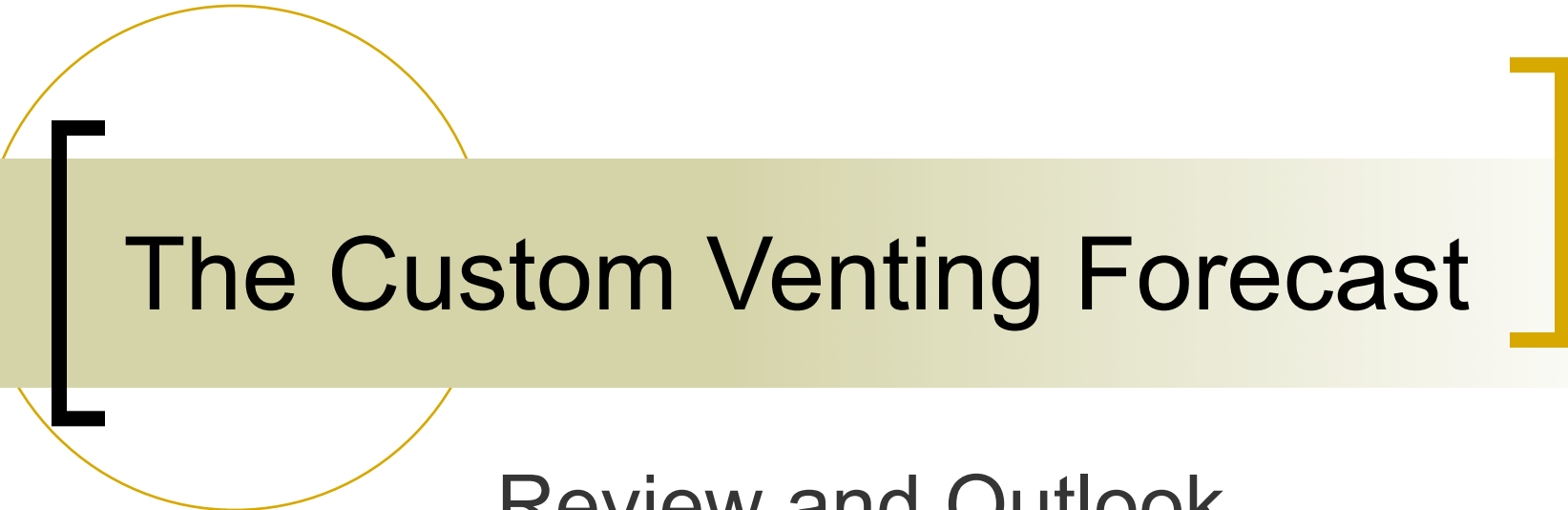




The Custom Venting Forecast

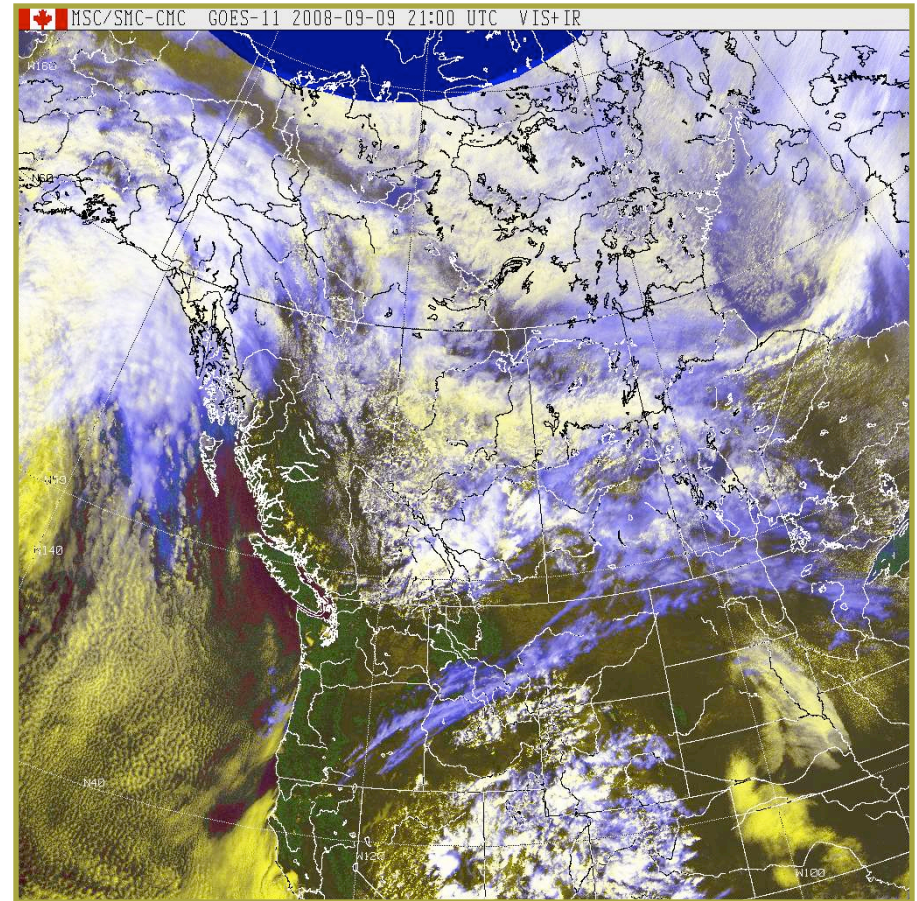
Review and Outlook

