Maintaining Ecological Integrity of Bulkley TSA Planning/Landscape Units

A Conversation with the Bulkley Valley Community Resources Board (CRB)

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Who am I?

- Sybille Haeussler PhD, RPF(ret)
- From Kitimat, came to Smithers 1978, live near Seymour Lake since 1982
- <u>Forest scientist:</u> degrees in Forest Biology & Forest Ecology from UBC (1980), Oregon State (1987), University of Quebec (2004)
- Mostly self-employed: describing terrestrial ecosystems, response of plants and ecosystems to disturbances, restoring endangered ecosystems, ecosystem-based forest management
- <u>Community involvement:</u> Skeena Roundtable (1989-91), BVCRB (1991-98), BV Research Centre (2001-16), BVLD Airshed Management Society (2016-24), BV Naturalists (1980+)
- Perspective: biocentric, scientific, pluralistic





Topic(s) for Discussion

- Query from Bob Mitchell (former CRB Chair): Should the CRB undertake or advocate to continue the monitoring work originally done for the Babine Watershed, or select another watershed in the Bulkley TSA for detailed monitoring?
- Further discussions with current CRB members:

 The Province of BC, with regional First Nations, is undertaking a
 Forest Landscape Plan for the combined Bulkley and Morice TSAs.

 How can the CRB best ensure that this new planning process
 contributes to continued relevance and updating of the CRB and
 Bulkley LRMP?

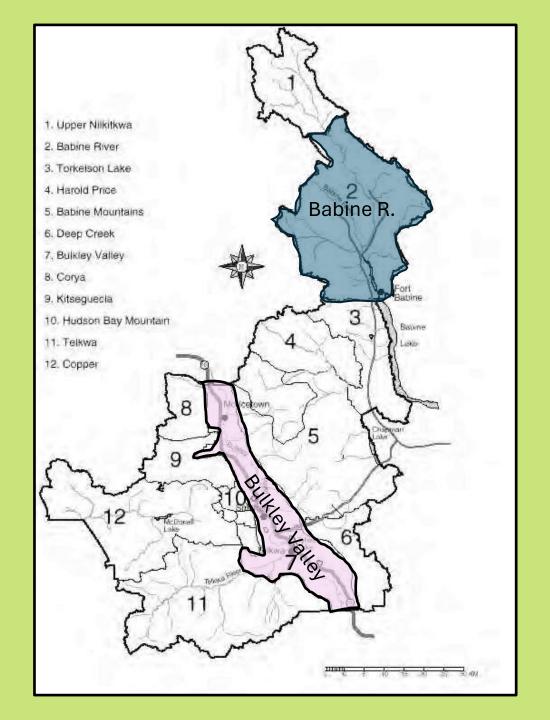
Initial Thoughts

- Bulkley LRMP was (is?) an excellent plan
- Survival of CRB for 33 years is a remarkable success story with many important contributions over the years
- Primary Weaknesses:
 - No First Nations (govt-to-govt) involvement
 - Lack of ongoing monitoring & formal updating
 - Many other overlapping or splintering processes & priorities

All 12 Bulkley LRMP Planning Units have a Landscape Unit Plan (1999)

Only a few extensively followed up:

- Babine River #2
 - Babine Watershed Monitoring Trust (2005 –terminated 2023)
 - Focussed on "effectiveness monitoring" for water
- Bulkley Valley #7
 Sustainable Resource Mgmt Plan (2005)
 Too complex?
- Others representative, accessible, not too complex - Copper? Deep Creek



Monitoring is essential

Implementation Monitoring

Were strategies followed? Were planning targets met?

Example: Retain 30% of old forest (>250 yrs) in Zone A.

Often done as a mapping exercise – can be applied to broad areas

Effectiveness Monitoring

Did the strategies & targets meet goals and objectives?

Example: Did retaining 30% old forest maintain healthy populations of threatened grizzly, goshawk and arboreal lichens in Zone A?

