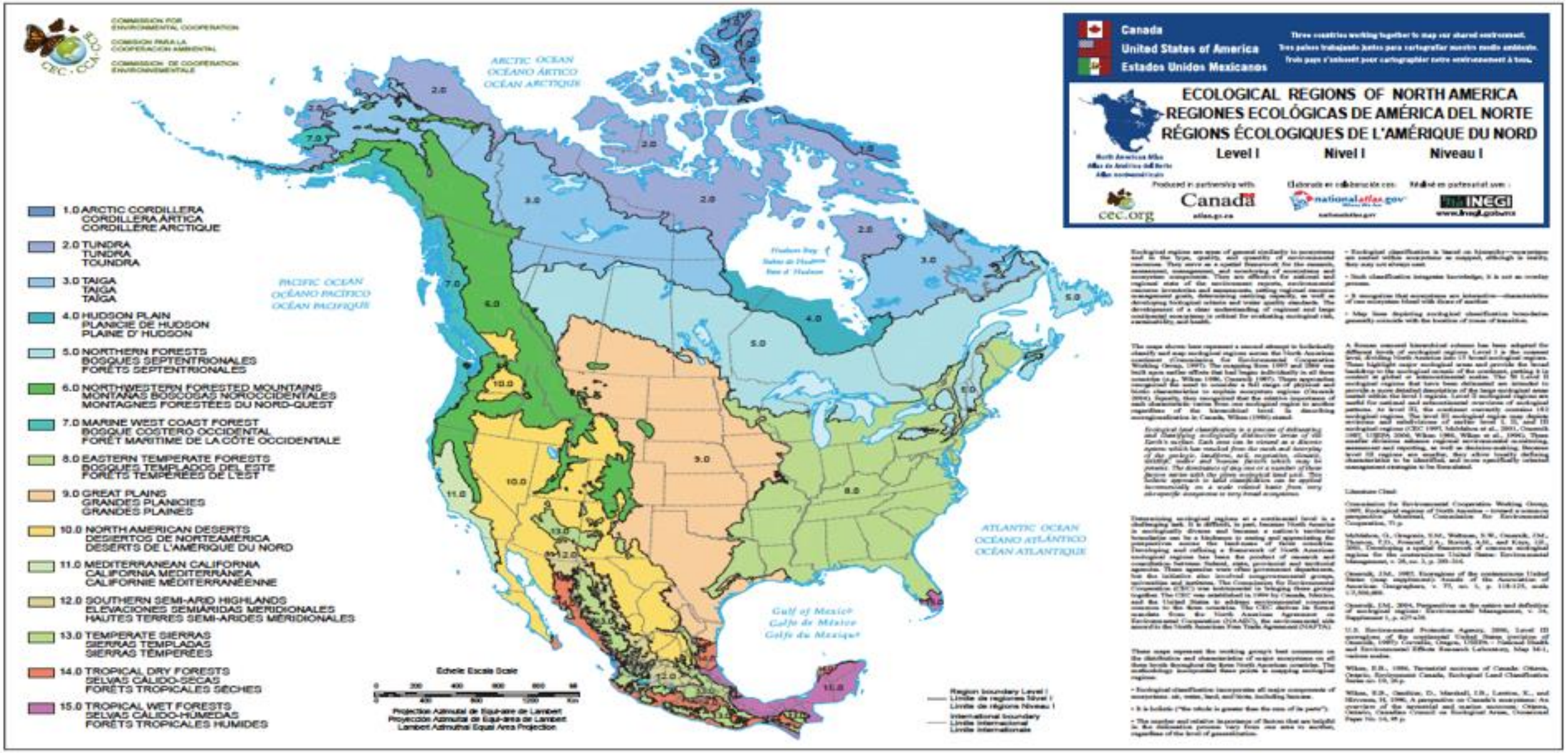
Forest Health in North America: *Innovative Use of Wood is Part of the Solution*

