

SHARING SILVICULTURE STORIES & TIDBITS

A Conversation with Scott and Dennis

64 Years Managing Silviculture Activities

95 Million Seedlings Planted

65 Thousand Hectares Declared Free Growing

“Every system is perfectly designed to achieve exactly the results it gets.”

~ W. Edwards Deming

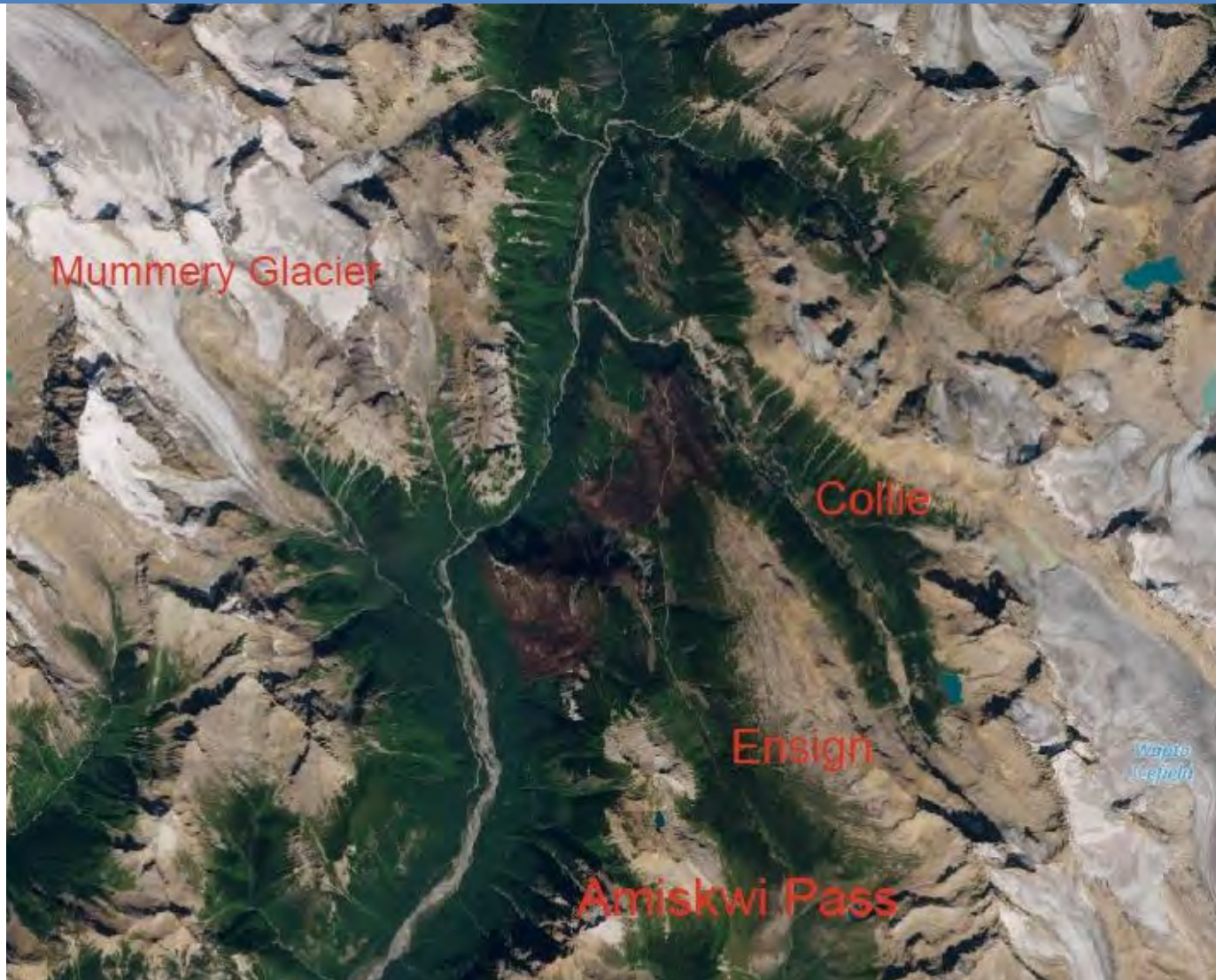
Fall Planting – Dennis' guidance

- Keep the program small – not more than 2 weeks
- Push off to next spring if anything goes wrong
- Site prepared blocks are better
- Plant as late as possible (after fall rains?) but before the early snow & moderate frost dates

2022 Fall Planted - Fall 2024 Follow-up







Mummery Glacier

Collie

Ensign

Amiskwi Pass

Wapta
Icefield

Fertilizing at the time of planting (Fd)

