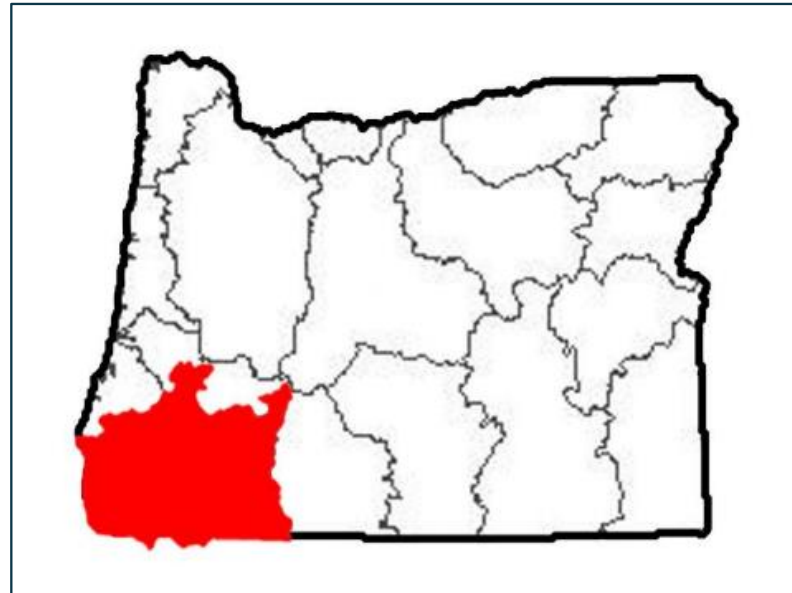


# Assessing Ecological Values in the Rogue Basin of Oregon

Sara Vickerman, Defenders of Wildlife  
Jimmy Kagan, Institute for Natural Resources  
December 2014

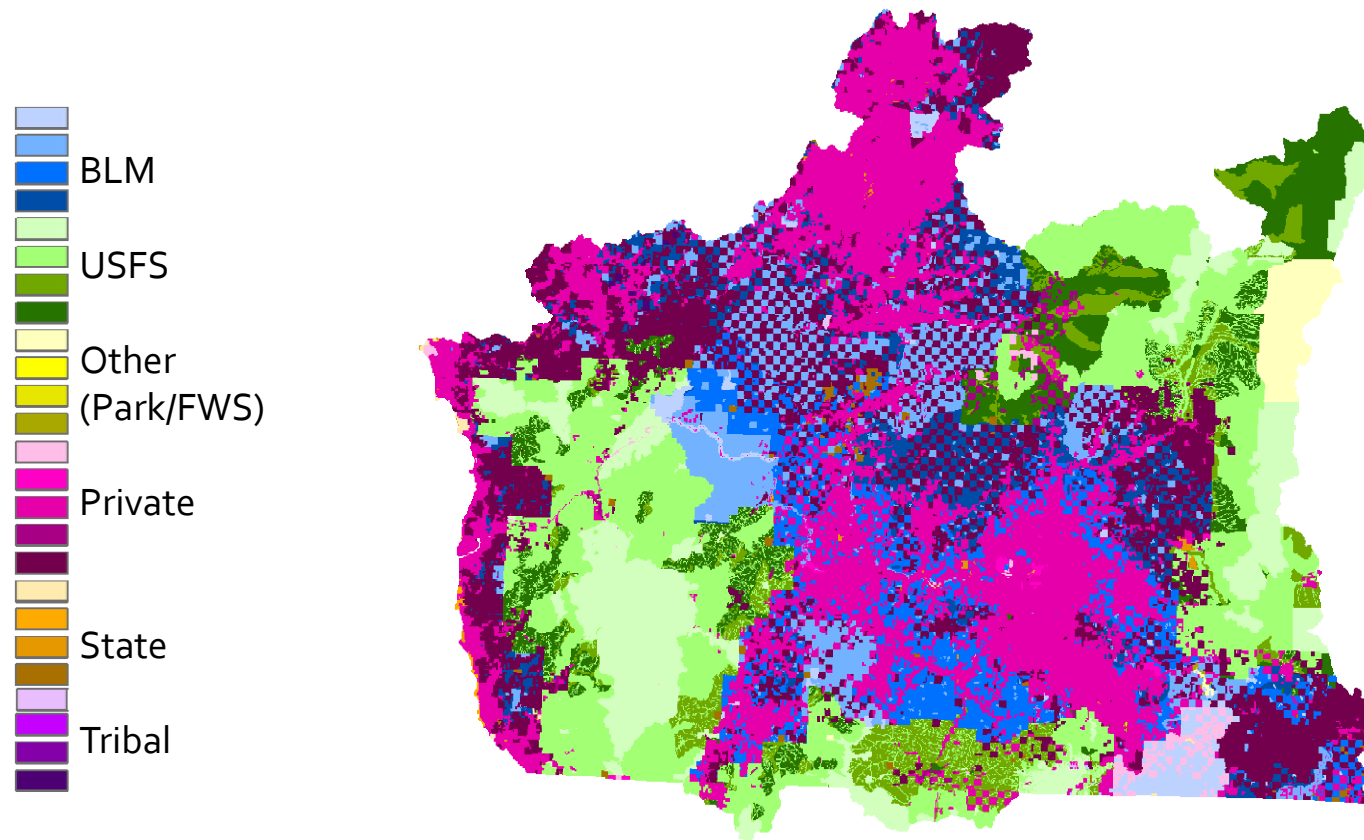


# Rogue Basin





# Mixed ownership with lots of federal land

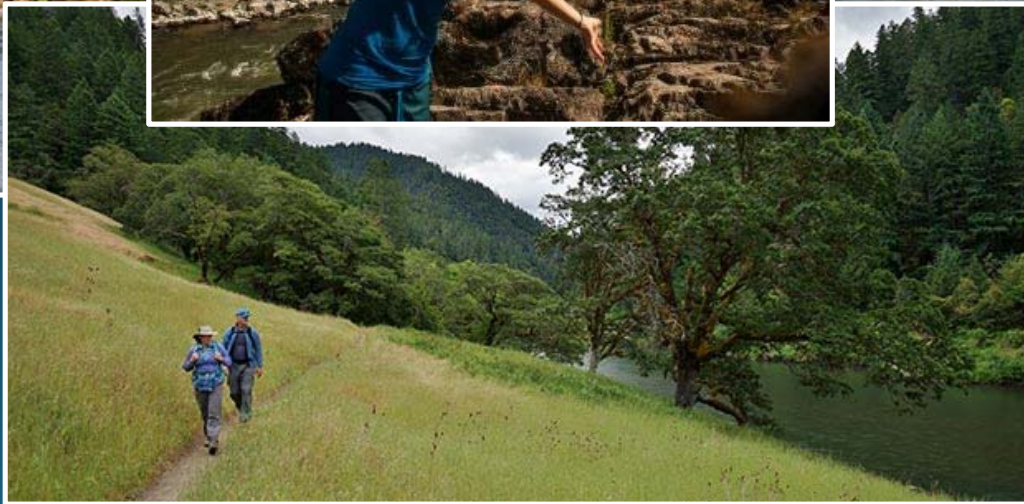
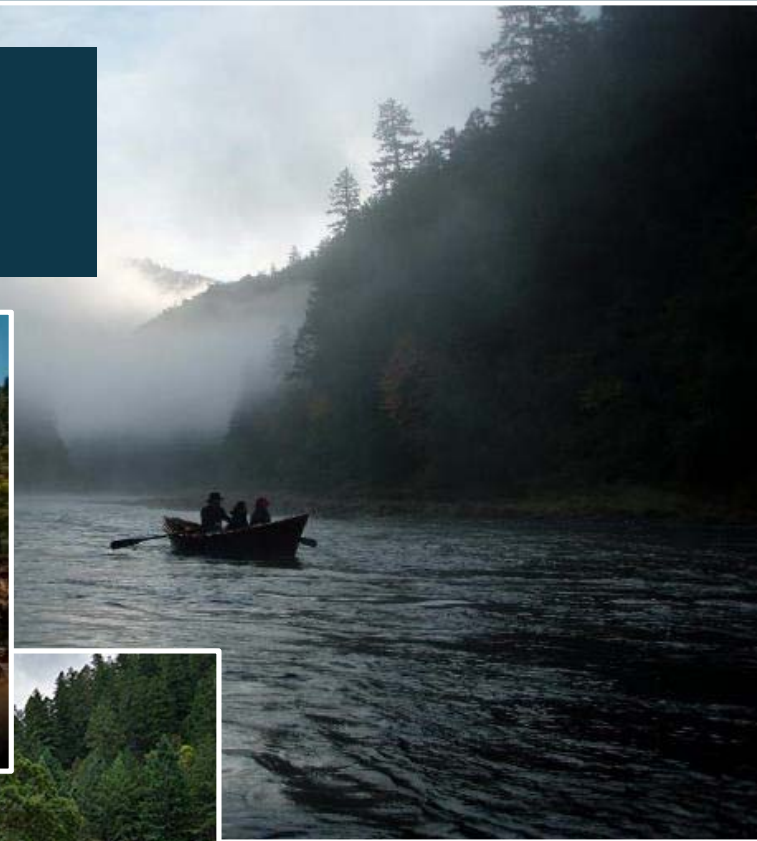


