



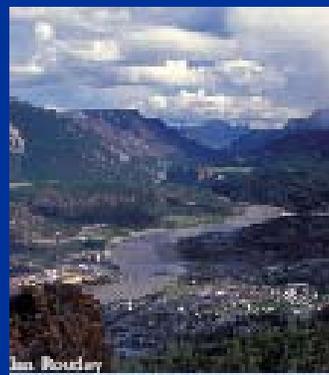
Social Marketing and Woodstove Exchange

Tony Wakelin

B.C. Ministry of Environment

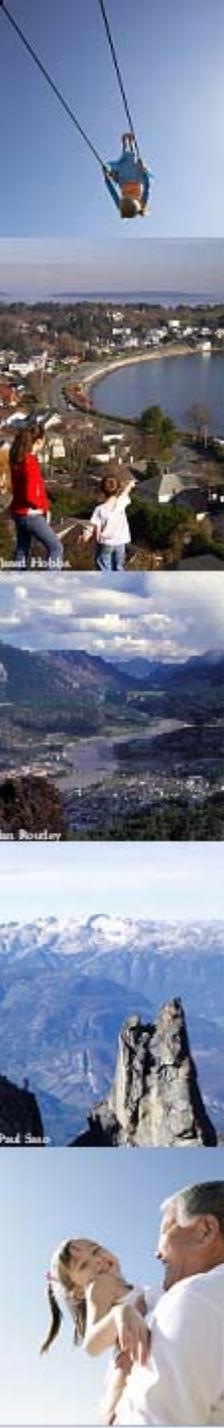
Prepared for Residential Wood Smoke Training Workshop

March 15 Reno



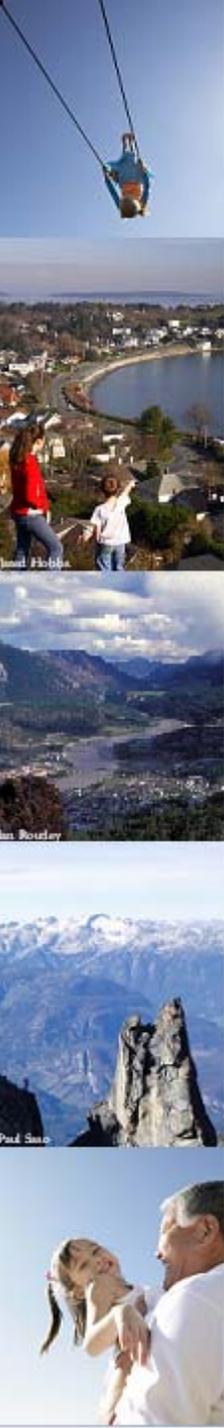
Overview

- Context
- Community Based Social Marketing
- Next Steps in BC
- Future



Solid Fuel Burning Domestic Appliance Regulation

On or before November 1, 1994 -
manufacturer, wholesaler or retailer
must not sell for use or for resale an
appliance unless it meets U.S. EPA or
CSA emission standards



Exchange Programs

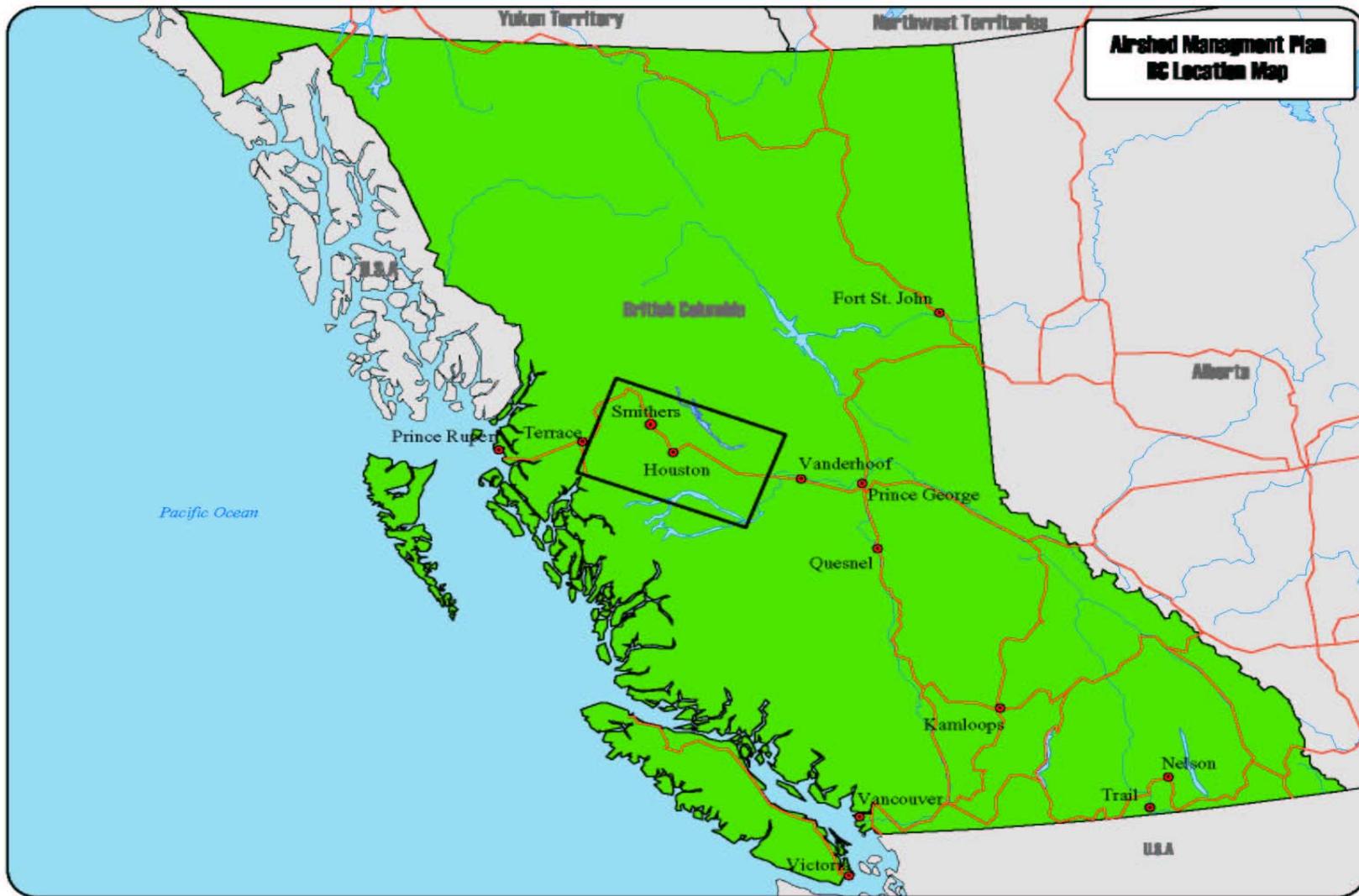
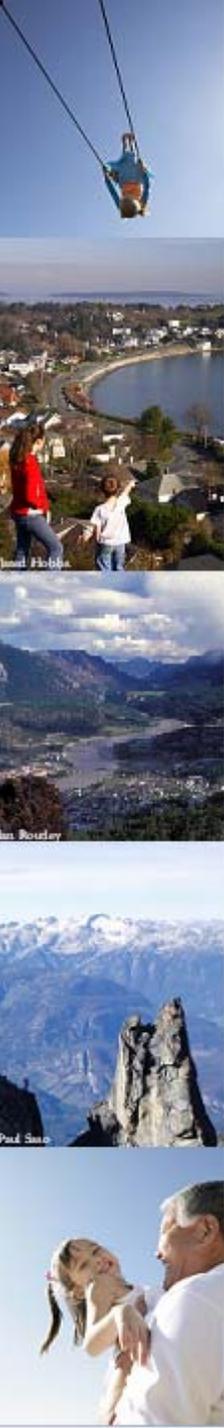
1995 BC	213
2001/2/3/4/5/6 Okanagan	783
2004 BVLD	35
2002/3/5 Cariboo	180
2004 Columbia-Kootenay	58
2004/5 Golden	44
2005 Sunshine Coast	17
2004 Prince George	17
	<hr/>
	Total 1357