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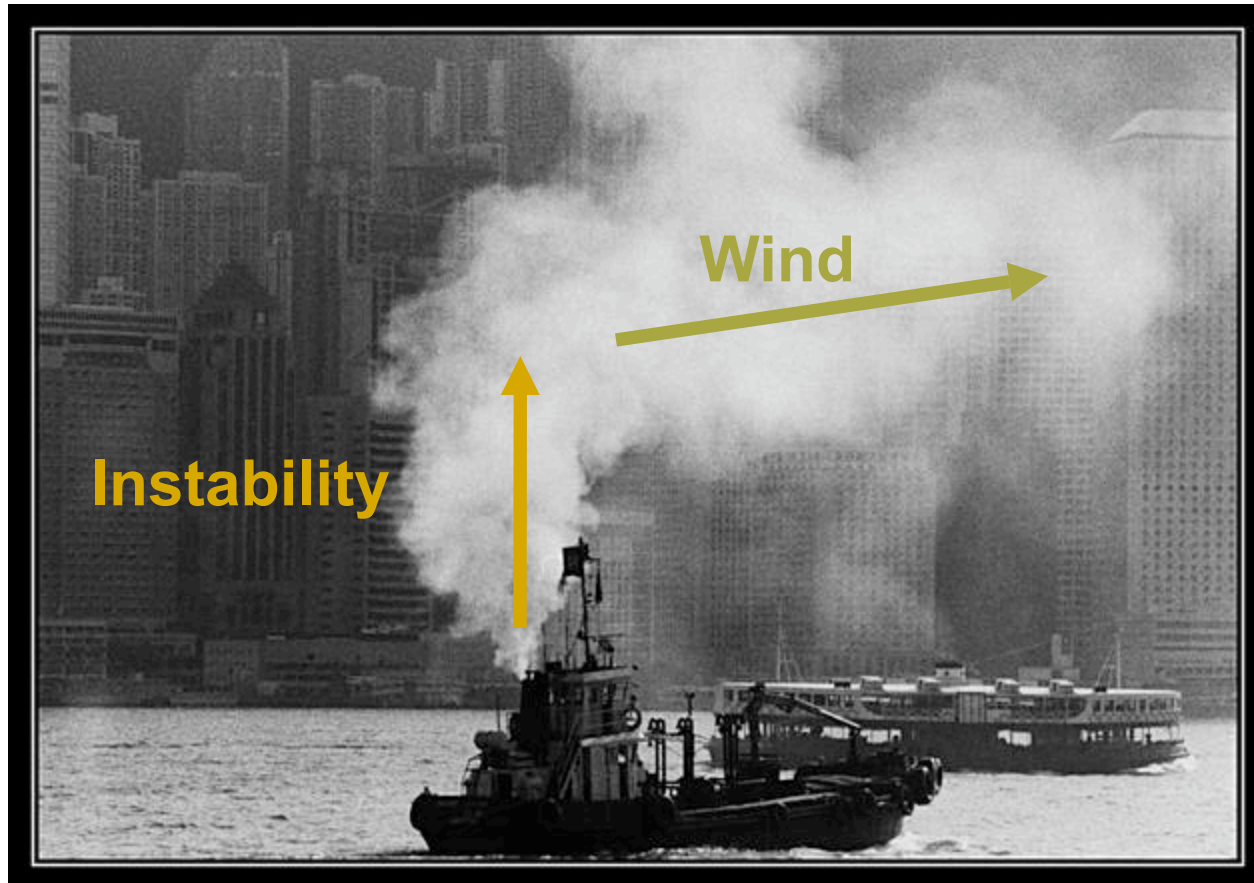
Purpose of the CVF Program