# Internationally significant biodiversity values





# World class recreational activities



# History of adversarial politics





Progress toward common ground regarding  
threat of fire



Good place to test application of ecological integrity assessment and highlight nature's benefits

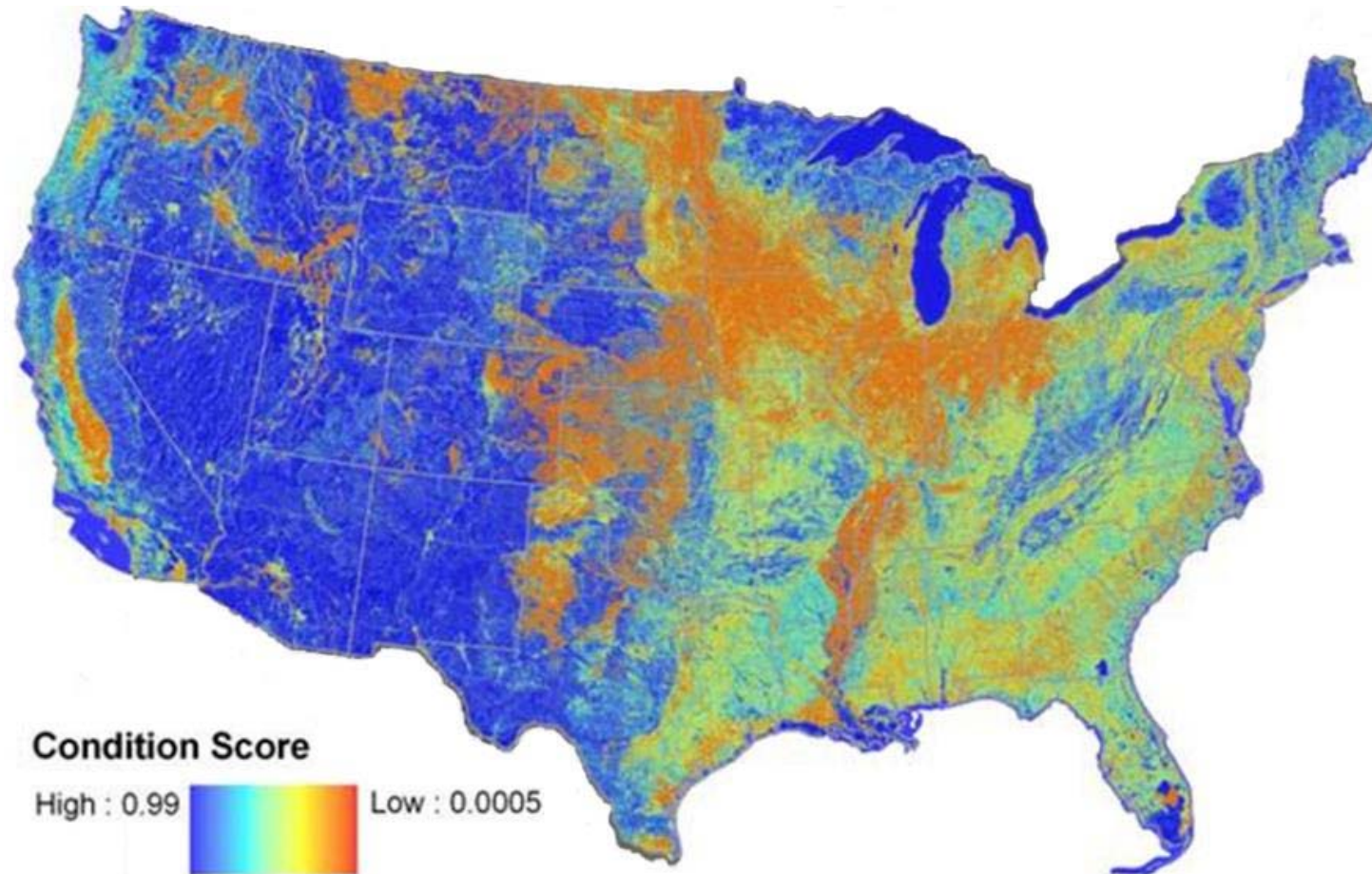




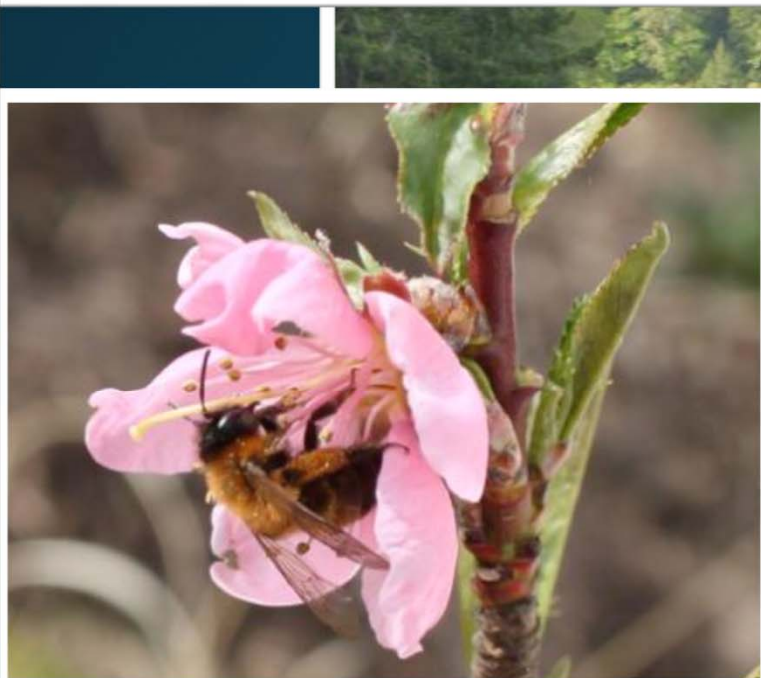
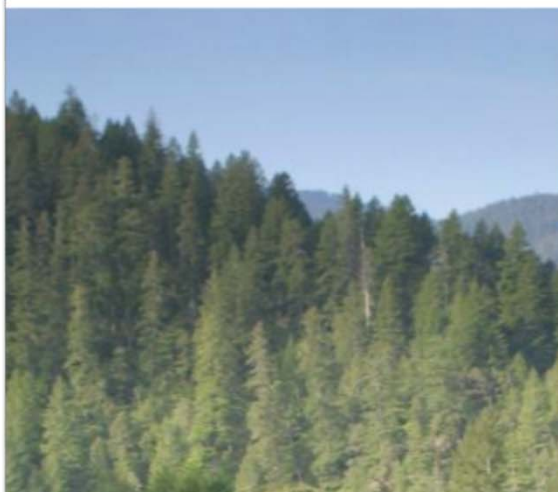
## Ecological integrity means...

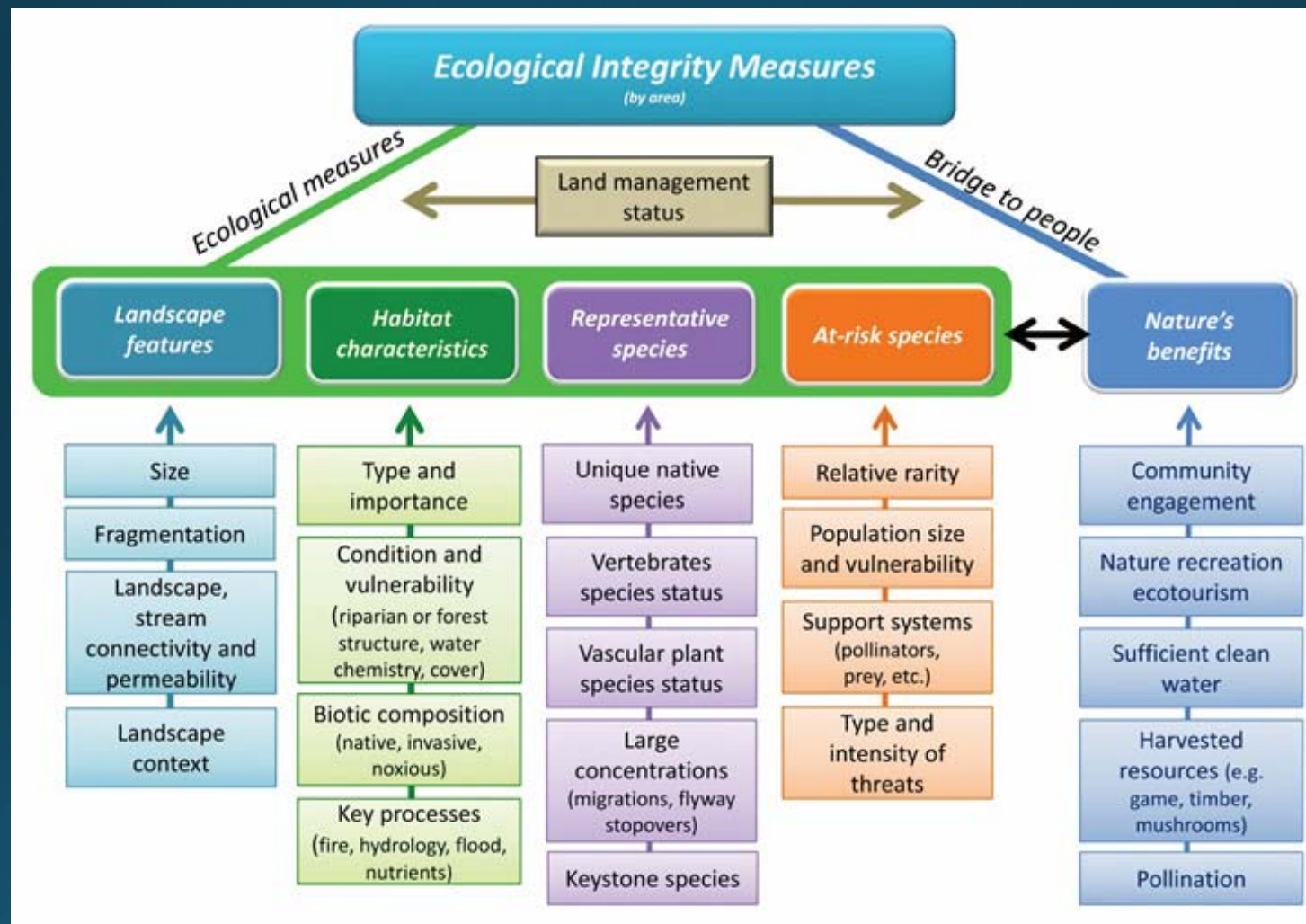
1. Ecosystem supports community of organisms comparable to natural habitat
2. Minimal human influence
3. Natural range of variability