How many old appliances?

2003 BC phone survey:

- Approximately 50% of household wood burning appliances are old technology
- There are 84,000 old appliances*

* Excluding LFV and Kelowna



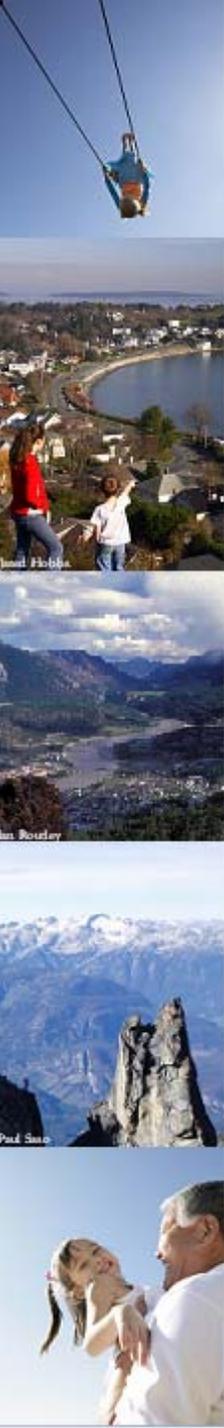
Bulkley Valley Lakes District (BVLD)



Ministry of Environment

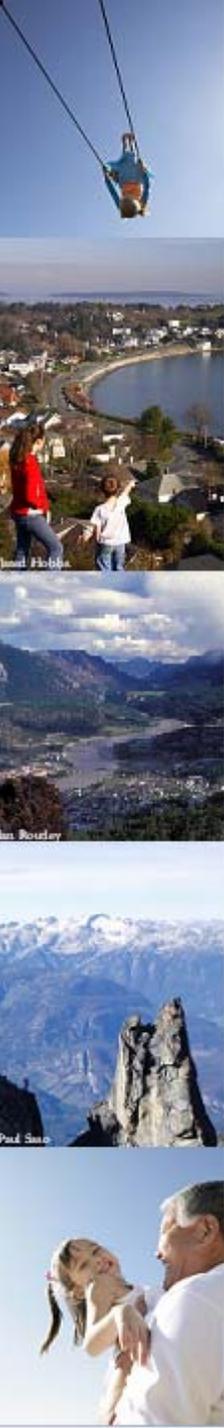
BVLD

- 11,500 homes
- 7,200 heated with wood
- 4,200 conventional (non-US EPA certified)
- 8% of annual PM_{2.5} – more during the heating season, and emissions are released where people live



CBSM

...demonstrate that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities benefits





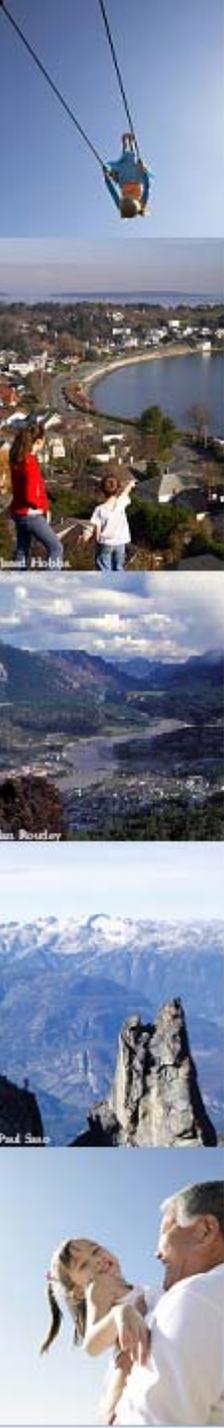
Fostering Sustainable Behavior

An Introduction to
Community-Based
Social
Marketing

Doug McKenzie-Mohr
William Smith

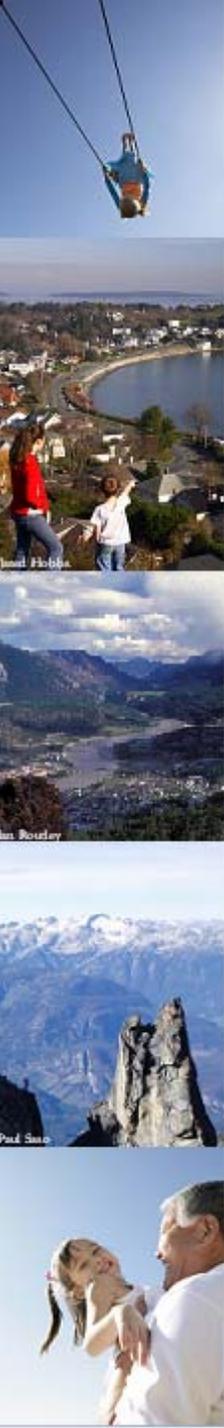
CBSM

- A few surveys have been done regarding woodstoves and exchange programs.
- However, CBSM takes things further.
- BC work to date is a starting point – there are still many questions.