Through the prediction of atmospheric smoke dispersion:

- Facilitate planning of open burning operations
- Avoid air quality episodes created by open burning under inadequate venting conditions
- Open as many burn days as possible without compromising air quality



[Smoke Dispersion Forecasting]



[Dispersion Forecast- Instability]



- Upward Motion, but:
- Smoke may linger aloft
- Initial temperature of smoke is important
- Daytime heating (cloud cover, sun angle, snow cover etc.)
- Mixing Height
- Cold front (but: Arctic Front)
- Brings fast upper winds to surface



Dispersion Forecast - Wind



- Pressure Gradient
- Smoke may linger at surface (despite initial rise)
- Wind may drive smoke into nearby buildings or communities.
- Wind cools smoke (reduces buoyancy)



The CVF Template

File Number: 21590-05/CVF

MINISTRY OF ENVIRONMENT Custom Venting Forecast

Issued To: Nadina Woodlot Association

Company: Nadina Woodlot Association

Burn Registration Number(s): On File

Date Issued: Wednesday, 09 January 2008

<u>nwa</u> Lots: Grassy Plains, Francois Lake West		Lat: 53 58.317, 54 14.56		Long: 125 53.303, 125 50.216	Elevation: 850, 800m	Piles:
		Venting:	Optimum Time:	Mixing Height ASL:	Wind:	
Thursday	AM	Poor	12:00 PM- 1:00 PM	surface	Calm	
	PM	Poor		Near Surface	Light E	
Friday		Poor	12:00 PM- 1:00 PM	Near Surface	Calm	
Saturday		Poor	12:00 PM- 1:00 PM	Near 900 m	Light E	

The CVF Template cont'd

Synopsis / Remarks:

Another Pacific frontal system is approaching the coast this afternoon. It will move over the interior of BC overnight and Thursday. As the system mostly advances warm air over BC, it will stabilize the atmosphere overall keeping mixing heights very low. Light surface winds will allow for some fair venting conditions only over higher and exposed terrain as the system passes on Thursday. The system is expected to bring light precipitation to the interior mainly from early morning to noon blabbbb blabbbb blabbbb

Current Air Quality Index:

	Burns Lake	Houston	Telkwa PM 2.5	Smithers	Kitimat	Terrace
PM ₁₀	14	19	N/A	10	6	6
PM _{2.5}	18	23	24	14	4	5

Air Quality Categories:
(Based on PM₁₀ values)

Good: 0-25
Poor: 51-100

Fair: 26-50
Very Poor: Over 101

****Open Burning Restrictions in place: NO**



Uwe Gramann
Air Resources Technician
250.847.7547

Forecaster Discretion

- Proximity of year round residences in high wind.
- Lack of any residence within a large radius.
- Smoke funnelling in valleys.
- Particulates already contained in the air-shed
- Number of piles to be burnt.
- Type of burn (e.g. slash piles vs “fall and burn”).
- Long weekends, holidays etc.
- History of complaints and infractions