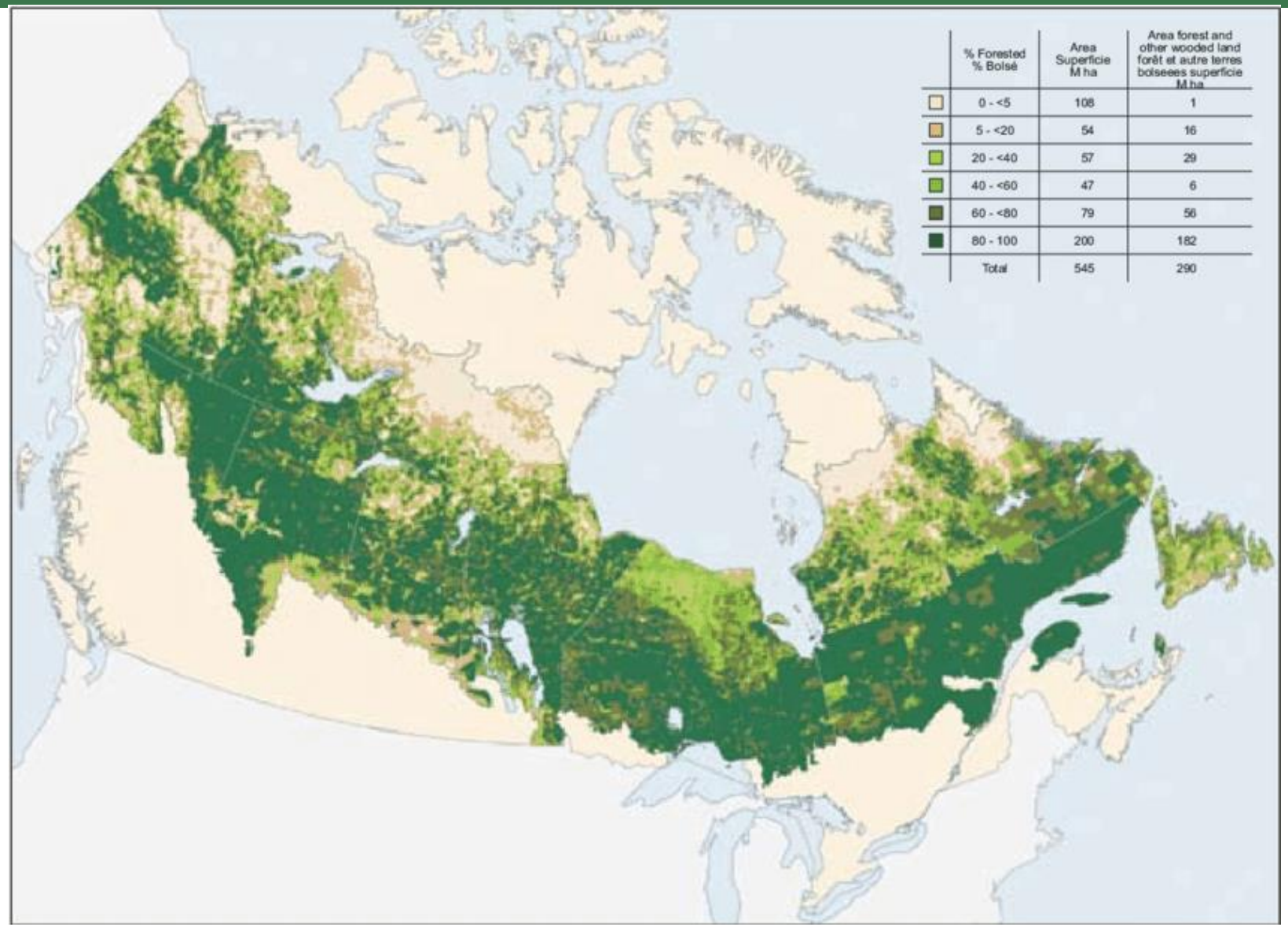
Presented by Kathryn (Katie) Fernholz

Disclaimer: This presentation was developed by a third party and is not funded by WoodWorks or the Softwood Lumber Board.