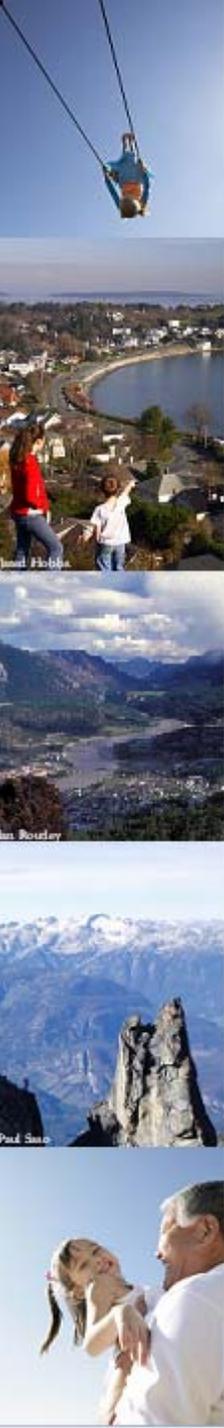
CBSM steps

1. Identify barriers/benefits to an activity
2. Develop a strategy that utilizes tools that have been shown to be effective
3. Pilot the strategy
4. Evaluate that strategy once it has been implemented across a community

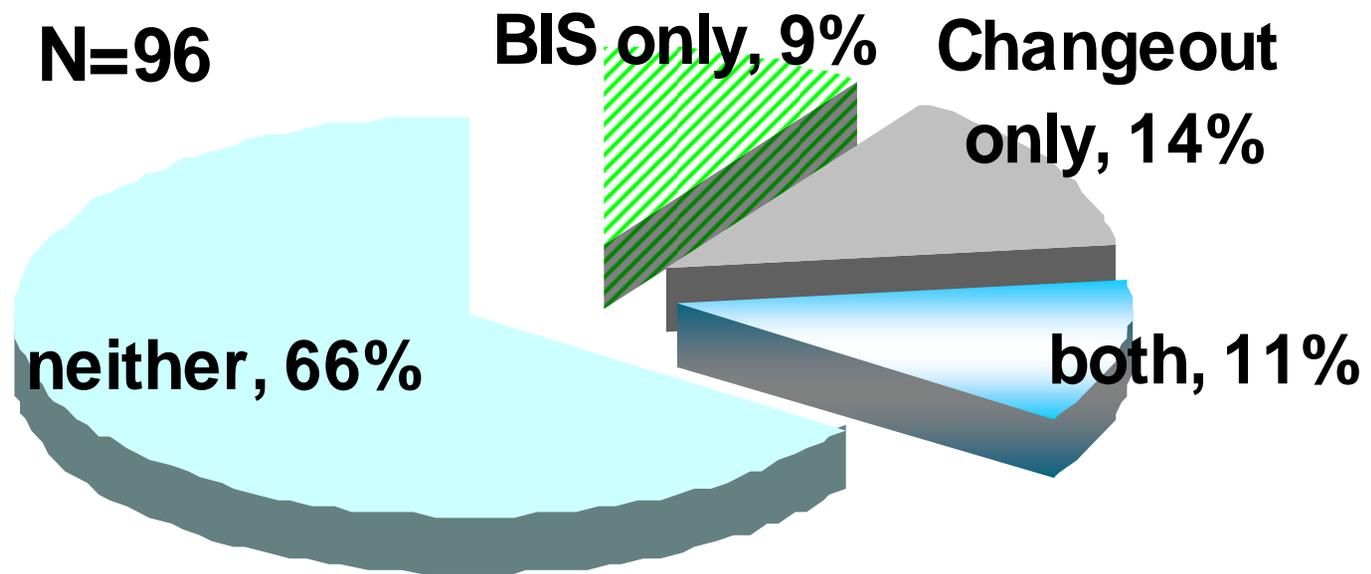


1. Barriers

- Questionnaire – Smithers
- *Focus groups – Burns Lake, Terrace, and Smithers*
- To develop the questions input was received from Doug Mackenzie-Mohr, and Robert Anderson - Simon Fraser University



