

CANADA – ALBERTA

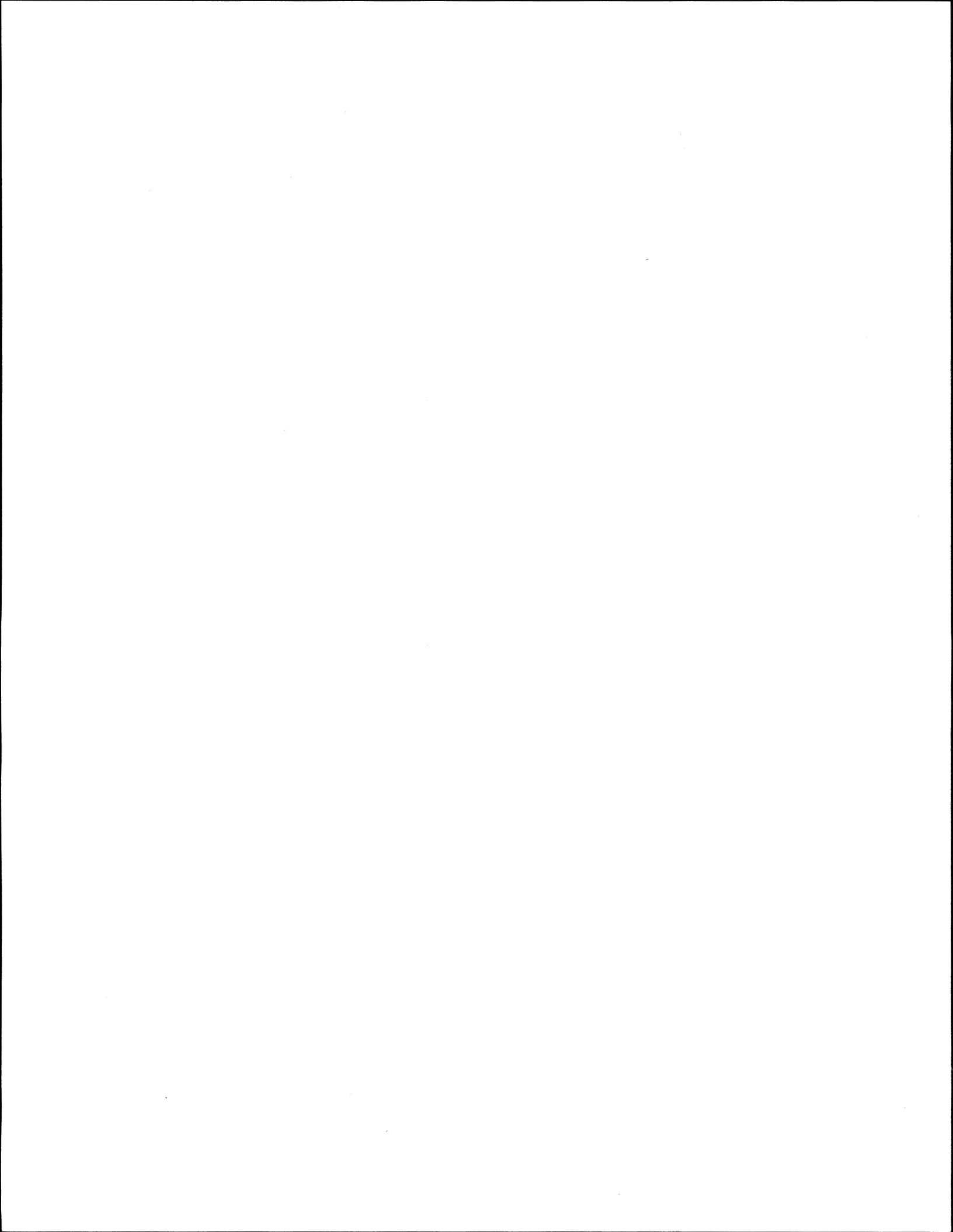
MEMORANDUM OF AGREEMENT

FOR

WATER QUANTITY SURVEYS

REPORT for FISCAL YEAR

2008 – 2009




CANADA – ALBERTA
2008 – 2009 Memorandum of Agreement for Water Quantity Surveys

TO: Dr. Alain Pietroniro
Administrator for Canada

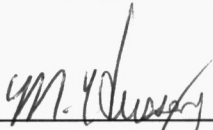
Mr. Tom Dickson
Administrator for Alberta

We hereby submit the annual report for the fiscal year 2008 – 2009 covering activities under the Memorandum of Agreement for Water Quantity Surveys for the Province of Alberta.

Government of Canada


for Russell G. Boals
Environment Canada

Province of Alberta


Morna Hussey
Alberta Environment

Members

Alberta Coordinating Committee

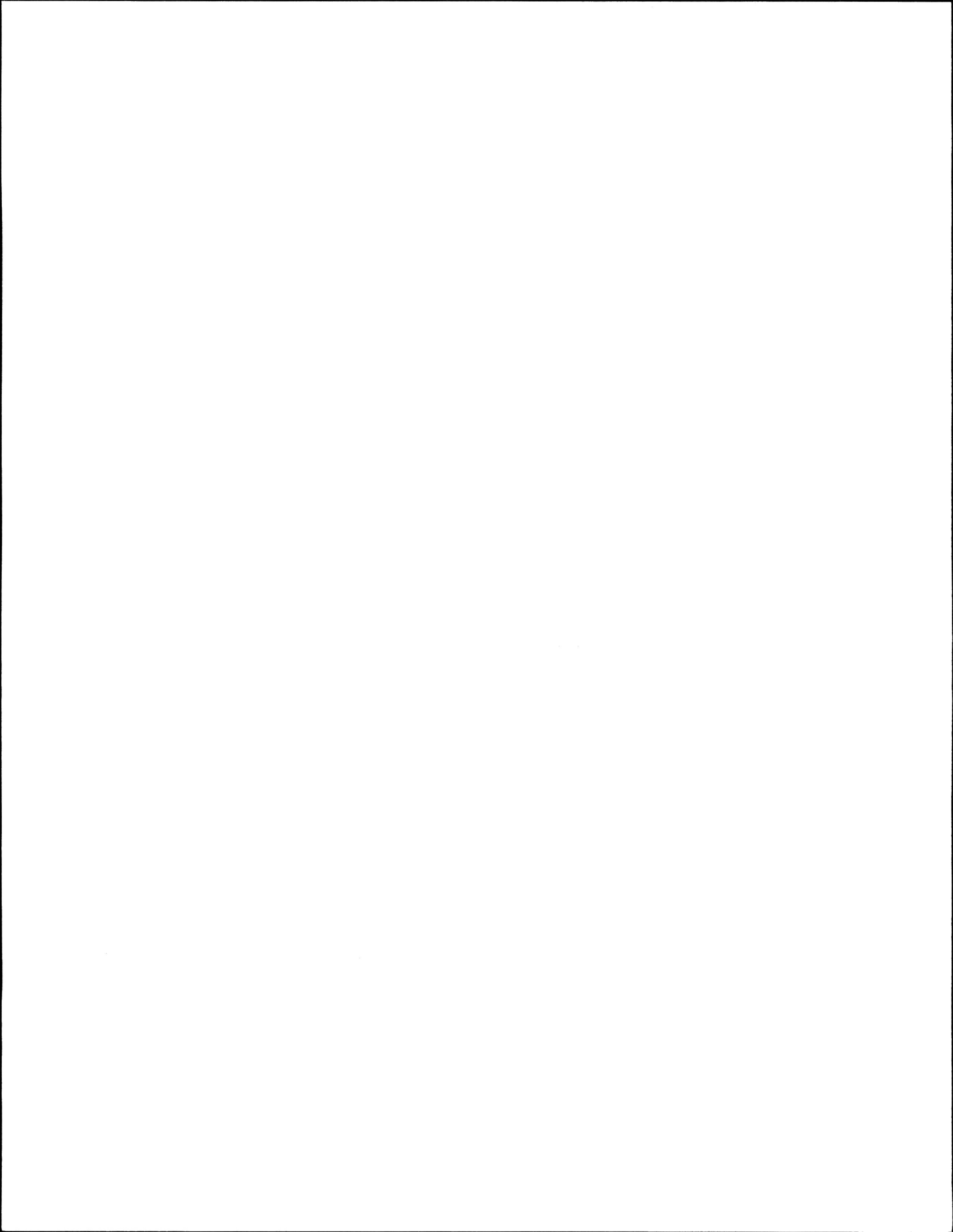
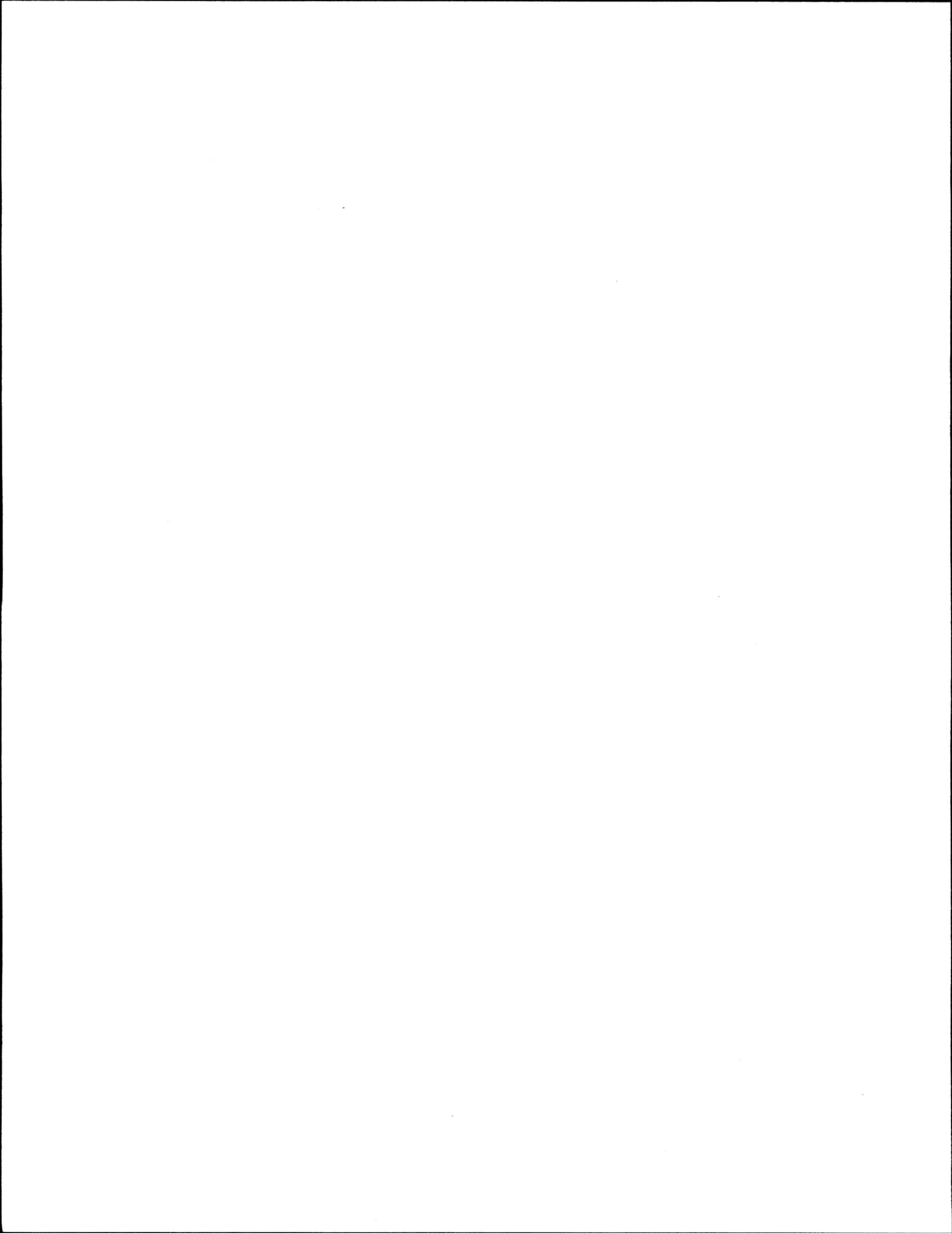


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1.0 INTRODUCTION

To date twenty five reports summarizing the activities of the water quantity surveys in the Province of Alberta have been submitted to the Administrators of the Canada – Alberta Water Quantity Surveys in accordance with Article XII of the 1975 Memorandum of Agreement. The last report was submitted March 2010 for the fiscal years 2007 – 2008.

In 1975, Canada and Alberta signed the Canada – Alberta Memorandum of Agreement for Water Quantity Surveys thus harmonizing the collection, processing, publication and distribution of Hydrometric data for Alberta. In the same year, similar agreements were signed with all provinces and with Indian and Northern Affairs Canada on behalf of the Territories. These agreements have provided the basis for the development of a standardized national archive of data and information on the availability and variability of surface water within Canada.

