

## *Non-Point Source Project Team, Meeting #4*

**Date:** Wednesday March 30, 2016

**Time:** 10:00 a.m. – 3:30 p.m.

**Place:** CFA Office, Calgary

**In attendance:**

<b>Name</b>	<b>Stakeholder group</b>
Atta Atia	Alberta Agriculture and Forestry (AAF)
Tasha Blumenthal	AAMDC
Bill Calder	Prairie Acid Rain Coalition
Rhonda Lee Curran	Alberta Environment and Parks (AEP)
Jim Hackett	ATCO
Rob Hoffman	Canadian Fuels Association (CFA)
David Lawlor	Alberta Airsheds Council (AAC) - Calgary Region Airshed Zone
Alison Miller	Imperial Oil Ltd. (CAPP/CIAC)
Andrew Read	Pembina Institute
Bob Scotten	Alberta Airsheds Council (AAC) - West Central Airshed Society
David Spink	Prairie Acid Rain Coalition
Ruth Yanor	Mewassin Community Council
Rich Smith	Alberta Beef Producers
Steve Marshman	Alberta Canola Association
Amanda Stuparyk	CASA

**Guests:**

Frauke Spurrell	Alberta Environment and Parks
Brian Ahearn	Canadian Fuels Association

**Regrets:**

Scott Wilson	Alberta Motor Association (AMA)
Val Mellesmoen	AEMERA
Martin Van Olst	Environment and Climate Change Canada

### **Action Items:**

<b>Action Item</b>	<b>Who</b>	<b>Due By</b>
1.6: Pursue the ability for CASA communications assistance to start a social media (e.g. Twitter) discussion/conversation around NPSs and the work of the new CASA Project Team.	Amanda	<b>Meeting #5</b>
1.7: Discuss internal CASA Communications capabilities and potential to provide support for the NPS Objective #4.	Amanda	<b>Meeting #5</b>
2.1: The NPS Project Team will send Amanda any additional NPS resources including any references outside Alberta; National/International and/or cross-jurisdictional reviews.	All Project Team Members	<b>Ongoing</b>
4.1: Update the NPS Resource Library to include the new source apportionment resources and the 2013 NPS Workshop Primers on the NPS Project Team page.	Amanda	<b>ASAP</b>
4.2: Share associated presentations or documents/links from the CASA Board Meeting with the project team in their follow up email.	Amanda	<b>ASAP</b>
4.3: AAF (Atta) will send information and any requirements for the AEPA's newsletter to Amanda who will work with co-chairs to draft an appropriate information article on the NPS Project.	Atta/Amanda/ Co-chairs	<b>Meeting #5</b>

4.4: Project Team members will provide any edits/comments on the draft workplan document to Amanda via email by end day Wednesday April 6, 2016 to incorporate into next draft that will be discussed at next meeting.	All project team members	<b>April 6, 2016</b>
4.5: AAF (Atta) will send the USDA modelling document to Amanda for posting to the NPS Resource Library.	Atta	<b>ASAP</b>
4.6: Contact the Wood Buffalo Environmental Association to inquire if they can provide a presentation to the project team on their work/experiences.	Andrew	<b>ASAP</b>

## 1. Administrative Items

The meeting began at 10:05 am; Rhonda Lee chaired the morning and Bill the afternoon. Team members introduced themselves and were welcomed to the meeting. Meeting quorum was achieved.

The team agreed to and welcomed new membership on the NPS Project Team as follows:

- Steve Marshman with the Alberta Canola Producers will be a Member on the Project Team representing the Agriculture-Industry. Steve also sits on the Crop Sector Working Group and the Agri-Environmental Partnership of Alberta group.
- Rich Smith with the Alberta Beef Producers will act as an Alternate Agriculture-Industry.
- Brian Ahearn with the Canadian Fuels Association was sitting as an observer and will be added as an informational Corresponding Member on the team.

The draft agenda and meeting objectives were approved. The minutes from meeting #3 were reviewed and approved with general editorial updates. These will be finalized and posted to the CASA website.