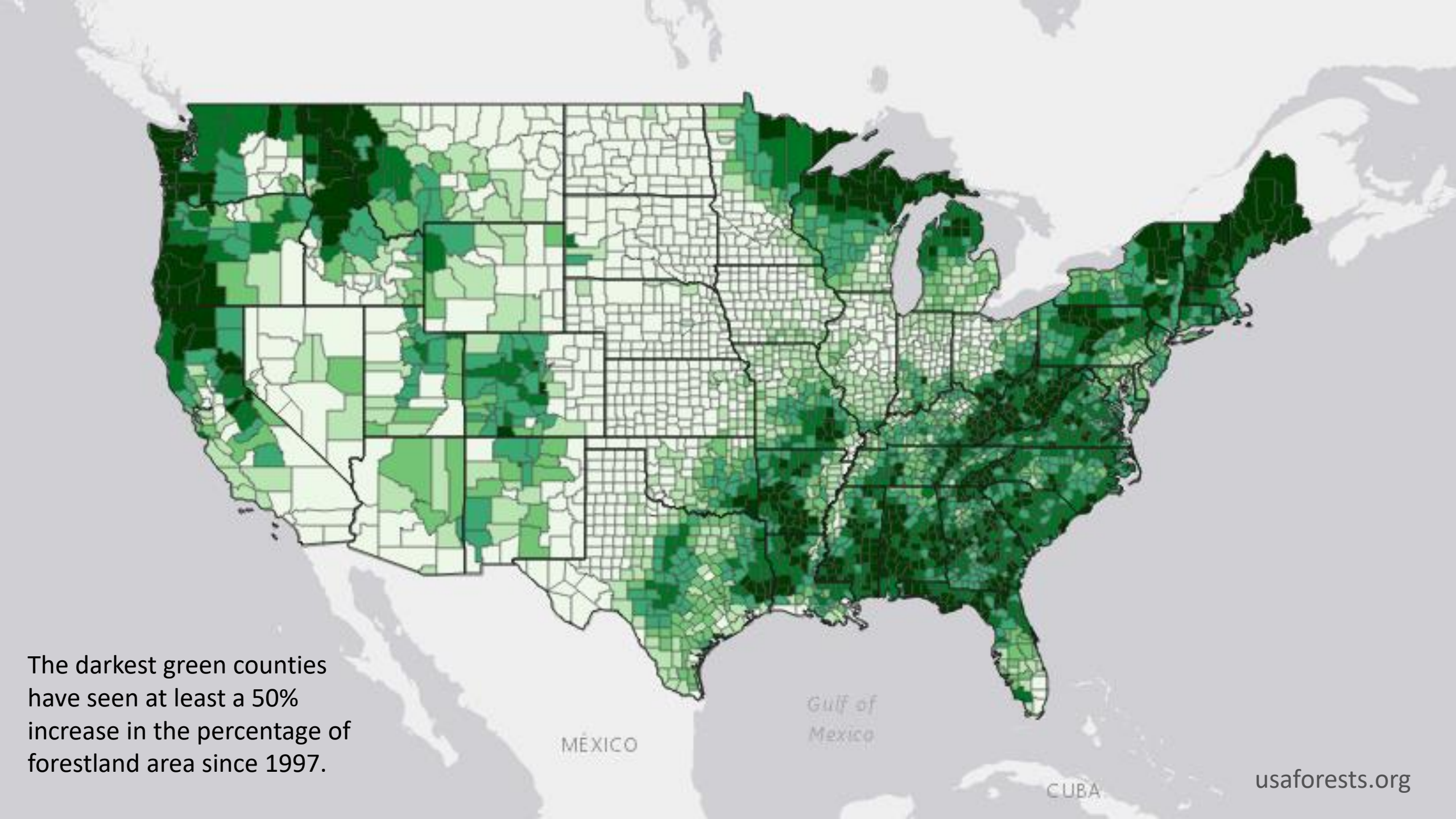
http://biocongress.org/wp-content/uploads/2009/05/north_america_satellite_b.jpg