The evolution of the needs of the parties and monitoring approaches since 1975 have created the need for the renewal of all of the 1975 agreements. This new Agreement provides the structure and flexibility to ensure that the parties are provided with an effective and efficient Hydrometric monitoring service that supports public health and safety, economic development and the sustainability of our natural environment.

Late in the calendar year, discussions concluded with the parties agreeing to the terms of the new Bilateral. As with the previous year's reports while discussions were taking place on the new Agreement, the twenty-sixth report for the fiscal year 2008 – 2009, has been prepared in accordance with the recommended changes to Schedule B of the new Agreement. Schedule B of the new Agreement describes the procedures for determining and distributing shareable costs. The new Agreement will replace the 1975 Agreement effective in 2009 – 2010.

The 2008 – 2009 report contains a brief summary of the year in review and highlights from the coordinator meetings held July 3, November 12, 2008 and February 9, 2009. Network status and operational costs for hydrometric and specific project activities are also discussed. A historical over and under cumulative summary and table of Alberta Environment payments is included in Section 3.0, while the historical network development dating back to the early 1900's is illustrated in the final section of this report.

In addition, the Appendices to this report include Schedule C, a station listing for 2008 – 2009; Schedule D, Summary of Financial Considerations Details for 2008 – 2009; Schedule D, Summary of Financial Considerations Estimates 2008 – 2009; Schedule D, Summary of Financial Consideration Estimates 2009 – 2010; Project Details 2008 -2009.

The 2008 – 2009 Alberta hydrometric program total gross expenditures were \$4,015,753. Canada's calculated share is \$1,664,005 while Alberta Environment's is \$2,351,748.

2.0 SUMMARY of OPERATIONAL CONSIDERATIONS

2.1 Year in Review

Water Survey of Canada celebrated 100 years of service to Canadians in 2008. To celebrate this momentous occasion, current and past employees along with provincial representatives attended a workshop in Penticton British Columbia in the fall of 2008.

Generally, the runoff from snowmelt and rainfall events was normal throughout most of the province. There were isolated rain events in some locations that caused localized flooding with minimal damages to personal property and gauging station civil works. Cooperation with the collection and transfer of field data between personnel from both Canada and Alberta Environment ensured timely data was provided to Alberta flood forecasters as well as national and international water apportionment authorities.

The discontinued station decommission file was placed on hold for 2008 – 2009. Alberta Environment experienced funding constraints, while Environment Canada continued to experience staff shortages.

2.2 Coordinator Meeting Highlights

The Canada – Alberta Coordinating Committee met on July 3rd, November 12th, 2008 and February 9th, 2009. Alberta was represented by Kendal Tupker and Hubert Howe of Alberta Environment while Canada's representatives were Russell Boals and Bill Streeton of Environment Canada.

There were no changes affecting the Water Survey Division operational station units of Schedule C from the 2007 – 2008 listing, however, one station was re-designated from F4 to Commercial. Alberta Environment changes to their 2008 – 2009 hydrometric network is included in Appendix A, Schedule C contributed data.

Since 1949, Water Survey Division has been monitoring continuous flow and sediment data on the Oldman River near Waldron's Corner (05AA023). The station is located on private land and at the land owners request; the station will be relocated from their property to a new location downstream and closer to the Oldman Reservoir effective April 1 2010.

Alberta informed the coordinators they are making progress with the use of Acoustic Doppler Current Profiler (ADCP) technology with three AENV personnel working towards certification. They also requested and received approval from coordinators to have AENV personnel accompany Water Survey Division staff on field activities that involve bridge and cableway measurements during high water events. By having AENV personnel involved in these activities during extreme events will permit staff to gain valuable experience and improve on competencies.

Canada reported there are eighty five (85) sites remaining to be upgraded to high data rate transmitters (HDR). The schedule of converting twenty sites per year is on track to meet the completion target date of 2013.

Coordinators presented the revised 2008 – 2009 Schedule D estimates of **\$4,063,389** to the Administrators for their approval. Canada's share is estimated at **\$1,793,415** (includes Alberta net credits for program work) while Alberta Environment net share is estimated at **\$2,269,973**. Alberta net share includes credits (\$141,642) for operating the Federal network in the Peace Athabasca Delta, direct costs incurred for 2008 – 2009 hydrometric program operations and Christina Lake operations.

Coordinators agreed to include water temperature reporting at select sites to Alberta Environment forecasters as part of the field reporting activities.

Coordinators agreed to postpone the Stakeholders workshop scheduled for February 2009 to early in 2010.

Coordinators discussed various options with respect to the eight expansion stations, including six which have infrastructure in place but without instrumentation. Alberta Environment concerns over a shrinking resource base and Environment Canada's staffing delays have contributed to the uncertainties. Alberta informed the committee members they have no plans for expansion work in 2009 – 2010.

Coordinators were informed there are considerable uncertainties in terms of the Regional Aquatics Monitoring Project's, (RAMP) involvement with the Water Survey Division and Alberta Environment.

2.3 Network

The Canada – Alberta Hydrometric Agreement includes three hundred and ninety six (396) hydrometric and four (4) sediment monitoring stations operated by the Alberta Water Survey Division and ten (10) hydrometric monitoring stations operated by Alberta Environment during 2008 – 2009. Two (2) of the Federal stations operated by Canada are located in Saskatchewan and four (4) international stations are located in Montana.

In addition to the stations operated by Canada and Alberta Environment, Water Survey Division Northwest Territories / Nunavut operated two (2) stations in northern Alberta while Water Survey Division Saskatchewan operated nine (9) stations in southeastern Alberta. Alberta Environment contributed data from thirty six (36) stations to the National Archive while Trans Alta Utilities and the City of Calgary contributed eighteen (18) and one (1) respectively for a total network size to 472 hydrometric stations.

There were no changes affecting the Water Survey Division operation station units of Schedule C from the 2007 – 2008 listing, however, one station was re-designated from F4 to Commercial, Deep Valley Creek near Valleyview. Alberta Environment changes to their 2008 – 2009 hydrometric network is included in Appendix A, Schedule C contributed data.

A detailed listing of the stations is included in Schedule C, 2008 – 2009, APPENDIX A

3.0 COST OF OPERATION

3.1 Operations

The 2008 – 2009 gross program expenditure shares for Canada were calculated at \$1,664,005 while the Alberta Environment's share is \$2,351,748. The calculated gross share values are 1.0% over the estimated expenditure for Canada and 97.5% of the Schedule D estimates for Alberta Environment.

Alberta Environment's 2.5% less than the Schedule D estimated expenditure in gross share is the difference between a 1.4% over expenditure in the operation (direct and indirect) and 23.4% less than estimated expenditures in projects. Canada's 1.0% over the estimated Schedule D expenditure in gross share is shared with a less than 1% over expenditure in both the operation (direct and indirect) and projects.

Resources were budgeted for provincial expansion projects in the Schedule D estimates however; no disbursements were made against this activity. The 23.4% less than estimated expenditure for Alberta Environment in projects can be attributed to the non activity in expansion. Canada's project 1% over the estimated Schedule D expenditure is the result of no disbursements' for decommissioning, limited activity in cableway projects resulting from delays with staffing the engineer and supervisor positions in the facilities section, and re-profiled resources from these two activities to LCM equipment purchases.

The limited activity in select projects did allow for budgeted funds to be re-profiled to shared purchases of HDR transmitters (\$102,120) along with shaft encoders (\$18,800) while Canada re-profiled Federal funds towards the purchase of Acoustic Doppler Velocity profiler and ADCPs.

The direct operations expenditures is 1% over the Schedule D estimates while the indirect operations expenditures is 4.1% over estimates. Five new personnel were hired to fill hydrometric technologist vacancies at various periods over the year. The addition of these new personnel had a significant impact on the training expenditures which is the primary factor of the 4.1% over expenditure in indirect operations.

Alberta Environment net share of the program expenditures is \$2,208,454 which is 2.7% or \$61,519 less than the Schedule D estimates of \$2,269,973.

The Alberta Environment net share includes total credits (\$143,294) for operating the Federal network in the Peace Athabasca Delta (\$114,913), their direct costs incurred for 2008 – 2009 hydrometric program operations (\$17,883) and Christina Lake operations (\$10,498).

Details of the 2008 – 2009 expenditures are included in Appendix B; Table 3.1.1 summarizes these expenditures; and Table 3.1.2 is the Alberta Environment quarterly payment listing.

Table 3.1.1
Schedule D 2008 – 2009
Summary of Financial Contributions

<u>TYPE OF EXPENDITURE</u>	<u>Stations</u>	<u>Expenditure</u>	<u>SHARE</u>	
			<u>FEDERAL</u>	<u>PROVINCIAL</u>
<u>Direct Operations</u>				
Hydrometric Network Operated by WSC	396	\$ 2,820,862	\$ 1,130,302	\$ 1,690,560
Hydrometric Equipment Depreciation		\$ 139,772	\$ 56,006	\$ 83,766
Full Program Sediment Stations	4	\$ 28,673	\$ 4,779	\$ 23,894
Sediment Equipment Depreciation		\$ -	\$ -	\$ -
<u>Indirect Operations</u>				
Hydrometric Network Operated by WSC	396	\$ 432,346	\$ 173,238	\$ 259,108
Full Program Sediment Stations	4	\$ 4,395	\$ 732	\$ 3,662
<u>Projects</u>				
Life Cycle Management	42	\$ 541,135	\$ 275,659	\$ 265,476
Cableway Upgrades	6	\$ 48,570	\$ 23,289	\$ 25,281
Station Decommissioning				
Network Expansion		\$ -	\$ -	
	TOTAL	\$ 4,015,753	\$ 1,664,005	\$ 2,351,748

ALBERTA GROSS SHARE: \$ 2,351,748

ALBERTA CREDIT:

a) Direct Operation cost (PAD)		
Hydrometric stations	\$	(95,576)
Hydrometric Depreciation	\$	(4,688)
b) Indirect Operation cost (PAD)	\$	(14,649)
c) Direct Costs Water Sciences ((\$39,894 X (123.950+.750)) / 313.050)	\$	(15,891)
d) Direct Costs Monitoring ((\$5000 X 123.950+.750) / 313.050)	\$	(1,992)
e) Christina Lake January -December	\$	(10,498)
	TOTAL	\$ (143,294)

ALBERTA NET SHARE: Alberta Gross Share - ALBERTA CREDIT \$ 2,208,454

Schedule D payment 2008 - 2009 from estimates \$ 2,269,973

BALANCE \$ 61,519

Table 3.1.2
 Alberta Environment Payments

2008 - 2009 Invoice Details				
Client	Invoice			
	Number	Date	Service	Total
Alberta Environment	80520123	July 2 2008	1st Quarter billing	\$675,361.00
Alberta Environment	80520281	September 19 2008	2nd Quarter billing	\$675,362.00
Alberta Environment	80520523	February 17 2009	3rd Quarter billing	\$533,720.00
Alberta Environment	80520562	March 13 2009	4th Quarter billing	\$385,531.00
				\$2,269,973.00

3.2 Projects

3.2.1 Life Cycle Management

Forty two (42) Life Cycle Management (LCM) projects were completed during 2008 – 2009 season. The completed projects represent approximately 54% of the planned projects. Staffing delays were the primary reason for the reduced project activity.

Included in the project activities were; heat tape and gauging station shelter replacements, electrical upgrades, stilling well civil works repairs, rodent proofing, and site assessments for future projects work along with minor maintenance at a number of other stations.

An Electrical Engineer was contracted to assess and make recommendations on the general wiring configuration of a typical gauging station. The report did not identify any significant concerns, however it was recommended the Water Survey Division may want to upgrade the GFI receptacles to industrial strength. Appropriate actions were taken at selected stations.

Three of the projects involved follow-up work on expansion stations that were not completed in 2007 – 2008. The work involved completion of the structural installation and landscaping as required.

Additional details on the LCM construction projects are included in Appendix E, 2008 – 2009 Projects.

3.2.2 Cableways

Six cableway projects were included in this activity. The Berland River new cableway was completed and put into service. Similar to the LCM projects, the planned cableway work incurred delays and re-scheduling due to staffing the supervisor and engineer vacancies.

Canada's project expenditure was 21% of the Schedule D estimates. The St Mary River at International Boundary cableway had geophysical and design work completed with the construction activities re-schedule to 2009 – 2010.

The North Saskatchewan River (F1) cableway construction project was the primary component of the Federal cableway estimates and with the engineer and supervisor staffing delays, this project was also postponed to 2009 – 2010.

The Alberta Environment funded planned cableway activities was 76% of estimated expenditures albeit only two of the planned seven stations had work completed. The Berland River which experienced delays in 2007 – 2008 was completed and put into service.

Additional details on the cableway projects are included in Appendix E, 2008 – 2009 Projects.

