

BVLD AMS Burn Operator's Forum

Highlights from the 2005 Fall Burn
Season: How Did We Do?

Sept 11th, 2006

Ben Weinstein
Air Quality Meteorologist



Ministry of
Environment



Overview

► The Bigger Picture

- Goals, Indicators and Strategies from chapters 6 and 7 in the BVLD Airshed Management Plan: Community Action For Clean Air
 - Forest Harvest Debris Burning (<http://bvldamp.ca/html/documents/chap6.PDF>)
 - Agriculture, Land Development and Small Sawmill Debris Burning (<http://bvldamp.ca/html/documents/chap7.PDF>)

► Highlights from the 2005 Burn Season

- Custom Venting Index Forecasting (CVF) service
- Burn Season Air Quality (AQ)

The Bigger Picture

Goals (from chapters 6 and 7 of the BVLD AMP: CAPCA tables 6-1 and 7-6)

- ▶ Reduce or eliminate AQ episodes attributable to forest harvesting / resource management debris burning as well as agricultural, land development and small sawmill debris burning
- ▶ Provide a proactive response when AQ is deteriorating in the airshed
- ▶ Reduce smoke impact on light aircraft navigation

The Bigger Picture

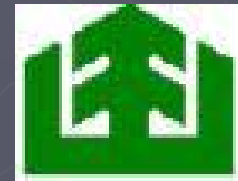
Strategies / Tools

- ▶ Continued operation of the Resource Management Burning Subcommittee (Burn Operator's Forum)
- ▶ Maintain MoE's educational, coordination and enforcement role with emitters
- ▶ Adhere to open burning restrictions ("burn bans") when necessary
- ▶ Follow locally developed Forest District Burn Management Plans
- ▶ Take advantage of CVF service when available

Highlights from the 2005 Burn Season

Custom Venting Index Forecasting Service

- ▶ In 2005 all Major Licensees received custom venting index forecasts
 - Pacific Inland Resources, Houston Forest Products, Babine Forest Products
 - Canfor Houston
 - Fraser Lake Sawmills
- ▶ Canfor Plateau, Timber Baron Forest Products, Cascadia/Western Forest Products, MoF in Quesnel and Williams Lake joined partway through the burn season
- ▶ Numerous small licensees, woodlot owners and agricultural landowners received CVF as well



2004 Burn Season

Custom Venting Index Forecasting Service

In total there were

- 307 emails written between September 13th and December 19th to 16 different recipients (sometimes over 10 per day)
- 30 phone spot forecasts as well as
- Numerous faxed forecasts
- ▶ Forecasts were issued to licensees in the
 - Vanderhoof
 - Nadina
 - Skeena-Stikine
 - Kalum and
 - North Coast Forest Districts as well as to
 - licensees / permittees on the Queen Charlotte Islands.

Highlights from the 2005 Burn Season

Custom Venting Index Forecasting Service

► In Total:

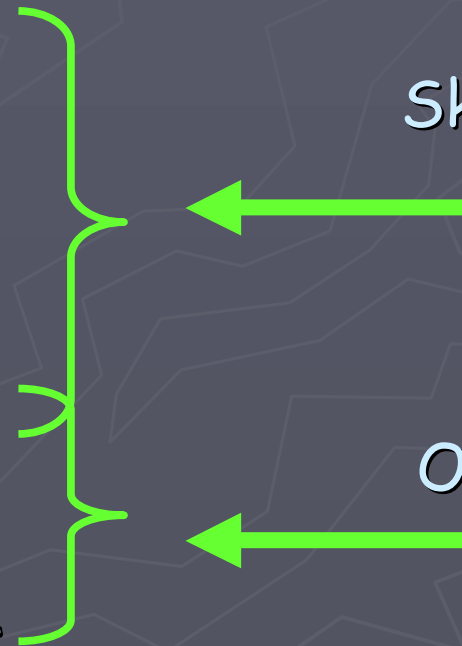
- Over 800 fcsts written between September 11th and December 19th to 27 different recipients (at times over 18 per day)

► Forecasts were issued to licensees in the

- Queen Charlotte Islands
- North Coast
- Kalum
- Skeena-Stikine
- Nadina
- Vanderhoof
- Prince George
- Fort St. James and
- Quesnel Forest Districts

