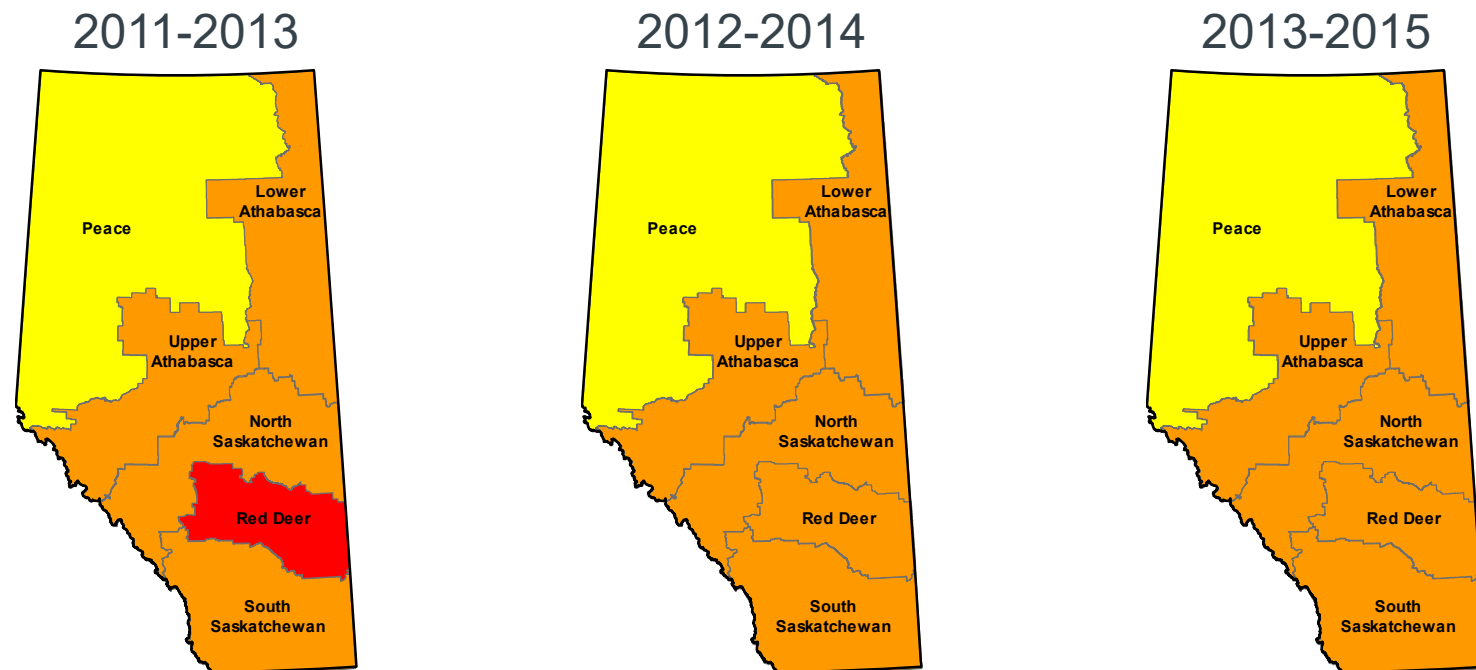


CAAQS and NO_x Emissions

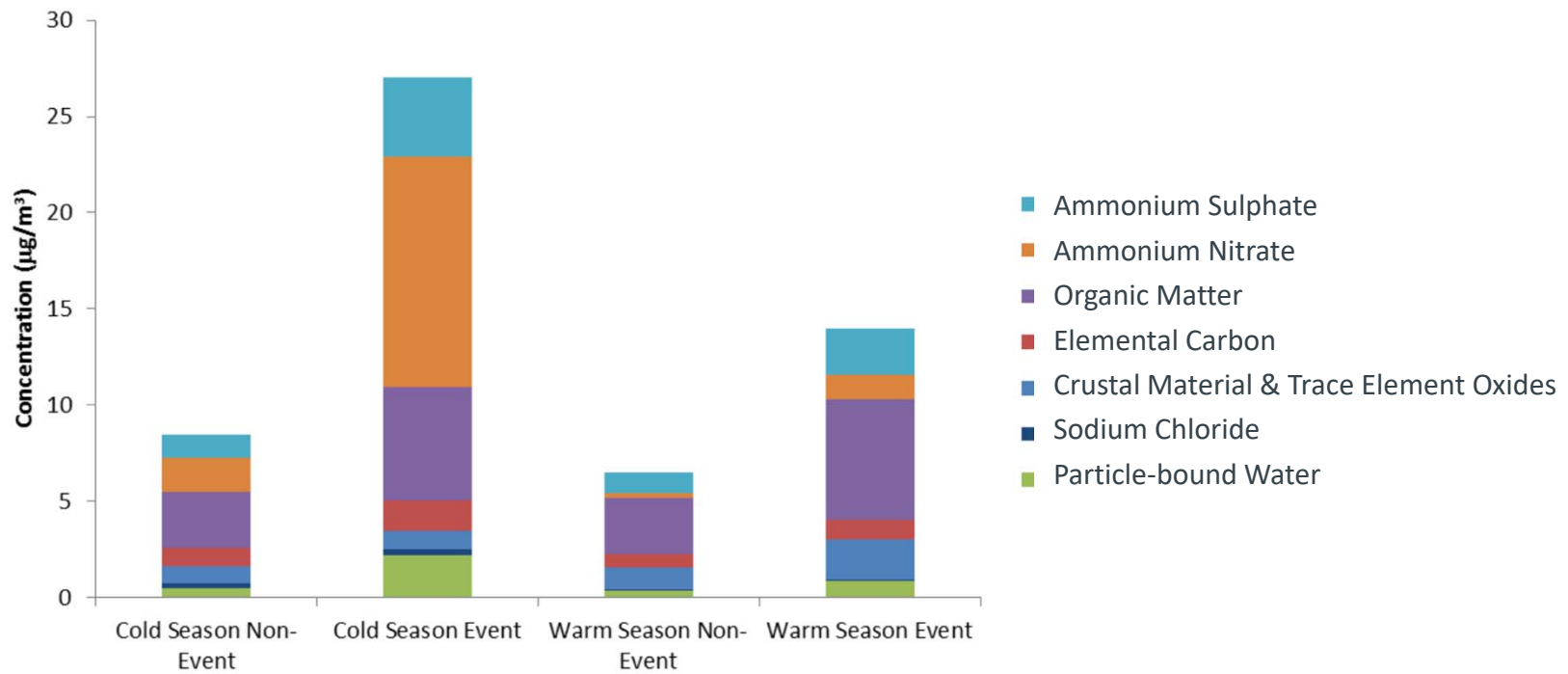
Andrew Clayton
August 9, 2018

Alberta

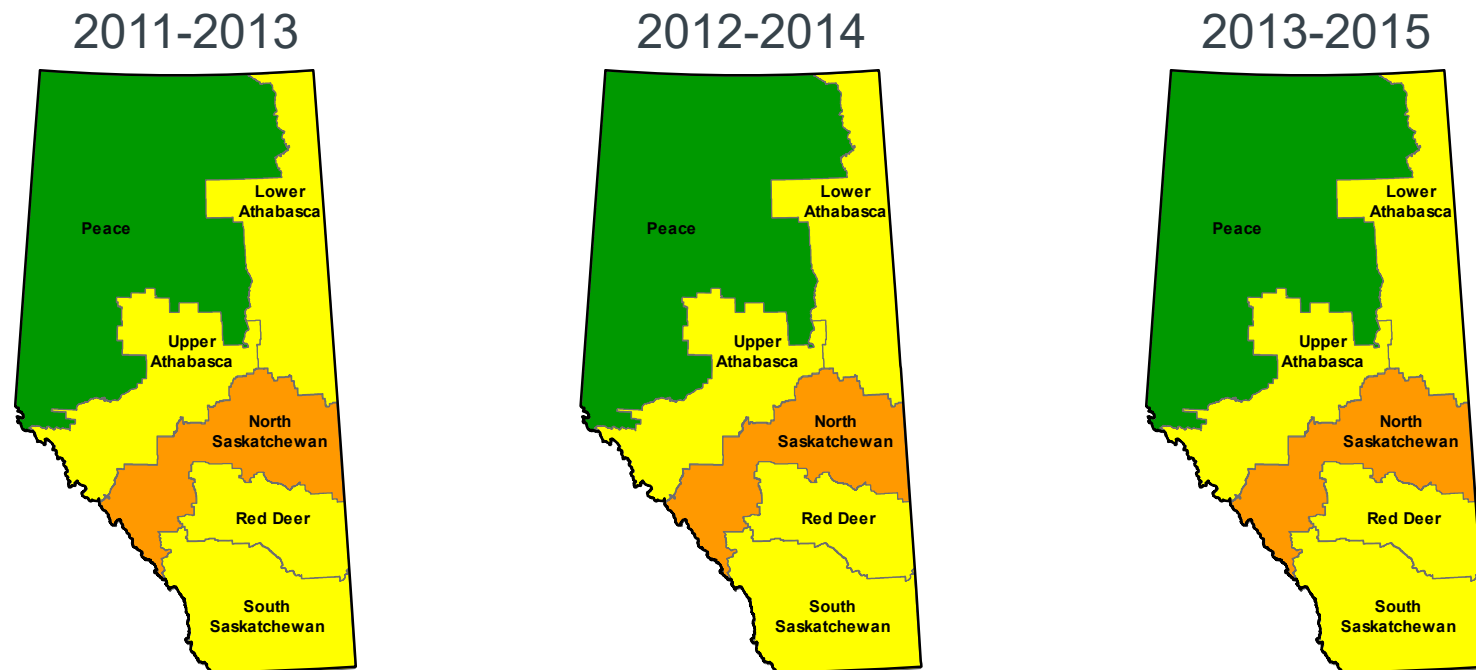
PM_{2.5} CAAQS Assessment Results



Particulate Composition – Capital Region



Ozone CAAQS Assessment Results



NO₂ CAAQS Thresholds

	1-Hour		Annual	
	2020	2025	2020	2025
Action	Actions for Achieving Air Zone CAAQS			
Standard	60 ppb	42 ppb	17.0 ppb	12.0 ppb
Action	Actions for Preventing CAAQS Exceedances			
