



# Flexible applications of the AKVEG Map

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# Acknowledgements

## **AKVEG Development Team**

Matt Macander, JJ Frost (ABR); Aaron Wells (AECOM);  
Elizabeth Powers, Hunter Gravely, Tina Boucher (DOI);  
Lindsey Flagstad, Anjanette Steer, Amanda Droghini (ACCS)

## **Moose Forage Biomass Team**

Amanda Droghini (ACCS); Kristin Denryter, Katie Anderson,  
Bill Collins, Don Spalinger (ADF&G)

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## **Field Data**

Numerous ecologists and technicians for over 30 years!

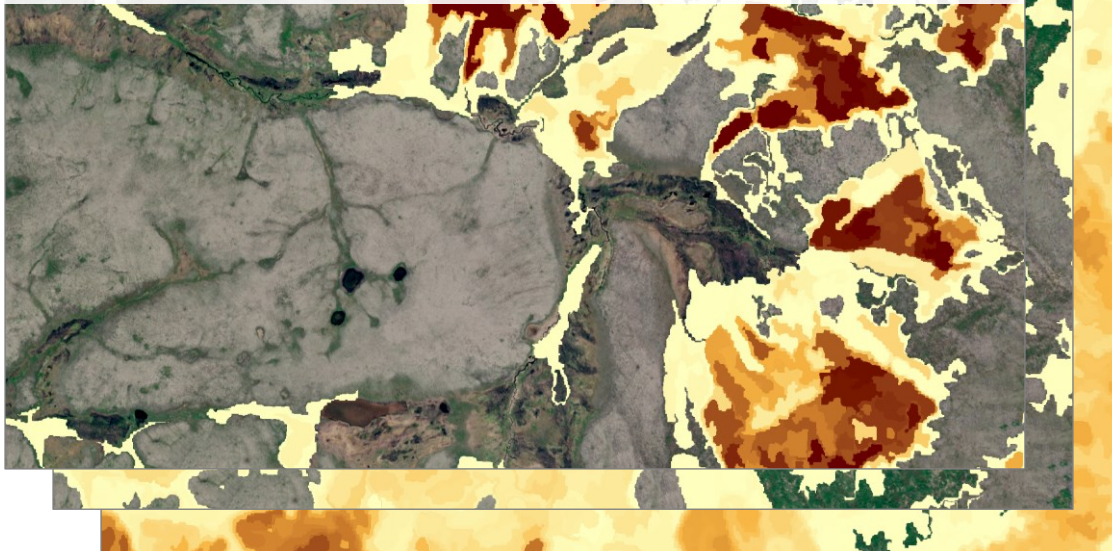


# AKVEG Map: high ecological and spatial resolution



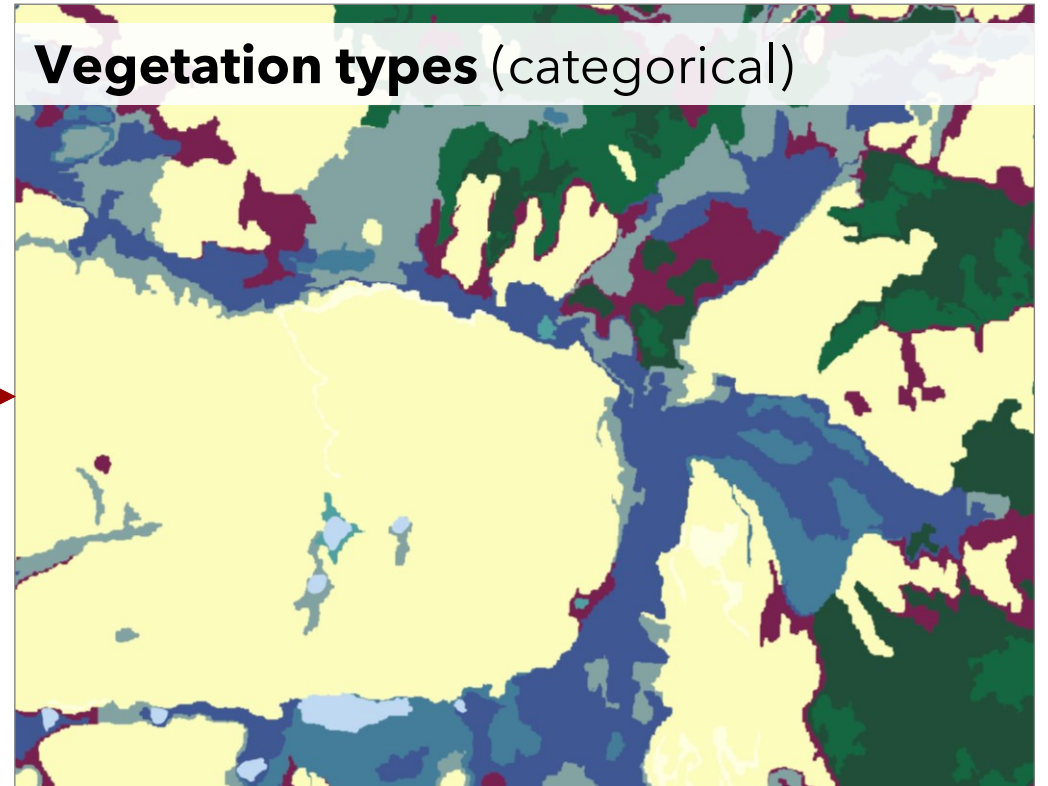
Organizes "what" is mapped

**Vegetation characteristics** (continuous)



Quantify "what is present" in numbers

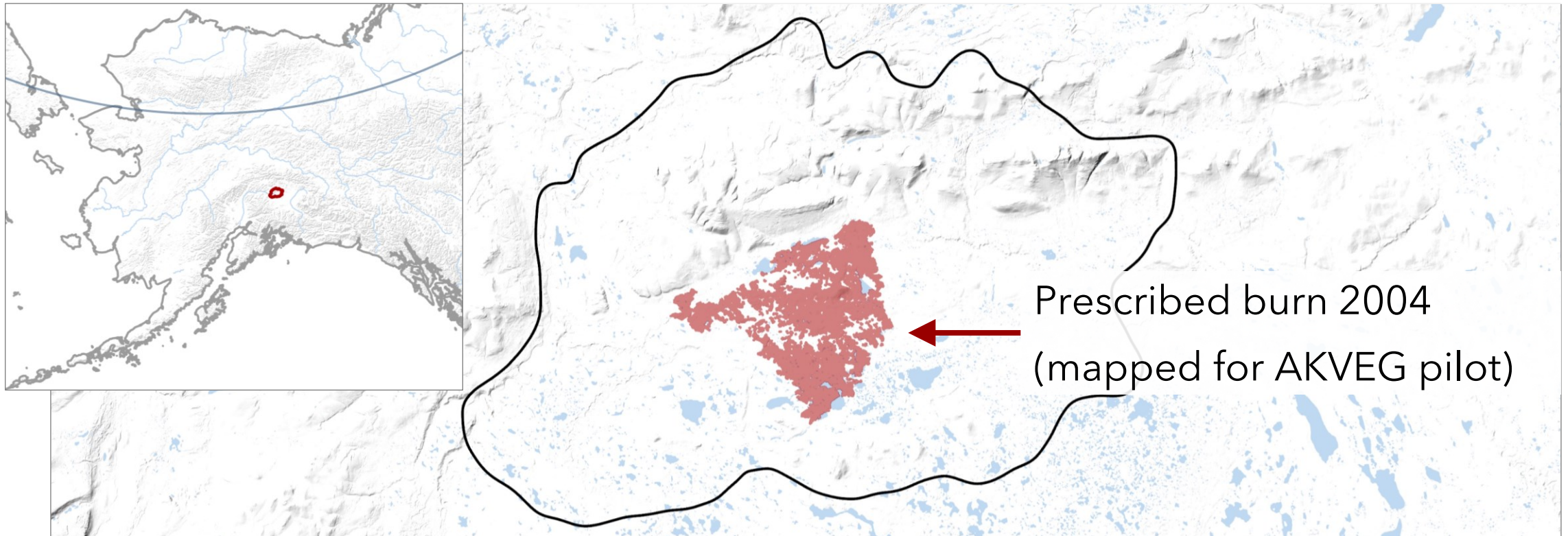
**Vegetation types** (categorical)



Describe "how the vegetation looks"



