



STATE OF PROVINCIAL REFORESTATION (CURRENT AND FUTURE)

ITAC meeting

January 19th 2022

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Practices Branch

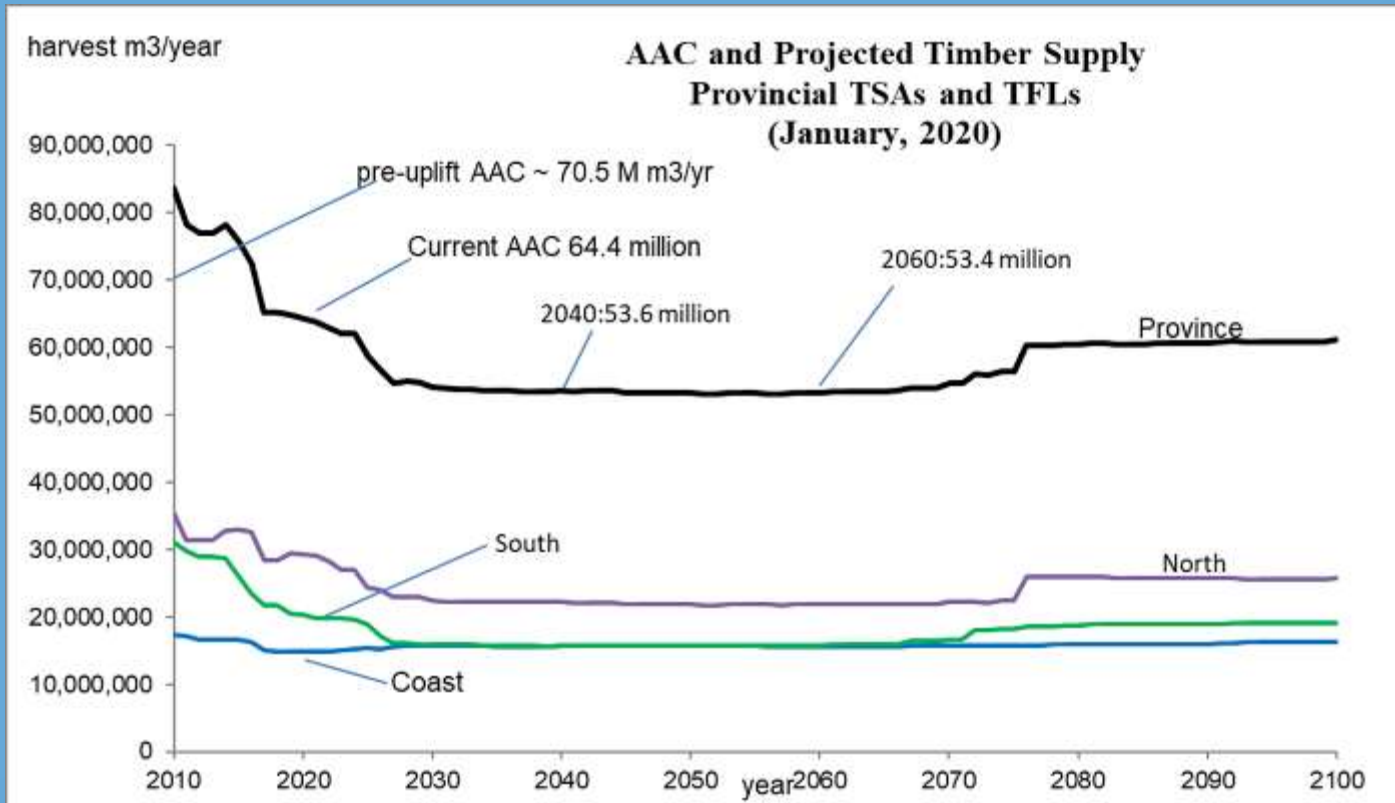
PRESENTATION OUTLINE

- ▶ Current Seedling Demand Drivers
- ▶ Recent Activity and State of the Silviculture Industry
- ▶ Potential Projections
 - ▶ Potential Area to Treat and 2021 Wildfire Overview
 - ▶ Seedling Projections
- ▶ Future Developments for Reforestation

CURRENT DRIVERS ??