# Ecological integrity

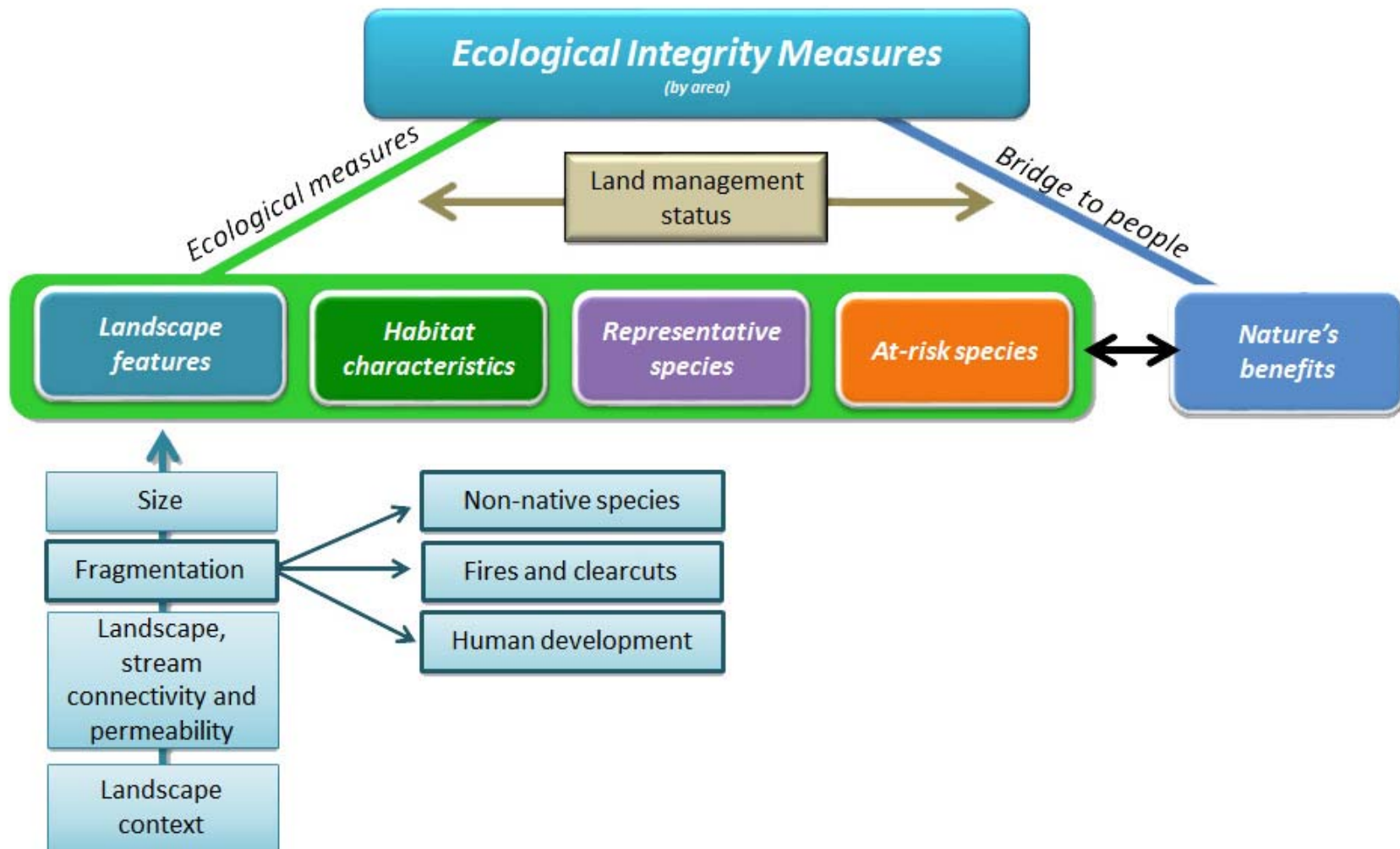


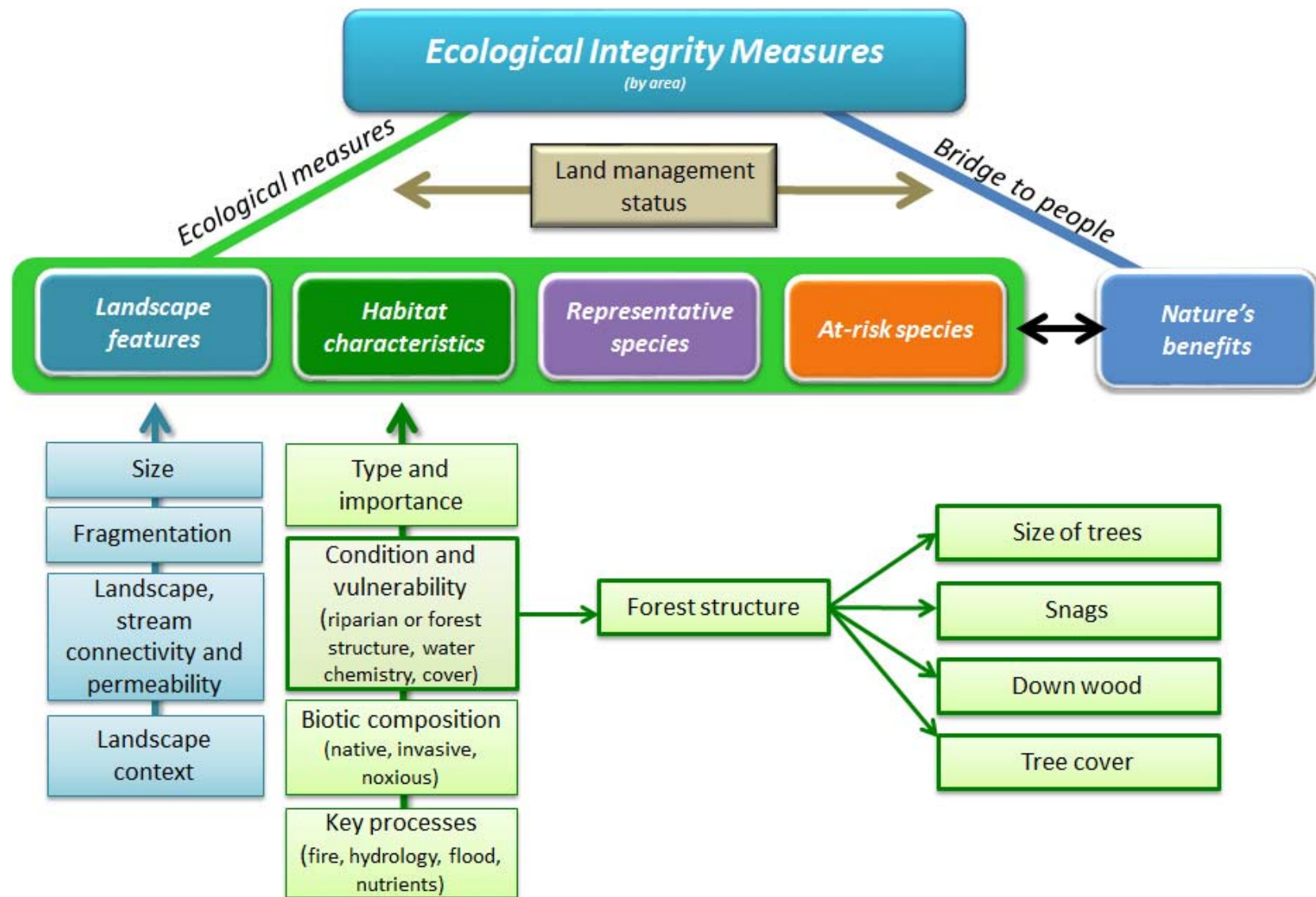










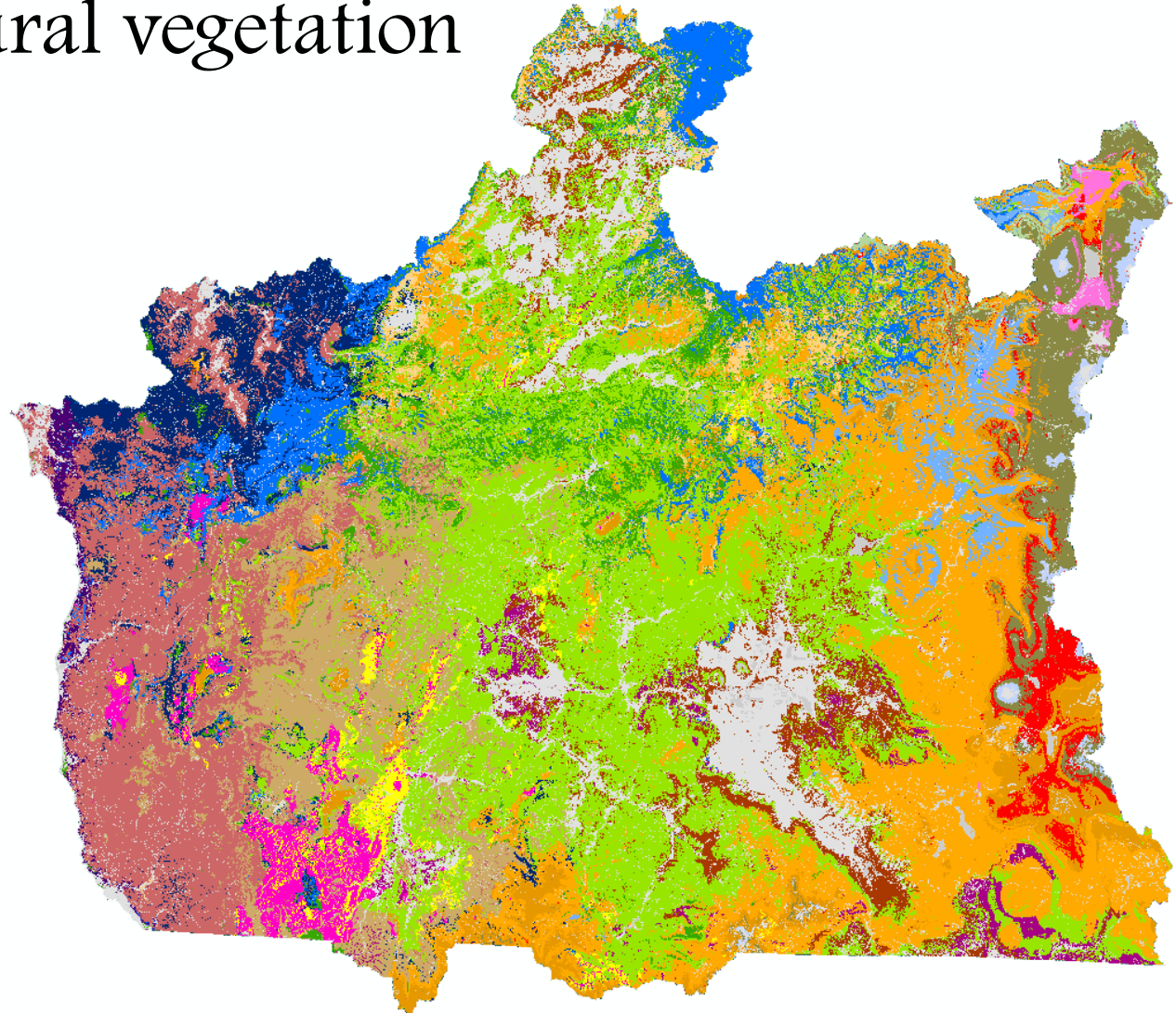




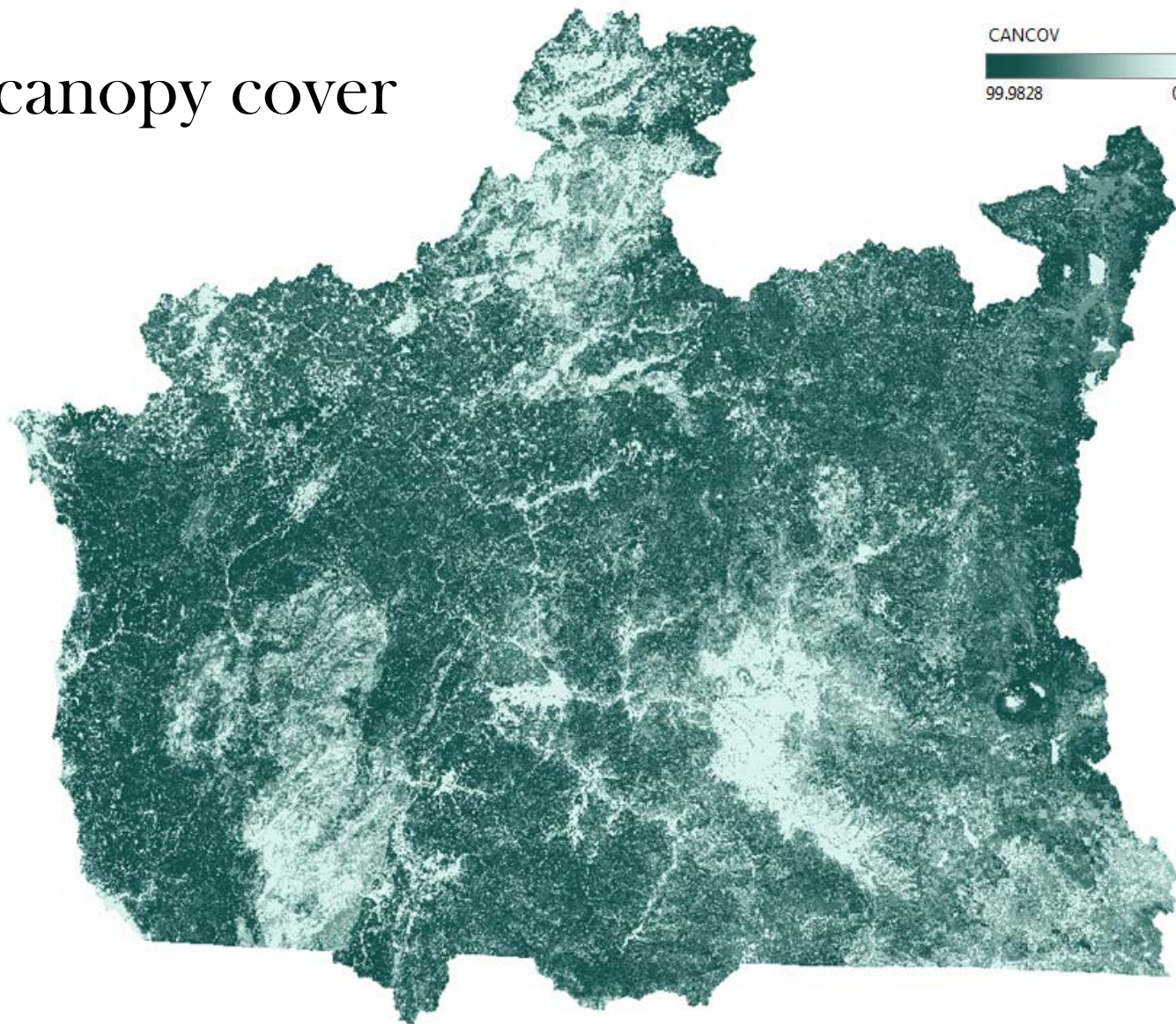
# Potential natural vegetation

- Barren
- Douglas-fir - Dry
- Douglas-fir - Moist
- Jeffrey pine
- Lodgepole pine cold
- Mountain hemlock - Cold Dry
- Not Modeled
- Oregon white oak
- Pacific silver fir - Intermediate
- Ponderosa pine - Dry
- Shasta red fir - Moist
- Sitka spruce

