A Context and Strategy for Intensive Management of Red Alder

Coastal Silviculture Committee
Winter Workshop, Feb. 22 2012

Craig Farnden PhD, RPF

Intensive management ….

Red alder….

SAY *WHAT*?

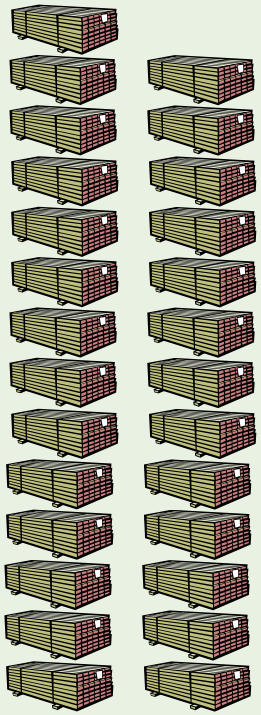
Pop Quiz

What is the peak annual production of red alder lumber – all jurisdictions?

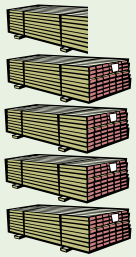
a) 2 million board feet
b) 4 million board feet
c) 8 million board feet
d) 16 million board feet
e) 32 million board feet

Alder Manufacturing

US Current

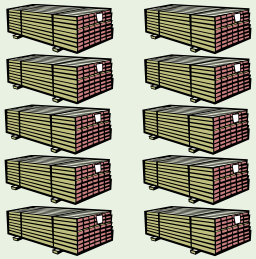


BC
1996-2007



BC Current

BC Potential



Each bundle = 1 mmfbm

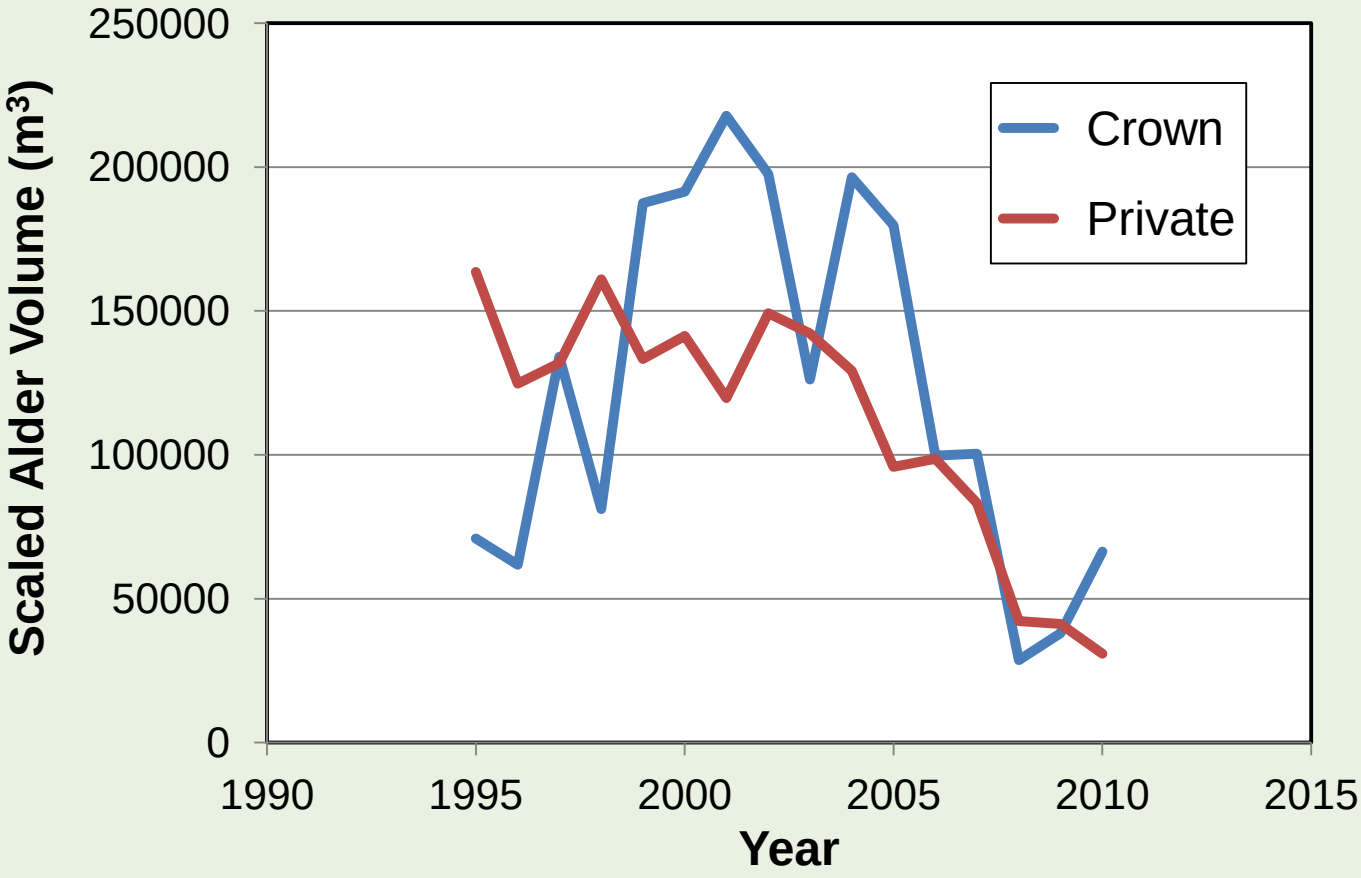
Alder Log Values

- Better than for hemlock
- A little below Douglas-fir in BC, roughly comparable in US
- Lumber values comparable to Douglas-fir
- Log price affected by higher conversion costs

