

THE ZONE



Photo credit: Natasha Barnett (Bearberry – September 2010)

PAMZ Announces Photo Contest

Looking for striking photos that show the diversity of PAMZ

At the beginning of July, PAMZ announced its first annual photo contest. The contest is open to all amateur photographers who reside or work within the PAMZ region and photos must be taken within the PAMZ region.

There are 2 divisions: Adult (Ages 18 & up) and Youth (Ages 18 and younger). A maximum of three (3) entries are allowed per person. Prizes will be awarded to the winners in the amounts of: 1st (\$300), 2nd (\$200) & 3rd (\$100) awarded for each of the divisions.

Photos will be judged in the following 3 categories: *Atmosphere* (clouds, storms, sunrises etc.), *Environment* (nature, landscapes etc.), and *Youth* (Ages up to 18, Atmosphere & Environment). When asked about the contest, PAMZ Communications Chair, Monica Rosevear, said, “We live in a beautiful part of the world and we hope to get photos that capture the many diversities of our airshed.”

Entry forms are available on the PAMZ website and the deadline for the contest is March 1, 2011.

UPCOMING EVENTS

For more
information visit
www.pamz.org

Red Deer River Watershed Alliance Community Forum

-Tuesday October 26, 10 am – 3 pm,
Sundre West Country Seniors
Centre, #4, 102, 2nd Ave NW
-Wednesday October 27, 10 – 3,
Red Deer Westerner Park, Lookout
Room, 4847 19th St

Synergy Alberta Conference

Capri Centre Red Deer
October 26-27th

PAMZ Board Meeting

November 24, 3-6 PM,
GH Dawe Centre, Red Deer,
“Air Quality Monitoring around the
Oilsands” Presentation 7-8 PM

Alberta Urban Municipalities Association Convention

November 23-24, Shaw Conference
Centre, Edmonton

**Clean Air Strategic Alliance Board
Meeting** December 2nd, CASA, 10th
floor, 10035 108 ST, Edmonton

City of Red Deer Receives Inaugural Action HERO Award

On Clean Air Day 2010, The City of Red Deer became the inaugural recipient of a PAMZ Action HERO Award. Action Hero stands for Action for Health and the Environment by Reducing Ozone.

In a formal ceremony held in downtown Red Deer with the Alberta Mobile Air Monitoring Laboratory (MAML) serving as a backdrop, Red Deer's Mayor Morris Flewwelling received the award on behalf of The City and its staff.

The City of Red Deer was chosen as the award's inaugural recipient for its Idle-Free Campaign that began in the Fall of 2009. A utility bill insert was developed to warn residents of the link between idling and emissions and their effect on health. The campaign also included the development of idle-free signs that local residents and businesses could post to discourage excessive vehicle idling.

Mayor Flewwelling credited the success of the initiative to residents who were inspired by the benefits the municipality experienced with its own Corporate Idle-Free Policy. Nearly a year after the

December 2008 policy launch, The City found it had saved 32,023 litres of fuel and over \$32,000 due to a reduction of emissions from civic fleet vehicles.

"Just because we have clear skies today doesn't mean that we'll always enjoy those clear skies unless we do our part to make sure that is sustainable," Mayor Flewwelling said.

PAMZ Action HERO Award Program was created as one way of encouraging local businesses and organizations to take up new initiatives to reduce the formation of ground-level ozone. The program is a component of a larger extensive Ozone Management Plan developed by PAMZ in 2008 that will be implemented in stages over the next ten years.

Ground level ozone can be formed from emissions of nitrogen oxides and volatile organic compounds. These compounds are produced from sources such as industrial processes, power plants, motor vehicles and smaller motorized equipment such as lawn mowers and chain saws. At higher concentrations,



PAMZ's Kevin Warren presenting an Action HERO Award to Mayor Flewwelling

ground level ozone can result in respiratory and other health problems, damage vegetation and crops and lower our quality of life. In Central Alberta it's not a serious problem yet and PAMZ is working to keep it that way.

BC Forest Fire Smoke Hits Central Alberta Hard

Remember where you were back in the third week of August earlier this year? Well, if you were anywhere in Central Alberta you will undoubtedly remember the thick smoke from forest fires in BC that enveloped the entire region. In fact, some of the highest levels of fine particulate matter (PM_{2.5}) seen in the province were recorded at the Red Deer Riverside Air Quality Monitoring Station operated by PAMZ.

On August 19th Alberta's Chief Medical Officer of Health issued an Air Quality Warning that was not lifted until a week later on August 26th. All four of PAMZ's continuous air quality monitoring stations recorded high PM_{2.5} levels, that over a three-day period from August 19-21, resulted in a total of 99 exceedences of the provincial hourly guideline and 12 exceedences of the daily ambient air quality objective.