Previous Program Awareness

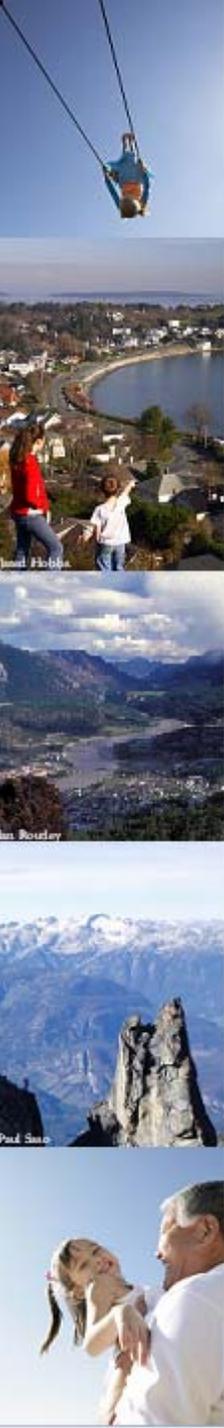


BIS = 2003 Burn-it-Smart Workshop

Changeout = 2004 Skeena-BVLD Woodstove Exchange

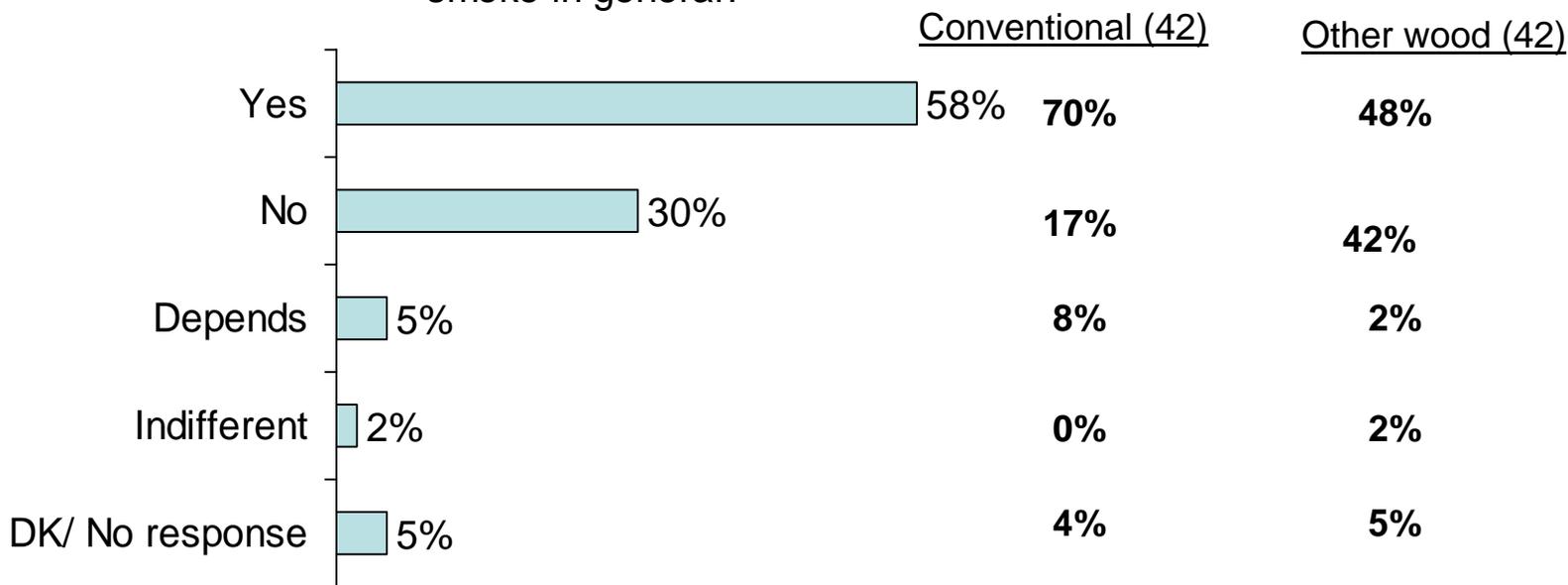
Attitudes toward Wood Smoke

- Wood smoke is not considered a major contributor to air pollution. Industry and cars are believed to be causing most of the pollution*
- Bulkley Valley is considered to have better air quality than most parts of BC*
- Wood smoke is not offensive to most as long as the wood is dry and no garbage or other materials have been added to the fire*
- Perceptions of wood smoke in the community varies across the Valley:*
 - Terrace and Burns Lake are sometimes smoky but not that often*
 - Smithers is often smoky beginning in fall and ending in spring*
 - Rural areas are less smoky than neighbourhoods closer to town*

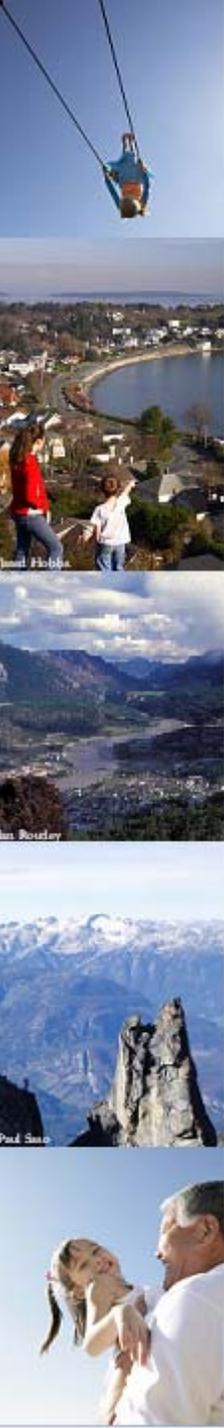


Attitudes toward Wood Smoke (cont'd)

26. Do you like the smell of wood smoke in general?



Base: All respondents, N=129

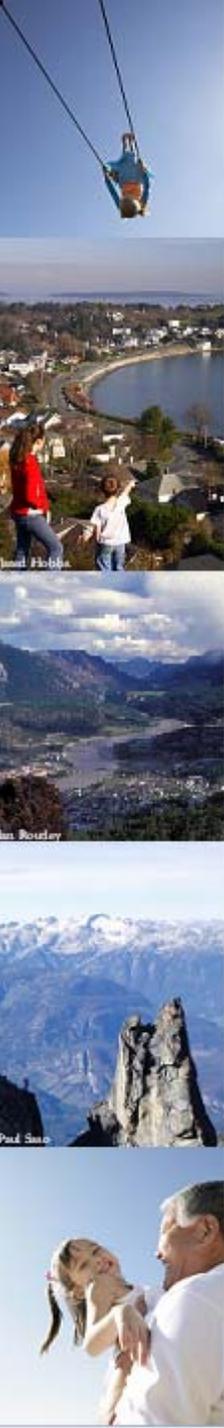


Plans to Upgrade

- *Approximately half of the residents we spoke with are considering upgrading to a new technology stove*
 - *Efficiency is the main reason (new stoves heat quickly, are very warm, and use half of the wood required by the conventional stoves)*
 - *Air quality is only a minor concern in the decision to upgrade*
- *Interest in replacing with gas and electricity is low*

