

Figure 22. Long term (1985-2007) average distribution of green water flow (actual and potential evapotranspiration).

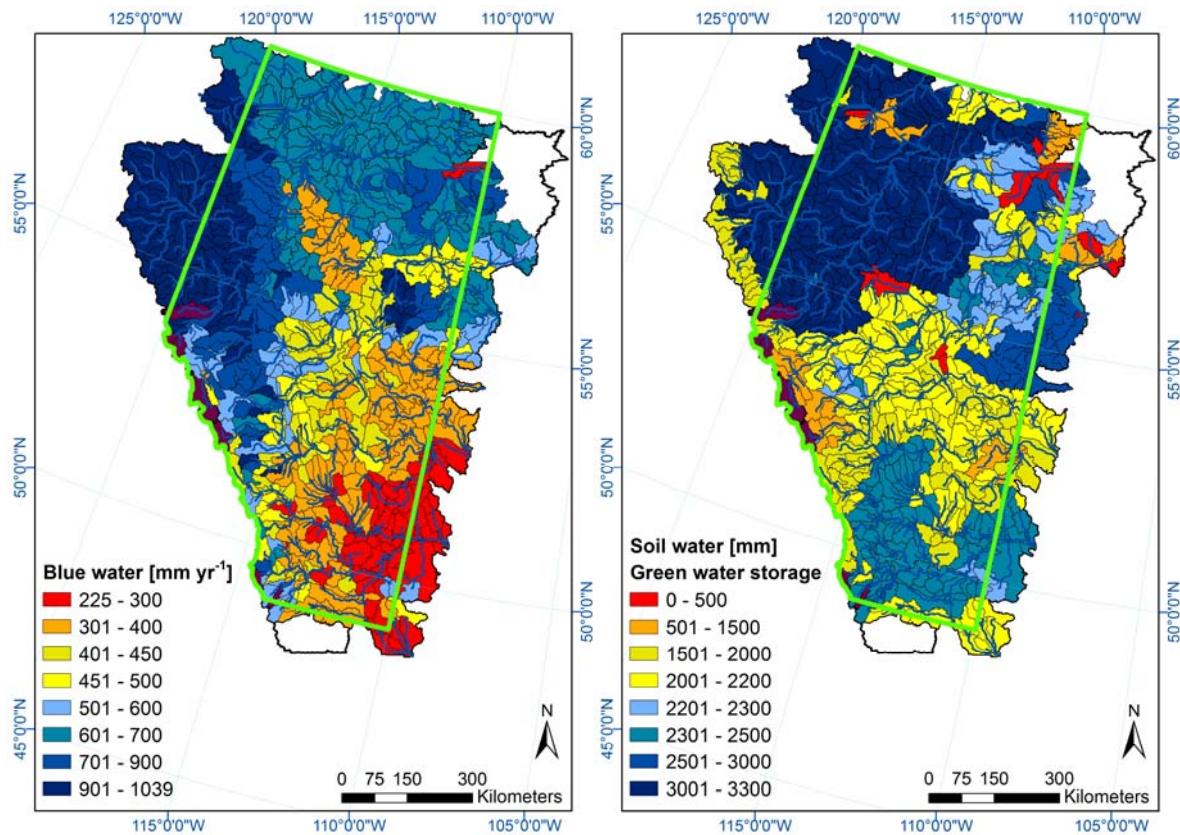


Figure 23. Long term (1985-2007) average distribution of blue water (water yield plus deep aquifer recharge) and green water storage (soil moisture).

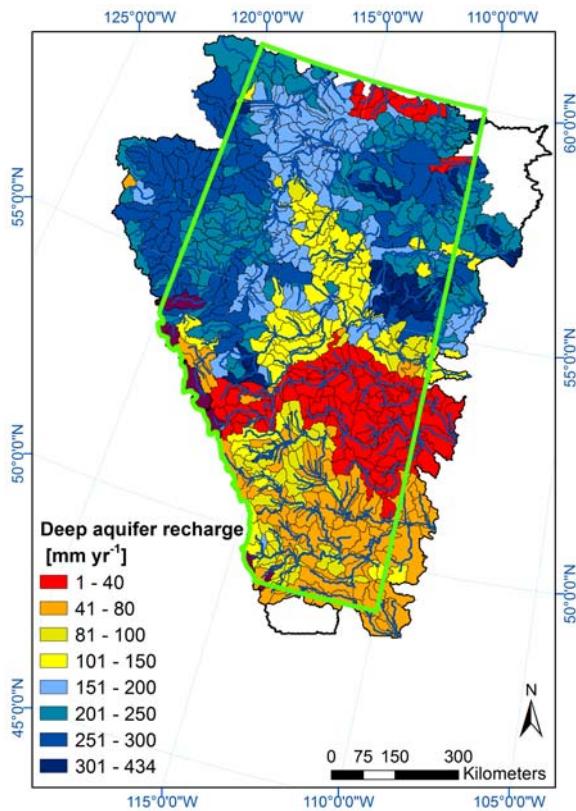


Figure 24. Long term (1985-2007) average distribution of deep aquifer recharge.

6.2 Final results using the CRU gridded climate data as input to the SWAT model

In general, a poor calibration result from previous section enforced the idea that i) climate data may have large errors associated with it, or ii) lack of stations in the northern part of Alberta (Figure 8) has a large impact on the overall model performance, or iii) the distribution of the observed stations is such that they are not assigned to the correct subbasins in the SWAT model.

To test some of these hypotheses, we obtained gridded climate data from Climate Research Unit, UK (CRU) to set up a new SWAT project for Alberta

taking the effect of glaciers in some subbasins as described in the previous section. The CRU provides 0.5 degree daily precipitation and temperature data. We performed calibration, validation, and uncertainty analysis using the discharge data of 101 stations (Figure 10). The calibration results were better in terms of *P-factor*, *R-factor* and goal function compared to the results using observed climate data. Table 4 shows calibration results aggregated at water region level. As shown in Table 4 the *R-factor*, R^2 and goal function were improved from their initial values while having a more satisfactory *P-factor* compare to the condition where we used the observed climate data for Alberta. Figures 25 to 27 show the calibration (1991-2006) and validation (1985-1990) results for some discharge stations. A high uncertainty (large *R-factor*) and small *p-factor* in some stations relates to insufficient accounting of agricultural and industrial water use, water diversion or water transfer projects and the construction or operation of dams/reservoirs in the province during the period of study. The water management maps of Alberta Environment (Figures 2, 3, and 4) show some of the man's activities influencing natural hydrology during the period of study. Regions with the highest activities have the worst calibration/validation results as well as the largest uncertainties. The construction of dams, reservoirs, roads, and tunnels can affect the local hydrology for many years. This is an important and often neglected source of uncertainty in large-scale hydrological modeling. As the extent of management in water resources development increases, hydrological modeling will become more and more difficult and will depend on the availability of detailed knowledge of the management operations.

Using the optimized parameter ranges, Figures 28 to 32 are shown as example of the type of maps that can be produced based on long-term averages. These variables are available at monthly resolution and could also

be tabulated with upper and lower uncertainty bonds for every one of 928 subbasins in the region of study.

Appendix I gives the long-term (1985-2006) average values of hydrological components for each of 928 subbasins. In Appendix II the location of the numbered subbasins is shown.

In Appendix III we aggregated the subbasin data into the major subbasins suggested in Figure 1. Also shown is the graphical representation of these data. We could not find much measured data to compare with our results. But water yield (net amount of water contributed to the river by the subbasin) estimated by SWAT was compared to the values give by Environment Alberta:

(<http://www.environment.alberta.ca/apps/basins/default.aspx?Basin=12>)

although we are not sure if both values are referring to the same things.

The water yield Figure shows large uncertainties in the water yield of water rich subbasins. The reported uncertainty contains natural year to year variation due to climate as well as water use and water abstraction. The later information was not available to us. Hence, our reported values could be taken as naturalized values.

Table 4. Calibration performance of different water regions while using CRU gridded climate data as input in the SWAT model.

River basin/subbasin	P_factor		R-factor		R ²		Goal function	
	initial	Final	initial	Final	initial	Final	initial	Final
Hay & Peac/Slave RB	0.45	0.47	3.36	2.87	0.27	0.28	0.21	0.21
Athabasca RB	0.67	0.39	3.94	3.01	0.30	0.33	0.23	0.24
Beaver RB	0.56	0.31	4.27	3.29	0.18	0.23	0.13	0.21
North Saskatchewan RSB	0.56	0.35	38.61	1.95	0.29	0.37	0.23	0.29
Red Deer, Bow, South Sas., Oldman RSB	0.48	0.30	6.58	4.47	0.37	0.39	0.26	0.27
Milk RB	0.28	0.55	108.78	3.89	0.22	0.34	0.17	0.33

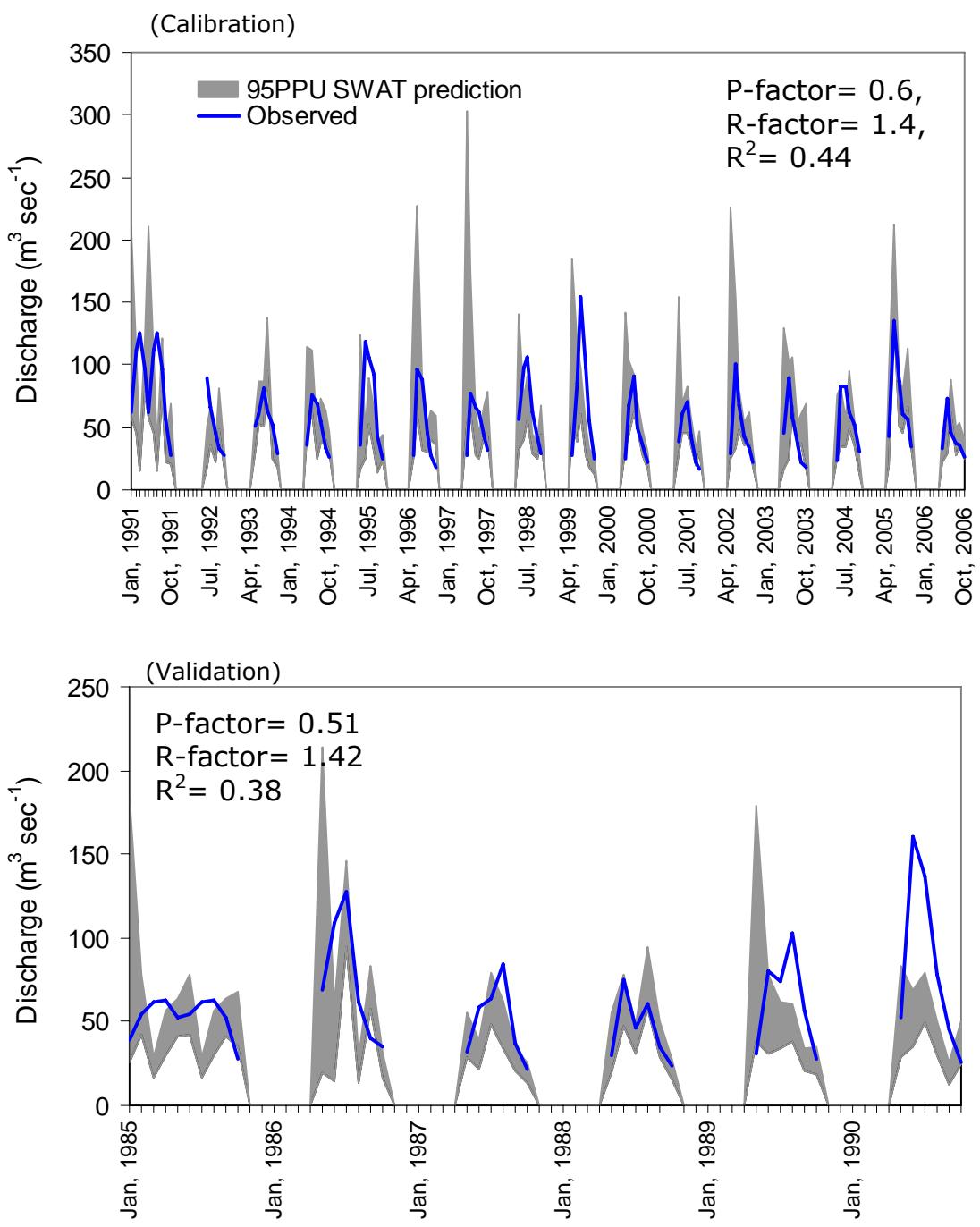


Figure 25. Comparison of the observed (blue line) and simulated (expressed as 95% prediction uncertainty band) discharges for “Nordegg River at Sunchild Road” station located in North Saskatchewan River Subbasin (subbasin number 645).

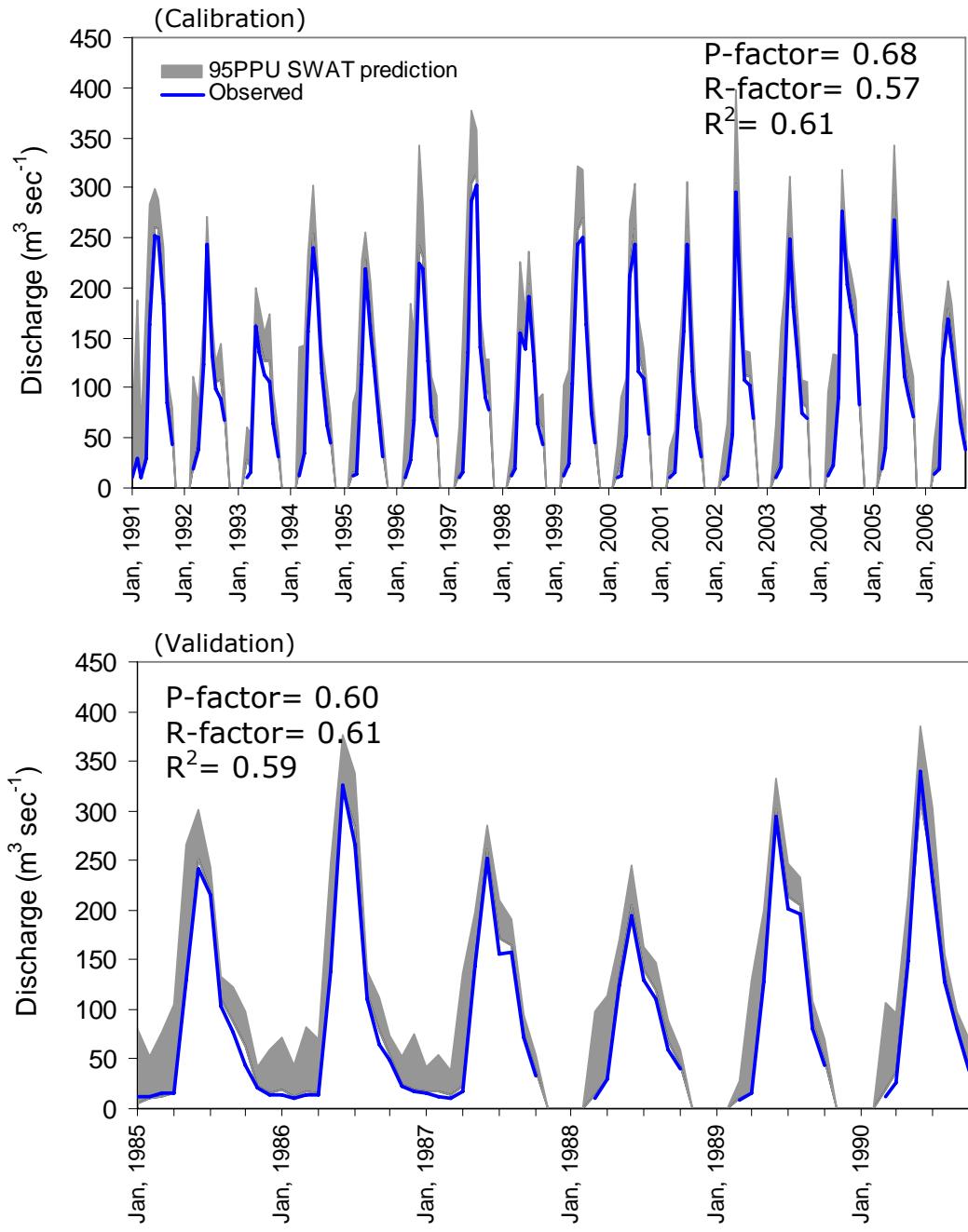


Figure 26. Comparison of the observed (blue line) and simulated (expressed as 95% prediction uncertainty band) discharges for "Smoky River Over Hells Creek" station located in Peace/Slave River Basin (subbasin number 496).

