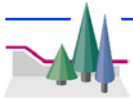


## Timber Supply Analysis for DFAM Licensees

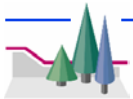
# *Timber Supply Concepts*

Reference: Technical Workshop Course Notes, Section 2



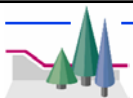
## Timber supply concepts

- What is timber supply?
- What portion of the forest produces timber?
- What are our measures of timber supply?
- What are the key influences on timber supply?
- How do we manage timber supply?



## What is timber supply?

*...the rate at which timber is made available for harvesting in response to social, economic, and environmental considerations.*

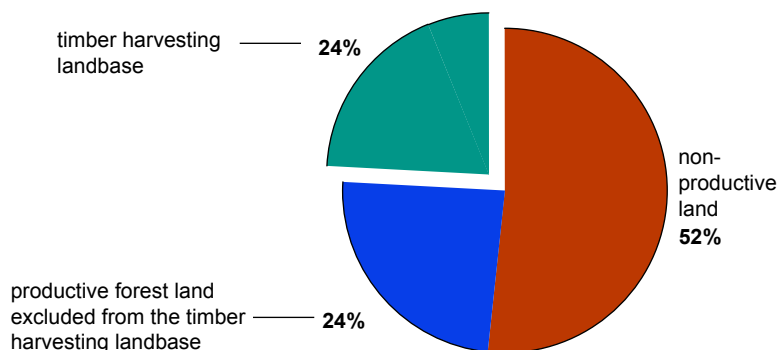


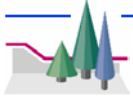
## What portion of the forest supplies timber?

### Total TSA landbase

Source: TSR Reports

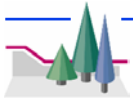
note: productive forest land denotes productivity with respect to timber only



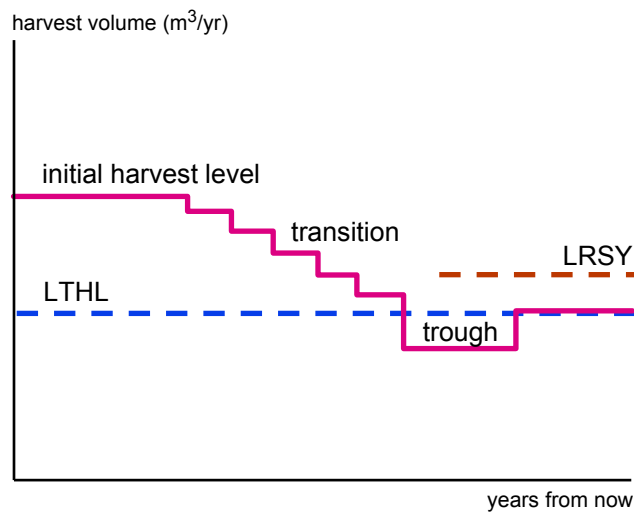


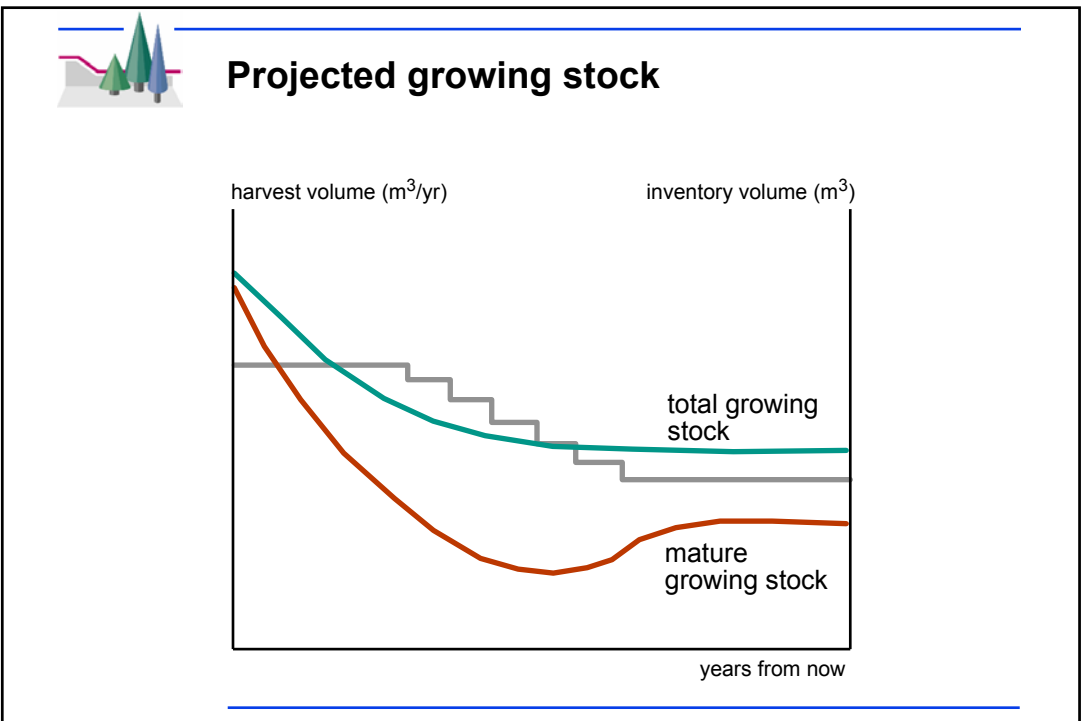
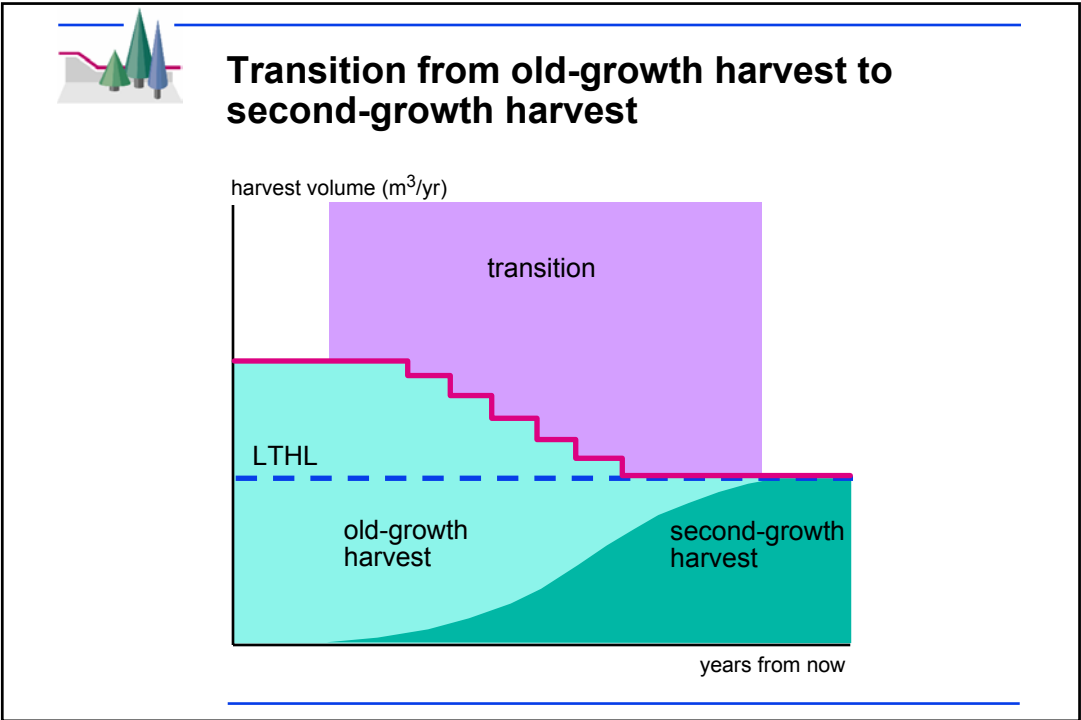
## What are our measures of timber supply?

