

The Business Case for Investments in Community Forests



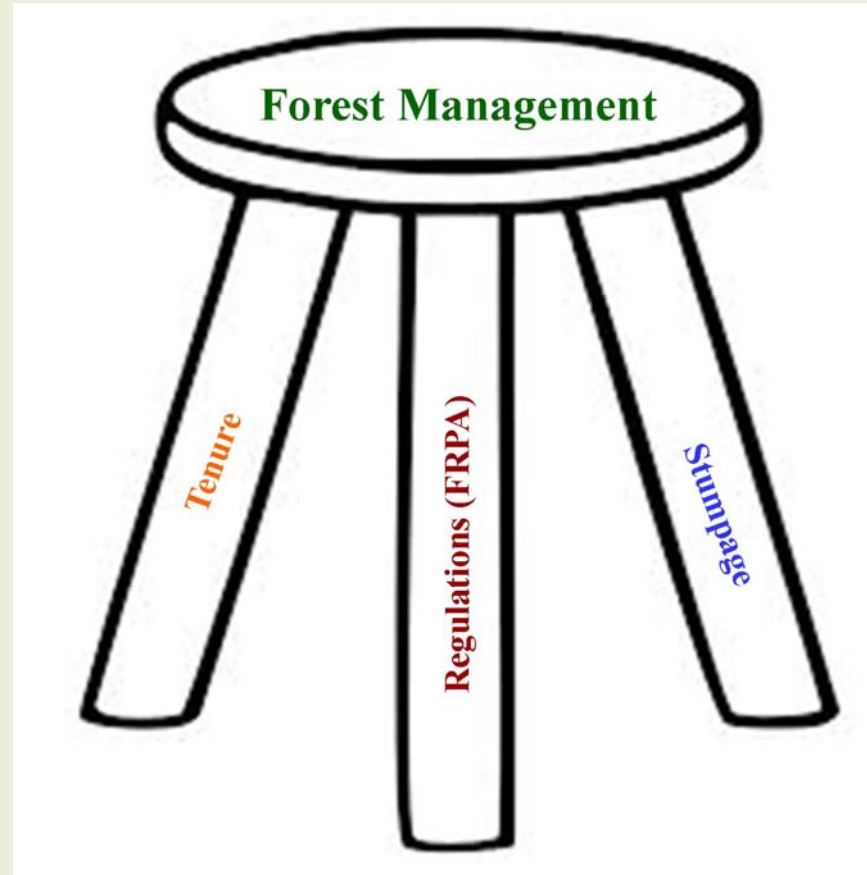
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Forest Management Framework



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Investment Opportunities by Tenure Type

	Forest License	TFL	CF	Woodlot
Attributes of Tenure				
<i>Ownership</i>	Private	Private(public)	Public	Private
<i>Area or volume based</i>	Volume	Area	Area	Area
<i>Security (Term, renewability, compensation for removals/AAC reductions)</i>	20yr; renewable; yes/no	25yr; renewable; yes	25yr; renewable; yes	20yr; renewable; yes
<i>Size</i>	Medium to large	Medium to large	Small	Very small
Stumpage	Appraisal	Appraisal	Tabular	Tabular



What Kind of Investments?

- Investments are over and above what is required or
- **Can be strategies to find new ways to get better results; investments in knowledge and experience**
- Take a broad based view; investment in improving the assets which include timber, non-timber values and inventories, monitoring, planning, ect.



Examples of Investment Opportunities/Innovations for CF's

- Setting of objectives for multiple resource values
- Planning (e.g.: SFMP)
- For timber should the objective be to;
 - Maximize the yield or
 - Maximize the value of forest production?



Quotes from Peter H. Pearse C.M., RPF(Ret)¹

- “Disregard of the value of forest production is only one shortcoming of the maximum sustained yield policy.”
- “But change is becoming unavoidable. The whole timber supply system is now beset with unprecedented pressures resulting from the mountain pine beetle epidemic in the interior; escalating costs of recovering the remaining old growth on the coast; new provisions for First Nations; and the effects of climate change on forest health and growth. Surely the best place to begin preparing for the impending change is to clarify whether our objective is to maximize the volume or the value of forest production.”

¹ Letter to BC Forest Professional Magazine (Jan/Feb 2016 edition)

What is Quality?

