



How FREP Data Informs Natural Resource Management

Examples from around the province



FSP results and strategies, operational plans, and practices

- We've seen evidence of **voluntary change and improvement through DMs and their staff working together proactively with FREP data to bring about changes** involving:

- incremental riparian management as well as
- directing enhanced management at the watershed level (based on FREP Riparian results).

- We've seen other great examples of **licensees** (such as Weyerhaeuser in the Okanagan) using FREP data to re-write their internal standards for certification (Weyco, 2020).

- A key practice that Weyerhaeuser implements is to establish 5-m MFZ adjacent to small streams, as well as ribboning out RMAs.
- They've added additional practices based on FREP small stream outreach:
 - Increased retention of non-merch and windfirm merch trees;
 - Increased emphasis on locating roads as far away from important features;
 - Further stratification of riparian classes based on size of feature, with increasing requirements as the feature size increases;
 - Improved quality of maps for equipment operators;
 - Greater retention of stub trees, especially where no RRZ.

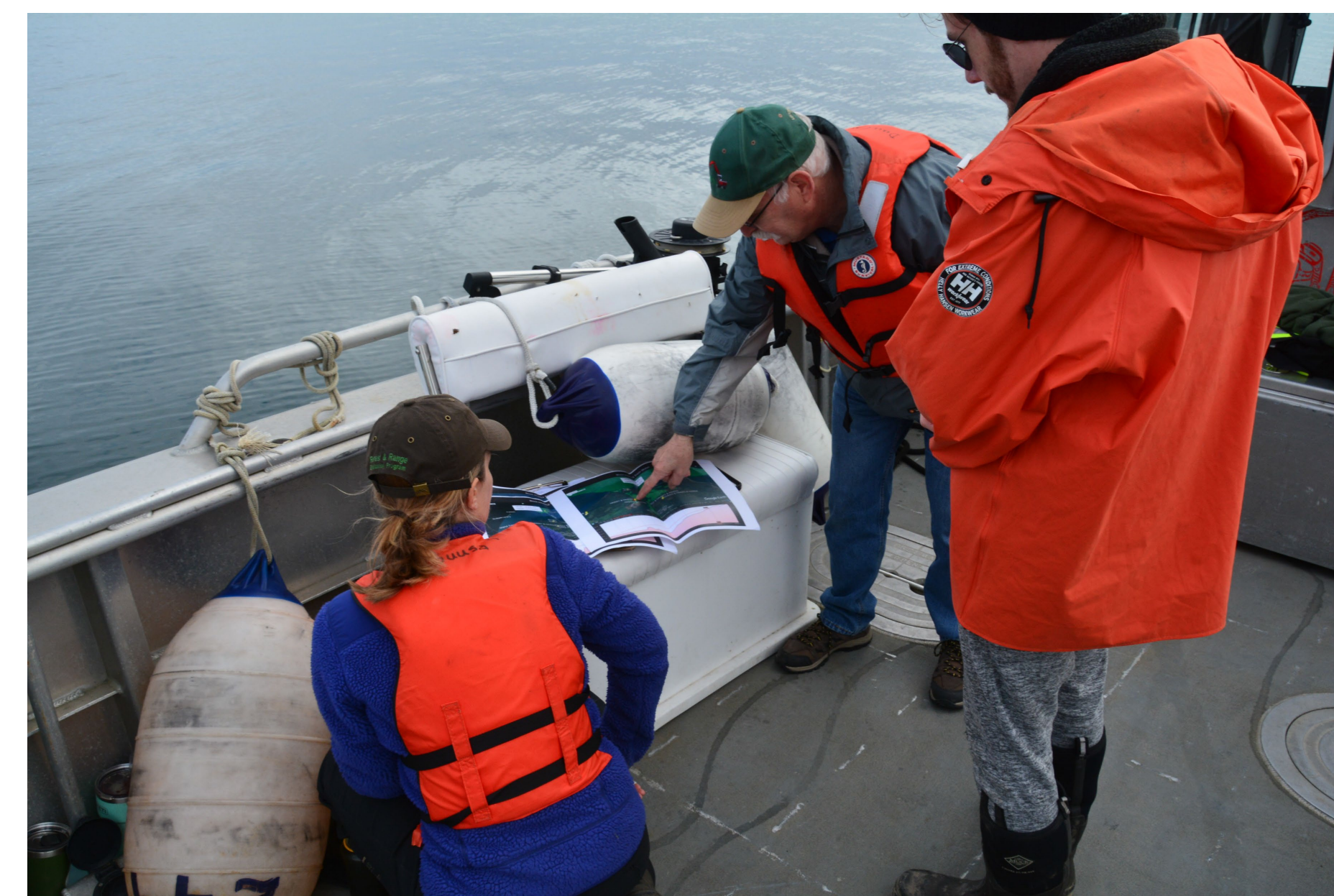


A machine-free zone and partial tree retention has limited disturbance to this non-fish 56 Weyerhaeuser stream in the Cascades district, ensuring effective delivery of water, nutrients, and invertebrates to downstream reaches. Photo credit: FREP assessors from the Cascades Natural Resource District.

Lisa Nordin and Jason Carmichael (Weyerhaeuser) co-authored an article in the Fall *2020 BC Forest Professional magazine* on this.

- The process of conducting Visual Quality Effectiveness Evaluations (VQEEs) often facilitates **important Visual Resource Management dialogue** between evaluators (often Natural Resource District staff) and practitioners (forest licensees).

- Standing together at a significant public viewpoint observing a landform and going through the VQEE form together, is an important element of continuous improvement and education.



- The **dialogue not only builds a relationship, but also can identify opportunities to improve** management of BC's scenic resource.



Timber Supply Reviews

- FREP data regarding the amount of retention within harvested cutblocks is **used by the Forest and Analysis Inventory Branch (FAIB)** in timber supply reviews.
- About a decade ago, the Timber Supply Rationales for the **Prince George, Mackenzie, and Quesnel TSAs** incorporated FREP data to refine forest health impacts on timber supply in those regions.
- See **FREP Extension Note #26, "How FREP is influencing the Continuous Improvement of Resource Management in British Columbia"**, for more information.