Typically requires fieldwork – feasible at smaller scales

• Both require good inventories – often lacking, but new technologies can help

Selecting a Landscape Unit for Monitoring

Landscape Unit:	Babine River	Bulkley Valley	Copper	Deep Creek
High values & interest?	yes	Too many?	yes	moderate
First Nation on-board?	Lake Babine	Witsuwit'en	Witsuwit'en Gitksan, Tsimshian?	Witsuwit'en
Accessibility?	remote	central	intermediate	Intermediate
Representative? -land use -tenure holders -geography/biology	Forestry, fish PIR, BCTS	private land Small operators Low elevation	varied BCTS, Wetzin'Kwa	?
Diversity/Complexity?	moderate	too high	High (coast transition)	low
Existing information?	high	high	moderate	moderate-low

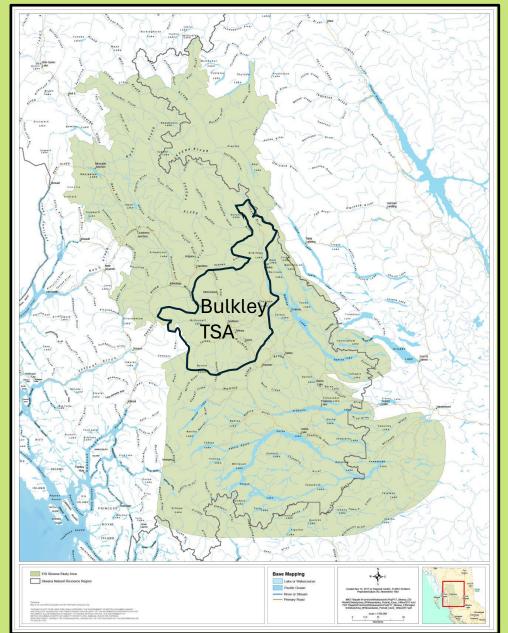
Example of Effectiveness Monitoring for Forest Biodiversity

- Babine Watershed Monitoring Project (2016-2018)
 - forest stand structure (live, dead, down trees, shrub & herb layers)
 - bird communities
 - arboreal lichens
- Costly project, not fully completed due to funding limitations
- Similar project implemented as a demonstration at BV Nordic Centre
- Using new technologies to monitor birds
- Simplified lichen monitoring
- Stand structure supplemented by forestry cruise plot data

Skeena Sustainability Assessment Forum

(SSAF)

- Environmental Stewardship Initiative (ESI)
- Cumulative effects of human use on environmental values
- Reports on:
 - Grizzly bear status (2020)
 - Fish & fish habitat (2021)
 - Wetland status (2021)
 - Moose (underway)
 - Medicinal plants (underway)
- East Skeena study area fully encompasses Bulkley TSA
- ESI Results informed Lakes FLP pilot project and presumably will be used for the Bulkley-Morice FLP



Fish and Fish Habitat

- main source of food, critical for trade and economy
- fish oils for health
- fishing brings us together as a community; the young learn about traditional knowledge and ceremony through fishing and processing fish

We can protect fish and fish habitat by: - banning sport and farm fishing

- changing and enforcing regulations and legislation
- removing debris from creeks
- enforcing buffer zones on all waterways

Moose

- main source of food; crucial for trading, potlatch and rites of passage
- hides are used for clothing, regalia, drums, and snowshoes while antlers are used for tools
- Elders can teach younger generations how to respect and use all parts of the moose



Skeena * Environmental

Stewardship

Initiative

We can protect moose by:

- conducting our own wildlife surveys
- focusing on their birthing and grazing lands
- training our own conservation and natural resources officers
- enhancing our relationship with wildlife officers
- encouraging better buffer zones and barriers to roads and railways

Medicinal Plants

- used to keep people healthy across the lifespan
- used spiritually for praying, smudging, in sweats
- used ceremonially for potlatch

We can protect medicinal plants by:

- marking, signing and tracking stands of plants
- creating seed banks and traditional plant nurseries
- working on land restoration and reclamation
- monitoring our lands and sharing information with other Nations

Skeena Region Stewardship Forum

Wetlands

- critical habitat for our animals, fish and medicnal plants
- they clean and filter runoff

We can protect wetlands by:

- increasing buffer zones
- mandating and enforcing grazing permits
- educating about their value
- actively monitoring beavers

Grizzly Bears

- we have a deep respect for grizzlies and do not mock them
- they have spiritual significance in teachings
- we used their grease and used their claws for regalia

We can protect grizzly bears by:

- monitoring their populations and territories
- stopping the trophy and sports hunt and the use of body parts
- reducing clear cuts, human encroachment and littering
- protecting their food sources

Lolleen Swenson





LAKE BABINE NATION















Back to Questions

• Should CRB undertake or advocate for more monitoring work in the Babine River Watershed, or select another landscape unit from the LRMP for monitoring?

 How can the CRB ensure that the new Bulkley-Morice FLP planning process contributes to relevance and updating of the CRB and Bulkley LRMP?