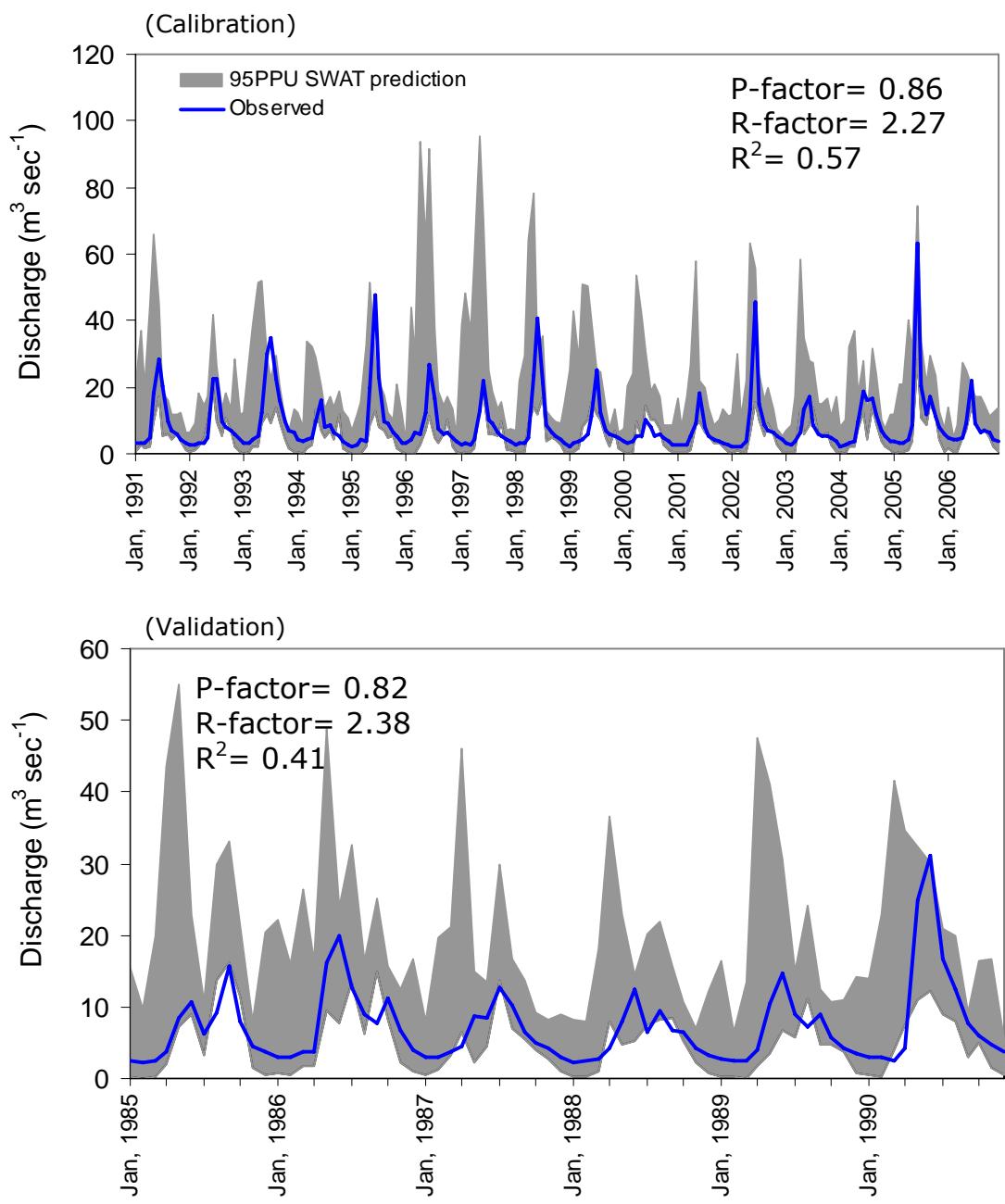


Figure 27. Comparison of the observed (blue line) and simulated (expressed as 95% prediction uncertainty band) discharges for "Elbow River at Bragg Creek" station located in Bow River Subbasin (subbasin number 780).

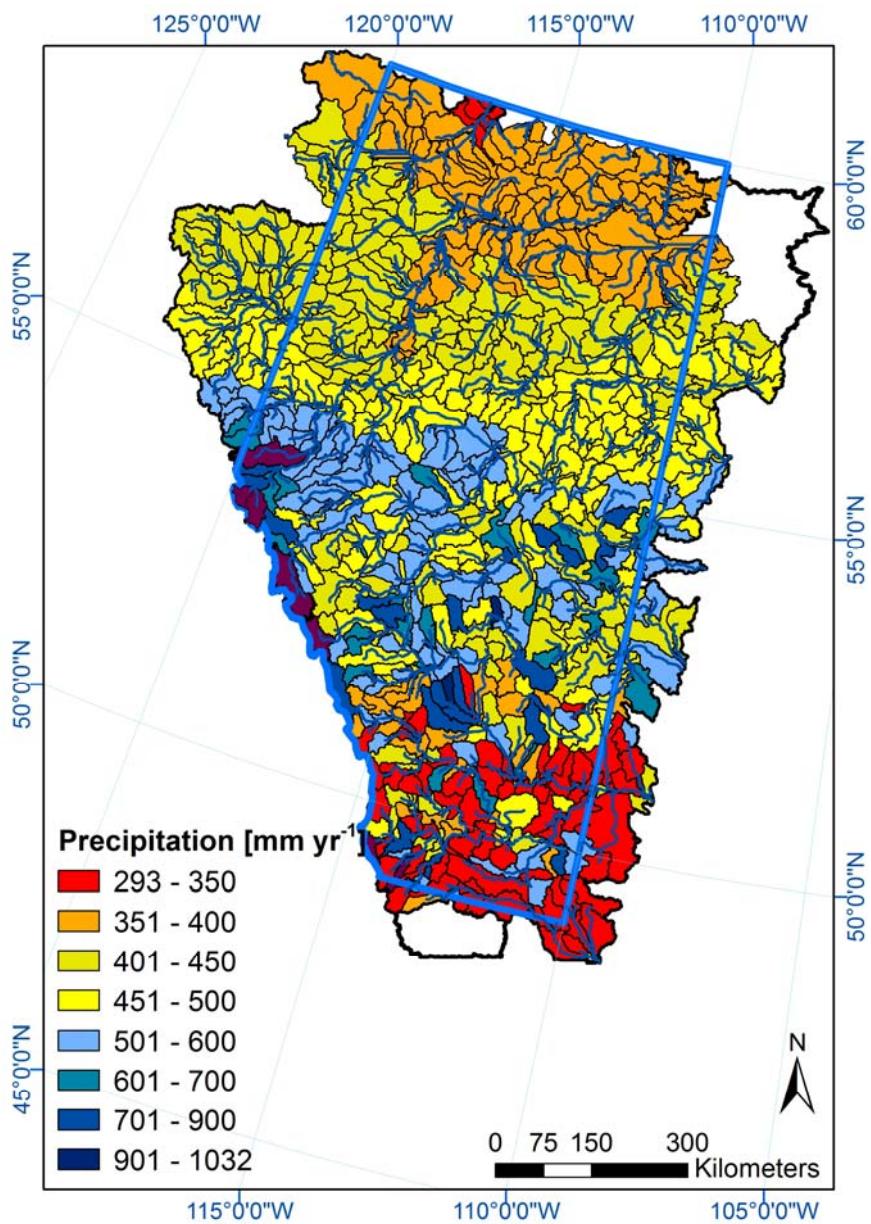


Figure 28. Long term (1985-2006) average distribution of precipitation using CRU gridded climate data.

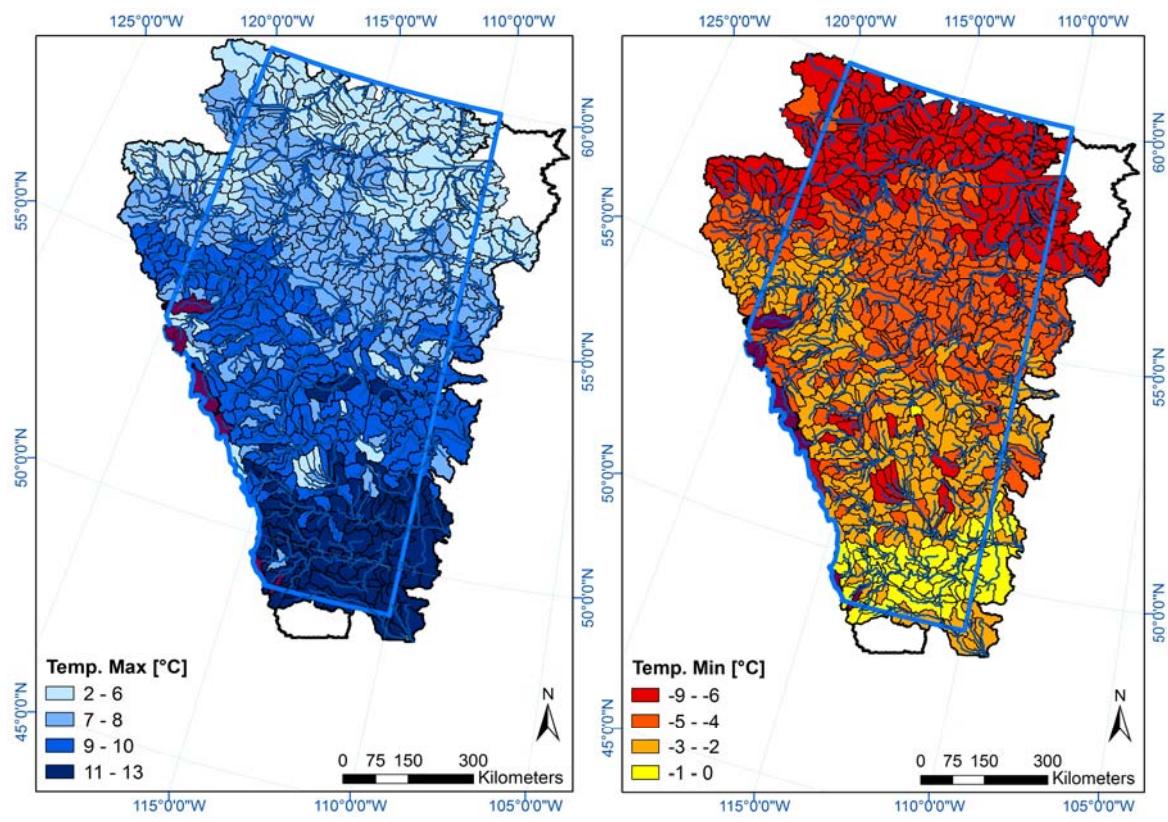


Figure 29. Long term (1985-2006) average distribution of maximum and minimum temperature using CRU gridded climate data.

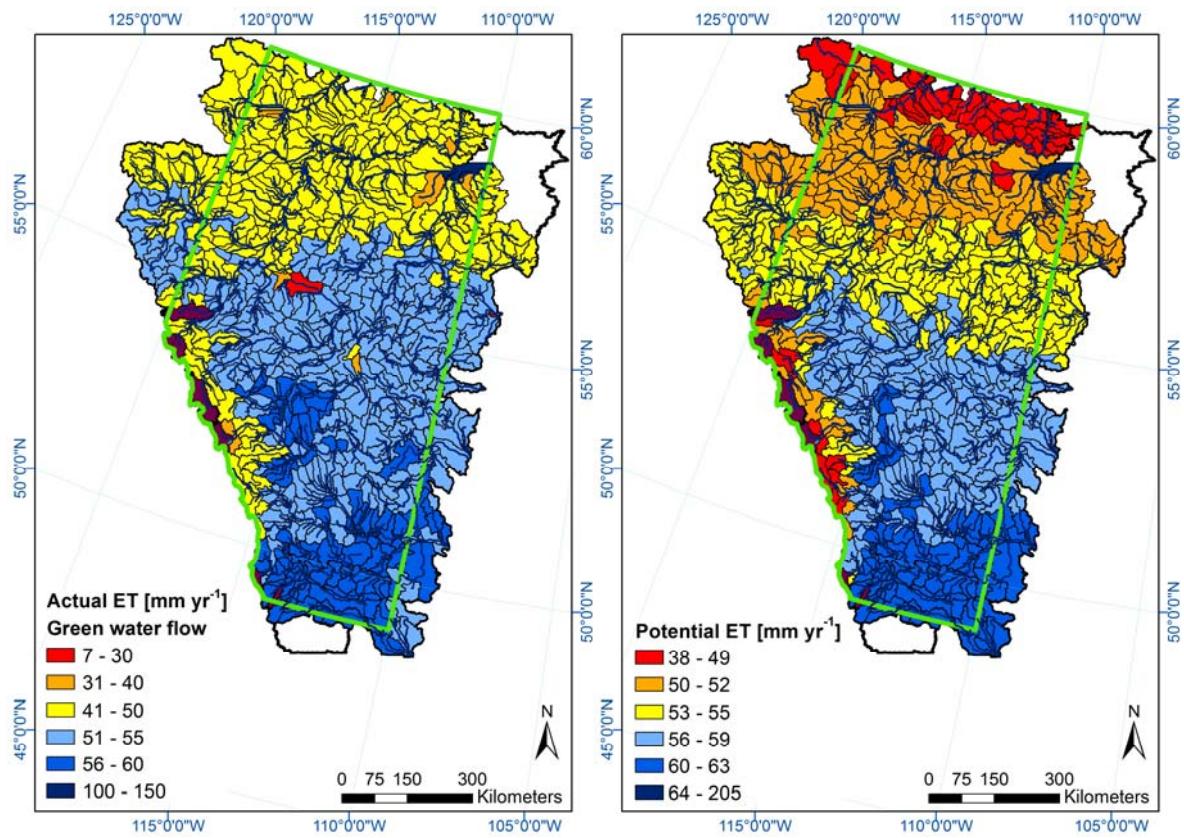


Figure 30. Long term (1985-2006) average distribution of green water flow (actual and potential evapotranspiration) using CRU gridded climate data.

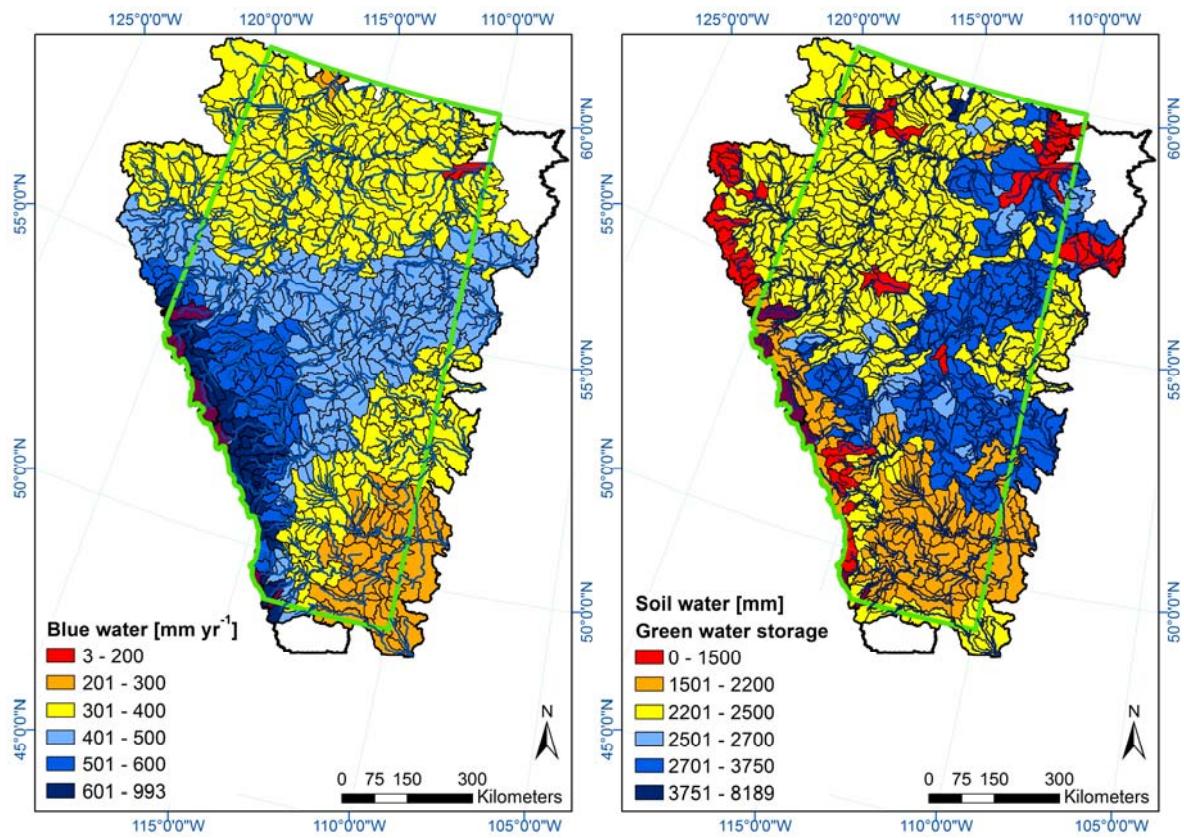


Figure 31. Long term (1985-2006) average distribution of blue water (water yield plus deep aquifer recharge) and green water storage (soil moisture) using CRU gridded climate data.

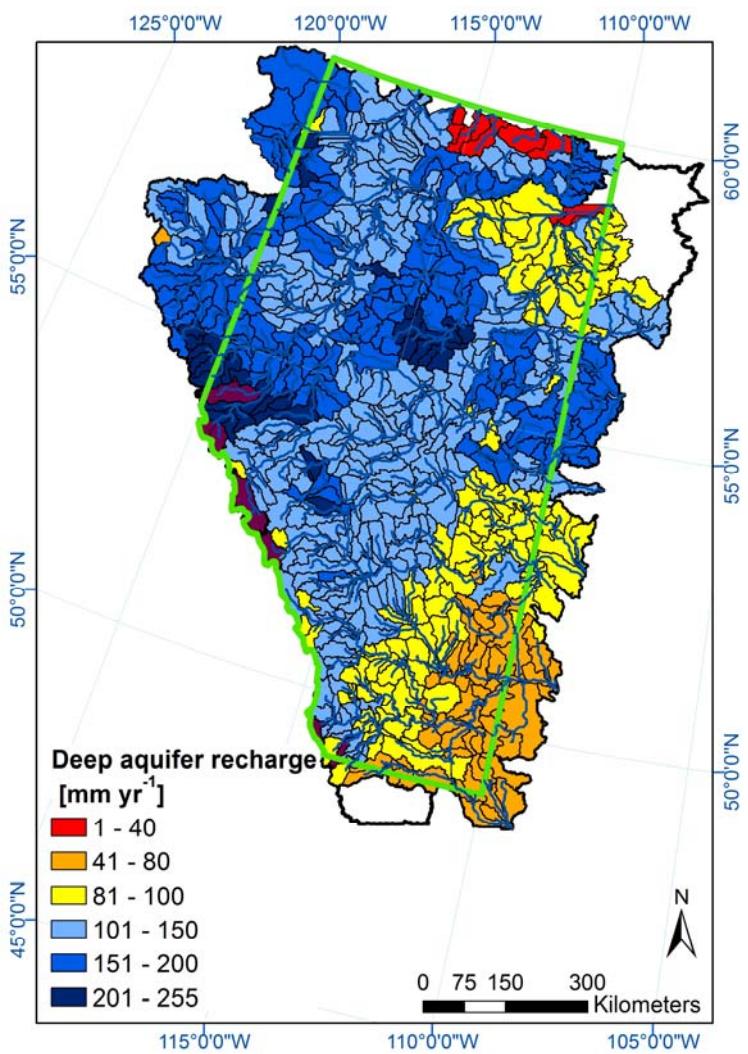


Figure 32. Long term (1985-2006) average distribution of deep aquifer recharge using CRU gridded climate data.

7. Data gap

What we have produced pertains to more or less natural conditions. More data regarding irrigation, cropping structure, water transfer, and dams and reservoirs are needed to produce a more real picture. In the following we identify some data gaps.