More recently, the **Rock Creek TSR in 2022:**

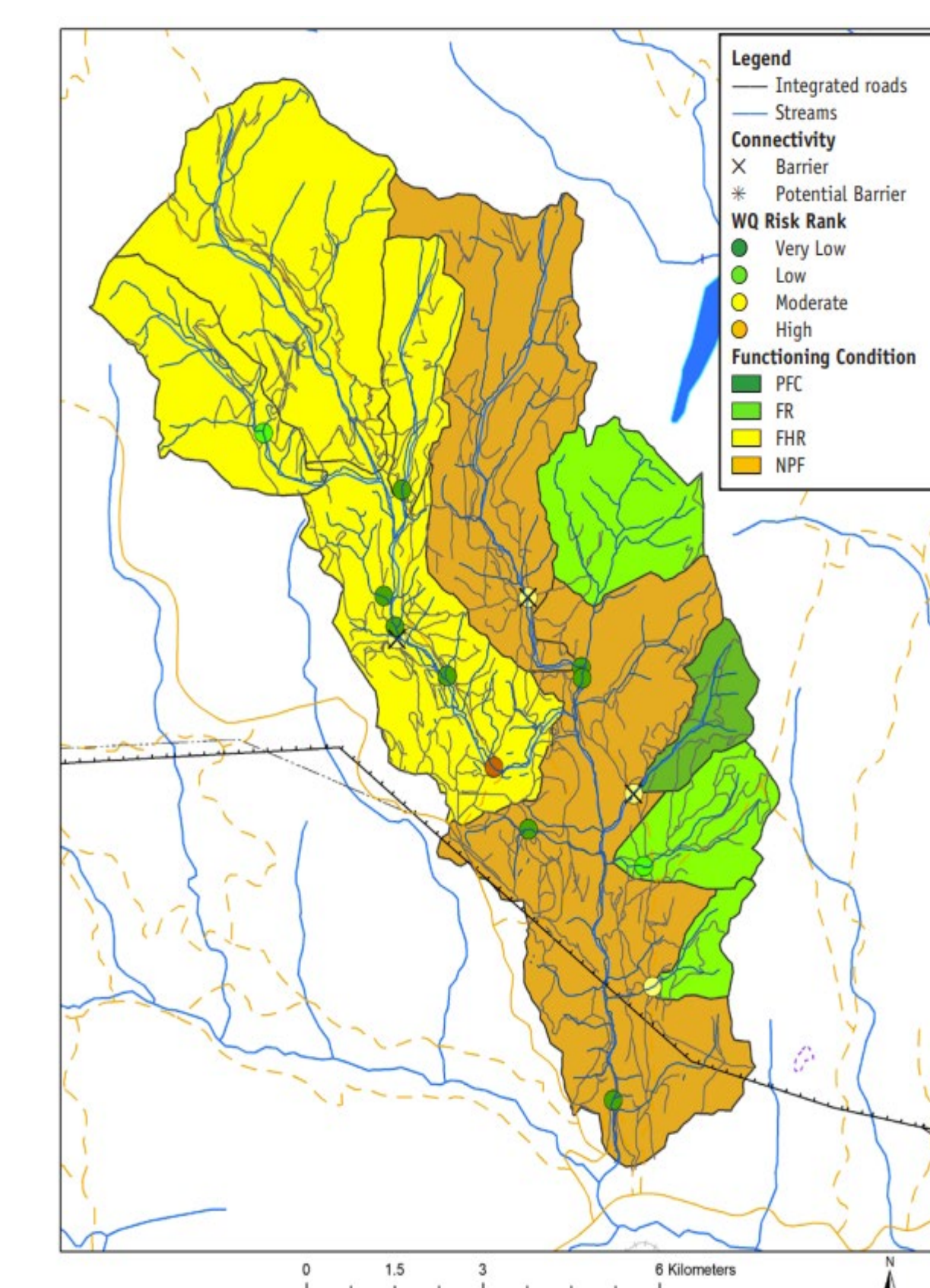


Figure 4. Map of Rock Creek sub-catchments with riparian/stream, water quality, and habitat connectivity results.

- **Diane Nicholls**, former Chief Forester reduced the AAC for TFL8 (located north of Rock Creek), partly due to 2020 FREP findings about watershed riparian functioning.
- A news article on this references the CF's report that draws on the 2020 findings of the FREP which monitors and evaluates forest practices.
- The FREP report found that Boundary Creek, which runs through much of Interfor's southerly harvest block, was "not properly functioning," mostly due to human caused disturbances upstream.



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More examples from around the province

