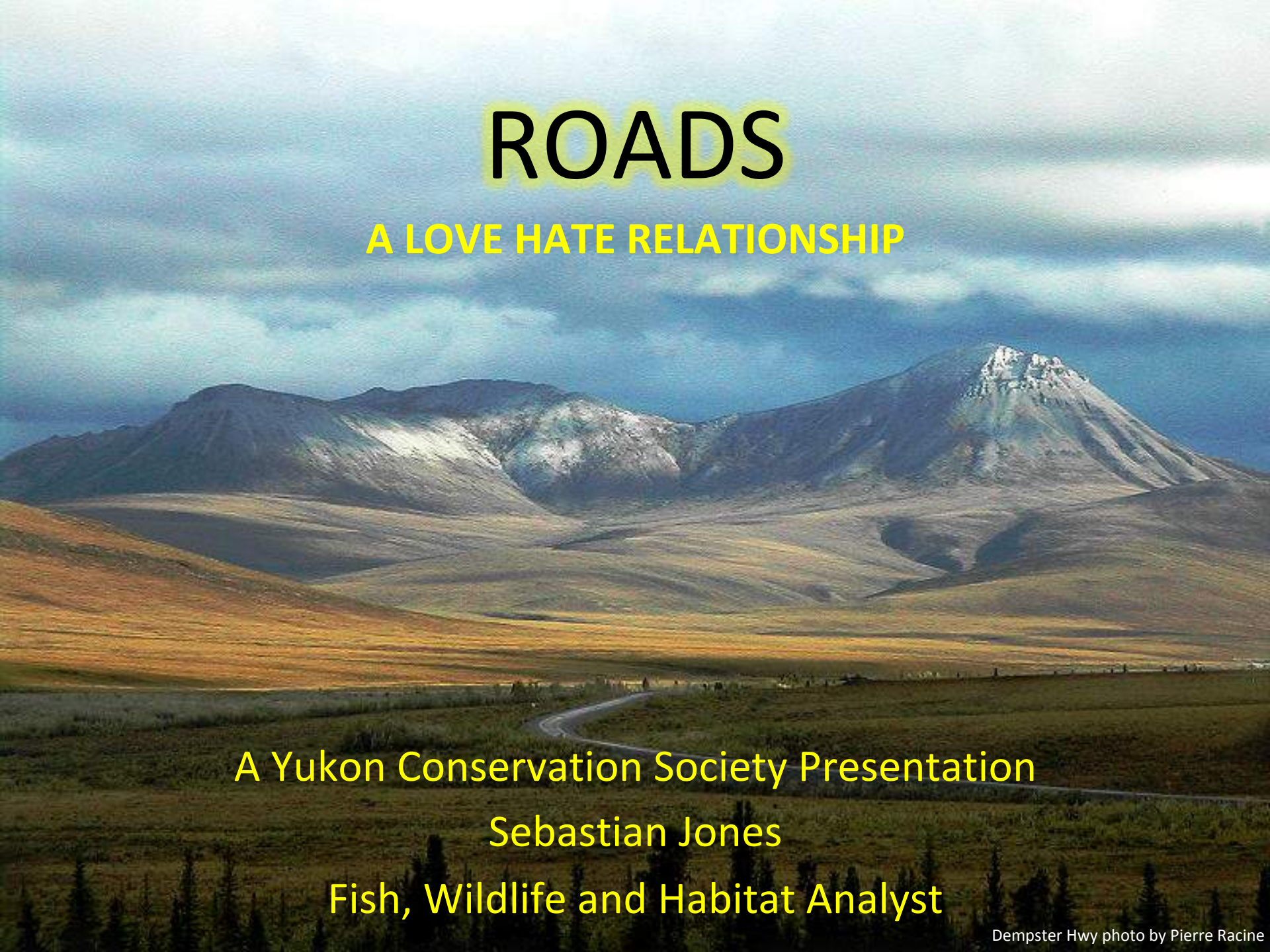


ROADS

A LOVE HATE RELATIONSHIP

A Yukon Conservation Society Presentation

Sebastian Jones

Fish, Wildlife and Habitat Analyst

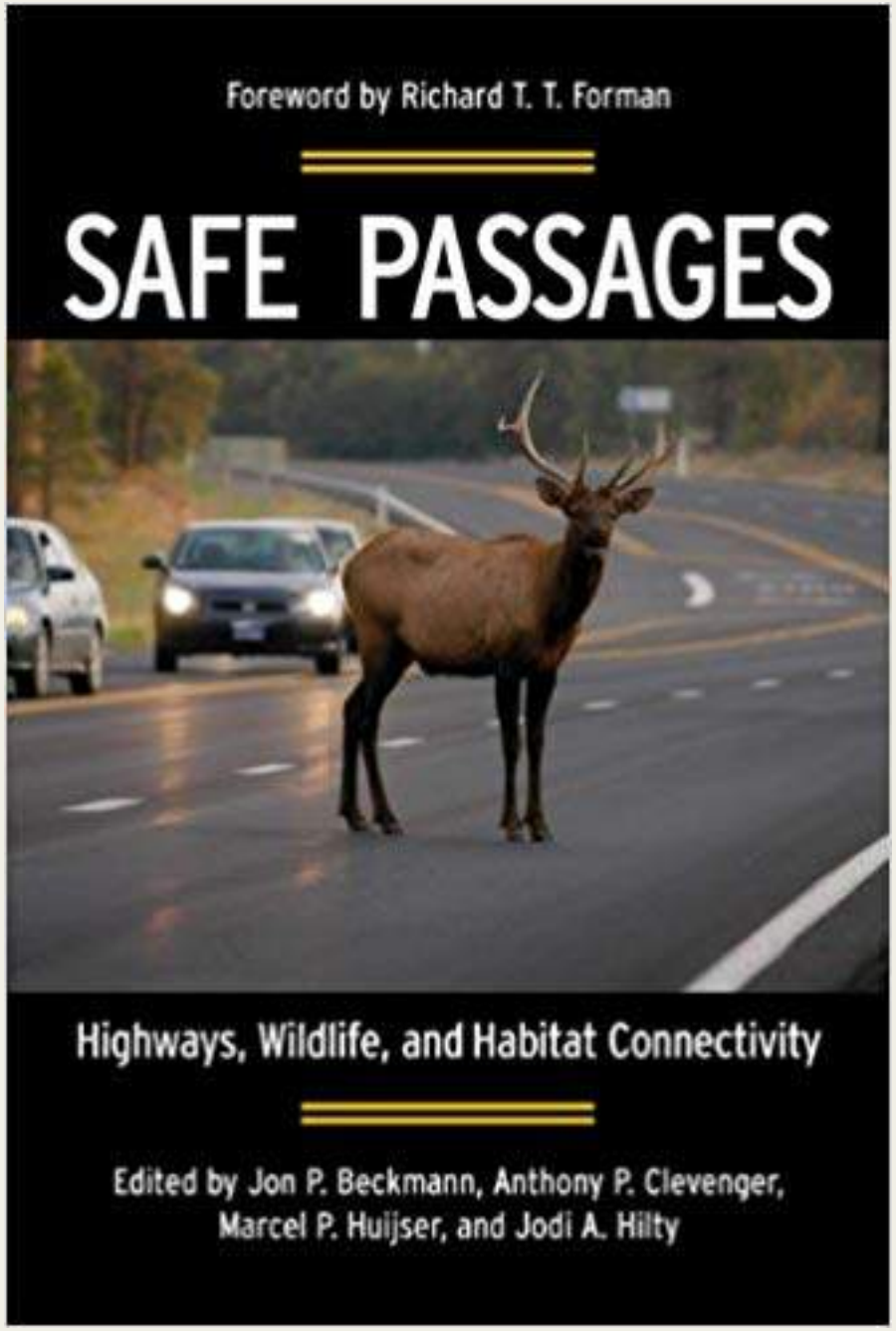