ftp://ftp.epa.gov/wed/ecoregions/cec_na/NA_LEVEL_I.pdf



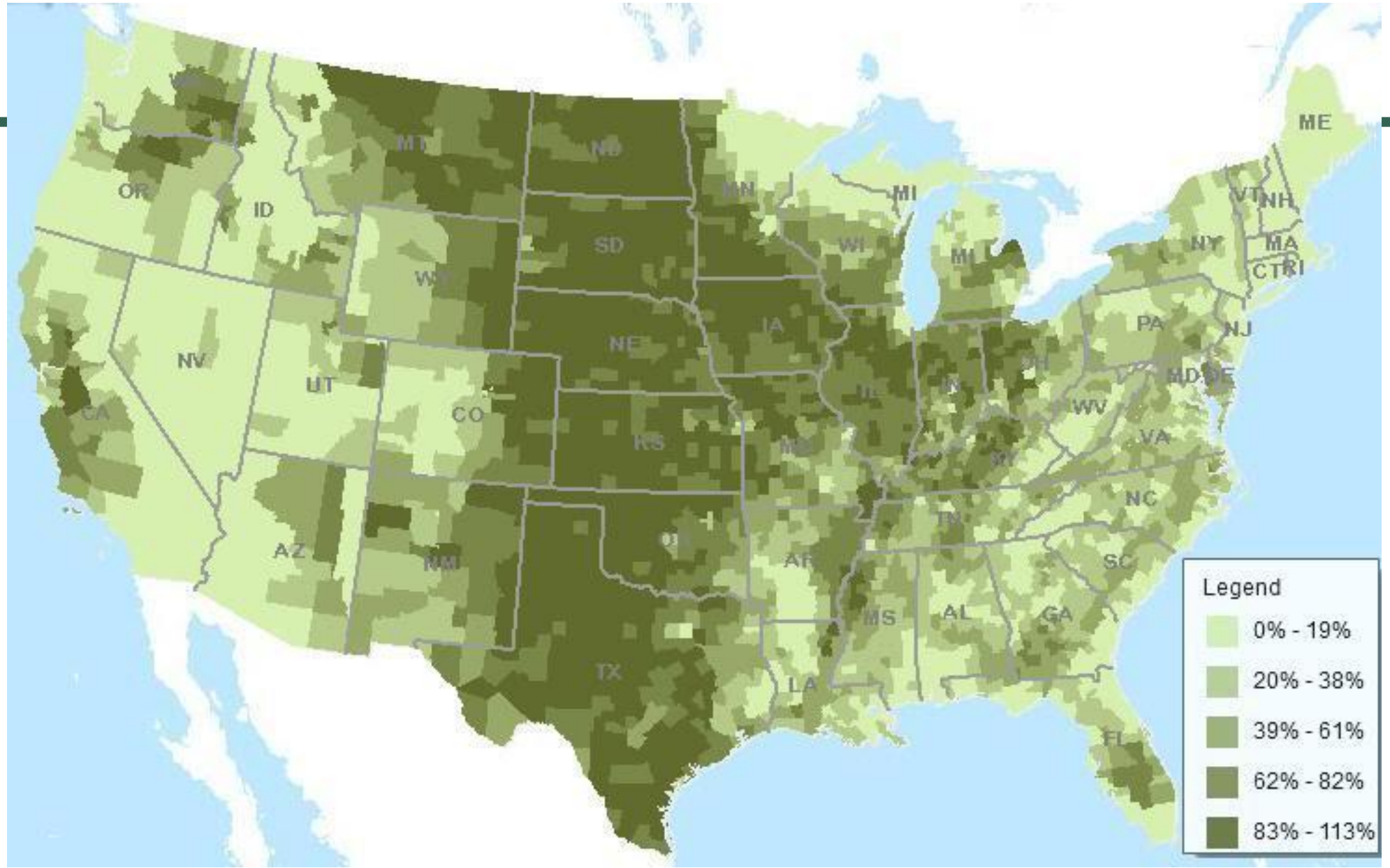
Bogdanski, Bryan. (2008). Canada's boreal forest economy: economic and socio-economic issues and research opportunities.



