Forest Analysis and Inventory Branch

Perspectives on BC's Forest Inventory

Presentation to Forest Practices Board

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Introduction

- During this presentation I will attempt to address the 5 questions posed by the meeting organizer for this session.

- I hope to leave you with a sense of:
  - The challenge of maintaining the inventory for BCs forests, it has never been easy
  - The current status and the focus of ministry's Forest Inventory Program
  - Some successes, challenges, and opportunities

What is the Provincial Forest Inventory?

- The province-wide mapping of forest cover polygons and their attributes
- Not a single data set but a suite of data sets, that assist in describing the forest including:
  - Thousands of PSPs and TSPs
  - Province-wide annual harvest layer
  - ‘Year of death’ mapping for MPB areas
  - 7,000 VRI ground samples
  - 122,700 trees sectioned for taper or decay

Where does the Forest Inventory Fit in Decision Making Processes about Land Management?

- Inventory is used to support many **strategic** decisions, including:
  - Timber Supply Forecasting
  - Supporting Determination of AACs
  - Harvest planning
  - Silviculture planning
  - Public reporting (e.g., State of Forest reporting)
  - First Nations issues (land claims, legal proceedings, tenures)
  - Biodiversity assessments
  - Species habitat assessments and mapping
  - Business inquires
- Many uses and many users

Is the Inventory Adequate for the Task of Supporting Decisions it is Used for?

- Yes for the most part:
  - Statutory decisions have not been challenged
  - Never confirmed that a bad strategic decision was made as a result of poor inventory data.
  - Problems that arise are generally a function of using the data inappropriately

- In terms of adequacy of the VRI design:
  - Peer-reviewed, world-class standards
  - Rigorous process for continuous improvement

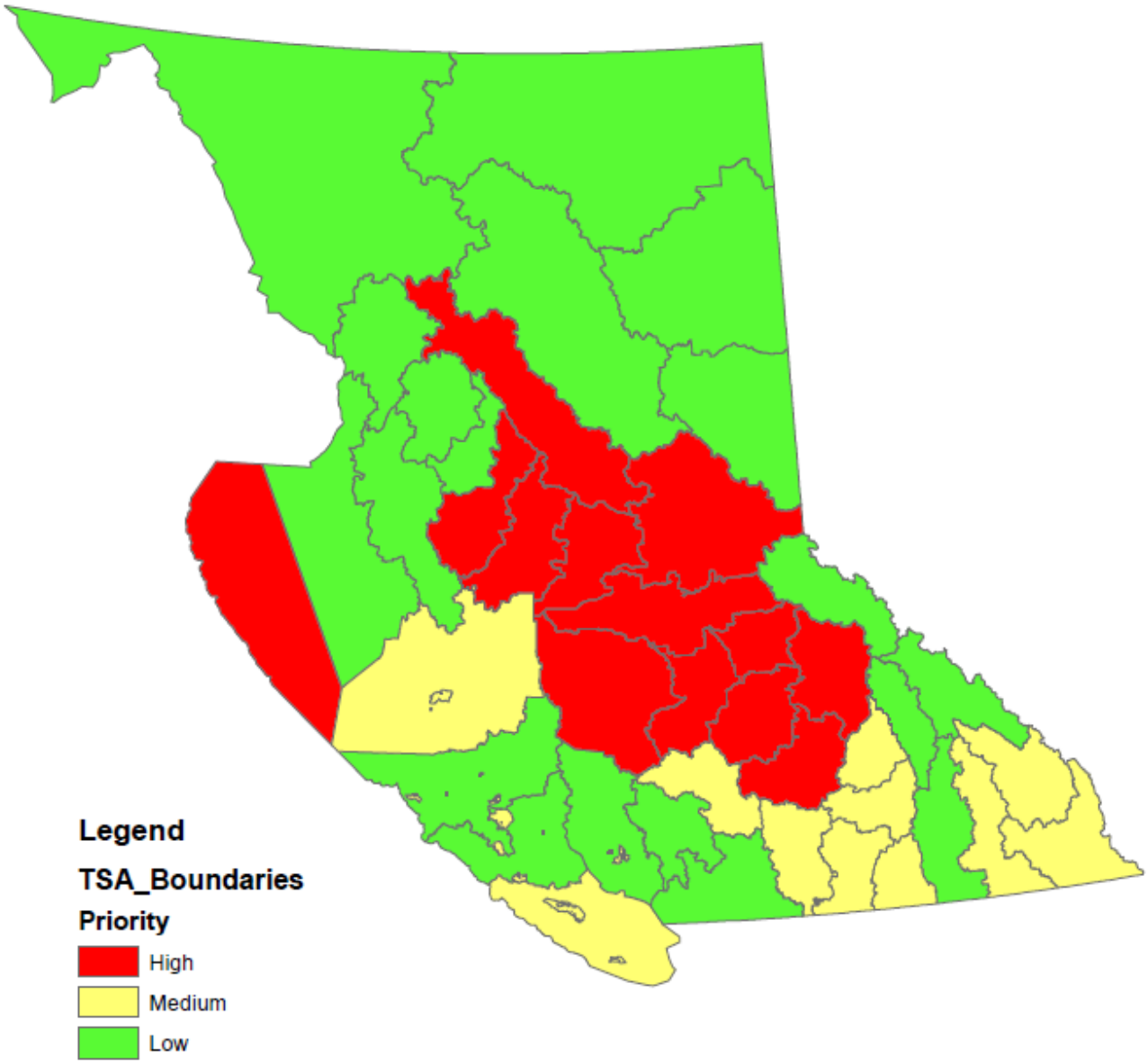
What is the risk that wrong decisions will be made because of the Inventory?