Dempster Hwy photo by Pierre Racine

Sometimes We Love Them

Sometimes We Hate Them

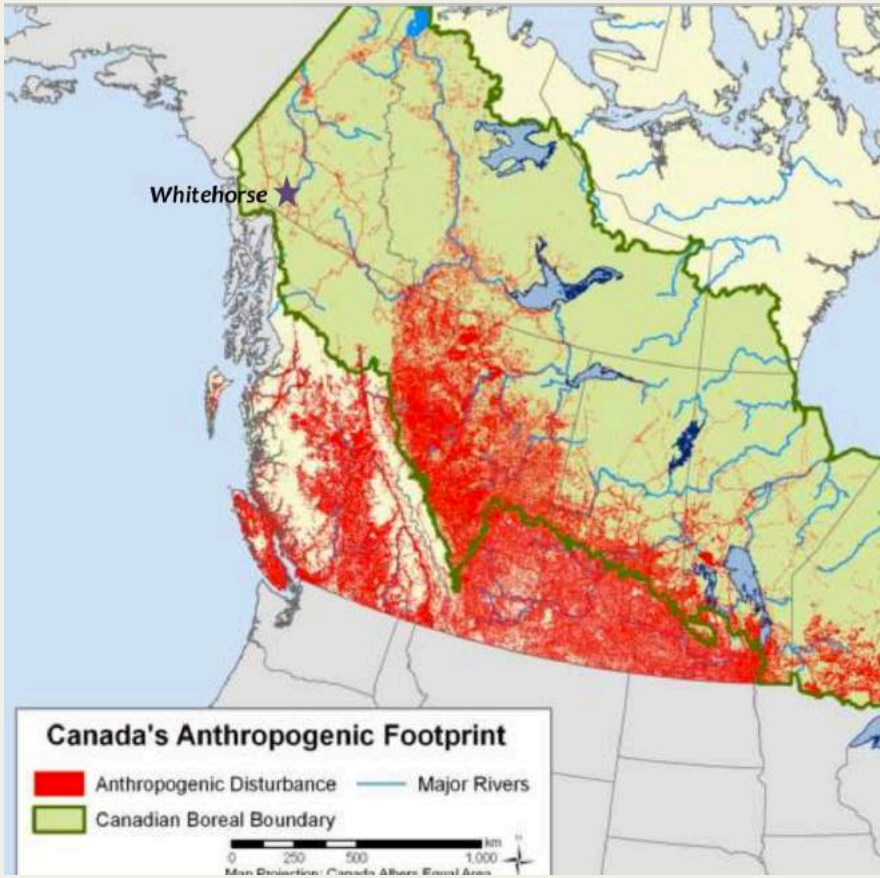
Road Ecology

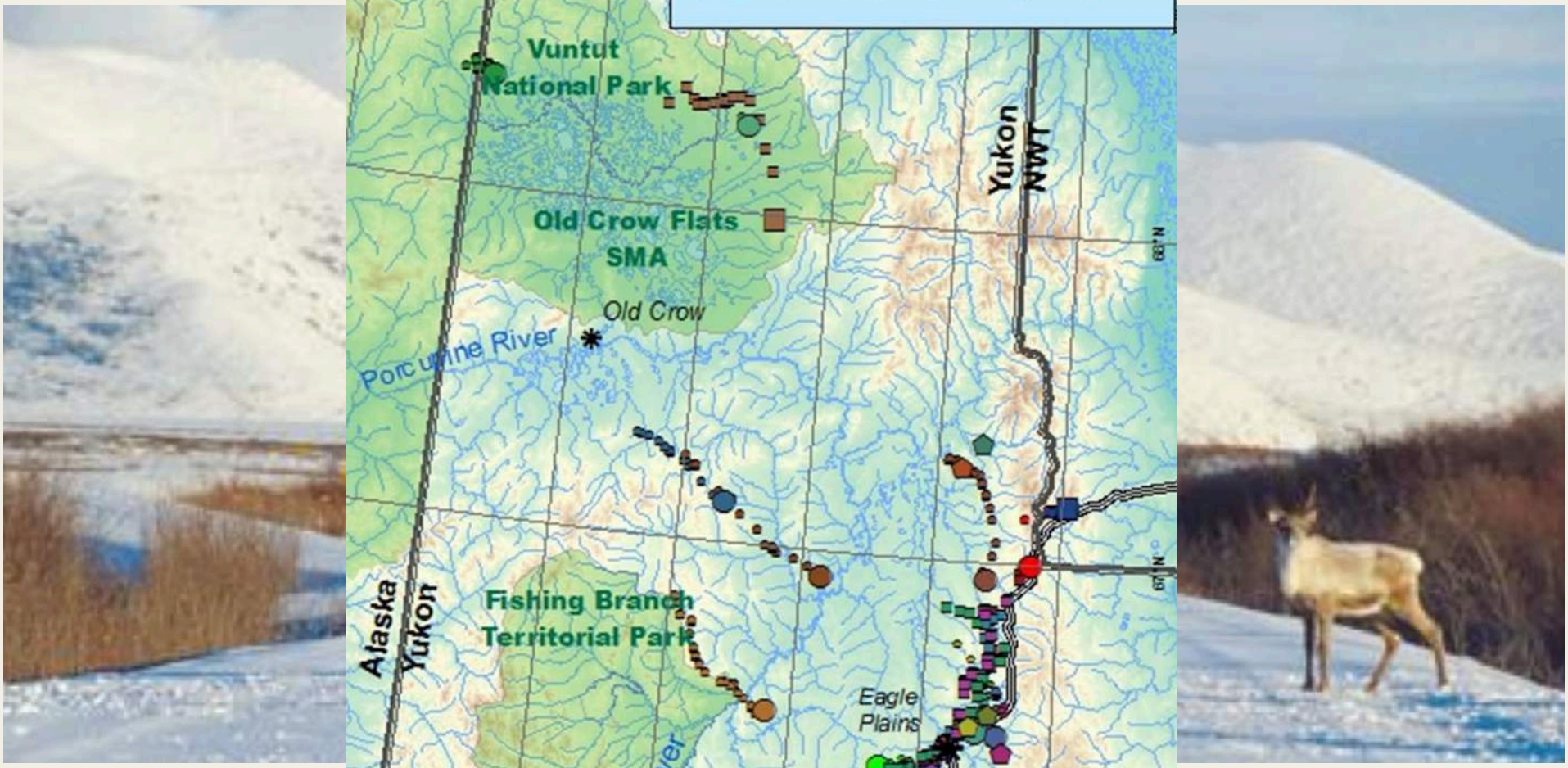
- **Road ecology** is the study of the **ecological** effects (both positive and negative) of **roads** and highways . ... **Roads** are a form of linear infrastructure intrusion that has some effects similar to infrastructure such as railroads, power lines, and canals.



