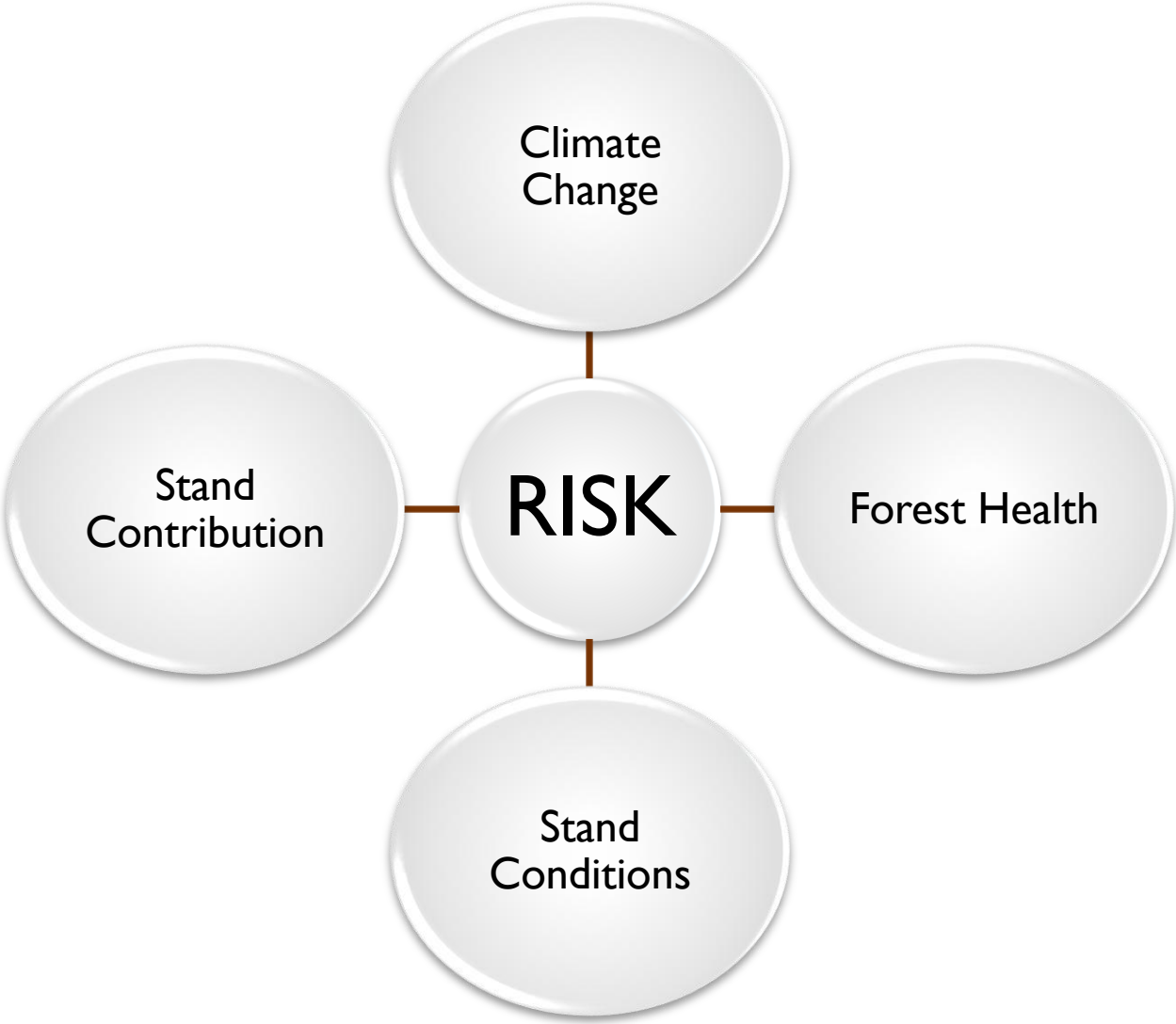
Nadina District Perspectives

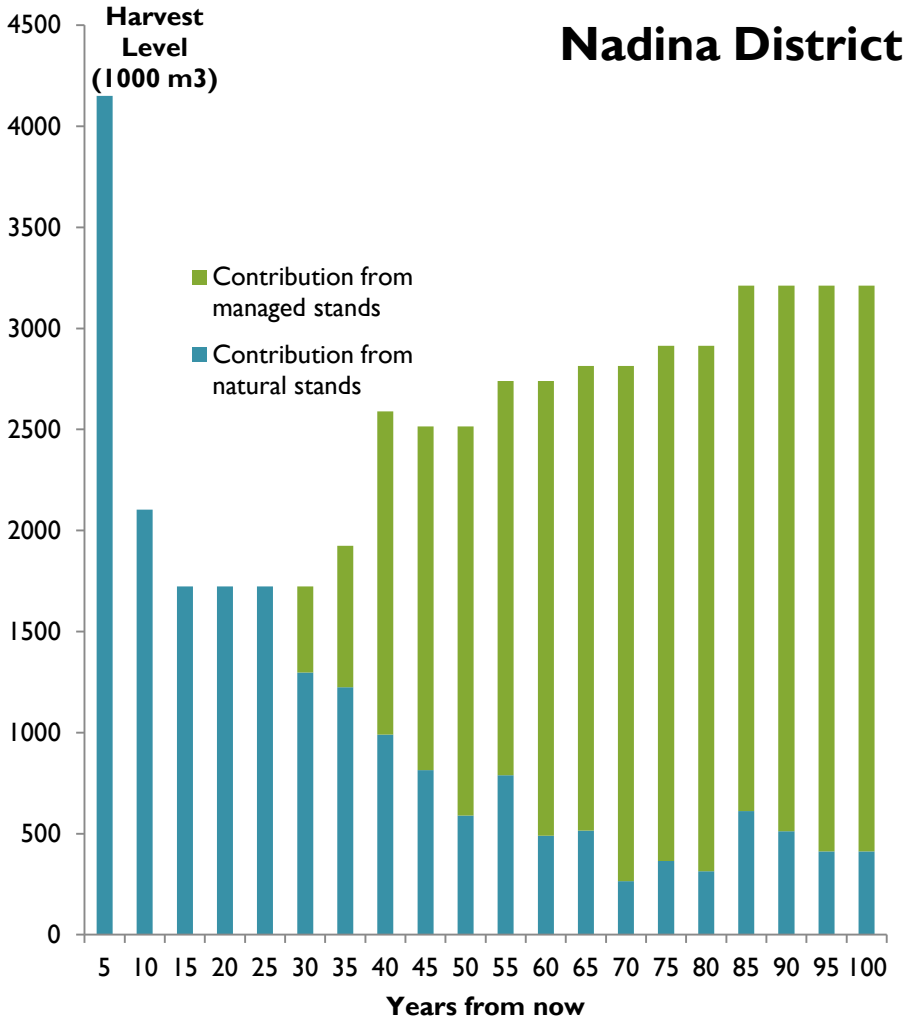
Purpose of discussion → Overview of concerns → Moving Forward

Why are we here?