3.2.3 Decommission

Alberta Environment did not receive budget funds for decommission activities in 2008 – 2009. Canada received funds but were unable to make any progress on this file due to staffing delays; subsequently the discontinued station decommission file was placed on hold for 2008 – 2009.

There are an estimated fifty four (54) sites remaining to be decommissioned. Once the human resource issues are finalized, the project will continue and a full accounting with respective partner shares will be provided at that time.

Table 3.2.3
Decommission Project Summary
2008 – 2009

<u>FISCAL YEAR</u>	<u>PROJECTS</u>	<u>SHARE</u>		<u>TOTAL</u>
		<u>FEDERAL</u>	<u>PROVINCIAL</u>	
2004 - 2005		\$11,835	\$14,202	\$26,037
2005 - 2006	89	\$87,062	\$15,211	\$102,273
2006 - 2007	126	\$98,651	\$28,000	\$126,651
2007 - 2008	23	\$155,664	\$84,100	\$239,764
2008 - 2009	0	\$0	\$0	\$0
TOTAL	238	\$353,212	\$141,513	\$494,725

3.2.4 Network Expansion

Alberta Environment's Schedule D estimates included \$150,000 to complete and activate the eight stations that were carried forward from 2007 – 2008. The projects were delayed early in the fiscal year as Water Survey Division was unable to complete work other than to have pads poured and shelters installed due to personnel availability. Two of the stations met with land availability delays in permissions and by fiscal year end no progress had been made on the permits.

As the year progressed, Alberta experienced uncertainties with their long term funding support for new stations, and by years end, plans for expansion work were suspended. With Alberta Environment anticipating future budget restraints there are no plans for expansion work in the short term.

One site, 07FD007 - Shorncliffe Lake near Czar, was activated for the 2008 field season as AENV had received funding for this site.

Program managers held discussions on various options with respect to the six expansion stations that have infrastructure in place but without instrumentation. One of these stations is on loan to the city of Edmonton while no decisions were reached on the others.

3.3 Provincial Variance

Table 3.3.1 includes the Alberta Environment historical summary of annual over and under contributions for their financial share of the hydrometric monitoring program. Ending fiscal year 2008 – 2009 Alberta Environment is carrying a surplus of \$62,020.

Table 3.3.1
Historical Provincial Variance
CUMULATIVE PROVINCIAL OVER OR UNDERPAYMENT
OF AGREEMENT OPERATION COSTS

Year	Share	Annual Payment	Overpayment (Underpayment)	Cumulative (under) / over	% of Annual Payment
1975-76	197,852	197,400	(452)	(452)	(0.23)
1976-77	231,000	231,000	-	(452)	-
1977-78	247,430	240,000	(7,430)	(7,882)	(3.10)
1978-79	267,055	260,000	(7,055)	(14,937)	(2.71)
1979-80	353,768	370,000	16,232	1,295	4.39
1980-81	423,906	390,000	(33,906)	(32,611)	(8.69)
1981-82	556,741	568,240	11,499	(21,112)	2.02
1982-83	747,352	747,352	-	(21,112)	-
1983-84	812,593	796,033	(16,560)	(37,672)	(2.08)
1984-85	935,664	933,500	(2,164)	(39,836)	(0.23)
1985-86	917,865	927,000	9,135	(30,701)	0.99
1986-87	962,413	962,700	287	(30,414)	0.03
1987-88	819,624	830,579	10,955	(19,459)	1.32
1988-89	868,131	856,000	(12,131)	(31,590)	(1.42)
1989-90	922,430	920,000	(2,430)	(34,020)	(0.26)
1990-91	1,002,759	1,008,350	5,591	(28,429)	0.55
1991-92	957,200	995,600	38,400	9,971	3.86
1992-93	1,030,991	1,062,600	31,609	41,580	2.97
*1993-94	-	(30,149)	(30,149)	11,431	-
1993-94	1,050,459	1,048,000	(2,459)	8,972	(0.23)
1994-95	956,377	964,400	8,023	16,995	0.83
1995-96	887,014	964,400	69,181	86,176	7.17
1996-97	925,700	940,000	30,202	116,378	3.21
**1997-98	971,691	940,000	(31,691)	116,378	(3.37)
**1998-99	950,484	940,000	(10,484)	116,378	(1.12)
**1999-00	943,647	943,943	296	116,378	0.03
2000-01	1,167,191	1,148,934	(18,257)	98,121	(1.59)
2001-02	1,174,758	1,181,417	6,659	104,780	0.56
2002-03	1,234,433	1,235,101	668	105,448	0.05
2003-04	1,870,602	1,862,243	(8,359)	97,089	(0.45)
2004-05	2,529,997	2,411,348	(118,649)	(21,560)	(4.92)
2005-06	2,598,177	2,772,776	174,599	153,039	6.30
***2006-07	2,336,605	2,408,435	71,830	71,830	2.98
2007-08	2,372,758	2,301,429	(71,329)	501	(3.10)
2008-09	2,208,454	2,269,973	61,519	62,020	2.71

*Credit to Alberta for overpayment in 1992-93

**Letter of Agreement \$0 Balance

*** credit balance 2005 - 06 zeroed in Schedule D calculations

4.0 HISTORICAL NETWORK DEVELOPMENT

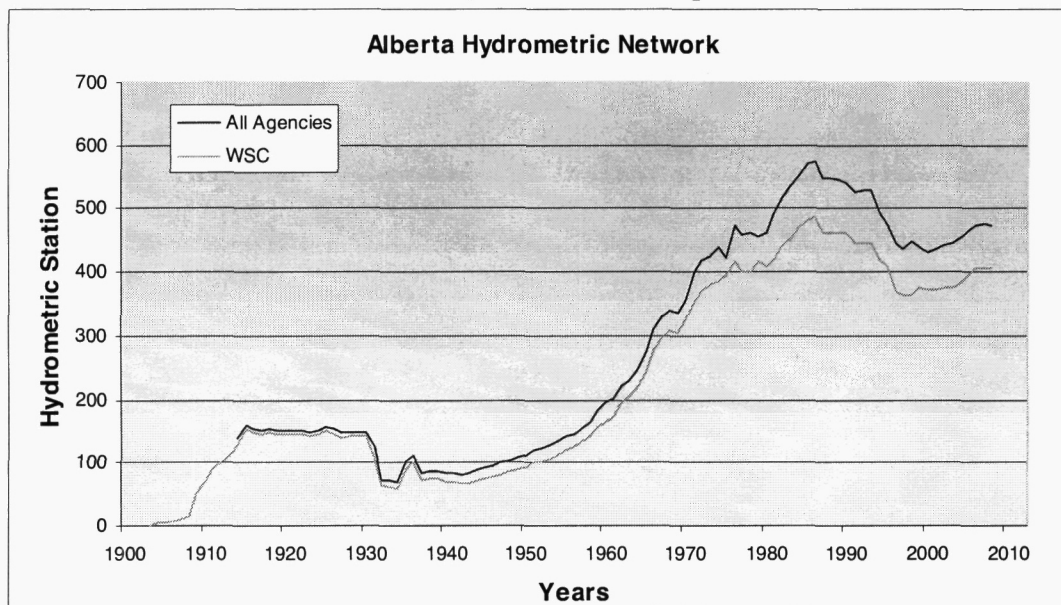
The Canada – Alberta Hydrometric Agreement was signed in 1975 – 1976 when four hundred and twenty three (423) hydrometric stations were assigned a designation and it was agreed the Water Survey of Canada would operate three hundred and eighty three (383) in a partnership with Alberta Environment. During the thirty four years of cooperation of the Alberta Agreement, very significant changes to the Alberta network were made which can be summarized as; 282 stations established, 269 stations discontinued and 223 stations re-designated.

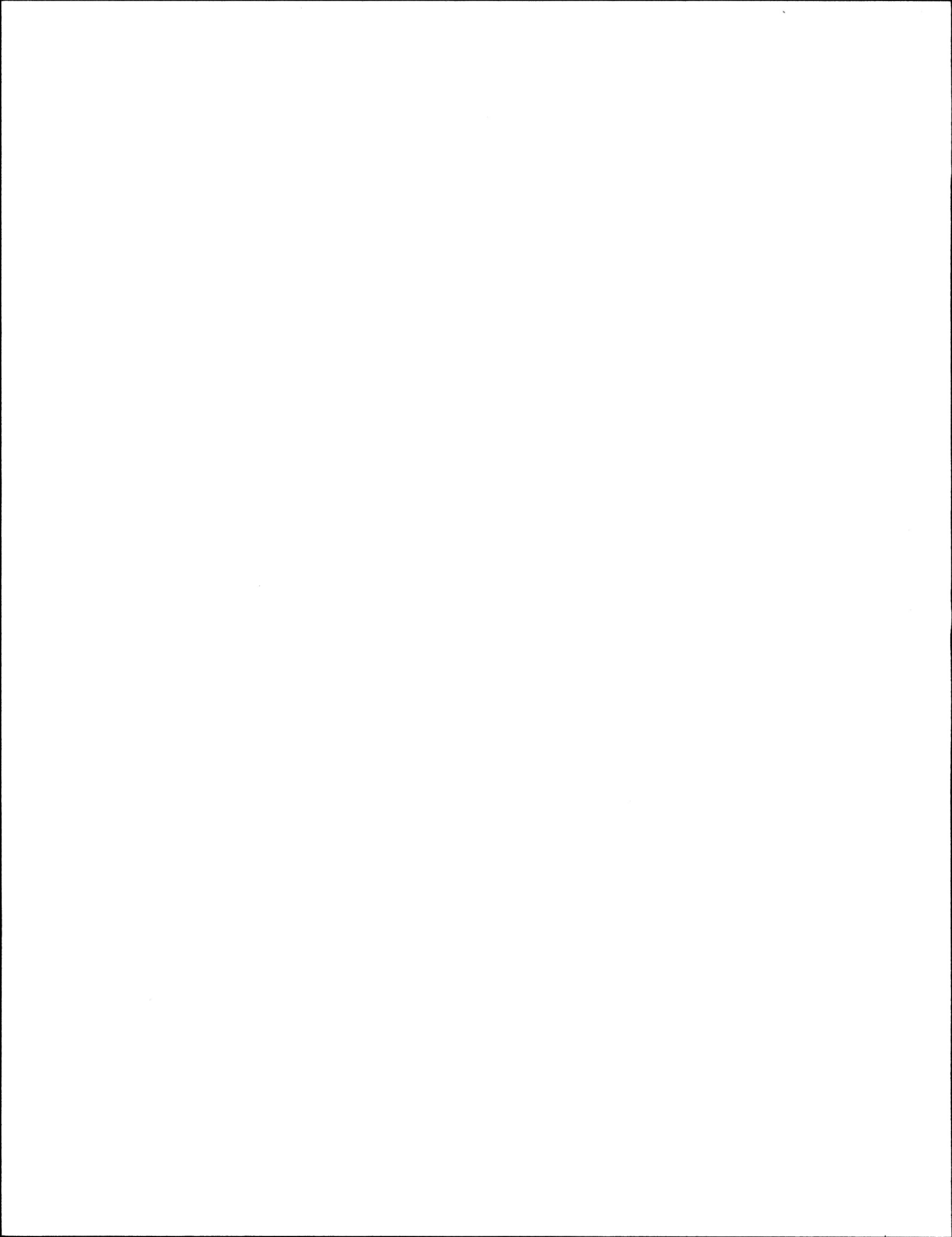
The history of the size of the hydrometric network in Alberta, which includes hydrometric stations operated by Water Survey of Canada (Alberta, Saskatchewan and Northwest Territories – Nunavut), Alberta Environment, Trans Alta Utilities and the City of Calgary, is illustrated in Figure 4.1.

In terms of the current era, it can be seen that the hydrometric network increased rapidly from the mid 1950's until the signing of the agreement in 1975. The stations operated in the hydrometric agreement steadily rose from 1975 to a peak of 573 in 1986 – 1987. After this point in time, resource support, first by Alberta and then by the Federal Government, resulted in a reduction of the number of stations operated in the agreement. Particularly large numbers of stations were discontinued in 1990 – 1991 (17), 1993 – 1994 (26) and 1995 – 1996 (39), until the network bottomed out in 2000 at 432 stations. During the five year period from 1992 to 1997 the station designation changes almost doubled with 92 occurring in the period 1996 to 1997.

Since 2000 the partner's stabilization of resource bases combined with the introduction of operational efficiencies has allowed for some growth in the network. The 2008 – 2009 network size currently includes 472 stations. The most significant changes have occurred since 2003 – 2004 with the introduction of Alberta's capital investment plan being included in their "Water for Life Strategy."

