



PEACE AIRSHED ZONE ASSOCIATION
Air Quality Monitoring Network

**Passive Data
for the
Month of January 2004**

Prepared by



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January 22, 2004

Alberta Environment
Enforcement and Monitoring Division
11th Floor, Oxbridge Place
9820 - 106th Street
Edmonton, Alberta, T5K 2J6

Re: Peace Airshed Zone Association - PASZA Ambient Air Report

Please find enclosed the PASZA passive ambient air monitoring data for the month of **January, 2004**.

There were no damaged or missing samples for the month and no exceedances of the Provincial Air Quality guidelines.

- Monthly average concentrations for SO₂ passives ranged from 0.0 ppb to 1.4 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.8 ppb to 10.6 ppb.
- Monthly average concentrations for O₃ passives ranged from 23.7 ppb to 51.7 ppb.

The 2003 regional average for all passives monitored in PASZA is summarized as follows:

SO₂ annual average for 2003 was 0.3 ppb
NO₂ annual average for 2003 was 1.9 ppb
O₃ annual average for 2003 was 27.8 ppb

If you have any questions, please contact me the Focus office at 780-466-6555.

On Behalf of,
Peace Airshed Zone Association

Kevin McCullum

A handwritten signature in black ink, appearing to read "K. McCullum".

Kevin McCullum, M.Sc., P.Eng.
AQM Environmental Engineering Specialist

Attachments

cc Mr. Richard Harp, Chairman of PASZA
Mr. Kevin Warren, Program Manager
PASZA Technical Committee Members
Gary Cross, CET Focus Corporation Ltd.