Managed Stands Yield Importance

- Significant contribution to timber supply within 20-40 years
- Dominated by pine
  - Pine continues to be a wide-spread species



Forest Health Agents

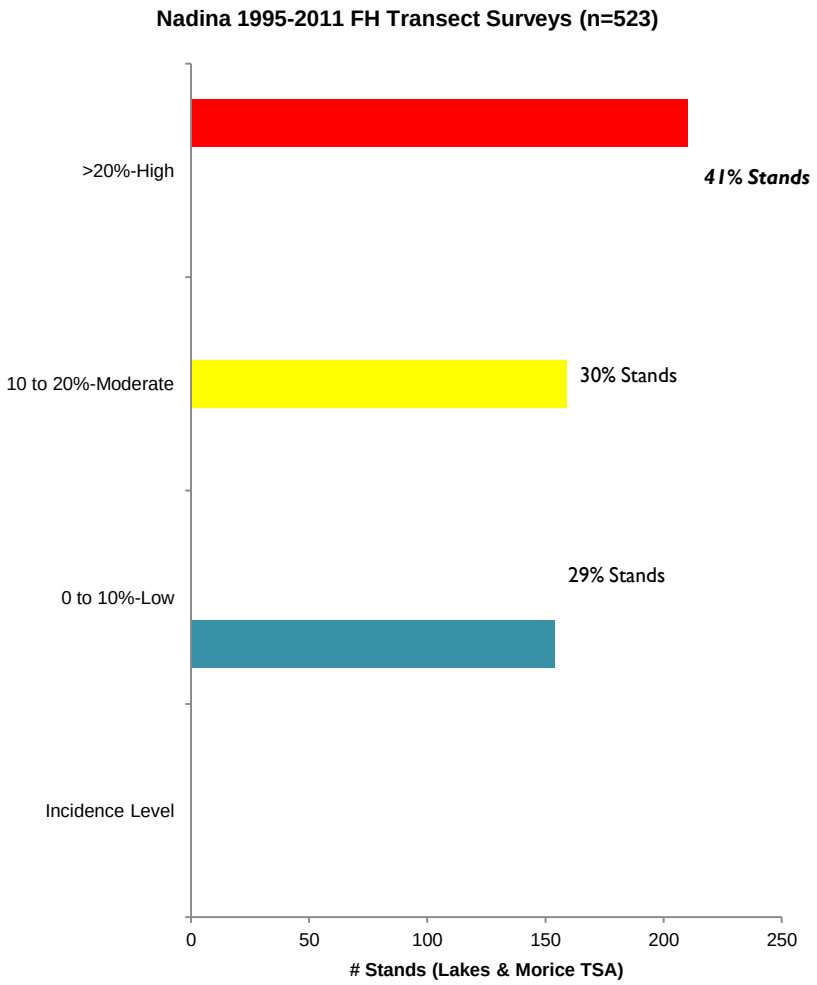
Rusts

Biotic Deformities

Competition

RUST

- Rust found in 99% of sampled plantations
- Level of high rust incidence has increased by 29% between 1995 and 2011

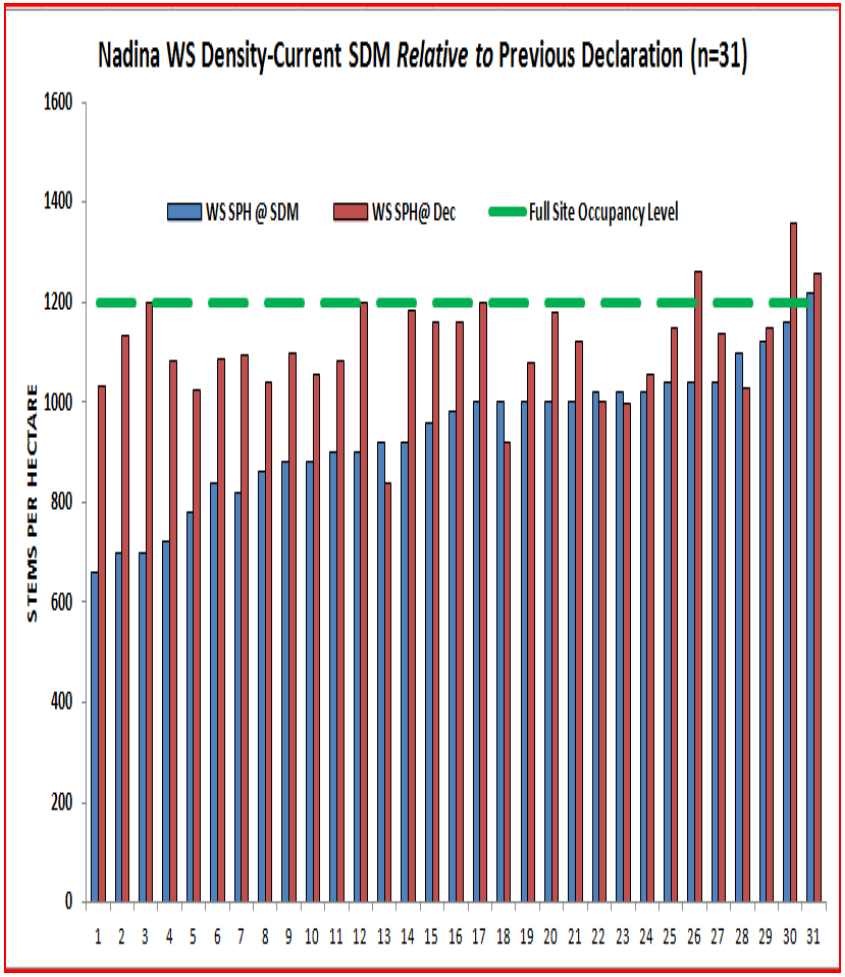


Managed Stands Conditions

- Recognition:
  - Practices are in compliance with the legislation and consistent with existing policies, standards, or objectives.