Roads are bigger than they look

- Zone of influence
  - Avoidance
  - Dust
  - Hydrology
  - Hunting access
  - Animal- vehicle collisions




0 12.5 25 50 75 100 125 150
Kilometers
PCH Satellite Collars (59 Total)
Globalstar Bulls (n = 14)
Lotek Iridium Cows (n = 36)
ATS Iridium Cows (n = 9)
Ivvavik National
Vuntut National Park
Old Crow Flats SMA
Old Crow
Porcupine River
Yukon NWT
Alaska Yukon
Fishing Branch Territorial Park
Eagle Plains
Miner River
68° N
69° N

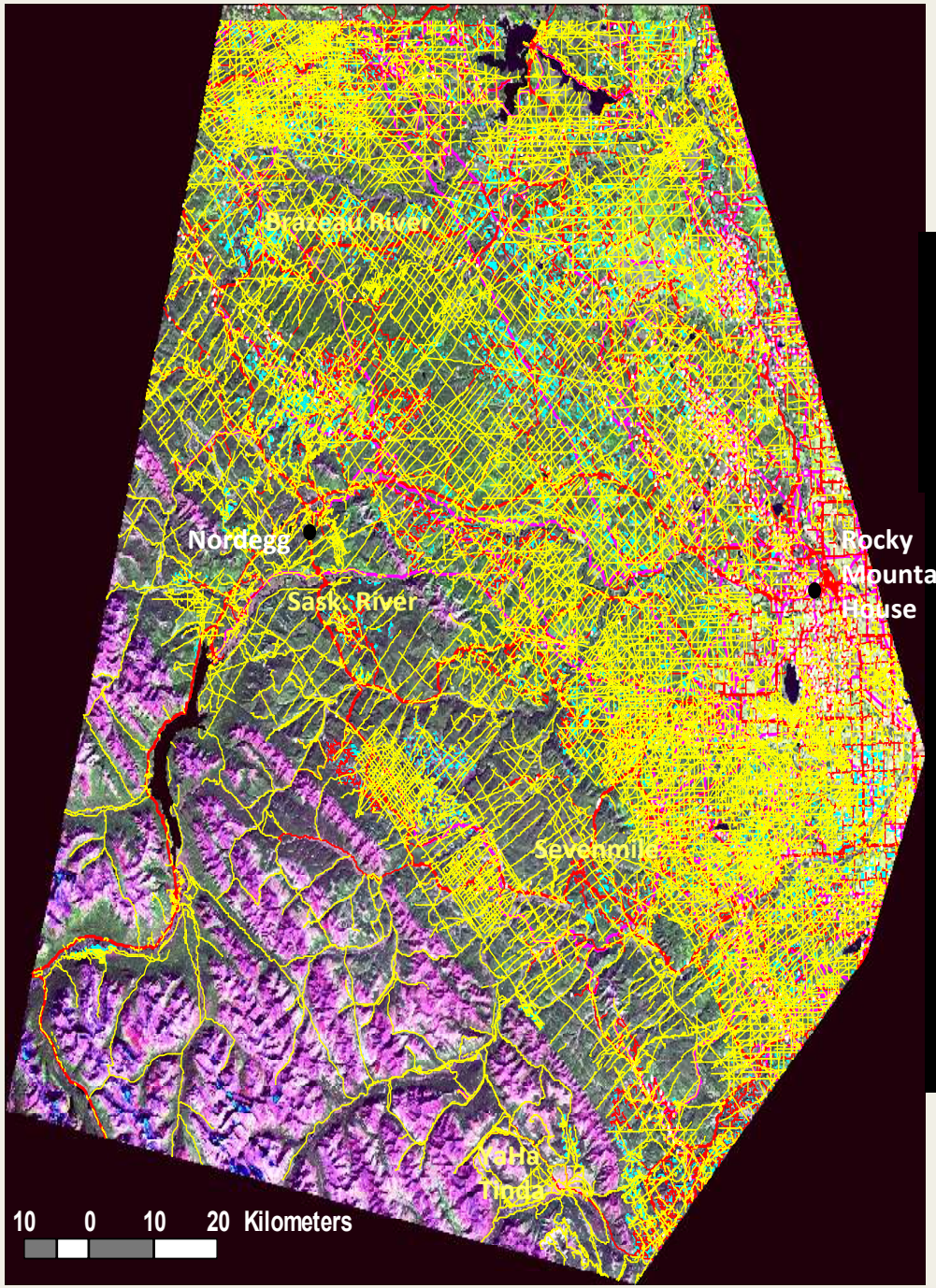
Roads are forever

Roman road still in use