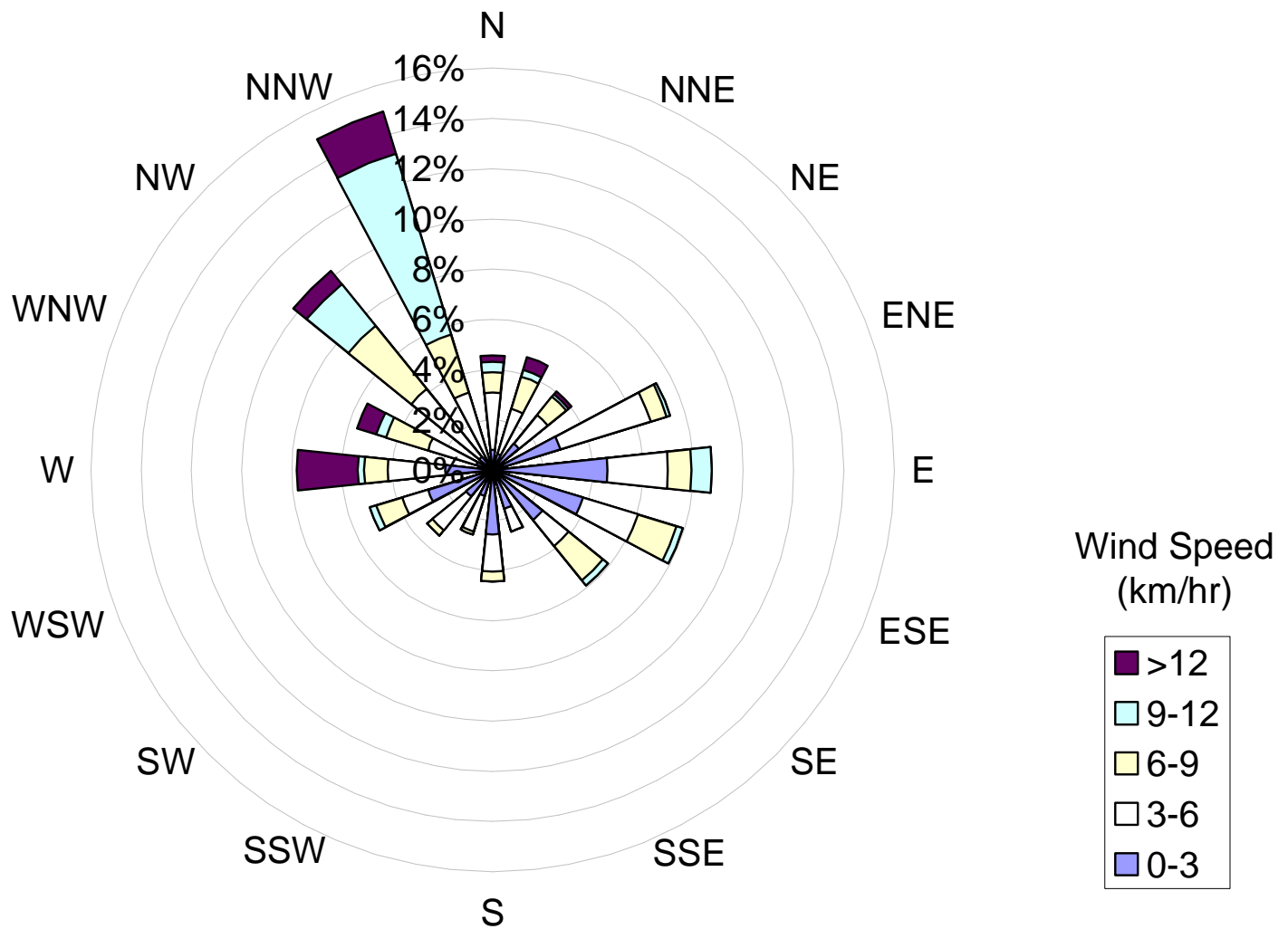


Figure 1. Wind Rose for the 1-hr Average Wind Speed Data Collected at the Beaverlodge Station during January 2004

Table 1. PASZA Passive Stations for January 2004

PASZA					
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
23a	Bear Lake	0.9	31.4	3.1	
23b	Bear Lake	1.1	31.2	3.1	
28a	Clairmont Lake	0.8	35.7	2.7	
28b	Clairmont Lake	0.7	34.2	2.9	
3a	Forth Creek	0.6	41.5	1.2	
3b	Forth Creek	0.6	50.5	1.2	
4a	Gordondale	0.9	39.3	1.9	
4b	Gordondale	0.9	34.8	1.7	
1	Silver Valley	1.0	39.4	1.6	08-27-081-11 W6M
2	Bay Tree	0.7	36.5	1.6	13-16-078-13 W6M
3	Forth Creek	0.6	46.0	1.2	04-13-082-07 W6M
4	Gordondale	0.9	37.1	1.8	04-34-078-10 W6M
5	Boone Creek	0.0	28.6	2.3	01-23-076-11 W6M
7	Steeprock Creek	0.6	42.1	2.2	09-35-072-13 W6M
9	Spirit River	0.6	46.8	1.8	08-12-079-07 W6M
10	Woking	0.5	47.4	1.4	01-13-076-07 W6M
11	Webber Creek	0.8	37.8	2.2	09-36-074-09 W6M
12	Hythe	0.5	36.1	3.1	14-36-072-11 W6M
14	Sylvester	0.4	34.8	2.8	08-06-069-12 W6M
16	Beaverlodge	0.6	32.8	5.4	15-36-071-10 W6M
17	Poplar	0.6	31.5	3.2	13-06-073-08 W6M
18	Saddle Hills	0.6	40.2	1.9	04-25-074-07 W6M
19	Wanham	0.7	38.3	1.7	16-22-077-03 W6M
20	Shaftesbury	0.3	39.4	1.2	04-03-082-23 W5M
21	Eaglesham	0.4	33.6	1.0	16-21-079-25 W5M

Table 1. PASZA Passive Stations for December 2003 (Continued)

Station Number	Station Name	PASZA			Site Legal
		SO2 ppb	O3 ppb	NO2 ppb	
23	Bear Lake	1.0	31.3	3.1	15-31-072-06 W6M
24	Wembley	0.6	32.0	4.5	12-31-070-08 W6M
25	Pinto Creek	0.4	29.3	3.0	04-24-069-11 W6M
26	Flyingshot	0.5	31.8	5.5	15-36-070-07 W6M
27	Grande Prairie 1	0.6	30.3	10.6	08-15-071-06 W6M
28	Clairmont Lake	0.7	34.9	2.8	09-06-073-04 W6M
29	Smoky Heights	1.0	39.0	1.8	04-06-075-02 W6M
30	Fitzsimmons	0.4	29.9	2.9	15-36-072-03 W6M
32	Gold Creek	0.3	23.7	3.0	06-33-067-05 W6M
33	Wapiti	0.3	29.4	2.6	02-25-071-03 W6M
34	Puskwaskau	0.2	39.9	0.9	15-35-074-25 W5M
35	Jean Cote	0.6	44.9	1.3	12-35-079-21 W5M
36	Guy	0.3	39.6	1.1	03-04-076-22 W5M
37	Crooked Creek	0.6	37.8	3.1	16-01-071-26 W5M
38	Karr Creek	0.4	28.2	1.5	10-16-065-02 W6M
39	Clouston Creek	0.6	39.1	1.9	12-01-073-22 W5M
40	McLennan	0.4	38.8	1.6	03-29-077-19 W5M
41	Valleyview	1.4	35.4	2.8	09-30-069-22 W5M
42	Sunset House	0.8	51.7	2.5	05-32-070-19 W5M
43	High Prairie	0.4	31.1	2.7	16-13-074-17 W5M
44	Peavine	0.4	30.3	0.8	03-05-079-15 W5M
45	Gift Lake	0.3	28.8	1.7	10-07-079-12 W5M
46	Little Smoky	0.8	29.6	5.4	12-01-065-21 W5M
47	Kinuso	0.3	27.4	2.2	12-10-073-10 W5M
48	Deer Mountain	0.6	34.0	0.9	15-22-068-09 W5M
49	Grande Prairie 2	0.7	29.6	10.4	17-26-071-06 W6M