The darkest green counties have seen at least a 50% increase in the percentage of forestland area since 1997.

usaforests.org

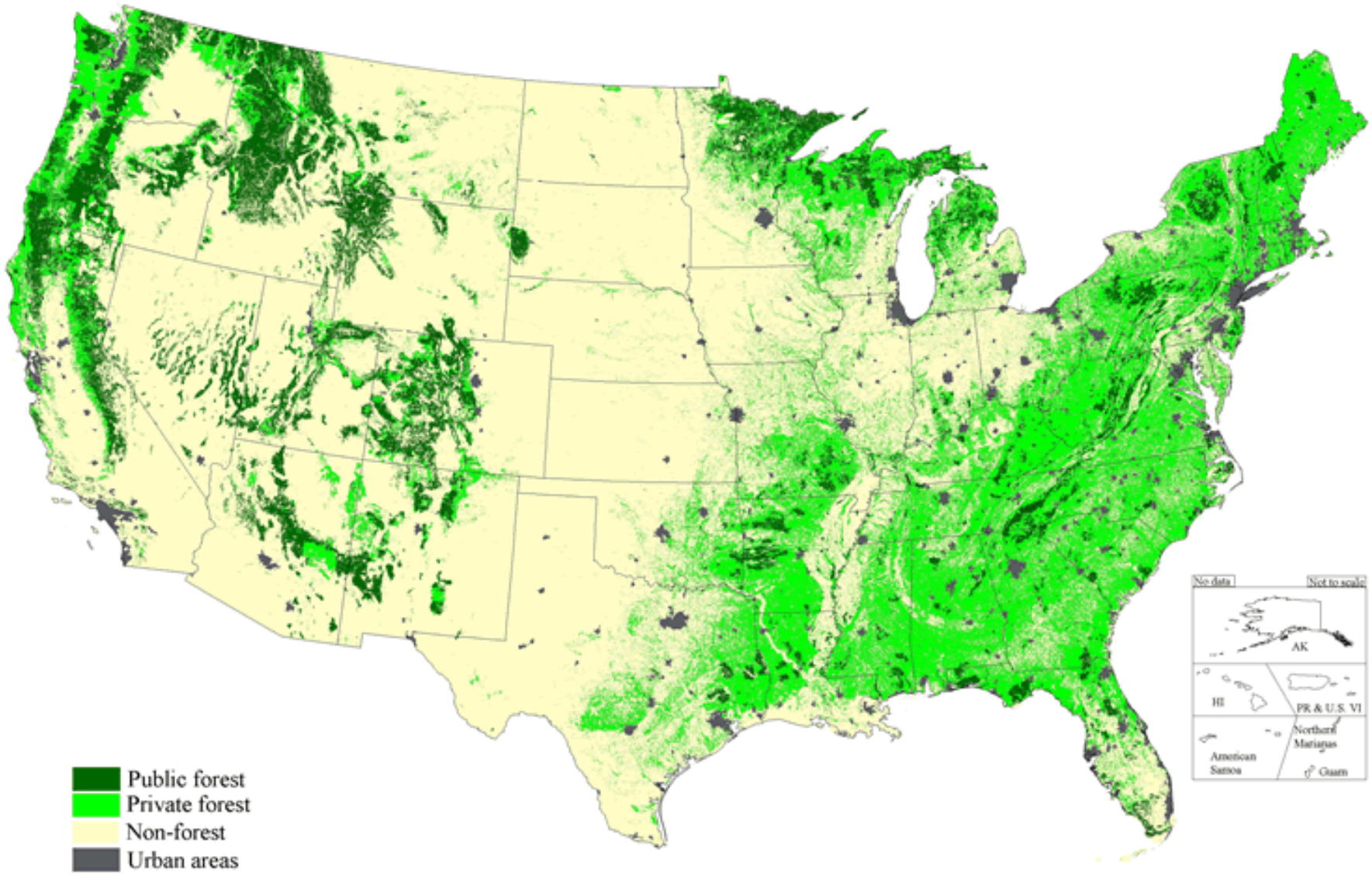
U.S. Land in Farms



Source: http://www.bigpictureagriculture.com/2011/05/us-farm-data-maps-density-farm-payments.html

Forest Land Ownership

This map displays the basic vegetation (forest vs. non-forest) of the conterminous United States as well as ownership (private vs. public). The lands displayed as "public" include Federal and State lands but do not generally include lands owned by local governments and municipalities.