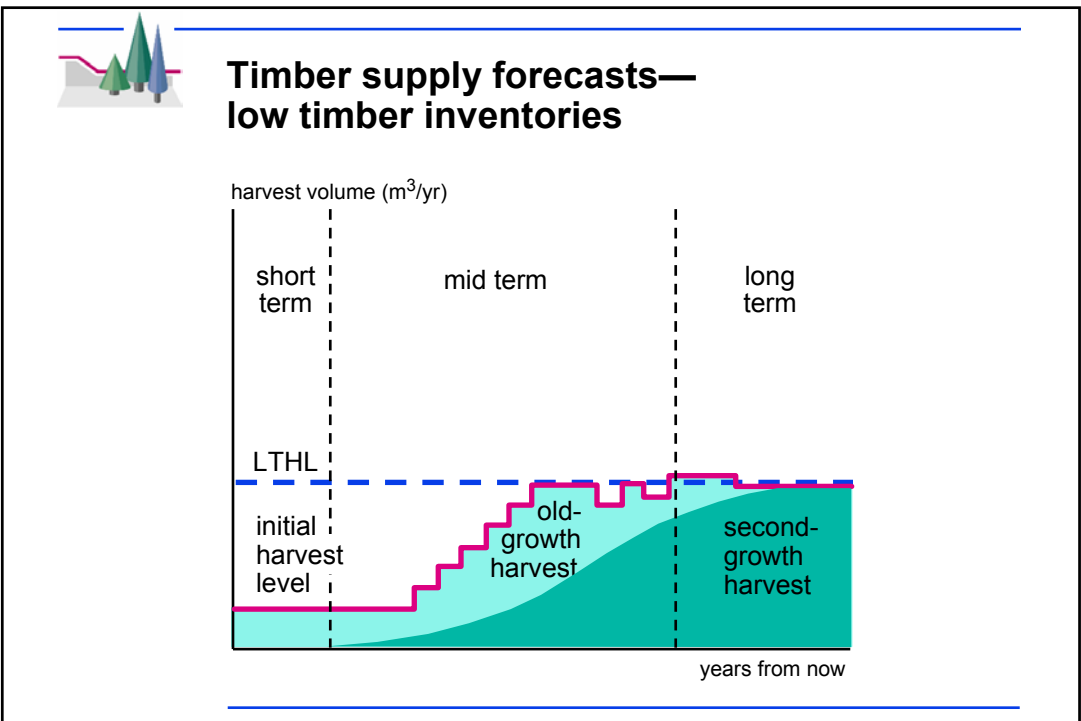
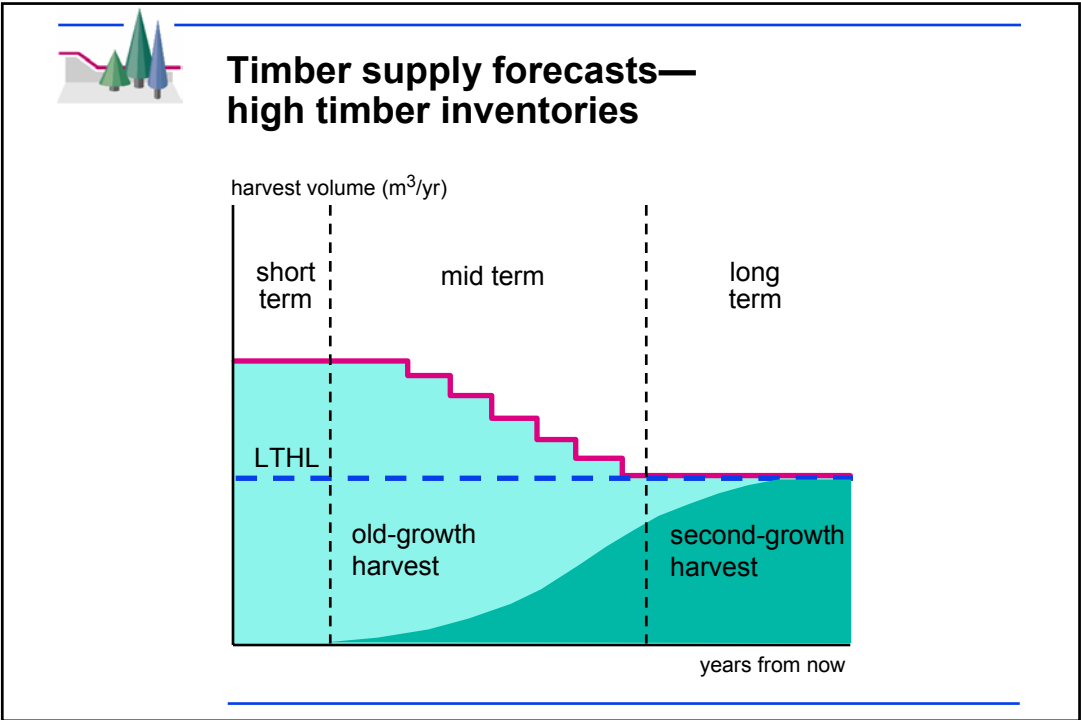
- volume harvested (the harvest flow graph)
- distribution of stand ages
- total volume of inventory (standing stock)
- average age of harvested stands
- average volume of harvested stands
- average area harvested annually