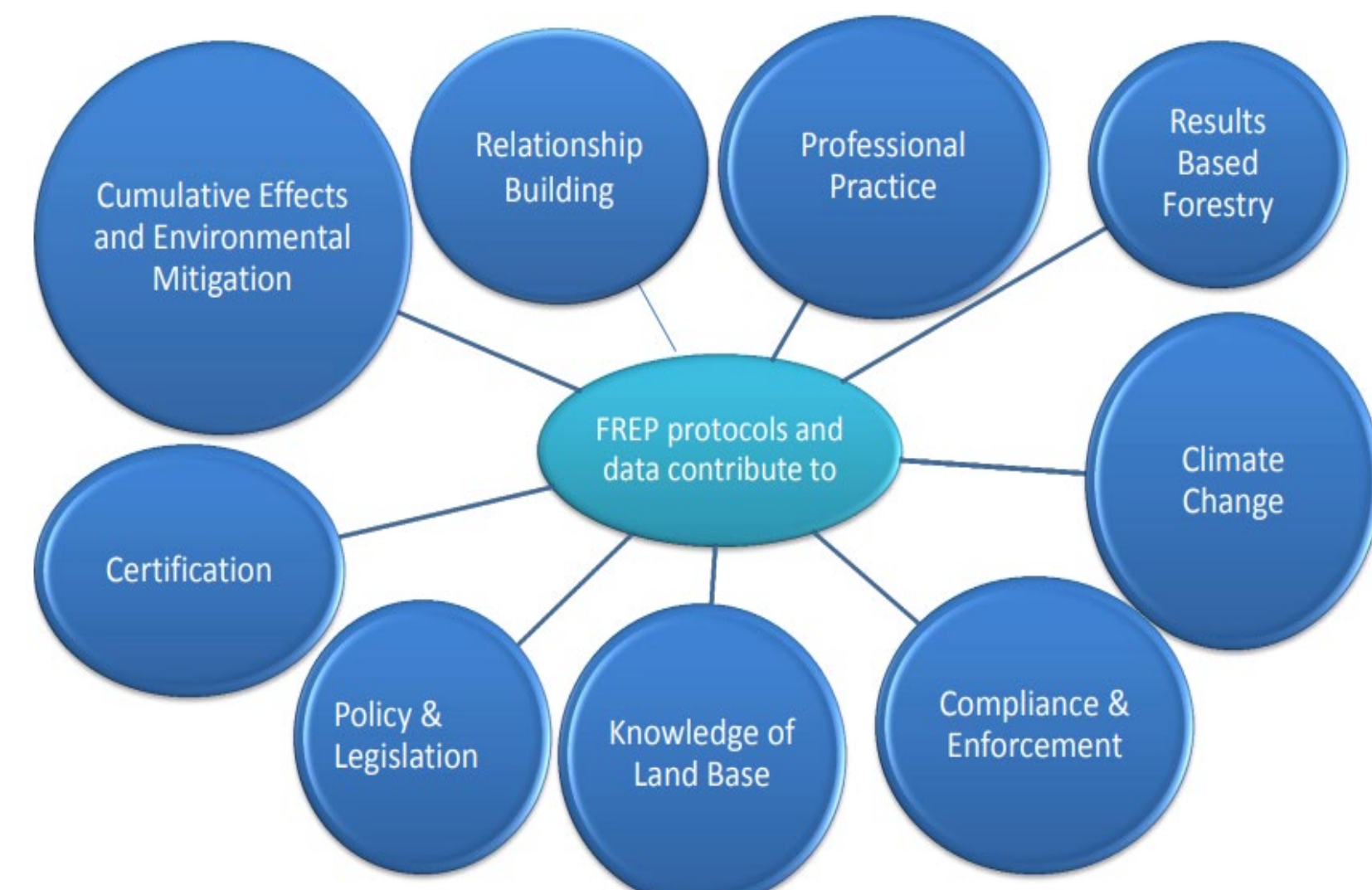


Protocols/Sampling for other uses

Other uses for FREP Protocols and sampling data include:

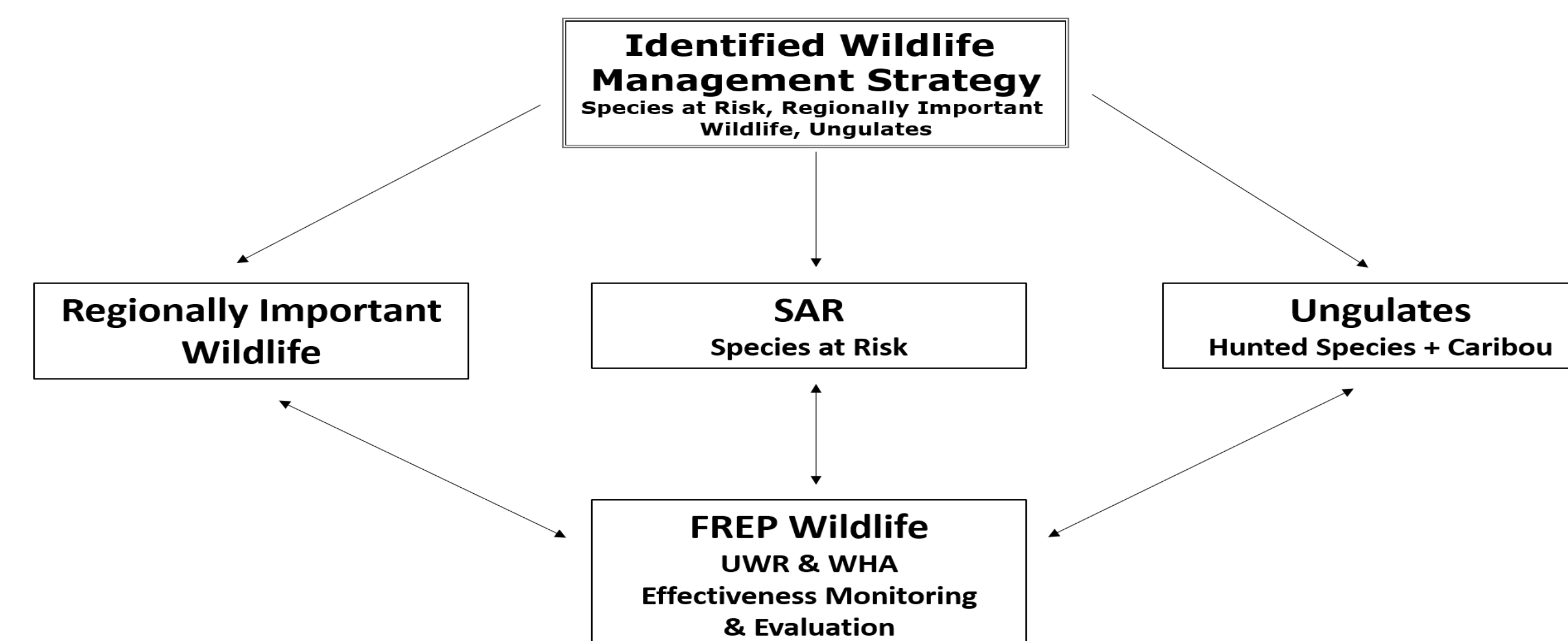
- Field verification for strategic office-based assessments
- Collaborative stewardship monitoring
- Oil and Gas effectiveness monitoring
- Water authorizations
- FREP monitoring results were requested by, and presented to, the Cohen Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River. (Reference to FREP Extension Note #26).