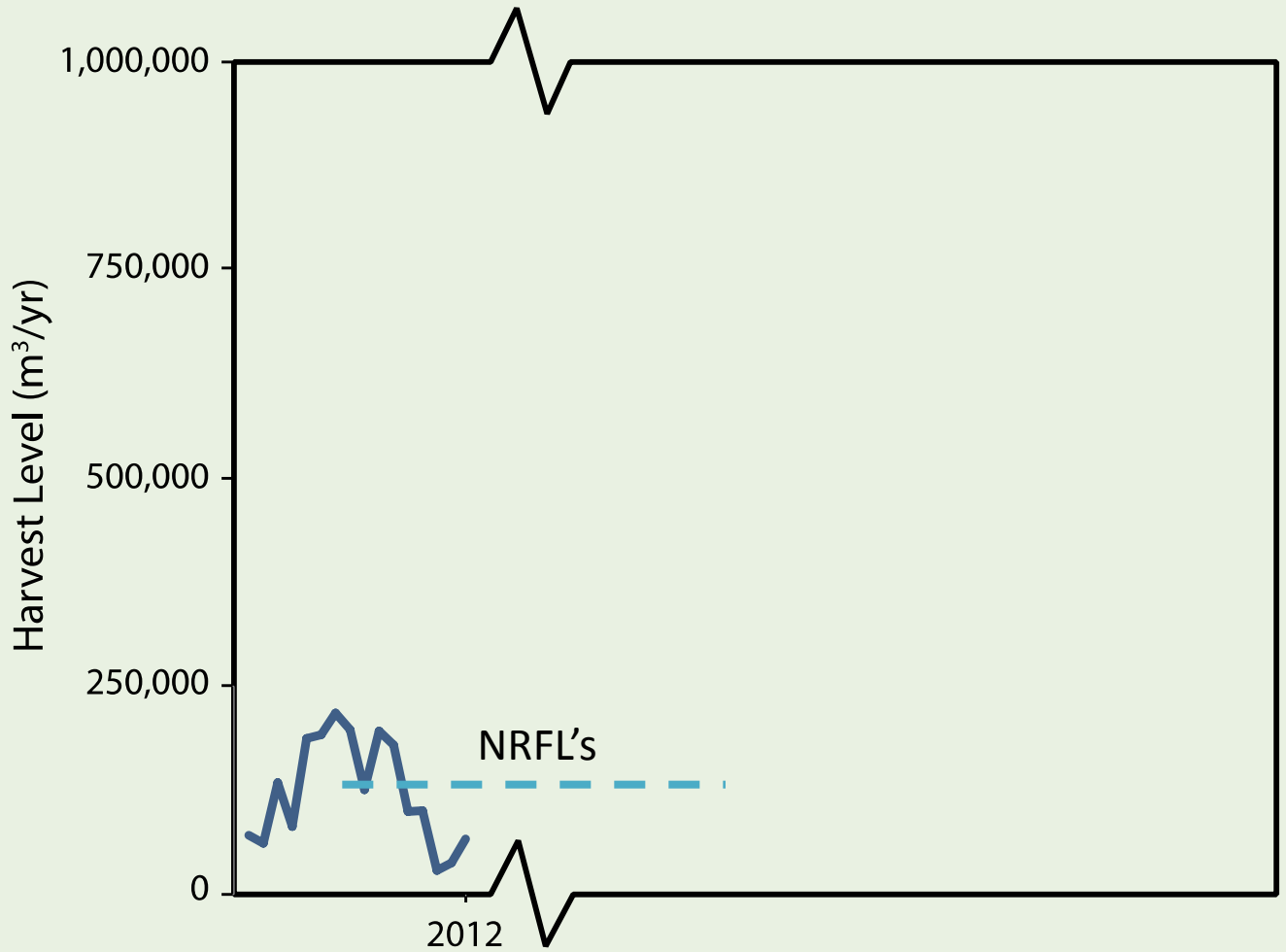
Future Market Potential

- Less of a commodity than softwood lumber
- Huge potential market:
  - Typical home needs 10x value in finish grade products compared to commodity lumber
  - Total NA finish grade products market is $200 billion; growing at 8-10% annually