Market Demand
Old growth Deferrals
MPB and Wildfires
Climate Change Adaptation
Drought and Associated Forest Health
Impacts





Area Harvested		
Year	Hectares	5yr Av.
2011	208,290	217,000
2012	219,566	
2013	226,916	
2014	200,969	
2015	232,147	
2016	210,799	178,000
2017	203,162	
2018	197,014	
2019	148,864	
2020	134,942	

MOUNTAIN PINE BEETLE AND WILDFIRE REFORESTATION



A HEAT DOME AND DROUGHT



2. RECENT ACTIVITY AND THE STATE OF REFORESTATION



THE PROVINCIAL REFORESTATION PROGRAM



Forests for Tomorrow
and Forest Carbon Initiative



Licensee Legal Obligations

PROVINCIAL SILVICULTURE INVESTMENTS

REFORESTATION AND TIMBER SUPPLY MITIGATION



PROVINCIAL REFORESTATION

ACHIEVEMENTS

2012-2022

	M trees		
Planting Year	FFT	FCI	Total
2012	23		23
2013	24		24
2014	19		19
2015	20		20
2016	24		24
2017	25	1	26
2018	24	11	35
2019	22.5	25.9	48.4
2020	26	37	63
2021	27	36	63
2022	21	25	46
Total	255.5	135.9	391.4

2021 / 22 Annual Plan Ministry Silviculture Program

Planting	66,200,000 trees
Overstorey Removal	1,750ha
Wildfire Surveys	62,481ha
MPB Surveys	9,146ha
Site Prep	5,718ha
Fert	35,860ha
Fert Surveys	72,658ha
Spacing	691ha
Sowing	45,000,000 trees

The Provincial Reforestation Program

Forest Investment and Reporting Branch

Will deliver the provinces reforestation programs and report out on activities

Forest Science, Planning and Practices Branch

Will focus on practices, policy development and overall goals and strategic direction for the provinces silviculture program

Licensee Obligations

1. **Annual harvesting commitment**
averages 218 million trees per year
2. **Section 108 legal obligation to 2021 – 225,000ha gross**
likely still 150 million trees required
3. **Drought Losses**
Unknown but substantial from 2017 and 2018 and now 2021

THE STATE OF REFORESTATION

WHAT IS REALLY GOING ON OUT THERE?

- ▶ **Planting** – stock sizes, planting densities, fertilization,
- ▶ **Site Preparation** – Mounding, Ripping, Trenching, prescribed fire
- ▶ **Brushing** – Herbicide and manual
- ▶ **Regeneration Delay and Free Growing**

THE SILVICULTURE INDUSTRY

Western Forestry Contractors Association

Focus on recruitment and retention

4-5,000 planters needed

Health and Safety
Covid Measures

Reviewing the Traditional
Planting Season
Start Earlier ?
Do More in Fall ?



