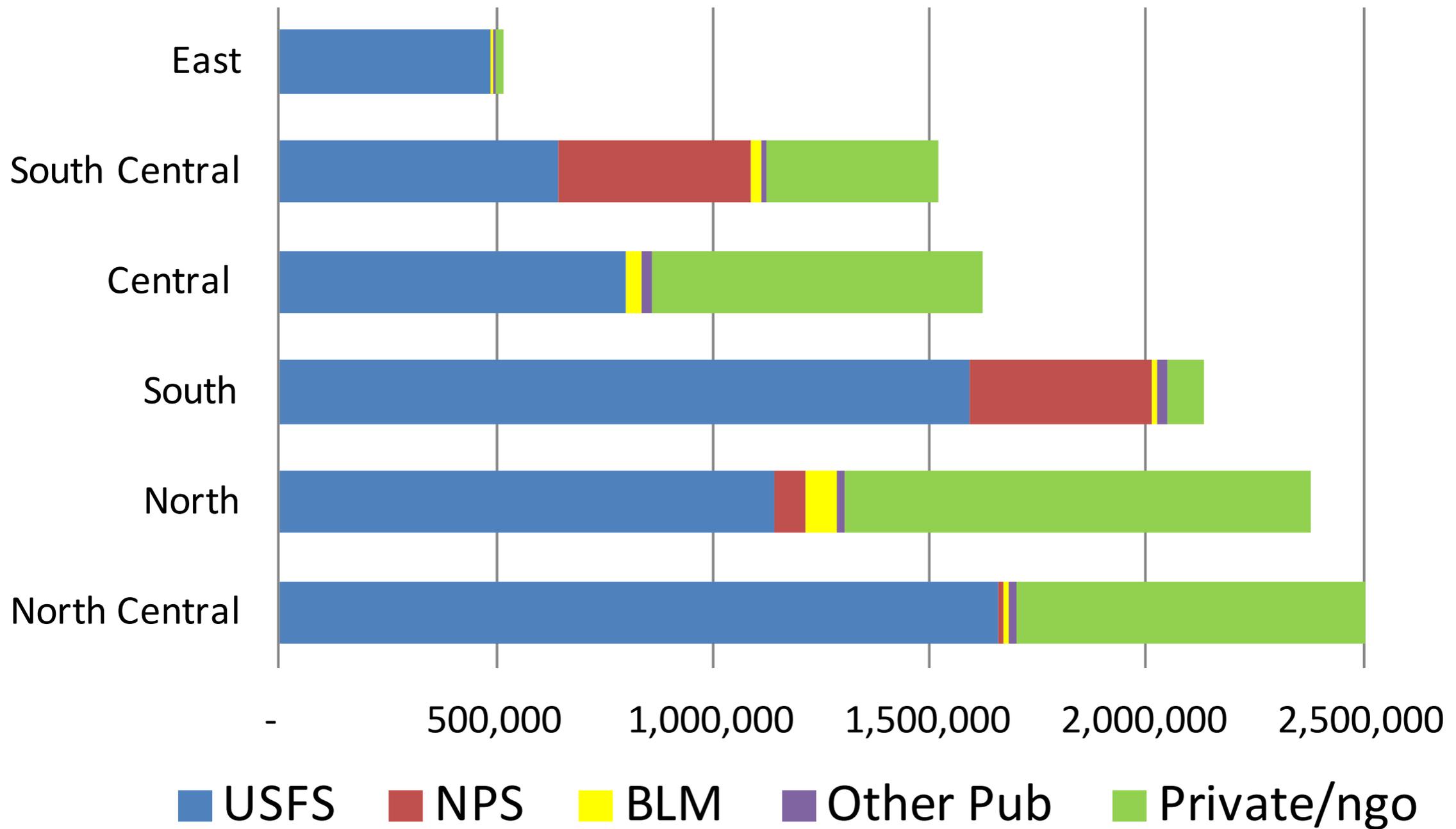
- 10.5 million acres of productive forest land - 43% of Region.
- 70% under public ownership.
- Before 1850, nearly $\frac{1}{2}$ of Sierra forests burned every 12 years; $\frac{3}{4}$ burned every 20 years.
- Only 0.2% of Sierra forests have burned at least every 20 years in modern times; 74% has not burned in 103 years.