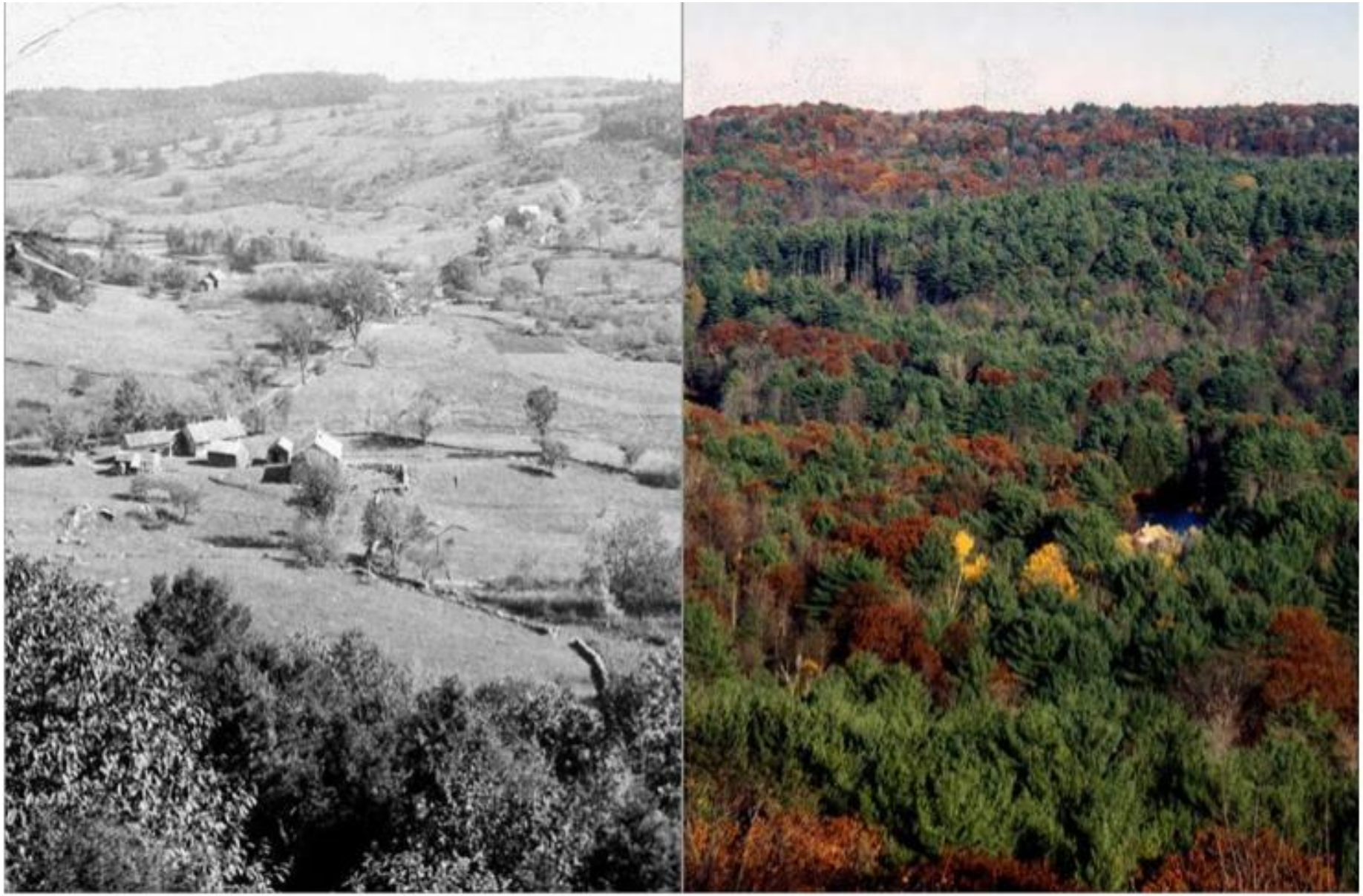


USDA Forest Service, State and Private Forestry,
Cooperative Forestry Staff, Washington Office.