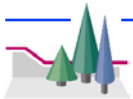


## Elements of a harvest flow graph





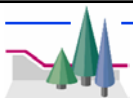




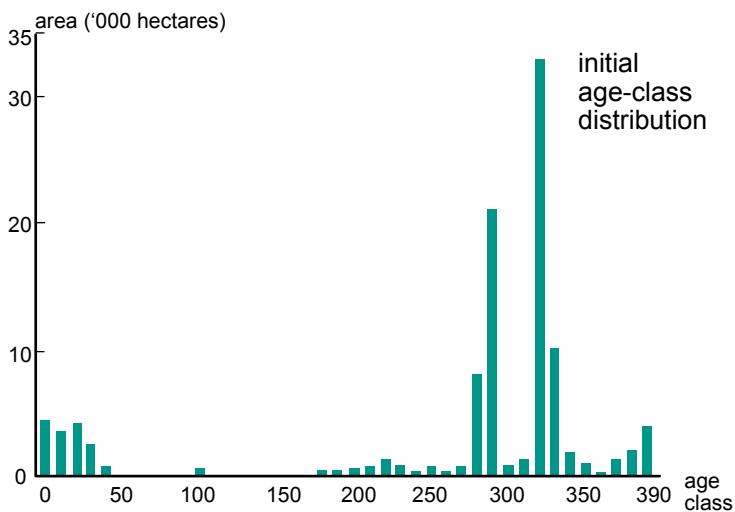
## Harvest flow choices

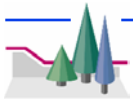
Assuming that the current AAC is above the long-term harvest level (LTHL)...

- maintain the harvest at the current level as long as possible
- then decline to LTHL at a maximum rate of about 10% per decade
- and thereafter harvest at the LTHL in perpetuity

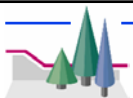
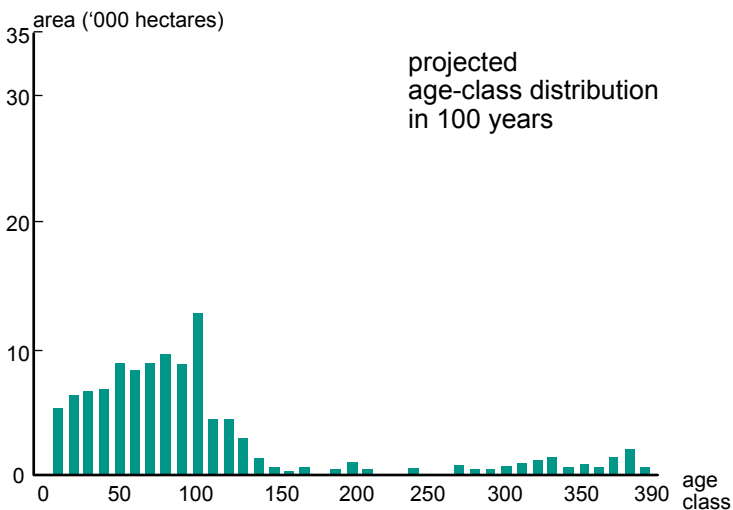