Figure 4.1
Historical Hydrometric Development





APPENDIX A
Schedule C
2008 – 2009

CANADA – ALBERTA
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APPENDIX A – Schedule C 2008 – 2009

Legend

<u>Station Unit</u>	<u>Classification</u>	<u>Symbol</u>	<u>Station Unit Factor</u>
Normal Access		N	
Remote Access		R	
Flow Station		Q	
Water Level Station		H	
Number of months of operation		Numeric	
	12QN		1.00
	12QR		1.80
	8QN		0.75
	8QR		1.50
	12HN		0.40
	12HR		1.10
	8HN		0.25
	8HR		0.95
<u>Designation and Operating Responsibilities</u>			
Federal Station		F	
Provincial Station		P	
Federal - Provincial Station		FP	
Contributed Alberta Environment		C-AENV	
Contributed Trans Alta Utilities		C-TAU	
Contributed City of Calgary		C-CITY	
Water Survey Division Alberta		WSCAB	
Water Survey Division Saskatchewan		WSCSK	
Alberta Environment		AENV	
Trans Alta Utilities		TAU	
City of Calgary		CITY	
Located in Saskatchewan operated by WSCAB		Station Name with *	
Located in Montana		Station Name with#	
Northwest Territories / Nunavut		NT/NU	

Schedule C Summary of Station Units

Water Survey Division Operated Units

	<u>Hydrometric</u>	<u>Sediment</u>	<u>Total</u>
Federal	123.425	0.525	123.950
Provincial	185.725	2.625	188.350
Commercial	0.750		0.750
Total	309.900	3.150	313.050

Alberta Environment Operated Units

	<u>Hydrometric</u>	<u>Sediment</u>	<u>Total</u>
Federal	10.500	0.000	10.500
Provincial	20.450	0.000	20.450
Commercial	0.400	0.000	0.400
Total	31.350	0.000	31.350

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APPENDIX A – Schedule C 2008 – 2009

1.0 Operated by Calgary WSC

1.1 Hydrometric Units

1.1.1 Federal Hydrometric Units

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
12QN	24	1.00	24.00
12QR	1	1.80	1.80
8QN	36	0.75	27.00
8QR	1	1.50	1.50
12HR	0	1.10	0.00
8HN	0	0.25	0.00
8HR	0	0.95	0.00
Total	68		56.70

1.1.2 Federal - Provincial Hydrometric Units

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
12QN	34	1.00	34.00
12QR	1	1.80	1.80
8QN	105	0.75	78.75
8QR	11	1.50	16.50
12HN	3	0.40	1.20
12HR	0	1.10	0.00
8HN	1	0.25	0.25
8HR	1	0.95	0.95
Total	156		133.45

1.1.3 Provincial Hydrometric Units

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
12QN	32	1.00	32.00
12QR	0	1.80	0.00
8QN	96	0.75	72.00
8QR	2	1.50	3.00
12HN	7	0.40	2.80
12HR	0	1.10	0.00
8HN	33	0.25	8.25
8HR	1	0.95	0.95
Total	171		119.00

1.2 Sediment Units

	<u>Fed.</u>	<u>Prov.</u>
1 Federal - Provincial	0.525	0.525
2 Provincial @ 1.05		2.100
Total	0.525	2.625

1.3 Commercial Hydrometric Units

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
8QN	1	0.75	0.75
Total	1		0.75

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APPENDIX A – Schedule C 2008 – 2009

2.0 Operated by Alberta Environment

2.1 Hydrometric Units

2.1.1 Federal Hydrometric Units

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
12HR	7	1.10	7.70
12HN	0	0.40	0.00
8QR	1	1.50	1.50
Total	8		9.20

2.1.2 Federal Provincial Hydrometric Units

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
12HR	1	1.10	1.10
8QR	1	1.50	1.50
Total	2		2.60

2.1.3 Provincial Hydrometric Units (contributed stations)

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
12QN	1	1.00	1.00
12QR	0	1.80	0.00
8QN	17	0.75	12.75
8QR	0	1.50	0.00
12HN	2	0.40	0.80
12HR	1	1.10	1.10
8HN	14	0.25	3.50
8HR	0	0.95	0.00
Total	35		19.15

2.2 Commercial Hydrometric Units (contributed stations)

<u>Classification</u>	<u>Stations</u>	<u>Factor</u>	<u>Units</u>
8QN	1	0.40	0.40
Total	1		0.40

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Federal Departmental Programs (F1)

Site Identification			Responsibility			Operational Approach				Output Products					
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
OPERATED BY - WATER SURVEY OF CANADA, ALBERTA DISTRICT															
BIRCH RIVER BELOW ALICE CREEK	07KE001	SW 35-107-19-4	F1	WSC, Alta.	8QR	1.5	Remote	MAROCT					Yes		
BOW RIVER AT BANFF	05BB001	SE 35-25-12-W5	F1	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BOW RIVER AT LAKE LOUISE	05BA001	NE 28-28-16-W5	F1	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
MISTAYA RIVER NEAR SASKATCHEWAN CROSSING	05DA007	SW 06-34-19-W5	F1	WSC, Alta.	12QN	1	Normal	ANNUAL					No		
NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT	05DA009	SW 14-35-18-W5	F1	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
PEKISKO CREEK NEAR LONGVIEW	05BL023	SW 34-17-02-W5	F1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PIPESTONE RIVER NEAR LAKE LOUISE	05BA002	SW 34-28-16-W5	F1	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
SILVERHORN CREEK NEAR THE MOUTH	05DA010	SE 02-33-19 W5	F1	WSC, Alta.	12QN	1	Normal	ANNUAL					No		
ST. MARY RIVER AT HIGHWAY NO. 501	05AE043	SW 01-02-25-W4	F1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WATERTON LAKE AT WATERTON PARK	05AD025	NW 23-01-30-W4	F1	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
WATERTON RIVER NEAR WATERTON PARK	05AD003	NE 08-02-29-W4	F1	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
Stations Total	11														
OPERATED BY - ALBERTA ENVIRONMENT															
EMBARRAS RIVER BREAKTHROUGH TO MAMAWI LAKE	07KF015		F1	AENV	8QR	1.5	Remote	MAROCT		6			Yes		
LAKE ATHABASCA AT FORT CHIPEWYAN	07MD001	SEC. 9-112-7-4	F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
LAKE CLAIRE NEAR OUTLET TO PRAIRIE RIVER	07KF002	58 38 00 - 111 41	F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
MAMAWI LAKE CHANNEL AT OLD DOG CAMP	07KF003	50	F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
PEACE RIVER BELOW CHENAL DES QUATRE FOURCHES	07KC005	SE 34-114-10-W4	F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
RIVIERE DES ROCHERS ABOVE SLAVE RIVER	07NA001		F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
RIVIERE DES ROCHERS EAST OF LITTLE RAPIDS	07NA007		F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
RIVIERE DES ROCHERS WEST OF LITTLE RAPIDS	07NA008		F1	AENV	12HR	1.1	Remote	ANNUAL		10			Yes		
Stations Total	8														

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Federal Interprovincial Waters (F2)

Site Identification			Responsibility			Operational Approach					Output Products				
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY	05FE004	SW 12-45-01-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BEAVER RIVER AT COLD LAKE RESERVE	06AD006	NE 10-62-02-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BOUNTIFUL COULEE INFLOW NEAR CRANFORD	05AG026	NE 36-9-18-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					No		
BOW RIVER AT CALGARY	05BH004	NE 15-24-01-W5	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BOW RIVER DEVELOPMENT DRAIN D NEAR VAUXHALL	05BN008	SW 30-14-15-4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					No		
BOW RIVER NEAR THE MOUTH	05BN012	NW 33-12-12-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BOXELDER CREEK AT HARGRAVE'S RANCH	05AH050	NE 23-12-30-W3	F2	WSC, Alta.	8QN	0.75	Normal	FEBOCT					Yes		
BOXELDER CREEK NEAR WALSH	05AH001	SE 02-12-30-W3	F2	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
CANADIAN ST. MARY CANAL NEAR SPRING COULEE	05AE026	NW 33-4-23-W4	F2	WSC, Alta.	8QN	0.75	Normal	APRNOV					Yes		
COLD LAKE AT COLD LAKE	06AF002	NW 24-63-02-W4	F2	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
COLD RIVER AT OUTLET OF COLD LAKE	06AF001	NE 27-64-26-W3	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
CROWFOOT CREEK NEAR CLUNY	05BM008	SE 06-22-20-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
EASTERN IRRIGATION DISTRICT MAIN BRANCH CANAL NEAR HEADGATE	05BM020	NW 36-20-19-4	F2	WSC, Alta.	8QN	0.75	Normal	APRNOV					Yes		
EXPANSE COULEE NEAR THE MOUTH	05AG003	NE 11-12-16-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
GLENIFFER RESERVOIR NEAR DICKSON	05CB006	SE 33-35-02-W5	F2	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
HIGHWOOD DIVERSION CANAL NEAR HEADGATES	05BL025	NE 25-18-30-W4	F2	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL ABOVE OLDMAN FLUME	05AB019	SE 34-8-27-W4	F2	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
LITTLE BOW CANAL AT HIGH RIVER	05BL015	NE 6-19-28-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
LITTLE BOW RIVER AT CARMANGAY	05AC003	SW 32-13-23-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
LITTLE BOW RIVER BELOW TRAVERS DAM	05AC012	NE 33-13-20-W4	F2	WSC, Alta.	8QN	0.75	Normal	APROCT					No		
LITTLE BOW RIVER NEAR THE MOUTH	05AC023	NW 11-11-19-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
MAGRATH IRRIGATION DISTRICT CANAL NEAR SPRING COULEE	05AE021	SE 05-05-23-W4	F2	WSC, Alta.	8QN	0.75	Normal	APROCT					No		
MATZHIWIN CREEK BELOW WARE COULEE	05CJ012	SE 35-21-14-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
MOUNTAIN VIEW IRRIGATION DISTRICT CANAL	05AD017	NW 4-2-28-W4	F2	WSC, Alta.	8QN	0.75	Normal	APRNOV					Yes		
NEW WEST COULEE NEAR THE MOUTH	05BN006	NE 34-14-16-W4	F2	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
NORTH SASKATCHEWAN RIVER NEAR DEER CREEK	05EF001	SW 27-52-25-W3	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
OLDMAN RIVER NEAR LETHBRIDGE	05AD007	NW 01-09-22-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
ONETREE CREEK NEAR PATRICIA	05CJ006	SW 36-20-13-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		

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Federal Interprovincial Waters (F2)

Site Identification			Responsibility					Operational Approach				Output Products			
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
PEACE RIVER AT PEACE POINT	07KC001	SE 35-116-15-W4	F2	Yellowknife	12QR	1.8	Remote	ANNUAL							
PIYAMI DRAIN NEAR PICTURE BUTTE	05AD037	SE 22-10-21-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					No		
POTHOLE CREEK AT RUSSELL'S RANCH	05AE016	NE 18-07-21-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYNOV					Yes		
RED DEER RIVER AT RED DEER	05CC002	SE 20-38-27-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
RED DEER RIVER NEAR BINDLOSS	05CK004	NW 25-22-3-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
ROSEBUD RIVER AT REDLAND	05CE005	NE 10-27-22-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
ROSS CREEK AT HIGHWAY 41	05AH052	SE 19-12-04-W4	F2	WSC, Alta.	8QN	0.75	Normal	FEBOCT					Yes		
SEVEN PERSONS CREEK AT MEDICINE HAT	05AH005	SW 30-12-05-W4 59 52 20 111 35	F2	WSC, Alta.	8QN	0.75	Normal	FEBOCT					Yes		
SLAVE RIVER AT FITZGERALD	07NB001	00	F2	Yellowknife	12QR	1.8	Remote	ANNUAL							
SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT	05AJ001	NW 31-12-05-W4	F2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
ST. MARY RESERVOIR NEAR SPRING COULEE	05AE025	NW 01-05-24-W4	F2	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
TWELVE MILE CREEK NEAR CECIL	05BN002	NE 02-14-13-W4	F2	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
UNITED IRRIGATION DISTRICT CANAL NEAR HILL SPRING	05AD013	NW 18-3-27-W4	F2	WSC, Alta.	8QN	0.75	Normal	APRNOV					Yes		
WATERTON RESERVOIR	05AD026	SE 27-04-28-W4	F2	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
Stations Total	42														

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Federal International Waters (F3)