Clinton mine closed in 1978

"New roads for equipment and personnel access will be constructed on claims as required and **will be reclaimed when no longer required for operations**."

Road networks Grow.. And Grow… And spawn more & more development



Roads
(7,693 km)

Cutblocks
(~950 km^2)

Utility Corridors
(2,784 km)

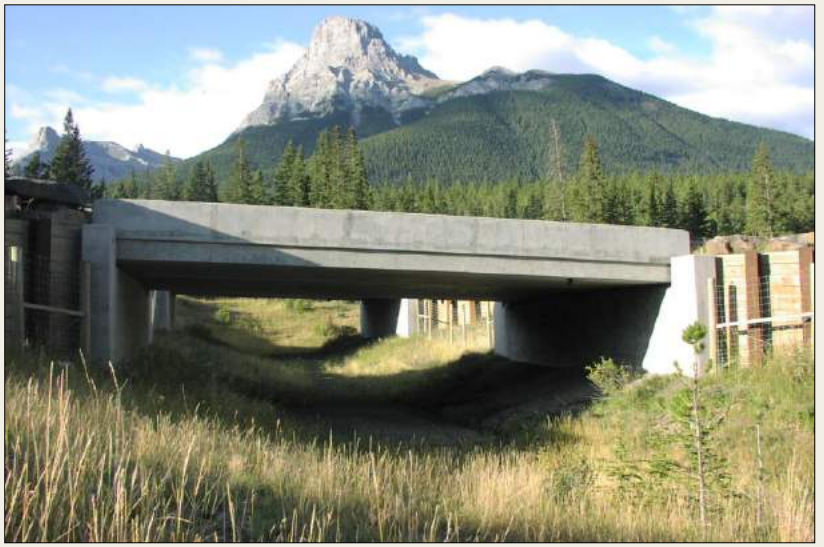
Well Sites
(4,185)

Seismic Lines/ Trails
(~28,324 km)

Road design affects us too!

Some solutions

Animal overpasses or underpasses



But in Yukon…

What does not work well?