VI versus CVF



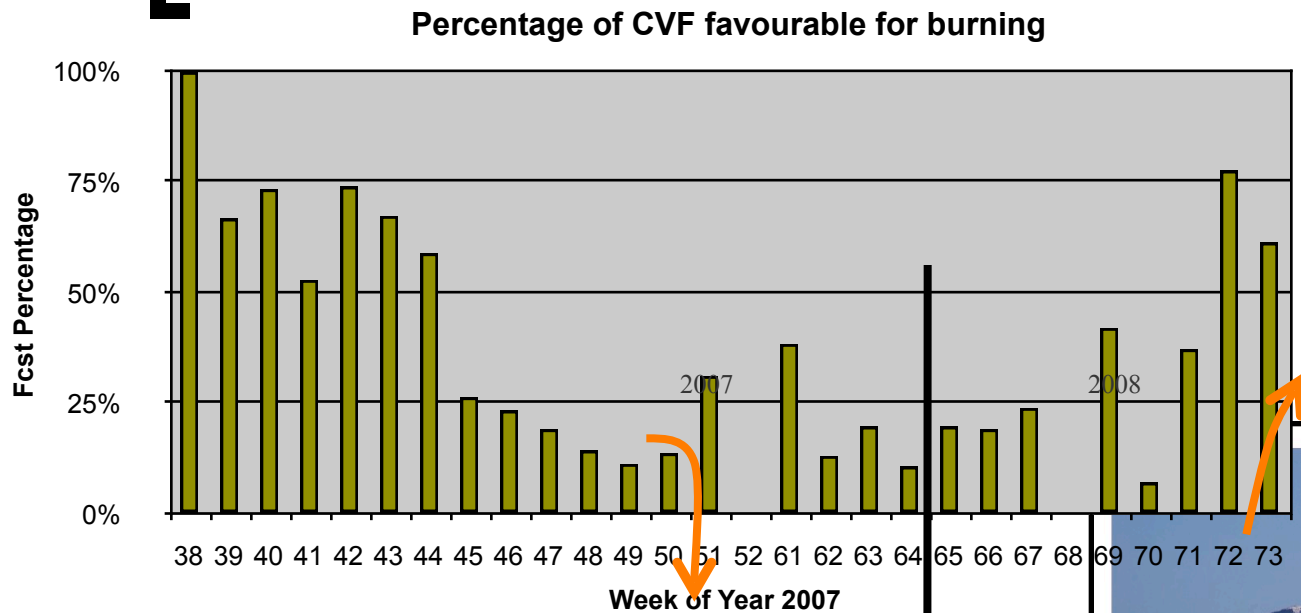
- VI is a general guideline
- CVF is issued on the previous day
- CVF is issued for three days
- Phone consultation (discretion and outlook)
- CVF uses forecaster's discretion
- Operators have the choice.

The 2007/08 Season

Start Day of CVF	2007-09-18
End Day of CVF	2008-03-28
Total Number of CVF Issued	2587
Total Number of Days during which CVF were issued.	120
Total number of registered burns in 07/08	856
Total number of registered piles burned in 07/08	31325
Number of registered burns by "big 4" in 07/08	618
Number of piles burnt using CVF in 07/08	18915



“The Drop”