1. A precise water use data is needed to draw a more reliable picture of blue water resources availability with smaller uncertainty band. An application of blue water information could be to draw a water scarcity map of Alberta presenting per capita water availability per year. Drawing water scarcity map based only on naturalized blue water resources availability or blue water availability with a high uncertainty band might not present the real scarcity situation in the regions.
2. Calibration of a large-scale distributed hydrologic model against river discharge alone does not provide sufficient confidence for all components of the water balance. We suggest a multi-criteria calibration (Abbaspour et al. 2007) for a better characterization of different components and as a way of dealing with the non-uniqueness problem (narrowing of the prediction uncertainty). For example because of the direct relationship between crop yield and evapotranspiration, we can include yield as an additional target variable in the calibration process in order to improve the simulation of ET, soil moisture, and deep aquifer recharge. We assume that if yield is correct, then actual evapotranspiration and also soil moisture are simulated correctly. This in turn indicates that deep aquifer recharge is correct; hence, increasing our confidence on the calculated blue water, that is the sum of river discharge and deep aquifer recharge.

3. Water transfer between/in different river systems is another source of uncertainty in hydrological model results, as it can change the hydrologic regime from its natural condition. We need this data to use as another input in the model to improve the calibration results.
4. Agricultural management data is required for the reasons explained previously to model major crop yields.
5. Future climate change data are useful to use as input in our calibrated hydrological model to assess the impact of climate change on hydrological components and water resources availability as well as crop yield.

8. Suggestion for project continuation

The next phase of this project could combine the water availability (this project) and water use (the project by Liu et al.) to build a more integrated model of Alberta. Furthermore, a more refined input database could improve model calibration. Such a model could be used for analysis of various water balance component as well as water supply-water demand analysis similar to the study by Faramarzi et al. [2010a, b]. Using the improved calibrated model, climate change scenarios could be run for foreseen future management changes and their impacts on water resources quantified. With the use of a population map, hot spots of water scarcity could be identified.

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Appendix I

Long-term average (1985-2007) hydrological components at subbasin level obtained with M95ppu. The M95PPU is calculated at the 50% level of the cumulative distribution obtained through Latin hypercube sampling.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
1	Hay RB	377.54	4.1	-7.84	334.16	184.91	45.4	47.76	2493.64
2	Hay RB	369.34	4.16	-7.96	326.02	151.94	45.29	49.01	2409.11
3	Hay RB	367.95	4.05	-8.28	324.44	148.21	44.95	48.27	2427.85
4	Hay RB	384.69	5.08	-7.47	340.27	157.89	46.07	49.36	2382.78
5	Hay RB	333.11	4.44	-8.23	290.37	123.09	44.84	48.02	2438.35
6	Hay RB	333.11	4.44	-8.23	290.16	123	45.04	48.01	2438.1
7	Hay RB	339.34	4.5	-7.79	295.67	108.34	45.1	48.12	2402.7
8	N_Hay RB	358.7	3.49	-7.79	316.65	10.38	42.72	45.67	2275.6
9	N_Hay RB	366.14	2.75	-8.21	325.05	11.84	42.06	44.61	2374.67
10	N_Hay RB	358.7	3.49	-7.79	316.39	10.21	42.63	45.32	2272.51
11	Hay RB	339.34	4.5	-7.79	295.1	109.68	45.16	47.63	2402.58
12	Hay RB	333.11	4.44	-8.23	288.75	110.21	44.99	47.95	2411.43
13	N_Hay RB	358.7	3.49	-7.79	316.37	115.28	43.13	46.12	2429.68
14	Hay RB	354.77	5.14	-7.58	310.38	136.57	45.18	48.1	2399.29
15	N_Hay RB	362.3	3.01	-7.8	324.39	10.99	37.77	45.41	2303.77
16	Hay RB	412.06	6.31	-6.13	365.04	177.49	47.35	49.69	2353.65
17	Hay RB	365.57	5.23	-7.6	319.99	140.77	45.76	49.01	2410.04
18	N_Hay RB	366.14	2.75	-8.21	321.04	1.7	43.11	46.08	7801.62
19	Hay RB	371.49	3.62	-8.04	327.18	127.05	44.91	47.25	2433
20	Hay RB	402.93	6.5	-5.86	355.5	172.27	47.36	50.27	2338.61
21	Hay RB	402.93	6.5	-5.86	356.01	81.13	47.02	50.18	1573.03
22	Hay RB	390.94	5.05	-7.06	345.1	166.18	45.93	48.56	2386.28
23	Hay RB	358.71	4.45	-7.82	314.16	123.36	45.04	48.27	2407.72
24	Hay RB	354.77	5.14	-7.58	309.86	139.2	45.38	48.29	2398.84
25	Hay RB	354.77	5.14	-7.58	309.44	126.92	45.75	48.67	2377.47
26	Hay RB	391.15	5.24	-7.11	344.79	138.46	46.1	49	2356.22
27	Hay RB	391.15	5.24	-7.11	345.15	164.23	45.85	49.04	2376.9
28	Hay RB	399.15	6.12	-6.67	359.83	104.05	39.26	49.5	337.26
29	Hay RB	358.71	4.45	-7.82	314.25	122.74	45.09	48.02	2407.64
30	Hay RB	402.93	6.5	-5.86	356.31	95.24	46.68	49.81	1574.85
31	Hay RB	371.49	3.62	-8.04	327.49	143.5	44.66	47.49	2456.08
32	Hay RB	384.69	5.08	-7.47	338.65	132.12	45.95	48.82	2370.03
33	N_Hay RB	392.86	2.2	-8.8	336.77	2.41	41.99	45.01	8189.46
34	Hay RB	365.57	5.23	-7.6	320.27	125.06	45.44	48.13	1138.84
35	Hay RB	412.06	6.31	-6.13	364.94	178.23	47.27	50.26	2353.69
36	Hay RB	402.93	6.5	-5.86	355.34	204.9	47.73	50.92	2388.69
37	Hay RB	399.15	6.12	-6.67	353.13	143.32	46.29	50.11	2338.61
38	Hay RB	372.89	5.1	-7.62	327.38	128.12	45.66	48.85	2358.78
39	Hay RB	404.89	6.38	-6.15	365.15	147.94	39.34	49.68	271.04
40	Hay RB	412.06	6.31	-6.13	364.81	178.57	47.58	50.71	2353.41
41	Hay RB	412.06	6.31	-6.13	365.05	175.78	47.29	50.48	2353.6
42	Hay RB	393.16	5.87	-7.04	354.21	96.86	38.76	49.49	409.33
43	Peace RB	364.96	3.71	-7.32	322.31	104.62	43.68	46.54	3447.99

44	Hay RB	392.9	5.42	-7.52	347.43	141.59	45.48	48.09	1142.55
45	N_Hay RB	358.35	3.44	-7.39	317.13	10.71	42.38	45.73	2300.37
46	Hay RB	404.89	6.38	-6.15	365.32	123.69	39.22	49.07	251.38

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
47	Hay RB	399.15	6.12	-6.67	360.19	104.62	39.05	49.64	350.19
48	Hay RB	393.16	5.87	-7.04	347.01	139.19	46.62	49.48	1111.6
49	N_Hay RB	353.84	3.41	-7.32	310.64	10.99	43.08	46.51	2298.13
50	Hay RB	412.06	6.31	-6.13	364.66	179.84	47.77	50.06	2353.37
51	Hay RB	388.85	5.23	-7.45	343.08	141.61	45.75	48.97	2374.42
52	Hay RB	399.15	6.12	-6.67	352.75	142.35	46.86	49.8	1104.85
53	Hay RB	412.65	6.08	-6.86	365.85	148.04	46.85	49.94	1104.5
54	N_Hay RB	361.89	3.76	-7.33	318.83	11.25	43.78	47	2818.53
55	Hay RB	412.65	6.08	-6.86	365.59	135.51	47	49.28	2366.81
56	Hay RB	393.16	5.87	-7.04	346.79	141.3	46.81	49.83	1111.43
57	Peace RB	364.96	3.71	-7.32	322.33	152.18	43.7	46.96	1119.9
58	Peace RB	360.54	3.43	-7.23	317.93	175.33	44.27	47.5	1204.23
59	Hay RB	412.06	6.31	-6.13	364.3	178.43	48.04	51.4	2353.19
60	Peace RB	394.08	2.59	-8.29	351.56	146.9	42.68	45.97	2542.64
61	Peace RB	368.1	4.14	-6.97	325.8	129.76	43.3	46.31	2395.27
62	Peace RB	360.54	3.43	-7.23	317.85	175.57	44.31	47.33	1204.6
63	Peace RB	364.96	3.71	-7.32	322	146.93	43.75	47.29	2431.28
64	Hay RB	415.38	6.29	-6.36	367.65	176.18	47.86	50.71	2361.12
65	Hay RB	412.06	6.31	-6.13	364.43	206.27	48.22	51.39	2404.29
66	Peace RB	367.93	4.08	-6.83	325.07	181.93	44.85	48.61	1168.75
67	Athabasca RB	368.38	2.77	-7.56	325.59	109.17	43.84	47.4	1458.77
68	Peace RB	368.91	4.33	-6.88	325.93	186.99	45.15	47.95	2484.56
69	Hay RB	412.06	6.31	-6.13	364.29	179.36	48.17	51.42	2353.15
70	Peace RB	389.84	4.01	-7.05	344.91	151.95	45.82	49.08	2414.15
71	Peace RB	392.52	2.33	-8.56	349.97	148.23	42.39	45.3	2527.35
72	Peace RB	366.44	4.37	-6.83	323.3	149.27	44.48	47.46	2411.63
73	Peace RB	368.41	4.36	-6.95	325.8	149.71	44.43	47.45	2412.02
74	Peace RB	368.41	4.36	-6.95	325.9	184.64	44.59	47.52	2479.85
75	Peace RB	366.44	4.37	-6.83	323.2	148.87	44.57	48	2411.55
76	Peace RB	367.93	4.08	-6.83	331.72	115.67	37.46	47.97	498.46
77	Peace RB	375.85	3.64	-7.04	333.07	184.8	44.79	47.75	1205.41
78	Peace RB	379.25	5.07	-7.12	333.87	139.17	45.85	49.24	1128.67
79	Peace RB	388.85	5.23	-7.45	342.98	140.57	45.8	48.89	1139.26
80	Peace RB	383.16	6.2	-6.1	336.15	134.43	47.28	50.34	2312.26
81	Peace RB	383.16	6.2	-6.1	336.1	139.74	47.38	50.25	2308.86
82	Peace RB	367.93	4.08	-6.83	331.56	136.08	37.59	48.05	542.48
83	Peace RB	406.59	6.07	-7.05	360.25	139.42	46.29	49.35	2368.83
84	Peace RB	375.85	3.64	-7.04	332.87	183.13	44.85	47.99	1205.21
85	Peace RB	367.93	4.08	-6.83	331.42	137.53	37.63	48.57	542.47
86	Hay RB	411.2	6.08	-6.99	364	140.03	47.24	50.31	2370.98
87	Peace RB	368.91	4.33	-6.88	332.98	140.28	37.52	48.48	524.74
88	Peace RB	382.73	4.01	-7.19	338.26	155.47	45.71	48.9	2428.23
89	Peace RB	376.69	6.24	-5.01	330.47	128.07	47.34	50.29	2322.14
90	Peace RB	382.73	4.01	-7.19	338.24	172.65	45.74	48.7	2434.65
91	Peace RB	383.16	6.2	-6.1	336.22	130.4	47.25	50.45	2343.15

92	Peace RB	376.69	6.24	-5.01	330.69	127.53	47.29	50.17	2322.16
93	Peace RB	376.69	6.24	-5.01	330.75	125.78	47.3	50.23	2320.92
94	Peace RB	382.73	4.01	-7.19	338.87	136.76	45.17	48.12	2392.13

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
95	Peace RB	367.93	4.08	-6.83	324.92	180.8	45.13	48.19	1168.12
96	Peace RB	376.08	4.79	-6.37	330.69	151.63	45.91	49.34	2397.11
97	Peace RB	376.69	6.24	-5.01	330.6	129.15	47.35	50.25	2322.13
98	Peace RB	376.08	4.79	-6.37	331.09	188.08	46.07	49.08	2450.7
99	Peace RB	389.84	4.01	-7.05	345.66	187.41	45.45	48.82	2486.86
100	Peace RB	373.32	5.14	-6.29	328.66	161.74	46.06	49.44	1755.32
101	Peace RB	376.08	4.79	-6.37	330.5	135.84	45.97	48.99	2379.41
102	Peace RB	376.08	4.79	-6.37	330.48	138.18	45.93	48.82	1740.71
103	Peace RB	412.65	6.08	-6.86	365.5	172.5	47.29	50.25	2371.52
104	Peace RB	373	4.27	-7.05	329.95	191.6	44.58	47.78	2481.45
105	Peace RB	414.71	6.12	-6.89	367.75	174.17	47.26	50.56	2364.28
106	Peace RB	376.69	6.24	-5.01	332.23	124.71	45.72	50.63	2317.04
107	Peace RB	393.02	3.62	-7.45	350.06	130.27	43.39	46.35	2427.67
108	Peace RB	415.69	5.59	-7.11	368.74	171.45	47.37	50.25	2373.28
109	Peace RB	376.78	4.65	-6.49	332.4	184.8	45.71	48.98	1137.65
110	Peace RB	376.69	6.24	-5.01	330.14	140.67	47.8	51.17	2308.73
111	Peace RB	375.74	6.21	-5.07	329.9	130.78	47.08	50.02	2321.2
112	Peace RB	393.02	3.62	-7.45	349.29	175.16	44.42	47.35	2476.32
113	Peace RB	375.74	6.21	-5.07	329.81	129.86	47.14	50.28	2321.17
114	Peace RB	376.69	6.24	-5.01	330.46	140.51	47.5	50.41	2308.89
115	Peace RB	375.74	6.21	-5.07	329.9	129.59	47.13	50.07	2321.16
116	Peace RB	422.15	5.97	-6.38	373.9	151.85	48.63	51.57	2388.81
117	Peace RB	422.15	5.97	-6.38	374.49	139.27	48.25	51.32	2350
118	Peace RB	377.54	6.16	-5.15	331.39	145.66	46.93	49.98	2305.74
119	Peace RB	376.69	6.24	-5.01	330.56	139.3	47.44	50.36	2308.91
120	Peace RB	373.98	6.26	-5.26	328.15	127.67	46.49	50.86	2298.73
121	Peace RB	406.59	6.07	-7.05	360.02	143	46.55	49.48	2368.55
122	Peace RB	376.69	6.24	-5.01	330.31	140.69	47.69	50.69	2308.8
123	Peace RB	435.07	5.94	-6.05	386.28	155.98	49.25	52.28	1381.54
124	Peace RB	422.15	5.97	-6.38	373.18	138.98	49.57	52.65	1353.98
125	Peace RB	383.16	6.2	-6.1	336.18	147.64	47.49	50.58	2308.73
126	Peace RB	420.19	5.31	-7.05	372.46	138.64	47.4	50.62	2364.4
127	Peace RB	397.79	6.85	-6.3	351.25	144.7	46.95	49.97	2308.17
128	Peace RB	422.15	5.97	-6.38	374.23	207.75	48.25	51.2	2417.2
129	Athabasca RB	381.59	4.45	-6.45	337.66	88.19	46.01	49.66	3641.77
130	Peace RB	420.25	6.32	-6.96	372.68	148.31	47.63	50.18	2369.42
131	Peace RB	397.79	6.85	-6.3	351.33	143.57	46.86	49.89	2308.17
132	Peace RB	397.79	6.85	-6.3	351.16	134.7	46.94	49.96	2331.74
133	Athabasca RB	376.02	4.55	-6.43	3.15	1.65	130.42	188.84	0.13
134	Peace RB	435.07	5.94	-6.05	386.8	136.12	48.91	51.15	2374.12
135	Peace RB	435.07	5.94	-6.05	386.41	155.42	49.21	52.29	1381.4
136	Athabasca RB	373.64	6.17	-5.22	328.15	93.48	46.83	49.99	3017.71
137	Peace RB	375.74	6.21	-5.07	329.36	169.85	47.77	50.38	2303.6
138	Athabasca RB	375.51	5.08	-6.58	329.77	94.33	46.05	49.29	3087.57

139	Athabasca RB	376.78	4.65	-6.49	352.87	119.34	7.77	48.48	53.92
140	Athabasca RB	379.76	5.98	-5.51	333.53	79.79	46.74	49.69	3004.81
141	Athabasca RB	379.76	5.98	-5.51	333.51	80.4	46.74	49.4	3004.81