Signage not effective deterrence

Animals avoid RipRap

Key points

- Roads are barriers
- Roads are bigger than they look
- Need baseline data on animals that use the landscape
- Need proper CE
- Strategic approach to road development, addressing collisions, movements, connectivity.
- Implement a road reclamation plan for the Yukon

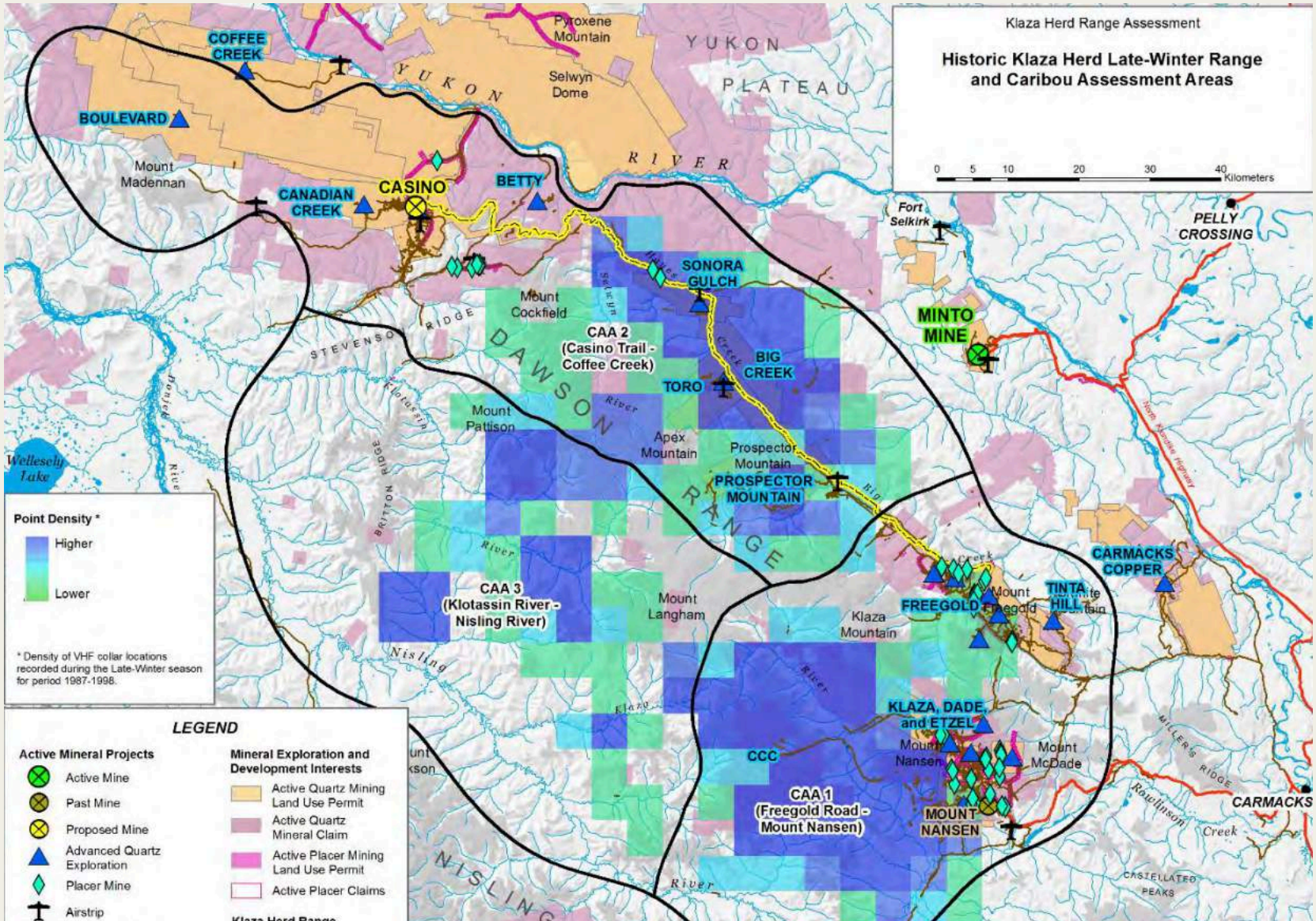
What can we do?