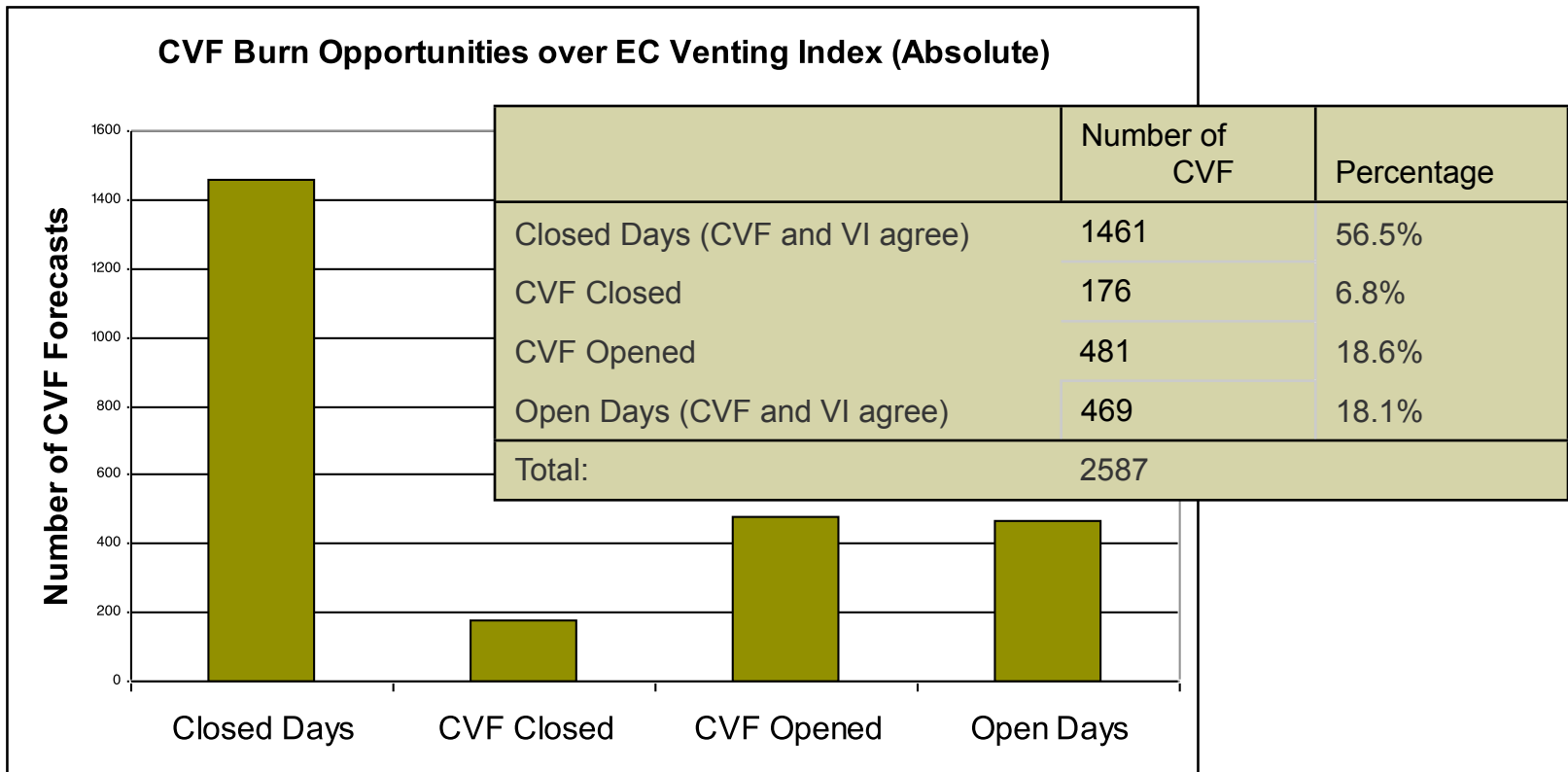


2007/08 in Numbers

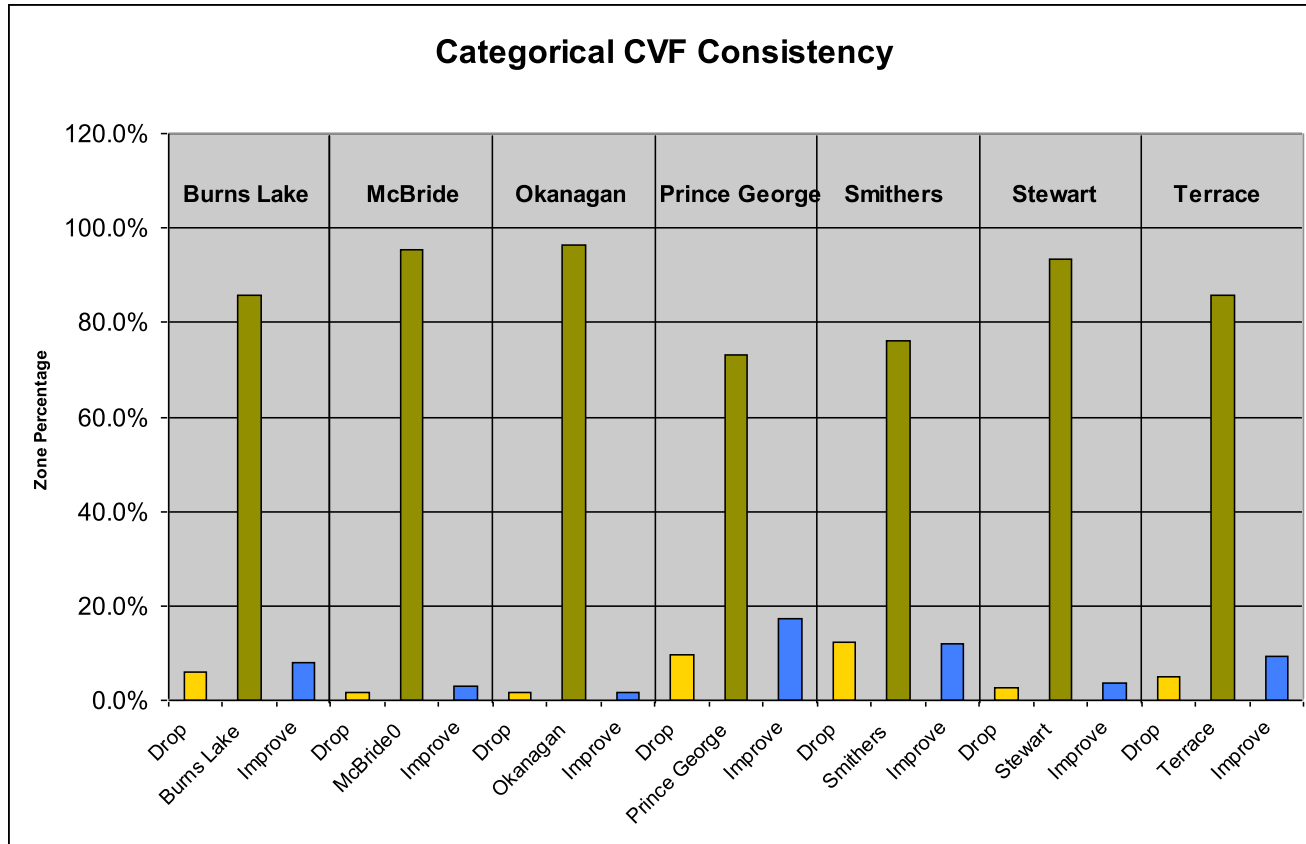
Month	Number of Registered Burns	Number of Registered Piles burned
9-2007	33	991
10-2007	726	24167
11-2007	63	5200
12-2007	23	701
1-2008	4	23
3-2008	4	218
4-2008	3	26



