

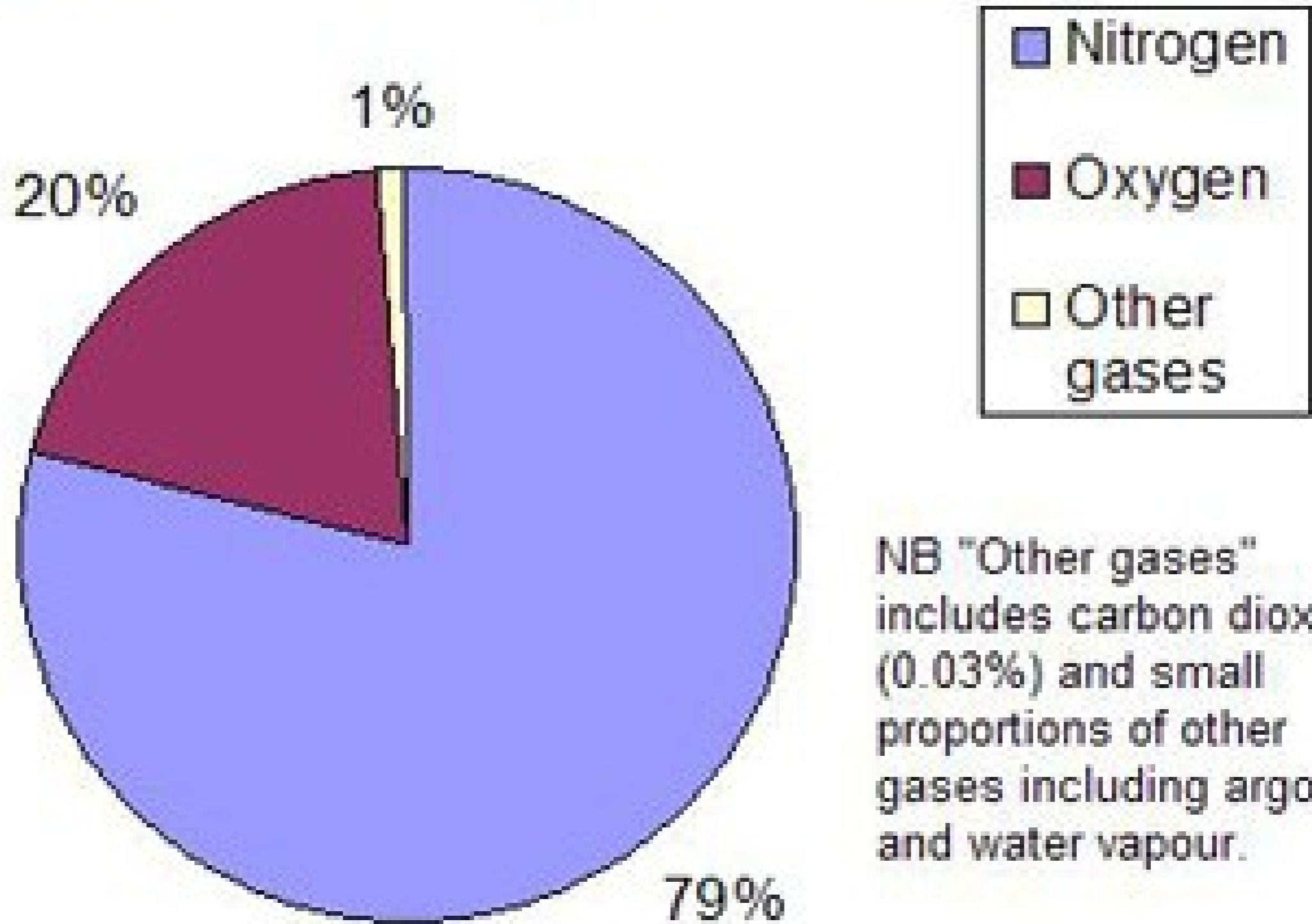
Past, Present, Future

Burns Lake June 2, 2009





Approximate composition of the air



NB "Other gases" includes carbon dioxide (0.03%) and small proportions of other gases including argon and water vapour.