Highlights (continued)

- Over ½ of Sierra forests – 5.5 million acres – classified as ‘high priority’ for treatment to prevent severe wildfire threats.
- About 3.6 million acres need restoration from pest damage; 1.2 million acres classified as high priority.
- Over 1 million acres need action to prevent future pest infestation.
- Sierra forests hold about 840 million tons of above-ground biomass or about 420 million tons of stored carbon.

Forest Lands in the Sierra

Ownership of Productive Forest Acres by Region



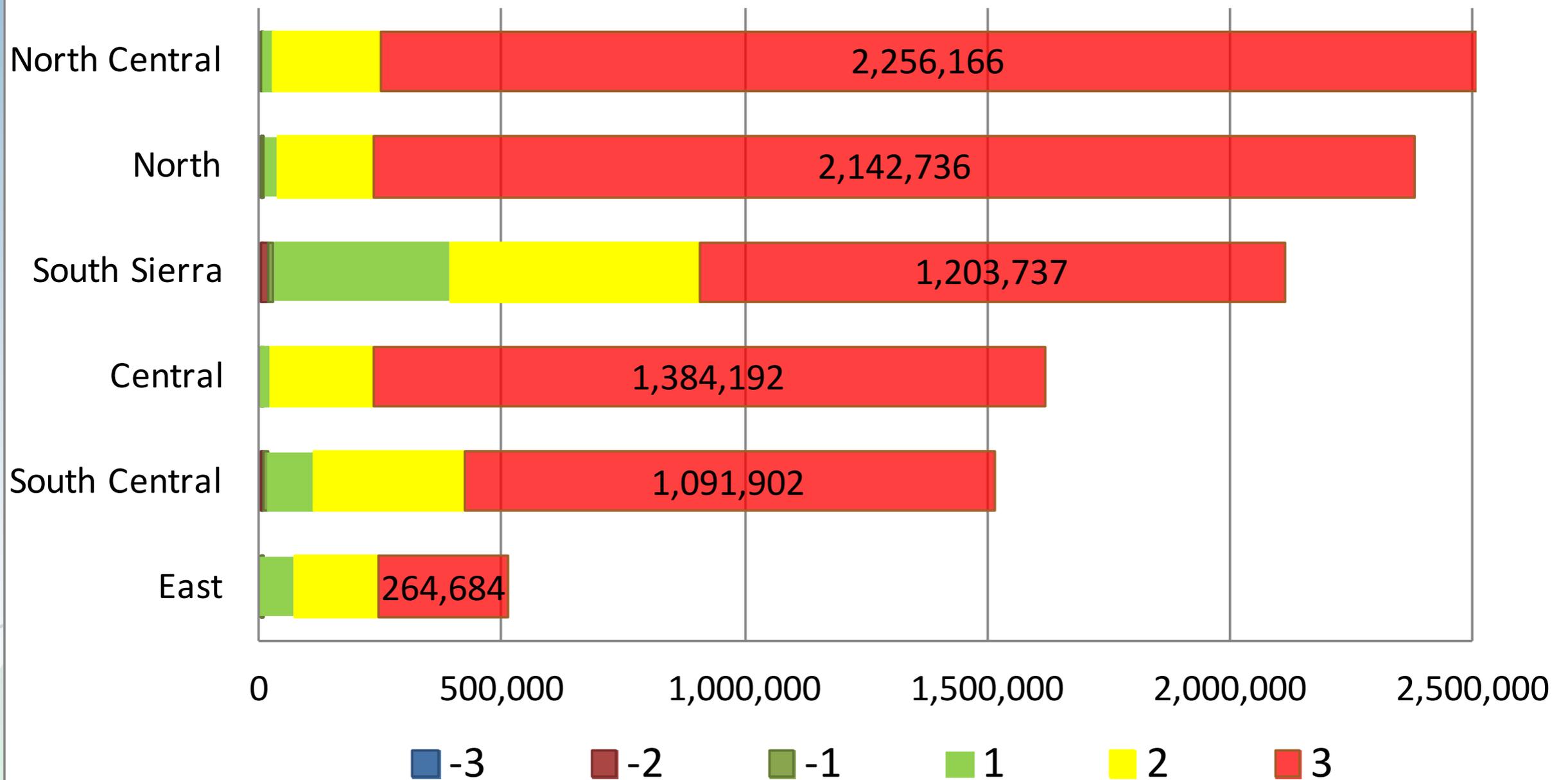
Fire Return Interval Departure

Percent change in the frequency of repeat forest fires on the landscape today versus pre-1850 era