100 0 100 200 300 400 500 Miles

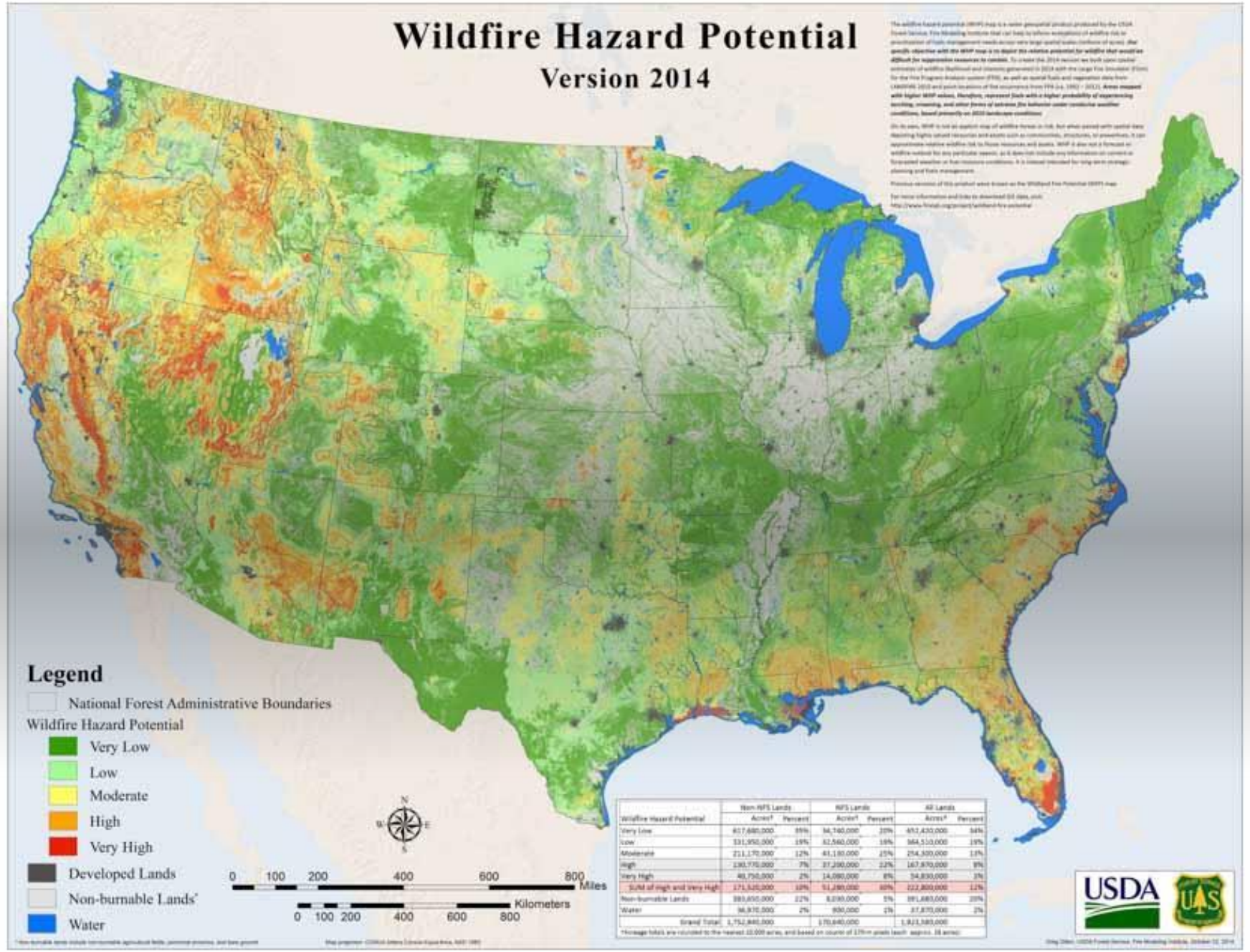
Data sources:
Forest: NLCD (1992)
Ownership: PAD (2001)
States: ESRI Data & Maps 2002
Urban areas: DCW (1998)


