WEST CENTRAL AIRSHED SOCIETY NEWSLETTER

Premiere Issue, Fall 2002

West Central Boundary Expansion in the Works

The WCAS has been working hard over the last year or so to revise its northern and eastern boundaries. The planned expansion by EPCOR and proposed expansion by TransAlta of their coal fired power plants on the outskirts of the zone made this a high priority and presented a unique opportunity for the board and stakeholders. This lead to the formation of a boundary committee subcommittee and allowed for several new members to join the WCAS including: Leduc County, Parkland County, Local Area Residents of Genessee and the Westview Health Region.

In addition, EPCOR also became a new volunteer member in July 2001; recognizing the value of being able to participate in a well established regional air shed, and the chance it provided to work with existing members and stakeholders such as TransAlta who have been a member of the WCAS since it was formed, even though its three thermal power plants in the Wabamun area were just outside the original zone boundaries.

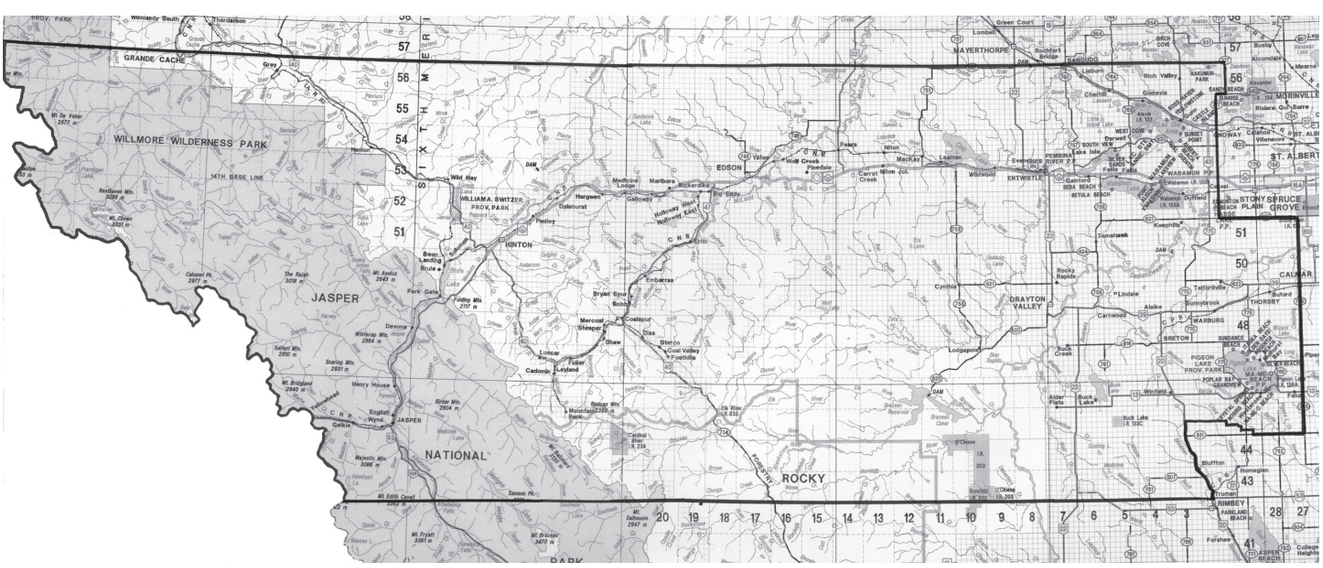
As part of the current approval process for EPCOR and TransAlta facilities the companies are required to develop an air monitoring area proposal in conjunction with a regional ambient air quality monitoring plan. Both facilities proposed to address these requirements through integration with the WCAS.

Therefore, it made sense to look at expanding the zonal boundaries to include these four plants and the area around them as well as several sour gas plants in the area northeast of the original boundaries.

In July 2002, Dr. Warren Kindzierski prepared a report and recommendations for EPCOR and TransAlta on an air monitoring area for power plants in the Genesee-Wabamun area. His report considered a range of background factors including: a) air monitoring objectives in general, and those of the WCAS in particular; b) emission sources that influence the area and the location of these sources; c) local meteorology; d) locations of populated areas; e) modeled and measured ambient air quality; and f) discussions with stakeholders.

Based on these factors, Dr. Kindzierski made four recommendations for the air monitoring area, which support the expansion of the zone's boundaries to the east and north:

1. Monitoring objectives for the air monitoring area are judged to be the same as those established by WCAS. A review of modeled (future) and measured ambient air quality in the area indicates a need to maintain monitoring capabilities near major emission sources in the air monitoring area.
2. A review of emission sources and local meteorological information indicates a need to establish air monitoring capabilities extending eastwards towards urban areas of Edmonton and Leduc, as there is a tendency for wind to flow along a westerly/northwesterly – southeasterly axis. However, based upon a review of modeled and measured ambient air quality, extending monitoring capabilities into these areas is not recommended because of the great distance, and the presence and possible confounding of urban source influences.
3. The boundary recommended for the air monitoring area is shown in the map below. This area takes into consideration flow of wind along a westerly/northwesterly – southeasterly axis. This area is considered a very conservative estimate of the monitoring area necessary for the Genessee Generating Station and the other power plants in the Genessee/Wabamun area.
4. Additional work should be undertaken to further support the basis for the establishment of the air monitoring area eastern boundary.