# Prescribed burn planned for Alphabet Hills

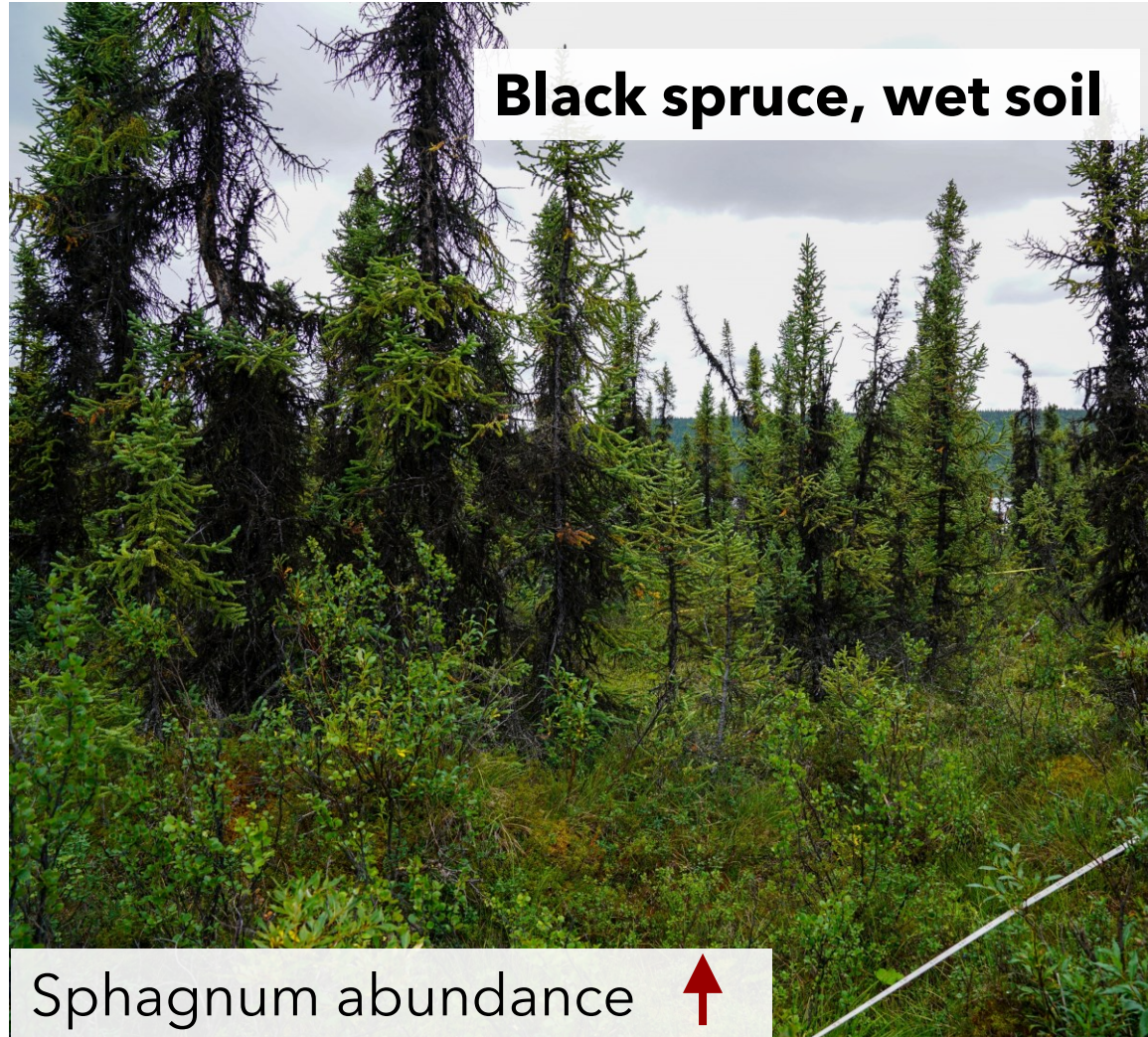


## BLM Environmental Assessment (May 2021)

1. Vegetation regeneration?
2. Recreational experience in Wild & Scenic River Corridor affected?
3. Moose habitat?

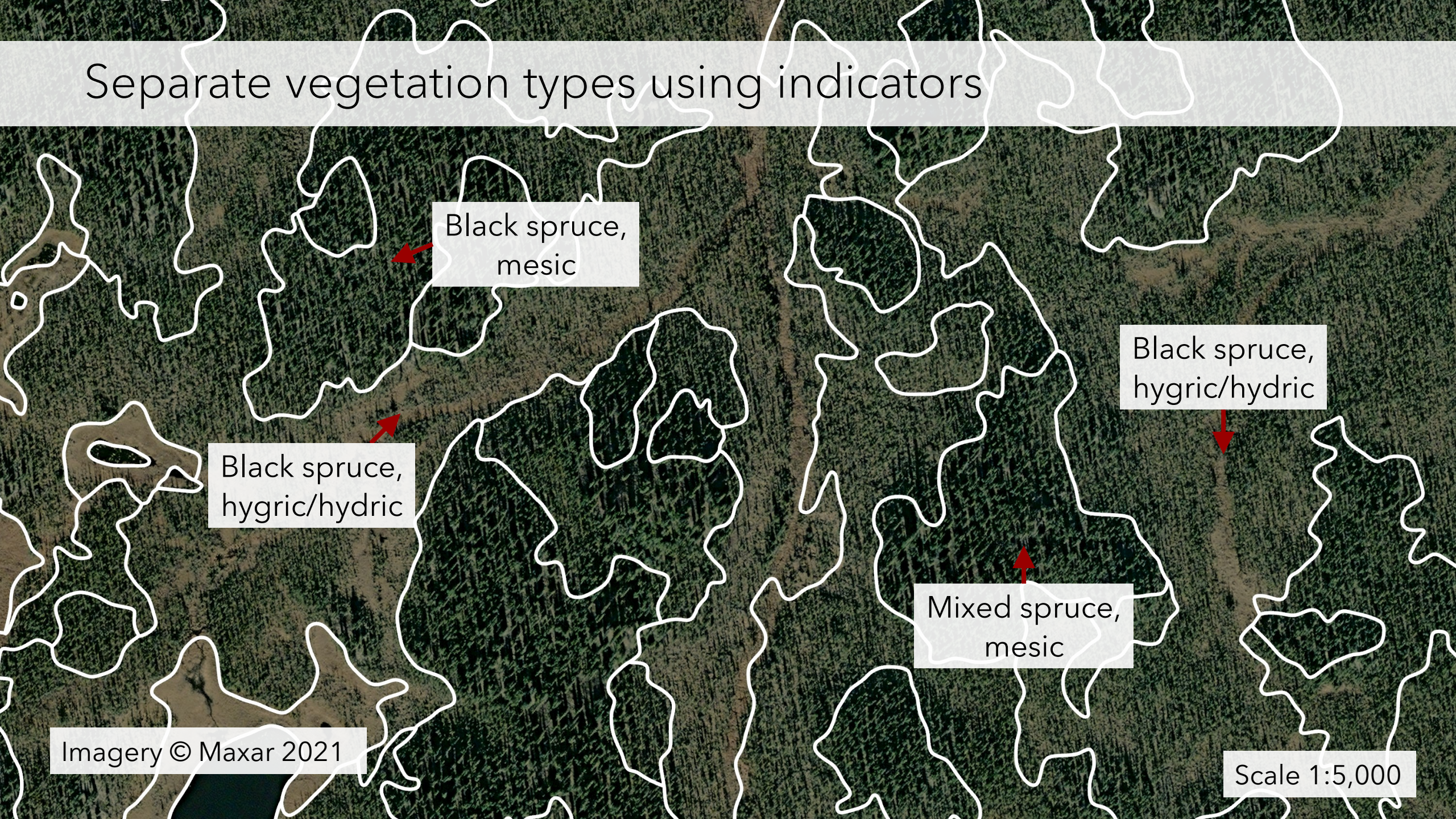


# Separate vegetation types using indicators





# Separate vegetation types using indicators



Black spruce,  