Human Hair
~70 μm average diameter

PM_{2.5}
<2.5 μm in diameter

PM₁₀
<10 μm in diameter

90 μm in diameter
Fine Beach Sand

Air Inversion

Cooler Air Layer

Warmer Air Layer

Cooler Air Layer

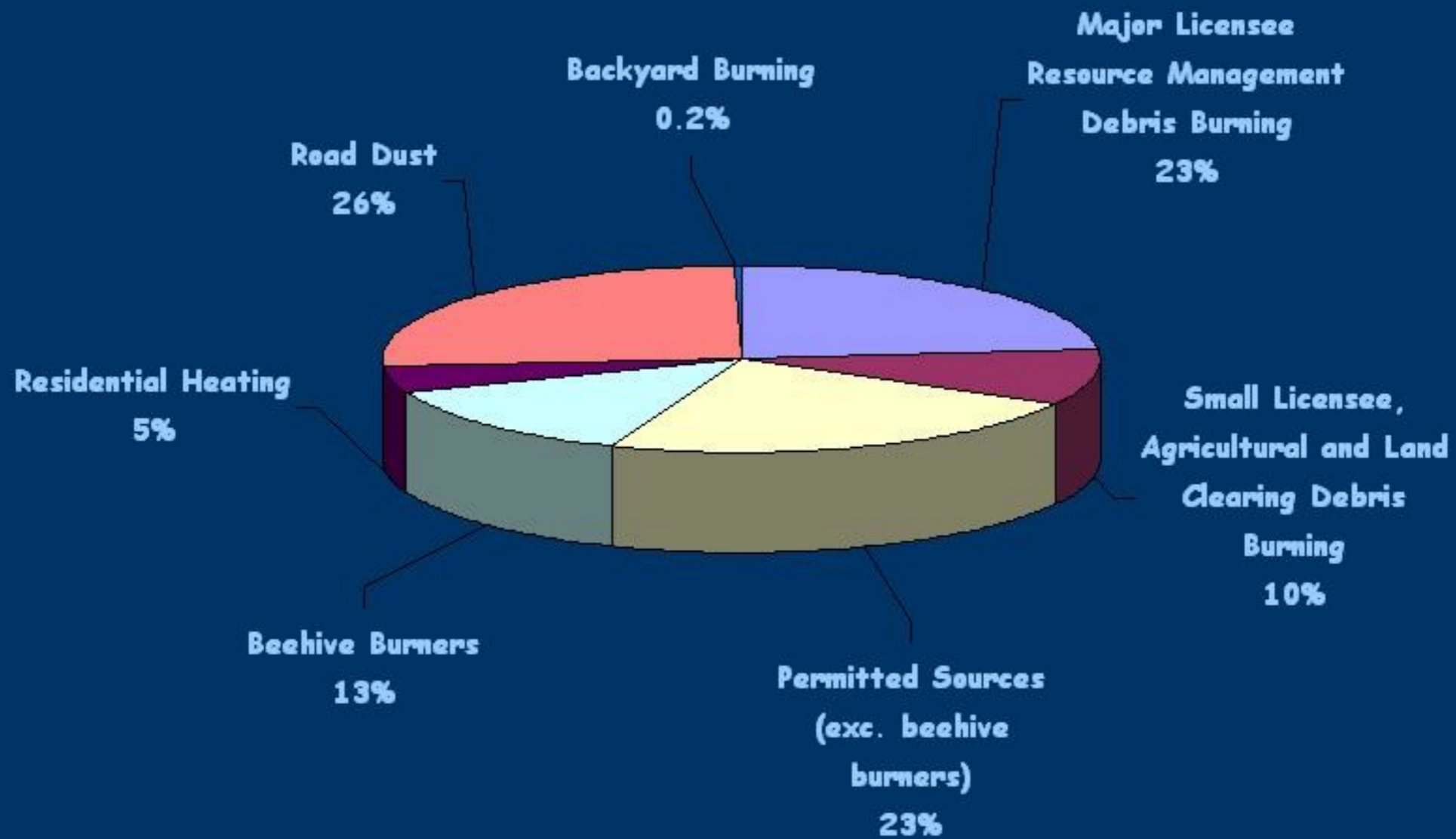


An airshed is a geographic area that because of emissions, topography and meteorology typically experiences similar air quality.