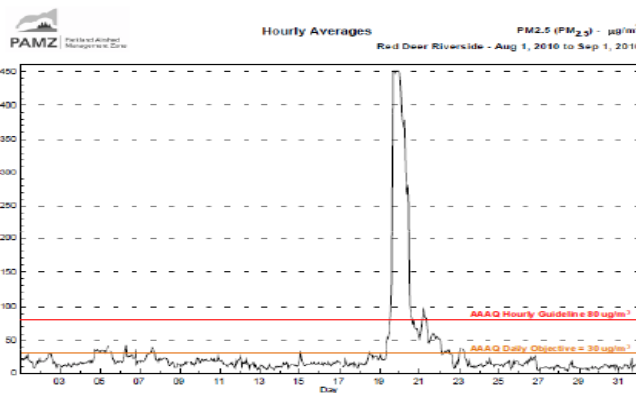
previous heart attack and congestive heart failure are the most affected.

The graph below illustrates the PM_{2.5} levels recorded at the Red Deer Riverside Air Quality monitoring Station during August 2010. One can see the PM_{2.5} Concentrations on August 19th and 20th were so high they exceeded the monitor's full scale operating range of 450 ug/m³!



Forest Fire Smoke near Bowden

Smoke, and the fine particulate matter associated with it, can be absorbed deep into an individual's lungs where it can aggravate existing health conditions. People with respiratory conditions such as chronic obstructive pulmonary disease (COPD) and asthma, or cardiovascular conditions such as angina,



Red Deer PM_{2.5} Hourly Average Concentrations for August 2010.

PAMZ Celebrates Clean Air Day

The Parkland Airshed Management Zone celebrated 2010 Clean Air Day (June 2) in a big way!

PAMZ's celebration was actually kicked off a day earlier with its participation in an Enviro-Fair sponsored by Alberta Environment at the Red Deer Provincial Building. The fair was an Environment Week (May 30-June 5) Green Stop that included booths, kiosks and hands-on displays from a number of environmental and government organizations and departments. Green Stops are events organized by local citizens and community groups designed to educate, empower and engage community members; the Enviro-Fair certainly did all of those things!

Carrying on with the education and engagement aspect, for Clean Air Day's first event PAMZ partnered up with The City of Red Deer and the Red Deer Public Library. The event was a public presentation delivered as part of the library's Environment Week week-long brown-bag lunch series. PAMZ Executive Director, Kevin Warren, spoke to an audience of about 40 people about "Clean Air And What We Can Do To Keep

It That Way". If the quality of the questions from the audience was any indication, there are a lot of citizens in Red Deer who are already practicing what PAMZ is preaching when it comes to pollution prevention and reduction!

The noon-time presentation was followed by an awards ceremony held just outside of the library's 49th Street entrance. The Mayor of Red Deer, Morris Flewwelling was presented with PAMZ's inaugural Action HERO award for its Idle-Free Campaign that started in the fall of 2009. Alberta Environment's Mobile Air Monitoring Laboratory (MAML) served as the backdrop for the awards ceremony and members of the public also had the opportunity to tour the mobile unit.

For the final event of Clean Air Day, PAMZ co-hosted a series of tours of the MAML to students of St. Martin de Porres School in Red Deer. Tom Bourque, of Alberta Environment's Enforcement and Monitoring Division led the tours explaining the purpose of the Mobile



Students touring the MAML with Tom Bourque of Alberta Environment looking on

Laboratory and how it works. He was assisted by PAMZ's Executive Director, Kevin Warren, who talked to students about air quality in the Red Deer area and some of the things they and their families could do to keep clean air clean.

"We were really pleased with the presence we were able to achieve in the community this Clean Air Day," Warren said. "You can look for us to make an even bigger splash in 2011".

Enmax's New Crossfield Energy Centre

PAMZ recently hosted a presentation by Daryl Balderson, an environmental engineer with ENMAX, about their new Crossfield Energy Centre. This natural gas-fired electrical power generation plant is a "peaking facility" designed to meet seasonal and daily peak power requirements. The 120 megawatt facility was completed in December 2009 and is part of a growing network of power generation facilities built by ENMAX to help meet southern Alberta's growing demand for power.

The Crossfield Energy Centre is located 10 km north of Airdrie on a 120 acre site, although the facility itself sits on 15 acres. The remainder of the site continues to be farmed just as it was before construction began. The centre is designed to be in operation anywhere from 15-45% of the year during periods of peak power demand such as very hot summer days or very cold winter nights. The units are controlled remotely from

ENMAX's Calgary Energy Centre and can reach full capacity within 10 minutes of start-up.