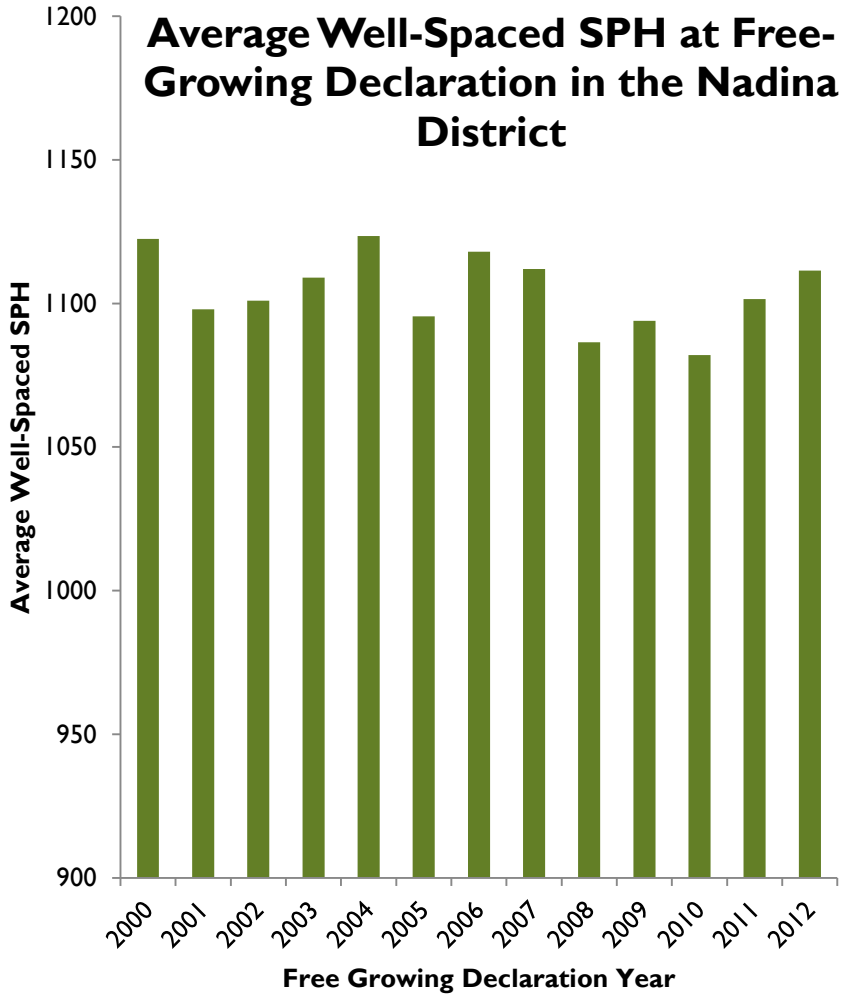
Managed Stands Conditions

- 96% of sites are not fully occupied
- Average WS density at FG 8% below full site occupancy
- Average WS density at survey 22% below full site occupancy