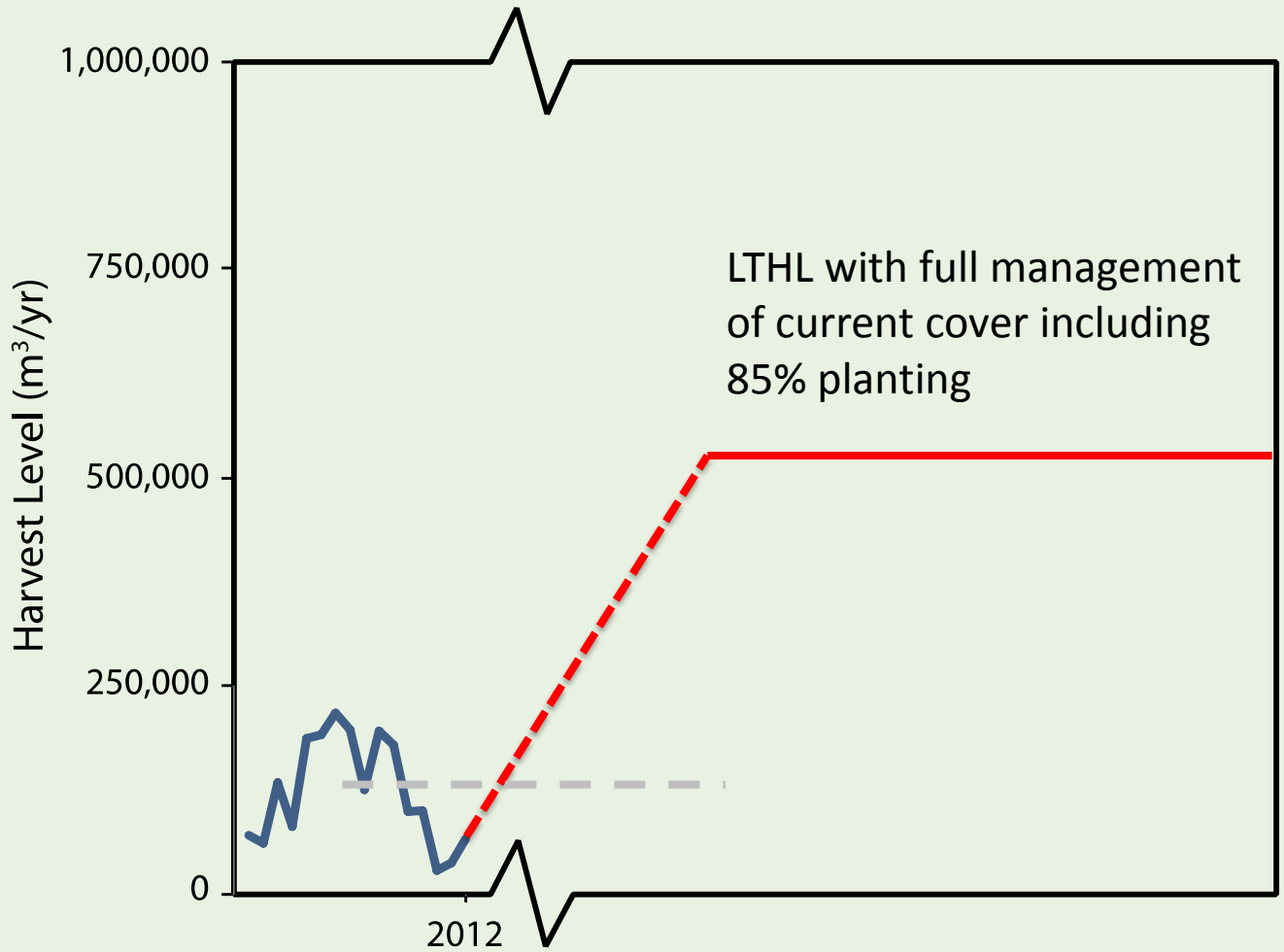
Historic Harvest Levels



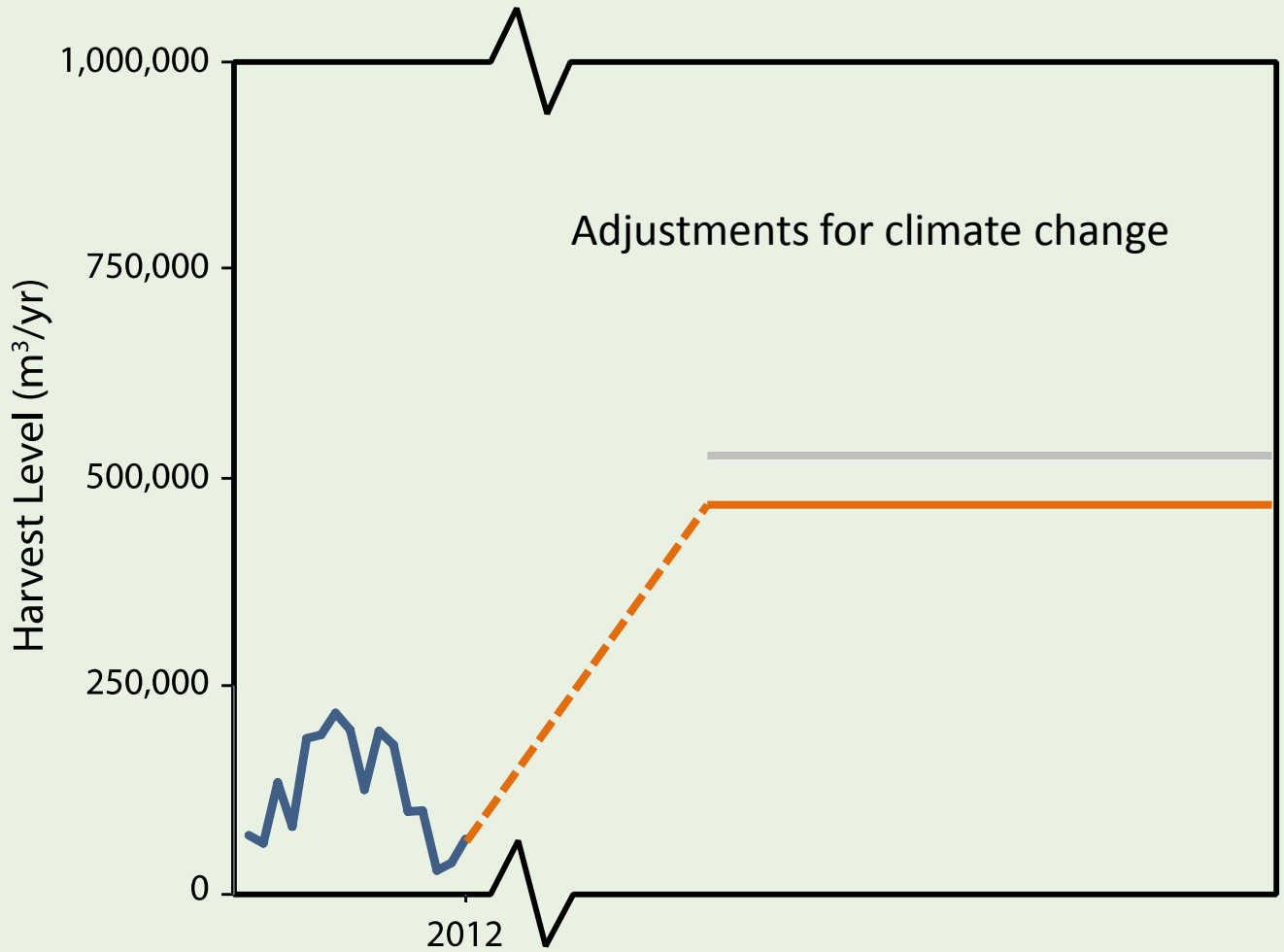
Potential Harvest Levels