## Changes in stand age distribution North Coast TSA 1994: **initial**

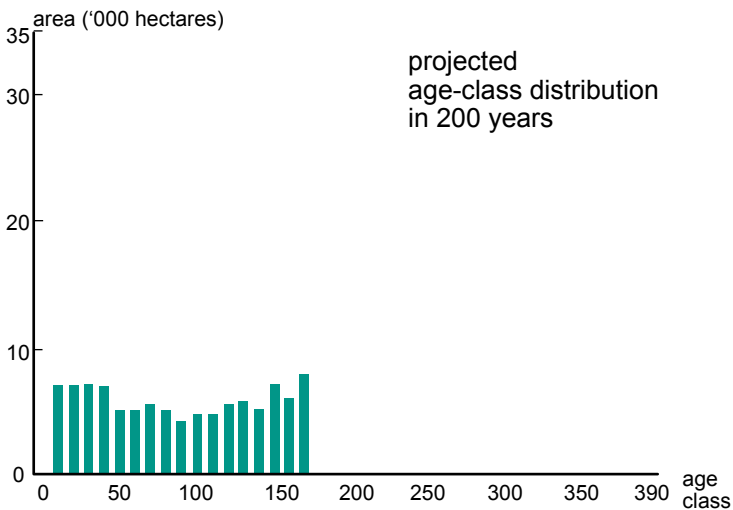


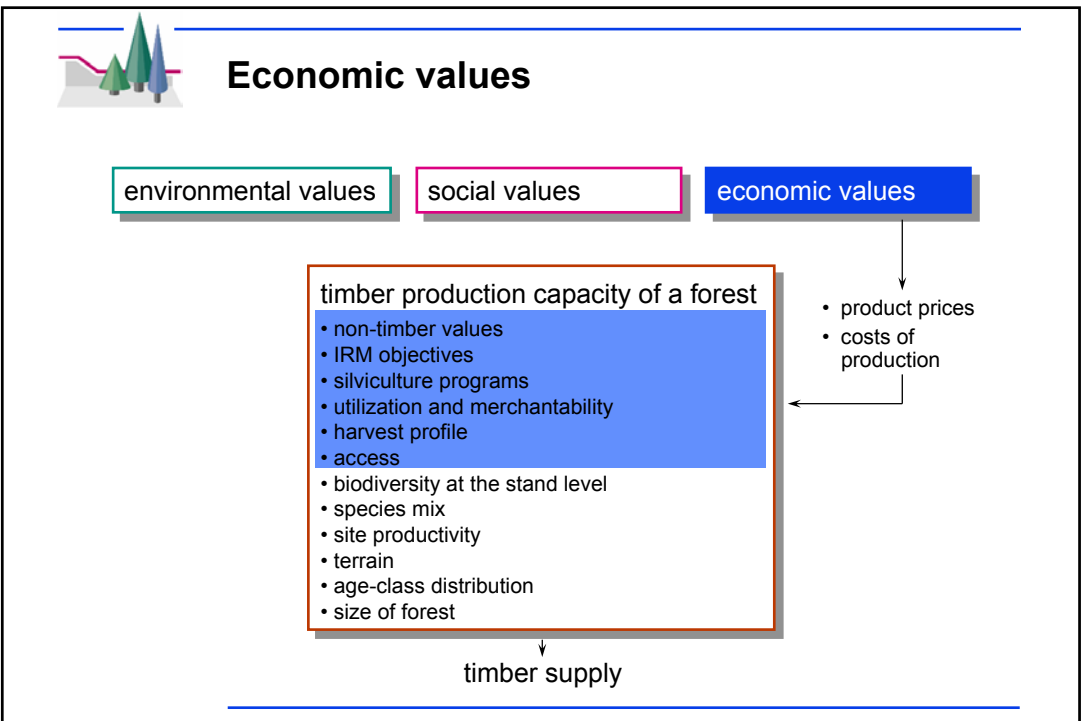
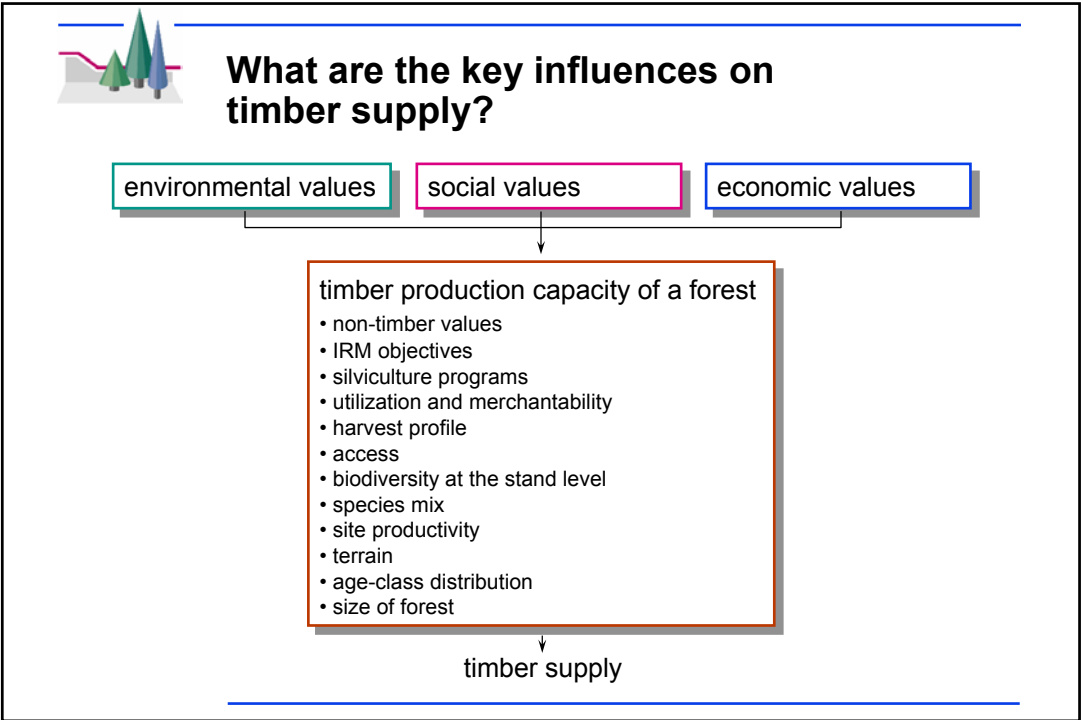