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
142	Athabasca RB	375.95	5.02	-6.47	2.97	1.47	131.5	190.01	5.41
143	Peace RB	397.79	6.85	-6.3	350.79	134.15	47	49.38	2331.67
144	Athabasca RB	376.02	4.55	-6.43	2.92	1.41	130.66	189.22	0.13
145	Peace RB	422.15	5.97	-6.38	374.64	175.63	48.03	50.57	2359.05
146	Peace RB	414.71	6.12	-6.89	366.66	171.21	47.88	51.13	2363.86
147	Athabasca RB	387.21	5.64	-5.96	339.94	83.05	47.04	50.38	3017.97
148	Peace RB	385.79	6.68	-5.79	337.81	132.74	48.43	51.03	2314.12
149	Athabasca RB	376.02	4.55	-6.43	2.62	1.27	130.72	189.32	0.13
150	Athabasca RB	387.21	5.64	-5.96	340.9	82.95	46.63	48.98	2210
151	Athabasca RB	396.53	5.22	-6.5	350.69	97.12	45.46	48.24	3086.99
152	Athabasca RB	379.76	5.98	-5.51	333.43	94.28	46.69	49.44	3026.46
153	Peace RB	421.4	5.75	-6.93	372.97	172.29	47.93	50.59	2377.5
154	Athabasca RB	373.64	6.17	-5.22	327.01	81.8	47.07	50.5	2991.88
155	Peace RB	375.74	6.21	-5.07	328.74	144.56	47.66	50.3	2308.73
156	Athabasca RB	395.6	6.07	-5.4	348.79	105.07	47.15	50.38	3026.54
157	Peace RB	385.79	6.68	-5.79	338.02	139.84	48.21	50.88	2299.45
158	Athabasca RB	381.59	4.45	-6.45	336.9	94.68	46.17	49.19	3738.59
159	Peace RB	394.67	6.26	-5.14	347.56	172.72	47.54	50.11	2309.6
160	Peace RB	422.15	5.97	-6.38	373.63	139.17	48.42	51.5	2370.83
161	Peace RB	422.15	5.97	-6.38	373.72	140.17	48.4	51.51	2349.87
162	Peace RB	435.07	5.94	-6.05	385.81	162.73	49.23	52.42	1382.77
163	Athabasca RB	391.5	5.1	-6.29	2.6	1.23	131.88	191.12	5.78
164	Athabasca RB	391.5	5.1	-6.29	357.78	106.35	35.06	49.02	415.85
165	Peace RB	435.07	5.94	-6.05	386.6	150.16	48.55	51.34	2390.34
166	Peace RB	394.67	6.26	-5.14	347.8	175.77	47.3	50.58	2309.26
167	Peace RB	422.15	5.97	-6.38	373.83	175.21	48.59	51.65	2360.07
168	Peace RB	435.07	5.94	-6.05	386.67	150.06	48.58	51.82	2390.16
169	Peace RB	435.07	5.94	-6.05	386.56	150.32	48.71	51.8	2368.41
170	Athabasca RB	391.5	5.1	-6.29	345.97	95.97	46.88	49.98	3702.9
171	Peace RB	435.07	5.94	-6.05	385.9	148.27	49.46	52.1	1379.57
172	Athabasca RB	396.53	5.22	-6.5	349.25	86.56	46.85	49.95	2518.88
173	Peace RB	435.07	5.94	-6.05	387.1	139.12	48.54	51.1	2374.51
174	Peace RB	435.07	5.94	-6.05	387.34	135.24	48.36	51.39	2396.58
175	Athabasca RB	392.16	5.38	-6.25	357.17	105.95	34.81	49.81	385.1
176	Peace RB	414.81	5.96	-6.91	368.82	149.31	46.06	48.86	2378.56
177	Peace RB	414.81	5.96	-6.91	368.84	148.87	46.03	49.09	2378.59
178	Peace RB	393.1	6.32	-5.12	345.24	178.26	48.48	51.68	2318.37
179	Peace RB	426.92	5.84	-6.73	378.43	147.84	48.47	51.65	2383.56
180	Athabasca RB	401.78	4.76	-6.43	355.54	87.4	46.64	49.73	2653.76
181	Peace RB	394.02	7.04	-5.57	346.93	135.94	48.11	50.66	2355.05
182	Athabasca RB	395.6	6.07	-5.4	349.31	134.54	47.54	50.58	3057.51
183	Peace RB	441.91	7.48	-4.56	392.15	145.18	49.76	52.55	2344.51
184	Peace RB	435.07	5.94	-6.05	387.22	141.16	48.53	51.63	2374.29
185	Peace RB	408.17	5.25	-6.16	361.48	161.94	47.64	50.69	2361.59

186	Peace RB	397.79	6.85	-6.3	350.84	134.79	47.45	50.55	2370.08
187	Peace RB	397.41	5.56	-6.17	350.23	139.06	47.84	50.81	2338.79
188	Peace RB	426.92	5.84	-6.73	378.37	149.49	48.68	51.66	2383.37

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
189	Peace RB	441.91	7.48	-4.56	390.96	78.59	51.29	54.27	2329.66
190	Peace RB	394.67	6.26	-5.14	348.01	177.07	47.79	50.63	2309.12
191	Peace RB	408.17	5.25	-6.16	361.64	139.24	47.36	50.63	2346.53
192	Peace RB	394.67	6.26	-5.14	348.17	187.65	47.84	50.88	2343.59
193	Peace RB	435.07	5.94	-6.05	387.38	183.64	48.31	51.65	2368.95
194	Peace RB	435.07	5.94	-6.05	387.33	151.76	48.5	51.73	2368.44
195	Peace RB	394.96	7.3	-5.91	349.25	133.72	46.28	50.86	2307.21
196	Peace RB	408.12	6.56	-6.51	361.57	149.15	47.56	50.62	2354.49
197	Athabasca RB	395.73	5.22	-6.62	361.3	82.73	34.87	49.75	396.37
198	Athabasca RB	401.78	4.76	-6.43	355.25	85.4	47.09	49.79	2646.27
199	Peace RB	435.07	5.94	-6.05	387.67	139.45	48.26	50.78	2374.5
200	Peace RB	441.91	7.48	-4.56	392.12	157.61	49.82	52.83	2315.37
201	Athabasca RB	401.78	4.76	-6.43	355.17	86.68	46.99	50.2	2647.26
202	Peace RB	465.47	7.61	-4.21	415.82	160.29	50.19	52.8	1361.99
203	Peace RB	414.81	5.96	-6.91	368.95	152.41	46.16	49.33	2378.44
204	Peace RB	408.12	6.56	-6.51	363.47	128.63	45.7	50.58	2381.16
205	Athabasca RB	392.16	5.38	-6.25	345.66	98.7	47.19	50.23	3693.37
206	Peace RB	441.91	7.48	-4.56	391.81	157.76	50.13	52.72	1333.15
207	Peace RB	441.91	7.48	-4.56	392.17	159.62	49.83	53.08	1333.21
208	Peace RB	441.91	7.48	-4.56	392.09	153.63	49.88	53.08	2315.32
209	Peace RB	441.91	7.48	-4.56	392.03	160.14	50.05	53.19	1333.19
210	Peace RB	441.91	7.48	-4.56	392.16	143.4	49.95	53.15	2344.39
211	Peace RB	408.14	6.38	-5.61	360.29	149.18	48.61	51.7	2318.97
212	Athabasca RB	424.41	4.81	-6.8	378.81	137.1	46.26	49.38	3149.2
213	Peace RB	404.44	7.1	-5.44	358.69	128.41	46.63	51.62	2358.46
214	Peace RB	441.91	7.48	-4.56	392.01	144.7	50.03	53.04	2344.49
215	Peace RB	441.91	7.48	-4.56	392.11	156.64	49.84	52.92	2315.35
216	Athabasca RB	401.78	4.76	-6.43	355.24	89.84	47.09	50.32	2645.7
217	Peace RB	417.78	6.62	-5.61	369.96	155.82	48.35	50.95	2338.21
218	Peace RB	441.91	7.48	-4.56	391.38	133.55	50.74	53.79	2314.97
219	Peace RB	441.91	7.48	-4.56	392.07	150.89	49.91	52.89	2315.3
220	Peace RB	394.96	7.3	-5.91	347.43	134.22	48.05	51.13	2366.44
221	Peace RB	404.44	7.1	-5.44	355.91	134.99	49.41	52.42	2364.49
222	Peace RB	391.35	7.68	-5.09	343.07	140.79	48.91	51.93	2301.73
223	Peace RB	411.48	5.54	-5.98	363.76	161.63	47.91	50.92	2357.24
224	Peace RB	441.91	7.48	-4.56	392.24	152.18	49.86	52.88	2315.32
225	Peace RB	435.07	5.94	-6.05	387.17	138.55	48.81	51.87	2353.52
226	Peace RB	426.92	5.84	-6.73	378.99	136.06	48.24	51.25	2404.36
227	Peace RB	441.91	7.48	-4.56	392.4	142.64	49.75	52.72	2364.04
228	Peace RB	410.21	6.97	-5.41	363.44	214.98	48.26	51.4	2366.47
229	Athabasca RB	392.16	5.38	-6.25	345.84	99.99	46.98	50.62	3694.03
230	Peace RB	402.78	6.92	-4.71	355.14	157.91	48.29	50.87	2316.9
231	Peace RB	465.47	7.61	-4.21	416.57	161.45	49.54	52.6	2356.18
232	Peace RB	441.91	7.48	-4.56	392.07	143.32	50.07	53.26	2344.36

233	Peace RB	441.91	7.48	-4.56	392.02	148.31	49.88	52.98	2314.04
234	Peace RB	425.21	5.92	-5.55	377.19	167.5	48.39	51.52	2337.07
235	Athabasca RB	413.83	5.86	-6.15	366.15	100.28	48.83	51.92	3707.56

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
236	Peace RB	391.35	7.68	-5.09	343.03	147.52	49.14	51.68	2301.67
237	Athabasca RB	429.25	4.9	-6.56	383.19	92.58	47.03	50.15	2728.87
238	Peace RB	410.37	6.75	-4.76	362.29	186.49	48.52	51.07	2309.99
239	Peace RB	410.37	6.75	-4.76	362.43	211.76	48.47	51.67	2339.36
240	Peace RB	441.91	7.48	-4.56	392.24	146.26	49.81	53.38	2325.38
241	Peace RB	441.91	7.48	-4.56	392.23	148.4	49.88	53	2314.05
242	Athabasca RB	416.74	5.5	-6.25	368.28	89.36	48.82	51.95	2243.42
243	Peace RB	441.91	7.48	-4.56	392.66	144.27	49.47	52.03	2309.56
244	Peace RB	441.91	7.48	-4.56	392.12	150.66	49.91	52.98	2311.88
245	Peace RB	441.91	7.48	-4.56	392.41	142.41	49.66	52.74	2364.01
246	Peace RB	441.91	7.48	-4.56	392.17	151.26	49.88	52.97	2311.9
247	Peace RB	391.35	7.68	-5.09	342.78	141.54	49.22	52.31	2301.62
248	Athabasca RB	413.83	5.86	-6.15	366.13	99.78	48.88	51.87	3707.55
249	Athabasca RB	416.74	5.5	-6.25	368.73	89.58	48.33	50.91	2243.63
250	Peace RB	420.17	7.32	-4.47	371.03	154.69	49.46	52.02	2311.32
251	Peace RB	417.78	6.62	-5.61	369.23	143.53	48.89	52.02	2326.62
252	Athabasca RB	429.25	4.9	-6.56	383.07	94.67	47.11	50.26	2727.66
253	Peace RB	429.72	6.74	-5.15	381.89	155.84	48.5	51.07	2320.67
254	Peace RB	391.35	7.68	-5.09	342.63	144.84	49.45	52.57	2301.55
255	Peace RB	404.44	7.1	-5.44	355.82	134.38	49.45	52.43	2364.49
256	Peace RB	465.47	7.61	-4.21	416.24	157.74	49.87	52.87	2356.65
257	Peace RB	465.47	7.61	-4.21	415.39	176.62	50.69	53.92	1362.81
258	Peace RB	465.47	7.61	-4.21	416.84	151.24	49.42	52.62	2394.34
259	Peace RB	409.18	7.39	-4.1	359.99	140.12	49.95	53.05	2348.92
260	Athabasca RB	414.29	5.61	-6.55	365.75	86.58	48.41	51.53	2512.8
261	Peace RB	410.21	6.97	-5.41	363.12	144.39	48.46	51	2321.71
262	Peace RB	424.7	6.58	-5.51	376.17	158.91	49.1	52.2	2336.77
263	Peace RB	421.07	7.44	-4.95	371.3	139.73	50.04	53.08	2354.09
264	Athabasca RB	441.91	5.82	-6.38	392.85	98.02	48.4	51.54	2510.84
265	Peace RB	445.53	7.14	-4.93	397.37	157.2	48.63	51.26	2329.02
266	Athabasca RB	429.25	4.9	-6.56	382.99	87.83	47.2	50.44	2734.34
267	Peace RB	445.95	7.42	-3.96	396.71	149	49.53	52.07	2361.63
268	Athabasca RB	438	6.22	-6.04	389.35	92.54	49.27	52.52	2221.17
269	Athabasca RB	422.46	6.67	-5.93	372.83	89.17	49.66	52.3	2484.47
270	Athabasca RB	422.46	6.67	-5.93	373.27	88.61	49.52	52.15	2200.68
271	Athabasca RB	422.46	6.67	-5.93	373.17	87.57	49.62	52.27	2200.66
272	Peace RB	495.41	8.43	-3.73	445.58	175.24	49.93	52.56	2384.64
273	Peace RB	495.41	8.43	-3.73	444.75	172.21	50.85	54.12	1382.14
274	Peace RB	440.06	6.44	-5.06	390.33	171.48	49.97	53.19	2334.31
275	Peace RB	437.53	5.32	-6.18	390.21	166.8	47.92	51.08	2385.33
276	Athabasca RB	441.91	5.82	-6.38	394.39	104.48	48	51.19	3068.96
277	Peace RB	398.23	7.78	-4.29	349.12	139.5	49.79	52.44	2353.84
278	Peace RB	465.47	7.61	-4.21	416.25	154.18	49.92	52.97	2356.43
279	Athabasca RB	422.46	6.67	-5.93	373.3	87.55	49.53	52.71	2200.66

280	Peace RB	398.23	7.78	-4.29	348.8	137.76	50.13	52.94	2354.27
281	Athabasca RB	422.46	6.67	-5.93	373.24	88.83	49.61	52.7	2200.7
282	Peace RB	465.47	7.61	-4.21	417	151.01	49.28	51.88	2389.67

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
283	Peace RB	420.17	7.32	-4.47	371.01	195.98	49.62	52.97	2319.16
284	Athabasca RB	429.25	4.9	-6.56	382.58	89.5	47.47	50.89	2726.4
285	Peace RB	420.17	7.32	-4.47	370.7	193.05	49.86	52.39	2321.34
286	Peace RB	429.72	6.74	-5.15	381.39	154.35	48.76	52.02	2320.58
287	Peace RB	420.17	7.32	-4.47	370.85	193.53	49.88	52.99	2321.33
288	Peace RB	438.89	7.9	-3.19	391.12	138.53	48.52	53.66	2301.79
289	Peace RB	398.23	7.78	-4.29	349.03	142.65	50.07	53.12	2304.88
290	Peace RB	465.47	7.61	-4.21	416.43	153.39	49.84	52.85	2394.41
291	Peace RB	438.89	7.9	-3.19	389.43	136.41	50.23	53.37	2343.06
292	Peace RB	420.88	7.33	-4.42	374.21	137.3	47.7	52.63	2344.84
293	Peace RB	398.23	7.78	-4.29	349.09	139.32	49.88	52.97	2353.79
294	Peace RB	448.24	7.45	-4.46	398.07	162.35	50.13	53.19	2318.76
295	Peace RB	448.24	7.45	-4.46	398.47	207.41	49.95	53.3	2326.29
296	Peace RB	438.89	7.9	-3.19	390.45	138.76	49.14	54.37	2339.88
297	Peace RB	445.95	7.42	-3.96	396.71	149.36	49.63	52.72	2361.55
298	Peace RB	433.33	6.57	-4.99	383.15	155.6	50.09	53.27	2318.56
299	Peace RB	495.41	8.43	-3.73	445.18	176.08	50.34	53.46	2384.39
300	Athabasca RB	455.08	5.11	-6.51	408.12	97.63	48.42	51.72	2771.81
301	Peace RB	435.58	6.52	-5.26	385.43	188.34	50.02	52.7	2319.5
302	Peace RB	465.47	7.61	-4.21	416.2	152.42	50.13	53.2	2394.19
303	Peace RB	495.41	8.43	-3.73	444.58	173.46	51.18	54.39	1382.01
304	Athabasca RB	422.46	6.67	-5.93	373.21	90.26	49.77	53.01	2200.61
305	Peace RB	449.91	8.28	-2.99	402.98	143.41	48.18	53.16	2337.97
306	Peace RB	430.3	7.2	-3.78	383.26	136.11	47.72	53.14	2346.96
307	Peace RB	449.91	8.28	-2.99	401.07	142.58	50.08	53.18	2343.06
308	Athabasca RB	438	6.22	-6.04	389.27	90.87	49.44	52.6	2221.06
309	Peace RB	448.97	7.46	-4.65	398.88	160.97	50.38	52.98	2323.5
310	Peace RB	449.91	8.28	-2.99	402.92	139.98	48.18	53.69	2337.9
311	Peace RB	409.18	7.39	-4.1	362.29	132.72	47.77	53.16	2342.41
312	Peace RB	398.23	7.78	-4.29	350.56	130.95	48.61	53.37	2346.73
313	Peace RB	465.47	7.61	-4.21	416.19	159.93	50.25	53.3	2394.01
314	Athabasca RB	442.83	5.53	-6.4	394.45	140.76	48.82	52.1	3121.08
315	Athabasca RB	444.68	6.55	-5.49	394.64	114.39	49.94	53.03	3027.24
316	Athabasca RB	450.96	6.61	-5.66	401.02	148.33	50.12	52.85	3066.1
317	Peace RB	426.37	7.22	-4.84	377.99	161.29	49.11	52.04	2334.03
318	Peace RB	434.11	8.06	-3.79	387.19	142.18	47.86	53.35	2310.33
319	Peace RB	495.41	8.43	-3.73	445.03	181.27	50.58	53.72	2385.29
320	Peace RB	449.91	8.28	-2.99	402.85	142.55	48.3	53.91	2337.93
321	Peace RB	438.89	7.9	-3.19	388.44	144.21	51.3	54.44	2361.63
322	Peace RB	495.41	8.43	-3.73	444.02	185.3	51.74	54.88	1382.73
323	Peace RB	495.41	8.43	-3.73	445.13	179.56	50.35	53.63	2385.31
324	Peace RB	433.33	6.57	-4.99	383.06	195.56	50.44	53.65	2321.42
325	Peace RB	452.88	7.6	-4.33	403.57	158.24	49.65	52.88	2327.84
326	Athabasca RB	454.41	6.87	-5.3	404.16	97.94	50.22	53.4	2205.84

327	Athabasca RB	452.8	6.33	-5.66	403.8	148.22	49.95	52.67	3070.98
328	Peace RB	495.41	8.43	-3.73	444.9	182.44	50.72	53.6	2385.31
329	Athabasca RB	454.41	6.87	-5.3	404.16	93.42	50.19	53.46	2205.74