- How trees are grown (for a given size; wood properties, taper, ROG, knot size/distribution)
- There are **tradeoffs** between growing fewer trees to become larger as fast as possible versus spreading site growth potential over more stems
- Different tree species have different wood properties and different potential end uses and markets



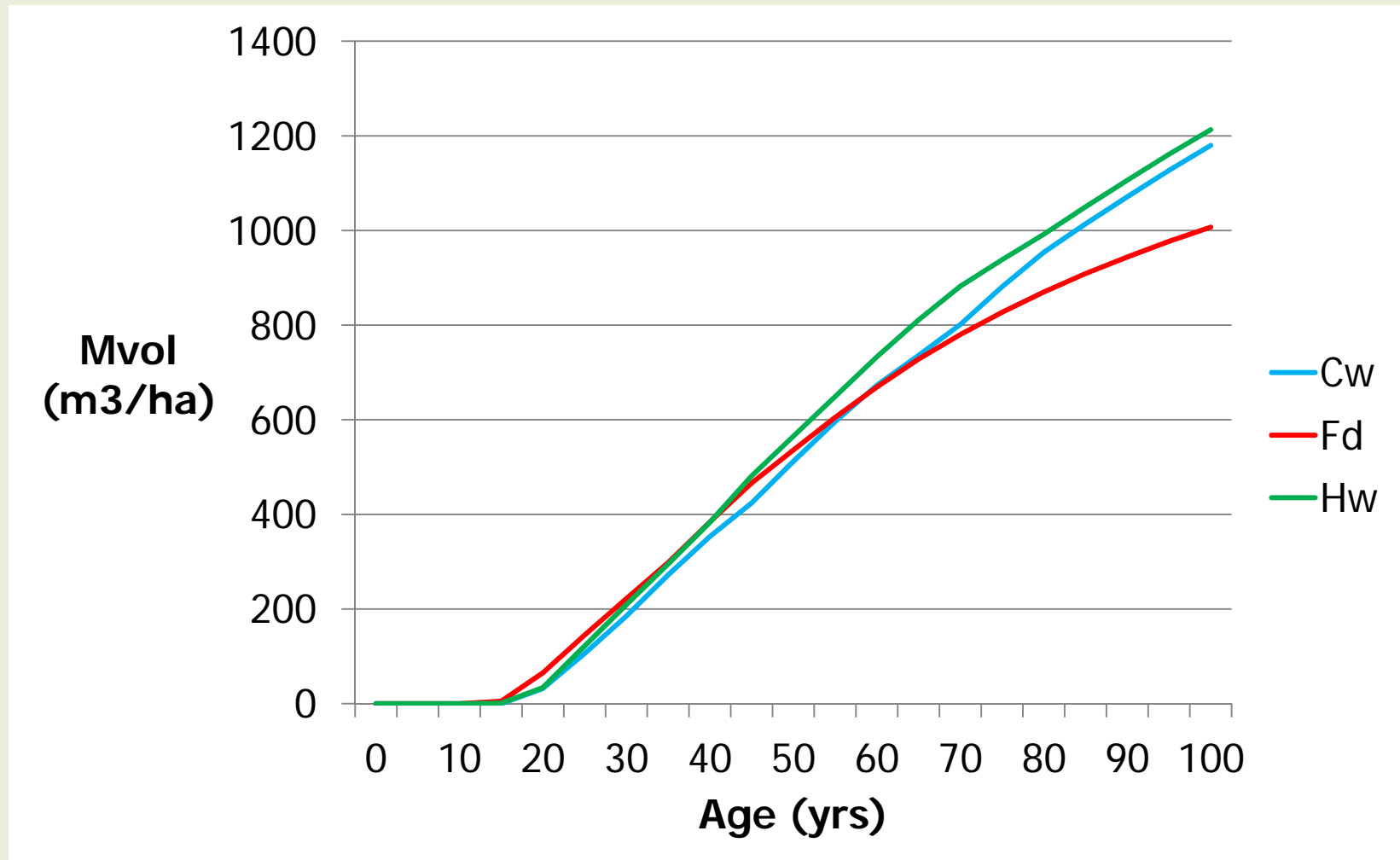
Coastal Second Growth Log Values¹

2000 to 2015 Industrial Immature Gang ($\geq 20\text{cm}$ top diam) Prices			
	Fd (\$/m3)	Cw(\$/m3)	Hw(\$/m3)
Average	\$74	\$127	\$53
Range	\$55 to 85	\$90 to 185	\$50 to 60

¹ Alec Orr-Ewing and Associates Ltd.