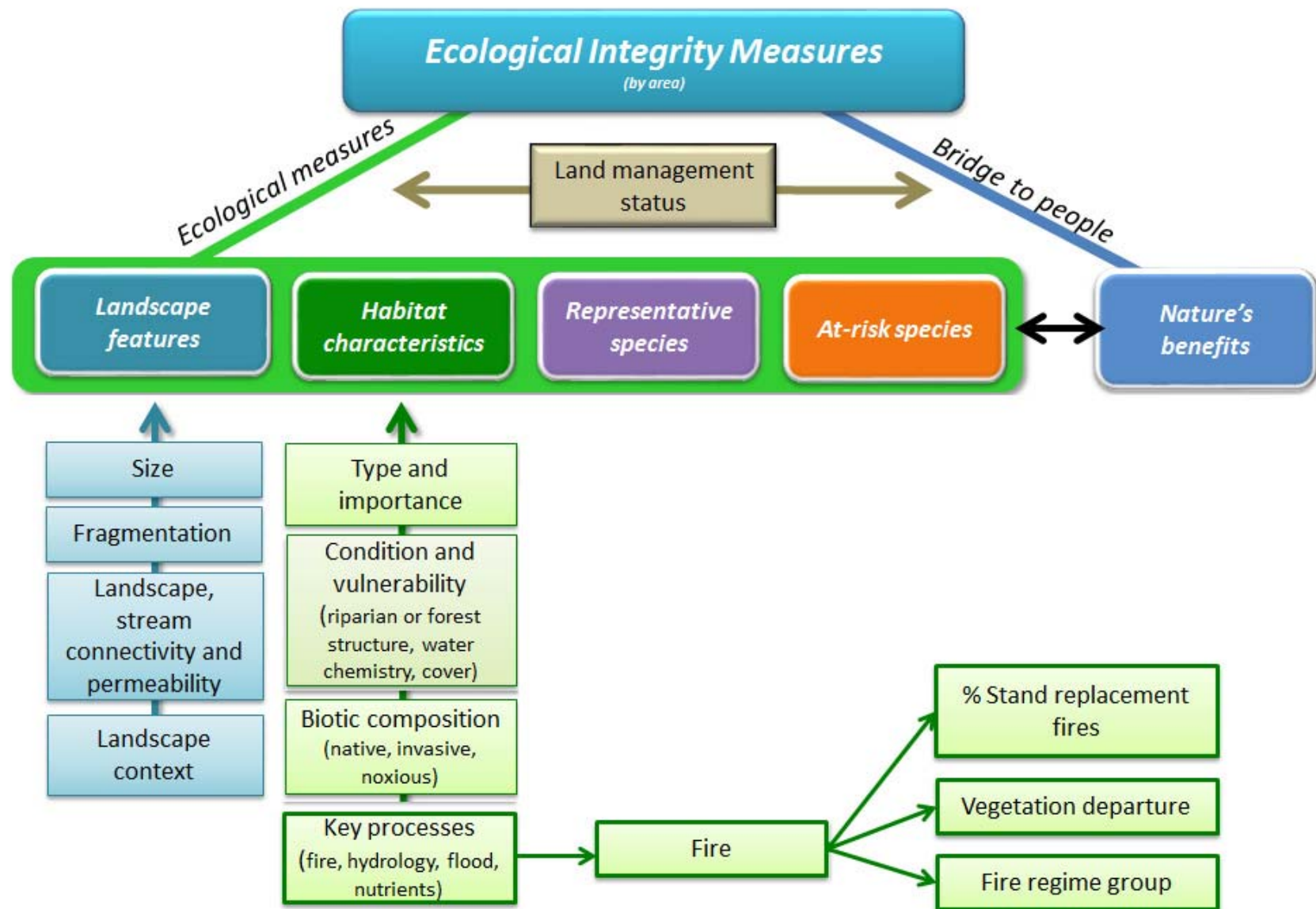
- Subalpine parkland
- Tan oak - Douglas-fir - Dry
- Tan oak - Douglas-fir - Moist
- Ultramafic
- Water
- Western hemlock - Hyperdry
- Western hemlock - Intermediate
- Western hemlock - Moist
- Wetland
- White fir - Cool
- White fir - Intermediate
- White fir - Warm moist