mesic

Black spruce,  
hygic/hydric

Mixed spruce,  
mesic

Black spruce,  
hygic/hydric

Imagery © Maxar 2021

Scale 1:5,000



# Describe vegetation regeneration ~15 years post-fire



77% of burned area (2004)

17% of burned area (2004)

**Expectation:**

White spruce-dominated

Black spruce-dominated





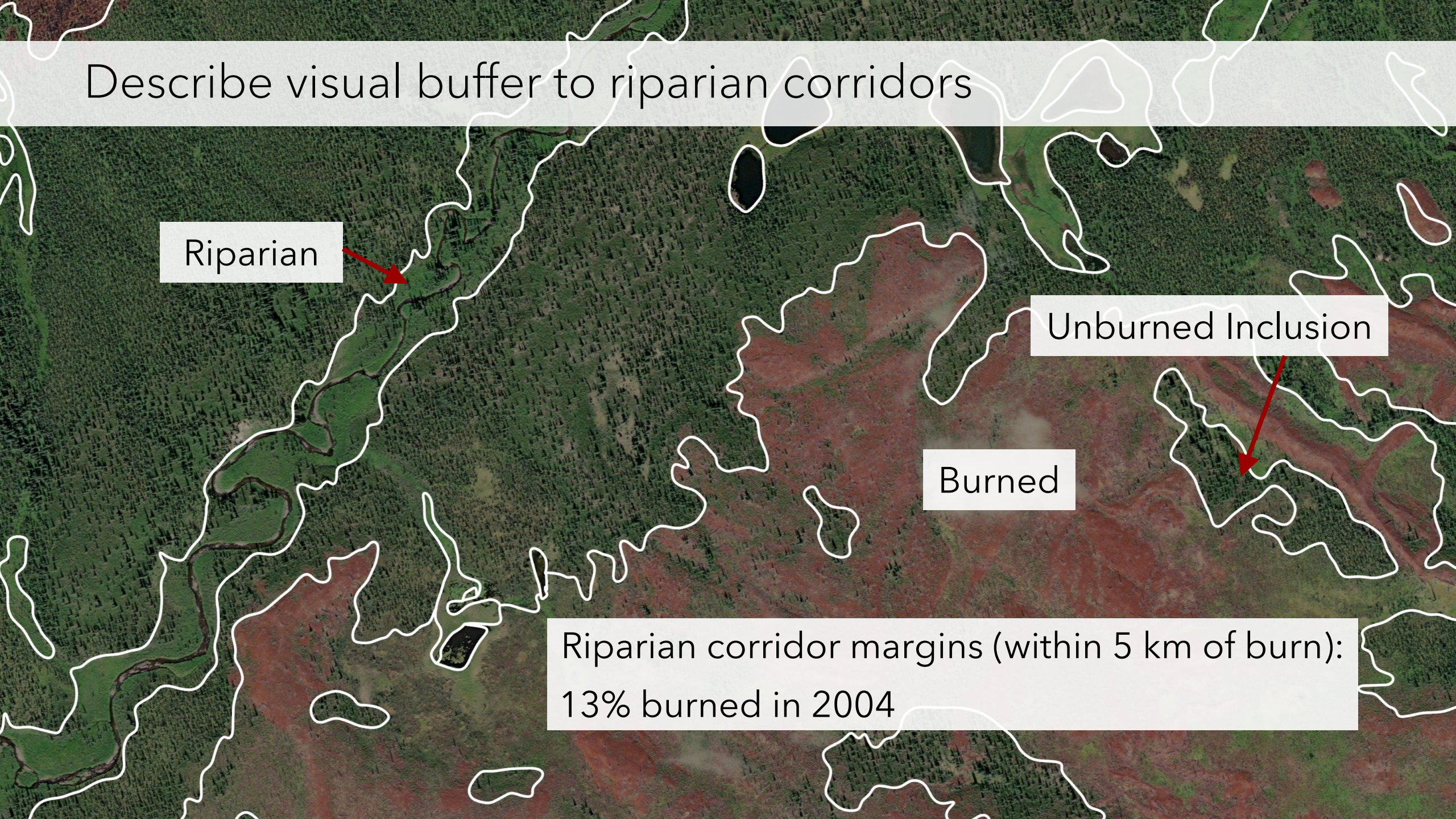
# Describe visual buffer to riparian corridors