UNITED STATES
MÉXICO
Gulf of Mexico
CUBA
Sawmills
Click on a facility to see more information.
In 2015, U.S. production of lumber from domestic and imported timber sources amounted to some 40,304 MMBF.
Esri, HERE, Garmin, NGA, USGS
esri



HARVARD UNIVERSITY (LEFT); DAVID FOSTER

Across New England, areas like the Swift River Valley (above, left, in the 1880s and in 2010) in Petersham have seen their forests, once cut down and cleared for farmland, replenished in the 21st century.



https://www.firelab.org/project/wildfire-hazard-potential

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Source: Understanding Eastside Forests http://oregonforests.org/sites/default/files/publications/pdf/Unst_East_Forests.pdf

Source: http://azdailysun.com/news/local/plans-for-forest-thinning-near-flagstaff-up-for-public-comment/article_f590004a-a2ee-11e2-913d-001a4bcf887a.html?

Table 4. Habitat characteristics and management recommendations for some forest interior birds of North America.

Species	Nest location	Feeding location	Min. forest size*	Management recommendation
Yellow-throated vireo	C	C	250	selective cutting to maintain partially open canopy.
Red-eyed vireo	C	C	50	harvest techniques that retain at least 70% canopy closure.
Northern Parula	C	C	250	retain 60-70% canopy closure and increase shrubs.
Black-and-white warbler	G	M	750	maintain early successional forest.
American redstart	U	M	80	maintain closed canopy and thin understory trees.
Prothonotary warbler	S	G	250	maintain old-growth stands with dead/dying trees.
Worm-eating warbler	G	G	750	maintain dense understory and low tree basal area.
Louisiana waterthrush	G	G	250	maintain wooded streambanks and thick undergrowth.
Ovenbird	G	G	250	maintain closed canopy and open understory.
Barred owl	S	OU	250	maintain large areas on 150-yr. or longer rotations.
Whip-poor-will	G	O	300	pole-sized even-aged stands, retain decaying trees.
Hairy woodpecker	S	T	10	retain decaying and healthy trees during timber harvest.
Pileated woodpecker	T	T	125	retain dead/decaying trees, 150 yr. or greater rotations.
Acadian flycatcher	S	LC	80	maintain tall closed canopy; thin understory trees.
Kentucky warbler	U	G	80	dense understory with well-developed ground cover.
Hooded warbler	U	U	80	maintain canopy closure and dense shrub layer.
Scarlet tanager	C	C	25	maintain pole-size stands, well-developed canopy.
Red-shouldered hawk	C	O	250	maintain mature forest at 140 to 400 trees/acre.

* Minimum forest size in acres. (Compiled from Bushman and Therres 1988.)

C = canopy, G = ground, U = understory, S = snag, M = mid-story, SH = shrub, T = trunk,

LC = lower canopy, O = open areas, OU = open understory.

Source: https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_010130.pdf

"In the long-term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber, or energy from the forest, will generate the largest sustained mitigation benefit."

- Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report

Conclusions

- North America's ecology provides for incredible forest diversity
- Markets support private landowners and help keep the landscape forested
- Management provides diverse benefits, including mitigating wildfire conditions and supporting wildlife habitat
- Sustainable forestry and use of forest products combine to maximize climate change mitigation
- Bottom line – choosing wood supports forest growth and health in North America and gives us a sustainable (carbon storing!) building material

QUESTIONS?

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