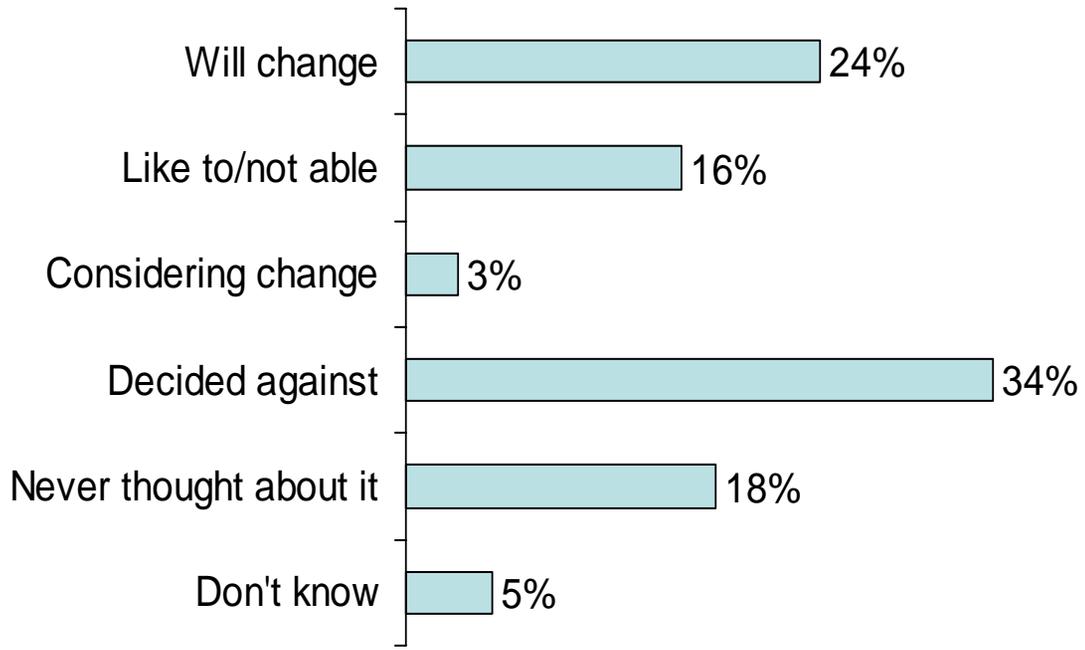
Switching to New Technology

- Cost is, by far, the most common barrier to purchasing a new technology wood stove.*
- Belief that older stoves are efficient and the technology cannot be improved.*
- Financial incentives would encourage an upgrade to a new technology stove. Buy-back/ exchange programs, government grants, and tax refunds are mentioned as appealing financial incentives.*



Plans to add or switch

65. Do you have any plans to add a new heating appliance or switch to another heat source in the near future?



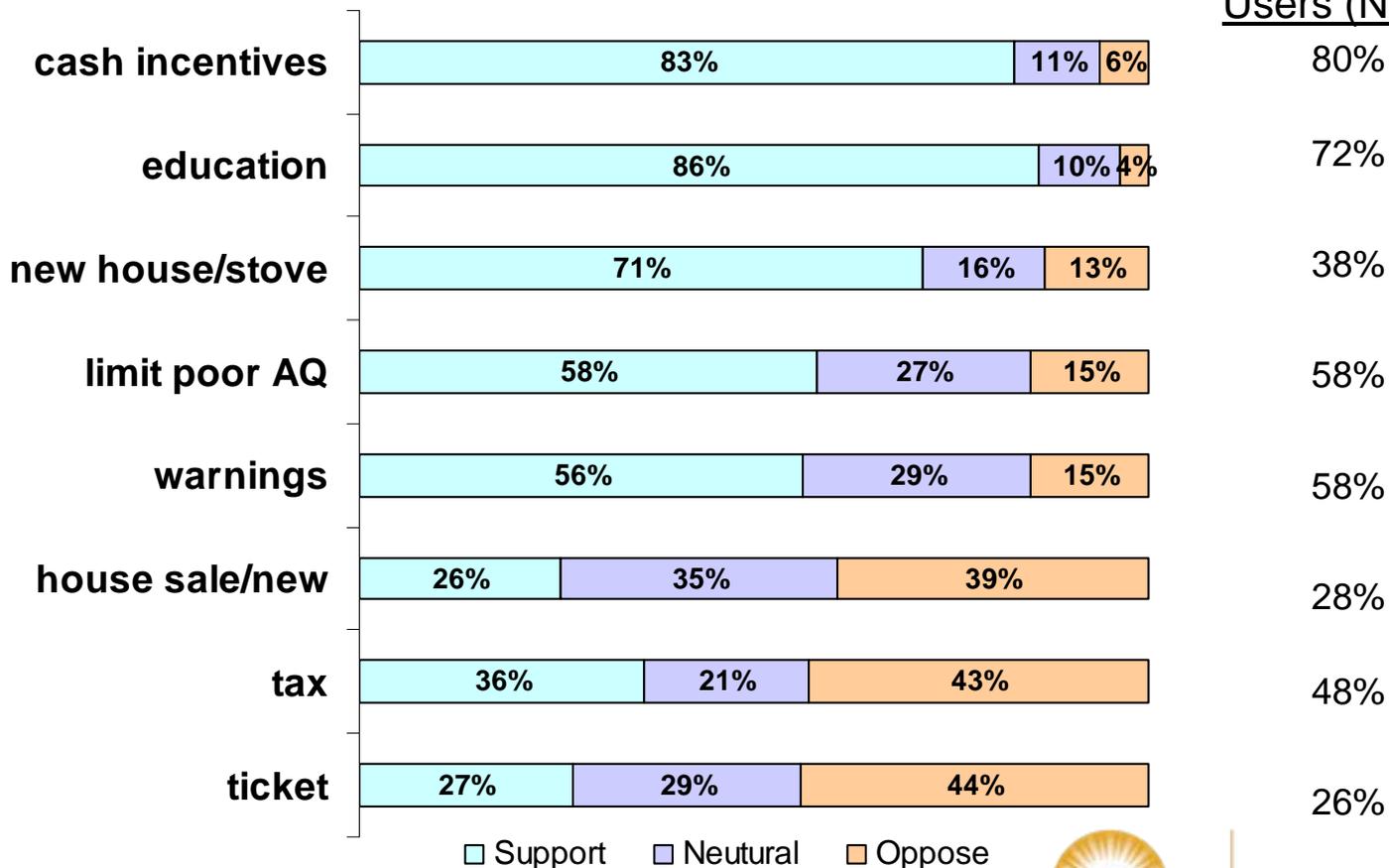
43% are open to an upgrade

Base: Respondents using conventional stoves, N=45

Support/Opposition to Actions

All (N=127)