Skeena Region

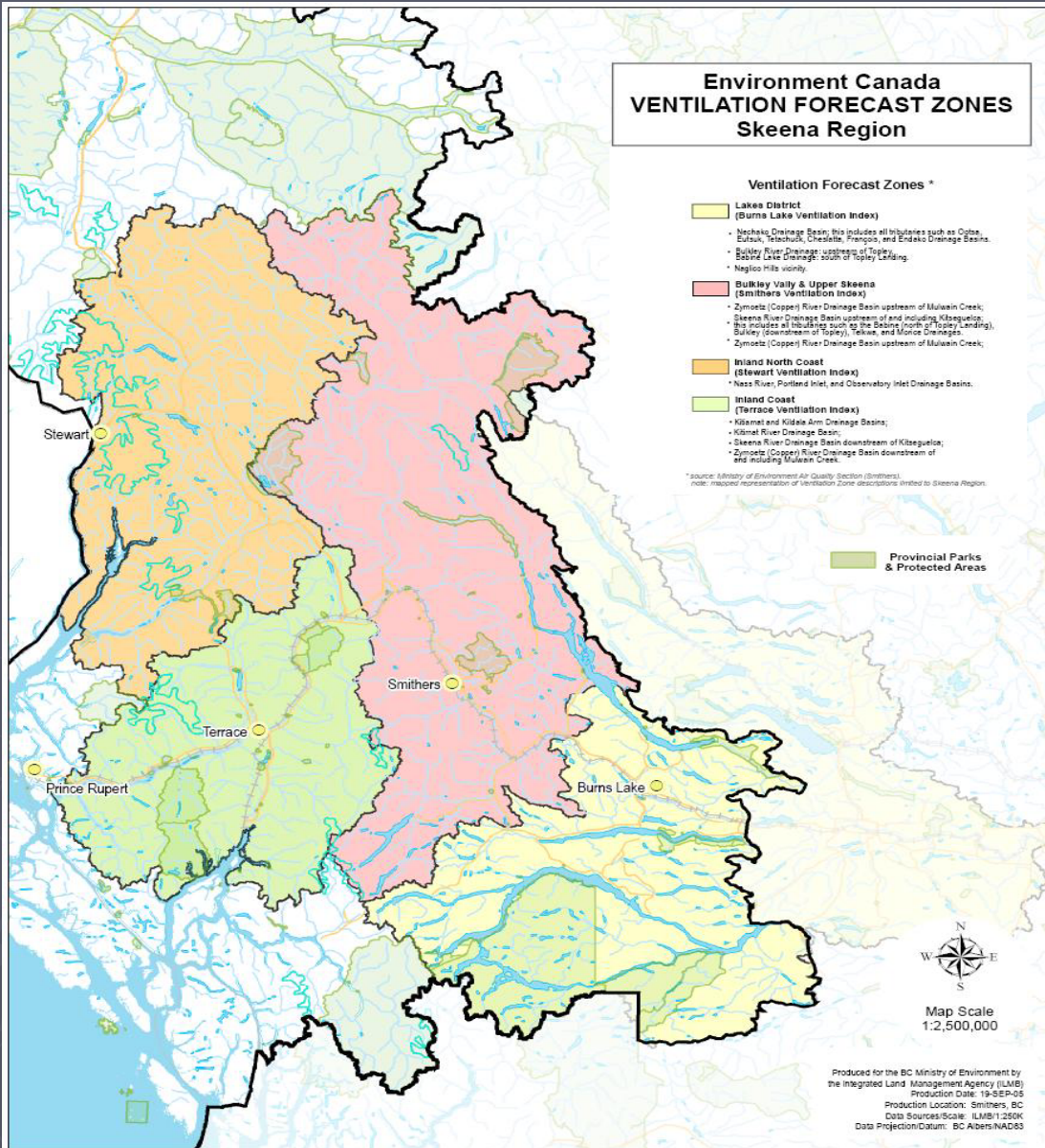
Other Regions



Geographical Extent of CVF



Highlights from the 2005 Burn Season



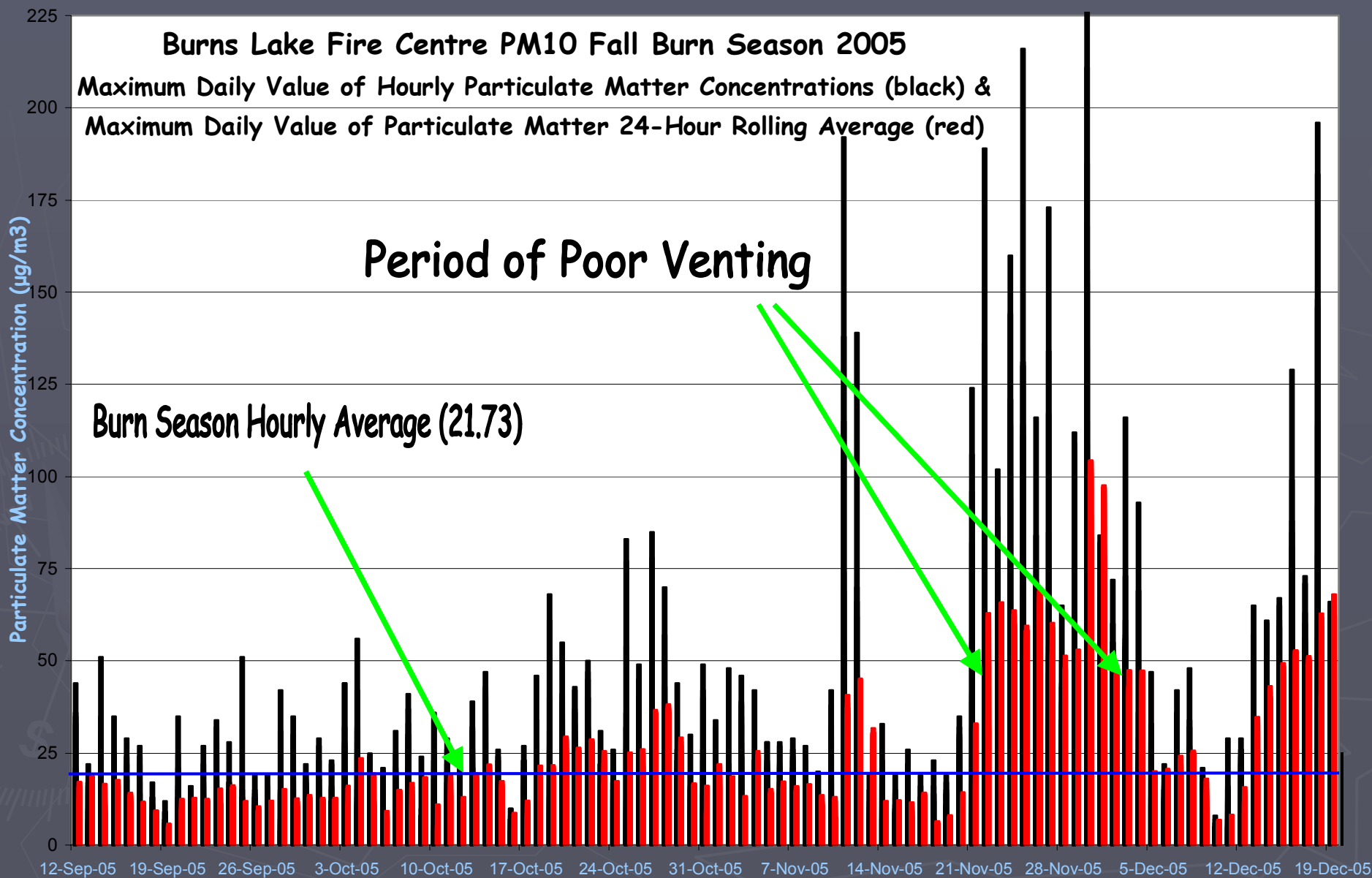
Custom Venting Index Forecasting Service

Highlights from the 2005 Burn Season

| 2005 Burn Season Custom Venting Forecast Openings and Closures | | | | |
|---|-----------------|-------------|-------------|---------------|
| Forecast Location | Net opened days | Days opened | Days closed | Forecast days |
| Smithers | 18 | 23 | 5 | 80 |
| Burns Lake | 6 | 10 | 4 | 69 |
| Queen Charlotte Islands ² | 1 | 5 | 4 | 27 |
| Quesnel | 4 | 4 | 0 | 25 |
| Stewart | 14 | 14 | 0 | 18 |
| Terrace | 17 | 18 | 1 | 60 |
| Totals | 60 | 74 | 14 | |

²QCI EC Venting Index Forecast not publically available

2005 Burn Season Air Quality



BVLD Air Quality Episode History

| Month | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|
| January | | | | | | | | | | | |
| February | | | | | | | | | | | |
| March | | | | | | | | | | | |
| April | | | | | | | | | | | |
| May | | | | | | | | | | | |
| June | | | | | | | | | | | |
| July | | | | | | | | | | | |
| August | | | | | | | | | | | |
| September | | | | | | | | | | | |
| October | | | | | | | | | | | |
| November | | | | | | | | | | | |
| December | | | | | | | | | | | |



25 13 28 33 12 12 19 20 26 12 19

Summary

- ▶ Open Burning (as per chapters 6 and 7 in the AMP) contribute a significant quantity of PM_{2.5} to the BVLD airshed.
- ▶ Goals, indicators, strategies and tools help us all manage this emission source. One such tool is the CVF service.
- ▶ The number of recipients to the CVF service is increasing. So are the number of partners.
- ▶ In 2005 Custom venting forecasts increased burning opportunities compared to the Environment Canada Venting Index Forecasts.
- ▶ During the Burn Season there were 2 sets of AQ Advisories or Burn Bans. (Nov 22-25 & Nov 30 - Dec 1)
- ▶ Lots of successes to build on. MoE looks forward to continue working with everyone this Fall!
- ▶ Custom Venting Forecaster Armel Castellan (armel.castellan@gov.bc.ca)