

Nanaimo Climate Change Adaptation Session – Feb 6, 2013

Personal Climate Change Observations

- Seasonal shifts, spring going later, summer lasting into what was thought of as fall
- Climate is varying from old norms.
- High wind events seem to be more common
- More and longer wind storms at seemingly random times – resulting in increased windthrow.
- Increased mortality of yellow cedar and increased leaf blight on Arbutus.
- Later snow melts – e.g., Mt Washington – for Marmot habitat.
- Beetle damage – Fd beetle on Sunshine Coast.
- Swiss Needle cast in Chilliwack.
- Rain intensity seems to be higher and abnormal occurrence of rain events.
- Issues with Bees – reduction in numbers, phenology links are out of synch.
- Mortality of spaced Hw in Haida Gwaii from black headed budworm (climate link?)
- Understory dieback of older Hw (50 years plus) on the sunshine coast (summer drought).
- Summer drought seems to be more severe.

Vulnerable species

- Yellow cedar and Amabilis fir at higher elevations
- Red Alder on drier sites.
- Hw on SE Vancouver Island – in the area of CDF creep.
- Douglas fir while it will increase in extent, will too be under stress if we experience the upper level of change that we appear to be headed for. Thus no species is the panacea without significant reduction in green house gas emissions.

Vulnerable ecosystems

- The Alpine
- ESSF from the upward movement of lower ecosystems and species
- High elevation meadows – tree encroachment, could adversely impact species such as the Vancouver Island Marmot.
- Existing set asides – they may not provide the conditions they were set out to provide. Thus any static reserves could be vulnerable. E.g., OGMAs, Habitat areas.
- Flood plains
- Red and blue listed ecosystems

Species Exercise

- Demote Yc – reduced snowpack, warmer conditions in summer.
- Promote Pw – broad amplitude, has shown good success on Mt Washington, resilient seedlot available.
- Promote Fd – warming (note mistake in original guide, shows higher in vm2 than vm1).

- Promote greater diversity – where the future is unknown, greater diversity provides for greater potential for some or all to survive.

What People will do differently

- Take the concept of climate change and adaptation concepts to their Forest Management Team
- Use the climate change lens when considering species choices, both at the stand and at the landscape level.
- Be brave and try different species and seedlots. Start small, observe and be bold, do not be afraid to fail as you will not learn without trying. Monitor to ID success.
- Promote greater flexibility for certain actions, such as windthrow salvage. This is to avoid Fd beetle outbreaks in a world that may be seeing more and more severe wind events.
- Monitor stress and stressors
- Incorporate climate change thinking into landscape planning – e.g. static vs. flexible retention.
- Use the variety of tools that were provided in the Links document.
- Promote greater monitoring to understand changes that are occurring and also promote venues to share that information.
- Use Climate Change information in land use decisions such as water use.
- Work with others to promote a greater understanding of the potential impacts of climate change. E.g., working with Parks.
- Will look for adaptation options wherever possible.
- However we must be realistic. We must advocate for mitigation – if change is too great, our attempts at mitigation will likely not be successful. This is something that should be clearly presented to the public – we cannot be seen as overly optimistic, but instead realistic.