- This is very tough to quantify
- Inventory information will always have inherent risk as attributes generalize the description of forest stand types
- All things being equal - accurate, current, relevant inventory information, used properly, will reduce risk of wrong decisions
- Risk can be reduced by understanding the inventory well including it's purpose, limitations and other specific information we have about an inventory (e.g. VRI samples, local experience)
- A robust decision framework helps too – e.g., periodic re-determinations of AAC with sensitivity analyses

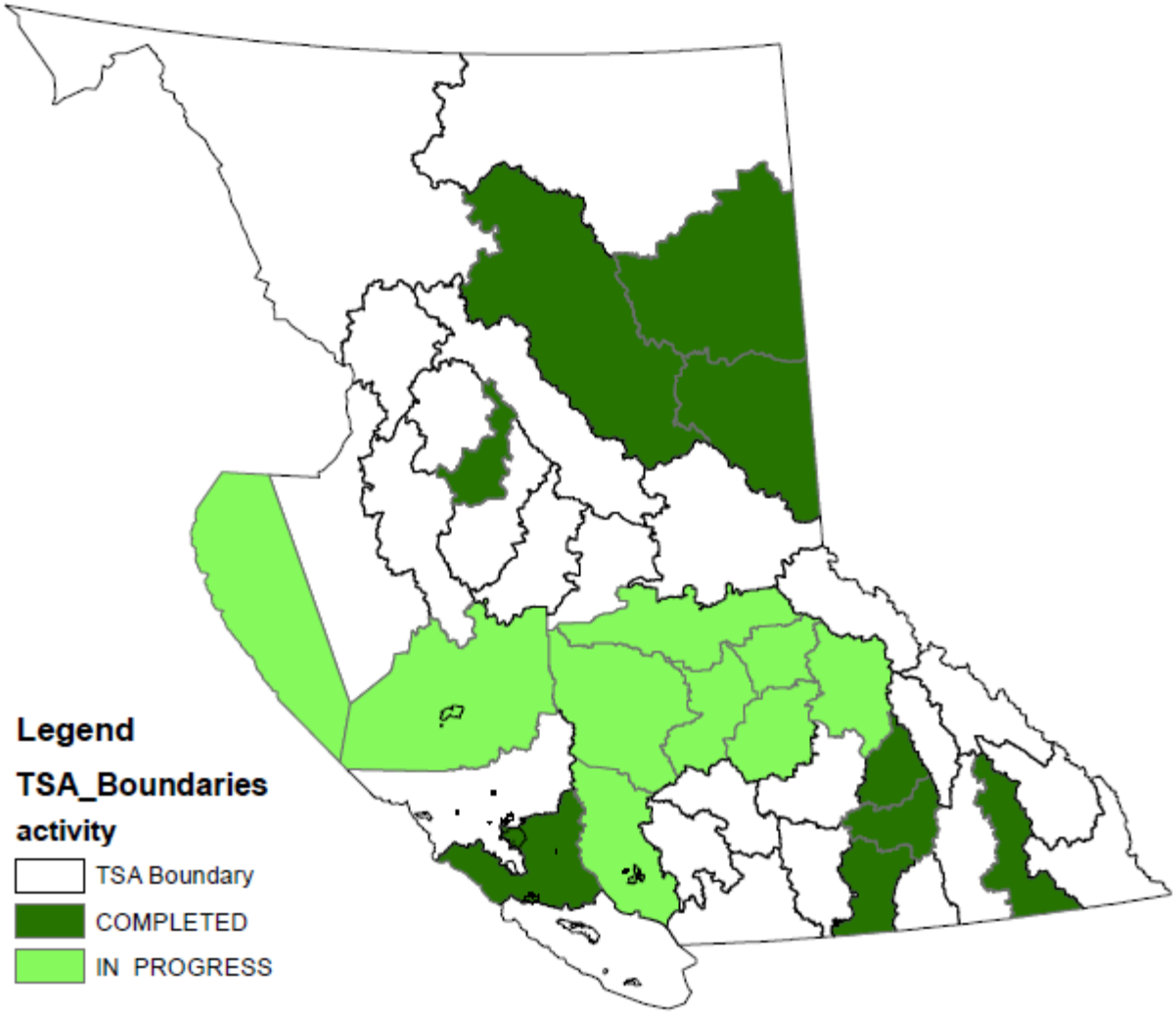
How Can the Resources Devoted to the Forest Inventory be Allocated to Minimize that Risk?

- I believe we are doing this through exhaustive planning for where we focus resource allocations to reduce risk
- In planning inventory activities we consider (among other things):
  - Level and rate of change forests have experienced in an MU
  - Level of decline in harvest forecasts in the near-term
  - Feedback from decision makers on the adequacy of that inventory
  - Units requiring updated information to support new management approaches (EBM)
  - Currency/quality of the Inventory
  - Inventories we know have issues

Inventory Risk/Priority Areas



Current and Recently Completed Inventories



What are the Recent Successes, Challenges and Opportunities for the Inventory Program?

Recent Successes

- Successfully assumed responsibility for direct planning and delivery of all provincial inventory projects