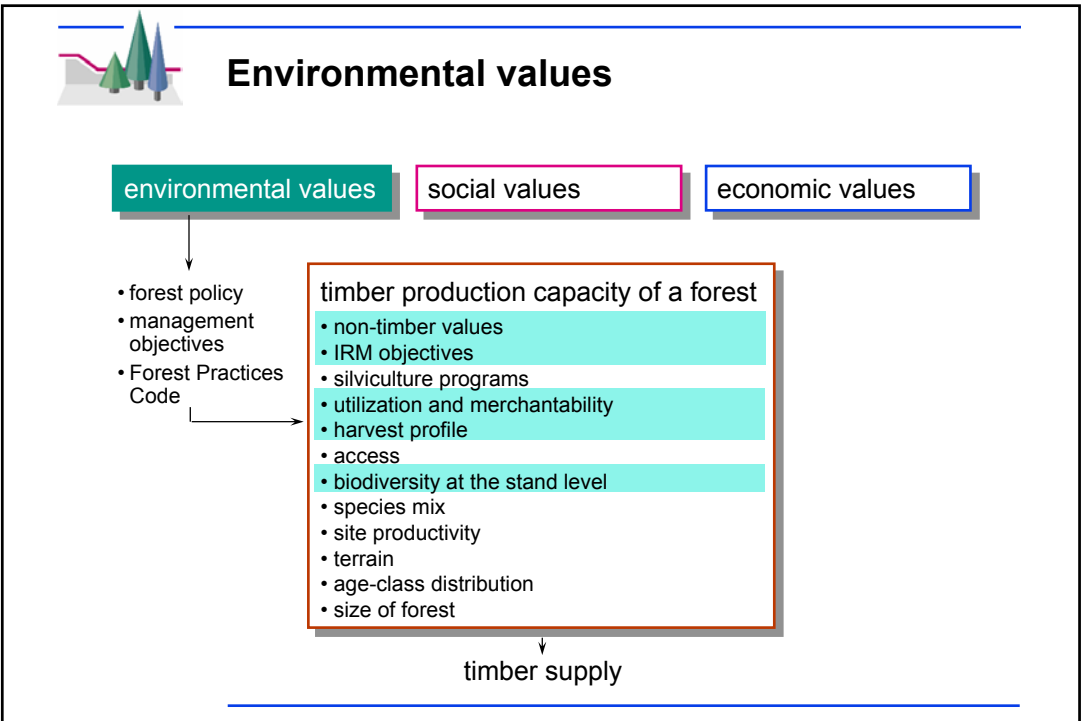
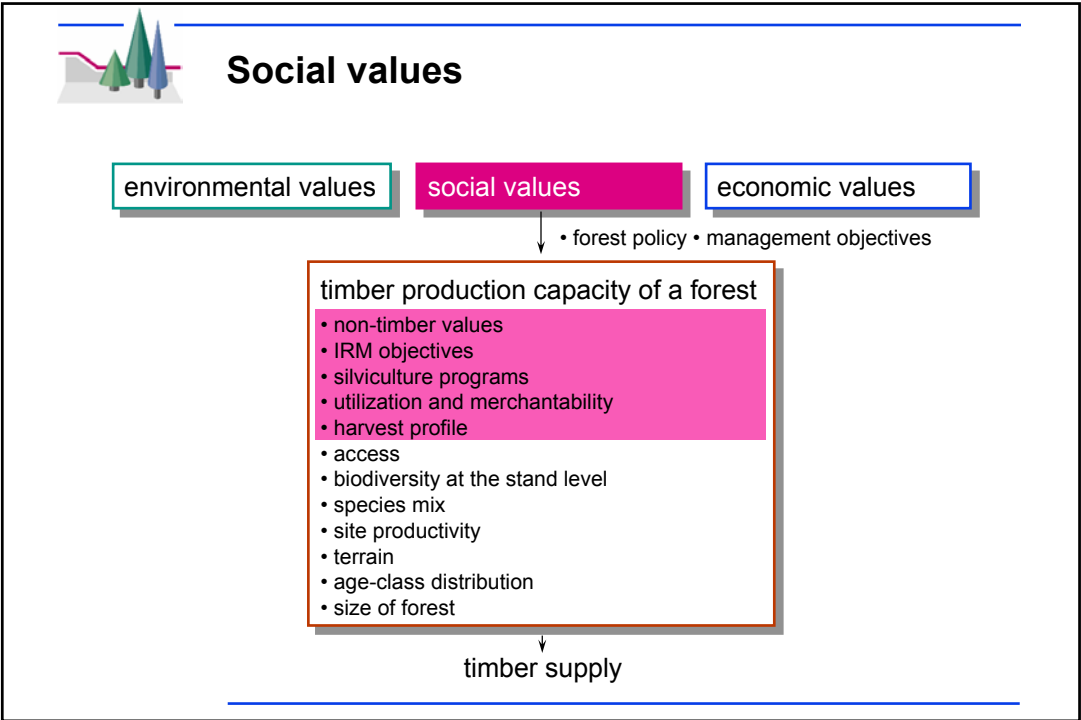
### Changes in stand age distribution North Coast TSA 1994: **100 years**