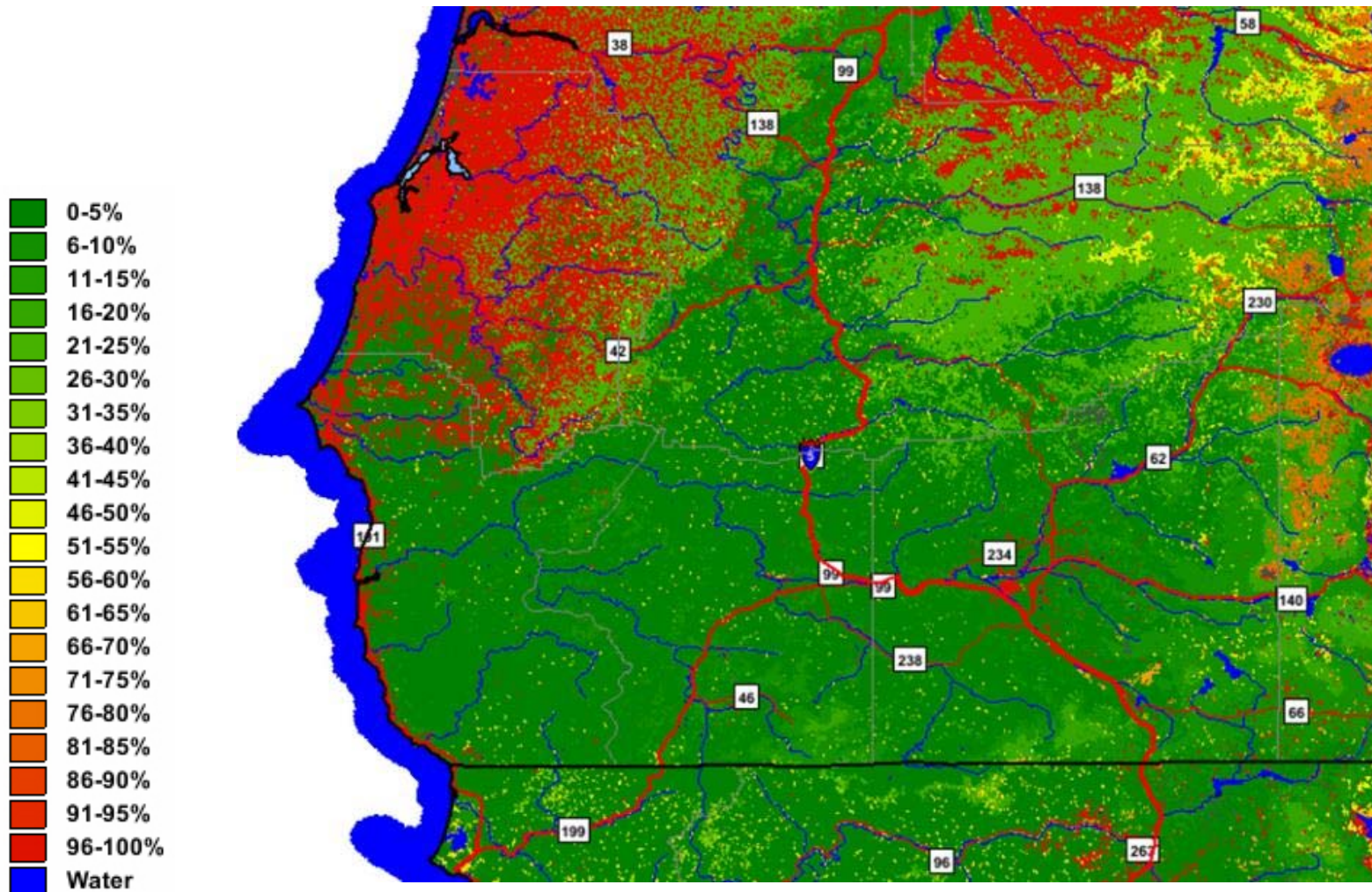
# Forest canopy cover



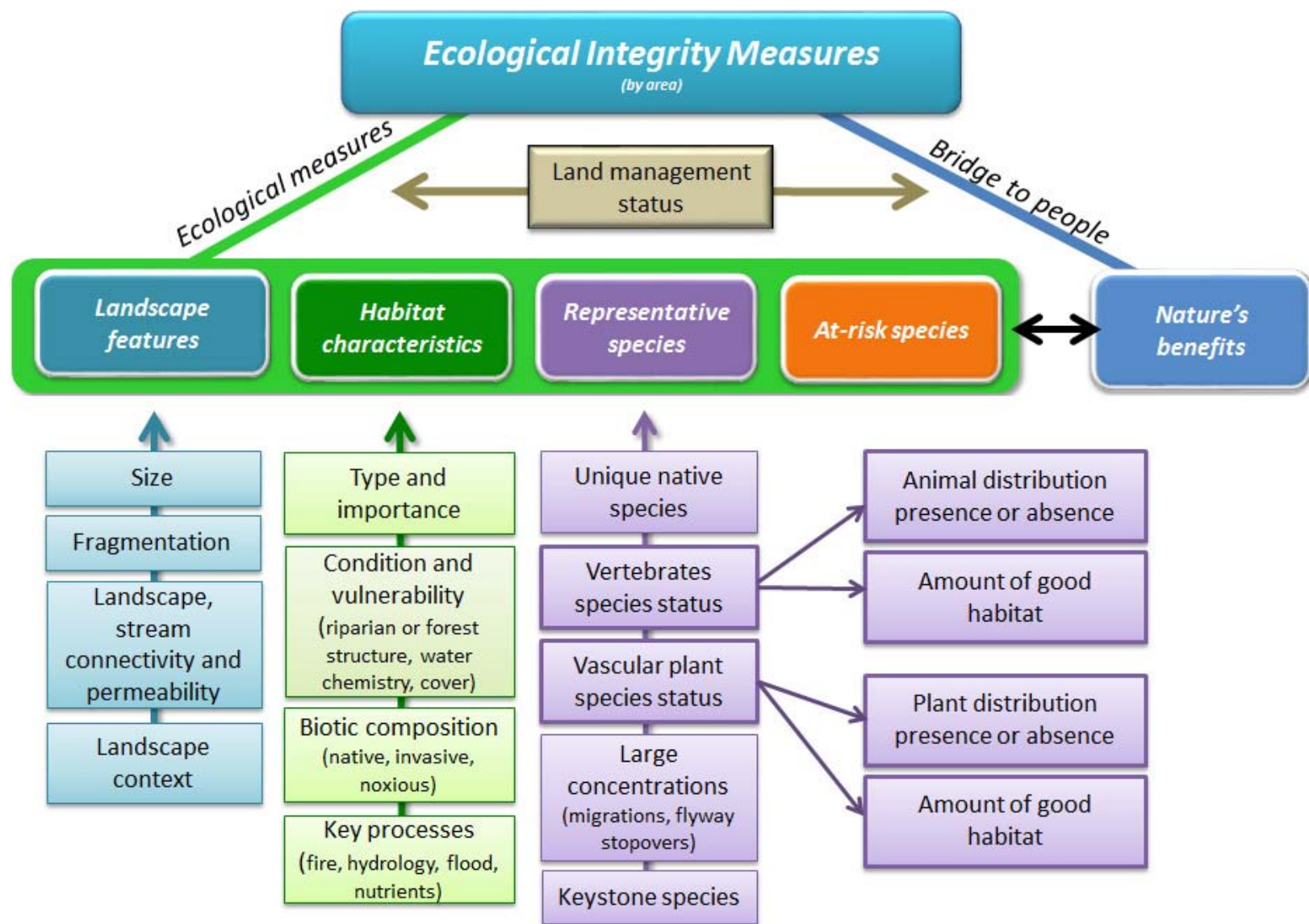




# Percent stand replacement fires (LAND FIRE - 2010)

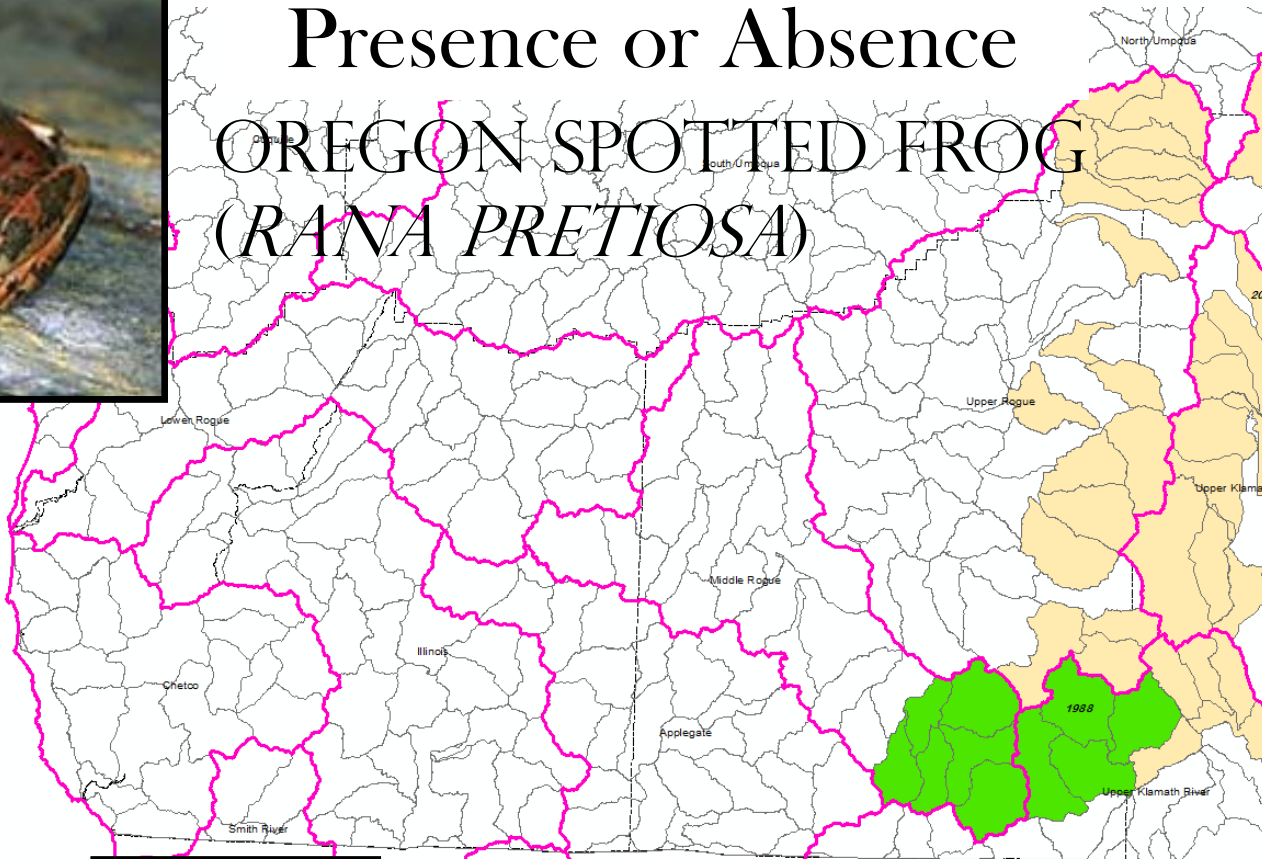






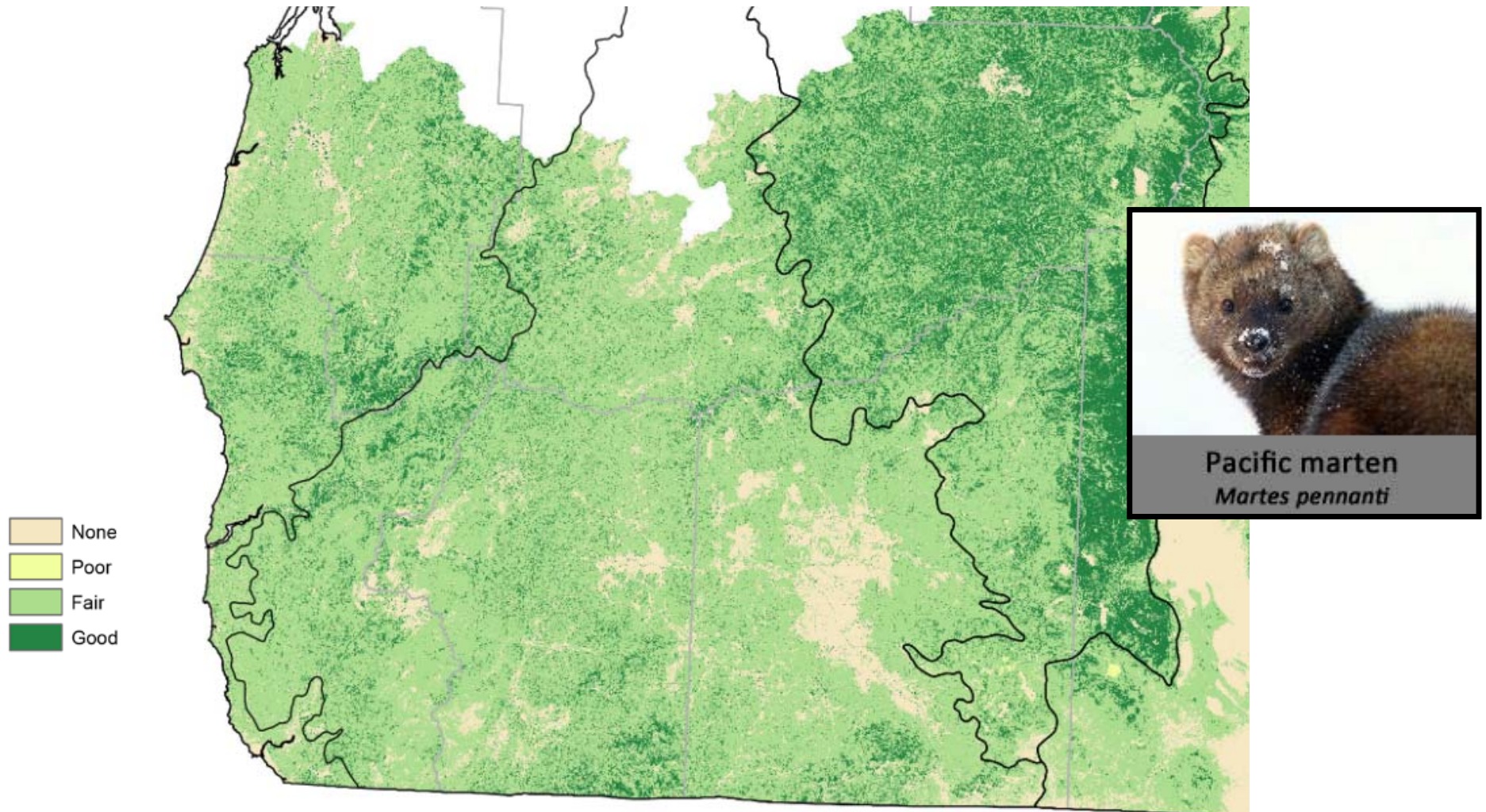