Riparian

Unburned Inclusion

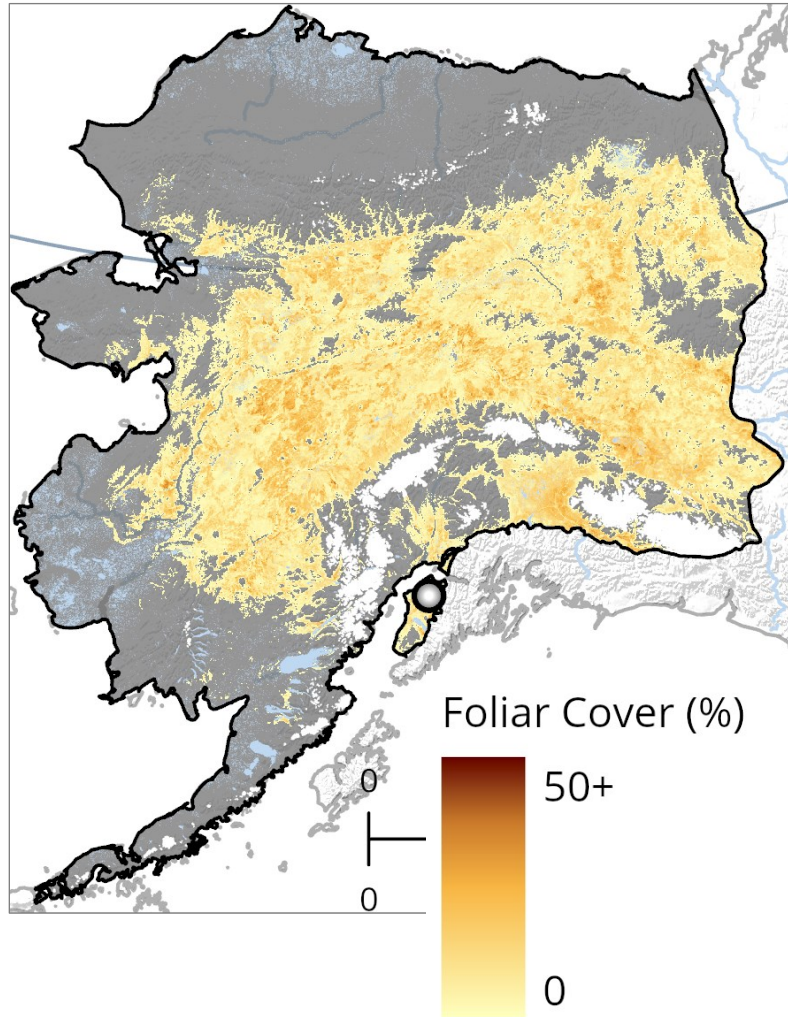
Burned

Riparian corridor margins (within 5 km of burn):  
13% burned in 2004





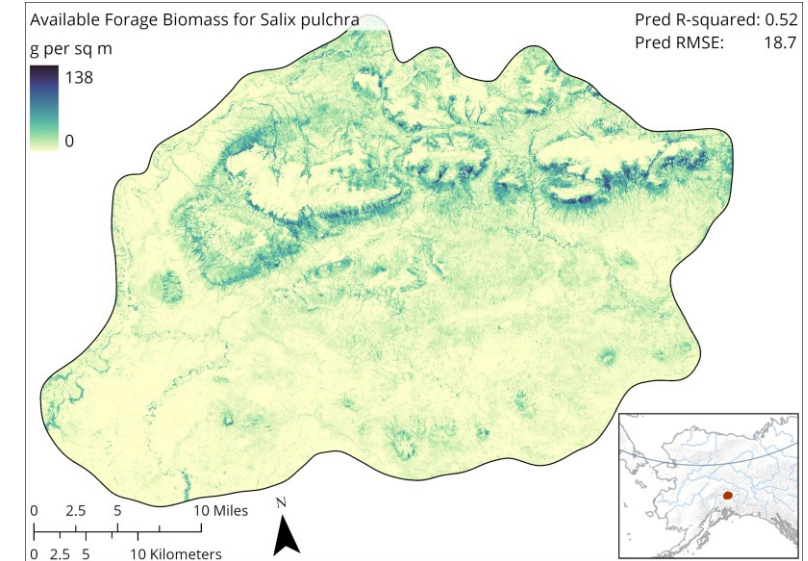
# Calibrate moose "foodscape" using AKVEG Map



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Animals don't eat vegetation types!