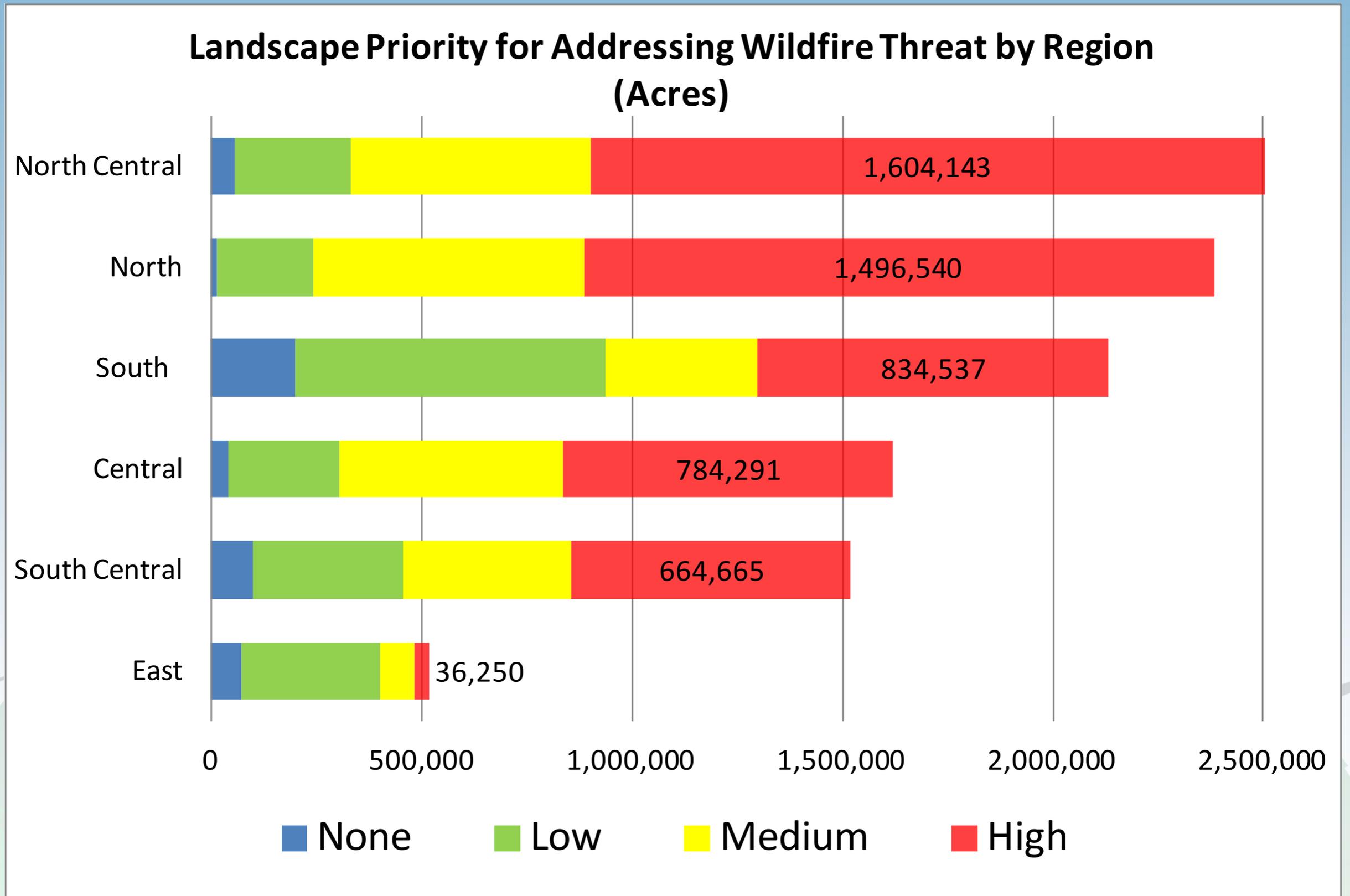
- Condition Class 1 - less than 33% departure
- Condition Class 2 - 33% - 66% departure
- Condition Class 3 - over 66% departure
- 78% of productive forests are Class 3

Acres of Forest by Condition Class

Acres of forest in each condition class by Subregion



Landscape Priority by Wildfire Threat Class



Fire Threat to Forest Ecosystems

For land prioritized with some level of fire threat:

- 63% of private land is prioritized 'high threat'
- 48% of Forest Service land is prioritized 'high threat'
- 25% of Park Service land is prioritized 'high threat'