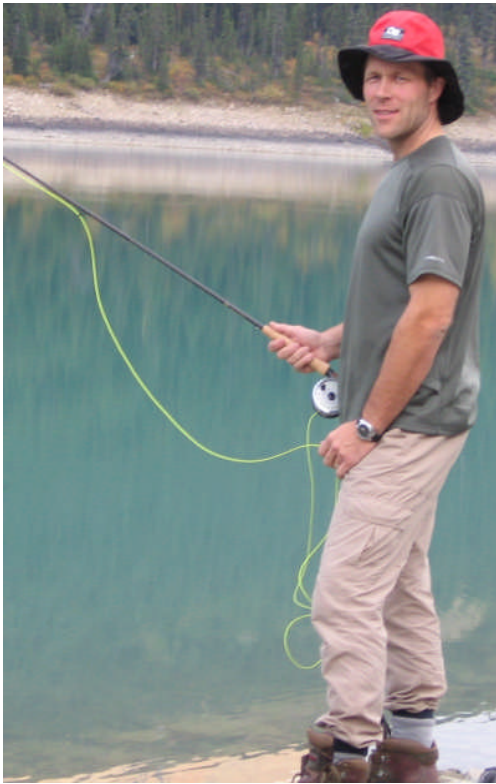
Power from the centre is generated by three 42 MW gas turbines, each providing the same amount of horsepower as 750 Ford Escape SUVs with considerably lower emissions of nitrogen oxides, carbon monoxide and fine particulate matter. The gas turbine units employ sophisticated emission control technologies to achieve ultra-low emissions of nitrogen oxides, 15 ppm or less. The resulting maximum predicted ground-level concentrations would be 7% of the Alberta Air Quality Hourly Objective for Nitrogen Dioxide (NO₂ - 212 ppb). Passive monitoring using the same samplers employed by PAMZ and conducted in the summer of 2010 indicated that actual observed concentrations of NO₂ are significantly lower.

Good job ENMAX!



Crossfield Energy Centre's Three Gas Turbine Units

Member Profile: Al Simcoe



Al Simcoe was raised in Dawson Creek, British Columbia and pursued his post-secondary education at the University of British Columbia eventually receiving both a Bachelor of Science and Masters in Forestry. He came to Alberta in 1997 to work at the West Fraser Timber Co. Ltd's Hinton Plant and, in 2000, moved to Rocky Mountain House to become the General Manager of their Laminated Veneer Lumber (LVL) Mill located near Strachan.

Al and his wife, Sandy, have three boys aged 7, 10 and 12. They spend much of their free time enjoying the outdoors; camping, hiking and biking. Their family's latest achievement was hiking a 13 kilometre trail to the top of Mount Coliseum near Nordegg.

In 2004, West Fraser joined PAMZ and Al has represented them on the Board of Directors ever since. Al is also a member of the PAMZ Technical Working Group where his keen eye for detail and "big picture" thinking are highly valued. At the June 2010 Annual General Meeting, Al was elected Chairperson of the PAMZ Board of Directors. Al is finding the position new and exciting, citing he has big shoes to fill in following Brian Goliss, PAMZ's dynamic past Chair.

When asked why West Fraser joined PAMZ, Al said, "Even though we are a relatively low emitter in relation to some of the other PAMZ members, West Fraser wanted to learn more about the local airshed and the issues in our area." PAMZ has really helped West Fraser become technically educated about air quality as well being more informed about the airshed in which they operate.

Al said the biggest benefit of being a member of PAMZ is the contact with other industries, regulators and the public as well as learning what the concerns are in the area and how West Fraser can fit into the solutions.

2010 Martha Kostuch Scholarship Recipient Chosen

PAMZ's Communication Committee recently announced the recipient of the Dr. Martha Kostuch Environmental Education Scholarship Award.

This scholarship was established to assist students graduating from high schools within PAMZ's boundaries in recognition of their outstanding environmental service and leadership as well as the promise of future achievement in environmental stewardship. The Scholarship celebrates the legacy of Dr. Kostuch, a PAMZ founding member, who made a significant impact on how environmental management policy was

developed in Alberta, advocating for effective collaboration among stakeholders.

This year's recipient of the scholarship is Alexis Kambeitz of Red Deer, Alberta. Alexis attended Hunting Hills High School in Red Deer and will be pursuing her post-secondary education in Land and Water Resources at Olds College. She submitted an outstanding application detailing her scholastic achievements along with an engaging essay explaining her passion. Her goal is to become an Environmental Scientist and help return the land to its natural state through reclamation.



Alexis Kambeitz, PAMZ's Kevin Warren and Olds College Land and Water Resources Program Coordinator, Bill Souster