****See FREP Extension Note #26, “How FREP is influencing the Continuous Improvement of Resource Management in British Columbia”, for more information.**

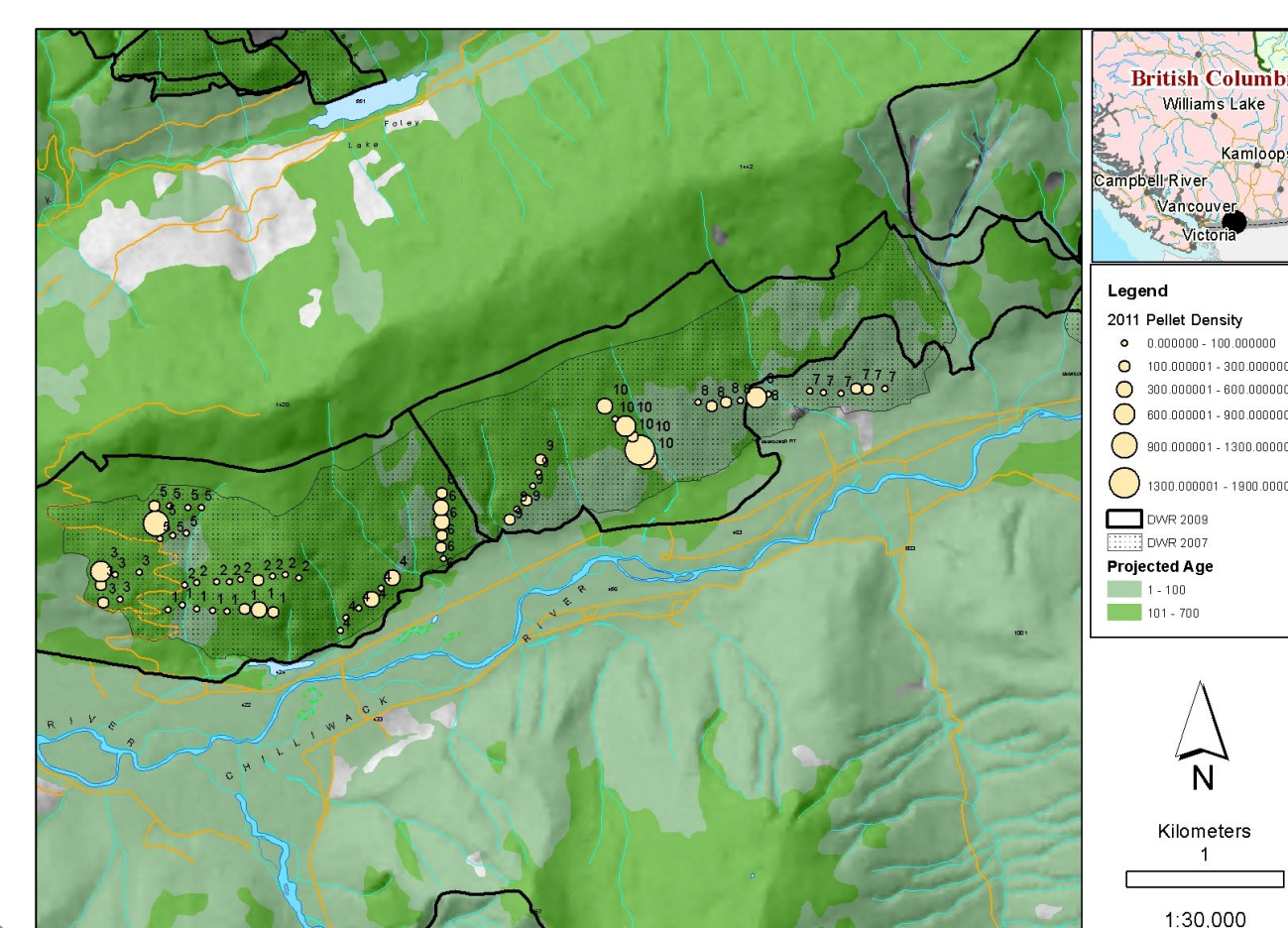
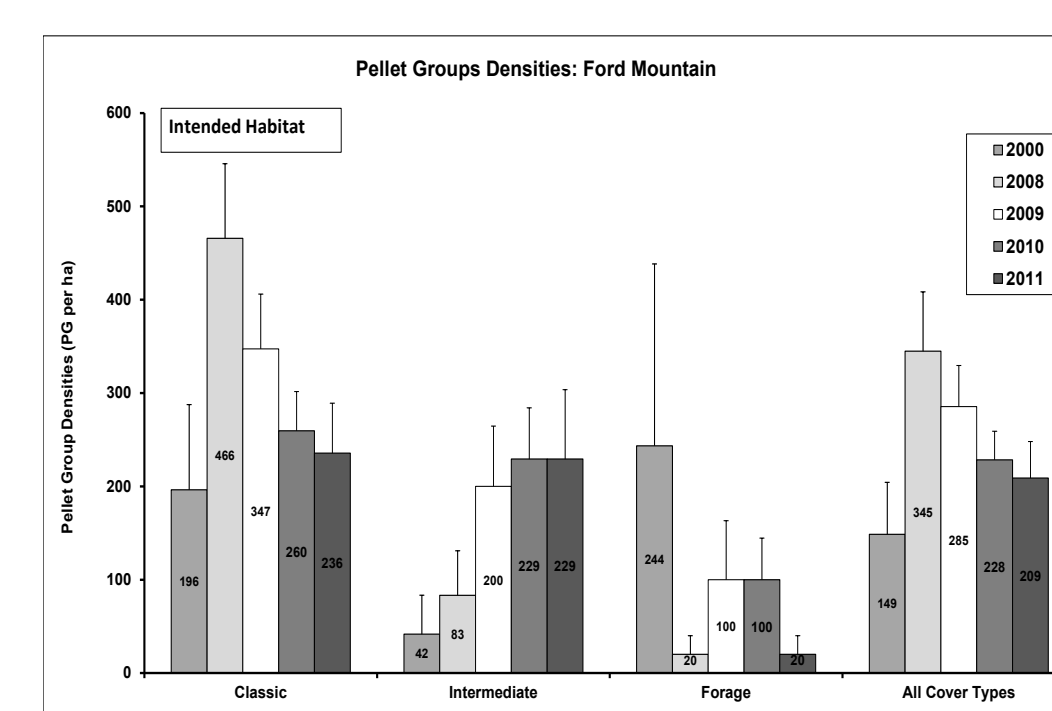
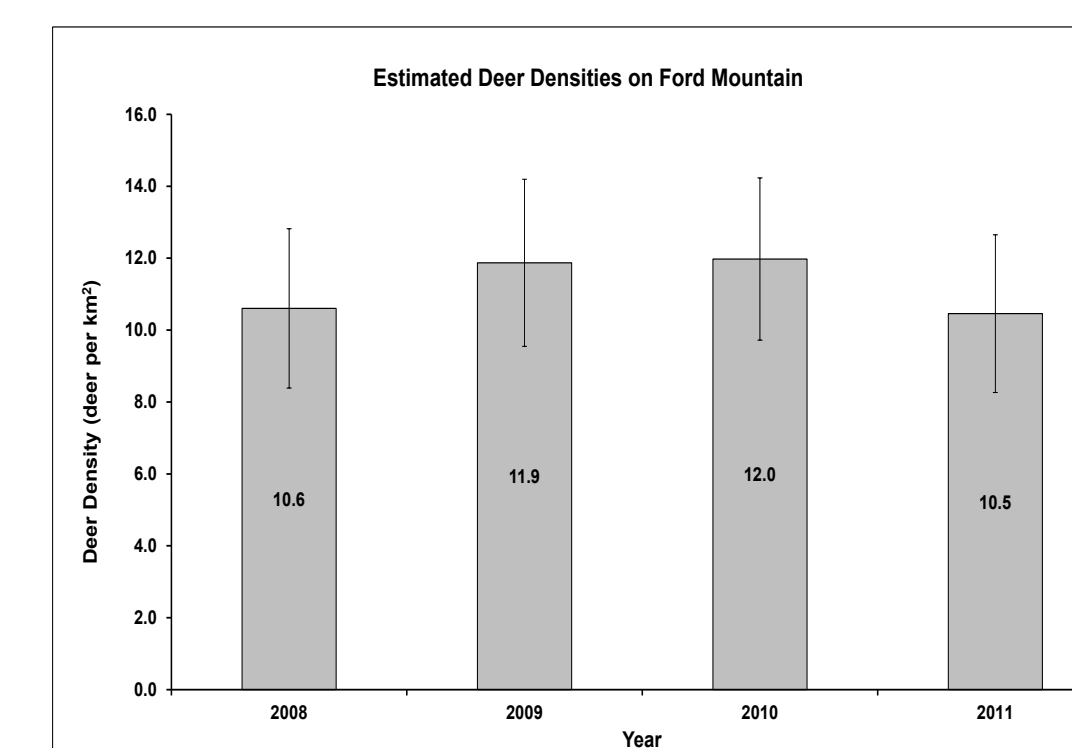