Conventional Stove Users (N=51)



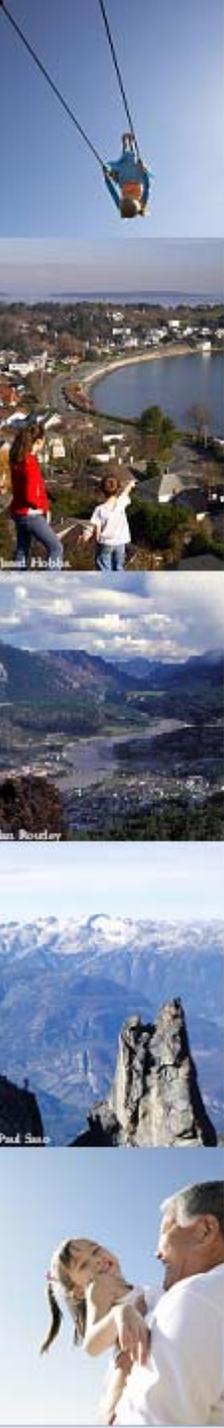
2006 survey results weight adjusted using 2003 random survey



Ministry of Environment

Reaction to By-Laws

- *People raised concerns such as:*
 - *Difficult to implement*
 - *May not be effective to reduce wood smoke*
 - *Concern for residents who rely solely on wood heat*
 - *Penalizes people who cannot afford it*
 - *By-laws represent a loss of community control*
- *Analogy to “gun registry” – group agreement*
- *Point to the need for communication when implementing a bylaw*
- *Education aspect of by-laws received a positive response – i.e. visit when lots of chimney smoke*



Health Air Quality Message

Wood smoke contains many toxic pollutants. Several studies have related wood smoke to respiratory (lung) symptoms such as coughing, asthma, congestion, and wheezing. In British Columbia, air pollution is estimated to account for 25 to 250 deaths per year, and costs our health care system \$85 million per year. Health risks are higher for pregnant women, children, elders and those with existing heart and lung problems.

Air quality in Smithers/Hazelton/Telkwa is negatively affected by residential wood smoke. The provincial health officer has recommended that action be taken to reduce wood smoke emissions.

Old woodstoves release far more air pollution than other forms of residential heating.

Health Air Quality Message

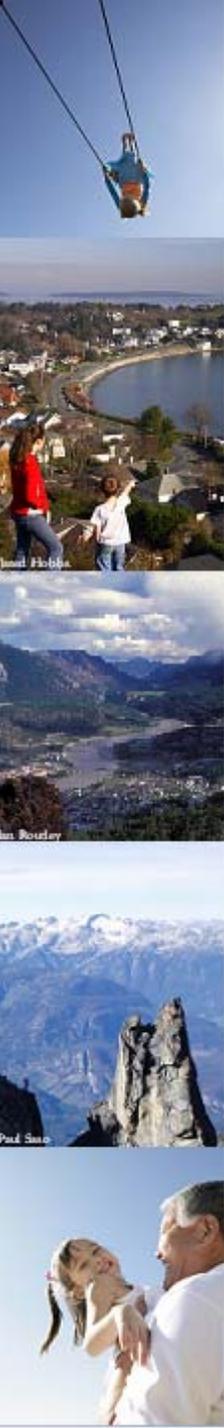
- In British Columbia
- 25 to 250 deaths per year
- \$85 Million in health care costs per year



Health Message Acceptance

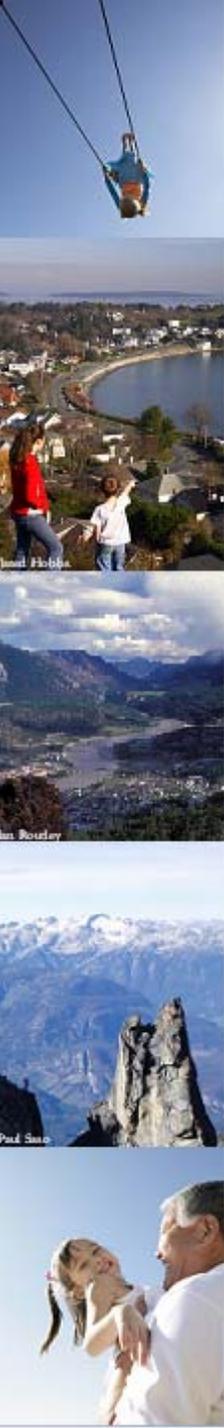
The communication statements about wood smoke and health risks were not well received and not considered credible by most.

- Facts are familiar and accepted but the link to wood smoke is not believed*



Wood smoke message

- Genuine concern about deaths and health risks*
- Overall, not credible and thought to be a “scare tactic”*
- Not credible that wood smoke is causing the deaths, or costing the healthcare system money directly or indirectly*

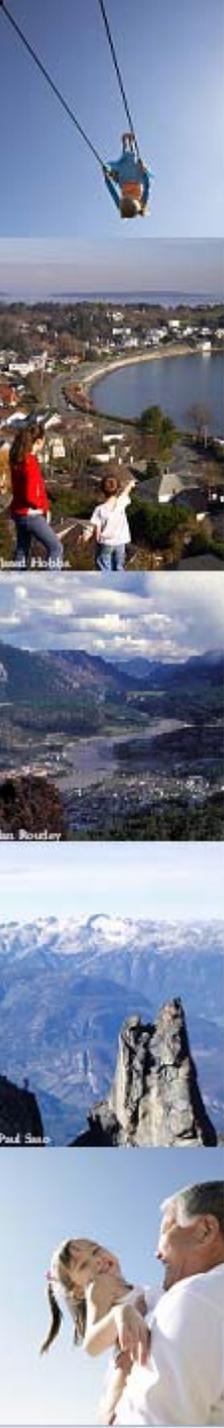


Air Quality message

- *Considered exaggerated “wood smoke is less of a problem than other polluters such as industry”*
- *Health officer “not credible - part of the government and Victoria”*
- *Health officer is “targeting woodstove users rather than industry”*