The Action Item's status from meeting #3 were updated as follows:

Action Item	Who	Status
1.6: Pursue the ability for CASA communications assistance to start a social media (e.g. Twitter) discussion/conversation around NPSs and the work of the new CASA Project Team.	Amanda	<b>Carry forward for Meeting #5.</b>
1.7: Discuss internal CASA Communications capabilities and potential to provide support for the NPS Objective #4.	Amanda	<b>Carry forward for Meeting #5.</b>
2.1: The NPS Project Team will send Amanda any additional NPS resources including any references outside Alberta; National/International and/or cross-jurisdictional reviews.	All Project Team Members	<b>Ongoing.</b> See notes below.
3.1: The co-chairs will review and provide Amanda any edits or clarifications for the 2015 CASA Annual Report highlight on the Non-Point Source project.	Amanda and co-chairs	<b>Complete.</b>
3.2: The co-chairs will review the listing of resources from the 2013 NPS Workshop and report back to the team on any required reading suggestions.	Amanda and co-chairs	<b>Complete.</b> See notes below.
3.3: Amanda will work with the co-chairs to draft a workplan outline for objectives 1 and 2 for review at the next team meeting.	Amanda and co-chairs	<b>Complete.</b>
3.4: Government (both Environment and Agriculture) to look at any information available on source apportionment and ammonia (respectively) that can be added to the NPS Resource Library and for project team review.	Rhonda Lee and Atta	<b>Complete.</b> See notes below.
3.5: Amanda and co-chairs will draft presentation to the CASA Board for the March 24 <sup>th</sup> Board meeting.	Amanda and co-chairs	<b>Complete.</b> The presentation will be sent to team in follow up email/posted online.
3.6: Amanda will create and send link via email for a Doodle Poll requesting team members' availability for the next three monthly team meetings in Q2 of 2016.	Amanda	<b>Complete.</b> Meetings #5, 6 and 7 (April – June) scheduled.

### **Additional Information:**

2.1: New documents will be added to the Resource Library on source apportionment.

3.2: The workshop resources are focused reports/resources on sectors and are older but will be referred to as needed. Co-chairs will assign the Workshop Primers in the coming meetings for review. Amanda will update the Resource Library to show these documents on the NPS Project Team page.

3.4: Noted with 2.1, source apportionment information for both Edmonton and Calgary was sent by AEP; AAF could not find any additional documents for ammonia but will send anything in future.

***Action Item 4.1: Amanda will update the NPS Resource Library to include the new source apportionment resources and the 2013 NPS Workshop Primers on the NPS Project Team page.***

## **2. South Saskatchewan Region NPS Overview**

The team received a presentation from Frauke Spurrell, AEP on the air quality management in the Calgary area in collaboration with the Calgary Region Airshed Zone (CRAZ). Highlights of the presentation and discussion include:

- A new continuous air monitoring station is being installed in Airdrie (west of Highway 2).
- The first status of the management response report for the South Saskatchewan Region Air Quality Management Framework will be coming out this year (Summer 2016).
- A study for CRAZ indicated ozone formation was VOC-limited regime within the City of Calgary (likely extending to nearby suburban and rural that are downwind) and NO<sub>x</sub>-limited regime in rural areas (outside influence of Calgary emissions). Ozone reductions should be focused on measures to limit NO<sub>x</sub> emissions in the rural areas and VOC emissions within the City of Calgary; the study used monitoring and meteorological data from 2001-2009 as well as the HYSPLIT model to identify the air mass origin during high ozone episodes. Ozone is currently not an issue in Calgary (at the yellow management level) but levels triggered the need for management planning in a previous Canada Wide Standards (CWS) assessment (2001-2003).
- Variability of event days for PM 2.5 by season (most in winter) and weather (including inversion events) were similar to the Capital Region in the past; investigation into the latest assessment period (2011-2013) is forthcoming. There is about 3-4 years of speciation data from the Calgary Central station (it has since been moved) but expert resources are required to analyze it, which is planned for the coming year. Only the Calgary Northwest station has long-term uninterrupted trend data as the other two Calgary stations have been re-sited in recent years.
- There have been evolving requirements for monitoring (2009 technology changed) and triggers for action under the CWS and CAAQS; data are averaged over 3 years as prescribed by the standards (same as EPA approach) as this provides more accuracy and enables trends to be detected. Industry data are not included in the CAAQS assessment but are used for compliance regulatory mechanisms.
- The ambient limits and triggers in the SSRP Air Quality Management Framework for NO<sub>2</sub>, PM<sub>2.5</sub> and ozone are the AAAQO and CAAQS, respectively. SO<sub>2</sub> CAAQS will be coming out before NO<sub>2</sub> and the GOA is committed to including SO<sub>2</sub> CAAQS (and any other future CAAQS) in the framework, once they are released.
- CRAZ-commissioned studies have ranked priority emission sources 1-5 based on primary emissions and inventories. Common theme of non-point sources dominating top 5 of priority emission sources for both O<sub>3</sub> precursors and PM<sub>2.5</sub>.
- SSRP regional CMAQ modelling 'zero-out scenarios' identified 'transportation' sector as having the biggest impact in decreasing predicted concentrations of NO<sub>x</sub> (Calgary, Medicine Hat, Lethbridge) and Ozone (rural areas), and the 'other's' sector (road dust, construction) followed closely by 'transportation' for PM<sub>2.5</sub>.
- Next steps include continued implementation of the CRAZ management plan, investigation of ambient monitoring trends (try to fill some knowledge gaps), and development of the SSRP management response.
- Potential gaps include boundary layer information/monitoring (i.e. wind units) in the case of inversions and review/assessment of the 'Other' category having impacts in the region (is there