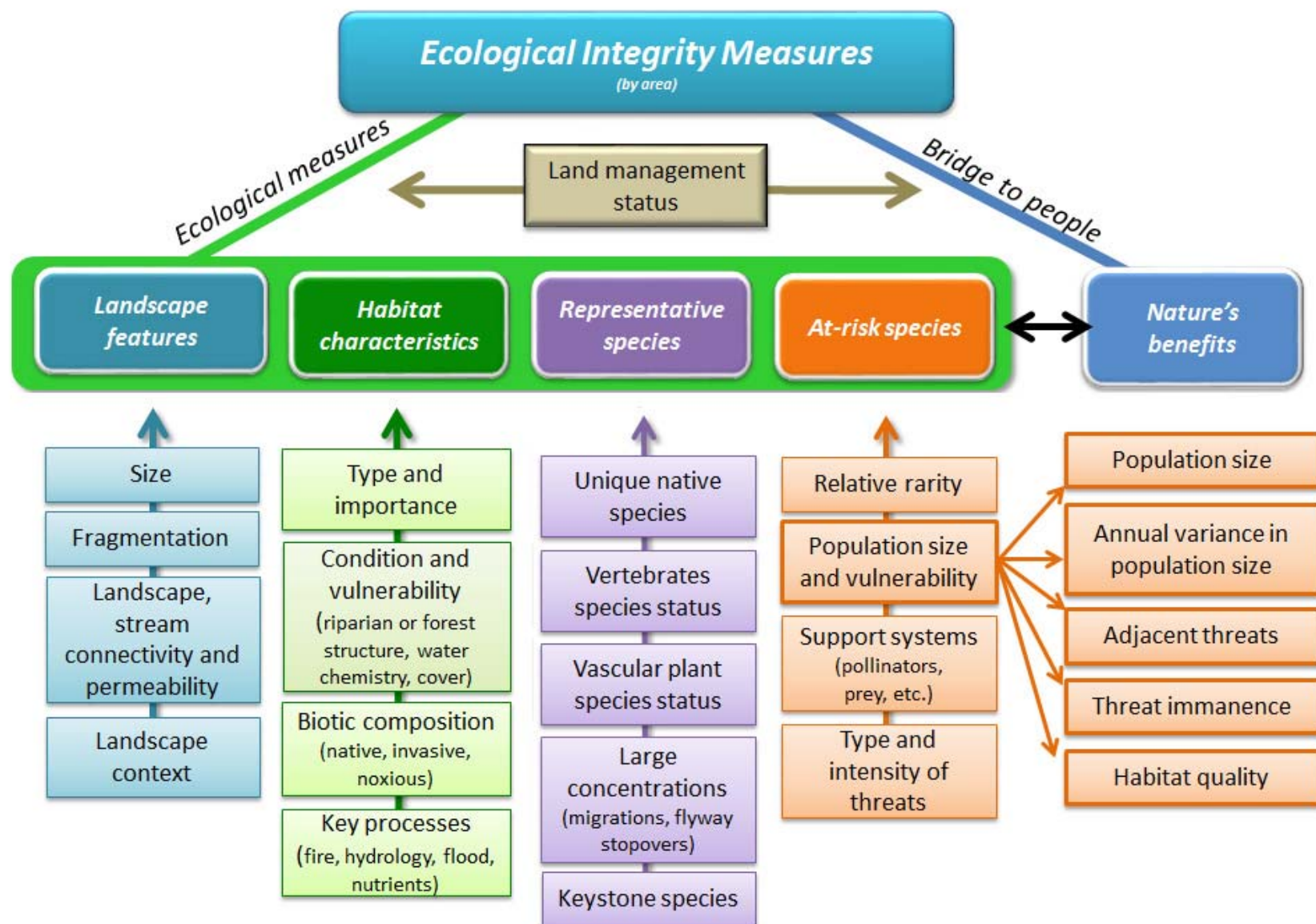
# Presence or Absence OREGON SPOTTED FROG (*RANA PRETIOSA*)





# Predicted habitat within occupied watersheds





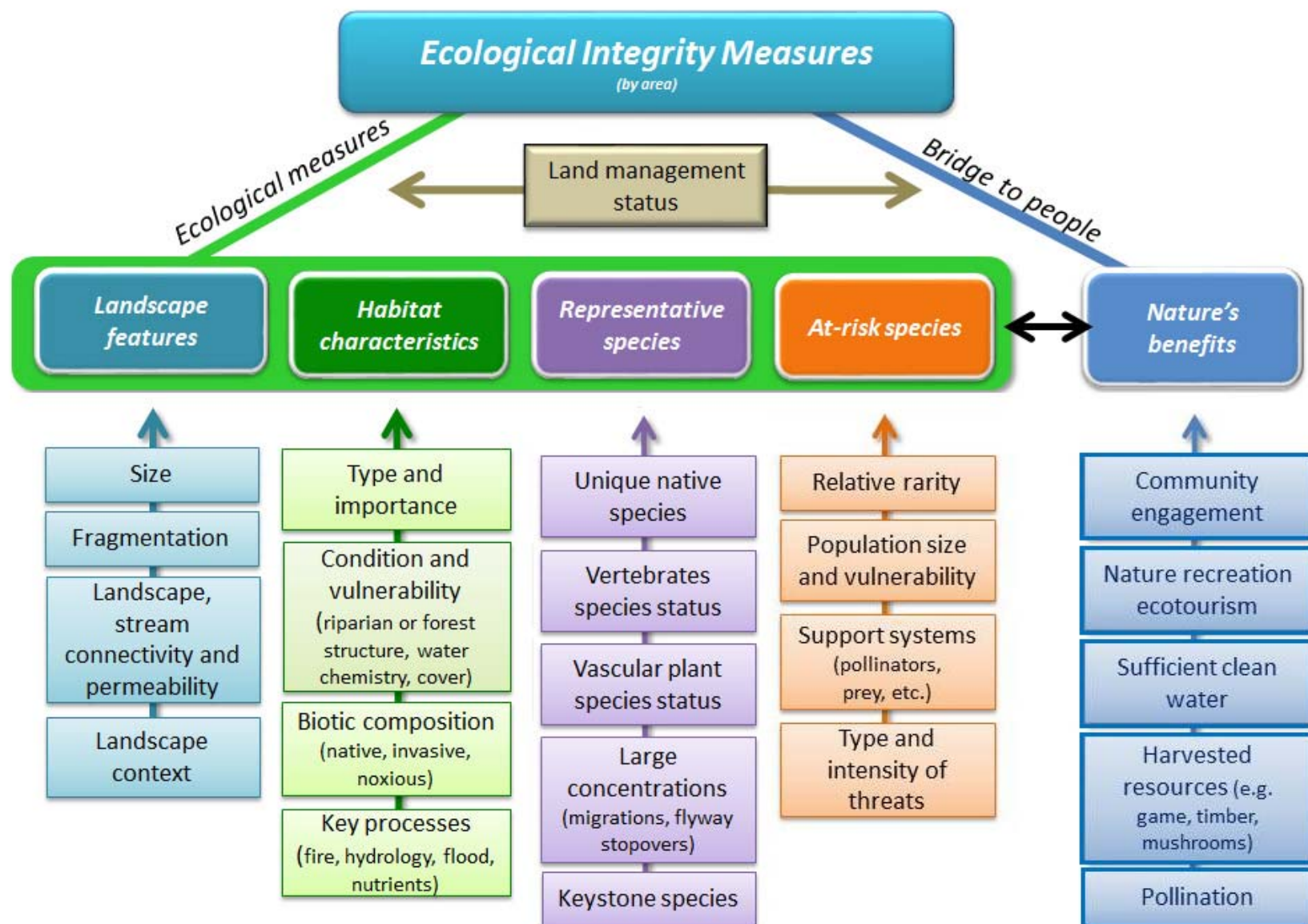