3. Potential Projections



THE 2021 FIRE SEASON AS WE KNOW IT

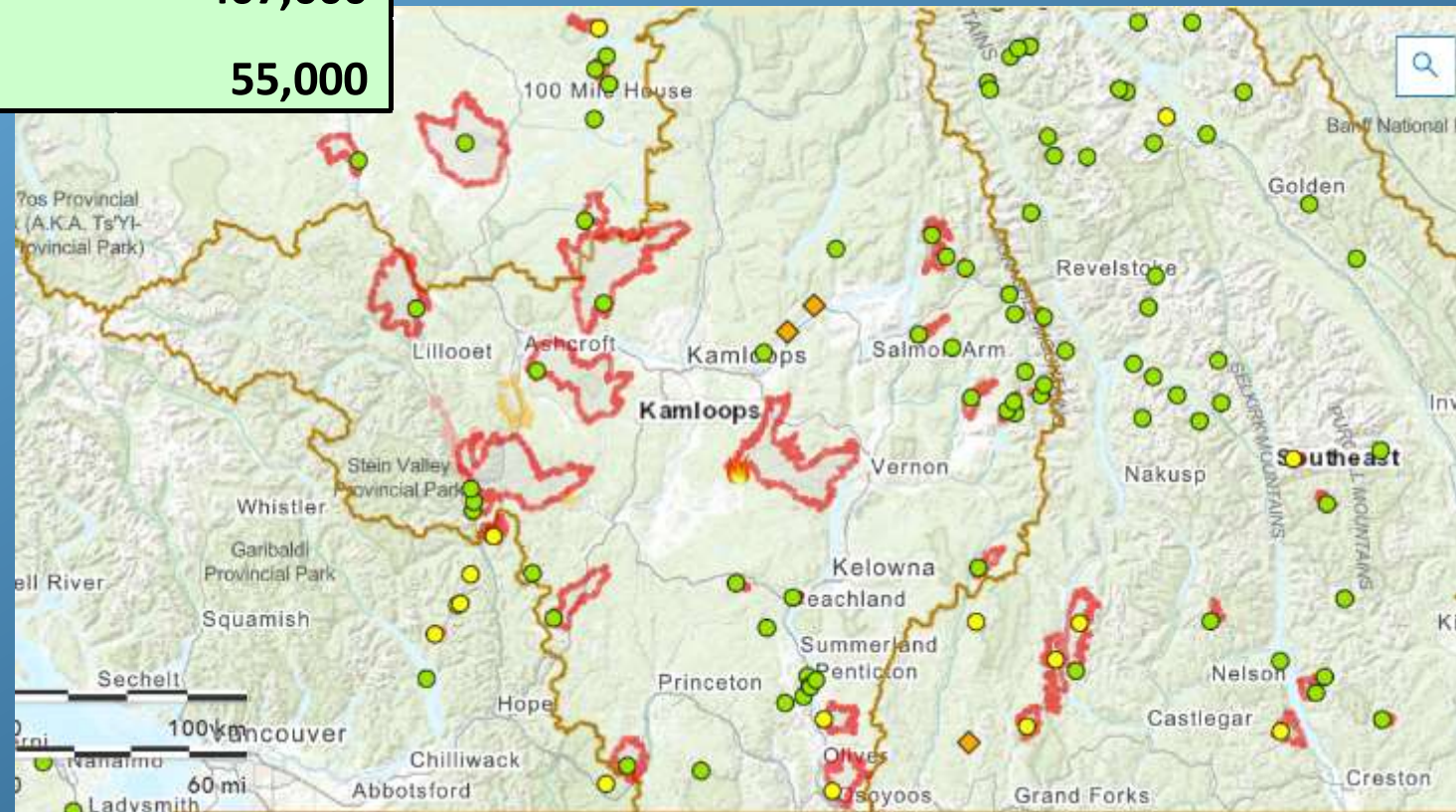
2021 Wildfires

Total Area Within Fire Perimeter

Forest Management Landbase 782,000

Timber harvesting Landbase 407,000

Licensee Liability 55,000