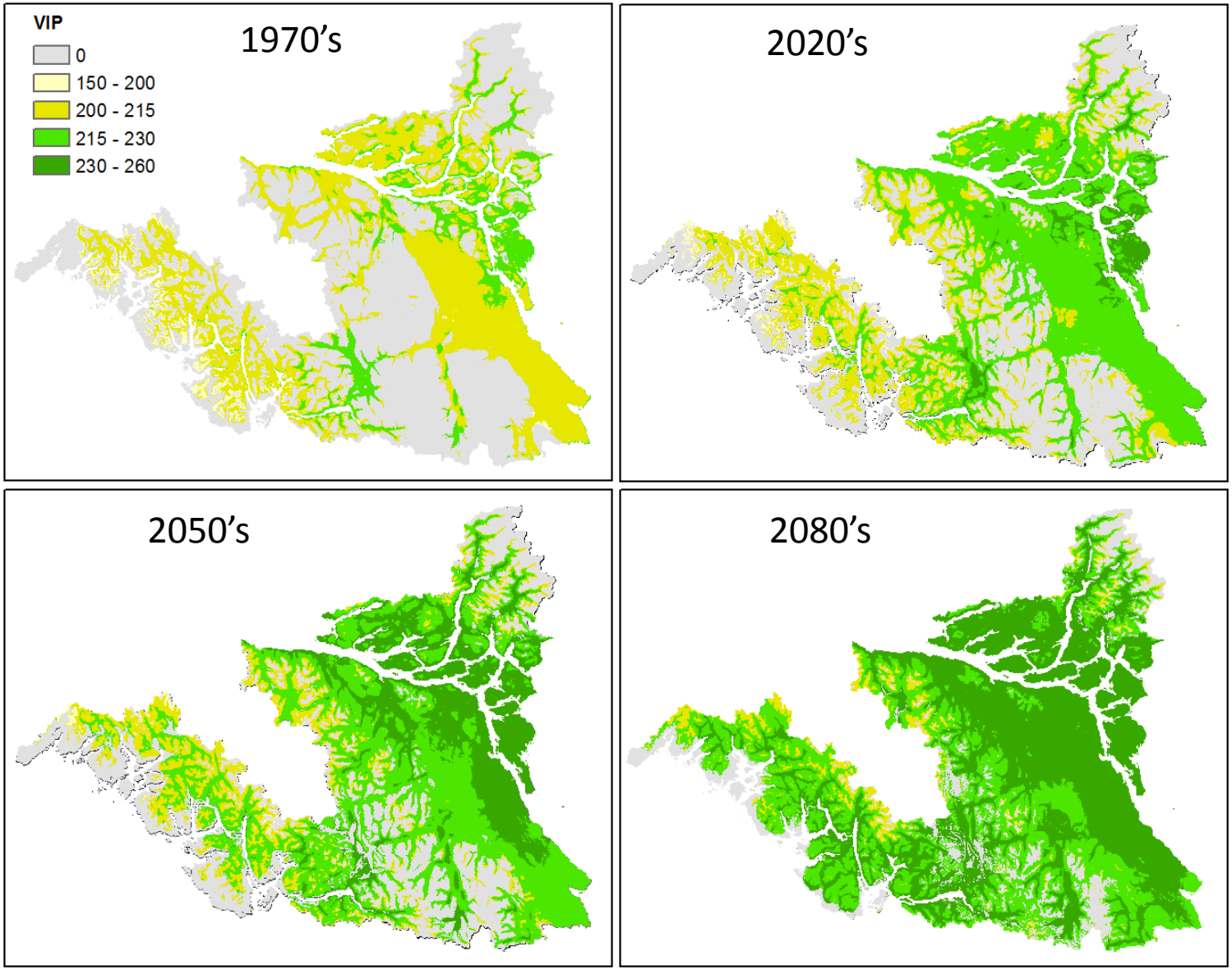


Potential Harvest Levels



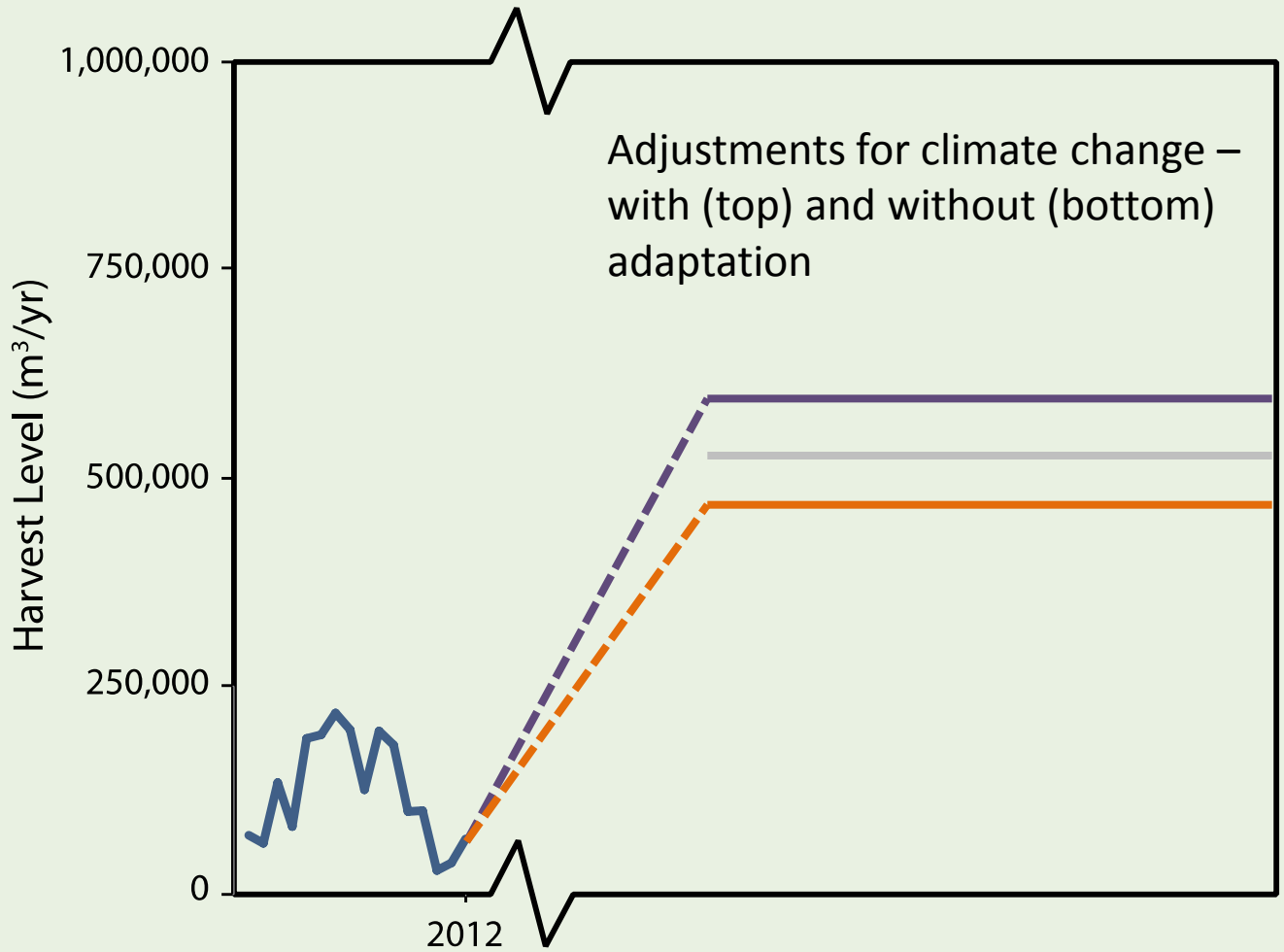