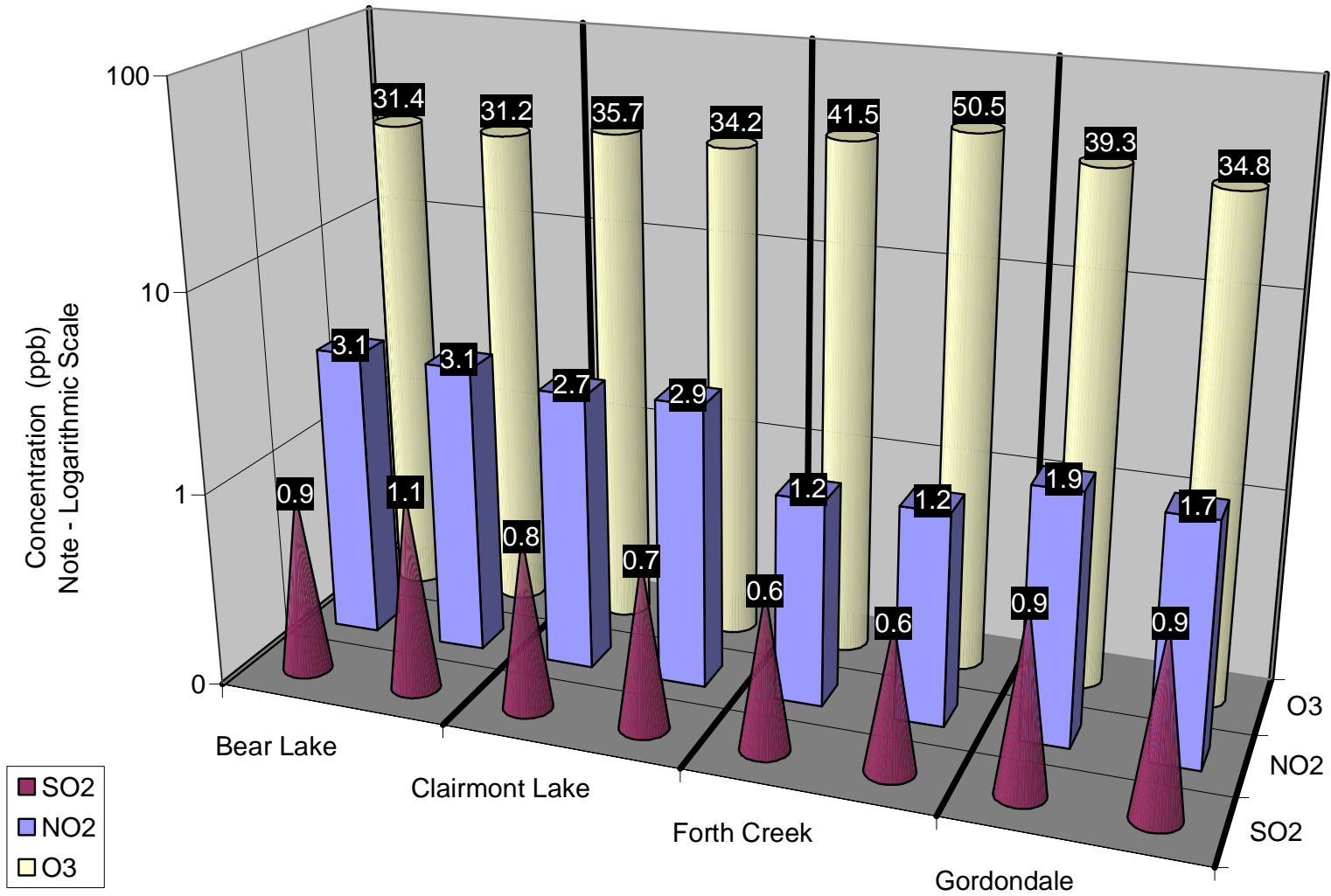


Figure 2. Duplicate Summary Chart

Table 2. Passive Summary Results for January 2004

Stats	Sulphur Dioxide	Ozone	Nitrogen Dioxide
	SO ₂	O ₃	NO ₂
	ppb	ppb	ppb
Passive Summary for January 2004 (PASZA Zone)			
Mean	0.6	35.5	2.7
Standard Deviation	0.2	6.1	2.1
Minimum	0.0	23.7	0.8
Maximum	Boone Creek (#5)	Gold Creek (#32)	Peavine (#44)
	1.4 Valleyview (#41)	51.7 Sunset House (#42)	10.6 Grande Prairie 1 (#27)

Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16)