Opened Burn Days (...or not)



CVF Consistency



Air Quality Advisories



Legend	
	1-3 days
	4-6 days
	7-9 days
	10+ days

[illegible]

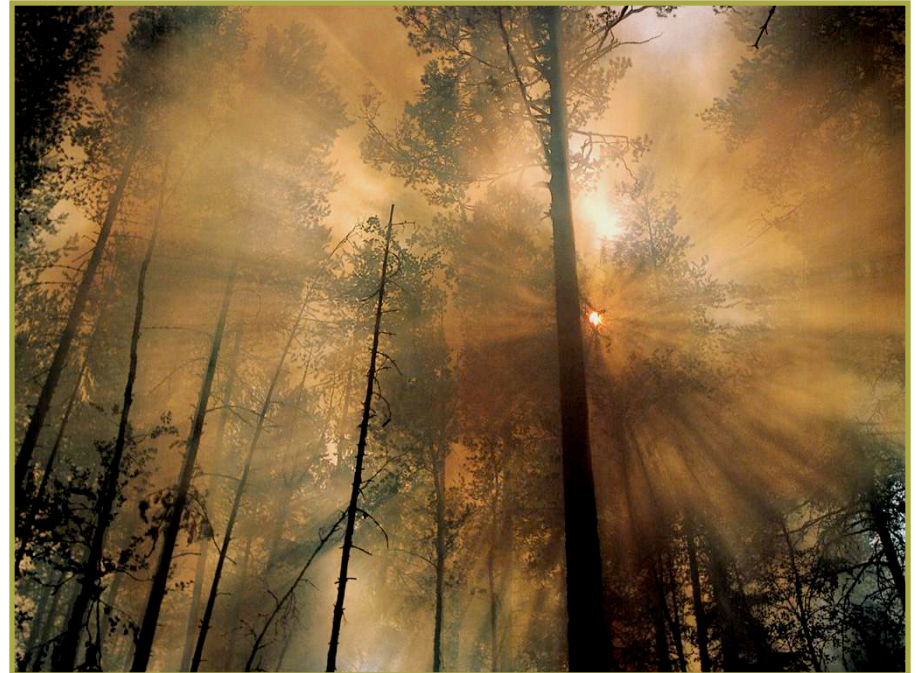
Things to Note

- Talk To Me
- Wind, Blue Sky and Dispersion
- Neighbouring CVF
- Be Ready – Burn Early
- Local Observations
- Exact Latitude/ Longitude



Give Me A Call

- When you are done with a spot – Let me know!
- If you have a sensitive/urgent burn coming – Let me know
- If your burn is smaller/larger than usual – Let me know
- If you are not quite sure about something – Give me a call



Compliance (...or not)



Feedback from last year?

Questions?

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