Potential Harvest Levels



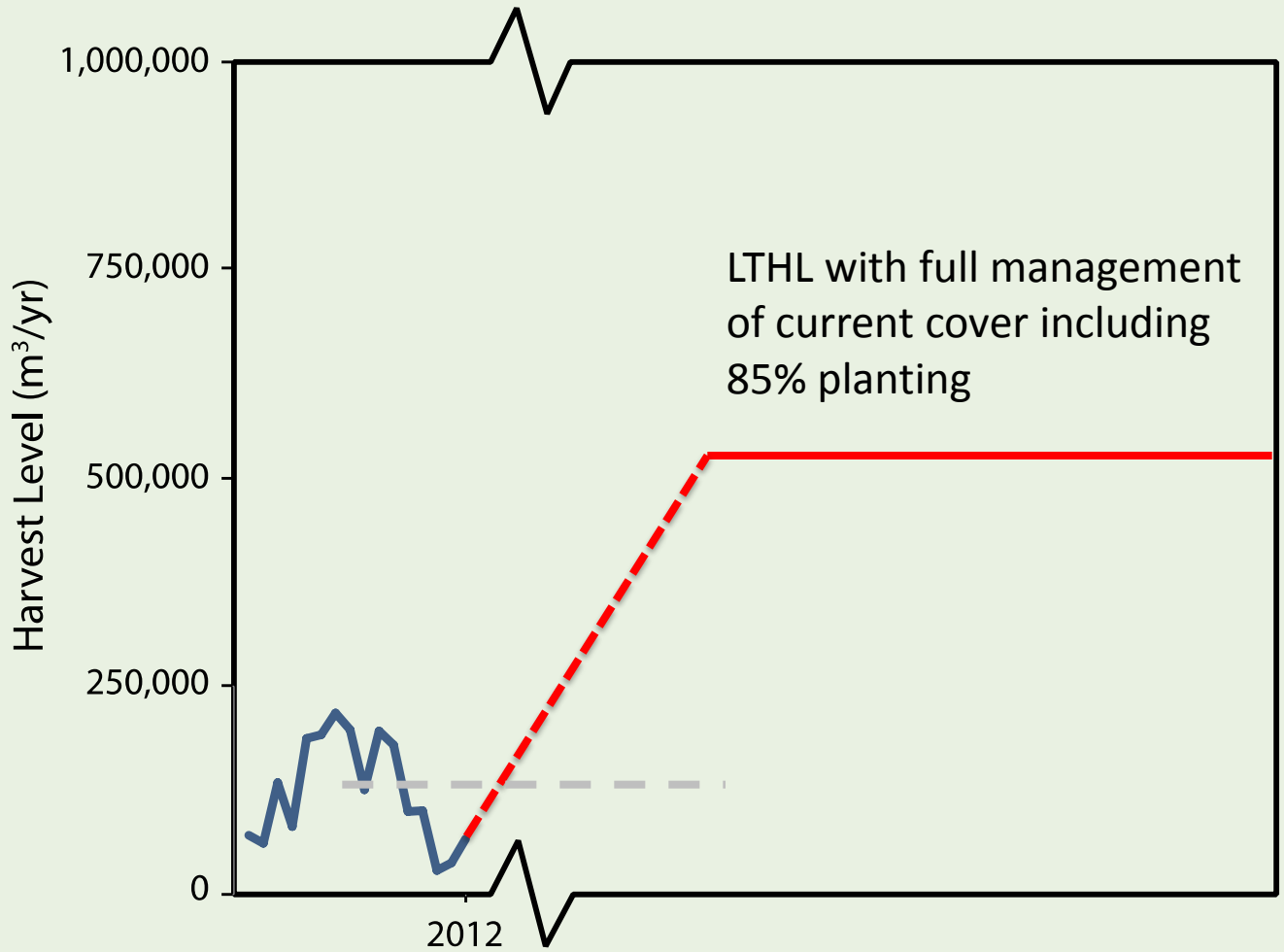


Cortini, F., P.G. Comeau, P.G., T. Wang, D.E. Hibbs and A. Bluhm. 2012. Climate effects on red alder growth in the Pacific Northwest of North America. Global Change Biology (submitted).