	SO ₂	O ₃	NO ₂
AENV Beaverlodge station	1.1	25.5	9.8
PASZA Beaverlodge passive	0.6	32.8	5.4

Alberta Ambient Air Quality Guidelines - Annual SO₂ Guideline is 11 ppb

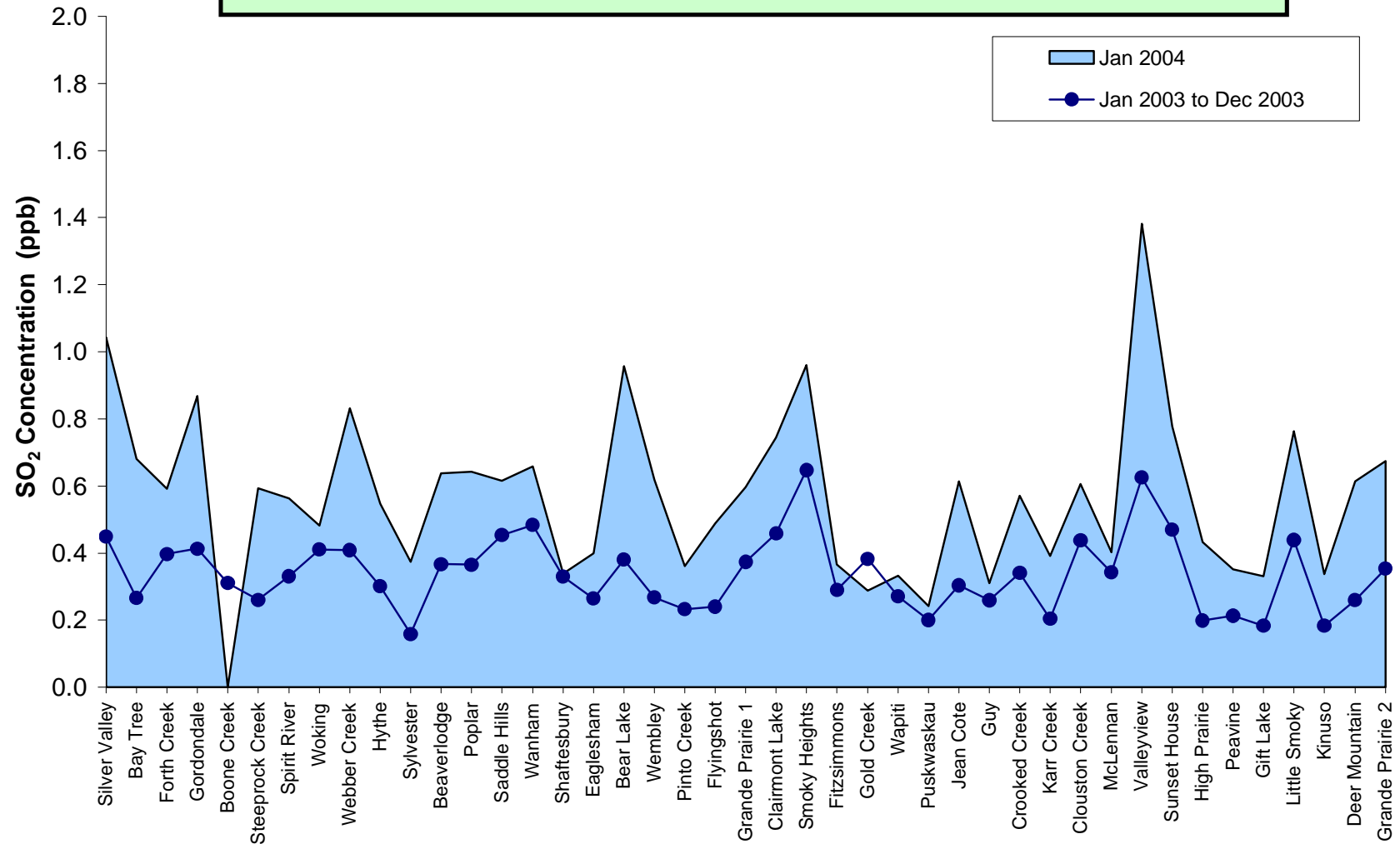


Figure 4. SO₂ Summary Chart

PASZA Passive O₃ Stations - January 2004
Average Concentrations in ppb

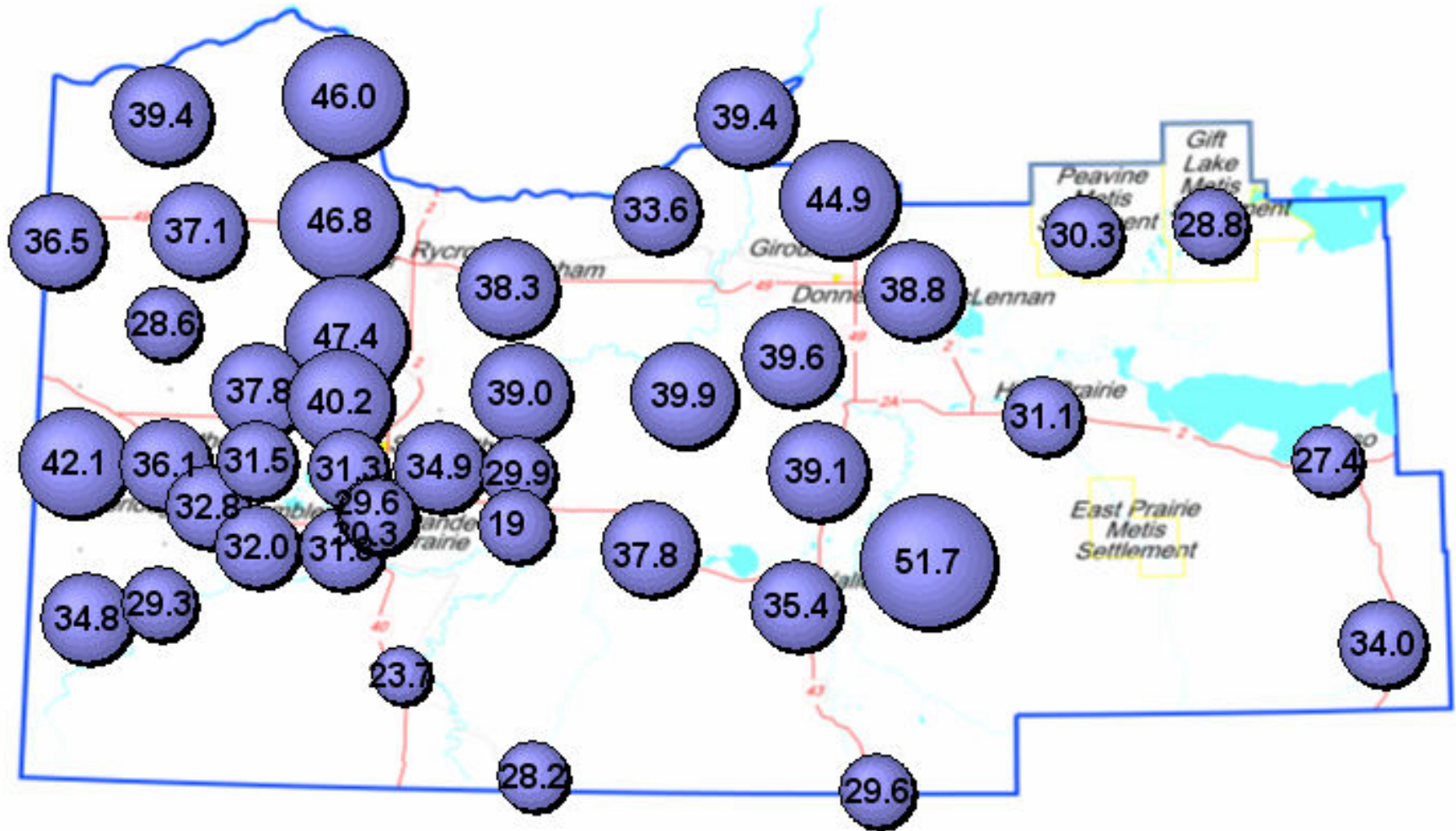