Potentially Treatable Area

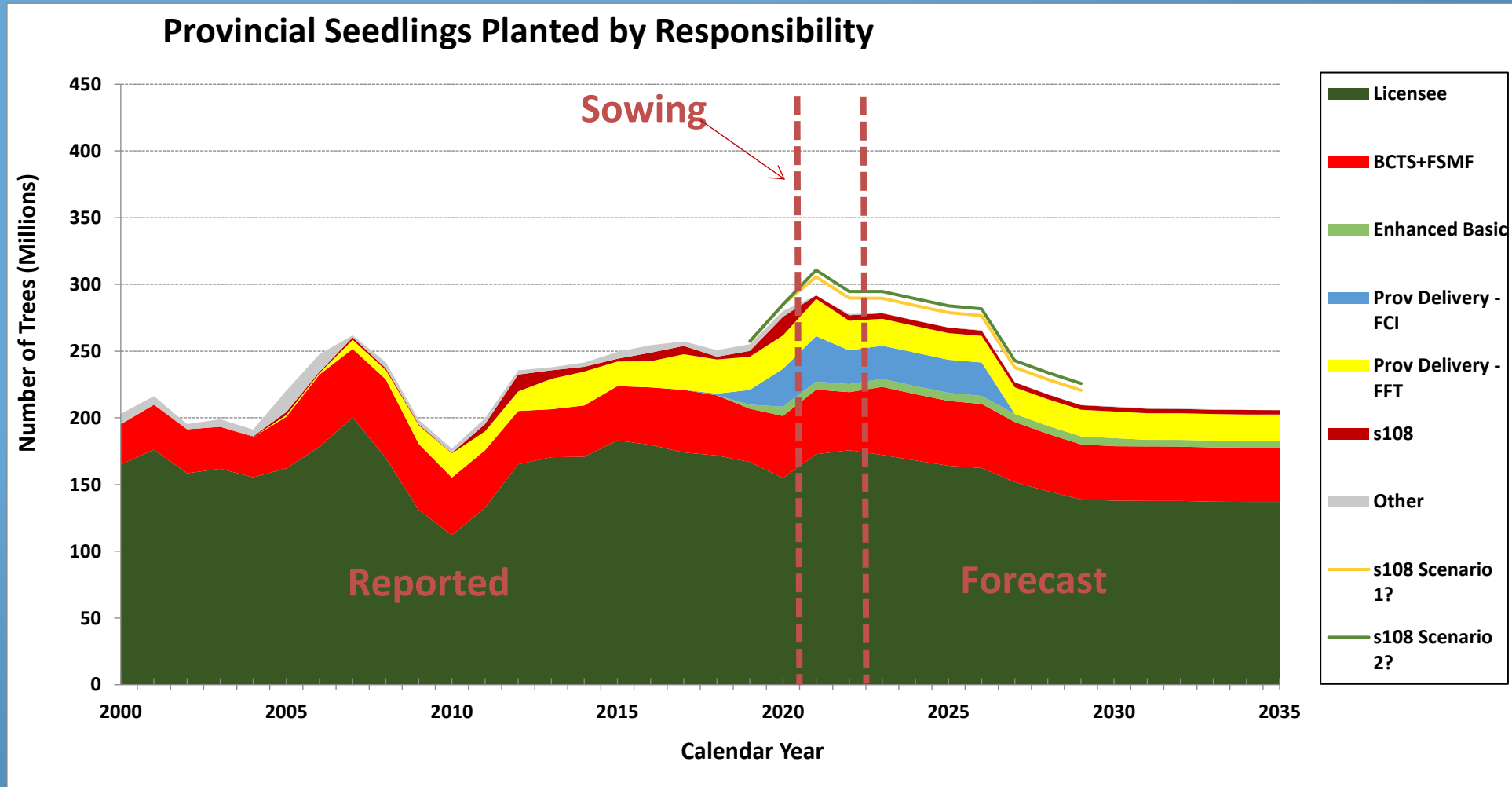
Only MBP

Netdown Factor - Potential Treatable Area	THLB Area(Ha)
(Only within MPB affected Stands)	Inside
MPB $\geq 70\%$ Dead	305,999.40
And Site Productivity ≥ 15	255,879.82
And Not in FTEN/RESULTS	252,714.17