Fire Threat to Watersheds:

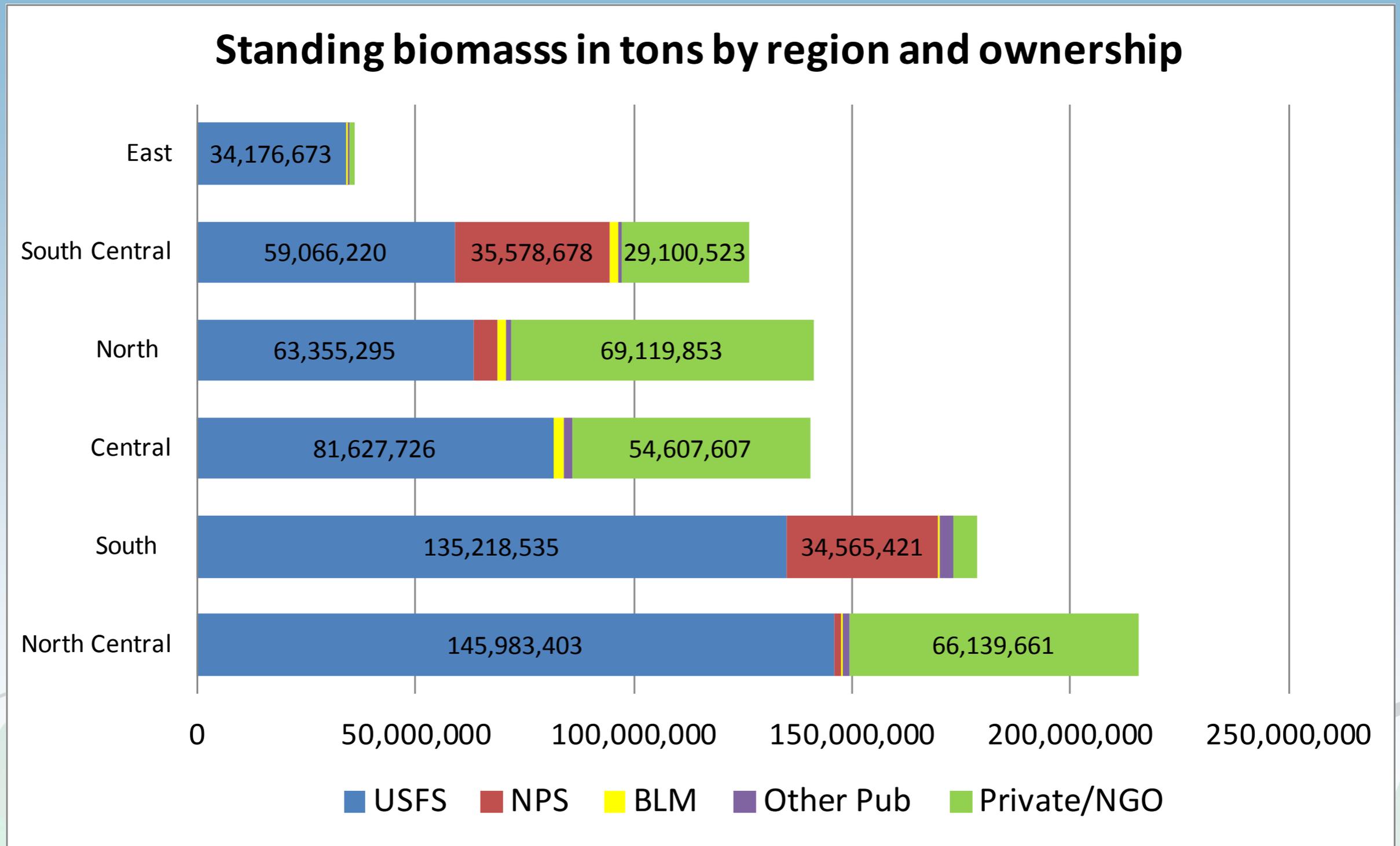
- 95% of watersheds prioritized for some level of fire threat
- 51% of watersheds prioritized as 'high threat'

Forest Pest Impacts & Threats

Acres of forest land identified for treatment needs

	Restoration	Prevention
USFS	2,707,000	630,000
Private/NGO	652,000	403,000
NPS	205,000	27,500
BLM	31,000	25,000
Other public	18,000	10,500

Carbon Storage – Forest Biomass



Recommendation

Staff recommends the Board approve this fourth System Indicators Report after making any revisions resulting from its review.