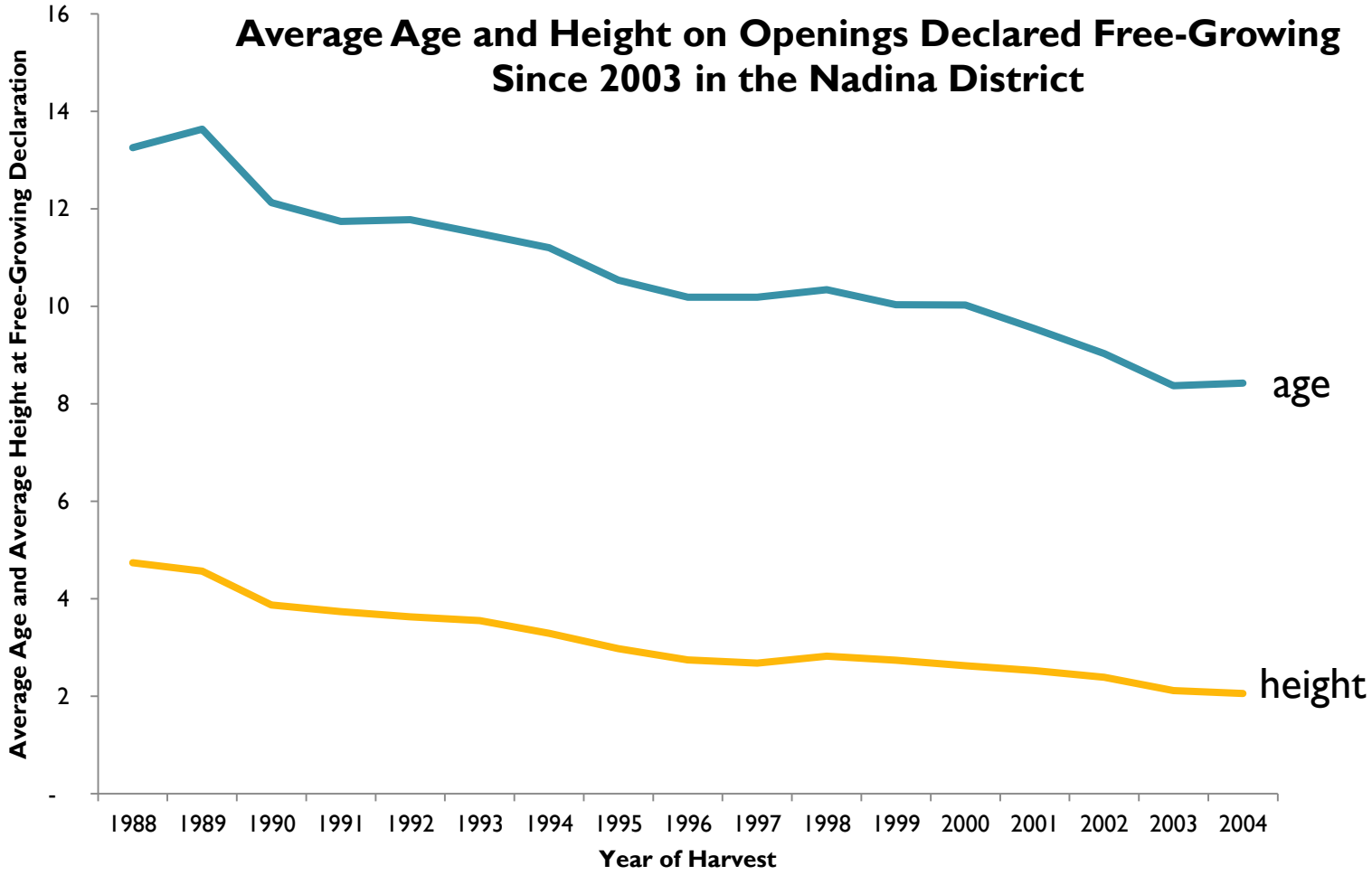
Managed Stands Conditions

- Average well-spaced density at FG 8% below full site occupancy

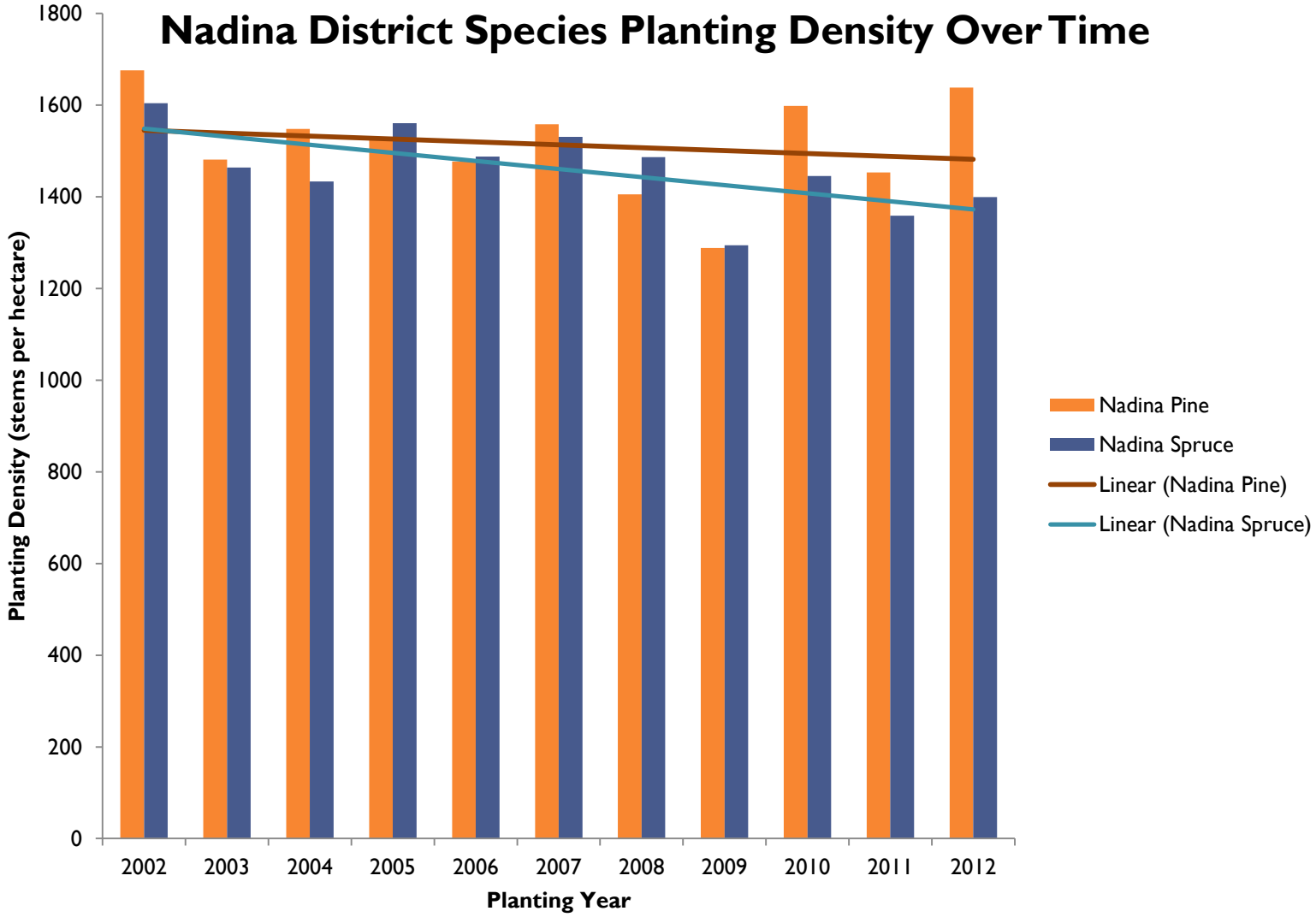


Managed Stands: Rust

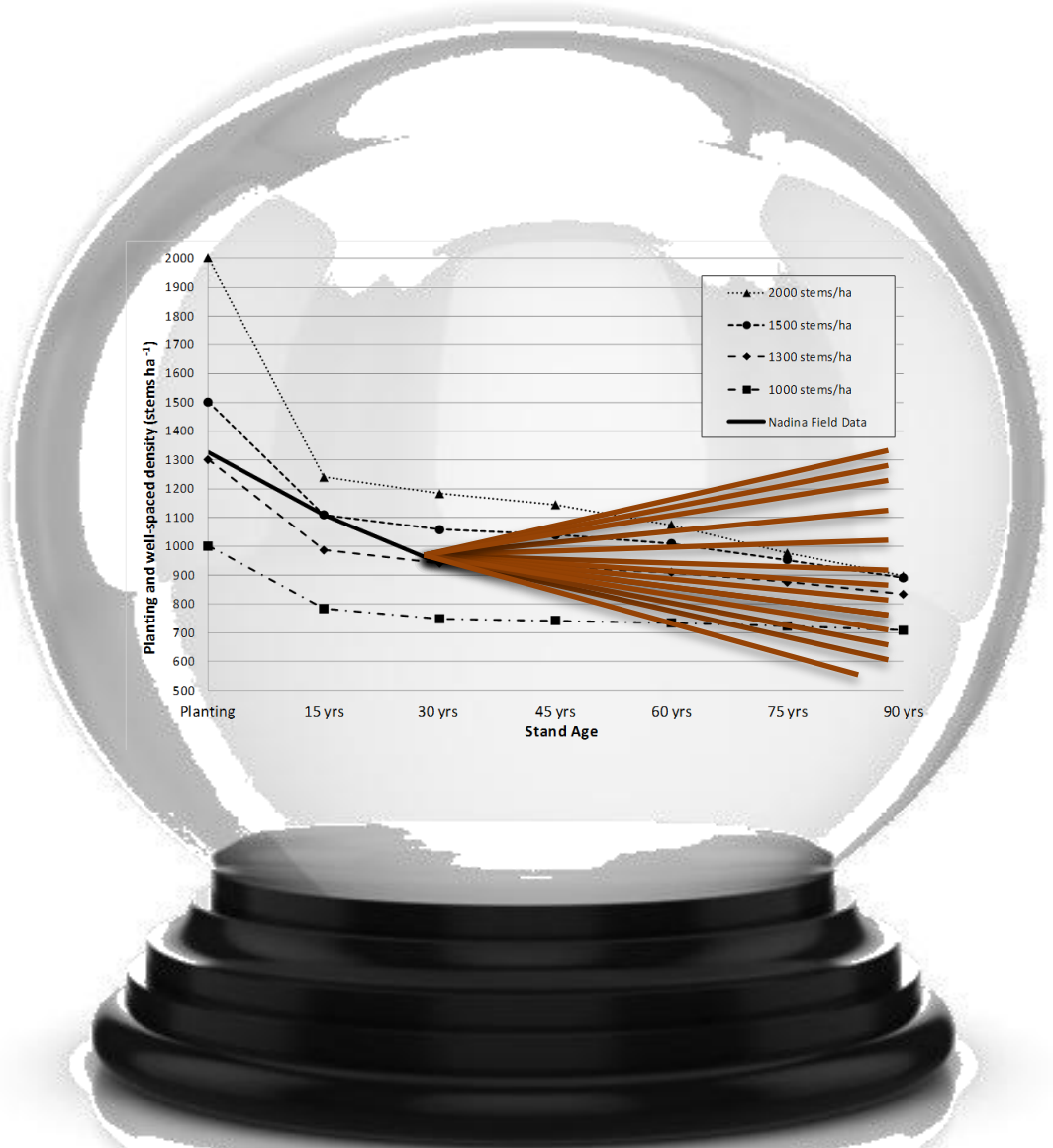
Managed Stands Conditions



Managed Stands Conditions



Stand Development



Managed Stands Conditions

Climate Change

- Climate change:
  - Warmer and wetter climate
  - SBS change from mostly SBS to mostly ICH/IDF
    - Shift in species
- Increased rust damage risk
  - warmer and wetter late springs and summers

Climate Variables Projected for 2055 in the Bulkley-Nechako

Variable	Median Change	Range of Change
Mean °C (annual)	+1.8 °C	+1.3°C to 2.7°C
Mean Precipitation (annual)	+9%	+2% to +16%