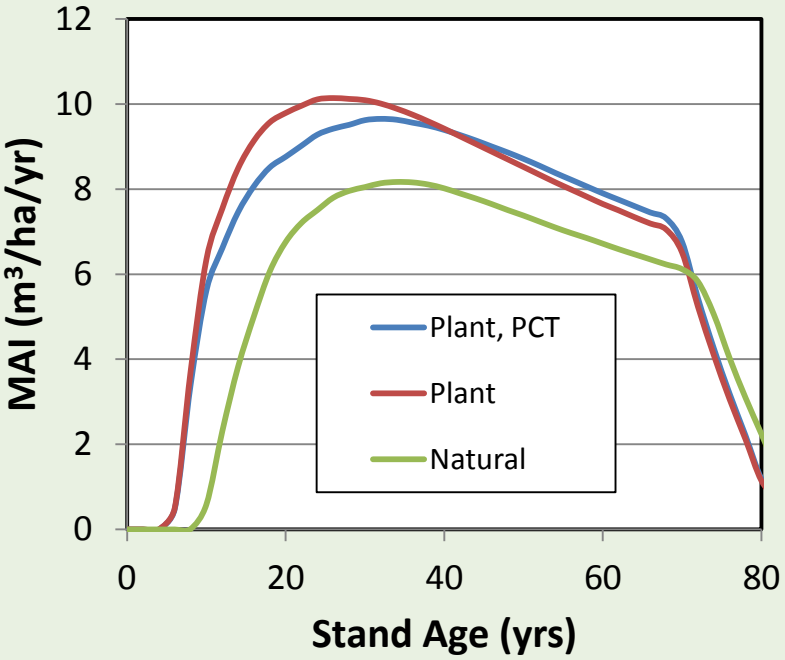
Potential Harvest Levels

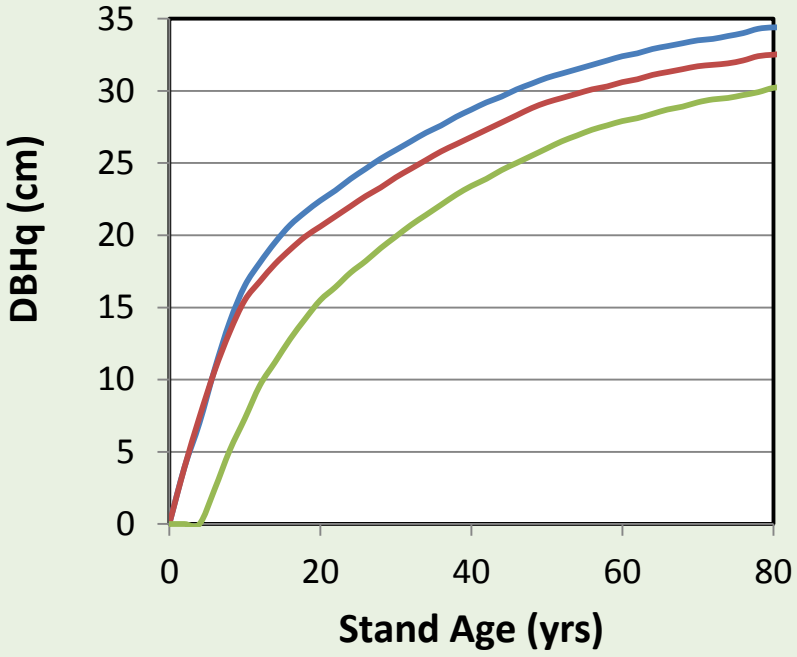


Potential Harvest Levels



Silviculture Effects

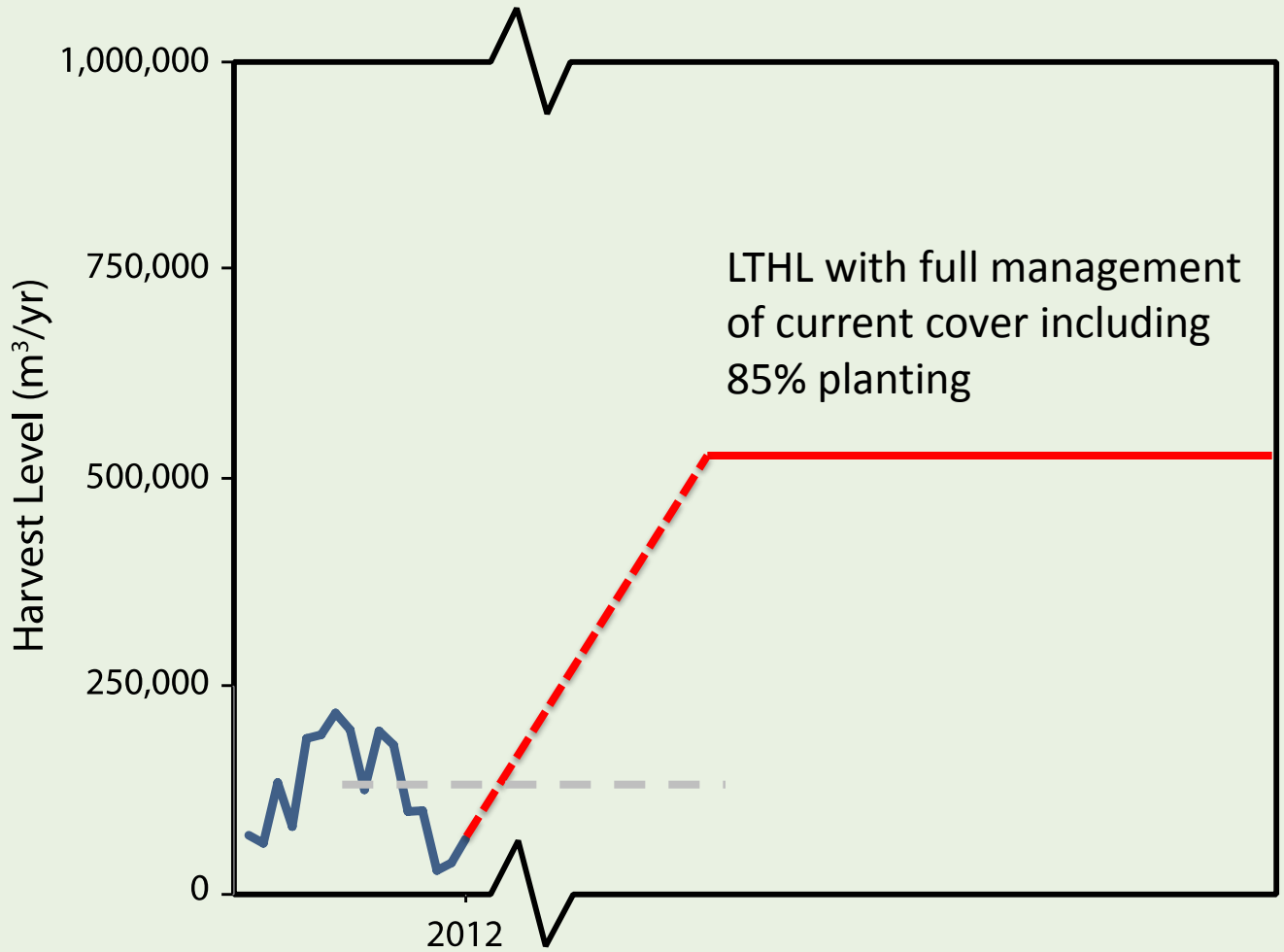




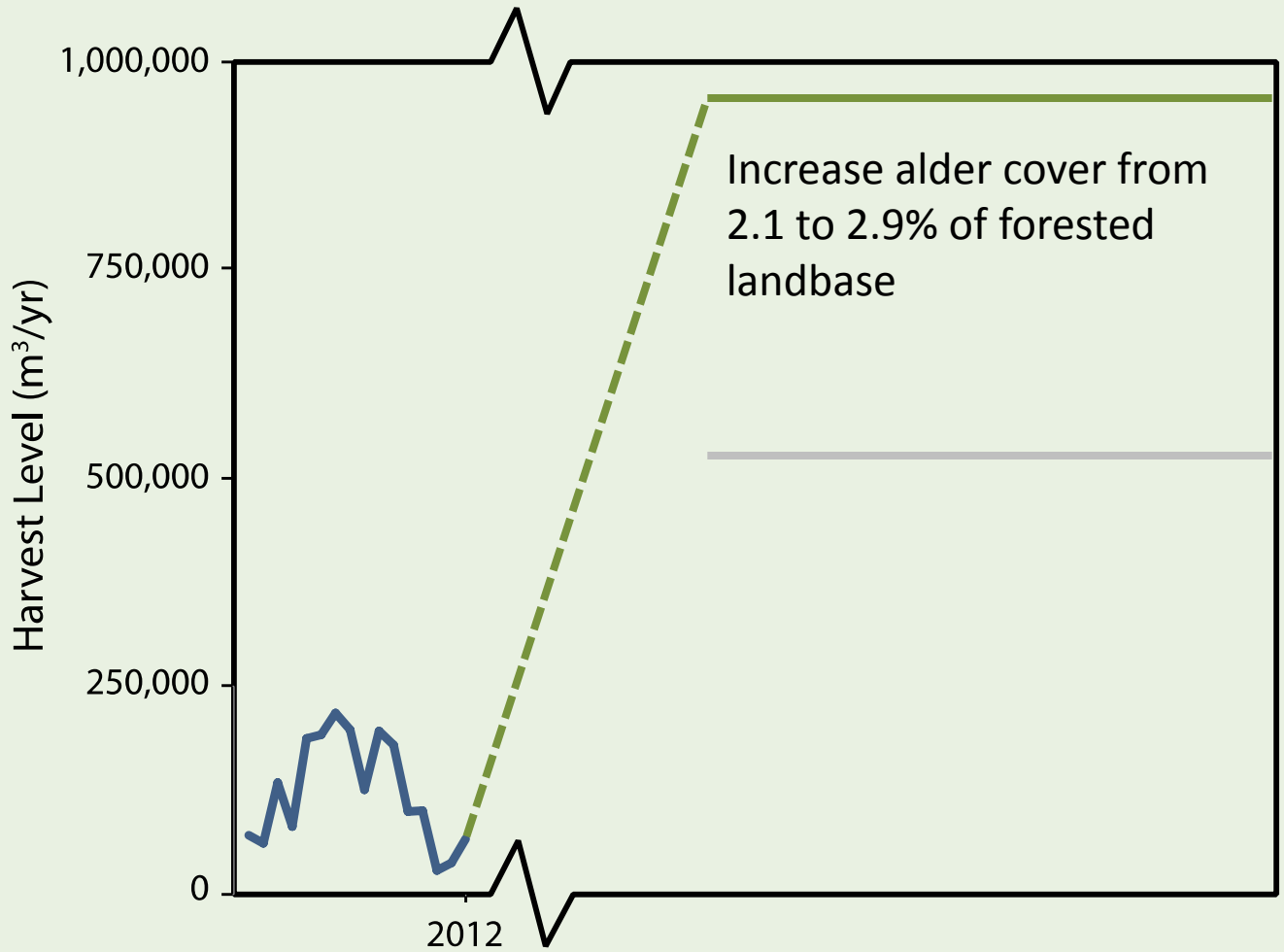
Alder SI_{50} = 32 m

Silviculture Effects

Potential Harvest Levels



Potential Harvest Levels



Overall Outcomes

Case	LTHL (m3/yr)	Jobs
Current	~50,000	~130
Basic Silviculture	500,000	1300
CC – No Adaptation	470,000	1200
CC – With Adaptation	600,000	1500
CC-A + Area Increase	970,000	2200

Impediments to Change
- forest management -

- Persistent conifer bias
- Lack of expertise
- Uncertainties around seed and planting stock
- Few current licensees see benefits
- No tree improvement program

Impediments to Change - industrial investment-

- Short term supply uncertainty
  - Commitment of current licensees to supply domestic market
  - Poor inventory and TSR information
- Long term supply uncertainty
  - Spotty reforestation record
  - No commitment to alder in management plans

Key Elements of a Red Alder Strategy

- Need a clear commitment to Red Alder with strategic direction – Provincially and apportioned by Management Unit
- Improved Inventory and TSR
- Tree improvement program
- Create open and competitive log market

Acknowledgements

The FFESC red alder and climate change team:

Phil Comeau (UofA)
Francesco Cortini (UofA)
Louise DeMontigny (MoFLNRO)
George Harper (MoFLNRO)
Barbara Hawkins (Uvic)
David Hibbs (OSU)
Rob Kozak (UBC)
Marty Kranabetter (MoFLNRO)
Bruce Larson (UBC)
Dan Nadir (UBC)
Brendan Porter (Uvic)
Ron Trosper (UBC/UAriz)
Tongli Wang (UBC)

Also:

Brian Kyle, John Andres and many others

Questions and Discussion