BOX 7421, DRAYTON VALLEY, ALBERTA T7A 1S6 ▪ TEL: 780.514.3533 ▪ FAX: 780.514.3563
Email: wcas@telusplanet.net ▪ Web: www.wcas.ca

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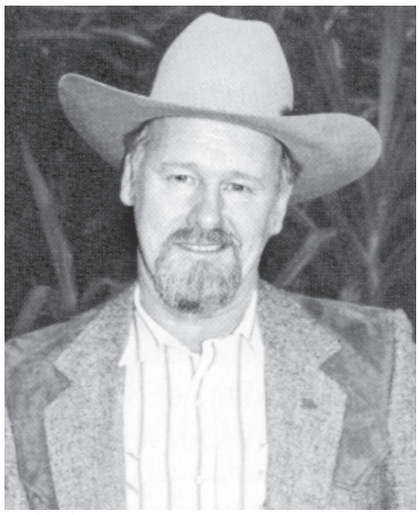
Meet Cecil Andersen, WCAS Board Chair

Cecil Andersen was one of the founding members of the West Central Airshed Society, representing the Pembina Agricultural Protection Association (PAPA). Following the Lodgepole blowouts in the 1980s, agricultural producers in the region became concerned about the impacts of energy development on their crops and livestock, and formed PAPA. "We realized there was a lack of good baseline information on the effects of regional air quality. After Lodgepole, PAPA worked with several of the major oil and gas operators in the Drayton Valley area to gather some of this data," says Andersen.

This initial five-year study focused mainly on soil acidification and the impacts of sulphur compounds. It was just winding down when efforts began to form the WCAS. "We felt the zonal approach was a good vehicle for expanding on this preliminary work," he notes. "Regional air quality monitoring has given us a much better picture of what's happening across the zone and allows us to assess changes and trends."

A key component has been the biomonitoring program to develop a scientific model for assessing potential impacts of air quality on crops. The model will be able to predict actual impacts on crop production from several factors, including effects from specific incidents. Data collection is nearly complete and the model should be ready in 2003.

"One of the big strengths of the West Central approach has been its flexibility. As new issues are identified, the board looks at them and decides collectively how to proceed," says Andersen. "It's an evolving process that has served us well."



Cecil Andersen

Cecil Andersen is an agricultural producer near Drayton Valley and chairs the West Central Airshed Society board of directors.

Mary Griffiths

This is the first issue of the West Central Airshed Society's newsletter, to be published twice a year in the spring and fall. If you have any suggestions for content, please contact us by phone, fax or email.

Meet WCAS Director, Mary Griffiths

Mary Griffiths joined the West Central board in fall 2000. Her stakeholder group, the Drayton Valley-based Pembina Institute, was a founding member of the WCAS, the first airshed zone in Alberta. The Institute recognized that air quality in the wider west central area was causing increasing concern to many residents. "We believed the multi-stakeholder approach was a good way to address these concerns and seek solutions," says Griffiths. "The integrated monitoring program tells us what's happening at a number of locations within the region, and the background station at Hightower Ridge gives us a reference point for clean air coming into Alberta."

Data from the monitoring program is available on the West Central website, and this increased public access to information about air quality in the zone has been an added benefit, according to Griffiths. "Anyone with an Internet connection can visit the website to see the results of our work."

In addition to improved management of air quality, she says the board has provided an opportunity for stakeholders with different perspectives to broaden their views and better appreciate the issues and concerns of others. The Pembina Institute has considerable experience in dealing with air quality issues across Alberta and represents public and environmental interests within WCAS. "Everyone has shown remarkable commitment to making this work, and the sense of stewardship remains strong. We look forward to continuing to play an active role with the airshed."

Mary Griffiths is an environmental policy analyst with the Pembina Institute. The Institute's head office is in Drayton Valley, with other offices with Calgary and Ottawa.

Visit West Central Airshed on the Web

Would you like to know what's happening right now at any one of the WCAS air quality monitoring stations? If you have Internet access, you can find out with a couple of clicks. Live data from the five continuous monitoring facilities in the zone is now accessible via the revamped WCAS website at **www.wcas.ca**. All you have to do is choose one of the five stations and type in the dates and times for which you'd like to see data. The program will generate either a table or a graph (your choice).

The WCAS operates five continuous air quality monitoring stations. Continuous monitoring is required to meet the Alberta Environment compliance standards for maximum hourly concentrations of pollutants. Continuous air monitoring is also needed to link any symptoms of stress observed on test crops to changes in air quality. Air quality monitoring and reporting methods used by the WCAS are compatible with those of Alberta Environment. The WCAS website describes the complete monitoring program, including the parameters measured, and gives a good overview on the history, objectives, and membership of the society.

Visit us online at www.wcas.ca, where you'll also find a link to the Clean Air Strategic Alliance and other zones in Alberta.