Growing degree days	+213	+127 to +394
Frost free days	+18	+11 to +29

Risk Management

- Changes to stocking standards:
  - Promote species diversity
  - Increase minimum densities
  - Insurance to future generations
- Ongoing monitoring

Overview of Concerns

Draft vs Order	Costs	Why Nadina? Why Now?
Technical and operational	Current practices	FSP timelines

Draft Nadina Stocking Standards

- Are the *draft* Nadina Stocking Standards mandatory?

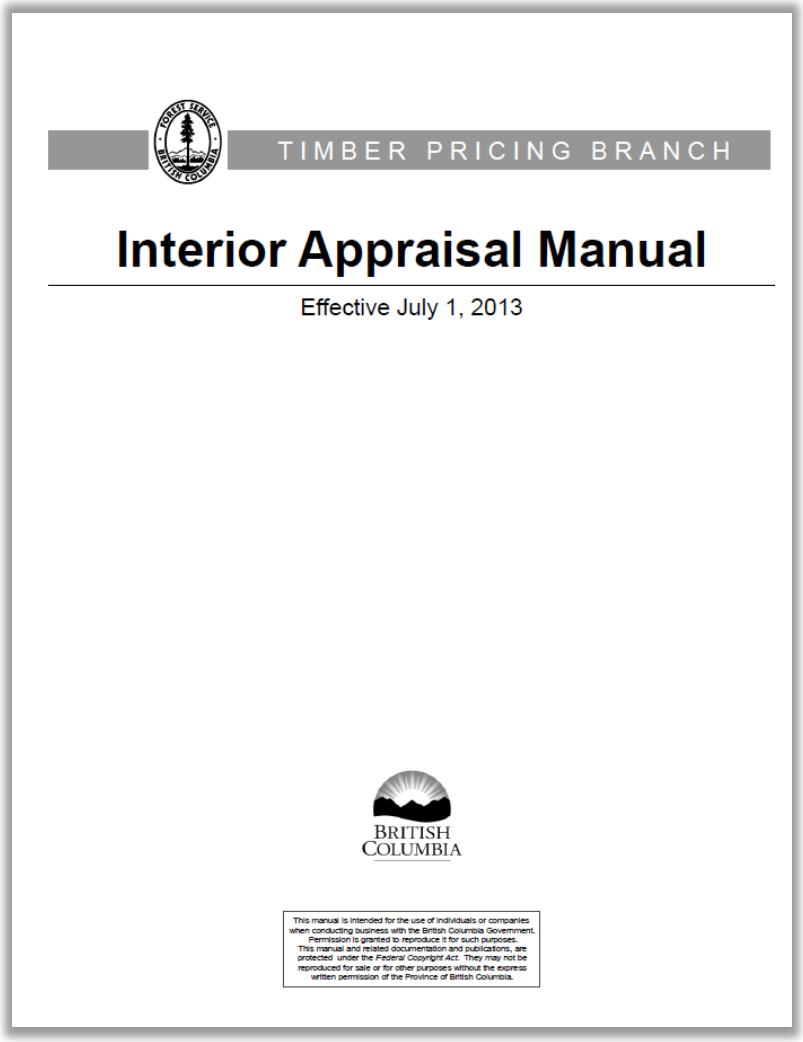
DRAFT Nadina District Reference Guide for FSP Stocking Standards

Quick Reference:

1. Rows highlighted in yellow designate changes to preferred and acceptable species
2. Numbers formatted in bold font designate changes to species density and spacing