Figure 5. O₃ Bubble Chart

Alberta Ambient Air Quality Guidelines - No Annual O₃ Guideline

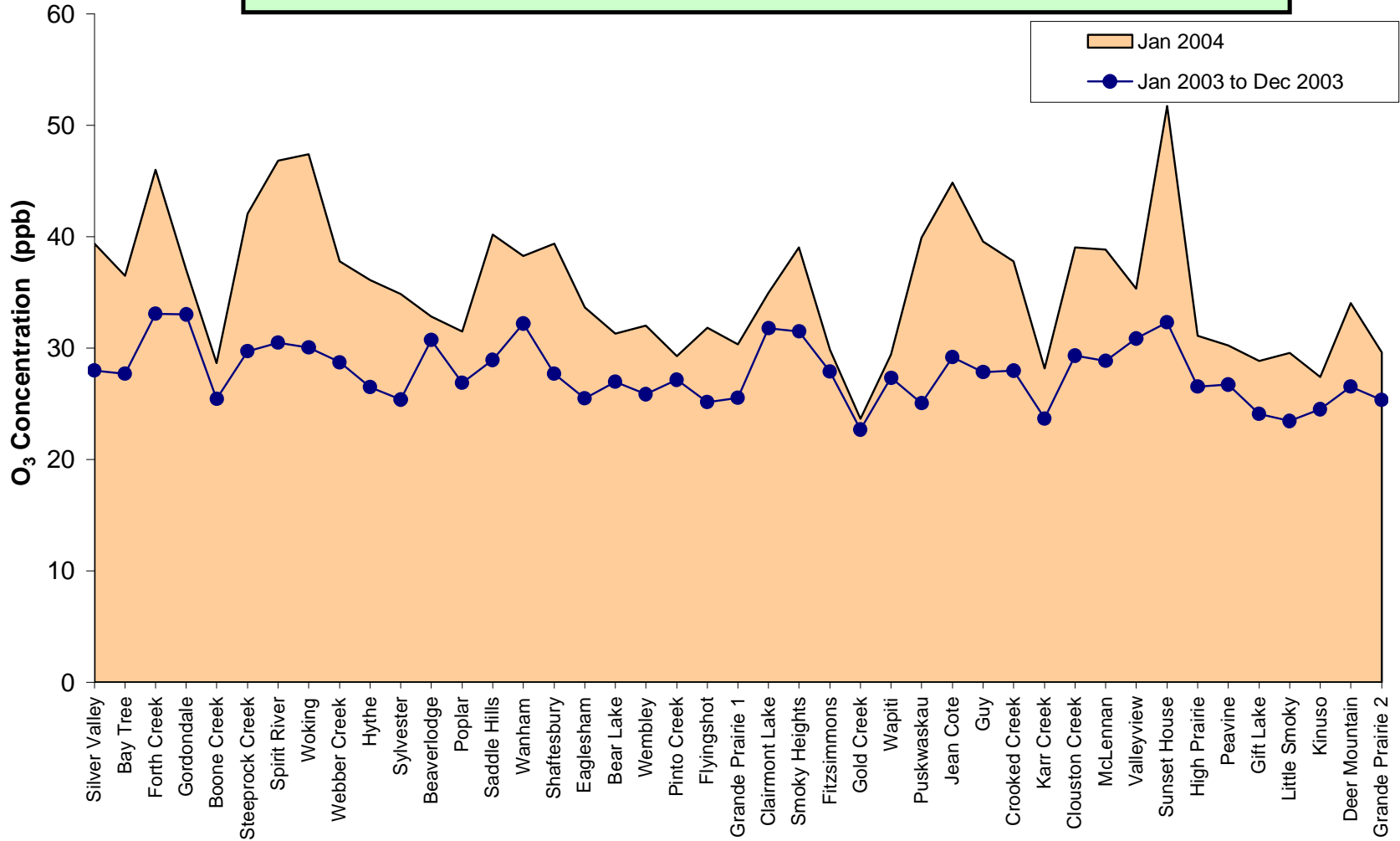


Figure 6. O₃ Summary Chart