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
330	Athabasca RB	454.85	6.71	-5.6	404.61	95.82	50.11	52.81	2202.35
331	Peace RB	434.11	8.06	-3.79	387.26	143.2	47.9	52.9	2343.61
332	Athabasca RB	455.08	5.11	-6.51	407.94	143.2	48.17	51.57	879.87
333	Athabasca RB	455.08	5.11	-6.51	407.8	142.38	48.27	51.43	879.81
334	Athabasca RB	454.41	6.87	-5.3	403.99	139.93	50.38	53.29	3064.08
335	Athabasca RB	454.41	6.87	-5.3	404.37	101.25	50.07	53.07	3029.65
336	Peace RB	453.56	6.84	-5	403.48	206.58	50.63	53.54	2322.6
337	Peace RB	427.42	8.57	-3.33	376.87	159.75	50.98	54.28	2303.53
338	Peace RB	444.48	7.18	-4.37	393.81	202.64	51	54.39	2318.37
339	Peace RB	449.91	8.28	-2.99	399.89	149.02	51.13	54.46	2360.49
340	Athabasca RB	455.08	5.11	-6.51	407.8	139.76	48.33	51.7	879.49
341	Peace RB	444.48	7.18	-4.37	393.78	202.49	50.93	54.06	2318.38
342	Athabasca RB	488.21	5.93	-6.16	438.12	152.18	50.37	53.78	3104.33
343	Peace RB	440.06	6.44	-5.06	389.99	177.48	50.55	53.5	2334.06
344	Athabasca RB	455.08	5.11	-6.51	407.64	137.44	48.36	51.79	878.69
345	Athabasca RB	455.08	5.11	-6.51	407.79	143.95	48.36	51.5	879.73
346	Athabasca RB	448.36	5.98	-5.75	399.67	96.55	49.7	52.68	2219.79
347	Peace RB	554.28	8.48	-3.7	503.45	217.05	50.81	53.53	1407.22
348	Athabasca RB	454.41	6.87	-5.3	403.66	145	50.55	53.99	3064.04
349	Athabasca RB	452.8	6.33	-5.66	402.86	109.52	49.93	52.82	3035.33
350	Athabasca RB	452.8	6.33	-5.66	403.51	140.8	50.12	52.81	3070.88
351	Peace RB	449.91	8.28	-2.99	399.95	158.34	50.97	53.78	2307.48
352	Athabasca RB	455.08	5.11	-6.51	407.66	144.13	48.36	51.72	879.7
353	Peace RB	427.42	8.57	-3.33	376.48	157.16	51.41	54.28	2303.36
354	Peace RB	470.82	7.58	-4.59	420.67	166.14	50.2	53.32	2330.1
355	Athabasca RB	448.36	5.98	-5.75	400.19	146.79	49.26	52.69	784.74
356	Peace RB	427.42	8.57	-3.33	376.85	144.44	51.08	54.01	2342.49
357	Peace RB	452.97	7.16	-4.4	402.2	209.61	51.29	54.42	2324.88
358	Peace RB	477.34	8.6	-3.68	425.83	161.62	52.12	55.54	2360.04
359	Peace RB	554.28	8.48	-3.7	501.74	216.47	52.49	55.81	1406.83
360	Peace RB	444.48	7.18	-4.37	393.72	203.54	51.05	54.72	2318.35
361	Peace RB	479.2	7.77	-4.52	429.13	170.35	50.63	53.97	2329.1
362	Peace RB	448.24	7.45	-4.46	398.53	240.25	50.31	53.57	2364.03
363	Athabasca RB	448.36	5.98	-5.75	400.24	93.99	49.38	53.3	2600.52
364	Peace RB	554.28	8.48	-3.7	503.8	207.51	50.48	53.11	2410.08
365	Peace RB	470.82	7.58	-4.59	428.17	151.57	42.49	54.01	160.97
366	Athabasca RB	448.36	5.98	-5.75	400.26	140.28	49.39	52.6	3087.28
367	Athabasca RB	455.08	5.11	-6.51	407.67	143.37	48.64	51.75	879.42
368	Athabasca RB	450.96	6.61	-5.66	401.18	104.22	50.03	52.98	2204.48
369	Peace RB	452.88	7.6	-4.33	405.74	150.21	47.8	52.39	2359.71
370	Peace RB	483.61	7.36	-4.39	432.72	223.95	51.24	54.66	2329.6
371	Athabasca RB	451.86	7.02	-5.06	401.19	115.3	51.12	54.78	3028.96
372	Peace RB	554.28	8.48	-3.7	502.28	192.1	52.3	55.09	1405.38
373	Peace RB	487.17	7.72	-4.39	435.73	186.5	51.6	54.93	2339.57

374	Athabasca RB	448.36	5.98	-5.75	399.9	104.66	49.75	53	2710.09
375	Peace RB	434.11	8.06	-3.79	387.44	140.2	48.13	53.16	2343.5
376	Peace RB	444.48	7.18	-4.37	393.61	205.32	51.25	54.6	2318.31

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
377	Peace RB	474.19	8.76	-3.16	422.33	160.63	52.06	55.42	2359.99
378	Athabasca RB	452.8	6.33	-5.66	403.77	143	50.16	53.44	3070.88
379	Peace RB	495.41	8.43	-3.73	447.72	159.59	48.17	53.16	2399.76
380	Peace RB	495.41	8.43	-3.73	447.55	161.17	48.24	53.63	2399.76
381	Peace RB	483.14	7.18	-4.68	432.95	223.45	50.75	54.24	2335.74
382	Peace RB	462.07	8.27	-3.42	411.33	154.29	51.38	54.87	2387.15
383	Peace RB	474.19	8.76	-3.16	423.07	159.47	51.46	54.56	2360.19
384	Peace RB	519.95	8.66	-3.86	470.32	176.38	50.29	53.51	2418.67
385	Athabasca RB	451.86	7.02	-5.06	401.75	96.52	50.87	54.14	2205.61
386	Athabasca RB	467.47	6.91	-5.24	417.56	97.05	50.89	53.58	2206.03
387	Athabasca RB	474.18	6.54	-5.63	423.57	156.54	50.53	53.26	3073.09
388	Peace RB	471.45	7.15	-4.67	420.6	210.8	51.38	54.34	2336.07
389	Peace RB	462.07	8.27	-3.42	413.33	159.11	49.45	54.78	2333.98
390	Athabasca RB	467.47	6.91	-5.24	417.49	117.49	50.87	54.29	3033.36
391	Peace RB	519.95	8.66	-3.86	470.26	180.95	50.56	53.29	2377.53
392	Peace RB	554.28	8.48	-3.7	504.38	191.07	49.92	53.18	2391.57
393	Peace RB	465.72	8.83	-3.58	416.41	159.07	49.85	55.1	2325.16
394	Athabasca RB	488.21	5.93	-6.16	437.2	101.55	49.8	53.1	3030.07
395	Peace RB	462.07	8.27	-3.42	413.42	162.01	49.43	53.98	2334.01
396	Athabasca RB	470.82	7.58	-4.59	433.64	101.4	37.55	53.56	131.57
397	Athabasca RB	485.77	8.27	-3.7	448.63	106.35	38.01	53.61	131.78
398	Peace RB	455.81	8.22	-3.62	405.37	167.04	51.42	54.19	2333.41
399	Peace RB	465.72	8.83	-3.58	414.81	157.52	51.48	54.67	1696.34
400	Peace RB	465.72	8.83	-3.58	417.23	151.9	49.08	55.03	1694.34
401	Athabasca RB	499.02	8.11	-4.22	467.72	110.26	31.47	53.94	136.9
402	Peace RB	483.14	7.18	-4.68	432.68	218.76	51.2	53.99	2337.31
403	Peace RB	455.81	8.22	-3.62	405.69	156.71	50.9	54.55	1693.64
404	Peace RB	514.11	8.83	-4	462.98	174.69	51.52	54.75	2409.62
405	Athabasca RB	454.53	6.64	-5.4	405.66	145.14	50.67	53.99	3067.27
406	Athabasca RB	448.36	5.98	-5.75	400.04	145.71	49.89	52.83	3087.24
407	Peace RB	554.28	8.48	-3.7	503.37	217.74	51.11	54.04	1407.09
408	Peace RB	554.28	8.48	-3.7	503.45	211.19	51.11	54.63	1406.68
409	Peace RB	554.28	8.48	-3.7	503.94	204	50.48	53.93	2409.91
410	Athabasca RB	499.02	8.11	-4.22	467.86	108.04	31.5	54.12	136.89
411	Peace RB	554.28	8.48	-3.7	503.81	197.05	50.71	53.53	2408.83
412	Peace RB	554.28	8.48	-3.7	503.52	203.63	50.98	54.37	2409.74
413	Athabasca RB	499.02	8.11	-4.22	467.81	108.18	31.52	54.15	136.88
414	Peace RB	502.36	8.88	-3.75	451.44	176.14	51.5	54.27	2362.53
415	Peace RB	554.28	8.48	-3.7	502.71	205.16	51.73	55.06	2409.48
416	Peace RB	674.66	6.02	-4.8	629.41	227.68	46.19	49.71	1521.72
417	Peace RB	477.34	8.6	-3.68	426.92	160.24	51.79	55.23	2385.59
418	Peace RB	474.19	8.76	-3.16	422.58	162.75	52.22	55.42	2359.89
419	Peace RB	485.77	8.27	-3.7	434.55	166.78	51.8	55.06	2363.37
420	Athabasca RB	499.02	8.11	-4.22	447.51	105.96	51.5	54.72	2486.34

421	Athabasca RB	453.56	6.84	-5	403.74	119.42	50.8	53.76	3028.44
422	Athabasca RB	466.53	7.06	-4.88	416.86	117.76	50.97	53.96	3030.92
423	N_Beaver	451.31	6.49	-5.36	400.1	158.6	50.85	53.66	2466.82

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
424	N_Beaver	451.31	6.49	-5.36	400.74	169.46	50.49	53.69	2469.27
425	Athabasca RB	510.92	8.23	-4.42	459.44	111.74	51.9	55.11	2486.25
426	Athabasca RB	479.2	7.77	-4.52	454.52	155.71	7.41	53.64	51.2
427	Athabasca RB	451.31	6.49	-5.36	402.41	144.97	50.55	53.69	3062.59
428	Athabasca RB	454.53	6.64	-5.4	405.7	145.81	50.9	53.83	3067.21
429	Athabasca RB	517.56	8.1	-4.42	4.02	1.81	140.98	203.84	387.4
430	N_Beaver	451.31	6.49	-5.36	400.25	168.08	50.59	52.94	2469.14
431	N_Beaver	451.31	6.49	-5.36	400.42	169.03	50.35	53.66	2469.38
432	Athabasca RB	465.81	7.28	-4.82	415.17	120.15	50.96	54.45	3023.31
433	Athabasca RB	454.53	6.64	-5.4	405.1	110.97	50.8	53.6	3032.03
434	Athabasca RB	465.81	7.28	-4.82	414.52	119.55	51.6	54.53	3023.15
435	Athabasca RB	517.56	8.1	-4.42	465.21	108.67	51.9	54.68	2490.32
436	Athabasca RB	510.92	8.23	-4.42	458.07	108.01	52.57	55.39	2492.35
437	Peace RB	514.11	8.83	-4	462.49	193.62	51.85	54.59	2347.98
438	Athabasca RB	471.24	6.35	-5.7	420.09	94.92	50.26	53.64	3014.92
439	Athabasca RB	451.31	6.49	-5.36	401.68	148.27	50.73	53.44	3062.49
440	Peace RB	474.19	8.76	-3.16	422.12	159.18	52.17	55.1	2386.21
441	Peace RB	674.66	6.02	-4.8	628.03	243.6	46.85	50.2	1523.19
442	Peace RB	514.11	8.83	-4	462.11	178.43	52.08	55.61	2362.01
443	Peace RB	502.36	8.88	-3.75	450.44	174.48	51.93	55.26	2362.31
444	Peace RB	502.36	8.88	-3.75	450.47	172.5	51.86	55.15	2362.28
445	Peace RB	591.97	7.36	-3.94	542.65	213.92	49.64	53	2446.89
446	Athabasca RB	464.27	6.22	-5.56	414.23	98.35	50.37	53.89	3015.54
447	Athabasca RB	464.27	6.22	-5.56	415.18	148.31	50.59	53.38	3074.07
448	Athabasca RB	471.24	6.35	-5.7	421.13	149.79	50.55	53.52	3074.95
449	Athabasca RB	499.02	8.11	-4.22	447.2	106.46	51.45	54.44	2489.29
450	Athabasca RB	485.94	6.69	-5.39	435.21	155.16	51.41	54.18	3071.38
451	Athabasca RB	487.75	6.48	-5.66	437.36	157.93	50.86	53.94	3073.68
452	Athabasca RB	506.77	7.89	-4.81	454.54	108.94	51.64	54.67	3019.04
453	Peace RB	528.59	9.36	-2.83	474.91	181.33	53.63	56.32	2368.08
454	Athabasca RB	506.77	7.89	-4.81	454.53	105.97	51.76	55.14	3016.4
455	Athabasca RB	487.75	6.48	-5.66	437.6	158.77	50.79	53.58	3073.71
456	Peace RB	528.59	9.36	-2.83	474.97	178.69	53.64	56.61	2368.03
457	Athabasca RB	497.01	7.77	-4.69	445.21	106.83	52.04	55.44	3016.3
458	Athabasca RB	511.79	7.56	-4.38	461.23	107.73	51.5	54.19	2489.1
459	Athabasca RB	506.77	7.89	-4.81	455.12	105.93	51.45	54.44	3012.64
460	Athabasca RB	482.89	6.51	-5.66	432.98	153.03	50.97	53.71	3077.92
461	Athabasca RB	471.24	6.35	-5.7	421.39	148.72	50.67	53.65	3074.9
462	Athabasca RB	506.77	7.89	-4.81	454.45	104.64	51.82	54.73	3016.35
463	Peace RB	533.04	8.86	-3.3	480.97	204.11	52.11	54.85	2393.96
464	Peace RB	540.65	9.04	-3.51	487.61	185.93	53.15	56.49	2409.24
465	Athabasca RB	506.77	7.89	-4.81	454.24	104.34	51.77	55.18	3016.35
466	Athabasca RB	487.75	6.48	-5.66	437.34	158.07	51.02	53.81	3073.61
467	Peace RB	528.59	9.36	-2.83	474.54	198.49	54.1	57.14	2407.93

468	Athabasca RB	471.24	6.35	-5.7	420.98	149.11	50.96	54.38	3074.81
469	Peace RB	535.82	8.93	-3.19	482.2	199.43	53.75	56.67	2411.61
470	Peace RB	563.25	8.39	-3.88	511.47	213.38	51.7	55.1	2398.41

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
471	Athabasca RB	517.56	8.1	-4.42	464.38	110.62	52.94	56.38	2493.7
472	N_Beaver	451.31	6.49	-5.36	400.45	165.98	50.57	53.36	2207.62
473	N_Beaver	464.27	6.22	-5.56	412.77	162.77	50.24	53.58	2480.66
474	Peace RB	596.53	8.75	-3.57	544.8	223.54	51.58	54.8	2396.89
475	N_Beaver	464.27	6.22	-5.56	431.72	149.45	8.07	53.86	60.32
476	N_Beaver	464.27	6.22	-5.56	412.33	170.69	50.4	53.8	2222.91
477	Peace RB	535.82	8.93	-3.19	482.27	196.57	53.85	57.12	2381.57
478	Peace RB	596.53	8.75	-3.57	544.01	224.49	52.49	55.89	2396.59
479	Athabasca RB	471.24	6.35	-5.7	421.33	152.92	50.99	54.49	3074.79
480	N_Beaver	464.27	6.22	-5.56	412.33	163.17	50.76	53.82	2480.49
481	Athabasca RB	486.36	7.11	-5	435.21	159.45	51.52	54.74	3073.52
482	Peace RB	533.04	8.86	-3.3	480.05	205.16	53.06	56.13	2393.08
483	Peace RB	591.97	7.36	-3.94	543.5	185.63	49.54	52.9	1397.68
484	Athabasca RB	518.29	8.42	-4.67	465.71	109.09	52.87	56.28	2489.76
485	Peace RB	782.76	4.79	-5.24	740.63	254.75	44.11	46.99	1677.67
486	Athabasca RB	518.29	8.42	-4.67	466.12	129.57	52.97	56.58	3044.74
487	Athabasca RB	508.69	8.69	-4.31	456.35	105.15	52.77	55.57	2483.15
488	Athabasca RB	506.77	7.89	-4.81	454.94	109.26	51.98	54.71	2490.97
489	Peace RB	688.43	6.12	-4.36	643.01	195.59	46.73	49.46	1460.38
490	Athabasca RB	473.72	7.55	-4.41	421.96	102.31	51.92	55.56	3001.73
491	Athabasca RB	465.81	7.28	-4.82	415.11	151.06	51.68	54.42	3064.61
492	Athabasca RB	518.29	8.42	-4.67	466.02	106.84	52.73	55.71	2488.42
493	Athabasca RB	483.02	7.34	-4.68	433.49	100.51	50.25	54.6	3033.21
494	N_Beaver	464.27	6.22	-5.56	412.17	162.82	50.87	53.68	2480.43
495	Athabasca RB	479.41	6.83	-5.28	428.44	153.42	51.48	54.68	3066.21
496	Peace RB	688.43	6.12	-4.36	642.48	202.71	47.23	50.19	1461
497	Athabasca RB	483.02	7.34	-4.68	431.05	100.25	51.97	55.4	3007.29
498	Athabasca RB	483.02	7.34	-4.68	431.56	99.89	51.68	54.62	3003.6
499	Athabasca RB	508.69	8.69	-4.31	455.93	107.72	52.85	55.52	3012.33
500	Peace RB	670.16	5.84	-5.18	621.95	250.37	47.79	50.62	1538.46
501	Athabasca RB	486.36	7.11	-5	434.36	100.84	51.76	55.28	3008.22
502	Peace RB	584.1	9.24	-3.16	530.21	233.92	54.52	57.24	2431.26
503	Peace RB	782.76	4.79	-5.24	739.39	229.92	45.18	48.99	1672.1
504	Peace RB	688.43	6.12	-4.36	642.19	223.27	47.76	51.36	1522.15
505	Athabasca RB	485.67	6.99	-5.08	434.37	103.24	51.64	55.13	3010.01
506	Athabasca RB	497.01	7.77	-4.69	445.38	107.89	52.38	55.07	3014.75
507	Athabasca RB	478.06	7.53	-4.37	426.06	96.06	52.21	54.91	3002.82
508	Athabasca RB	512.85	8.22	-3.91	459.61	105.55	53.01	55.69	3007.47
509	Athabasca RB	478.06	7.53	-4.37	425.98	101.16	52.15	54.95	3003.52
510	Athabasca RB	485.78	7.9	-3.19	433.05	100.37	53.19	55.92	3002.12
511	Athabasca RB	485.78	7.9	-3.19	433.34	102.62	52.92	55.61	3001.25
512	Athabasca RB	477.22	7.65	-4.19	425.13	101.41	52.23	54.94	3001.67
513	Athabasca RB	478.06	7.53	-4.37	426.54	97.03	52.15	54.85	2472.79
514	Athabasca RB	518.29	8.42	-4.67	465.41	108.24	53.11	55.79	2488.32