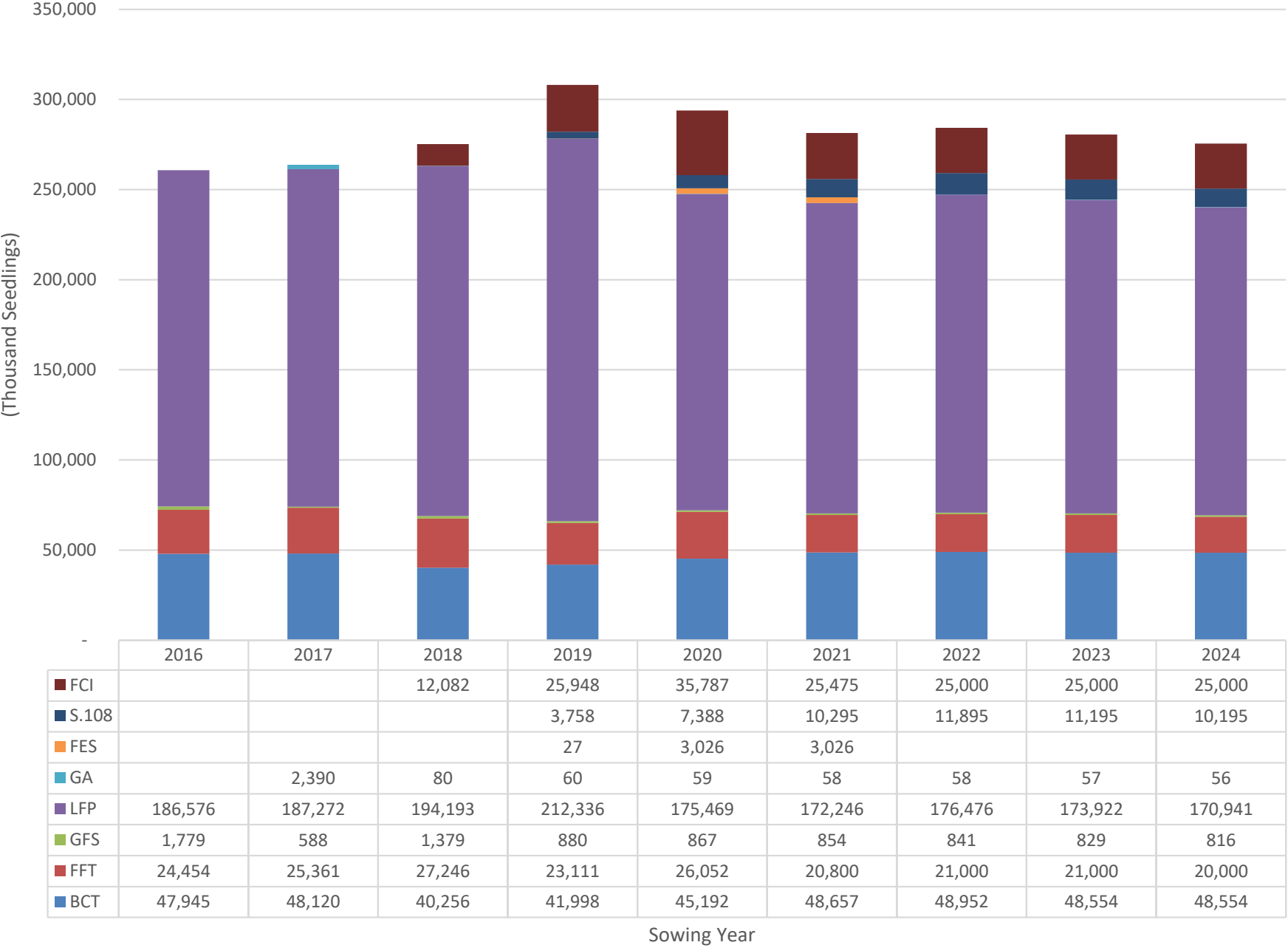
Only Wildfire

Netdown Factor - Potential Treatable Area	THLB Area(Ha)
(Only within Wildfire 2000-2020)	Inside
Wildfires 2000-2020	1,494,477.15
Wildfires 2015-2020	1,014,126.26
And Wildfire Burn Severity = High, Medium, Low	758,684.80
And Site Productivity ≥ 15	450,612.45
And Not in FTEN/RESULTS	421,916.18

PUTTING IT ALL TOGETHER



Provincial Sowing by Year and Funding (2016-2024)



UNCERTAINTY FACTORS

- ▶ Section 108
- ▶ Government Funding post covid??
- ▶ The 2 Billion Tree Program
- ▶ Nursery Capacity – US wildfire demands

2 BILLION TREE PROGRAM

Where would the trees go?

Inside and



Outside the Timber Harvesting LandBase

Outside the THLB

Category	Inside THLB	Outside THLB
	Hectares	
Wildfires 2015 to 2021	1,421,000	1,650,000
High, Medium, Low Severity	708,270	750,000
MPB >70% dead	306,000	192,000
and Site Index >15	256,000	161,000

What other options exist?



FUTURE CHALLENGES FOR THE REFORESTATION PROGRAM

- ▶ Climate Change and Species Selection
- ▶ Increasing growing season moisture deficits
- ▶ Climate Change and Season for planting
- ▶ Wildfire Hazard Abatement or Wildlife habitat
- ▶ A smaller THLB requiring more intensive management

Increase stocking levels in licensee lands ? Improve timber quality



SO THE FUTURE IS THE FUTURE



And right now our crystal ball is a little cloudy, but we are working on it