

2013 BCCFA AGM

Implementing Climate Change Lessons at the Operational Level

May 24, 2013



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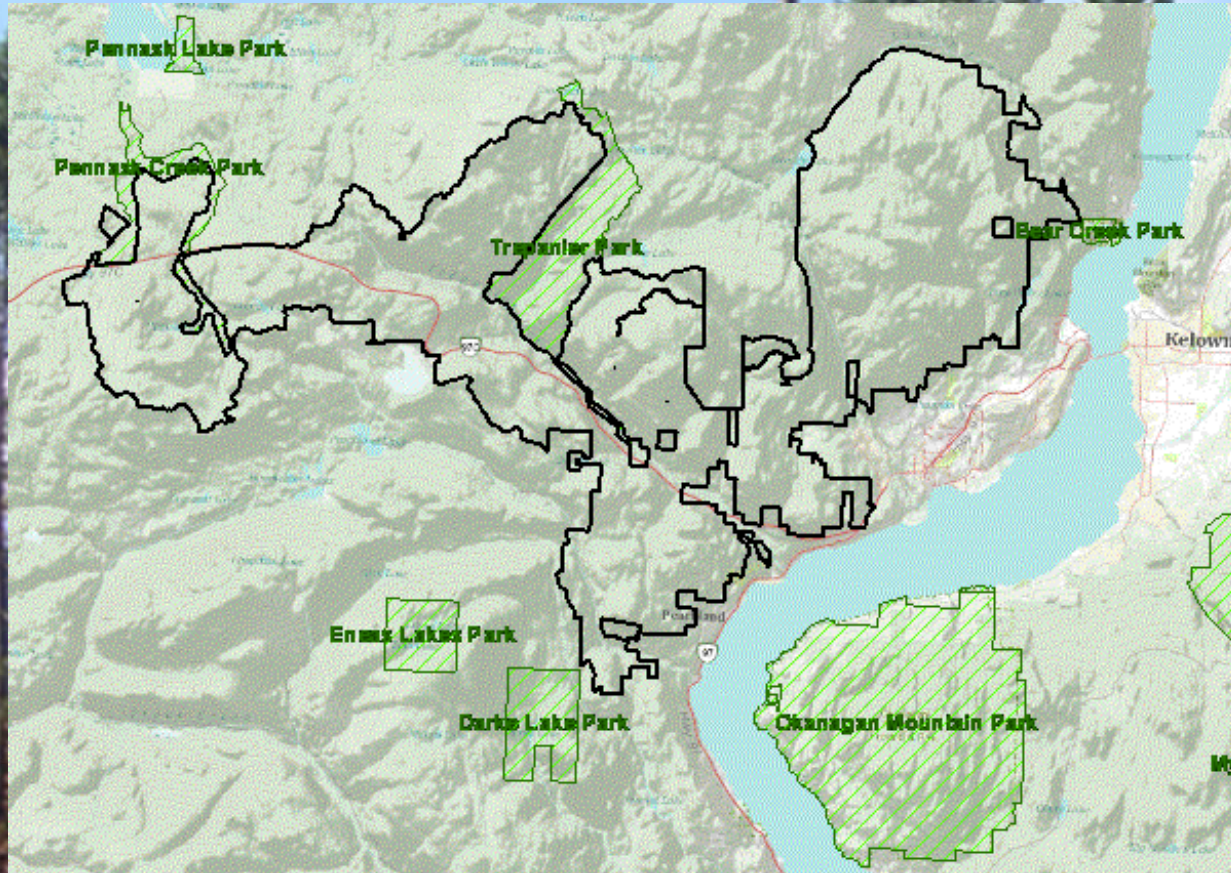
Or
My Brain Hurts!



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WFN-CF

- 47,000 ha
- ESSF, MS, IDF, PPBg,
- Sx, Bl, Pl, Fd, Pp, At, Ep
- 600m – 1,900m
- 50% in CWS supplying Peachland and West Kelowna population >35,000



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What Impacts Should we Expect?

- Hotter
- Drier
- Wetter
- More droughts
- Higher and shorter peak flows
 - increased flooding and less water capture
- Shorter growing season
- Reduced site index?
- Longer fire shut downs, longer spring breakup

Increased Variability



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In the Okanagan **Water is King!**

Issues

- 50% of WFN-CF is within CWs
- Reduced water capture and increasing urban pressure
- In some communities >75% of water is used by the agriculture industry

“Solutions”

- Communicate with and educate water purveyors and municipalities
- Retain more riparian vegetation and retain more cover in cutblocks?
- Build better roads, deactivation, sediment traps



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Range Tenures

Issues

- 100% of WFN-CF support range tenures
 - (including 100% of CWs)
- IHA has been requiring water source assessments
- Most issues are with cattle in CWS
- **Forest tenure and range tenure holders could lose our social licence to operate in CWs.**

“Solutions”

- Work with ranchers to keep cattle out of drainages
- Communicate with and educate IHA, water purveyors



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Natural Range Barriers

Forest tenure holders are working with and many times ahead of range tenure holders in testing and implementing range drift controls



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Fire Risk

Issues

- Historic fire exclusion and build up of forest fuels
- Increasing urban pressures
- Logging shut downs in September are increasing