- Developed a new inventory approach (LVI) to provide cost effective, rapid inventory information in units experiencing significant change
- Secured relatively stable funding over the past several years
- Developed a provincial monitoring protocol for second growth stands

What are the Recent Successes, Challenges and Opportunities for the Inventory Program?

Opportunities

- Fill gaps in published coverage by acquiring inventory data for all TFLs
- Improve the quality of RESULTS data submissions to inventory
- Implement a young stand monitoring program
- Continue developing and adopting new technology and methods
  - Air-borne and satellite-borne digital image capture systems
  - Semi-automated satellite image inventory classification [LVI]
  - New tools and methods for collecting inventory information for MBP-impacted areas

What are the Recent Successes, Challenges and Opportunities for the Inventory Program?

Challenges

- Funding
- Staffing/Succession
- IT Systems Maintenance and Development
- Getting feedback from the multitude of inventory users
- Adapting to change
  - The overarching challenge is to successfully adapt to ongoing changes in the forest, the ministry, technology, and user requirements

Conclusion

- The Provincial Forest Inventory is a strategic-level inventory that meets most strategic-level planning requirements
- The status of the inventory varies across the province
- Ministry has a significant program targeting inventory work on high priority areas
- Inventory program has faced significant challenges
  - We have overcome some of them
  - We continue to wrestle with others
- I also see great opportunities