BEC Zones and Series		Regeneration							Free Growing				
		Preferred Species and (Free Growing Height)	Acceptable Species and (Height)	Target (sph)	Minimum Stocking (sph)	Minimum Preferred (sph)	Minimum Horizontal Distance (m)	Regen Delay (max years)	Target (sph)	Minimum Stocking (sph)	Minimum Preferred (sph)	Minimum Horizontal Distance (m)	Free Growing Delay (max years)
	ESSFmc 01	Bl(0.8) Sx(0.8)	Pl(1.6)	1200	700	600	2	7	1200	700	600	2	20
	ESSFmc 02 03	Pl(1.6)	Bl(0.8) Sx(0.8)	1000	500	400	2	7	1000	500	400	2	20
	ESSFmc 04	Pl(1.6) Bl(0.8)	Sx(0.8)	1200	700	600	2	7	1200	700	600	2	20
	ESSFmc 05/06	Bl(0.8) Sx(0.8)		1200	700	600	2	4	1200	700	600	2	20
	ESSFmc 07	Bl(0.8) Sx(0.8)	Pl(1.6)	1200	700	600	1	4	1200	700	600	1	20
	ESSFmc 08	Bl(0.8) Sx(0.8)		1000	500	400	1	4	1000	500	400	1	20
	ESSFmc 09/10	Bl(0.8) Sx(0.8)		1000	500	400	1	4	1000	500	400	1	20
>50% Pl	SBS dk 01	Sx(1.0), Pli(2.0), Fdi(1.4)Lw(2.0)		2000	1600	1600	2	4	1600	1200	1200	2	20
	SBS dk 01	Sx(1.0), Pli(2.0), Fdi(1.4)Lw(2.0)		1600	1400	1400	2	4	1400	800	800	2	20
	SBS dk 02	PLI(1.4)	SX(.8)	1000	500	400	2.0	4	1000	500	400	2	20
	SBS dk 03	PLI(2.0)SX(1.0)	SB(1.0)Fdi(1.4)Lw(2.0)	1200	700	600	2.0	4	1200	700	600	2	20
>50% Pl	SBS dk 04	PLI(2.0) FDI(1.4) SX(1.0)Lw(2.0)		1600	1400	1400	2.0	4	1400	900	900	2	20
	SBS dk 04	PLI(2.0) FDI(1.4) SX(1.0)Lw(2.0)		1400	1200	1200	2.0	4	1200	700	700	2	20
>50% Pl	SBS dk 05	PLI(2.0) SX(1.0)	Lw(2.0)Fdi(1.4)	2000	1600	1400	2.0	4	1600	1200	1000	2	20
	SBS dk 05	PLI(2.0) SX(1.0)	Lw(2.0)Fdi(1.4)	1600	1200	1000	2.0	4	1400	800	700	2	20
>50% Pl	SBS dk 06	SX(1.0),Fdi(1.4),Lw(2.0)PLI(2.0)		2000	1600	1600	2.0	4	1600	1200	1200	2	20
	SBS dk 06	SX(1.0),Fdi(1.4),Lw(2.0)PLI(2.0)		1600	1200	1200	2.0	4	1400	800	800	2	20
	SBS dk 07	SX(.8) Lw(2.0)Fdi(1.4)	PLI(1.4)	1200	700	600	1	4	1000	500	400	1	20
	SBS dk 08	SX(1.0)	PLI(2.0)	1200	700	600	1	4	1200	700	600	1	20
	SBS dk 09	Pl(1.4) Sb(0.8)Sx(0.8)		400	200	200	1	4	400	200	200	1	20
	SBS dk 10	Pl(1.4) Sb(0.8)Sx(0.8)		400	200	200	1	4	400	200	200	1	20
>50% Pl	SBS mc 2 01	PLI(1.6) SX(.8)Fdi(1.4) Lw(2.0)	BL(.8)	2000	1600	1400	2.0	4	1600	1200	1000	2	20
	SBS mc 2 01	PLI(1.6) SX(.8)Fdi(1.4) Lw(2.0)	BL(.8)	1600	1400	1200	2.0	4	1400	800	700	2	20
	SBS mc 2 02	PLI(1.2)	BL(.6) SX(.6)	1200	700	600	2.0	4	1000	500	400	2	20

