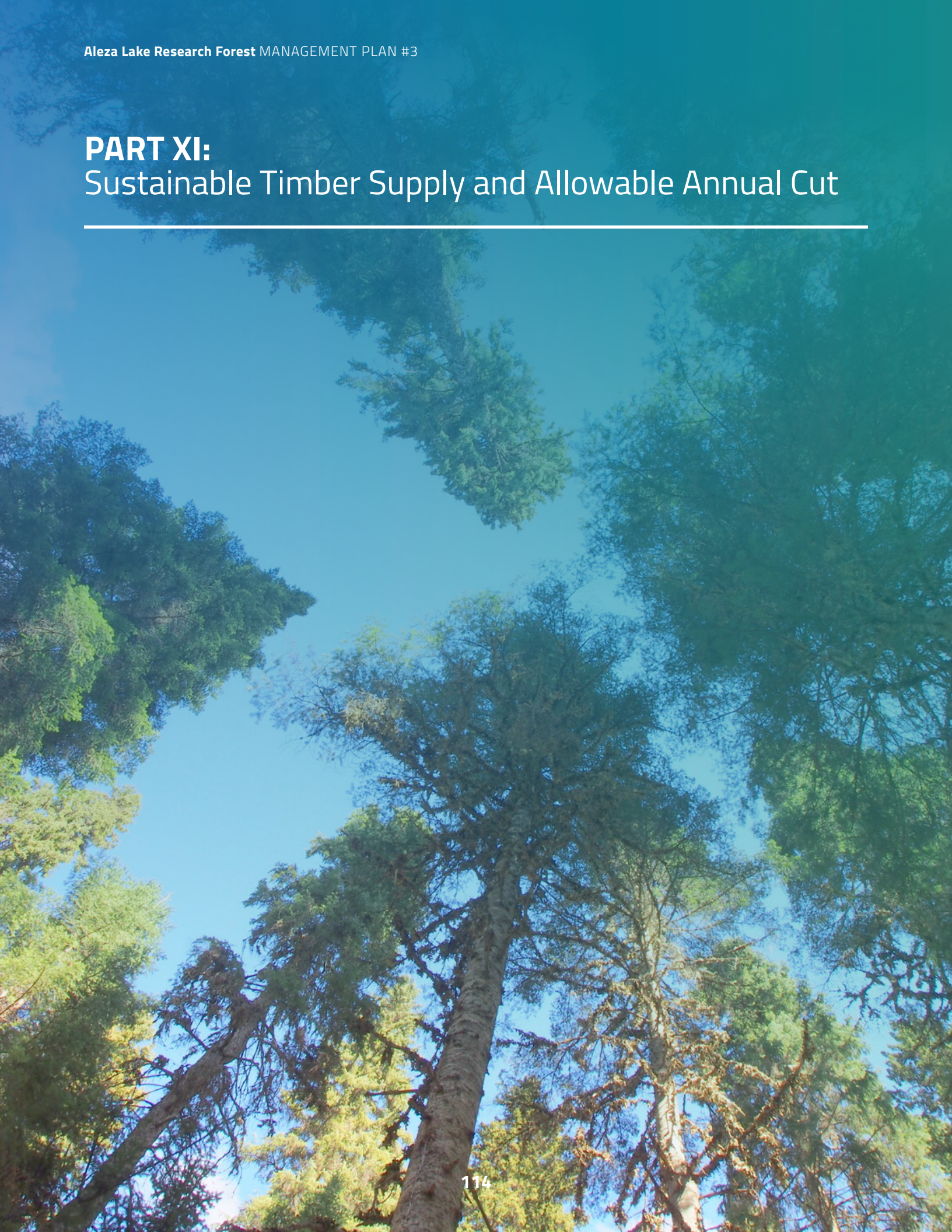
PART XI:
Sustainable Timber Supply and Allowable Annual Cut



15. TIMBER SUPPLY MANAGEMENT

Maturing second-growth stand at the ALRF

15.1 AAC History

From 2001 (ALRF establishment) to 2010, the Allowable Annual Cut (AAC) approved by the Province was 16,000 m^3 (cubic metres) of timber per year. For the period of 2011 to 2018, the AAC was 19,000 m^3 per year.

15.2 Timber Supply Determination

The AAC for the Aleza Lake Research Forest is determined by the District Manager.

Timber supply reviews and analyses will be undertaken by the permittee (the ALRF Society) to the required standards, and submitted to the District Manager, at regular intervals and/or as directed by the Province.

15.3 Cut Control and Cut Control Period

The ALRF Society as permittee will regularly monitor timber volumes harvested under the ALRF timbermark via the provincial Harvest Billing System (or equivalent mechanisms), to ensure due diligence and legal compliance with the authorized AAC over a specified 5-year period, or other cut-control period as directed by the Province.

As a guiding principle, any surplus or deficit in AAC harvest incurred in a current cut control period will be carried forward to the following cut control period. The Province may provide additional direction or guidance in this respect.