- Started in late '90's due to seedling **growth** seen in burnt slash piles
- Used RTI GSFP blend
- Only treated Fd seedlings, replants & high competition areas
- Generally was a big help to establishment & growth

CP996 – 328 Lower John Creek

- Stumped 2008
- Planted 2009
- Photo April 2012



BUT, recently we've been seeing this much more than in the past:



and unfortunately some of this:



Armillaria Root Rot:
Considerations in
cable ground

97.1 aka
Mistakes



Moisture deficits: frequency & degree; forest impacts & monitoring

2023



Table 4. Changes in the vapor pressure deficit (VPD) in relation to air temperature and relative humidity. The table area defined in green are optimum, yellow conditions are marginal, while red areas are stressful conditions to plant seedlings (Based on the physiological performance of seedlings to evaporative demand - Kozlowski et al. 1991; Grossnickle 2000).

Air Temperature °C	Relative Humidity									VPD	
	90%	80%	70%	60%	50%	40%	30%	20%	10%		
0											
5	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8		
10	0.1	0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.1		
15	0.2	0.3	0.5	0.7	0.9	1.0	1.2	1.4	1.5		
20	0.2	0.5	0.7	0.9	1.2	1.4	1.6	1.9	2.1		
25	0.3	0.6	1.0	1.3	1.6	1.9	2.2	2.5	2.9		
30	0.4	0.9	1.3	1.7	2.1	2.5	3.0	3.4	3.8		
35	0.6	1.1	1.7	2.2	2.8	3.4	3.9	4.5	5.1		
40	0.7	1.5	2.2	3.0	3.7	4.4	5.2	5.9	6.6		

Fig. 1. Global mean vapor pressure deficit (VPD) anomalies of vegetated area over the growing season. Anomalies are relative to the mean of 1982–2015 when data from all datasets are available. Vegetation areas were determined using the MODIS land cover product. Blue line and gray area illustrate the mean and SD of VPD simulated by six CMIP5 models under the RCP4.5 scenario.