Costs



TIMBER PRICING BRANCH

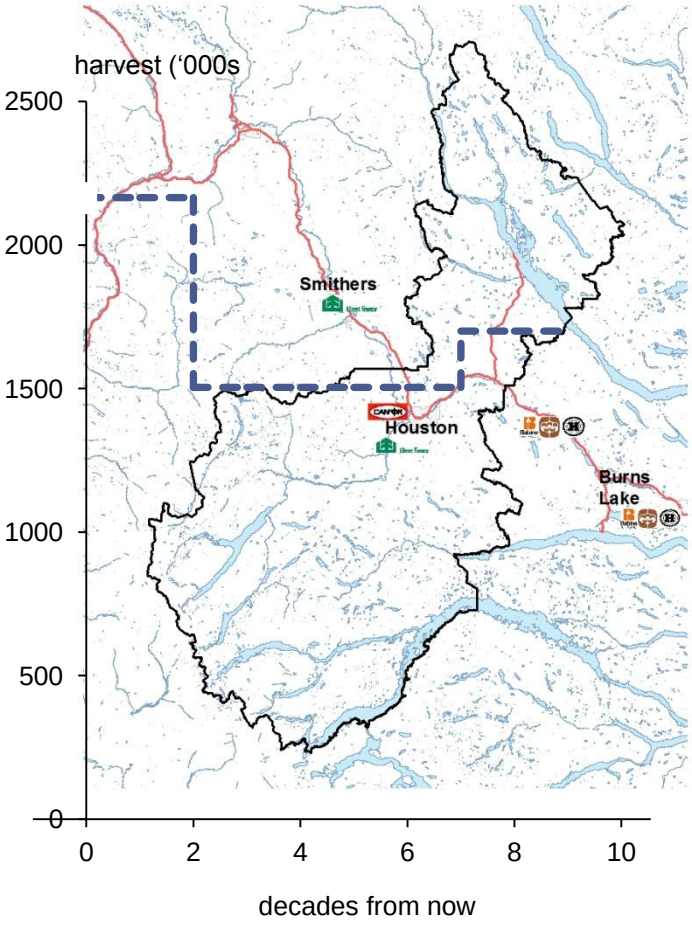
Interior Appraisal Manual

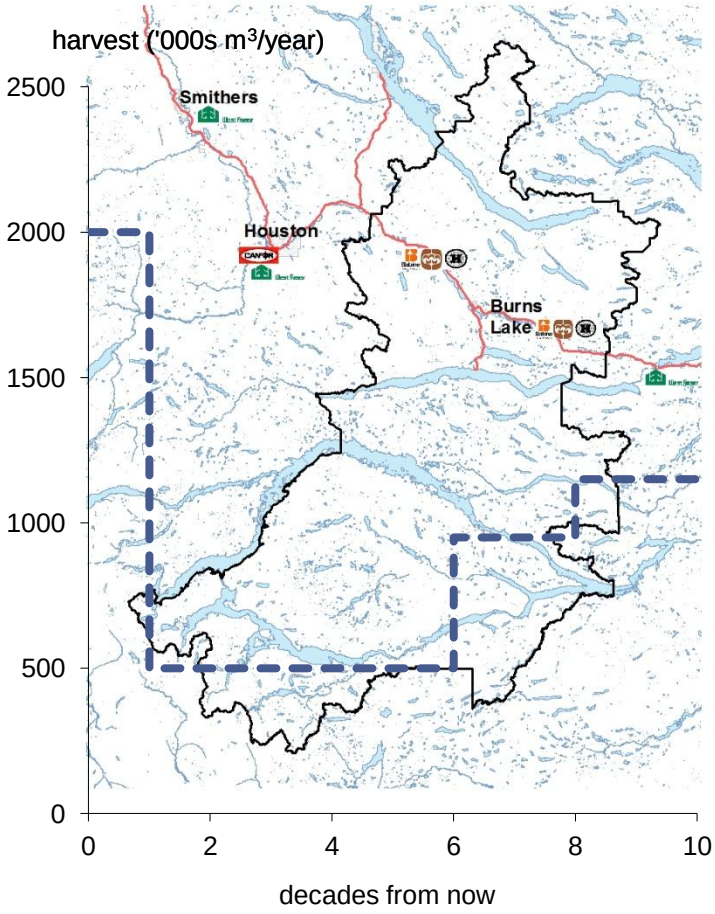
Effective July 1, 2013

BRITISH COLUMBIA

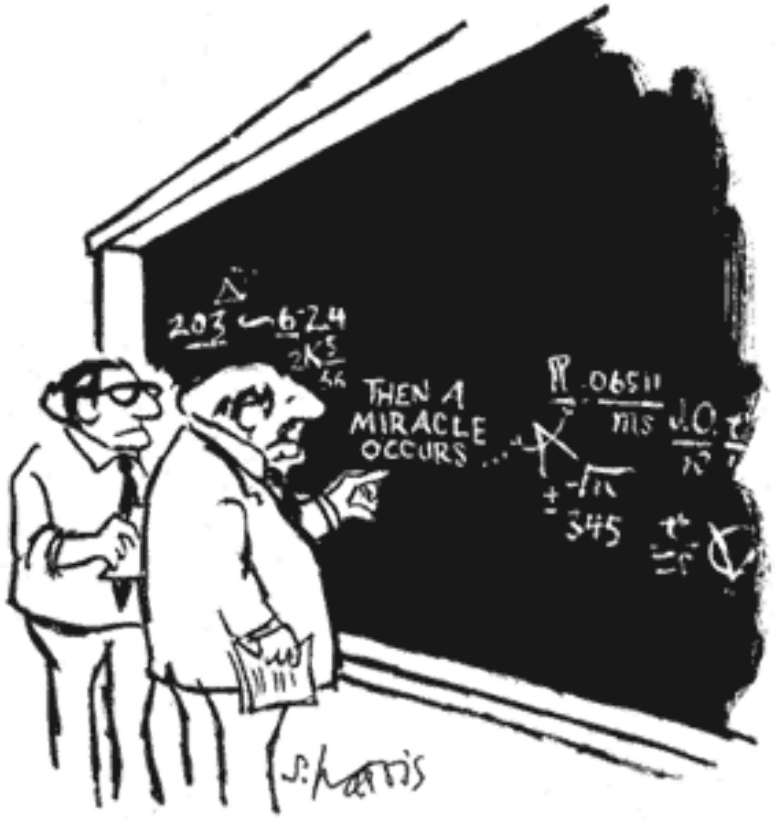
This manual is intended for the use of individuals or companies when conducting business with the British Columbia Government. Permission is granted to reproduce it for such purposes. This manual and related documentation and publications, are protected under the *Federal Copyright Act*. They may not be reproduced for sale or for other purposes without the express written permission of the Province of British Columbia.