Threshold	31 ppb		7.0 ppb	
Action	Actions for Preventing Air Quality Deterioration			
Threshold	20 ppb		2.0 ppb	
Action	Actions for Keeping Clean Areas Clean			
Metric	The 3-year average of the annual 98 th percentile of the daily maximum 1-hour average concentrations		The average over a single calendar year of all 1-hour average concentrations	

CAAQS Outlook for Nitrogen Dioxide

- Analysis is based on 2014-2016 data.
- Actual determination of CAAQS achievement and management levels will be based on 2018-2020 data.
- This outlook is based on applying CAAQS thresholds to community type stations as used in the 2011-2013 PM_{2.5} and ozone CAAQS assessment.
 - Results from stations heavily influenced by industrial activity and in areas not accessed by public not included.

Preliminary 2016 Status of Air Zones – NO₂



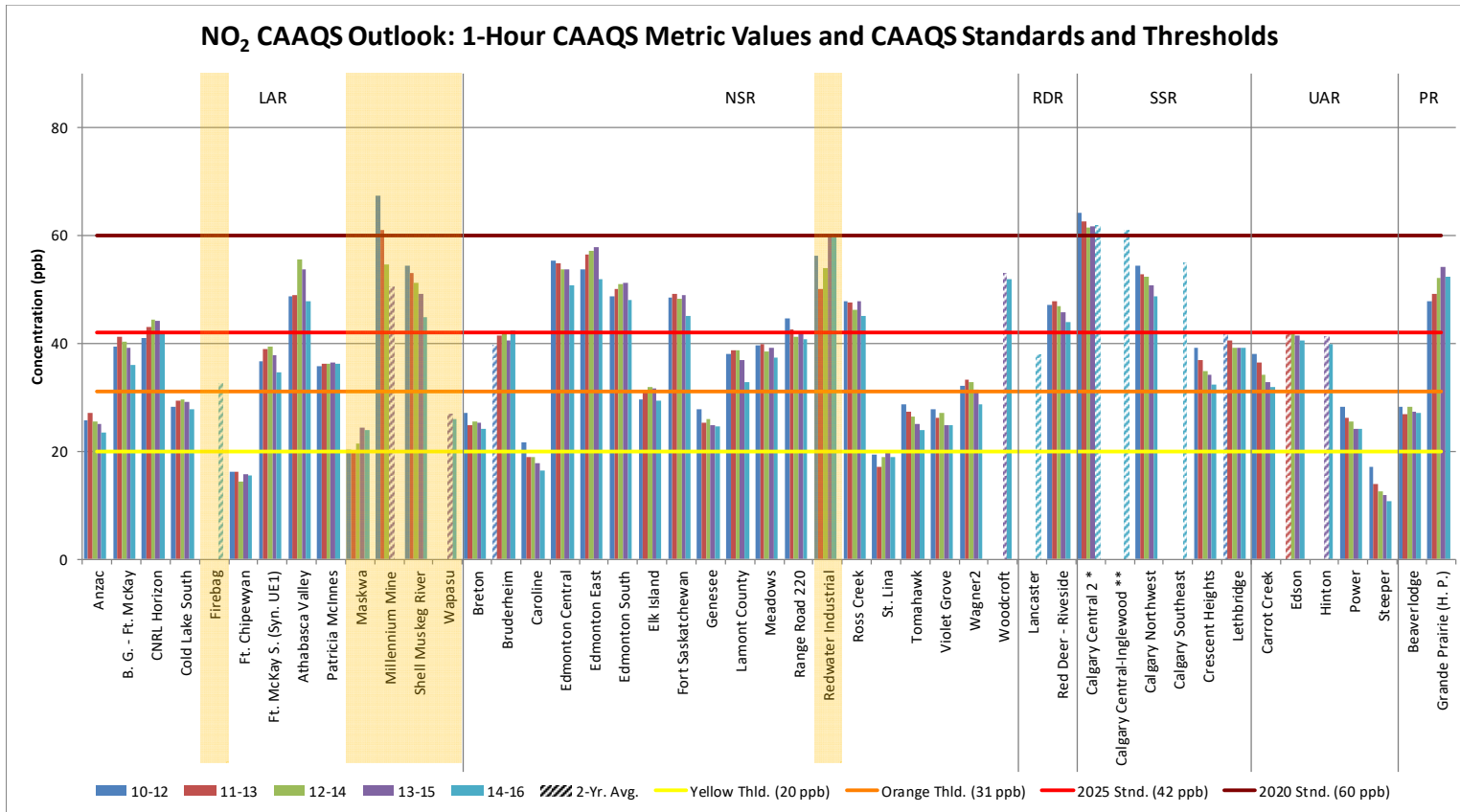
- All zones are in Orange management level for the current NO₂ CAAQS based on preliminary 2014-16 ambient data.
- The NO₂ CAAQS will become more stringent in 2025.