local data). Work has been focused on Calgary to date; need to investigate and fill knowledge gaps in Medicine Hat and Lethbridge.

### 3. Key Updates

**CASA Update.** Amanda provided an update on CASA secretariat activities:

- CASA is in good shape administratively and in its current projects but has the capacity to support additional initiatives. At the March Board Meeting, the government agreed to identify its current top priorities (including air and climate change priorities) to help assist in identifying priority areas for additional CASA projects.

**March Board Meeting Update.** Amanda provided highlights from the March 24<sup>th</sup> Board Meeting:

- There are 3 new members of the CASA Board; Andre Corbould, AEP; Carolyn Kolebaba, AAMDC; and Koray Onder, CAPP.
- The Board received the Audited 2015 secretariat financial statements for information that will be accepted at the June Annual General Meeting. There were no findings from the audit.
- The Board heard substantive updates from the Non-Point Source, Performance Measures review and Communications Teams.
- CASA's Communications committee has developed a 2016 Plan and is beginning its implementation that includes working with stakeholders for collaborating social events and/or promotions (starting with Clean Air Day on June 8).
- CASA's Annual Report is being drafted and should be released in June/July.
- The NPS Presentation was very well received; the Board continues to express great interest in this project. The team noted the presentation could be used as an overview and update for internal discussions within organizations and should be posted online for team members.
  - A Board member suggested the project team consider prescribed fires in the province as an emission source as they are becoming more common (including fire fighter training).
  - It was confirmed to the Board that QA/QC of monitoring data is not part of the team or task group work, but that the task group would identify any assumptions and limitations in their work.
- The Board disbanded the Odour Management Team, received various updates from the Provincial Government and discussed the process for developing new work for CASA.
  - The GoA will be bringing forward a list of their top priorities and issues to CASA for the Executive to review and scope (the aim will be to bring forward one or more Statements of Opportunity to discuss at the June Board meeting).
  - The Board heard a presentation by AEP on **CAAQS Management Planning** – including an update on CAAQS regions. The co-chairs suggest this information be presented to the NPS project team at an upcoming meeting. This could potentially be included with a Red Deer Response presentation/update when available.

The next CASA Board meeting is June 15, 2016 in Calgary. As committed, NPS Project Team will be providing an update and similar to the March meeting, the Secretariat/Co-Chairs will draft an update presentation for the meeting based on proposed content that is discussed at the May team meeting.

***Action Item 4.2: Amanda will share associated presentations or documents/links from the CASA Board Meeting with the team in their follow up email.***

**Project Team Member Updates.** The team was given an opportunity to provide updates on their organization or other related activities:

- Highlights from the Federal Budget 2016 read on March 22, 2016 were provided.
- AAF was approached for information/an article on the CASA NPS Project for the AEPA's newsletter and requested process and approval from the team. The team agreed this is a specific request with

associated requirements so the co-chairs will work with the secretariat to draft an information piece. The article will be shared with the team once drafted.

- AEMERA and the AAC have signed a MOU for roles. The AAC will be holding a session (near June) that will further explore roles and responsibilities for all parties that are involved in air quality.
- The AAMDC annual convention had many questions around the climate change strategy and carbon tax – the AEP minister confirmed that marked fuel including diesel for Ag producers will be exempt from any carbon levy.