515	Athabasca RB	508.69	8.69	-4.31	456.33	129.76	52.8	55.78	3033.76
516	Athabasca RB	478.06	7.53	-4.37	426.1	98.59	52.39	55.15	2472.67
517	Athabasca RB	478.97	7.74	-4	426.87	103.46	52.5	55.26	3006.02

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
518	Athabasca RB	583.83	9.31	-3.77	531.09	125.12	52.85	55.63	2497.72
519	N_Beaver	456.65	6.5	-5.33	403.56	158.67	51.13	54.04	2468.73
520	Athabasca RB	577.74	7.05	-5.6	524.96	118.69	50.46	53.69	2523.04
521	Athabasca RB	604.2	7.16	-4.81	548.8	127.81	48.58	51.44	2559.51
522	Athabasca RB	580.47	9.35	-2.85	525.77	119.25	54.89	57.74	2485
523	Athabasca RB	580.47	9.35	-2.85	525.97	122.46	54.58	57.45	2485.08
524	Athabasca RB	481.64	8.36	-3	442.04	109.33	40.5	56.42	120.65
525	Athabasca RB	581.91	8.48	-4.26	528.05	120.03	51.25	54.12	2838.9
526	Athabasca RB	583.83	9.31	-3.77	530.28	123.12	53.28	56.17	2497.6
527	Athabasca RB	568.77	8.51	-4.89	515.41	115.69	53.09	55.99	2506.14
528	Athabasca RB	490.67	9.27	-4.27	437.46	96.59	53.65	56.42	2474.35
529	Athabasca RB	572.76	8.96	-3.88	518.44	119.44	54.25	57.05	2496.76
530	Athabasca RB	568.77	8.51	-4.89	3.78	1.19	141.96	205.18	447.08
531	Athabasca RB	508.69	8.69	-4.31	455.16	112.49	53.01	55.31	3013.47
532	Athabasca RB	490.67	9.27	-4.27	437.23	103.2	53.77	56.53	2474.3
533	Beaver RB	456.65	6.5	-5.33	401.33	168.15	51.57	54.4	2469.23
534	Beaver RB	456.65	6.5	-5.33	402.8	157.55	51.5	54.84	2468.59
535	Athabasca RB	501.28	8.79	-2.98	449.34	104.75	52.14	56.97	3007.11
536	Athabasca RB	540.7	9.11	-4.61	487.52	111.56	53.67	56.39	2491.68
537	Athabasca RB	568.77	8.51	-4.89	515.95	111.11	52.95	55.72	2502.24
538	Athabasca RB	575.15	9.47	-4.77	521.49	113.9	53.91	56.68	2498.2
539	Athabasca RB	503.73	9.22	-3.44	452.3	107.48	51.96	56.56	3032.62
540	Beaver RB	461.74	6.67	-5.37	407.29	168.56	51.43	54.23	2476.24
541	Beaver RB	444.49	7.14	-4.95	390.46	154.32	52.37	55.69	2455.6
542	Athabasca RB	581.91	8.48	-4.26	527.76	120.16	51.2	54.42	2838.82
543	Athabasca RB	738.66	5.38	-5.91	688.58	109.25	45.69	48.66	1907.46
544	Beaver RB	437.9	7.08	-4.69	382.64	161.69	52.15	55.04	2462.75
545	Beaver RB	477.22	7.65	-4.19	421.27	164.68	52.66	55.87	2443.01
546	Beaver RB	461.41	8.16	-3.71	405.57	160.94	53.02	56.33	2431.61
547	Beaver RB	437.9	7.08	-4.69	382.75	153.25	52.25	55.58	2455.26
548	Athabasca RB	501.28	8.79	-2.98	450.05	104.31	51.62	57.15	2474.51
549	Athabasca RB	503.73	9.22	-3.44	452.01	104.52	52.13	56.68	3032.55
550	Beaver RB	437.9	7.08	-4.69	382.77	153.15	52.36	55.13	2455.24
551	Beaver RB	437.9	7.08	-4.69	382.3	152.96	52.61	55.82	2455.12
552	Athabasca RB	490.67	9.27	-4.27	437.07	100.2	53.88	57.07	2474.33
553	Athabasca RB	583.83	9.31	-3.77	530.48	124.85	53.25	56.05	2497.5
554	Athabasca RB	564.5	9.79	-3.98	510.45	114.22	54.24	57.1	2929.11
555	Athabasca RB	564.5	9.79	-3.98	510.18	112.42	54.37	57.17	2487.55
556	Athabasca RB	610.71	9.04	-4.1	555.84	127.33	54.08	56.91	2508.05
557	Athabasca RB	587.97	9.14	-4.54	534.44	193.21	54.28	57.25	3100.74
558	Athabasca RB	587.97	9.14	-4.54	533.67	123.63	54.15	57.39	2501.5
559	Athabasca RB	587.97	9.14	-4.54	534.62	189.91	54.22	57.15	3100.75
560	Beaver RB	469.9	7.36	-4.76	412.93	152.74	52.44	55.69	2456.02
561	Athabasca RB	587.97	9.14	-4.54	534.36	190.77	54.37	57.66	3100.72

562	Beaver RB	437.9	7.08	-4.69	382.86	152.94	52.43	55.73	2455.17
563	Beaver RB	463.48	8.13	-3.83	408.11	161.19	53.04	56.18	2437.19
564	Beaver RB	460.26	7.86	-4.31	403.65	150.36	53.13	56.37	2455.73

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
565	Athabasca RB	610.71	9.04	-4.1	557.28	200.35	54.13	57.31	3106.54
566	Beaver RB	460.26	7.86	-4.31	403.25	150.56	53.55	56.9	2453.98
567	Beaver RB	460.26	7.86	-4.31	403.7	150.31	53.12	56.26	2455.71
568	Beaver RB	437.9	7.08	-4.69	382.81	153.24	52.43	55.64	2455.16
569	Athabasca RB	800.45	4.74	-5.75	749.39	109.81	45.12	48.39	1943.08
570	Athabasca RB	637.21	7.54	-4.93	584.69	103.02	51.94	54.87	1806.38
571	Athabasca RB	738.66	5.38	-5.91	689.75	125.29	44.92	47.82	1910.55
572	Athabasca RB	575.15	9.47	-4.77	521.38	120.95	54.26	57.18	2499.93
573	Beaver RB	431	7.83	-4.46	375.8	139.95	52.66	55.53	2437.24
574	Beaver RB	425.81	7.73	-3.99	371.26	137.86	53.12	56.19	2437.85
575	Beaver RB	437.9	7.08	-4.69	383.12	149.24	52.51	55.52	2445.8
576	Athabasca RB	609.56	9.68	-4.28	555.82	201.68	54.57	57.73	3111.8
577	Beaver RB	425.81	7.73	-3.99	371.04	137.38	53.13	56.45	2438.04
578	Athabasca RB	609.56	9.68	-4.28	553.18	129.68	54.79	57.85	2834.04
579	North Sas. RSB	481.64	8.36	-3	441.97	113.64	39.61	56.51	118.87
580	Beaver RB	431	7.83	-4.46	375.57	139.39	52.72	55.56	2437.22
581	Beaver RB	431	7.83	-4.46	375.12	138.98	53.2	56.33	2436.97
582	Beaver RB	425.81	7.73	-3.99	370.35	138.25	53.73	56.8	2437.63
583	Athabasca RB	738.66	5.38	-5.91	689.7	103.19	44.89	48.02	1906.56
584	North Sas. RSB	461.41	8.16	-3.71	407.96	100.57	53.45	56.24	2867.55
585	Beaver RB	431	7.83	-4.46	375.08	139.06	53.32	56	2436.92
586	Athabasca RB	738.66	5.38	-5.91	688.45	92.38	47.24	50.29	1869.77
587	Athabasca RB	564.5	9.79	-3.98	510.22	114.29	54.62	57.37	2487.46
588	Athabasca RB	609.56	9.68	-4.28	552.93	129.79	54.98	57.82	2834.02
589	Athabasca RB	533.82	9.69	-2.99	480.42	110.67	53.75	56.59	2480.75
590	North Sas. RSB	478.94	8.66	-2.87	426.34	105.01	52.97	56.67	2868.26
591	North Sas. RSB	479.66	8.04	-3.73	427.04	107.74	52.5	56.18	2871.01
592	North Sas. RSB	481.64	8.36	-3	426.73	112.17	53.68	56.35	2873.11
593	North Sas. RSB	478.94	8.66	-2.87	425.49	119.71	53.87	56.56	2868.48
594	Athabasca RB	635.32	8.65	-4.62	577.8	129.21	53.07	55.8	2854.38
595	Athabasca RB	879.03	5.19	-5.55	828.33	117.39	43.66	46.65	1937.21
596	Beaver RB	425.81	7.73	-3.99	370.92	138.45	53.43	56.3	2437.73
597	Athabasca RB	879.03	5.19	-5.55	828.04	155.75	43.76	46.89	1943.16
598	North Sas. RSB	454.13	9.01	-2.44	400.33	102.65	54.79	57.79	2867.22
599	North Sas. RSB	530.63	9.44	-2.16	476.23	113.84	54.98	57.68	2592.93
600	Athabasca RB	845.49	5.65	-5.65	793.7	101.78	46.48	49.15	1886.77
601	North Sas. RSB	494.91	9.39	-2.09	440.45	108.6	54.35	58.15	2871.6
602	North Sas. RSB	494.91	9.39	-2.09	440.45	110.39	54.28	57.97	2871.61
603	North Sas. RSB	494.91	9.39	-2.09	440.7	108.17	54.42	58.09	2870.98
604	North Sas. RSB	437.59	8.63	-3.42	385.81	97.02	52.67	56.47	2863.23
605	North Sas. RSB	463.48	8.13	-3.83	410.99	99.36	53.36	56.03	2869.58
606	Beaver RB	425.81	7.73	-3.99	373.61	147.7	51.26	55.88	2421.79
607	Athabasca RB	845.49	5.65	-5.65	793.61	106.7	46.73	49.76	1887.16
608	North Sas. RSB	530.63	9.44	-2.16	476.33	109.7	55.2	58.07	2592.85

609	Athabasca RB	594.06	9.54	-4.83	540.35	189.91	55.38	58.11	3105.42
610	North Sas. RSB	454.13	9.01	-2.44	400.37	104.41	55	58.21	2867.35
611	North Sas. RSB	494.91	9.39	-2.09	438.83	92.28	55.47	58.11	2874.86

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
612	North Sas. RSB	570.06	10.09	-2	516.27	119.49	55.57	58.11	2871.31
613	North Sas. RSB	570.06	10.09	-2	515.8	121.16	55.79	58.57	2587.14
614	North Sas. RSB	482.25	9.17	-2.97	427.56	90.78	54.53	57.27	2876.01
615	Athabasca RB	591.53	9.7	-4.69	538.8	195.79	54.61	57.19	3096.8
616	Athabasca RB	591.53	9.7	-4.69	538.28	193.06	55.13	58.48	3096.68
617	Athabasca RB	585.13	9.89	-3.46	530.85	120.24	55.04	58.29	2485.12
618	Athabasca RB	585.13	9.89	-3.46	530.6	145.13	55.33	58.17	3043.37
619	North Sas. RSB	504.32	9.63	-2.75	450.8	106.98	54.01	57.95	2874.23
620	North Sas. RSB	482.25	9.17	-2.97	428.27	104.5	53.63	57.23	2872.32
621	North Sas. RSB	482.25	9.17	-2.97	427.58	107.04	54.75	57.39	2874.05
622	North Sas. RSB	435.13	8.15	-3.93	383.25	98.52	53.56	56.2	2864.87
623	North Sas. RSB	544.71	9.72	-1.77	489.33	120.98	55.59	58.21	2872.88
624	North Sas. RSB	435.13	8.15	-3.93	384.01	93.8	52.84	56.69	2867.49
625	North Sas. RSB	570.06	10.09	-2	515.53	119.03	55.96	58.61	2587.07
626	North Sas. RSB	504.32	9.63	-2.75	449.6	112.92	55.54	58.29	2876.16
627	North Sas. RSB	434.24	8.42	-3.58	382.87	96.52	53.08	56.93	2869.57
628	North Sas. RSB	585.13	9.89	-3.46	530.86	152.83	55.16	57.77	2889.79
629	North Sas. RSB	570.06	10.09	-2	515.64	121.25	55.73	58.61	2587.15
630	North Sas. RSB	435.13	8.15	-3.93	383.14	92.16	53.72	56.5	2864.78
631	North Sas. RSB	426.97	8.02	-4.21	374.44	88.54	53.31	55.95	2580.18
632	North Sas. RSB	429.43	8.06	-4	376.54	86.66	53.71	56.3	2864.53
633	North Sas. RSB	621.12	8.45	-5.57	563.94	130.36	50.97	53.64	2910.54
634	North Sas. RSB	477.22	8.91	-2.63	422.56	109.34	54.94	57.71	2581.71
635	North Sas. RSB	436.06	8.94	-3.13	382.92	100.75	53.54	57.42	2857.57
636	North Sas. RSB	429.15	8.75	-3.12	377.46	94.27	53.2	56.9	2864.23
637	North Sas. RSB	608.55	9.58	-2.93	553.96	135.35	55.49	58.16	2604.51
638	North Sas. RSB	589.92	9.88	-3.89	535.39	155.5	55.18	57.92	2895.28
639	North Sas. RSB	592.08	9.49	-5.1	538.83	204.36	54.12	57.04	2956.41
640	North Sas. RSB	589.92	9.88	-3.89	533.64	128.06	55.12	58.3	2855.68
641	North Sas. RSB	429.43	8.06	-4	377.78	88.22	52.79	56.6	2866.34
642	North Sas. RSB	589.92	9.88	-3.89	533.55	129.19	55.2	57.84	2855.66
643	North Sas. RSB	592.08	9.49	-5.1	535.96	129.53	54.64	57.49	2869.35
644	North Sas. RSB	621.12	8.45	-5.57	569.21	136.33	51.76	54.64	1705.28
645	North Sas. RSB	746.57	6.4	-6.23	696.31	111.62	48.51	51.3	1772.12
646	North Sas. RSB	429.43	8.06	-4	376.66	86.65	53.76	56.45	2866.21
647	North Sas. RSB	436.06	8.94	-3.13	383.33	94.96	53.28	57.03	2857.65
648	North Sas. RSB	429.15	8.75	-3.12	376.84	97.68	53.56	57.3	2858.61
649	North Sas. RSB	425.76	8.58	-3.37	373.04	92.67	54.19	56.82	2863.44
650	North Sas. RSB	429.15	8.75	-3.12	377.41	95.5	53.46	57.13	2864.15
651	North Sas. RSB	416.7	8.58	-3.72	363.74	91.23	53.37	56.96	2864.1
652	North Sas. RSB	589.92	9.88	-3.89	533.74	129.94	55.19	57.87	2855.65
653	North Sas. RSB	429.43	8.06	-4	379.15	88.02	51.4	56.77	2866.65
654	North Sas. RSB	429.43	8.06	-4	378.64	90.56	51.68	56.43	2862.49
655	North Sas. RSB	502.91	9.44	-2.69	449.6	111.01	54.38	57.91	2881.73

656	North Sas. RSB	589.92	9.88	-3.89	533.06	132.71	55.77	58.52	2855.5
657	North Sas. RSB	482.25	9.17	-2.97	428.22	105.86	54.08	57.75	2875.9
658	North Sas. RSB	750.1	6.04	-6.74	702.9	139.76	46.59	49.39	1818.97