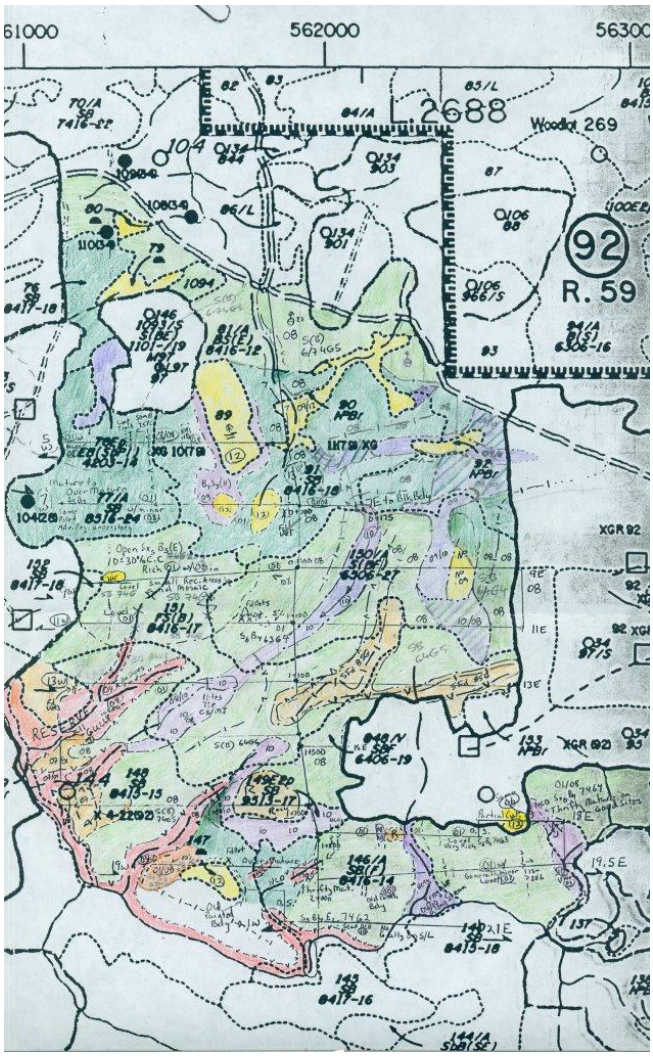
15.4 Timber Supply Analyses

Appendix E of this Management Plan includes a Timber Supply Analysis for the Aleza Lake Research Forest for the term of this plan and into the future. This analysis report considers, analyzes, and addresses the following requirements and concerns of the Province for this plan (as per SUP 23615):

1. *"the short and long term availability of timber for harvesting in the Permit area, including the impact of management practices on the availability of timber…",*

2. *"the availability of timber (based on) the net operable landbase, harvested areas, existing and proposed road access within the net operable land base, and areas subject to special management constraints…"*, and

3. *"(the) categorization of areas within the net operable landbase by the type and quality of timber, and the harvesting method(s)suitable to the terrain."*



For timber management, both field-based operational planning and mapping (example field map as shown) and computer-aided analysis of forest inventory data help to separate out areas suitable for timber harvesting and management from more sensitive areas designated for other forest values

Timber Supply Modeling / forecasting was done using the University of British Columbia's freely available ATLAS - FPS model (Forest Planning Studio, http://sfmtutorials.forestry.ubc.ca/fps-atlas/) with the intent that this model may also be used for UNBC forest planning instruction.

Initial data analysis, modeling, and training of ALRF professional forestry staff was provided by Mark Perdue RPF of Forsite Consultants Ltd. Following model training and orientation, ALRF staff used additional local ALRF data and detailed knowledge and understanding of the area to run additional iterations and scenarios of the model, as a basis for preparation of the final timber supply analysis report.

15.5 Overview of Gross Landbase and Net Timber Harvesting Landbase

A timber-supply "net-down" table for the ALRF landbase, summarized in the Appendix E timber supply analysis, provides an overview of the gross and net landbase for the ALRF, and the proportion of the landbase available (allocated under this plan) for sustainable timber management and related harvesting.

From a gross Crown landbase of 9,002 hectares (excluding Ecological Reserve 84 under the jurisdiction of BC Parks), and after the deduction of excluded lands, non-contributing lands allocated for other purposes (including Old-growth Management Areas), and other proportionate reductions for other non-timber values, the current Total Harvestable Landbase is 5,799 hectares, or 64.4% of the gross ALRF landbase.

Estimated future reductions for road access and Wildlife Tree Retention Areas within the Total Harvestable Landbase further adjusts the long-term timber harvesting landbase (i.e.-that area allocated for growing trees for sustainable timber management) downward to a final total of 5,032 hectares or 55.9% of the total ALRF landbase.

Figure 10: Selected portion of the provincial Vegetation Resources Inventory (VRI) forest cover polygons,
overlaid on ALRF aerial ortho-photo coverage. VRI data support, and provide one of the foundations of the ALRF timber supply analyses, and are complemented and cross-referenced to other ALRF landbase data in this analysis.