“Solutions”

- Use harvesting as a tool for fuel reduction
- “Zone” out portions of WFN-CF for reduced stocking and deciduous
- Plan for shorter harvesting season



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Forest Health

Issues

- Was the MPB epidemic the “new normal” driven by climate change stress?
- Spruce beetle, Douglas-fir beetle, balsam beetle, western pine beetle, spruce budworm, tussock moth, tent caterpillar
- Root disease, mistletoe, fires

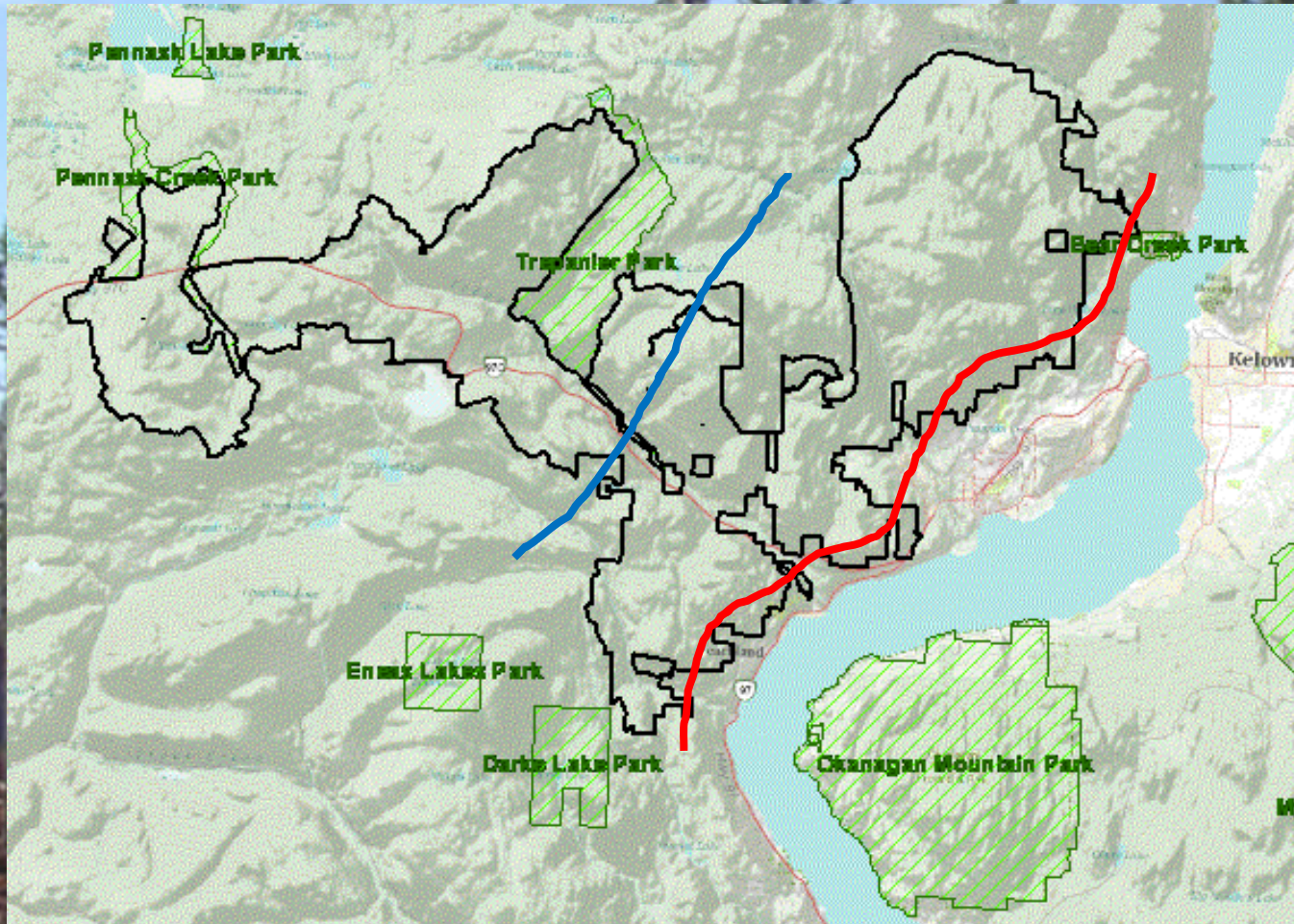
“Solutions”

- Manage or multiple species
- Develop a monitoring program
- Be flexible in responding to outbreaks
- Is this where we apply the 1 Cutting Permit opportunity?



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Species Shift



2080
Climate
Projection

Change of
PPBg BEC

— 2013
— 2080



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Species Shift

Issues

- 2080 projection shows PPBg up to 1,000m elevation – 25% of current operating area
- Should we be planting for success in 80 years? For the mid point of our rotations @ 40 years? For free growing in 15 years?

“Solutions”

- Resilience through multiple species plantings
 - Even outside the current seed transfer rules
- Greater “latitude” in seed transfer including seed from south of 49th parallel
- Prepare to manage for other non timber resources



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Species Shift and NTFP



Agave tequilana

Is this the future?



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The Future Forest Will be Different