Site Identification			Responsibility				Operational Approach					Output Products			
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
BARE CREEK RESERVOIR NEAR ELKWATER	11AB094	NE 31-05-03-W4	F3	WSC, Sask.	8HN		Normal	MAR OCT							
BEAR CREEK NEAR INTERNATIONAL BOUNDARY	11AA028	NE 12-01-10-W4	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					No		
CRESSDAY RESERVOIR NEAR CRESSDAY	11AB097	SE 30-03-02-W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
GREASEWOOD RESERVOIR NEAR ELKWATER	11AB092	SE 19-06-03-W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
JAYDOT RESERVOIR NEAR JAYDOT	11AB098	SW 01-03-01-W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
LAKE SHERBURNE	05AE036	SE 35-36-15WP	F3	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
MASSY RESERVOIR NEAR ELKWATER	11AB104	SE 17-06-03 W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
MICHEL RESERVOIR NEAR ELKWATER	11AB091	SE 05-07-03-W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
MIDDLE CREEK NEAR THE SASKATCHEWAN BOUNDARY	11AB009	SE 34-05-01-W4	F3	WSC, Sask.	8QN	0.75	Normal	MAR OCT							
MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY	11AA031	NW 07-37-10EP	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					Yes		
MILK RIVER AT MILK RIVER	11AA005	NE 21-02-16-W4	F3	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
MILK RIVER AT WESTERN CROSSING OF INTERNATIONAL BOUNDARY	11AA025	NE 01-01-20-W4	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					Yes		
MINERS COULEE NEAR INTERNATIONAL BOUNDARY	11AA029	SW 10-01-11-W4	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					No		
MITCHELL RESERVOIR NEAR ELKWATER	11AB099	NW 16-06-01-W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
NORTH FORK MILK RIVER ABOVE ST. MARY CANAL	11AA032	NE 16-37-11WP	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					Yes		
NORTH MILK RIVER NEAR INTERNATIONAL BOUNDARY	11AA001	NE 11-01-23-W4	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					Yes		
REESOR RESERVOIR NEAR ELKWATER	11AB090	SE 20-08-01-W4	F3	WSC, Sask.	8HN	0.25	Normal	MAR OCT							
ST. MARY CANAL AT ST. MARY CROSSING	05AE029	SW 19-37-13WP	F3	WSC, Alta.	8QN	0.75	Normal	MAR OCT					Yes		
ST. MARY RIVER AT INTERNATIONAL BOUNDARY	05AE027	SW 05-01-25-W4	F3	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
Stations Total	19														

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Federal National Water Quantity Inventory (F4)

Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
OPERATED BY - WATER SURVEY OF CANADA, ALBERTA DISTRICT															
ATHABASCA RIVER BELOW MCMURRAY	07DA001	NW 05-90-09-W4	F4	WSC, Alta.	12QR	1.80	Remote	ANNUAL					Yes		
ATHABASCA RIVER NEAR JASPER	07AA002	NW 27-45-01-W6	F4	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
MARMOT CREEK MAIN STEM NEAR SEEBE	05BF016	NE 11-23-09-W5	F4	WSC, Alta.	8QN	0.75	Normal	MAYOCT					No		
MIETTE RIVER NEAR JASPER	07AA001	NW 08-45-01-W6	F4	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
PEACE RIVER AT PEACE RIVER	07HA001	NW 31-83-21-W5	F4	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
PRAIRIE BLOOD COULEE NEAR LETHBRIDGE	05AD035	NW 17-07-22-W4	F4	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WABASCA RIVER AT HIGHWAY NO. 88	07JD002	NW 22-102-09-W5	F4	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
Stations Total	7														

Commercial Revenue (C)

Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
OPERATED BY - WATER SURVEY OF CANADA, ALBERTA DISTRICT															
DEEP VALLEY CREEK NEAR VALLEYVIEW	07GF008	SW 09-63-25-W5	F4	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
Stations Total	1														

Federal – Provincial Agreements (FP1)

Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
OPERATED BY - WATER SURVEY OF CANADA, ALBERTA DISTRICT															
BEAVER RIVER ABOVE SYNCRUDE	07DA018	NE 32-91-10-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
CLEARWATER RIVER AT DRAPER	07CD001	SE 06-89-08-W4	FP1	WSC, Alta.	12QR	1.80	Remote	ANNUAL					Yes		
FIREBAG RIVER NEAR THE MOUTH	07DC001	NW 36-99-08-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
HANGINGSTONE RIVER AT FORT MCMURRAY	07CD004	NW 10-89-09-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
MACKAY RIVER NEAR FORT MACKAY	07DB001	SE 03-95-11-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
MUSKEG RIVER NEAR FORT MACKAY	07DA008	NE 29-94-10-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
RICHARDSON RIVER NEAR THE MOUTH	07DD002	NE 10-108-8-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
STEEP BANK RIVER NEAR FORT MCMURRAY	07DA006	SW 29-92-09-W4	FP1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
WESTERN IRRIGATION DISTRICT CANAL NEAR HEADGATES	05BM015	SE 13-24-1-W5	FP1	WSC, Alta.	8QN	0.75	Normal	APRNOV					Yes		
Stations Total	9														
OPERATED BY - ALBERTA ENVIRONMENT															
ATHABASCA RIVER NEAR OLD FORT	07DD011	58 22 28 11 31 18	FP1	AENV	12HR	1.10	Remote	ANNUAL			10		Yes		
EMBARRAS RIVER BELOW DIVERGENCE	07DD003		FP1	AENV	8QR	1.50	Remote	MAROCT			6		Yes		
Stations Total	2														

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Federal – Provincial River Basin Management (FP2)

Site Identification			Responsibility		Operational Approach					Output Products					
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
ATHABASCA RIVER AT HINTON	07AD002	NE 23-51-25-W5	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BELLY RIVER NEAR MOUNTAIN VIEW	05AD005	NE 05-02-28-W4	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
BOW RIVER BELOW BASSANO DAM	05BM004	SW 02-21-19-W4	FP2	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
BOW RIVER BELOW CARSELAND DAM	05BM002	NW 33-21-25-W4	FP2	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
ETHEL LAKE NEAR COLD LAKE	06AC004	SE 23-64-03-W4	FP2	WSC, Alta.	12HN	0.4	Normal	ANNUAL					Yes		
HAY RIVER NEAR MEANDER RIVER	07OB003	NW 11-117-22-W5	FP2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
HIGHWOOD RIVER NEAR THE MOUTH	05BL024	NE 16-21-28-W4	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
KAKWA RIVER AT HIGHWAY NO. 40	07GB003	SE 05-63-04-W6	FP2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
LEE CREEK AT CARDSTON	05AE002	NW 10-03-25-W4	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
LUTOSE CREEK NEAR STEEN RIVER	07OB006	SW 07-120-19-W5	FP2	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
MARIE LAKE NEAR COLD LAKE	06AC005	SW 06-65-02-W4	FP2	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
MCLEOD RIVER NEAR ROSEVEAR	07AG007	NW 28-54-15-W5	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
NORTH SASKATCHEWAN RIVER AT EDMONTON	05DF001	NW 33-52-24-W4	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
OLDMAN RIVER NEAR BROCKET	05AA024	SE 14-07-29-W4	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
PEMBINA RIVER AT JARVIE	07BC002	NE 15-63-27-W4	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
ROLPH CREEK NEAR KIMBALL	05AE005	NE 16-02-24-W4	FP2	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
SMOKY RIVER ABOVE HELLS CREEK	07GA001	NE 19-57-08-W6	FP2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SMOKY RIVER AT WATINO	07GJ001	SE 34-77-24-W5	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
STEEN RIVER NEAR STEEN RIVER	07OB004	NE 4-122-19-5	FP2	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SWAN RIVER NEAR KINUSO	07BJ001	NE 11-73-10-W5	FP2	WSC, Alta.	12QN	1	Normal	ANNUAL					Yes		
Stations Total	20														

Federal – Provincial Regional Water Quantity Inventory (FP3)

Site Identification			Responsibility		Operational Approach					Output Products					
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
ALKALI CREEK NEAR THE MOUTH	05CK005	SW 28-22-04-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
AMISK RIVER AT HIGHWAY NO. 36	06AA002	SE 26-63-14-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
ATIMOSWE CREEK NEAR ELK POINT	05ED002	NW 36-56-07-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BATTLE RIVER NEAR PONOKA	05FA001	NE 31-42-25-W4	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
BEAVER RIVER NEAR GOODRIDGE	06AA001	NE 12-63-10-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BERRY CREEK NEAR ROSE LYNN	05CH008	NW 21-28-11-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BIGKNIFE CREEK NEAR GADSBY	05FC002	NW 11-41-17-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BLINDMAN RIVER NEAR BLUFFTON	05CC008	NE 31-43-02-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BLOCK CREEK NEAR LEEDALE	05CC010	SE 35-41-05-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BOYER RIVER NEAR PADDLE PRAIRIE	07JF004	SW 05-103-22-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BRAZEAU RIVER BELOW CARDINAL RIVER	05DD007	NW 16-45-18-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
BROWN CREEK AT FORESTRY ROAD	05DD004	NW 02-44-17-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
BUCHANAN CREEK NEAR MANNING	07HC002	NW 16-91-22-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BUFFALO CREEK AT HIGHWAY NO. 41	05FE002	SW 31-46-06-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BULLPOUND CREEK NEAR WATTS	05CG004	NW 16-31-15-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		

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Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
CADOTTE RIVER AT OUTLET CADOTTE LAKE	07HB001	SE 27-86-16-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
CASTLE RIVER AT RANGER STATION	05AA028	SE 21-05-03-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
CATARACT CREEK NEAR FORESTRY ROAD	05BL022	SW 26-15-05-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
CHINCHAGA RIVER NEAR HIGH LEVEL	07OC001	NW 31-110-02-W6	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
CHRISTINA RIVER NEAR CHARD	07CE002	NW 09-79-06-W4	FP3	WSC, Alta.	8QR	1.50	Remote	MAR	OCT				Yes		
CHRISTMAS CREEK NEAR BLUE RIDGE	07AH002	SE 31-60-09-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
CLEAR RIVER NEAR BEAR CANYON	07FD009	SW 28-84-11-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
CLEARWATER RIVER NEAR DOVERCOURT	05DB006	SW 07-38-06-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
COYOTE CREEK NEAR CHERHILL	07BB014	NW 27-56-05-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
CROWSNEST RIVER AT FRANK CUTBANK RIVER NEAR GRANDE PRAIRIE	05AA008	SE 36-07-04-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
DAPP CREEK AT HIGHWAY NO. 44	07GB001	SE 10-64-07-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
DRIFTWOOD RIVER NEAR THE MOUTH	07BC006	NW 28-61-26-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
DRYWOOD CREEK NEAR THE MOUTH	07BK007	NW 22-72-02-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					No		
ELBOW RIVER AT BRAGG CREEK	05AD010	SE 14-04-29-W4	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
EUREKA RIVER NEAR WORSLEY	05BJ004	NE 12-23-05-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
FISH CREEK ABOVE LITTLE FISH LAKE	07FD013	SW 13-86-08-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
FISH CREEK NEAR PRIDDIS	05CG006	SW 16-28-16-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
FLAT CREEK NEAR BOYLE	05BK001	NE 22-22-03-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
FREEMAN RIVER NEAR FORT ASSINIBOINE	07CA003	SE 02-65-20-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
GRANDE PRAIRIE CREEK NEAR SEXSMITH	07AH001	NE 13-62-07-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
GROS VENTRE CREEK NEAR DUNMORE	07GE003	SW 6-74-06-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
HEART RIVER NEAR NAMPA	05AH037	SE 08-11-04-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEB	OCT				Yes		
HIGHWOOD RIVER AT DIEBEL'S RANCH	07HA003	NW 30-81-20-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
HINES CREEK ABOVE GERRY LAKE	05BL019	NW 4-17-04-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
HOUSE RIVER AT HIGHWAY NO. 63	07FD011	NE 32-84-02-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
IOSEGUN RIVER NEAR LITTLE SMOKY	07CB002	NW 05-77-14-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
IRON CREEK NEAR HARDISTY	07GG003	NW 29-66-21-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
JAMES RIVER NEAR SUNDRE	05FB002	NE 13-43-10-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		
JUMPINGPOUND CREEK NEAR COX HILL	05CA002	SW 20-34-05-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
KEG RIVER AT HIGHWAY NO. 35	05BH013	NE 32-23-07-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAY	OCT				No		
LAC LA BICHE AT LAC LA BICHE	07HF002	SW 12-101-23-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
LAFOND CREEK NEAR RED EARTH CREEK	07CA004	NW 06-67-13-W4	FP3	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
LESSER SLAVE LAKE AT SLAVE LAKE	07JC001	NW17-93-07-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				Yes		
LESSER SLAVE RIVER AT SLAVE LAKE	07BJ006	SE 12-73-06-W5	FP3	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
LITTLE BERLAND RIVER AT HIGHWAY NO. 40	07BK001	SE 07-73-05-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
	07AC008	SE 21-54-02-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAR	OCT				No		