PASZA Passive NO₂ Stations - January 2004
Average Concentrations in ppb

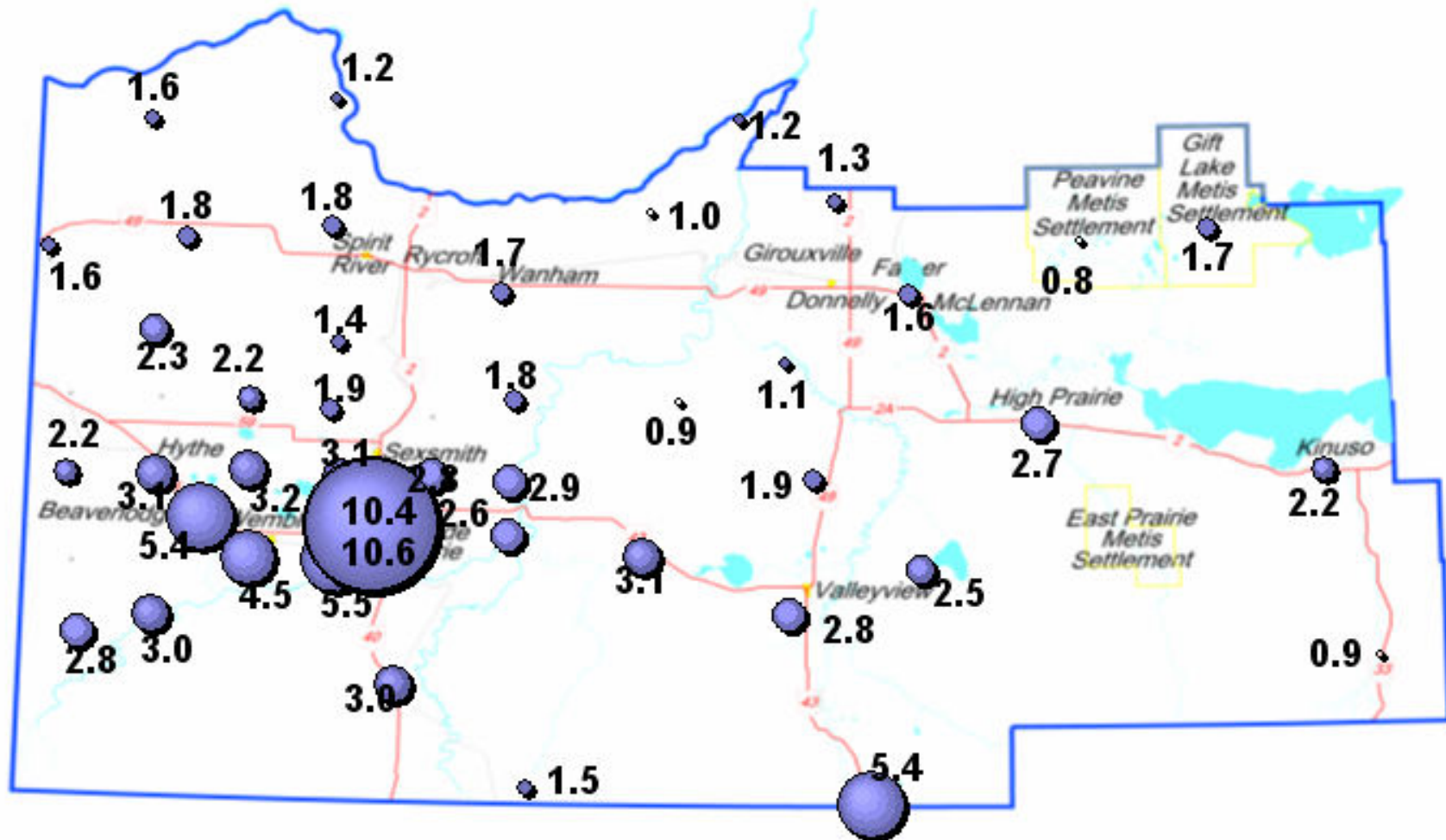


Figure 7. NO₂ Bubble Chart

Alberta Ambient Air Quality Guidelines - Annual NO₂ Guideline is 32 ppb

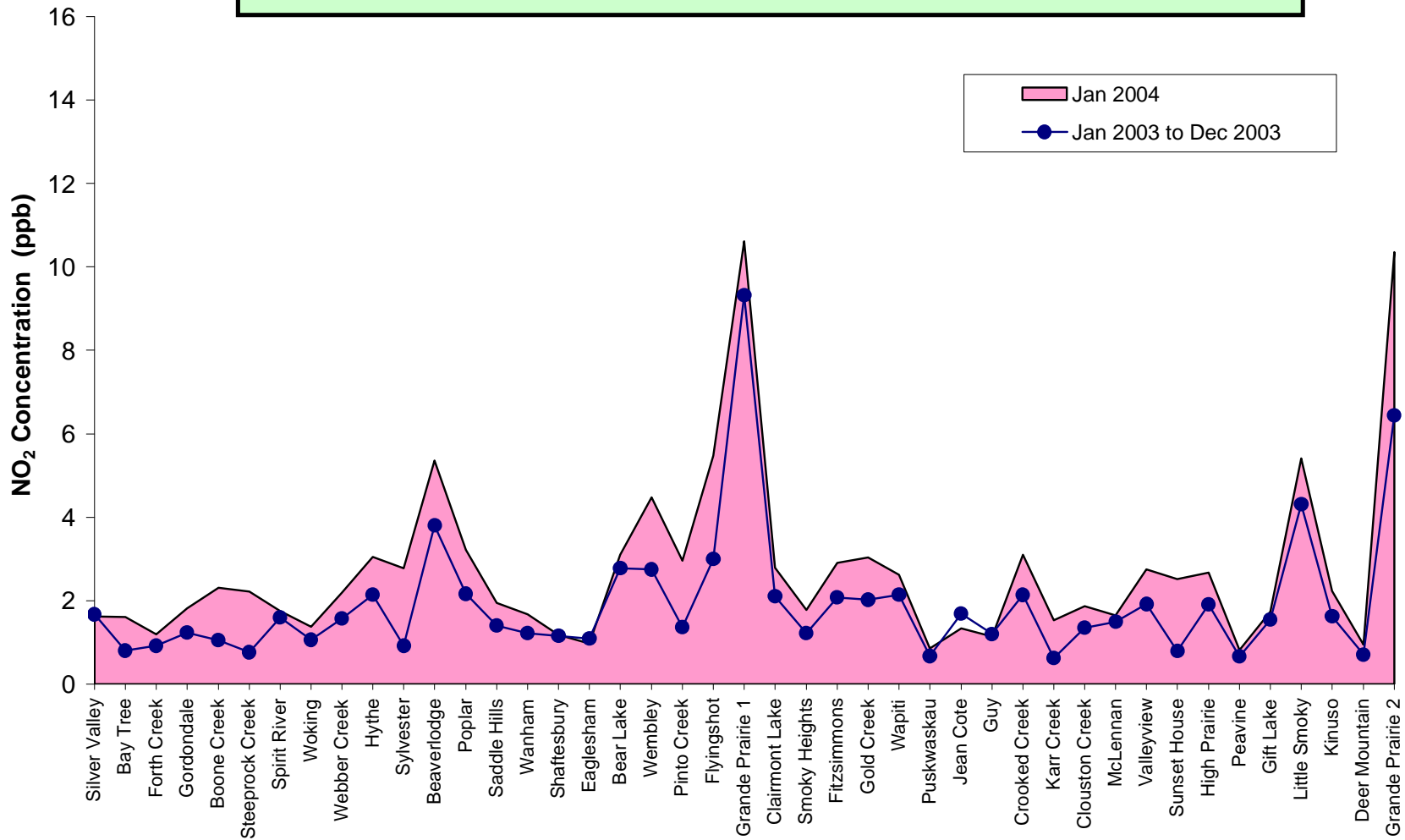


Figure 8. NO₂ Summary Chart

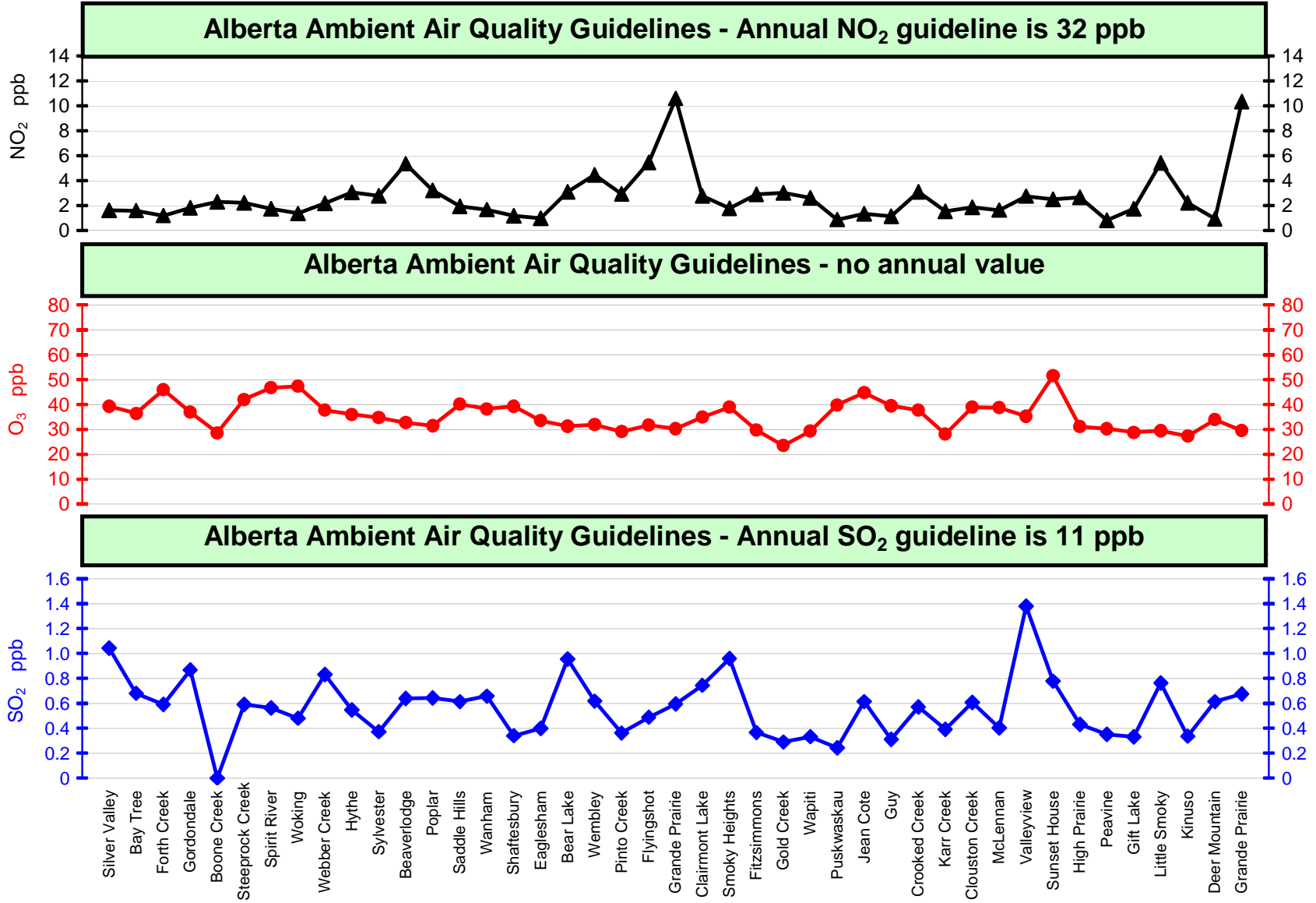


Figure 9. Overview Summary