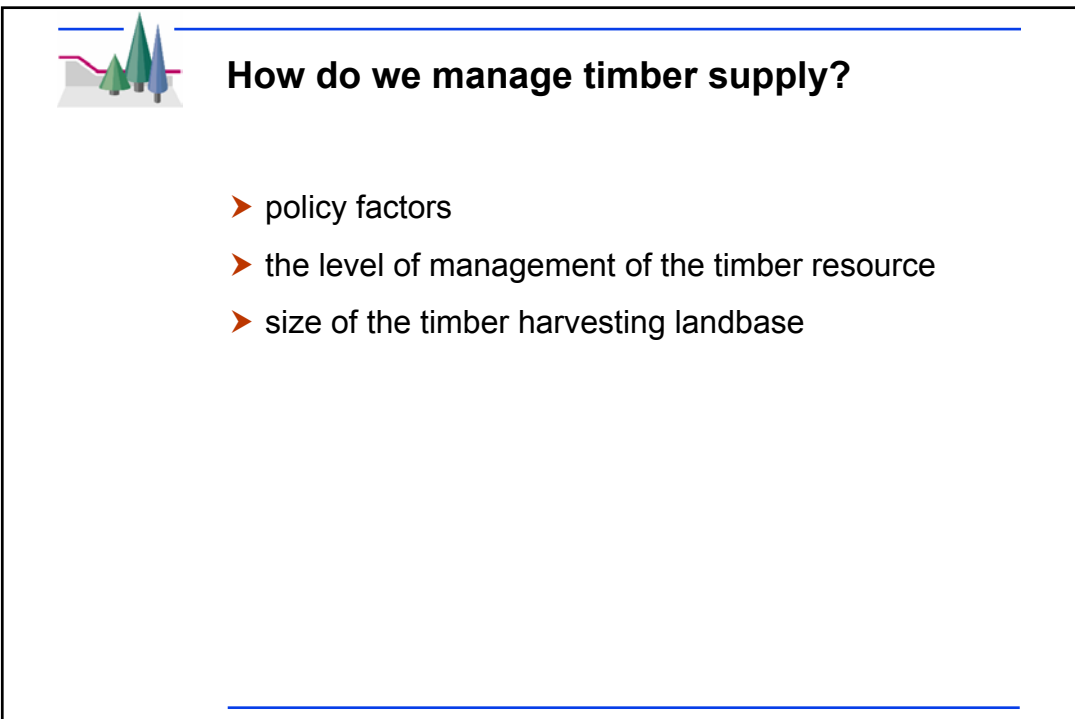
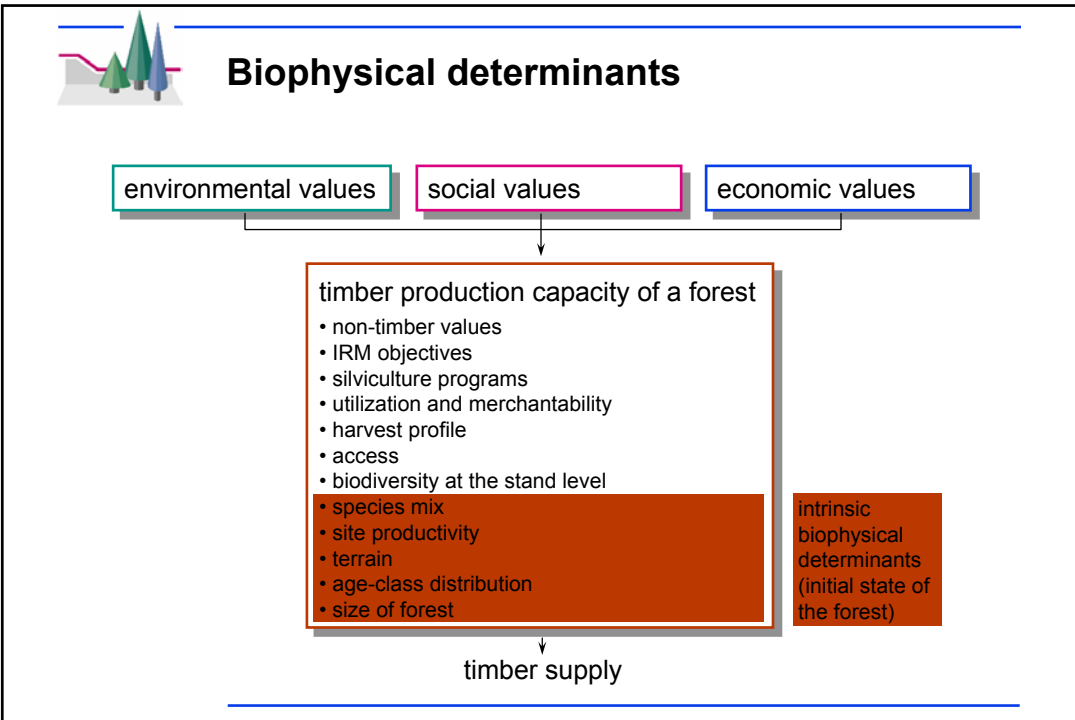