Preliminary 2016 Status of Air Zones – NO₂

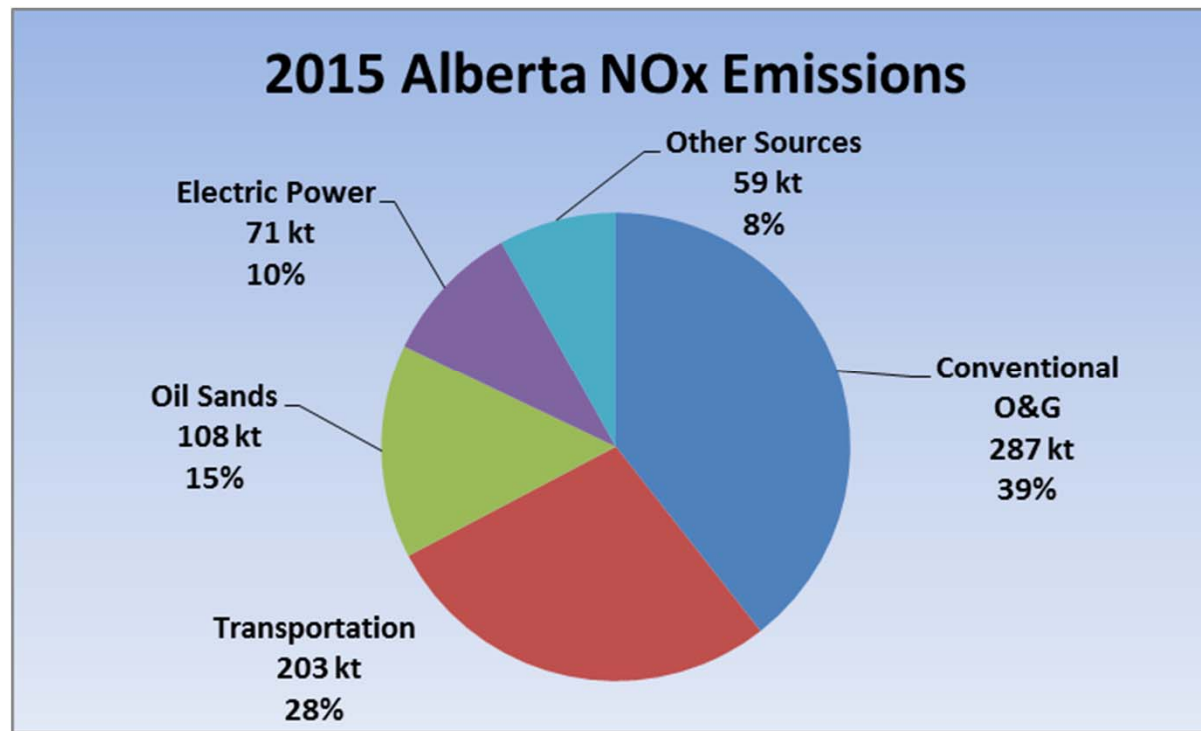


- All zones except Upper Athabasca will be in Red exceedance level when compared against the 2025 NO₂ CAAQS levels.

NO₂ CAAQS Outlook: 1-Hour CAAQS Metric Values and CAAQS Standards and Thresholds



NO_x Emissions by Sector in Alberta



NO_x Emissions in Canada