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
659	North Sas. RSB	1031.92	2.47	-8.46	992.97	97.99	35.36	38.2	2152.99
660	North Sas. RSB	477.22	8.91	-2.63	423.95	104.65	54.17	57.72	2872.57
661	North Sas. RSB	433.01	9.48	-2.21	380.2	92.51	53.66	57.36	2854.31
662	North Sas. RSB	502.91	9.44	-2.69	449.36	114.15	54.72	58.3	2881.62
663	North Sas. RSB	502.91	9.44	-2.69	448.41	110.66	55.53	58.26	2590.12
664	North Sas. RSB	416.7	8.58	-3.72	363.6	88.31	53.68	57.36	2863.92
665	North Sas. RSB	750.1	6.04	-6.74	677.39	115.04	47.32	50.08	3007.46
666	North Sas. RSB	622.55	8.97	-5.83	567.98	128.59	52.71	55.4	2638.76
667	North Sas. RSB	694.06	6.88	-6.96	630.25	125.47	48.08	50.95	2972.88
668	North Sas. RSB	622.55	8.97	-5.83	567.53	128.9	53.1	55.88	2638.59
669	North Sas. RSB	425.76	8.58	-3.37	373.68	92.29	53.63	57.39	2864.39
670	North Sas. RSB	416.7	8.58	-3.72	363.59	86.11	53.73	57.32	2863.89
671	North Sas. RSB	416.7	8.58	-3.72	363.55	87.38	53.75	57.31	2863.88
672	North Sas. RSB	1018.43	2.72	-8.52	977.91	104.5	36.07	38.73	2090.72
673	North Sas. RSB	592.67	9.81	-3.53	537.29	121.98	55.68	58.26	2605.56
674	Red Deer RSB	592.67	9.81	-3.53	538.85	139.87	55.55	58.27	2190.51
675	North Sas. RSB	694.06	6.88	-6.96	645.4	119.94	49.02	52.09	1768.53
676	Red Deer RSB	551.85	9.45	-3.24	499.53	130.66	54.44	58.38	2184.81
677	Red Deer RSB	608.55	9.58	-2.93	555.26	147.87	55.75	58.62	2186.82
678	Red Deer RSB	551.85	9.45	-3.24	499.46	131.69	54.48	58.71	2184.81
679	North Sas. RSB	622.55	8.97	-5.83	565.98	128.09	53.52	56.48	2886.37
680	Red Deer RSB	537.12	9.44	-2.63	484.49	135.25	55.05	57.74	2175.33
681	Red Deer RSB	501.71	9.54	-3.16	447.95	124.02	55.73	58.68	2207.8
682	North Sas. RSB	460.09	9.29	-2.51	407.79	100.72	53.53	57.46	2873.01
683	North Sas. RSB	460.09	9.29	-2.51	407.7	99.66	53.49	57.21	2872.99
684	North Sas. RSB	447.83	9.28	-2.65	394.78	98	54.14	57.8	2858.5
685	North Sas. RSB	433.01	9.48	-2.21	380.02	89.1	54.09	57.79	2860.25
686	North Sas. RSB	433.01	9.48	-2.21	379.19	88.78	54.94	57.59	2859.61
687	North Sas. RSB	428.32	8.47	-3.61	375.06	91.31	53.79	57.25	2867.7
688	North Sas. RSB	420.66	9.08	-3.09	367.29	84.61	54.14	56.75	2863.11
689	North Sas. RSB	428.32	8.47	-3.61	374.69	90.64	54.03	57.52	2867.58
690	North Sas. RSB	428.16	9.19	-2.98	375.82	80.75	53.19	57.08	2666.58
691	North Sas. RSB	428.16	9.19	-2.98	375.1	93.21	53.65	57.28	2864.34
692	Red Deer RSB	489.92	9.41	-2.9	435.94	123.2	55.78	58.4	2206.65
693	Red Deer RSB	460.09	9.29	-2.51	406.33	112.95	55.06	57.89	2196.59
694	North Sas. RSB	420.66	9.08	-3.09	367.84	85.69	53.36	57.12	2862.89
695	North Sas. RSB	420.66	9.08	-3.09	367.09	91.35	54.2	56.84	2081.24
696	Red Deer RSB	501.71	9.54	-3.16	447.99	123.76	54.83	58.46	2209.23
697	North Sas. RSB	447.83	9.28	-2.65	394.35	87.04	54.22	58.36	2668.49
698	Red Deer RSB	462	9.71	-2.98	408.15	112.89	54.81	57.43	2195.84
699	Red Deer RSB	669.89	7.79	-5.95	609.7	149.72	49.58	52.53	1340.04
700	North Sas. RSB	420.66	9.08	-3.09	366.71	94.22	54.37	57.34	2081.16
701	Red Deer RSB	462	9.71	-2.98	407.98	110.75	54.83	57.46	2195.81
702	North Sas. RSB	428.32	8.47	-3.61	373.35	95.5	54.45	57.27	2863.95

703	North Sas. RSB	428.32	8.47	-3.61	373.07	95.65	54.37	57.05	2866.71
704	Red Deer RSB	431.23	9.43	-2.76	378.32	104.51	54.04	56.65	2189.69
705	North Sas. RSB	420.66	9.08	-3.09	369.6	86.76	51.06	57.31	2078.78

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
706	North Sas. RSB	420.66	9.08	-3.09	366.51	84.04	54.09	56.74	2863.15
707	Red Deer RSB	462	9.71	-2.98	408.79	113.78	53.9	57.72	2198.9
708	Red Deer RSB	551.85	9.45	-3.24	496.87	133.47	56	58.83	2216.68
709	Red Deer RSB	551.85	9.45	-3.24	497.98	134.92	54.88	58.88	2219.87
710	Red Deer RSB	551.85	9.45	-3.24	498.06	131.03	54.77	58.78	2219.9
711	Red Deer RSB	551.85	9.45	-3.24	498.26	134.47	54.71	58.69	2219.95
712	Red Deer RSB	501.71	9.54	-3.16	447.5	125.24	55.02	58.95	2209.18
713	Red Deer RSB	551.85	9.45	-3.24	496.81	132.74	56.07	58.97	2183.37
714	Red Deer RSB	551.85	9.45	-3.24	497.16	133.4	55.95	58.85	2216.67
715	Red Deer RSB	669.89	7.79	-5.95	608.33	151.25	49.81	52.84	2277.79
716	North Sas. RSB	420.66	9.08	-3.09	366.49	89.21	54.37	57.31	2863.12
717	Red Deer RSB	490.23	10.31	-2.55	436.52	123.28	54.85	58.62	2206.64
718	Red Deer RSB	558.69	9.95	-4.19	503.59	131.66	55.26	58.1	2185.83
719	Red Deer RSB	558.69	9.95	-4.19	505.09	133.34	53.75	58.01	2188.15
720	Red Deer RSB	490.23	10.31	-2.55	436.65	124.07	54.81	58.83	2206.65
721	North Sas. RSB	413.08	9.32	-3.23	360.45	79.1	53.14	57.47	2655.01
722	North Sas. RSB	420.66	9.08	-3.09	369.66	86.53	51.25	57.35	2078.71
723	North Sas. RSB	414.8	9.65	-2.13	361.29	89.19	54.58	57.22	2850.95
724	North Sas. RSB	425.5	9.38	-2.7	373.76	89.02	52.45	56.25	2857.79
725	North Sas. RSB	390.43	9.35	-3.04	337.59	80.34	53.82	57.57	2858.6
726	Red Deer RSB	837.23	4.32	-8.19	771.71	104.12	44.25	46.87	1476.97
727	Red Deer RSB	558.69	9.95	-4.19	503.72	138.7	55.47	58.11	2188.42
728	Red Deer RSB	669.89	7.79	-5.95	608.84	147.61	50.62	53.65	1339.93
729	Red Deer RSB	558.69	9.95	-4.19	502.71	139.33	56.45	59.42	2187.99
730	Red Deer RSB	837.23	4.32	-8.19	771.75	106.62	42.95	46.03	1511.01
731	North Sas. RSB	390.43	9.35	-3.04	337.11	83.7	54.64	57.27	2858.02
732	Red Deer RSB	558.69	9.95	-4.19	502.08	138.46	56.23	58.86	2200.05
733	Red Deer RSB	669.89	7.79	-5.95	609.03	139.96	50.63	53.66	1339.5
734	North Sas. RSB	416.95	9.29	-3.14	362.39	110.76	55.01	57.9	2082.19
735	Red Deer RSB	558.69	9.95	-4.19	503.16	141.33	56.07	58.79	2188.07
736	North Sas. RSB	414.8	9.65	-2.13	363.03	87.22	53.22	57.57	2852.82
737	North Sas. RSB	390.43	9.35	-3.04	336.3	83.46	55.14	57.77	2856.8
738	Red Deer RSB	490.23	10.31	-2.55	435.92	126.93	55.64	59.42	2206.34
739	North Sas. RSB	398.65	9.39	-3.13	344.39	79.6	54.31	57.19	2860.86
740	North Sas. RSB	390.43	9.35	-3.04	338.15	79.37	53.59	57.72	2076.6
741	Red Deer RSB	468.66	9.98	-2.86	415.5	114.91	54.39	58.13	2204.24
742	Red Deer RSB	468.66	9.98	-2.86	415.37	114.88	54.49	58.46	2204.2
743	Bow RSB	969.29	4.36	-6.81	896.12	120.62	43.66	46.63	1509.28
744	Bow RSB	881.11	3.97	-7.74	812.87	96.8	42.41	45.12	1489.73
745	Bow RSB	881.11	3.97	-7.74	812.15	106.85	41.03	43.74	1529.54
746	North Sas. RSB	389.79	10.09	-2.69	337.87	82.69	53.5	57.71	2856.27
747	North Sas. RSB	342.91	9.71	-3.16	290.59	69.42	53.36	55.98	2850.86
748	North Sas. RSB	390.43	9.35	-3.04	336.42	78.73	55.36	57.87	2856.94
749	Red Deer RSB	417.55	10.16	-3.07	365.92	101.14	53.42	57.21	2199.23

750	Red Deer RSB	417.55	10.16	-3.07	366.01	100.06	53.33	57.28	2199.3
751	Bow RSB	841.01	3.81	-7.87	772.09	93.43	41.93	44.81	1516.49
752	North Sas. RSB	342.91	9.71	-3.16	291.37	69.14	52.45	56.22	2851.19

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
753	North Sas. RSB	377.56	9.56	-3.2	324.9	78.66	53.22	55.73	2850.82
754	North Sas. RSB	342.42	9.41	-3.92	290.2	71.92	53.24	55.8	2848.92
755	Bow RSB	726.73	6.01	-6.92	662.08	127.68	46.96	49.65	1406.12
756	Red Deer RSB	386.32	10.6	-2.43	333.75	89.3	54.52	58.51	2180.29
757	Red Deer RSB	386.32	10.6	-2.43	333.26	93.68	54.34	58.24	2184.32
758	North Sas. RSB	342.91	9.71	-3.16	289.73	69.07	53.72	56.4	2845.02
759	Red Deer RSB	386.32	10.6	-2.43	333.45	87.99	54.48	58.25	2180.26
760	Bow RSB	585.69	9.62	-4.45	529.8	134.19	53.5	56.17	2211.34
761	Red Deer RSB	415.56	10.6	-2.73	362.64	98.76	53.66	57.96	2199.77
762	Bow RSB	585.69	9.62	-4.45	531.34	135.71	53.27	55.94	2234.66
763	Bow RSB	726.73	6.01	-6.92	662.08	103.36	47.51	50.55	1401.73
764	Red Deer RSB	386.32	10.6	-2.43	333.47	90.12	54.66	58.53	2180.24
765	Bow RSB	585.69	9.62	-4.45	529.5	141.07	53.65	56.42	2215.73
766	Red Deer RSB	386.32	10.6	-2.43	333.23	91.89	54.68	58.82	2180.29
767	Red Deer RSB	377.97	10.94	-2.49	323.96	88.46	54.83	58.66	2188.31
768	Red Deer RSB	434.77	10.72	-2.35	380.51	111.74	54.56	58.4	2197.7
769	Red Deer RSB	377.97	10.94	-2.49	323.93	91.92	55.03	59.01	2182.36
770	Bow RSB	841.01	3.81	-7.87	770.95	96.75	42.52	45.35	1516.77
771	Bow RSB	499.78	10.07	-3.29	445.84	126.01	54.29	56.87	2210.79
772	NN	335.39	9.84	-3.02	281.78	80.37	54.98	57.85	2177.32
773	North Sas. RSB	342.42	9.41	-3.92	289.46	71.08	53.59	56.26	2848.69
774	Bow RSB	499.78	10.07	-3.29	445.52	105.24	54.26	56.81	2216.67
775	Bow RSB	499.78	10.07	-3.29	446.82	122.31	53.06	57.03	2214.01
776	Red Deer RSB	434.77	10.72	-2.35	380.45	108.6	54.84	58.83	2197.67
777	North Sas. RSB	342.91	9.71	-3.16	289.28	68.5	53.87	56.66	2845.59
778	Red Deer RSB	377.56	9.56	-3.2	325.18	89.6	53.63	56.21	2170.6
779	Bow RSB	499.78	10.07	-3.29	445.32	122.56	54.56	57.3	2210.68
780	Bow RSB	709.99	6.37	-6.92	643.48	100.4	48.12	51.11	1398.45
781	North Sas. RSB	335.39	9.84	-3.02	282.34	71.22	54.08	57.89	2847.68
782	Bow RSB	561.13	9.91	-4	505.79	107.23	53.72	56.29	2232.82
783	Bow RSB	499.78	10.07	-3.29	445.78	105.03	54.23	56.93	2216.68
784	NN	335.39	9.84	-3.02	281.69	78.85	55.23	57.91	2177.23
785	NN	335.39	9.84	-3.02	284.8	81.03	51.91	57.78	2160.78
786	Red Deer RSB	342.8	10.51	-3.26	289.23	79.55	55.06	57.77	2168.72
787	Bow RSB	561.13	9.91	-4	506.84	124.81	52.82	56.71	2227.79
788	Bow RSB	418.16	11.28	-2.12	364.13	93.33	54.29	58.76	2189.53
789	Red Deer RSB	370.3	10.74	-2.68	316.94	87.78	54.59	57.28	2190.01
790	Red Deer RSB	342.8	10.51	-3.26	289.02	84.93	55.22	57.92	2168.68
791	Bow RSB	561.13	9.91	-4	503.54	124.41	54.42	57.17	2223.12
792	Bow RSB	418.16	11.28	-2.12	364.2	95.42	54.2	58.65	2189.59
793	Bow RSB	418.16	11.28	-2.12	364.03	93.79	54.37	58.7	2189.49
794	Bow RSB	418.16	11.28	-2.12	363.87	94.22	54.46	58.79	2189.44
795	Bow RSB	395.5	11.14	-2.1	341.7	92.51	54.35	58.47	2189.21
796	Bow RSB	377.97	10.94	-2.49	323.17	92.51	55.46	59.26	2188.02

797	Red Deer RSB	342.8	10.51	-3.26	288.92	80.5	55.23	57.91	2168.59
798	Bow RSB	561.13	9.91	-4	506.38	124.23	53.06	56.98	2227.61
799	Bow RSB	392.77	11.29	-2.02	339.08	91.91	54.4	58.37	2193.52

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
800	Bow RSB	418.16	11.28	-2.12	363.61	95.01	54.65	59.01	2189.35
801	Bow RSB	395.5	11.14	-2.1	341.63	93.04	54.3	58.42	2189.17
802	Bow RSB	392.77	11.29	-2.02	337.75	92.7	55.69	58.38	2192.27
803	Bow RSB	395.5	11.14	-2.1	341.02	92.43	54.8	58.97	2188.94
804	Red Deer RSB	370.3	10.74	-2.68	317.74	88.5	53.53	57.47	2190.32
805	Bow RSB	678.3	9.05	-4.61	616.27	118.57	52.75	55.44	2252.14
806	Red Deer RSB	342.8	10.51	-3.26	288.76	84.67	55.3	58.13	2168.49
807	Red Deer RSB	308.77	10.37	-3.25	253.9	73.91	56.29	58.95	2161.93
808	Bow RSB	678.3	9.05	-4.61	616.11	128.89	52.99	55.62	2250.91
809	Red Deer RSB	366.9	11.4	-2.2	313.51	88.79	54.72	58.53	2167.55
810	Bow RSB	753.88	5.24	-6.26	685.06	100.87	46.99	49.84	1417.09
811	Red Deer RSB	333.97	11.45	-2.15	279.83	93.41	55.49	58.1	1591.71
812	Red Deer RSB	333.97	11.45	-2.15	279.62	92.84	55.63	58.35	1591.61
813	Red Deer RSB	333.97	11.45	-2.15	279.75	85.95	55.48	58.19	1591.54
814	Red Deer RSB	333.97	11.45	-2.15	279.36	77.02	55.58	58.26	2161.51
815	Red Deer RSB	309.49	10.51	-2.49	254.34	74.87	56.54	59.19	2180.1
816	Red Deer RSB	333.97	11.45	-2.15	279.32	78.25	55.56	58.19	2161.54
817	Red Deer RSB	308.77	10.37	-3.25	254.13	74.21	56.05	58.7	2162.05
818	Red Deer RSB	295.84	11.36	-1.68	239.92	68.98	56.99	59.65	2170.67
819	Red Deer RSB	294.16	11.49	-1.97	239.84	69.98	55.77	58.36	2174.46
820	Red Deer RSB	333.97	11.45	-2.15	279.23	76.85	55.54	58.11	2161.52
821	Red Deer RSB	294.16	11.49	-1.97	239.54	71.39	55.96	58.62	2174.38
822	Red Deer RSB	333.97	11.45	-2.15	279.02	77.29	55.71	58.29	2161.44
823	Red Deer RSB	333.97	11.45	-2.15	280.18	79.74	54.55	58.52	2161.14
824	Bow RSB	392.77	11.29	-2.02	338.39	93.55	54.79	58.62	2193.27
825	Red Deer RSB	294.16	11.49	-1.97	239.58	72.14	55.7	58.42	2155.56
826	Red Deer RSB	306.93	10.62	-2.46	252.84	71.48	55.17	59.12	2179.1
827	NN	306.93	10.62	-2.46	251.05	74.47	56.72	59.36	2177.26
828	Red Deer RSB	292.66	11.61	-1.61	236.13	68.94	57.09	59.76	2172.22
829	Red Deer RSB	292.66	11.61	-1.61	235.99	68.61	57.3	59.87	2172.12
830	Red Deer RSB	295.84	11.36	-1.68	239.63	71.59	56.87	59.44	2170.72
831	Red Deer RSB	306.93	10.62	-2.46	254.44	72.34	53.08	59.15	2179.62
832	NN	292.66	11.61	-1.61	239.04	69.13	53.89	59.68	2172.1
833	NN	292.66	11.61	-1.61	238.85	68.24	54.02	59.75	2172.07
834	Oldman RSB	445.88	11.55	-1.92	389.4	98.67	55.18	59.38	2194.48
835	NN	306.93	10.62	-2.46	254.31	74.76	53.08	59.23	2179.63
836	NN	306.93	10.62	-2.46	251.21	73.4	56.23	58.88	2176.47
837	NN	306.93	10.62	-2.46	251.03	71.74	56.45	59.1	2176.31
838	NN	292.66	11.61	-1.61	238.83	69.35	54.1	59.96	2170.85
839	Oldman RSB	418.16	11.28	-2.12	362.82	97.75	54.51	58.75	2189.39
840	Oldman RSB	445.88	11.55	-1.92	389.55	98.79	55.13	59.44	2194.5
841	NN	292.66	11.61	-1.61	239.04	67.86	53.92	59.74	2172.1
842	Oldman RSB	678.3	9.05	-4.61	614.72	116.85	53.65	56.22	2251.81
843	Oldman RSB	445.88	11.55	-1.92	386.5	94.25	57.65	60.49	2190.39

844	Oldman RSB	445.88	11.55	-1.92	387.58	96.9	57.09	59.78	2193.58
845	Oldman RSB	403.93	12.03	-1.26	346.44	92.46	56.51	60.29	2182.71
846	Oldman RSB	403.93	12.03	-1.26	346.57	91.31	56.43	60.23	2182.73

Table 5. Continued.

Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
847	Oldman RSB	445.88	11.55	-1.92	387.62	99.04	57.06	59.77	2193.61
848	Oldman RSB	403.93	12.03	-1.26	346.42	92.14	56.67	60.47	2182.63
849	Oldman RSB	445.88	11.55	-1.92	387.74	97.85	56.99	59.71	2193.62
850	NN	312.27	11.72	-1.6	257.38	75.35	55.5	61.4	2174.5
851	South Sas. RSB	295.84	11.36	-1.68	239.23	69.69	57.31	59.95	2170.46
852	South Sas. RSB	313.4	11.93	-0.98	258.06	73.46	56.27	58.88	2174.98
853	Oldman RSB	498.8	11.53	-1.49	438.65	92.92	57.79	60.51	2197.66
854	Oldman RSB	422.29	12.53	-0.65	364.3	100.17	57.23	60.85	2181
855	Bow RSB	351.81	12.14	-1.65	296.21	90.85	56.57	59.31	2183.42
856	Bow RSB	351.81	12.14	-1.65	296.56	84.61	56.2	59.9	2183.1
857	Oldman RSB	650.71	8.74	-3.74	583.54	113.33	55.02	57.9	1309.85
858	South Sas. RSB	292.66	11.61	-1.61	235.91	71.97	57.73	60.5	2171.88
859	South Sas. RSB	313.4	11.93	-0.98	257.97	75.99	56.68	59.29	2174.73
860	Bow RSB	325.23	12.19	-1.36	269.82	81.24	56.45	59.14	2158.5
861	Bow RSB	325.23	12.19	-1.36	270.39	79.84	55.88	59.36	2176.41
862	Oldman RSB	498.8	11.53	-1.49	439.54	106.71	57.72	60.43	2201.8
863	Oldman RSB	390.33	11.95	-1.37	334.44	90.98	56.14	59.94	2188.11
864	Bow RSB	325.23	12.19	-1.36	269.55	77.32	56.69	59.39	2158.33
865	Oldman RSB	356.83	12.77	-0.74	300.51	82.04	56.86	60.32	2180.74
866	Oldman RSB	650.71	8.74	-3.74	583.05	120.53	55.28	58.13	1309.97
867	Oldman RSB	650.71	8.74	-3.74	586.77	124.67	54.03	56.82	2253.32
868	Oldman RSB	498.8	11.53	-1.49	439.64	107.42	57.65	60.52	2201.81
869	Oldman RSB	422.29	12.53	-0.65	364.43	98.14	57.31	60.96	2180.94
870	Oldman RSB	650.71	8.74	-3.74	587.13	125.08	53.86	56.55	2253.32
871	Bow RSB	325.23	12.19	-1.36	269.52	78.79	56.84	59.67	2176.44
872	Oldman RSB	356.83	12.77	-0.74	301.08	85.3	56.38	60.52	2179.25
873	Oldman RSB	498.8	11.53	-1.49	438.34	101.29	58.43	61.16	2197.6
874	Oldman RSB	334.39	12.84	-0.66	277.38	78.87	57.85	60.58	2176.69
875	Oldman RSB	498.8	11.53	-1.49	438.89	105.95	58.28	60.99	2189.1
876	Oldman RSB	381.43	12.57	-0.7	323.85	91.38	57.33	60.78	2179.3
877	Oldman RSB	809.26	7.71	-3.38	737.41	147.95	52.33	55.12	2297.57
878	Oldman RSB	356.83	12.77	-0.74	300.48	87.07	57.25	60.98	2180.59
879	South Sas. RSB	313.4	11.93	-0.98	258.03	61	56.85	59.51	2174.4
880	South Sas. RSB	313.4	11.93	-0.98	258.09	77.07	56.76	59.34	2174.6
881	South Sas. RSB	313.4	11.93	-0.98	258.1	71.94	56.78	59.49	2172.58
882	South Sas. RSB	334.39	12.84	-0.66	277.74	77.18	57.8	60.46	2176.6
883	South Sas. RSB	313.4	11.93	-0.98	257.93	61.28	56.94	59.57	2174.35
884	South Sas. RSB	334.8	12.6	-0.33	279.5	79.73	56.3	60.26	2171.9
885	South Sas. RSB	335.1	11.81	-1.08	278.45	77.68	57.89	60.62	2178.14
886	Oldman RSB	422.29	12.53	-0.65	364.39	96.72	57.51	61.13	2180.8
887	Oldman RSB	381.43	12.57	-0.7	323.56	90.44	57.72	61.13	2179.09
888	Oldman RSB	422.29	12.53	-0.65	364.45	97.83	57.51	61.1	2180.8
889	South Sas. RSB	334.39	12.84	-0.66	278.63	78.74	56.71	60.9	2175.08
890	Oldman RSB	422.29	12.53	-0.65	364.18	97.45	57.71	61.3	2180.71

891	NN	312.27	11.72	-1.6	258.97	72.79	54.33	60.09	2175.24
892	Oldman RSB	405.95	11.82	-1.23	347.48	91.08	58.24	62.17	2188.17
893	Oldman RSB	523.48	12.24	-0.76	465.22	112.69	57.37	61.22	2195.07

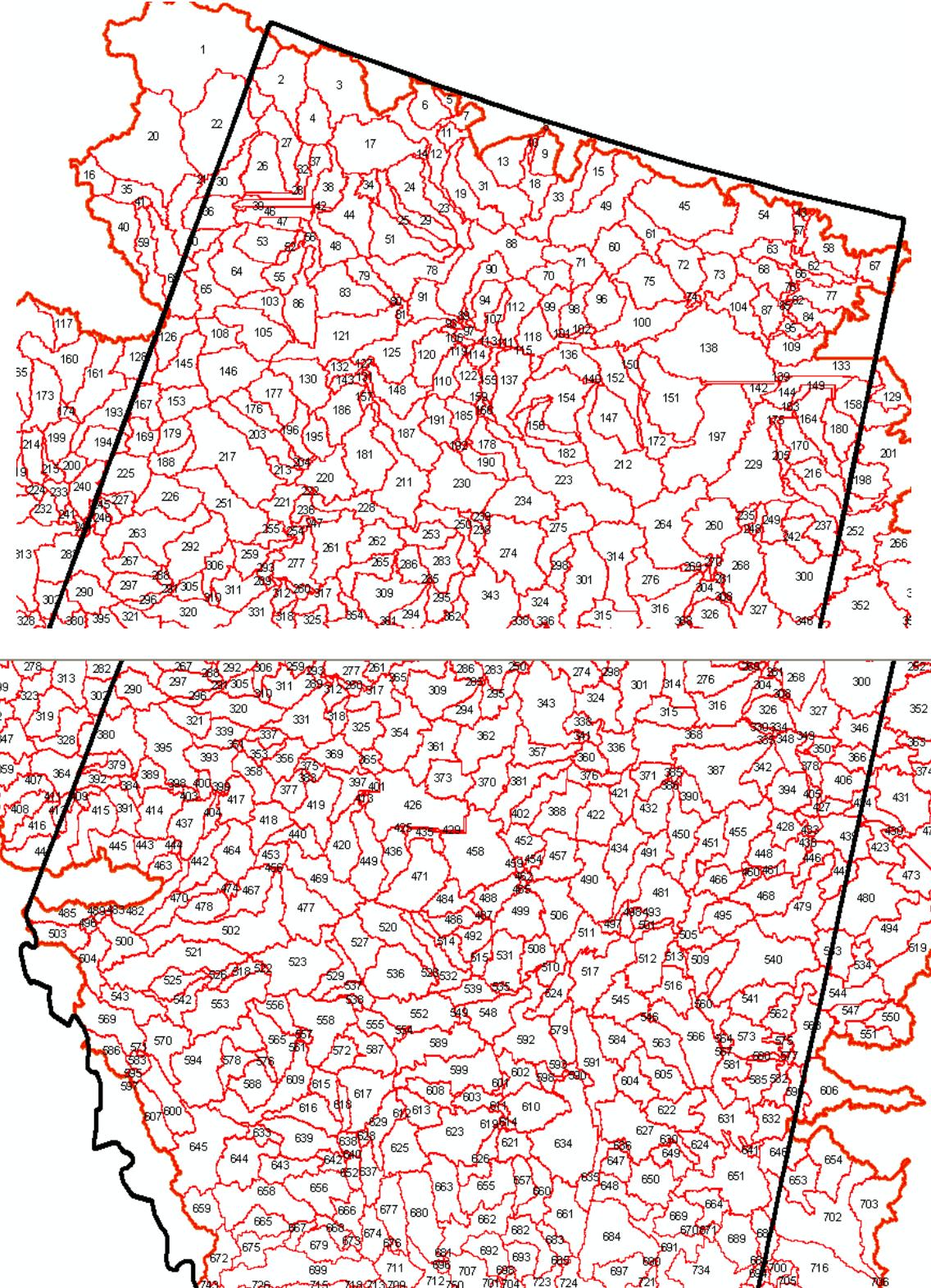
Table 5. Continued.

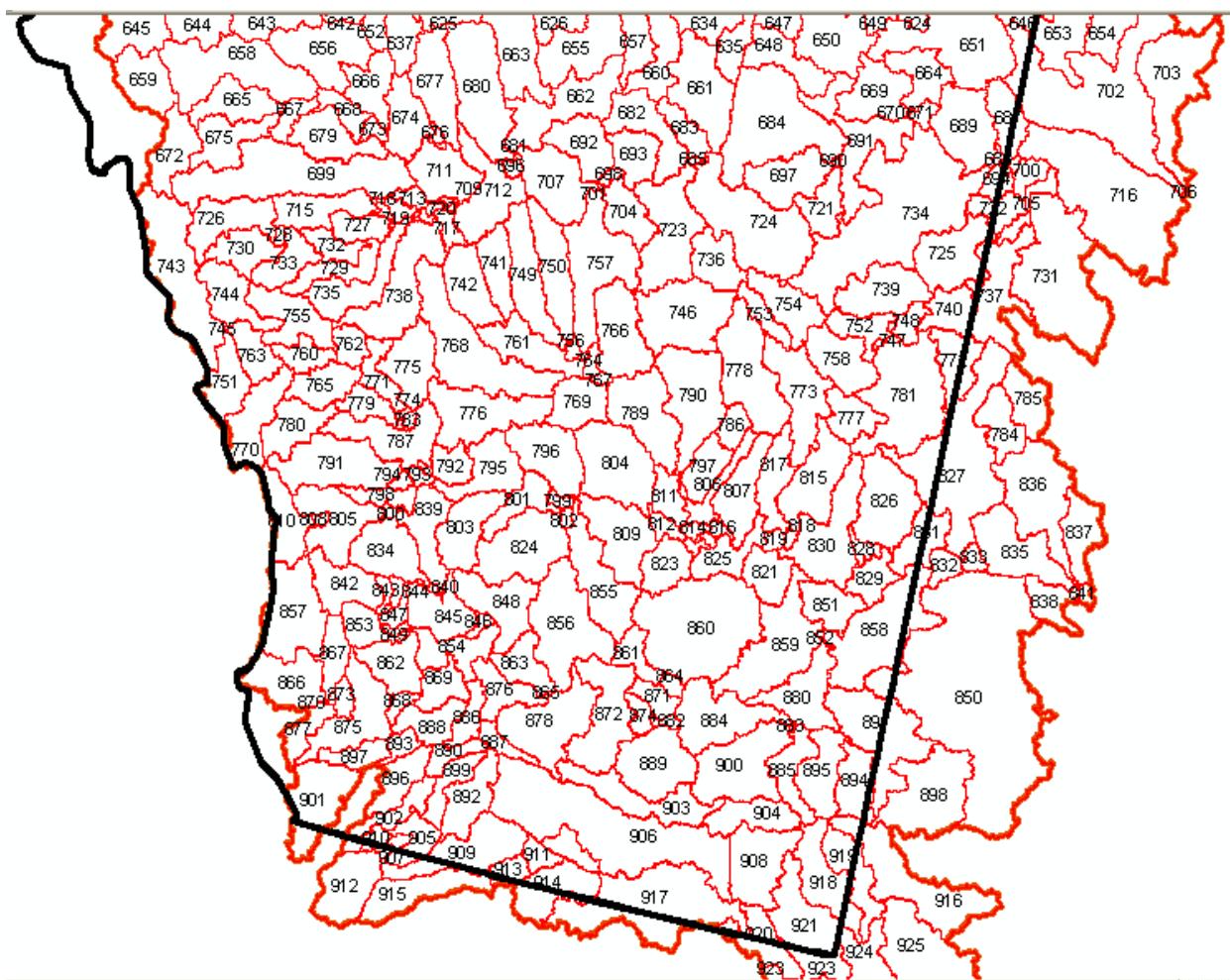
Subbasin	RB NAME	PCP	TMAX	TMIN	BLUE	DA	ET	PET	SW
894	NN	337.57	10.92	-2.65	280.74	72.09	57.28	60.06	2186.29
895	South Sas. RSB	337.57	10.92	-2.65	280.51	73.3	57.31	59.96	2186.26
896	Oldman RSB	523.48	12.24	-0.76	464.75	113.33	57.49	61.32	2190.13
897	Oldman RSB	757.25	10.43	-1.42	694.02	148.9	56.91	59.69	2220.95
898	NN	337.57	10.92	-2.65	284.49	73.88	53.55	60.14	2188.9
899	Oldman RSB	523.48	12.24	-0.76	465.47	116.37	57.22	61.02	2195.08
900	South Sas. RSB	335.1	11.81	-1.08	279.88	77.27	56.03	60.18	2178.74
901	Oldman RSB	757.25	10.43	-1.42	693.23	86.93	58.22	60.97	2219.66
902	Oldman RSB	523.48	12.24	-0.76	463.15	113.01	59.29	62.04	2190.12
903	South Sas. RSB	334.39	12.84	-0.66	278.14	82.84	57.1	61.39	2174.82
904	South Sas. RSB	335.1	11.81	-1.08	278.26	76.5	57.85	60.56	2177.62
905	Oldman RSB	523.48	12.24	-0.76	464.73	111.82	58.02	61.91	2195.12
906	South Sas. RSB	322.66	12.69	-0.42	265.53	80.8	58.19	62.34	2162.55
907	Oldman RSB	523.48	12.24	-0.76	463.3	109.33	59.23	61.94	2190.11
908	South Sas. RSB	346.77	12.48	-0.85	288.82	80.37	58.68	61.45	2179.47
909	Milk RB	405.95	11.82	-1.23	344.69	58.67	59.79	62.52	2350.49
910	Oldman RSB	523.48	12.24	-0.76	463.09	110.57	59.59	62.12	2189.98
911	Milk RB	349.81	12.28	-0.77	293.61	50.53	55.33	62.3	2332.47
912	Oldman RSB	757.25	10.43	-1.42	693.03	95.36	58.79	61.34	2219.96
913	Milk RB	349.81	12.28	-0.77	293.47	50.55	55.7	62.66	2332.29
914	Milk RB	349.81	12.28	-0.77	293.59	51.08	55.43	62.09	2331.11
915	Milk RB	523.48	12.24	-0.76	462.23	73.81	59.64	62.16	2360.73
916	Milk RB	323.59	11.77	-2.48	269.45	44.78	53.71	60.75	2345.4
917	Milk RB	353.61	12.94	-0.18	293.55	53.38	59.45	61.91	2327.32
918	Milk RB	323.59	11.77	-2.48	264.85	44.78	58.37	60.9	2345.2
919	Milk RB	323.59	11.77	-2.48	269.17	45.06	53.82	60.82	2345.28
920	Milk RB	346.77	12.48	-0.85	287.23	55.69	58.79	61.26	2342.91
921	Milk RB	323.59	11.77	-2.48	264.7	44.8	58.27	60.82	2345.51
922	Milk RB	323.59	11.77	-2.48	264.21	48.83	58.46	60.97	2351.8
923	Milk RB	323.59	11.77	-2.48	264.24	49.69	58.55	61.08	2351.69
924	Milk RB	323.59	11.77	-2.48	268.82	45.63	53.85	60.85	2345.32
925	Milk RB	323.59	11.77	-2.48	268.57	45.16	54.04	61.04	2345.05
926	Milk RB	323.59	11.77	-2.48	266.77	44.94	55.72	60.93	2345.21
927	Milk RB	323.59	11.77	-2.48	268.72	43.73	53.95	60.93	2344.97
928	Milk RB	323.59	11.77	-2.48	268.67	43.61	53.99	60.96	2344.9

RB: river basin, **RSB:** river subbasin, **N_Hay RB:** the modeled subbasins located nearby Hay River basin which are not part of Alberta main river basins. **N_Beaver:** the modeled subbasins located nearby Beaver River basin which are not part of Alberta main river basins, **PCP:** precipitation (mm), **TMAX:** maximum temperature ($^{\circ}\text{C}$), **TMIN:** minimum temperature ($^{\circ}\text{C}$), **Blue:** blue water and is total water yield plus deep aquifer recharge (mm yr^{-1}), **DA:** deep aquifer recharge (mm yr^{-1}), **SW:** green water storage (soil water, mm), **ET:** green water flow (actual evapotranspiration, (mm yr^{-1})), **PET:** potential evapotranspiration (mm yr^{-1}).

Appendix II

Subbasin number





Appendix III

Water balance components aggregated for major subbasins

River basin/sub basin	Blue		ET		SW		PET		DA		WYLD	
	L95PPU	U95PPU										
Hay	6.20	14.86	1.28	1.47	59.79	73.21	1.32	2.56	1.56	7.78	1.14	10.88
Peace	45.88	94.55	7.91	8.98	370.54	448.11	8.10	15.58	11.26	51.75	8.85	68.20
Athabasca	50.72	90.02	7.34	8.45	332.81	506.16	7.84	14.68	6.78	31.39	28.30	75.29
Beaver	4.15	8.39	0.77	0.86	33.42	44.06	0.78	1.45	0.99	4.11	1.74	6.14
North Sask.	30.73	49.01	4.32	4.95	200.05	277.09	4.45	7.90	4.59	13.88	19.11	40.97
Red Deer	15.06	23.80	2.41	2.74	91.70	113.81	2.48	4.31	2.35	7.90	8.92	19.40
Bow	8.92	18.56	1.13	1.51	47.94	61.11	1.16	2.36	1.10	4.57	5.68	15.89
Oldman	7.40	12.13	1.15	1.32	42.20	52.82	1.19	2.03	1.01	3.52	4.65	10.15
South Sask.	3.62	5.69	0.95	1.03	33.94	42.30	0.99	1.59	0.63	2.05	2.00	4.54
Milk	1.33	2.55	0.37	0.40	12.59	18.69	0.39	0.61	0.01	0.78	0.82	2.32