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LITTLE PADDLE RIVER NEAR MAYERTHORPE	07BB005	SE 31-57-08-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
LITTLE RED DEER RIVER NEAR WATER VALLEY	05CB002	NW 29-29-05-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
LITTLE SMOKY RIVER AT LITTLE SMOKY	07GG002	SE 25-66-22-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
LOGAN RIVER NEAR THE MOUTH	07CA012	NE 26-71-12-W4	FP3	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
LOVETT RIVER NEAR THE MOUTH	07BA003	NW 26-46-19-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAYOCT					No		
MACKAY CREEK AT WALSH	05AH002	NW 26-11-01-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
MANYBERRIES CREEK AT BRODIN'S FARM	05AF010	NE 03-05-06-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					Yes		
MASKWA CREEK NO. 1 ABOVE BEARHILLS LAKE	05FA014	SW 18-44-25-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
MCLEOD RIVER ABOVE EMBARRAS RIVER	07AF002	SE 07-52-18-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
MEDICINE RIVER NEAR ECKVILLE	05CC007	SE 03-39-03-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
MONTAGNEUSE RIVER NEAR HINES CREEK	07FD012	SW 22-85-05-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
MUSKEG RIVER NEAR GRANDE CACHE	07GA002	SW 15-57-06-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
NORDEGG RIVER AT SUNCHILD ROAD	05DD009	SW 27-44-11-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
NORTH RAM RIVER AT FORESTRY ROAD	05DC011	SE 19-38-14-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
NOTIKEWIN RIVER AT MANNING	07HC001	SW 27-91-23-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
OLDMAN RIVER NEAR WALDRON'S CORNER	05AA023	NE 10-10-02-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
OWL RIVER BELOW PICHE RIVER	07CA013	SW 36-69-13-W4	FP3	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
PADDLE RIVER NEAR ANSELMO	07BB011	NW 24-56-10-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PEACE RIVER AT DUNVEGAN BRIDGE	07FD003	SE07-80-04-W6	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
PEAVINE CREEK NEAR FALHER	07GH004	NW 31-76-21-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PEIGAN CREEK NEAR PAKOWKI ROAD	05AH041	NW 19-07-07-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					Yes		
PINCHER CREEK AT PINCHER CREEK	05AA004	SW 23-06-30-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PINE CREEK NEAR GRASSLAND	07CA005	SE 26-67-19-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PIPESTONE CREEK NEAR WETASKIWIN	05FA012	SE 08-47-23-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PONTON RIVER ABOVE BOYER RIVER	07JP003	NW 15-109-14-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PRAIRIE CREEK BELOW LICK CREEK	05DB005	SE 12-38-10-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
RACEHORSE CREEK NEAR THE MOUTH	05AA027	SE 24-10-04-W5	FP3	WSC, Alta.	8QN	0.75	Normal	APROCT					No		
RAT CREEK NEAR CYNTHIA	07BA002	SW 13-48-11-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
RAVEN RIVER NEAR RAVEN	05CB004	SW 14-36-04-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
RAY CREEK NEAR INNISFAIL	05CE010	SW 13-35-26-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
RED DEER RIVER BELOW BURNT TIMBER CREEK	05CA009	NE 11-31-08-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
REDEARTH CREEK NEAR RED EARTH CREEK	07JC002	NW 17-87-08-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
REDWATER RIVER NEAR THE MOUTH	05EC005	SW 01-57-21-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
RENWICK CREEK NEAR THREE HILLS	05CE011	NE 05-32-24-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
RIBSTONE CREEK NEAR EDGERTON	05FD001	NW 35-43-04-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
ROSE CREEK NEAR ALDER FLATS	05DE007	NW 31-45-07-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		

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Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
SADDLE RIVER NEAR WOKING	07FD006	NE 4-77-5-6	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SAGE CREEK AT Q RANCH NEAR WILDHORSE	11AA026	NW 09-02-02-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SAKWATAMAU RIVER NEAR WHITECOURT	07AH003	SE 19-60-12-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SAM LAKE TRIBUTARY NEAR SCHULER	05AH047	NE 07-14-02-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					Yes		
SAND RIVER NEAR THE MOUTH	06AB001	NW 20-63-08-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SAULTEAUX RIVER NEAR SPURFIELD	07BK005	SE 21-71-02-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
SAWRIDGE CREEK NEAR SLAVE LAKE	07BK009	NE 25-72-06-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SHEEP RIVER AT BLACK DIAMOND	05BL014	NE 08-20-02-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
SIMONETTE RIVER NEAR GOODWIN	07GF001	NE 11-71-02-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SNAKE CREEK NEAR VULCAN	05AC030	SW 36-17-22-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
SOUSA CREEK NEAR HIGH LEVEL	07OA001	SE 31-110-03-W6	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
STONY CREEK NEAR TAWATINAW	07BE004	NW 24-61-24-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
STRAWBERRY CREEK NEAR THE MOUTH	05DF004	SE 15-50-01-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
STRETTON CREEK NEAR MARWAYNE	05EE005	SE 35-51-03-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SUNDANCE CREEK NEAR BICKERDIKE	07AF010	NW 11-53-19-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
SWAN RIVER NEAR SWAN HILLS	07BJ003	NW 16-67-10-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
TEEPEE CREEK NEAR LA CRETE	07JD004	SE 28-105-14-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
THREEHILLS CREEK BELOW RAY CREEK	05CE018	SW 18-35-25-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
THREEPOINT CREEK NEAR MILLARVILLE	05BL013	NW 07-21-02-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
TOMAHAWK CREEK NEAR TOMAHAWK	05DE009	NW 13-51-06-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
TRAP CREEK NEAR LONGVIEW	05BL027	NW 36-17-04-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
VERMILION RIVER AT VEGREVILLE	05EE009	NW 17-52-14-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
VERMILION RIVER TRIBUTARY NEAR BRUCE	05EE006	SW 07-50-14-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WABASH CREEK NEAR PIBROCH	07BC007	NW 25-60-27-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WAIPAROUS CREEK NEAR THE MOUTH	05BG006	NW 06-27-06-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WANDERING RIVER NEAR WANDERING RIVER	07CA006	SW0 6-72-16-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WAPITI RIVER NEAR GRANDE PRAIRIE	07GE001	SW 23-70-06-W6	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WASKAHIGAN RIVER NEAR THE MOUTH	07GG001	SE 35-66-22-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WASKASOO CREEK AT RED DEER	05CC011	NE 16-38-27-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WEST ARROWWOOD CREEK NEAR ARROWWOOD	05BM014	SW 11-21-24-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
WEST ARROWWOOD CREEK NEAR ENSIGN	05BM018	SW 14-18-25-W4	FP3	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
WEST PRAIRIE RIVER NEAR HIGH PRAIRIE	07BF002	SE 35-74-17-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WEST WHITEMUD CREEK NEAR IRETON	05DF007	SE 14-49-26-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
WHITEMUD RIVER NEAR DIXONVILLE	07HA005	SW 06-87-23-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WILDHAY RIVER NEAR HINTON	07AC001	NW 29-52-27-W5	FP3	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
WILLOW CREEK AT SECONDARY 532	05AB040	SE 09-15-03-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		

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Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
WILLOW RIVER NEAR WABASCA	07JA003	SE 12-80-26-W4	FP3	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
WOLF CREEK AT HIGHWAY NO. 16A	07AG003	NE 22-53-16-W5	FP3	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WOLF LAKE AT OUTLET	06AB004	NW 16-66-07-W4	FP3	WSC, Alta.	8HR	0.95	Remote	MAROCT							
WOLF RIVER AT OUTLET OF WOLF LAKE	06AB002	NE 16-66-07-W4	FP3	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
Stations Total	127														

Provincial Departmental Programs (P1)

Site Identification			Responsibility			Operational Approach					Output Products				
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
ALBERTA POWER LIMITED COOLING POND OUTLET	05CG007	NW 29-28-13-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
ATHABASCA RIVER AT ATHABASCA	07BE001	SE 20-66-22-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
ATHABASCA RIVER NEAR WINDFALL	07AE001	NE20-60-14-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
ATIM CREEK AT CENTURY RD	05EA012	SW 23-53-27-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BABETTE CREEK NEAR COLINTON	07CA008	SE 27-65-21-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BAPTISTE LAKE NEAR ATHABASCA	07BE002	SW 26-66-24-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
BAPTISTE RIVER NEAR THE MOUTH	05DC012	NW 34-42-08-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					No		
BATTLE RIVER AT DUHAMEL	05FA011	SE 10-46-21-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BATTLE RIVER AT HIGHWAY 872	05FC008	NE 32-39-10-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BATTLE RIVER NEAR FORESTBURG	05FC001	NW 35-41-17-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BEAR RIVER NEAR VALHALLA CENTRE	07GE007	NW 07-74-09-W6	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BEARBERRY CREEK NEAR SUNDRE	05CA011	NW 06-33-5-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BEAVER CREEK NEAR BROCKET	05AB013	NW 07-08-28-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BEAVERLODGE RIVER NEAR BEAVERLODGE	07GD001	SE 34-71-10-W6	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BEAVERTAIL CREEK NEAR HYPHE	07GD002	SE 17-73-11-W6	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BELLY RIVER NEAR GLENWOOD	05AD041	SE 06-05-26-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
BELLY-ST. MARY DIVERSION CANAL	05AD021	SE 34-04-27-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BERLAND RIVER NEAR THE MOUTH	07AC007	SW 18-58-20-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BERRY CREEK NEAR THE MOUTH	05CH007	SW 10-22-12-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BERRY CREEK RESERVOIR NEAR SUNNYNOOK	05CH014	NE 29-26-12-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
BERRY CREEK RESERVOIR OUTLET	05CH011	NW 21-26-12-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BLACKMUD CREEK NEAR ELLERSLIE	05DF003	SE 19-51-24-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BLINDMAN RIVER NEAR BLACKFALDS	05CC001	NW 14-39-27-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
BLOOD INDIAN CREEK NEAR CABIN LAKE	05CK007	NE 31-24-09-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BLOOD INDIAN CREEK NEAR THE MOUTH	05CK001	SE 16-23-08-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BOW RIVER DEVELOPMENT CANAL BELOW HEADGATES	05BM021	SE 32-21-25-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BOW RIVER NEAR COCHRANE	05BH005	SW 35-25-04-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
BOYER RIVER NEAR FORT VERMILION	07JF002	SE 09-109-14-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
BUFFALO LAKE NEAR ERSKINE	05CD005	NW 19-40-20-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
BULLSHEAD CREEK AT BLACK AND WHITE TRAIL	05AH053	NE 17-11-05-W4M	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		

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BULLSHEAD RESERVOIR NEAR ELKWATER	05AH057	NW 29-8-4-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
CALLING LAKE AT RANGER STATION	07CB001	SW 17-72-21-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
CAMROSE CREEK NEAR CAMROSE	05FA025	NW 11-47-20-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
CARROT CREEK NEAR THE MOUTH	05EA011	NE 36-53-26-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
CASTLE RIVER NEAR BEAVER MINES	05AA022	NW 24-06-02-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
CAVAN LAKE DIVERSION NEAR DUNMORE	05AH044	NW 10-11-04-W4	P1	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
CAVAN LAKE NEAR DUNMORE	05AH048	NE 30-11-3-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
CHAIN LAKES RESERVOIR NEAR NANTON	05AB037	NE 27-14-02-W5	P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
CHIP LAKE NEAR NORTHVILLE	07BB008	SW 03-54-10-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
CLEARWATER RIVER ABOVE CHRISTINA RIVER	07CD005	NW 29-88-06-W4	P1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
COAL LAKE RESERVOIR NEAR WETASKIWIN	05FA016	SE 35-46-23-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					No		
CYPRESS VIEW RESERVOIR NEAR ELKWATER	05AH054	SE 12-10-2-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
DICKSON DAM TUNNEL OUTLET	05CB007	SE 04-36-02-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
EAST MCALPINE CREEK NEAR ELKWATER LAKE	05AH043	NE 03-10-02-W4	P1	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
EAST PRAIRIE RIVER NEAR ENILDA	07BF001	NE 14-74-16-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
ELBOW RIVER AT SARCEE BRIDGE	05BJ010	SE 35-23-02-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
ELBOW RIVER BELOW GLENMORE DAM	05BJ001	SW 04-24-01-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
ELKWATER LAKE AT ELKWATER	05AH025	NW 24-08-03-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
EMBARRAS RIVER NEAR WEALD	07AF014	NE 01-51-20-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
FALLENTIMBER CREEK NEAR SUNDRE	05CA012	SW 09-32-05-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
FAWCETT LAKE NEAR SMITH	07BK008	SE 15-73-01-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
FORSTER RESERVOIR NEAR CESSFORD	05CH013	SW 28-23-13-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
GHOST RIVER ABOVE WAIPAROUS CREEK	05BG010	NW 33-26-07-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
GOLD CREEK NEAR FRANK	05AA030	SW 31-07-03-W5	P1	WSC, Alta.	8QN	0.75	Normal	APRNOV					Yes		
GREGG RIVER NEAR THE MOUTH	07AF015	SW 30-49-23-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
GREGOIRE LAKE NEAR FORT MCMURRAY	07CE001	SW 07-86-08-W4	P1	WSC, Alta.	8HR	0.95	Remote	MAROCT					Yes		
GROAT CREEK NEAR WHITECOURT	07AG008	NE 22-58-13-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
GULL LAKE AT ASPEN BEACH	05CC006	NE 21-40-28-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
HAYNES CREEK NEAR HAYNES	05CD006	SW 11-39-24-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
HIGHWOOD RIVER BELOW LITTLE BOW CANAL	05BL004	NE 06-19-28-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
HILDA LAKE NEAR COLD LAKE	06AC003	NE 08-64-03-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
ISLE LAKE AT EUREKA BEACH	05EA008	NE 32-53-05-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					No		
JACKFISH CREEK NEAR LA COREY	06AC001	NE 09-63-05-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
JACKPINE CREEK AT HIGHWAY NO. 88	07JD003	NE 09-106-11-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
JUMPINGPOUND CREEK AT TOWNSHIP ROAD 252	05BH015		P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
KENNEDY COULEE NEAR ACADIA VALLEY	05CK006	SW 05-25-02-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		

