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## **Canada Grassland Project Protocol Version 1.0 ERRATA AND CLARIFICATIONS**

The Climate Action Reserve (Reserve) published its Canada Grassland Project Protocol Version 1.0 (CGPP V1.0) on October 16, 2019. While the Reserve intends for the CGPP V1.0 to be a complete, transparent document, it recognizes that correction of errors and clarifications will be necessary as the protocol is implemented and issues are identified. This document is an official record of all errata and clarifications applicable to the CGPP V1.0.<sup>1</sup>

Per the Reserve Offset Program Manual, both errata and clarifications are considered effective on the date they are first posted on the Reserve website. The effective date of each erratum or clarification is clearly designated below. All listed and registered Canada Grassland projects must incorporate and adhere to these errata and clarifications when they undergo verification. The Reserve will incorporate both errata and clarifications into future versions of the protocol.

All project developers and verification bodies must refer to this document to ensure that the most current guidance is adhered to in project design and verification. Verification bodies shall refer to this document immediately prior to uploading any Verification Statement to assure all issues are properly addressed and incorporated into verification activities.

If you have any questions about the updates or clarifications in this document, please contact Policy at [policy@climateactionreserve.org](mailto:policy@climateactionreserve.org) or (213) 891-1444 x3.

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<sup>1</sup> See Section 4.3.4 of the Reserve Offset Program Manual for an explanation of the Reserve's policies on protocol errata and clarifications. "Errata" are issued to correct typographical errors. "Clarifications" are issued to ensure consistent interpretation and application of the protocol. For document management and program implementation purposes, both errata and clarifications are contained in this single document.

*Please ensure that you are using the latest version of this document*

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## Errata and Clarifications (arranged by protocol section)

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## Section 5

### 1. Conversion Factor for CH<sub>4</sub> Emissions from Manure Deposited by Grazing Animals (ERRATUM – December 18, 2019)

**Section:** Project Emissions from Grazing, Equation 5.15

**Context:** On page 49, Equation 5.15 is used to calculate project emissions from livestock grazing. Three values integrate the sum of livestock grazing emissions: N<sub>2</sub>O emissions from manure deposited by grazing animals (N<sub>2</sub>O<sub>MN</sub>), CH<sub>4</sub> emissions from manure deposited by grazing animals (CH<sub>4,MN</sub>), and CH<sub>4</sub> emissions from enteric fermentation in grazing animals (CH<sub>4,ENT</sub>). The factor used to convert from grams to tonnes in the CH<sub>4,MN</sub> equation is incorrectly stated as 1,000 while it should be 1,000,000. As written, Equation 5.15 reads as follows:

$$CH_{4,MN} = \sum_L \left( \frac{AGD_l \times PEF_{mn,l} \times GWP_{CH_4}}{1000} \right)$$

**Correction:** The corrected equation reads as follows:

$$CH_{4,MN} = \sum_L \left( \frac{AGD_l \times PEF_{mn,l} \times GWP_{CH_4}}{1000000} \right)$$

## Appendix B

### 2. Baseline Emission Factors (ERRATUM – December 18, 2019)

**Section:** B.5 Results, Table B.1

**Context:** On page 99, Table B.1 lists the baseline emission factors for grassland projects per acre per year. The values were incorrectly converted to kg of N<sub>2</sub>O or CO<sub>2</sub>/acre/year from kg of N<sub>2</sub>O or CO<sub>2</sub>/hectare/year by multiplying by 2.47 instead of dividing by 2.47. The values have been recalculated to correctly state kg of N<sub>2</sub>O or CO<sub>2</sub>/acre/year.

**Correction:** The correct baseline emission factors are shown on the next page.

**Table B.1.** Baseline Emission Factors per Acre per Year

Reporting Zone	RZ_ID	Soil Texture	Stratum ID	BEF <sub>N<sub>2</sub>O,s</sub> Year 1-10 (kg N <sub>2</sub> O/ac/yr)	BEF <sub>N<sub>2</sub>O,s</sub> Year 11-20 (kg N <sub>2</sub> O/ac/yr)	BEF <sub>N<sub>2</sub>O,s</sub> Year 21-30 (kg N <sub>2</sub> O/ac/yr)	BEF <sub>Cfert,s</sub> (kg CO <sub>2</sub> /ac/yr)	BEF <sub>OC,s</sub> 1- 10 yr (kg CO <sub>2</sub> /ac/yr)	BEF <sub>OC,s</sub> 11-20 yr (kg CO <sub>2</sub> /ac/yr)	BEF <sub>OC,s</sub> 21-30 yr (kg CO <sub>2</sub> /ac/yr)
Atlantic Maritime	6	Coarse	6_Coarse	1.67	1.53	1.42	61.47	1192	924	717
Boreal Plains	10	Coarse	10_Coarse	0.90	0.84	0.80	18.99	623	464	345
Boreal Shield East	5	Coarse	5_Coarse	1.32	1.18	1.08	38.25	1083	803	595
Boreal Shield West	9	Coarse	9_Coarse	1.16	1.07	1.00	18.87	781	550	388
Mixedwood Plains	7	Coarse	7_Coarse	1.52	1.39	1.29	25.03	1028	762	565
Mountane Cordillera	14	Coarse	14_Coarse	0.53	0.50	0.48	7.58	551	453	372
Pacific Maritime	15	Coarse	15_Coarse	0.95	0.88	0.83	5.56	653	552	468
Semiarid prairies	12	Coarse	12_Coarse	0.41	0.38	0.36	12.55	509	364	260
Subhumid prairies	11	Coarse	11_Coarse	0.75	0.71	0.68	17.22	493	366	272
Atlantic Maritime	6	Medium	6_Medium	2.04	1.91	1.79	61.47	1179	975	806
Boreal Plains	10	Medium	10_Medium	0.96	0.90	0.86	18.99	799	644	519
Boreal Shield East	5	Medium	5_Medium	1.78	1.62	1.49	38.25	1349	1088	878
Boreal Shield West	9	Medium	9_Medium	1.21	1.13	1.07	18.87	850	660	512
Mixedwood Plains	7	Medium	7_Medium	1.89	1.75	1.64	25.03	1088	855	672
Mountane Cordillera	14	Medium	14_Medium	0.61	0.57	0.54	7.58	817	686	577
Pacific Maritime	15	Medium	15_Medium	1.14	1.07	1.01	5.56	961	850	751
Semiarid prairies	12	Medium	12_Medium	0.47	0.43	0.40	12.55	766	574	430
Subhumid prairies	11	Medium	11_Medium	0.82	0.77	0.73	17.22	732	571	445
Atlantic Maritime	6	Fine	6_Fine	2.66	2.42	2.23	61.47	1478	1183	948
Boreal Plains	10	Fine	10_Fine	0.99	0.94	0.90	18.99	897	750	627
Boreal Shield East	5	Fine	5_Fine	2.01	1.88	1.76	38.25	1214	1029	873
Boreal Shield West	9	Fine	9_Fine	1.28	1.20	1.13	18.87	977	785	632
Mixedwood Plains	7	Fine	7_Fine	2.41	2.22	2.06	25.03	1316	1061	856
Mountane Cordillera	14	Fine	14_Fine	0.58	0.55	0.53	7.58	694	623	559
Pacific Maritime	15	Fine	15_Fine	1.01	0.96	0.92	5.56	765	683	610
Semiarid prairies	12	Fine	12_Fine	0.51	0.47	0.44	12.55	957	770	619
Subhumid prairies	11	Fine	11_Fine	0.81	0.77	0.74	17.22	690	572	474