- New roads need to be planned with all social and ecological implications in mind:
  - Hydrology
  - Wildlife key habitat
  - Wildlife routes
  - Habitat connectivity
  - Collisions with wildlife
  - Increased hunter access

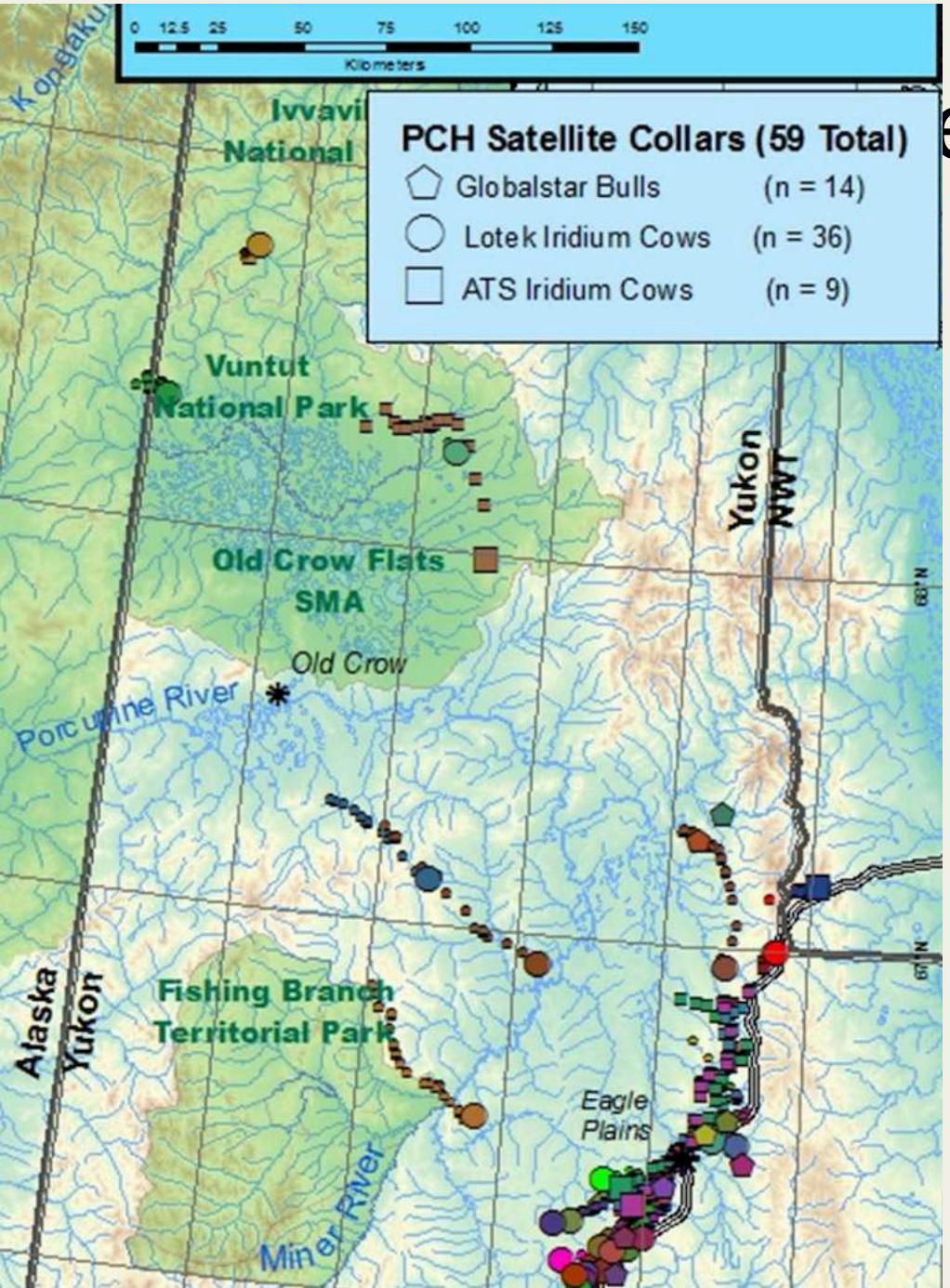
Hydrology

- What's wrong with this picture?