**AKVEG Map vegetation characteristics used to calibrate moose "Foodscape"**



# Results: Willow (*Salix* spp. > 50 cm tall)

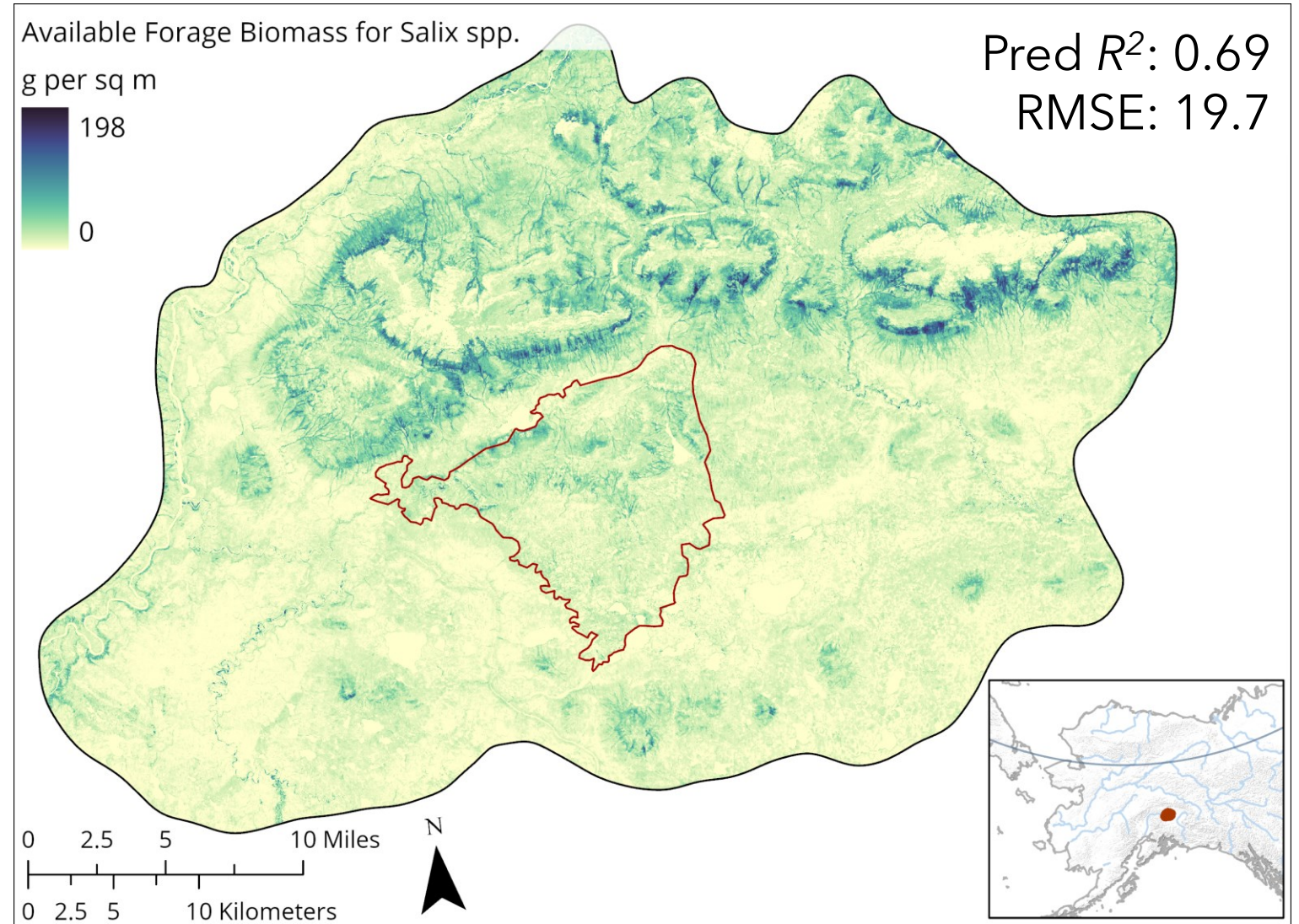
Mean g per sq m  
(within 5 km of burn):