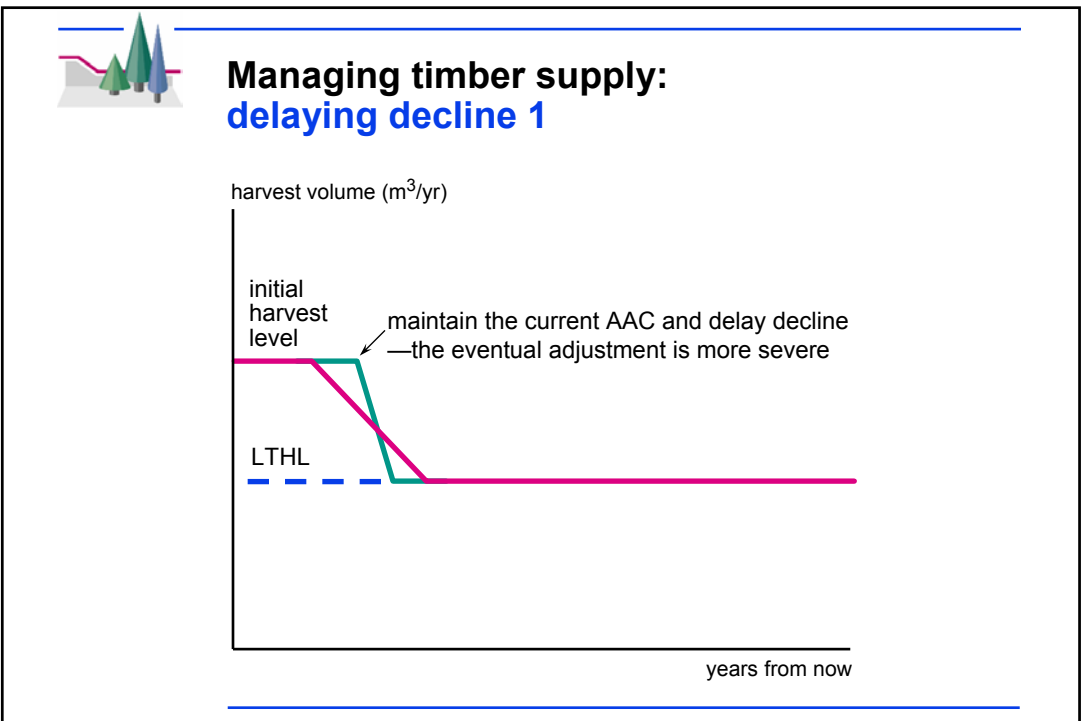
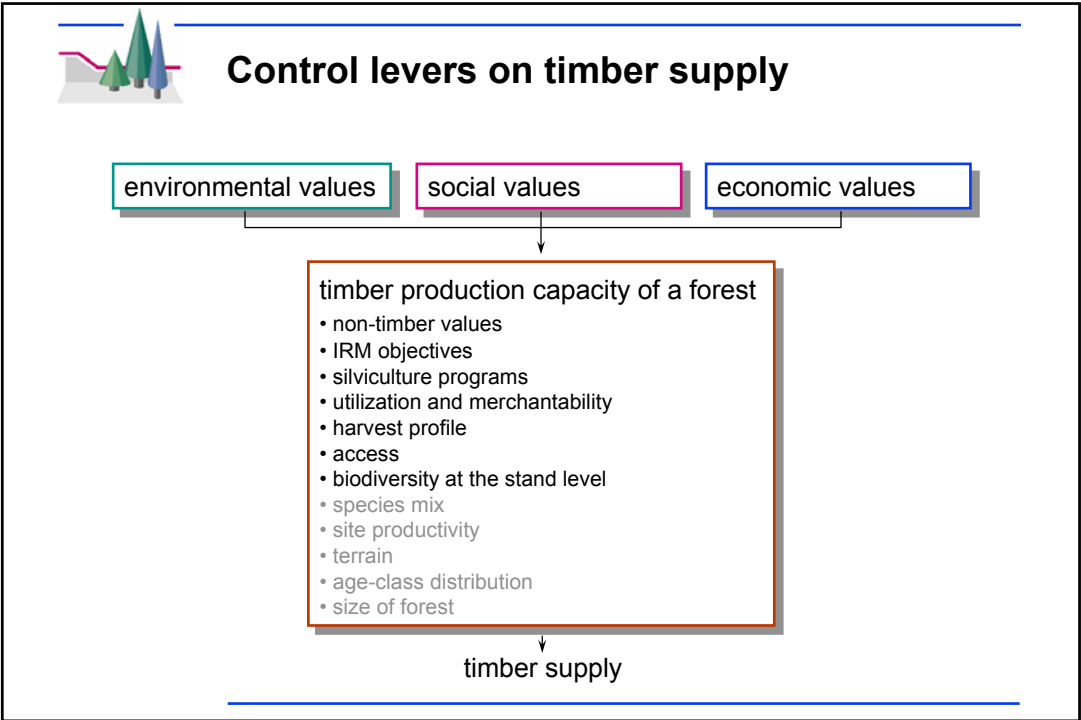
### Changes in stand age distribution North Coast TSA 1994: **200 years**

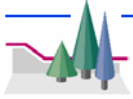




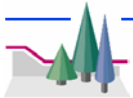
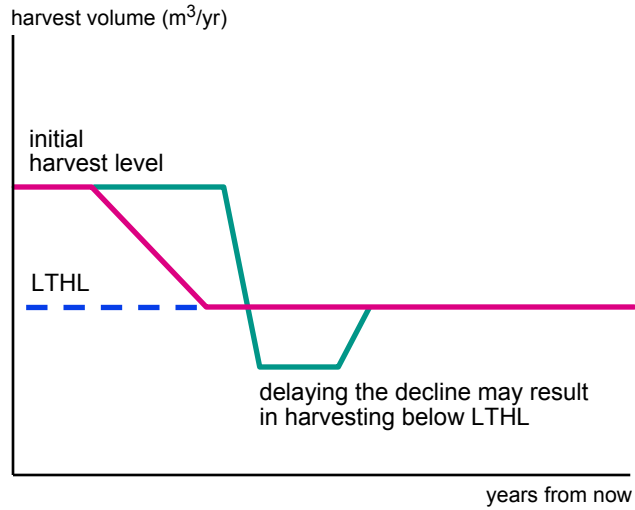