Place and Time





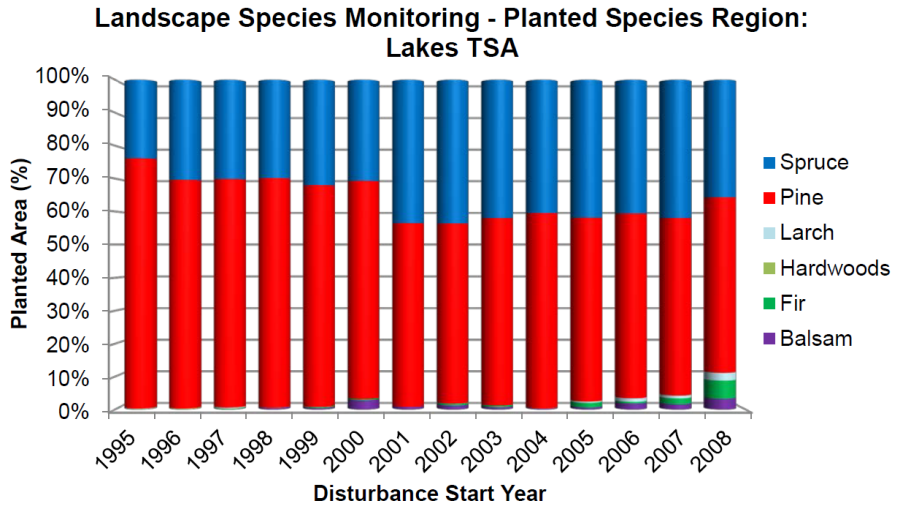
Technical Questions

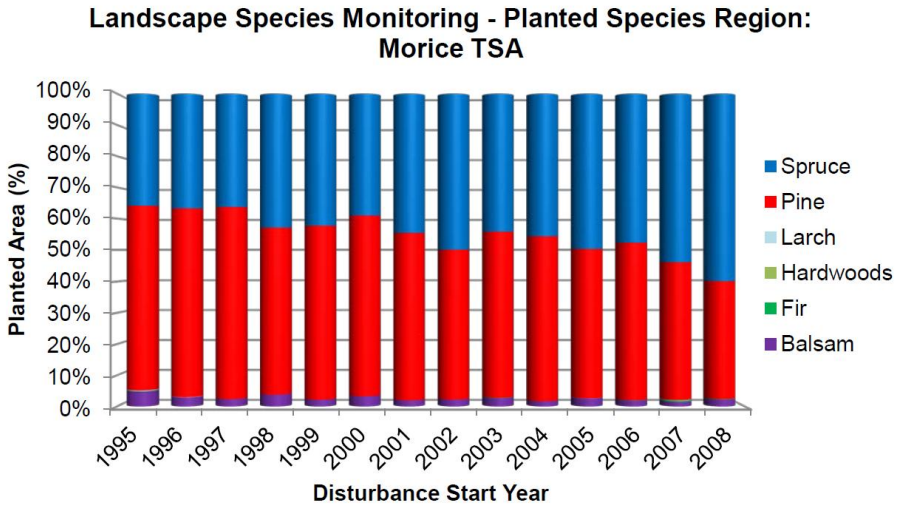


"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

Current Practices

- Current practices adequately address risk



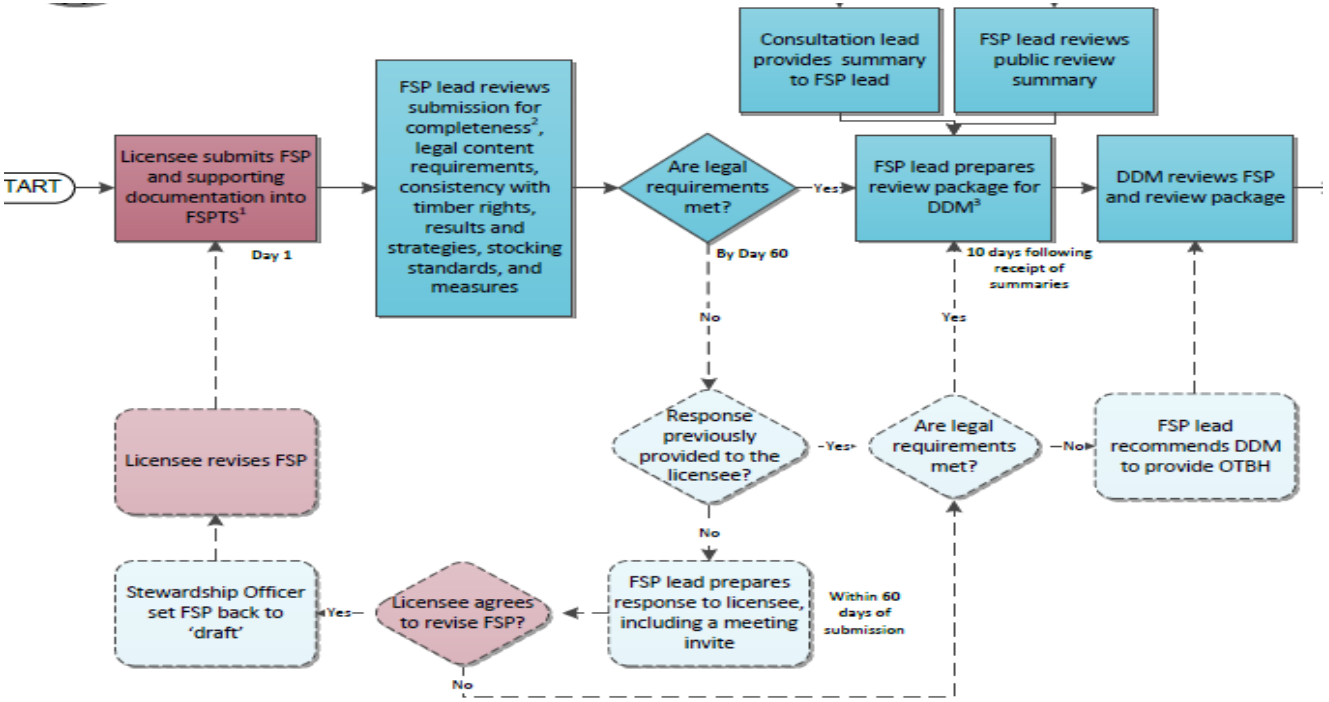


FSP Timelines

Expected Submission Date

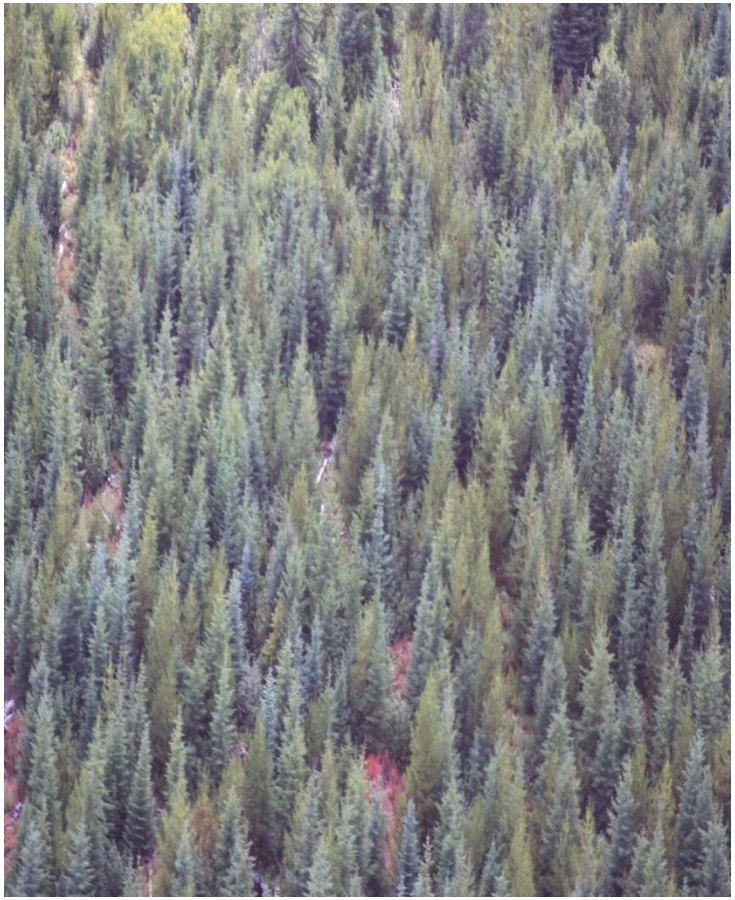
FSP Expiry Date

Ongoing Collaboration



Moving Forward

- What is planted today and stand treatments will determine future timber supply
- Collaboration is essential

Moving Forward

- Harvested areas stocked with ***ecologically suitable species*** that **address immediate and long-term forest health issues** to a **density** or **basal area** that is consistent with **maintaining or enhancing an economically valuable supply of commercial timber**
- Resilient forests
- Proactive response, thriving communities, strong forest industry