Burned | 15

Unburned | 19

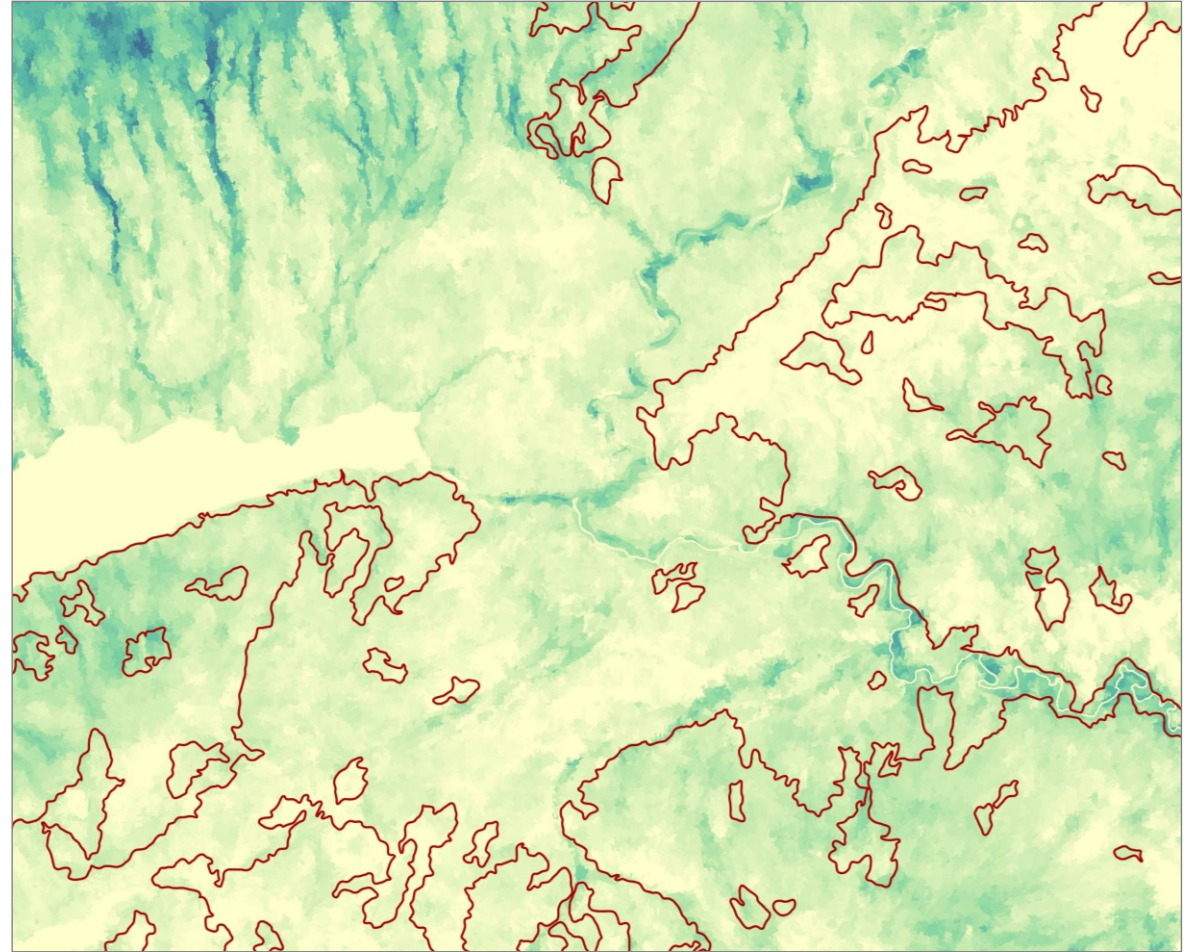
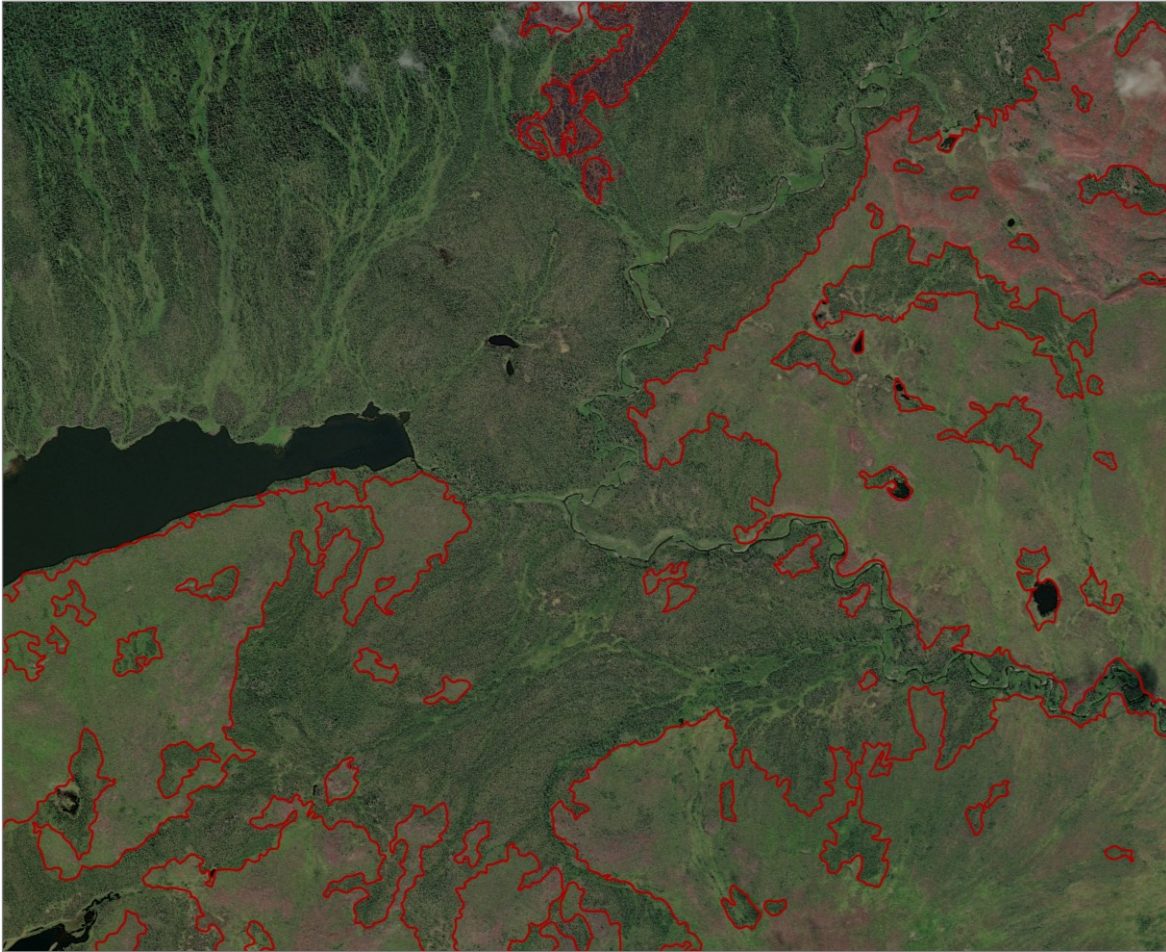
Monitoring the means is  
not biologically relevant!