Emission Source	Season
road dust	spring
backyard burning	spring, summer, fall
space heating	winter, spring
forest harvest debris burning	spring, fall
beehive burners	all seasons
debris burning from small sawmills, agriculture operations, and landclearing.	spring, fall
other industrial permitted sources	all seasons

Emissions Inventory (2002)



Current Projects

— [Communication priorities

— [Woodstove Exchange Program

— [Woody Debris Inventory

— [Vehicle Idling Reduction

— [Annual Burn Operators Forum

— [Air Quality Monitoring update

— [New education tools

Communication Priorities

Image crafting
Building communications capacity
Audience research
Media outreach
Optimize communications resources BC-wide
Local government engagement
Provincial government engagement
Neighbourhood challenge
Air quality and health outreach
Industry excellence recognition
Wood-fired boilers

Invitation to Innovate and Collaborate

- BVLD AMS prefers to collaborate in an effort to promote integrated environmental management and sound economic development
- Partnerships have been formed with other agencies where there are overlapping mandates- geographic overlap is not necessary
- We are willing to share our work plan and communications strategy with other planning groups that are interested in joint initiatives

Woodstove Exchange Program



- New rebates available
- Community events and demonstrations
- Spring 09 Campaign strategy
- Burn it Smart Workshops

Results

	2006 & 7	2008	2009	Total
Burns Lake	33	23	2	58
Granisle	3	8	4	15
Houston	34	21	5	60
Telkwa	15	18	3	36
Smithers	58	34	4	96
Hazeltons	21	28	5	54
Terrace & Thornhill	23	11	0	34
TOTAL	187	143	23	353

Results

- **353 Rebates of \$250 each** distributed by the BVLD Airshed Management Society to residents between Burns Lake and Terrace. That's a total of **\$88,250**, with another **47* rebates still to go!** (plus additional 200 or so)
- **That means 353 Old Belchers destroyed!** This represents 88 % of our initial goal of 400 exchanges and roughly 9% of target 4000 est. conventional stoves in the BVLD Airshed.
- **Reduced emissions:** $353 \times 94.3 \text{ kg/stove/season} = 33,200 \text{ Kg PM 2.5/season}$. Based on calculations using 2004 Report "Residential Wood Burning Emissions in British Columbia." **That's removing over 33 tonnes of smoke per season!**

- **Wood Stove By-Laws Adopted** in partner municipalities of Smithers, Houston and Burns Lake. Bylaws under consideration in Granisle, Terrace and requested in rural area outside of Hazelton.
- Houston, Smithers, Burns Lake, Telkwa, RDKS and now Terrace are also committing additional rebate incentives for their residents to upgrade and improve local air quality.
- **Wood Conserved:** $353 \times 1.63 \text{ cords/season} = 575 \text{ cords/season}$. Assuming new appliance owners use 1/3 less wood of estimated average 4.79 cord/winter in BVLD region. That's **575 cords** that didn't have to be bucked, hauled, split and stacked! **(575 cords would fill 48 logging trucks)**
- **Supporting Local Businesses:** The Exchange Program has partnered with 14 retailers between Burns Lake and Terrace, supporting local retailers and encouraging sales within the region. 353 exchanges means about \$500,000 of regional wood and pellet stove sales!

Woody Debris Inventory

- Purpose is to match up businesses that want woody debris with businesses that are burning or landfilling woody debris
- Survey completed with 60+ generators of woody debris
- Final report ready June 30
- Funding provided by CFDC 16/37, Northern and BV Credit Unions, Northwest Science and Innovation Society, BC MOE.



Vehicle Idling Reduction



- Idling hot spot surveys
- Fleet management policies (3 minutes max in one hour period & block heaters)
- Signs and education from www.idlefreebc.ca
- New programs under development with School Board
- Part of Greening Communities checklist i. e. Terrace Trade Show

Annual Burn Operators Forum

- Casual gathering of forestry workers who specialize in cleaning up cutblocks
- Compare notes on where, when and how burning occurs
- Review best practices and regulations around minimizing smoke
- Share information on alternatives to burning and new markets

New teaching tools

- Videos
- Websites
- Technical reports and economic development research
 - Public education handouts
 - Creative radio and print ads
 - Colouring books
 - Posters
 - Door to door campaigns
 - Moisture meters
 - Stove thermometers

Future

- Other pollutants i. e. Ozone (O₃) at ground level and Nitrogen Dioxide (NO₂)
- Other sources (transportation, mining)
- Stronger integration with economic development goals and official community plans
- Reflection of community priorities

Questions?