Data collected from **Wildlife Monitoring** is used in variety of ways:

Wildlife Monitoring Pathways



- Ungulate Winter Range work on black-tailed deer
- Faecal pellet group counts can determine whether a winter range is being used by deer, meaning is it still functioning as winter range
- It can also determine if the intended habitats are being used by linking abundance to habitat type at a site level (Classic habitat meaning older forests)
- Pellet group densities can be converted to deer densities, and both the trend and deer densities can be used to help monitor the deer population and be used in for decisions around setting hunting allocations
- Can also relate deer abundance to Winter Range size to determine at what point the Winter Range is no longer functional



FRPA Improvements

Bringing forward key findings of FREP into FLP

- FREP data is being used in pilot FLP's current conditions assessments (e.g. Quesnel FLP pilot).
- We expect to see FREP evolve further via FLP:
 - Via effectiveness monitoring and implementation monitoring of FLP outcomes and targets.
- FREP Data was used to propose a number of regulatory changes (**Amendments to the Forest Planning and Practices Regulation**). These proposed regulatory changes are planned for phase four of the FRPA amendments.

Water Act Authorizations

Riparian results are being used in the South Coast Region, by Water Branch, when **making decisions about Water Act authorizations**

Legislation and Policy Development

- Examples:**
 - The Chief Forester's policy on coarse woody debris was based on FREP results.
 - FREP indicators and data were used in the development of the **Water Sustainability Act**, the **Natural Resource Roads Act**, and the **Ministry of Environment's Environmental Mitigation Policy and Procedures**.
 - Over the years, FREP data and results have been provided to other ministries, such as the Ministry of Justice, as background information on the **state of forest management within watersheds in First Nations' interest areas**.

Government Actions Regulation (GAR) Orders

- There recent **GAR order requiring that low sedimentation levels are maintained in Fisheries Sensitive Watersheds (FSWs)**....was initiated as a result of FREP WQ data. This has led to more licensees and BCTS asking for sedimentation control training for maintaining low sedimentation level in FSWs.

Follow up with Dave Maloney for more information on this!