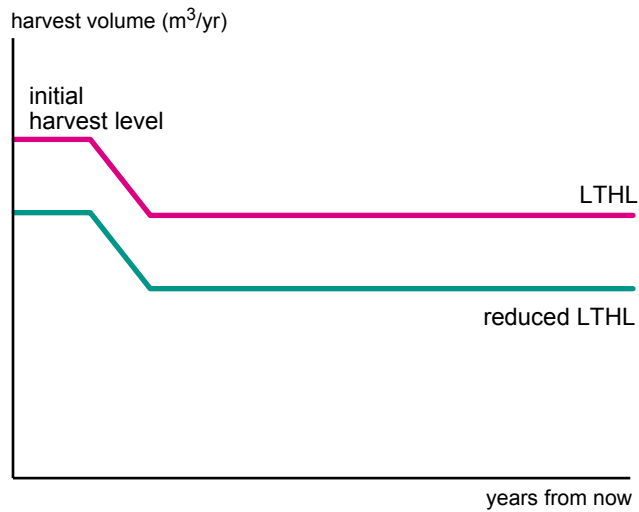


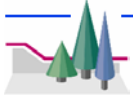


## Managing timber supply: delaying decline 2

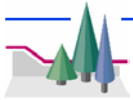
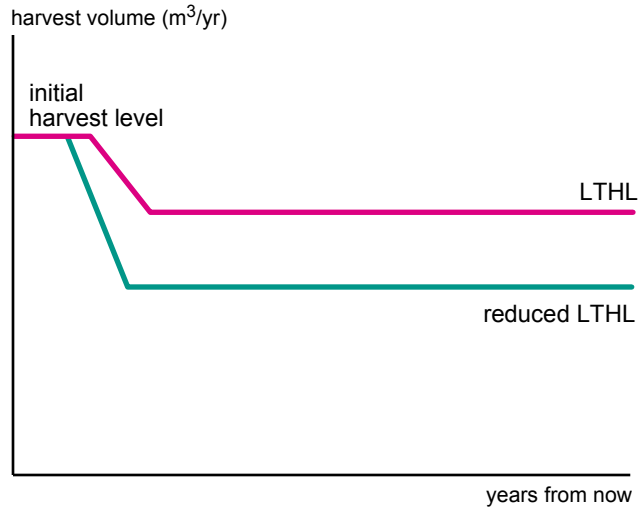


## Managing timber supply: reducing the landbase 1

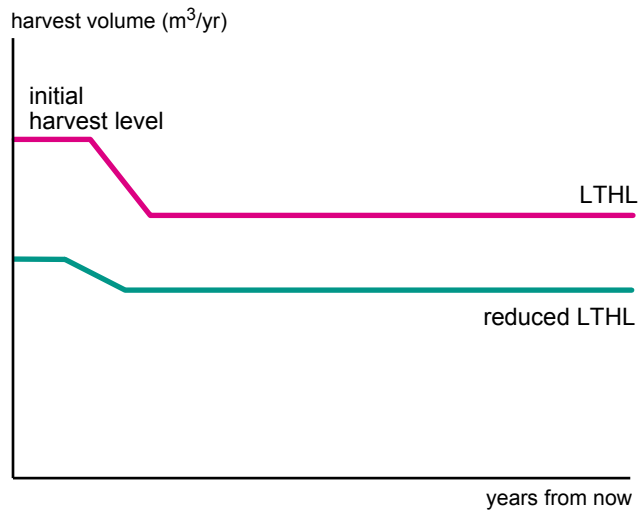


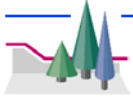


## Managing timber supply: reducing the landbase 2

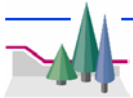
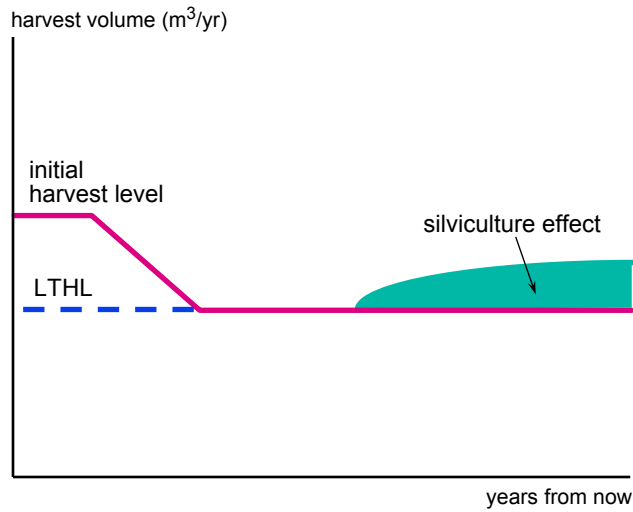


## Managing timber supply: reducing the landbase 3

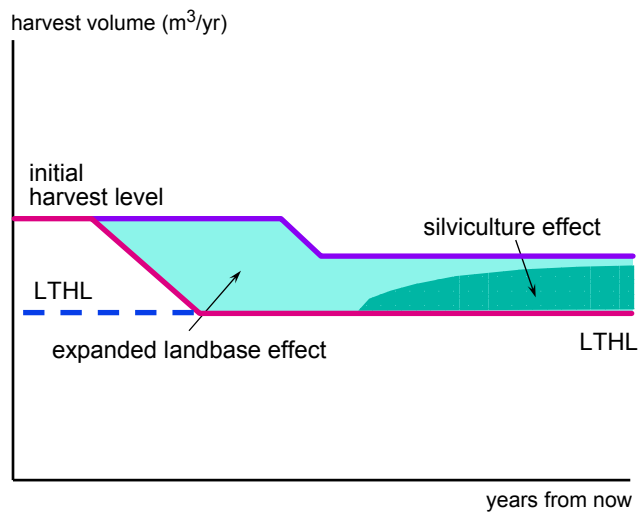


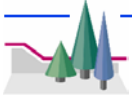


## Expanding timber supply— long term



## Expanding timber supply— short term





## Opportunities for expanding timber supply

<b>Opportunity</b>	<b>short term</b>	<b>long term</b>
commercial thinning	+	(-)
early fertilization		+
late fertilization	+	+
forest health	+	+
expansion of operable landbase	+	+
increased utilization of hardwoods	+	+
partial cutting	+	+
genetically improved stock		+
reduced regeneration delay		+
rehabilitate backlog NSR		+
rehabilitate degraded roads		+
reforestation of marginal agriculture lands		+
species conversion		+