# Ecosystem services — the values that nature provides





# Principles to Guide Assessments of Ecosystem Service Values



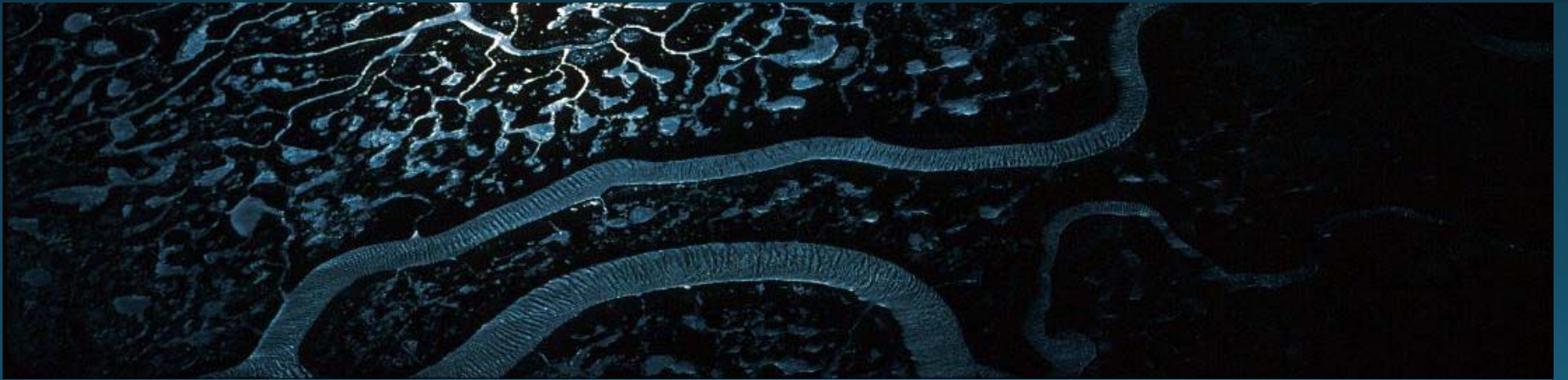
*Authors:*

Ervin, D., S. Vickerman, S. Ngawhika, F. Beaudoin, S. Hamlin,  
E. Dietrich, P. Manson, J. Schoenen.