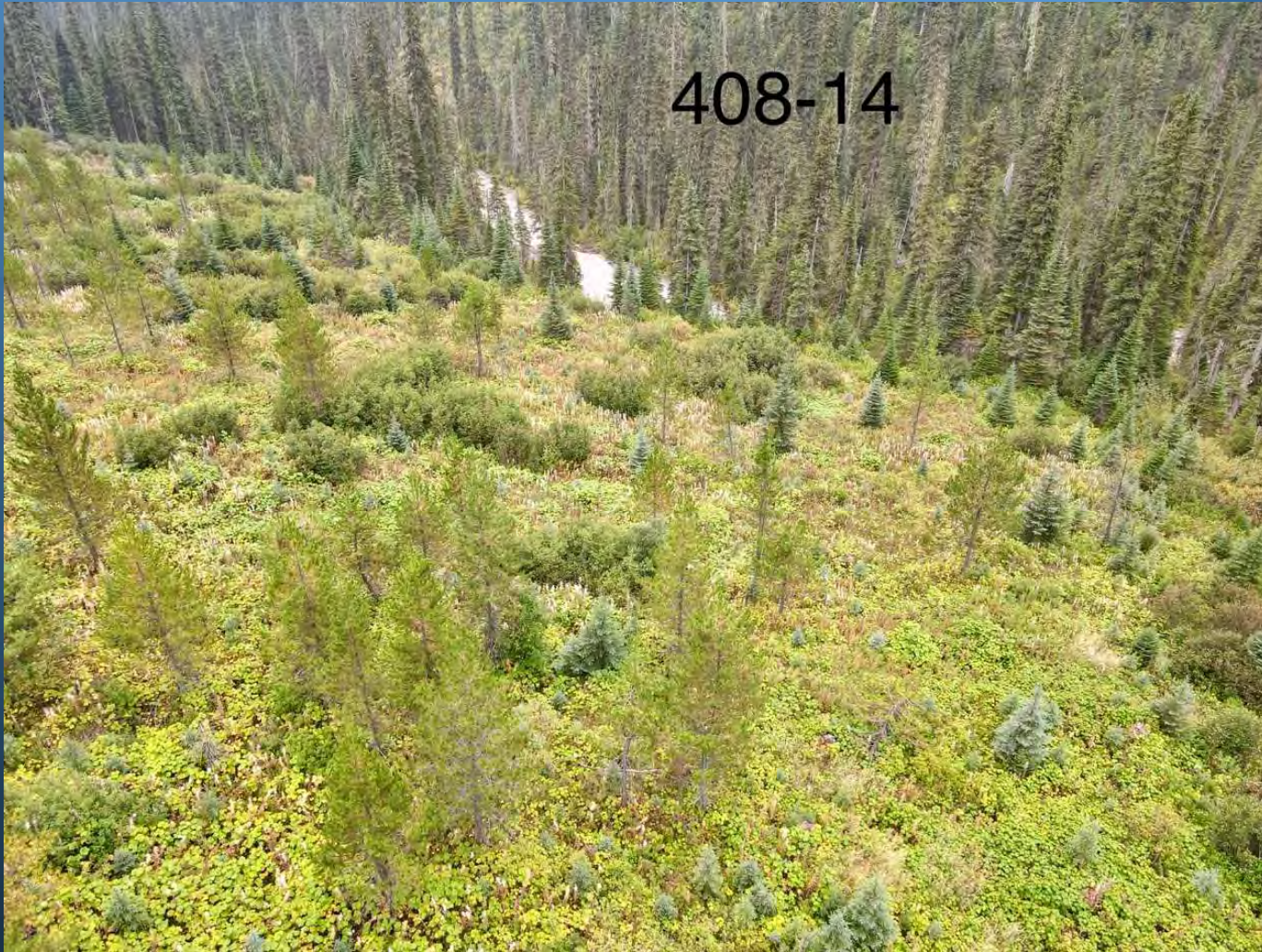


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Implementing **post free growing forest management** activities

both Lodgepole pine:

Douglas-fir:



Pre Treatment:

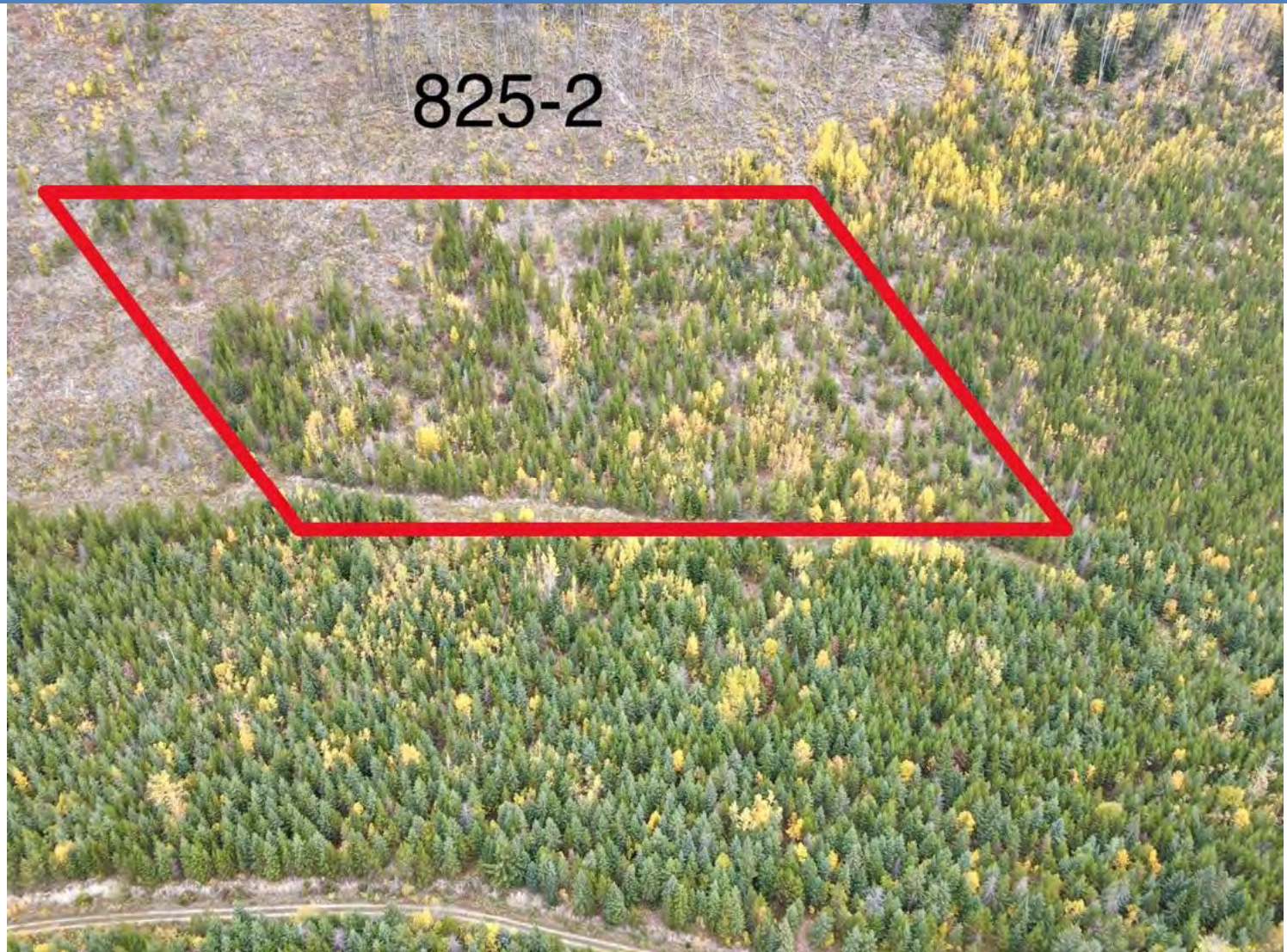


Post
Treatment:



Wildlife:

Ungulate use in
the mountains &
reforestation
considerations





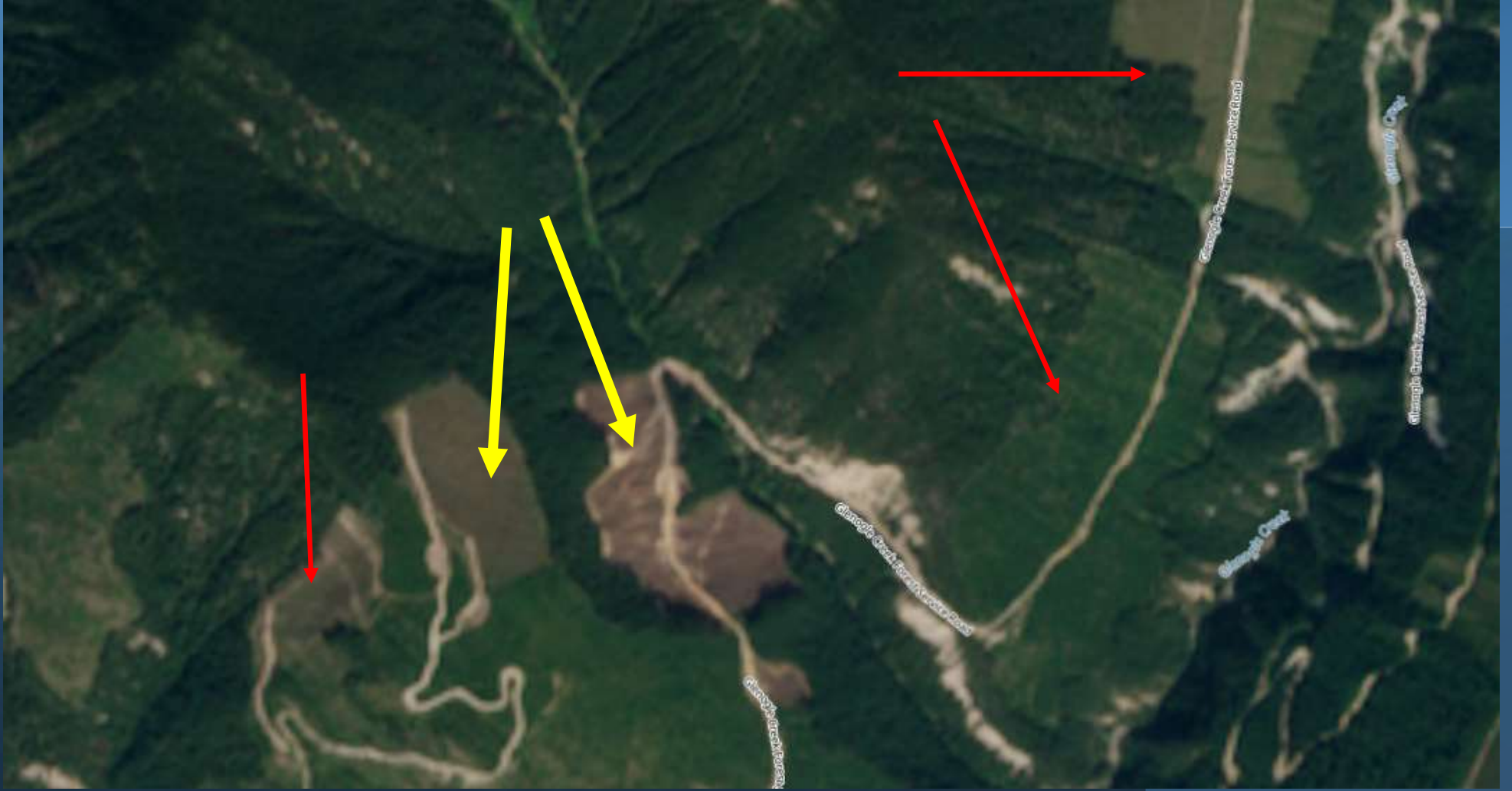
Damaged Pli, Lw, Sx



Good growth despite
scars







QUESTIONS?