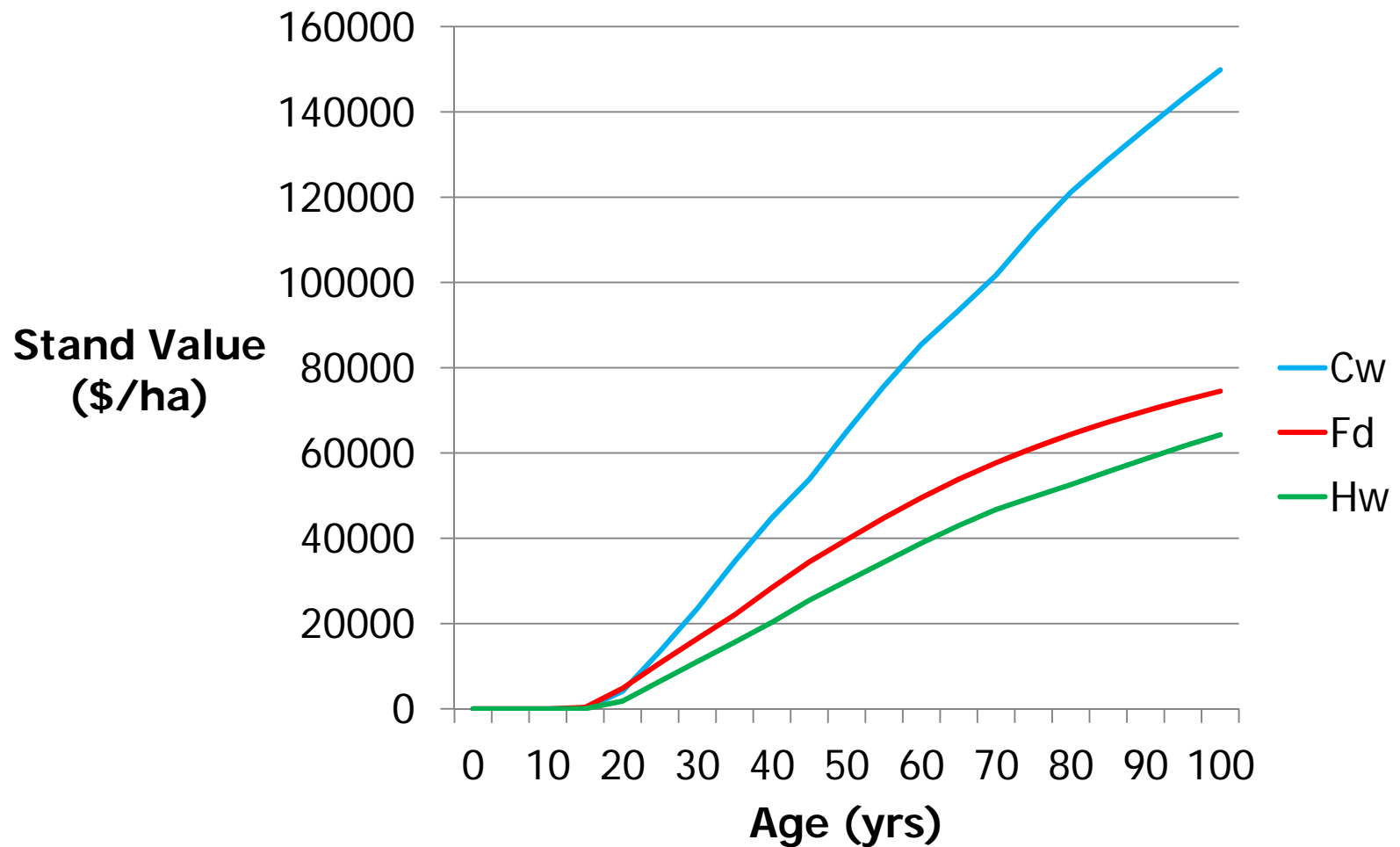


Yield Comparison (Cw vs Fd vs Hw)



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Value Comparison (Cw vs Fd vs Hw)



Challenges with Mixed Species Stands on Short Rotations

BEC site series	Fd SI50	Hw SI50	Cw SI50
CWHdm ss01	34	30	27
CWHdm ss07	41	N/A	31
CWHvm1 ss01	36	28	23



Harry Smith Trials, UBC Research Forest (age 50)



Other Ideas

- If one prefers higher initial densities (but doesn't want to pay more)
 - Promote natural regen (partial cutting with, without site prep)
 - Direct seeding
 - Establishing nurse crops
- Species selection
 - Better matching of species to site
 - Mixed vs mini-monocultures
 - Alternating species to maintain/enhance soil
- Partial cutting
 - To integrate timber management with recreation, wildlife values, fire hazard mitigation, ect



Conclusions



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