***Action Item 4.3: AAF (Atta) will send information and any requirements for the AEPA's newsletter to Amanda who will work with the Team co-chairs to draft an appropriate information article.***

## **4. Task Group Update**

The project team received a Task Group Update document via email. The Task Group's first meeting was March 4, 2016. The project team was very happy to hear of the meeting work and the members' commitment and initiative to begin their work immediately. They share concern about timelines and had a discussion to allow some flexibility on the deadlines. The Project Team requested the following from the task group:

- Discuss the considerations from the Project Team and CASA Board and add as applicable into the terms of reference tasks including prescribed burning / fire fighter training, and, industrial monitoring data availability and rural area data.
- The task group is to consider some additional flexibility in their timeline for their deliverables to the project team. To ease the noted 3-month timeline for flexibility (i.e. is up to 6 months a more reasonable timeline?) and assist with concurrent activity, the project team is requesting the Task Group's advice in stages on NPS on which to focus.
  - Stage 1 information includes the task group providing the project team in the next 1-2 months with its initial, emerging (high-level) list (top "X" number) of top priority, including context as to why those sources are being flagged.
  - Thereafter, further analysis and refinement (including any considerations for consultant work) of the list can occur in stages in the coming months and should include updates at each of the project team meetings, until the final deliverable.

The challenge for the task group and project team remains in linking the information and data back to CAAQS impacts with the applicable data and uncertainties and in getting the right level of information for the project, recognizing that the relative priority of NPS may be more important than absolute precision on their various contributions.

Using the draft initial list of NPS from the task group, the project team will begin work on Objective 2 with the understanding the list may change as the Task Group proceeds with its work (unlikely to be a drastic change).

## **5. Learnings and Key Messages from Presentations & Readings** (to date)

All team members were given a chance to discuss their observations and learnings from the presentation on air quality management in Calgary or anything else to date. This sharing contributed to the development of a common understanding within the team. Highlights of the key messaging or gaps included:

- Through all presentations it clear that this is a complicated topic and this team's work is very important and should include cross-cutting provincial actions. There is a difference between rural and urban air quality and NPS situations, but there is also a gap of data and information for the rural areas (potentially there may also be a difference between some suburban areas compared to adjacent core urban areas if they have unique circumstances). NO<sub>2</sub> is hypothesized to be larger factor in the rural areas and VOC may be limiting in urban for ozone formation in the South Saskatchewan air zone.

- Pleased with the SSRP response identifying problem areas, i.e. transportation, and working to implement actions that address them. Noted that SO<sub>2</sub> is not an issue in SSRP but awaiting the 1<sup>st</sup> status report to see the impact of agriculture on PM<sub>2.5</sub>. Ammonia from Ag is a major contributor but will need to look at the sources (re: secondary PM formation).
- The Capital and Calgary Regions are different but the question of ‘why’ is part of the team’s work. The Red Deer response and data will be interesting to compare.
- Seeing that some of the issues are common. Feel that if we get the initial list of NPS we can as a team start to consider management actions.
- Consideration for any areas conducting their own passive monitoring (but also note that for trending the error bars are large) to address data gaps in the rural regions, with considerations for meteorological effects in the different regions.
- It was recommended to explore learnings from the Wood Buffalo Environmental Association (WBEA) as there may be information to better understand long-range transport of the urban pollution. A presentation from WBEA will be sought for a future meeting.

Gaps previously noted included considerations for the emission inventories, PM speciation data, and meteorological effects. There was a note about data gaps in the SSRP region monitoring boundary of the existing airshed organizations, e.g. CRAZ, Palliser, etc. (from Lethbridge to Pincher Creek) and consistent data is coming out of the one station in that area is uncertain.

- Other gaps noted include an ‘Instrumentation Gap’. To consider the technology for monitoring PM (current tech is no longer supported and will be replaced by 2020 as they are out of production). The team should be aware of emerging technology (new for VOCs) that may be considered for the province.
- Noted a lag time between triggers being reached and response actions.

It was discussed whether the team should focus only on urban areas as the CAAQS monitoring is in the more populated areas and the mandate for the team is to consider where the CAAQS are being exceeded or are close to being exceeded (orange management level). The team agreed that this project should focus on those areas within the air zones where the monitoring is showing red or orange levels for the CAAQS (which is largely the urban areas), with the caveat that, any information that is captured on rural areas be kept for further consideration outside of this project. This approach can be re-visited as more information emerges.

## 6. Draft Project Team Workplan

The team walked through the drafted workplan document to discuss edits based on the group exercise and discussions at last meeting. The team does not want to spend a lot of time on this document given that it will evolve as the team’s work proceeds. Objective #4 will be discussed at the next meeting. To expedite the draft-to-final document, members will provide any comments/edits via email.