**AKVEG Map enables  
repeat monitoring that is  
spatially explicit  
(biologically meaningful).**





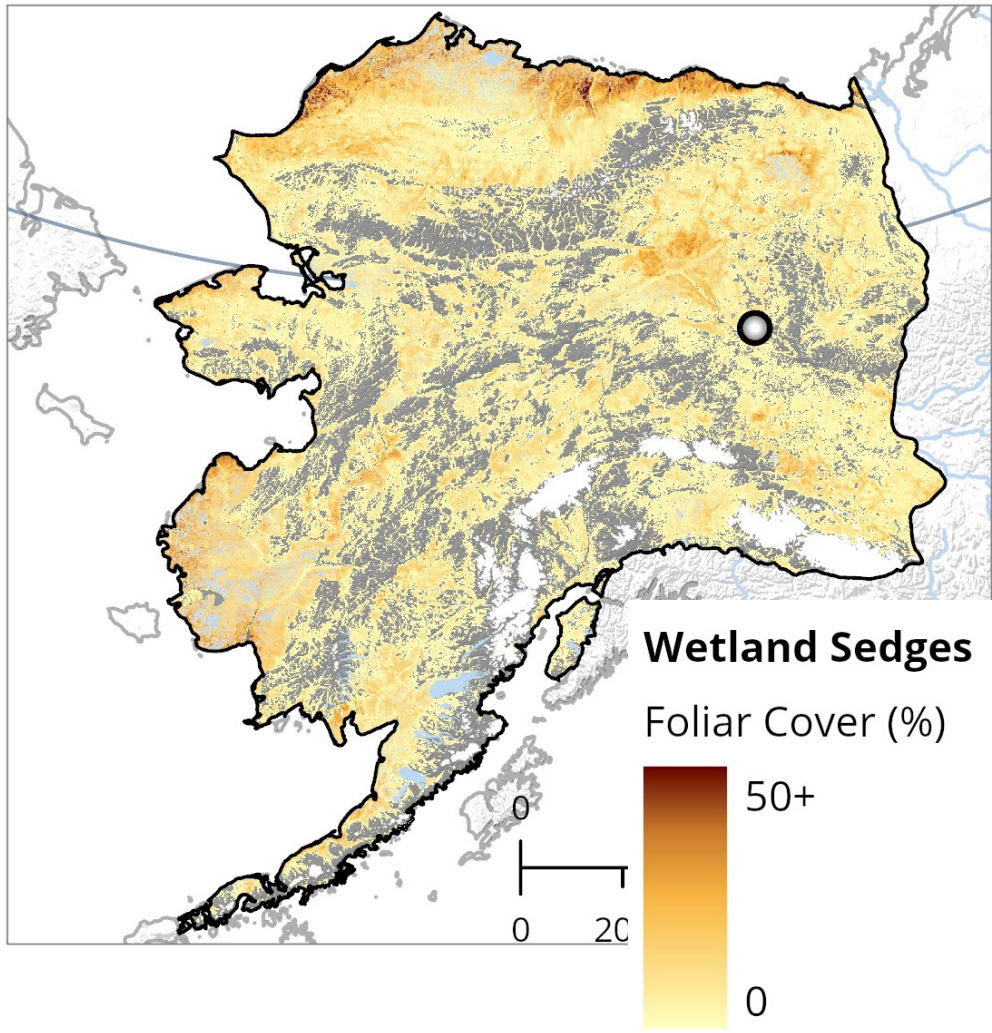
After 15 years, no clear increase of "food" within burn



But... biomass expected to peak 20-30 years post fire & willow diversity is higher.



# Statewide in extent



# Flexible to local applications