Next Steps in BC

- Positioning and Marketing Recommendations – where Erika comes in





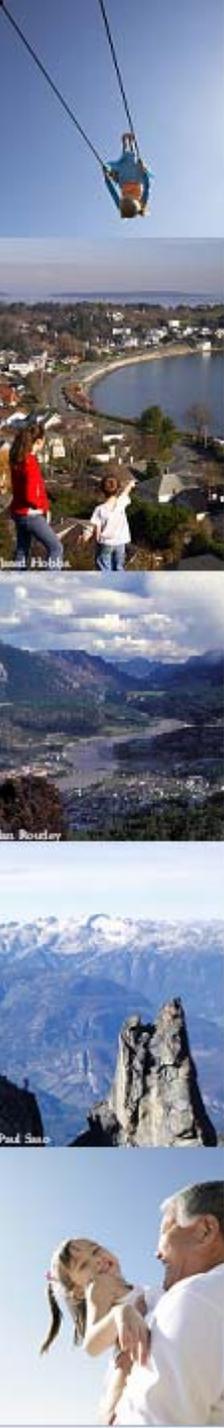
- Pilot strategy
- Started December 2006

Partnerships

- Ministry of Environment \$100,000
- Northern Health Authority \$5,000
- Hearth Products Industry \$7,500 (advertising) & 15% discount (March only)
- Retailer Registration Retailer Registration \$200 each
- Environment Canada \$20,000
- Credit Unions
- Municipal governments
 - Bylaws in Houston and Smithers
 - Incentives – Houston \$300 additional, waive inspection fees
 - Recycling
- BVLD AMS – non profit organization

Bylaw Content

- No wood heating when air quality advisory in effect
- Only new woodstoves installed
- No outdoor boilers
- All non-certified - Houston “shall be removed by” – Smithers “target removal date of ” Dec 31, 2010
- Prior to completion of sale or transfer of property non-certified appliance replace or remove





clean air booth
air management society



Burn it Smart!
www.burnitsmart.org
Soyons responsables!
www.chauffageaubeis.org



Canada

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25 STORES & SERVICES

SuperValu
value and freshness

LIQUOR STORE *Refrill* DRUG STORE

Curves J&J JEWELLERY

1ST CHOICE FASHIONS
INVENTORY
CLEAROUT SALE
UP TO 60% OFF

PRIME RETAIL
SPACE LEASE
FOR MORE INFORMATION
CALL OR FAX



He's bringing you **MONEY** to upgrade your old stove

**\$250
CASH**

Have you seen **SUPERSTOVE?**

Old stoves burn too much wood and smoke up your neighbourhood. Join me this winter and together we'll clear the air and get the most out of your wood!



**Don't
wait
X-Change
Your old
stove
NOW
superStove**
Saving our air
one stove at a time!

THE LUNG ASSOCIATION™
British Columbia

northern health

BRITISH COLUMBIA
Ministry of Environment

by:lid
airshed
management
society



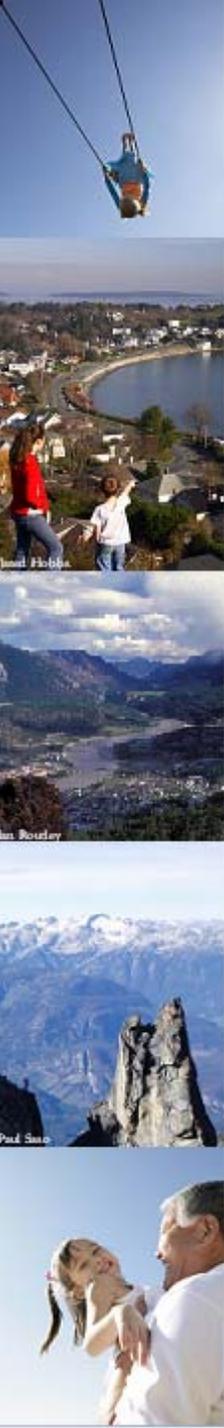
Plus Spring In-store discounts at Participating Retailers
Favourable financing at local Credit Unions
No Town permit fees for stove installation

To find a registered retailer or to have SuperStove
visit a neighbourhood near you...

Call Colin Macleod at the **X-Change Hotline 1 888-334-0335**

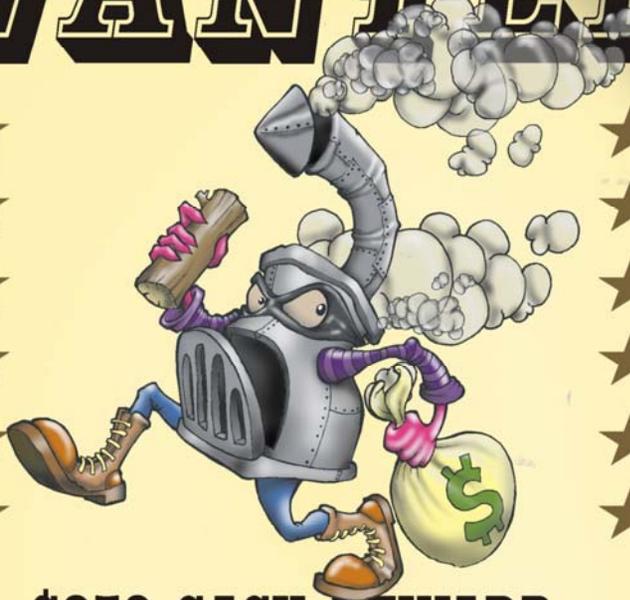
BRITISH COLUMBIA
The Best Place on Earth

Ministry of Environment



For smoking up the air in your neighbourhood
and eating your firewood

WANTED



\$250 CASH REWARD

Plus Spring In-store discounts at Participating Retailers

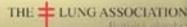
Favourable financing at local Credit Unions

No Town permit fees for stove installation

TIME TO CLEAN UP THE AIR IN THIS TOWN!

If you live between Terrace and Burns Lake and are using an old wood stove, act now!

To find a registered retailer, or to help clean the air in your neighbourhood contact Colin Macleod
at the X-Change Hotline: 1 888 334 0335 or e-mail Colin.Macleod@gov.bc.ca



Ministry of
Environment

SuperStove has Ol' Belcher on the Run!



“It's time to clean up the air in this town,” challenges SuperStove, a local Airshed Action Hero. “Ol' Belcher's been eating up your firewood and smoking up your neighbourhoods for too long now. In some homes, he's responsible for wasting an extra five pick-up loads of wood per season. And where is this extra wood going? It's billowing out your chimney and polluting

the air we all breathe.”