***Action Item 4.4: Members will provide any edits on the draft workplan to Amanda via email by end day Wednesday April 6, 2016, for incorporation into next draft to be discussed next meeting.***

Some highlights of the discussion on the draft document included:

- Adhere to the originally approved timelines from the NPS project charter and work towards a 22-month completion (September 2017) but recognize it may be aggressive and uncertain as the work continues. If ultimately required, the team may consider requesting a time extension from the Board.
- Confirmed the project focus is on the red and orange management levels for the CAAQS.
- There is confidence in the expertise within the task group that a consultant is not expected to be required for the initial NPS list, but the concern remains about the time to complete all the work.

**Objective #2:** the team does not think at this time that they will need to commission any work on NPS action other jurisdictions are taking but instead will wait for the GoA jurisdictional scan that is

international and focused on both point and non-point sources to guide where the team could still use additional information. It is hard to know what will be required until the team knows where their focus is (from Strategy 1.4).

- In the meantime the team will compile any additional resources. The NPS workshop may have an older jurisdictional scan and the Capital Region has conducted one that can be reviewed.
- A USDA Report for Agriculture for PM will be added to the Resource Library.

Any communications approach to this objective might be premature until the team's work progresses further and the NPS focus(es) is/are determined. The thought is to start a conversation and then continue to build awareness along the way. There needs to ensure a representative sample of people involved and not just particular interest groups. Public appetite on implementation should come after the team identifies specific strategies. This will be drafted further within the discussion under Objective #4.

**Objective #3:** notes the team will recommend management actions, test, and refine them to produce their final deliverable(s). Highlights of workplan discussion include:

- Anticipated resources to complete the work should be that Strategy 3.1 is completed by the team, 3.2 includes obtaining outside feedback from 'interested/affected parties' (will require budget and resources), 3.3 is based on 3.2 and includes further evaluation, reassessment and finalization by the team. This should include applicable resources to develop the Project Team's Final Report.
- The team will need to determine who those 'interested parties' are – where they need to take the discussions and will be determined by the role or group that is considered by the management action being proposed. Management actions may be about changing behaviour or technology or both.
- The team discussed the variability of potential mechanisms and that options for management actions are currently open but should ensure they are SMART recommendations.
- It was noted that some possible management actions (e.g. development of a dust guide) could take the form of recommendations for future projects that would benefit from the CASA process to undertake.
- If a few key NPS are the focus after Objective 2, the project team could consider creating task groups for each, with membership composed of key people/experts knowledgeable of those respective source areas and some project team members (varying by task group). These task groups could identify, evaluate and recommend to the project team key management actions for their respective source areas. This would also assist in laying the groundwork for implementation of the actions and obtaining buy-in from stakeholders.
- Team membership will be reassessed prior to this objective but it was noted (see above) that perhaps the best use of additional membership would be in the form of the task groups that can be very specific and focused on providing input on the team's recommendations. The team will be as considerate as they can be in their budget and also consider where the funds would be best spent.
- The estimated budget for this objective remains unknown but the team noted that, if the team partners with other organizations and affected sectors around the table, then costs might be shared. They also noted that there could be a series of very specific meetings to targeted people/sectors vs. general workshops.

**Action Item 4.5:** *AAF (Atta) will send the USDA modelling document to Amanda for posting to the NPS Resource Library.*

## 7. Next Steps and Next Meeting

The team reviewed action items from the meeting and confirmed the next project team meeting is April 20, 2016 at the CASA office. Considerations and objectives for the next meeting are to:

- Discuss and establish Communications objectives/requirements for Objective #4
- Finalize the Project Team Workplan
- Receive and discuss the Task Group update and/or review their ToR
- Start work and discussion on the "Inventory of Management Actions/Categories"
- Receive (potential) presentation from Wood Buffalo Environmental Association (WBEA) work

- Discuss polling for meetings in the Summer 2016 to continue work (i.e. the GoA jurisdictional scan in June/July feeding into and working to complete Objective 2).

The team discussed interests around the table for further presentations and learnings that included: Red Deer's CAAQS response; info/data on the other Regions; Climate Change update (from GoA); Sectors or Sources (i.e. residential/commercial heating, transportation); AEMERA overview; Airsheds; a better understanding of the process and options for approvals (EPEA approvals).

***Action Item 4.6: Andrew will contact the Wood Buffalo Environmental Association (WBEA) to inquire if they can provide a presentation to the project team on their work/experiences.***

**The meeting adjourned at 3:15 pm.**