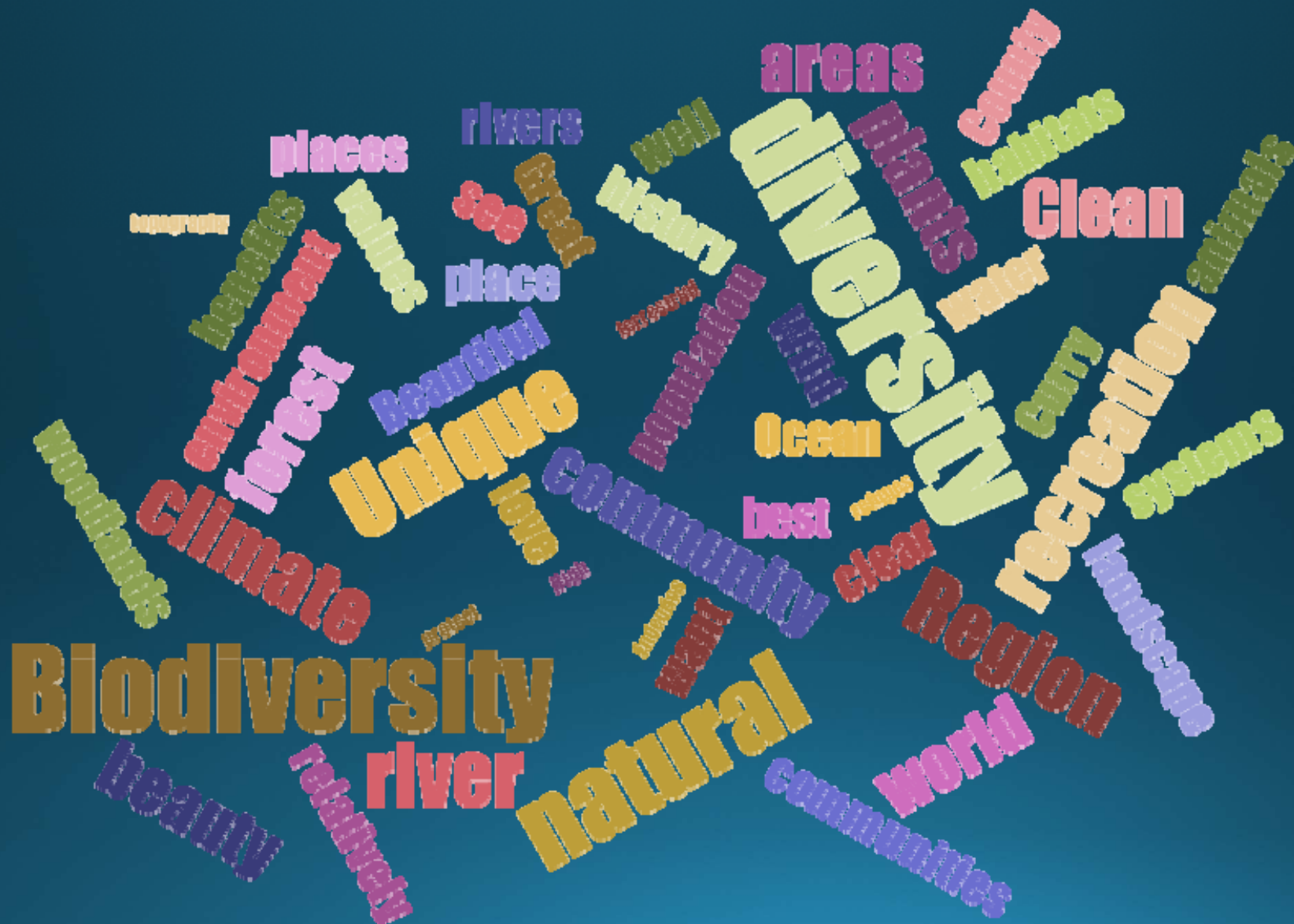
2014



Assessing the value of these benefits includes intrinsic value and need not be monetized to be considered in land management decisions







Proposed process





1.

Conduct ecological assessment to characterize natural resources and benefits they provide.



# 2.

Assess the vulnerability of the system to adverse impacts from climate change, flooding, development, etc.





# 3.

Engage agencies and stakeholders to develop a shared understanding of cumulative impacts and opportunities to align management actions.



4.

Communicate with stakeholders within/outside the region to determine expectations.





5.

Facilitate interdisciplinary collaboration to conduct quantitative and qualitative assessments of potential services to inform discussions about trade-offs.



6.

Keep stakeholders engaged, determine what worked, make adjustments based on lessons learned.



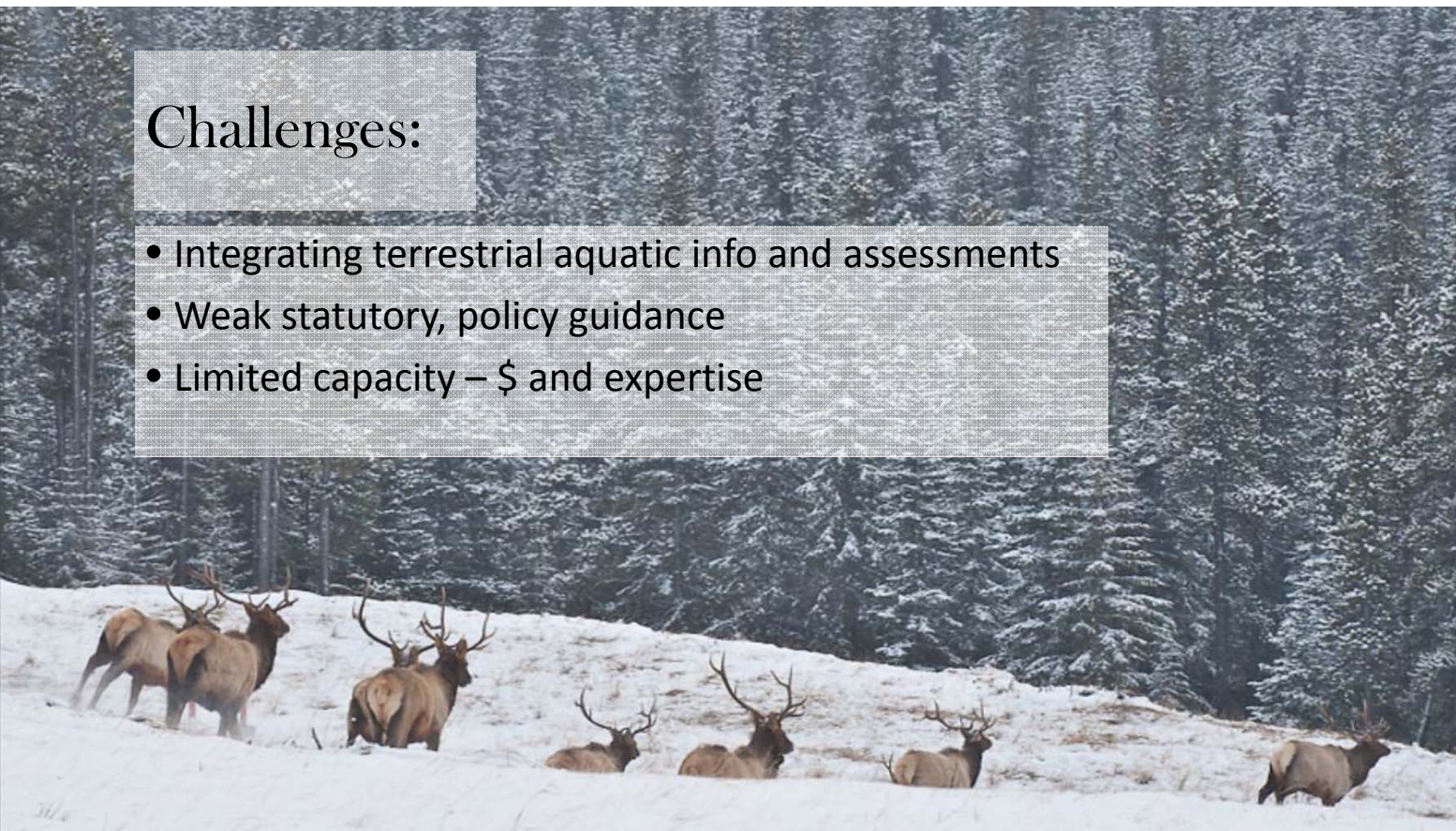


A word cloud on a dark blue background. The words are arranged in various orientations and colors. The most prominent words are 'restoration' (large, purple), 'management' (large, pink), 'ecosystem' (large, blue), 'services' (large, yellow), 'scale' (large, pink), 'climate' (large, blue), 'funding' (large, yellow), 'capacity' (large, pink), 'fire' (large, green), 'value' (large, green), 'land' (large, yellow), 'planning' (large, pink), 'needs' (large, red), 'change' (large, blue), 'water' (large, pink), 'support' (large, red), 'forest' (large, green), 'use' (large, pink), 'need' (large, yellow), 'habitat' (large, red), 'area' (large, green), 'work' (large, red), 'world' (large, pink), 'priorities' (large, blue), 'plans' (large, red), 'way' (large, yellow), 'plus' (large, yellow), 'lack' (large, blue), 'get' (large, pink), 'goals' (large, pink), 'one' (large, yellow), 'and' (large, yellow), 'more' (large, green), 'enter' (large, red), 'areas' (large, green).

restoration management ecosystem services climate funding capacity fire value land planning needs change water support forest use need habitat area work world priorities plans way plus lack get goals one and more enter areas

## Challenges:

- Integrating terrestrial aquatic info and assessments
- Weak statutory, policy guidance
- Limited capacity – \$ and expertise





## Contact information

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