Help is here. “There's never been a better time to get rid of that old smoky stove,” says SuperStove. If you live between Terrace and Burns Lake, then you could qualify for a **\$250 cash rebate**, plus in-store discounts at participating retail stores next March, favourable financing at local Credit Unions, and no town permit fees for stove upgrades.

What can you do to help?

First make sure that you're burning split, well-seasoned firewood. “If you cut it this year, then it's too green to burn clean,” SuperStove cautions.

And if you spot Ol' Belcher in your home or neighbourhood, then you or your neighbour should seriously consider upgrading to a cleaner burning appliance. “Join me this winter, and together we'll

clear the air and get the most out of your wood, SuperStove urges.”

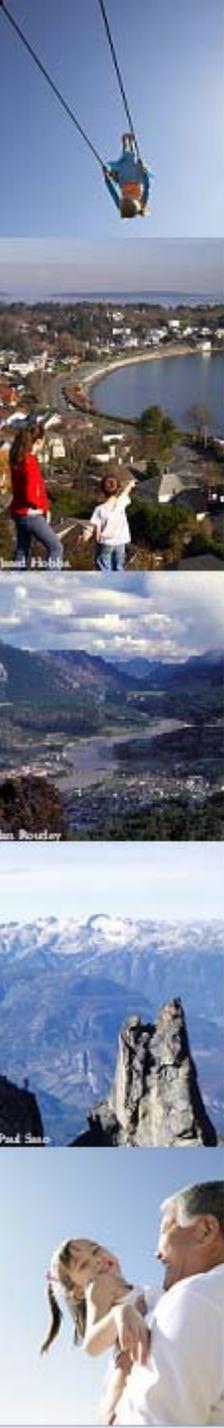
To find a registered retailer, or to help clear the air in your neighbourhood contact Colin Macleod at the

**Woodstove X-Change Hotline:
1 888 334 0335**

Or e-mail Colin.MacLeod@gov.bc.ca

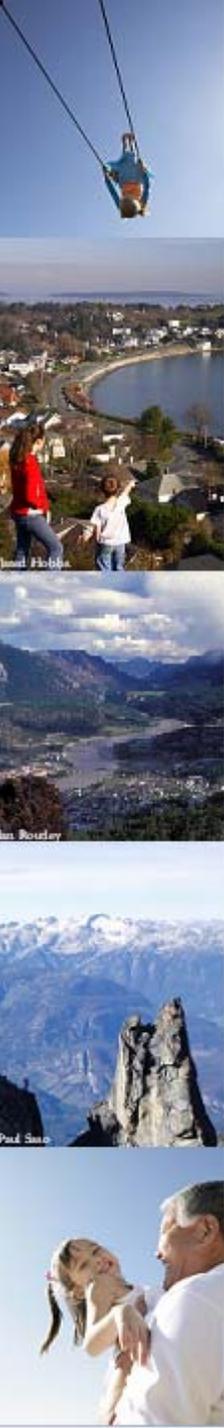
Other Promotions

- Radio shows and ads
- X-Change toll free hot line
- Door hangers and cards
- Website <http://cleanairplan.ca/>



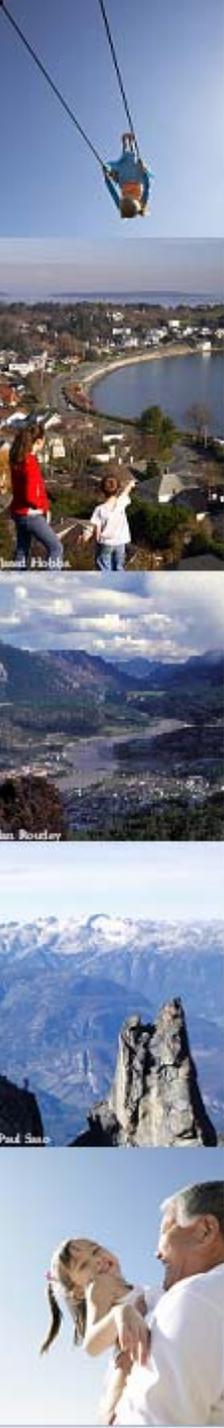
Evaluation

- Not just how many stoves (target 400 by Dec 31, 2010)
- Will need to know what worked
- Why did each exchange took place?
- What can we apply to future exchange programs?



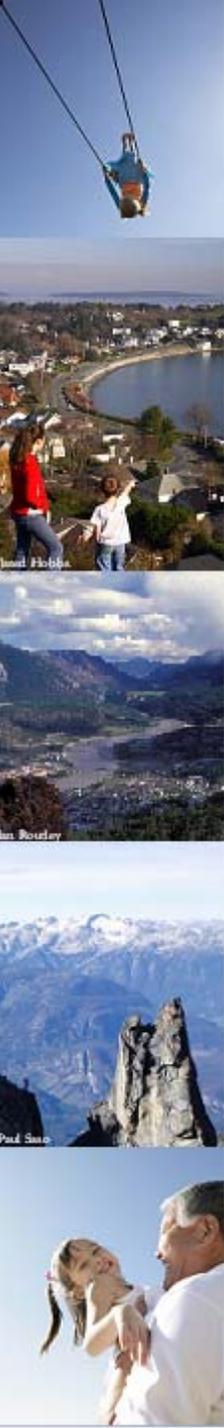
Future Considerations

- US and Canadian CBSM studies to shape the future of woodstove exchange programs.
- What questions would you like to have answered?
- Use demographic and other data (proximately to fire wood?) to shape key elements for future programs (Sacramento will be different than interior BC).



Acknowledgements

- Ben Weinstein – Air Quality Meteorologist
- Laurie Gallant – BVLD AMS
- Ken Thomson – Houston Fire Chief
- Colin McLeod – Coordinator in Smithers
- Reid Harvey, Zigi Gadomski – WET BC
- Hui, Therese and Benji



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http://www.town.smithers.bc.ca/pdfs/bylaws/bl1454_current/BL%2015%20%20WOOD%20BURNING%20APPLIANCE%20SMOKE%20CONTROL.pdf