Reduce Habitat Fragmentation

- 

e Corridors



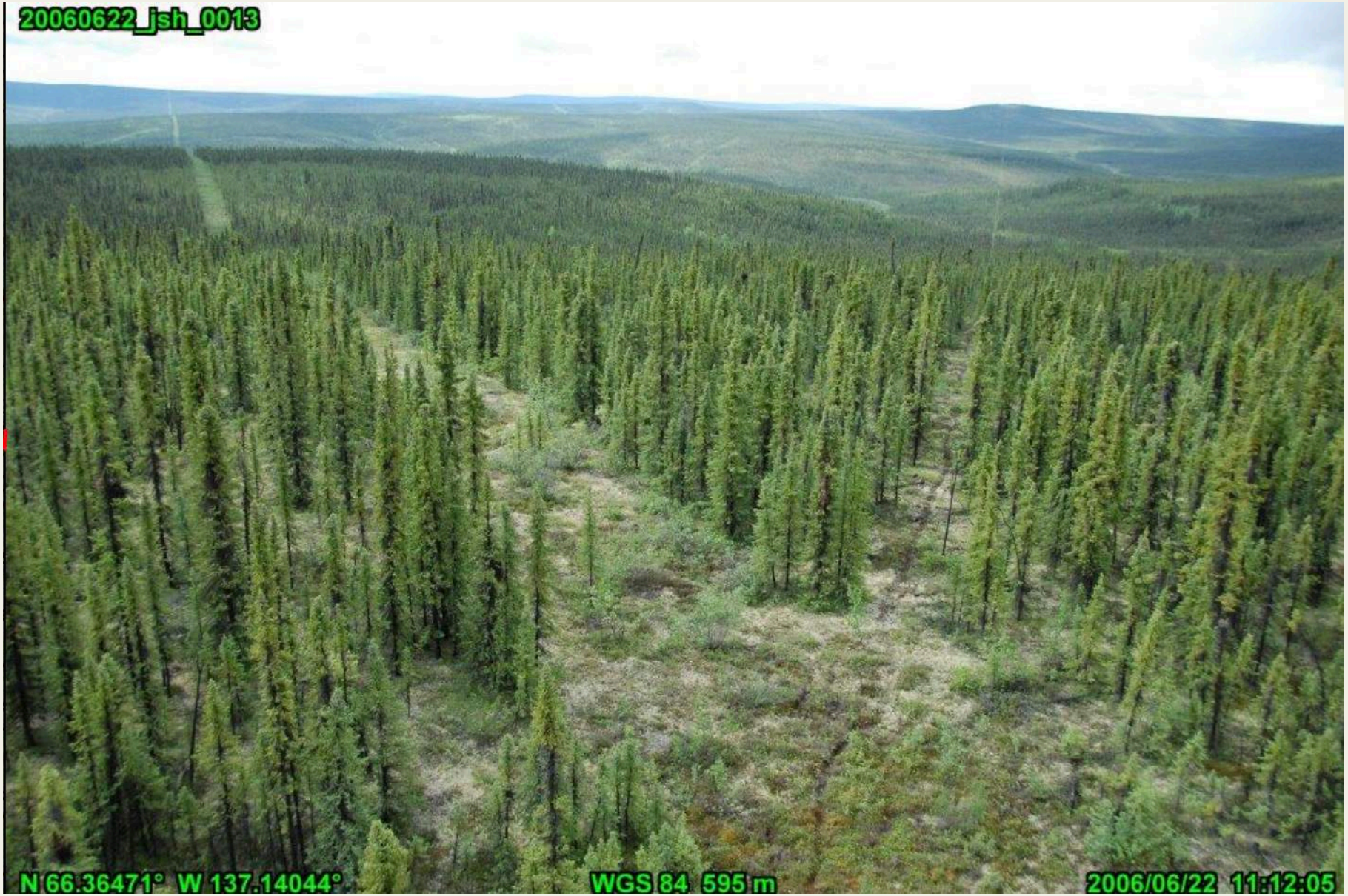
The Proponent shall not create impediments to wildlife movement within OK Creek valley and shall ensure that corridors remain open at all times for ease of wildlife movement.
YESAB 2015-0205

What can we do?

- Reduce the number of roads
- Is this road/linear disturbance really needed?
- Are there alternatives?

-

What can we do?



CONCLUSIONS

- Do Land Use Planning First
- Build Trust & Relationships
- Ensure Roads Reflect Community Values
- Put Roads In Places With Overlapping Values
- Needs Many Forms of Knowledge
- Requires Partnerships & Coordination
- Needs Clear Prioritization of Values

Thank you

- Questions? Thoughts?