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KETTLES CREEK AT PINCHER CREEK	05AA033	NE23-6-30-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
KILLARNEY LAKE TRIBUTARY NEAR CHAUVIN	05GA010	SW 31-41-01-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
KLESKUN HILLS MAIN DRAIN NEAR GRANDE PRAIRIE	07GE002	NE 12-72-4-6	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
KNEEHILLS CREEK NEAR DRUMHELLER	05CE002	NW 12-29-22-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
LAC LA NONNE AT LAC LA NONNE	07BB007	NE 07-57-02-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
LAC STE. ANNE AT ALBERTA BEACH	05EA006	SE 22-54-03-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
LASTHILL CREEK NEAR ECKVILLE	05CC013	NE 14-39-04-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
LILY CREEK NEAR SLAVE LAKE	07BG004	NW 14-74-06-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
LITTLE RED DEER RIVER NEAR THE MOUTH	05CB001	SW 30-35-01-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
LITTLE SMOKY RIVER NEAR GUY	07GH002	NE 33-74-21-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
LLOYD CREEK NEAR BLUFFTON	05CC009	NE 25-43-02-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
LOMOND LATERAL NEAR HEADGATE	05AC017	SW 34-14-20-W4	P1	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
LOON RIVER NEAR THE MOUTH	07JC003	SE 20-93-07-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
MACKAY CREEK RESERVOIR NEAR ELKWATER	05AH056	SW 7-9-1-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
MCALPINE CREEK RESERVOIR NEAR ELKWATER	05AH055	NE 2-9-2-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
MCGREGOR TRAVERS CANAL NEAR CHAMPION	05AC025	SW 15-15-21-W4	P1	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
MCLEOD RIVER NEAR CADOMIN	07AF013	SE 30-47-22-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MCLEOD RIVER NEAR WHITECOURT	07AG004	SE 15-58-13-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MEADOW CREEK NEAR THE MOUTH	05AB029	NW 32-11-27-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MICHICHI CREEK AT DRUMHELLER	05CE020	NW 11-29-20-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MILK RIVER RIDGE RESERVOIR	05AF030	SW 14-05-20 W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
MILL CREEK NEAR THE MOUTH	05AA011	SW 18-06-01-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MONITOR CREEK NEAR CONSORT	05GA011	NW 35-33-06-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MONITOR CREEK NEAR MONITOR	05GA003	SW 06-35-04-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MOORE LAKE NEAR COLD LAKE	06AC002	NE 32-63-04-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
MOOSEHILLS CREEK NEAR ELK POINT	05ED003	SE 23-57-06-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
MOSQUITO CREEK NEAR THE MOUTH	05AC031	SE 18-15-26-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
MURIEL LAKE NEAR GURNEYVILLE	06AC007	SW 31-59-05-W4	P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
NORTH SASKATCHEWAN RIVER AT HWY. 759	05DE010		P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					NEW		
NORTH SASKATCHEWAN RIVER NEAR LODGEPOLE	05DE006	SW 14-47-09-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
NORTH SASKATCHEWAN RIVER NEAR ROCKY MOUNTAIN HOUSE	05DC001	NE 21-39-07-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
NOSE CREEK ABOVE AIRDRIE	05BH014	SE 14-27-1-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
OLDMAN RESERVOIR NEAR PINCHER CREEK	05AA032	NW 25-07-30-W4	P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
OLDMAN RIVER NEAR THE MOUTH	05AG006	SW 24-11-14-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
PADDLE RIVER AT BARRHEAD	07BB006	SW 21-59-03-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		

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PADDLE RIVER NEAR ROCHFORD BRIDGE	07BB004	SW 06-57-07-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PAINT EARTH CREEK NEAR HALKIRK	05FC004	NE 30-39-15-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PARFLESH CREEK NEAR CHANCELLOR	05BM007	SW 35-23-21-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PARLBY CREEK AT ALIX	05CD007	SE 02-40-23-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PEACE RIVER ABOVE SMOKY RIVER CONFLUENCE	07FD901	NW 36-82-23-W5	P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
PEACE RIVER NEAR CARCAJOU	07HD001		P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					NEW		
		SW 24-108-13-W5													
PEACE RIVER AT FORT VERMILION	07HF001		P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
PEACE RIVER NEAR ELK ISLAND PARK	07FD934	SW 10-80-26-W5	P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
PEMBINA RIVER BELOW PADDY CREEK	07BA001	NE 12-48-10-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
PEMBINA RIVER NEAR ENTWISTLE	07BB002	SW 29-53-07-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
PIGEON LAKE AT PROVINCIAL PARK	05FA013	NE 22-46-01-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
PINCHER CREEK AT FRONT RANGE ROAD	05AA034	SE 21-4-1-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PINE COULEE DIVERSION CANAL BELOW HEADGATES	05AB042	SW 32-13-28-4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PINE COULEE OUTFLOW BELOW RESERVOIR	05AB045	NW 27-13-28-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PINE COULEE RESERVOIR NEAR STAVELY	05AB044	SW 34-13-28-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
PINTO CREEK NEAR GRANDE PRAIRIE	07GC002	SW 36-67-10-W6	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
PONY CREEK NEAR CHARD	07CE003	SW 22-79-06-W4	P1	WSC, Alta.	8QR	1.50	Remote	MAROCT					Yes		
PORTER CREEK ABOVE BAPTISTE LAKE	07BE003	SW 21-66-24-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
PRAIRIE CREEK NEAR ROCKY MOUNTAIN HOUSE	05DB002	NW 15-38-07-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
RAM RIVER NEAR THE MOUTH	05DC006	SE 19-39-10-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
RED DEER RIVER ABOVE PANTHER RIVER	05CA004	NE 18-31-10-W5	P1	WSC, Alta.	8QN	0.75	Normal	APROCT					Yes		
RED DEER RIVER AT DRUMHELLER	05CE001	SW 11-29-20-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
REDWILLOW RIVER NEAR RIO GRANDE	07GD004	NW 24-70-12-W6	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
ROSEBUD RIVER BELOW CARSTAIRS CREEK	05CE006	NW 22-28-27-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
RUSH LAKE DRAIN NEAR NEW DAYTON	05AF031	NW 36-05-17-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
SALT CREEK NEAR GROUARD	07BF009	SW 28-76-14-5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
SHEEP RIVER AT OKOTOKS	05BL012	SE 29-20-29-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
SOUNDING CREEK NEAR CHINOOK	05GA012	SE 09-30-07-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SOUNDING CREEK NEAR OYEN	05GA008	SE 15-30-04-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SOUTH HEART RESERVOIR NEAR MCLENNAN	07BF008	SE 20-77-17-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
SOUTH HEART RIVER NEAR BIG PRAIRIE SETTLEMENT	07BF905	SW 17-76-15-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
SOUTH HEART RIVER NEAR PEAVINE	07BF010	NW 02-79-16-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
SOUTH WABASCA LAKE NEAR DESMARAIS	07JA002	NW 14-80-25-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					No		
SPIRIT RIVER NEAR SPIRIT RIVER	07FD020	SE10-78-6-W6	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		

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SPRAY RIVER AT BANFF	05BC001	SW 25-25-12-W5	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
SPRUCE COULEE RESERVOIR NEAR ELKWATER	05AH058	NW 26-8-2-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
ST. MARY RIVER NEAR LETHBRIDGE	05AE006	SW 19-07-21-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
STIMSON CREEK NEAR PEKISKO	05BL007	SE 14-17-02-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
STIRLING LAKE OUTFLOW NEAR STIRLING	05AF029	SW 03-07-19-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
STURGEON LAKE NEAR VALLEYVIEW	07GH003	SW 01-71-24-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					No		
STURGEON RIVER AT ST. ALBERT	05EA002	NE 04-54-25-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
STURGEON RIVER NEAR FORT SASKATCHEWAN	05EA001	NE 29-55-22-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
STURGEON RIVER NEAR MAGNOLIA BRIDGE	05EA010	SW 20-53-06-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
STURGEON RIVER NEAR VILLENEUVE	05EA005	NW 10-54-26-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
SUNWAPTA RIVER AT ATHABASCA GLACIER	07AA007	SW 33-37-23-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAYOCT					Yes		
SYLVAN LAKE AT SYLVAN LAKE	05CC003	NE 32-38-01-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					Yes		
THREEHILLS CREEK NEAR CARBON	05CE007	SW 17-30-22-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
TODD CREEK NEAR HIGHWAY NO.22	05AA909	SE 29-09-02-W5	P1	WSC, Alta.	8QN	0.75	Normal	APROCT					No		
TROUT CREEK NEAR GRANUM	05AB005	SW 07-12-27-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
UTIKUMA LAKE NEAR NIPISI	07JA001	SE 24-79-09-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
VERDIGRIS COULEE NEAR THE MOUTH	11AA038	NW 12-02-14-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT							
VERDIGRIS LAKE TRIBUTARY NEAR MILK RIVER	11AA039	NE 21-03-16-W4	P1	WSC, Alta.	8QN	0.75	Normal	FEBOCT					No		
VERMILION PARK LAKE NEAR VERMILION	05EE008	NW 32-50-06-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					No		
VERMILION LAKES NEAR MORECAMBE	05EE011	NW 06-54-10-W4	P1	WSC, Alta.	8HN	0.25	Normal	MAROCT					Yes		
VERMILION RIVER AT RGE RD 105	05EE010	SE 31-53-10-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
VERMILION RIVER NEAR MARWAYNE	05EE007	NW 16-52-03-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
WABAMUN LAKE AT WABAMUN	05DE002	SE 08-53-05-W5M	P1	WSC, Alta.	12HN	0.40	Normal	ANNUAL					Yes		
WAMPUS CREEK NEAR HINTON	07AF003	NW 23-48-23-W5	P1	WSC, Alta.	8QN	0.75	Normal	APROCT					No		
WATERTON RIVER NEAR GLENWOOD	05AD028	SW 05-06-26-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WATERTON-BELLY DIVERSION CANAL	05AD027	SE 25-4-28-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WEED CREEK AT THORSBY	05DF008	NE 15-49-1-W5	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WEILLER CREEK NEAR WETASKIWIN	05FA024	NE 09-46-23-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
WHITEMUD CREEK NEAR ELLERSLIE	05DF006	SE 22-51-25-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WILLOW CREEK AT HIGHWAY NO. 811	05AB046	NW 24-09-26-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WILLOW CREEK AT OXLY RANCH	05AB041	NW 36-13-29-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
WILLOW CREEK NEAR CLARESHOLM	05AB021	NE 23-12-28-W4	P1	WSC, Alta.	12QN	1.00	Normal	ANNUAL					Yes		
WINAGAMI LAKE AT PROVINCIAL PARK	07BF006	SW 35-76-18-W5	P1	WSC, Alta.	8HN	0.25	Normal	MAYOCT					No		
WOLF CREEK AT TOWNSHIP ROAD 410	05FA026		P1	WSC, Alta.	8QN	0.75	Normal	MAROCT						NEW	
YARROW CREEK AT SPREAD EAGLE ROAD	05AD042	NE 22-3-30-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					Yes		
YOUNG CREEK NEAR CASTOR	05FC007	NE 12-38-13-W4	P1	WSC, Alta.	8QN	0.75	Normal	MAROCT					No		
Stations Total	171														

CANADA – ALBERTA
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Provincial Contributed Data

Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive
ATHABASCA RIVER ABOVE JACKFISH CREEK	07DD007		PAD	PAD	12HR	1.10	Remote	ANNUAL		10			No	
BEAR LAKE NEAR CLAIMONT	07GE004	NE 27-72-07-W6	C-AENV	AENV	8HN	0.25	Normal	MAROCT		3				
BIGELOW RESERVOIR NEAR WIMBORNE	05CE901	SW 03-34-25-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		7			No	Yes
BOW RIVER DEVELOPMENT MAIN CANAL AT DROP NO. 3	05AC902	SW 09-14-19-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		9			X	
CHESTERMERE LAKE AT SOUTH OUTLET	05BM904	NE1/4-030024-28-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		8			Yes	Yes
CHRISTINA LAKE NEAR WINEFRED LAKE	07CE906	SW31-76-5-W4	C-AENV	AENV	12HN	0.40	Normal	ANNUAL		3			Yes	Yes
CLEAR LAKE DIVERSION CANAL BELOW HEADGATE	05AC938	NW 2-15-26-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8			X	
CLEAR LAKE DIVERSION HEAD POND ABOVE HEADGATE	05AC939	NW 2-15-26-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		8			X	
CLEAR LAKE NEAR STAVELY	05AC901	NE 31-13-25-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		9			X	
DRIEDMEAT LAKE AT OUTFLOW	05FA020	SE 17-44-19-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		10				Yes
ETZIKOM COULEE NEAR NEMISKAM	05AF905	SW 02-06-10-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		12				X
GRIMSHAW DRAINAGE NEAR GRIMSHAW	07FD908	SW 08-83-23 W5	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8				
HAYNES CREEK (M1) NEAR JOFFRE	05CD913	NW03-40-25-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		12				Yes
KEHO LAKE NEAR NOBLEFORD	05AC919	SE 33-11-22-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		9			X	
LAKE MCGREGOR AT SOUTH DAM	05AC022	NE 21-15-21-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		10			X	
LITTLE BOW RESERVOIR NEAR ENCHANT	05AC922	NE 28-14-20-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		9				
LITTLE BOW RIVER ABOVE TRAVERS RESERVOIR	05AC034	NW1/4-29-014-22-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8			Yes	Yes
LITTLE BOW RIVER AT HIGHWAY NO. 533	05AC930	NW 17-16-26-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8			Yes	Yes
LITTLE BOW RIVER BELOW TWIN VALLEY RESERVOIR	05AC941	SE1/4-05-015-25-W4	C-AENV	AENV	12QN	1.00	Normal	ANNUAL		8			Yes	Yes
MIRROR BACKFLOOD AT HIGHWAY 50	05CD905	NW20-40-22-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		10				Yes
MODESTE CREEK NEAR LINDALE	05DE911	NW20-49-05-W5	C-AENV	AENV	8QN	0.75	Normal	MAROCT		12			Yes	Yes
NAMPA (SOUTH) DRAINAGE NEAR NAMPA	07HA914	NW 12-81-21 W5	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8			Yes	Yes
NORTH STAR DRAINAGE NEAR NORTH STAR	07HC907	SE 27-90-23 W5	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8			Yes	Yes
PADDLE RIVER RESERVOIR NEAR ROCHFORD BRIDGE	07BB914	SE02-57-08-W5	C-AENV	AENV	12HN	0.40	Normal	ANNUAL		8			Yes	Yes
PARLBY CREEK NEAR MIRROR	05CD902	SE 04-41-22-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		12			Yes	Yes
PAYNE LAKE NEAR MOUNTAIN VIEW	05AD940		C-AENV	AENV	8HN	0.25	Normal	MAROCT		9			X	
POINTE-AUX-PINS CREEK NEAR ARDROSSAN	05EB902	SW27-53-22-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		15				Yes
POINTE-AUX-PINS TRIBUTARY NO. 2 NEAR ARDROSSAN	05EB910	SW23-53-22-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		15				Yes
RYCROFT SURVEY NO. 3 NEAR RYCROFT	07FD910	SE 18-78-04 W6	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8				Yes
SPOTTED LAKE NEAR MIRROR	05CD903	SW04-41-22-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		10			Yes	Yes
TRAVERS RESERVOIR NEAR ENCHANT	05AC921	NE 18-14-20-W4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		9			X	
TWIN VALLEY RESERVOIR NEAR HIGHWAY 529	05AC940	SE1/4-05-015-25-W4	C-AENV	AENV	12HN	0.40	Normal	ANNUAL		8			Yes	Yes
TYRRELL LAKE NEAR WARNER	05AF903	SE 17-5-17-4	C-AENV	AENV	8HN	0.25	Normal	MAROCT		9			X	
WASKATENAU CREEK NEAR WASKATENAU	05EC002	SE 28-59-19-W4	C-AENV	AENV	8QN	0.75	Normal	MAROCT		12				Yes

CANADA – ALBERTA
 2008 – 2009 Memorandum of Agreement for Water Quantity Surveys
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Provincial Contributed Data

Site Identification			Responsibility		Operational Approach						Output Products				
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
WHITBURN DRAINAGE PROJECT NEAR SPIRIT RIVER	07FD912	SE 23-79-08 W6	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8				Yes	
YOUNG DRAINAGE PROJECT NEAR SPIRIT RIVER	07FD913	SE 01-79-06 W6	C-AENV	AENV	8QN	0.75	Normal	MAROCT		8			Yes	Yes	
Stations Total	36														

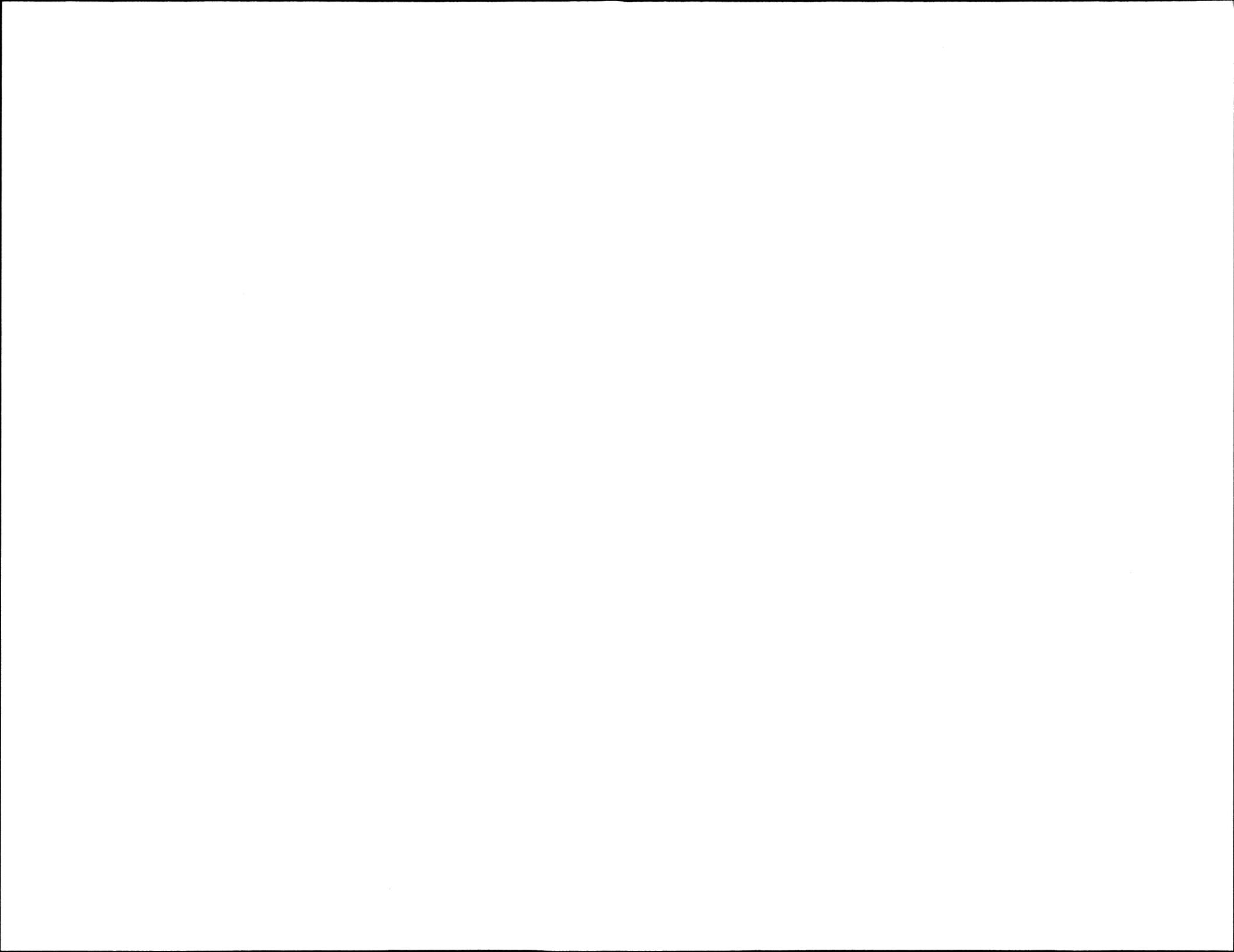
Trans Alta Utilities and City of Calgary Contributed Data

Site Identification			Responsibility		Operational Approach						Output Products				
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
BARRIER LAKE NEAR SEEBE	05BF024	51 01 59 115 02 29	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
BOW RIVER BELOW BEARSPAW DAM	05BH008	SW 04-25-02-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
BOW RIVER NEAR SEEBE	05BE004	NE 10-25-08-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
CASCADE POWER DIVERSION NEAR BANFF	05BD004	SE 8-26-11-5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
GHOST LAKE NEAR COCHRANE	05BE005	NE 13-26-06-W5	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
GHOST RIVER DIVERSION TO LAKE MINNEWANKA	05BG003	NE 2-27-9-5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
GHOST RIVER NEAR BLACK ROCK MOUNTAIN	05BG002	SE 15-27-09-W5	C-TAU	TAU - Cont.	8QN	0.75	Normal	MAROCT							
GHOST TRAIL	05BE999	NE 13-26-06-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
GOAT CREEK AT BANFF PARK BOUNDARY	05BC008	SW 23-24-11-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
KANANASKIS RIVER ABOVE POCATERRA CREEK	05BF003	NE 13-20-09-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
KANANASKIS RIVER BELOW BARRIER DAM	05BF025	SE 15-24-08-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
LAKE ABRAHAM NEAR NORDEGG	05DC009	SW 35-38-17-W5	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
LAKE MINNEWANKA NEAR BANFF	05BD003	SW 21-26-11-W5	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
LOWER KANANASKIS LAKE	05BF009	SW 13-20-09-W5	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
NORTH SASKATCHEWAN RIVER BELOW BIGHORN PLANT	05DC010	SE 35-38-17-W5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
SPRAY POWER DIVERSION AT CANMORE	05BE007	SW 32-24-10-5	C-TAU	TAU - Cont.	12QN	1.00	Normal	ANNUAL							
SPRAY RESERVOIR AT THREE SISTERS DAM	05BC006	SW 32-23-10-W5	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
UPPER KANANASKIS LAKE	05BF005	NE 13-19-09-W5	C-TAU	TAU - Cont.	12HN	0.40	Normal	ANNUAL							
GLENMORE RESERVOIR AT CALGARY	05BJ008	SE 32-23-01-W5	C-CITY	City of CAL.	12HN	0.40	Normal	ANNUAL					?City		
Stations Total	19														

CANADA – ALBERTA
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APPENDIX A – Schedule C 2008 – 2009

Sediment Program

Site Identification			Responsibility		Operational Approach					Output Products					
Station Name	Station Number	Station Location	Station Designation	Operator	Station Type	Station Units	Access	Operating Period	Operating Method	Planned Visits	Response Priority	Standards Tier	Real Time	Archive	Other
PROVINCIAL															
OLDMAN RIVER NEAR BROCKET	05AA024	SE 14-07-29-W4	FP2	WSC, Alta.	12QN	1.05	Normal	ANNUAL					Yes		
OLDMAN RIVER NEAR WALDRON'S CORNER	05AA023	NE 10-10-2-W5	FP3	WSC, Alta.	12QN	1.05	Normal	ANNUAL					Yes		
FEDERAL - PROVINCIAL															
OLDMAN RIVER NEAR LETHBRIDGE	05AD007	NW 1-9-22-W4	F2	WSC, Alta.	12QN	0.525	Normal	ANNUAL					Yes		
FEDERAL															
SLAVE RIVER AT FITZGERALD	07NB001		F2	NT - NU	12QR	0.525	Remote	ANNUAL							



APPENDIX B

Schedule D

Annual Payment Details

2008 – 2009

CANADA – ALBERTA
 2008 – 2009 Memorandum of Agreement for Water Quantity Surveys
APPENDIX B – Schedule D Annual Payment Details 2008 – 2009

1.0 DIRECT OPERATIONS

1.1 Salaries

Salaries for personnel charged to the direct operations (Appendix A)		\$1,348,366
Overtime (Appendix A)		\$122,018
	Direct Operations Salary	<u>\$1,470,384</u>
O & M Conversion		
	= 0.2 X Direct Operations Salary	\$294,077
	Direct Operations Salary (as O&M)	<u>\$1,764,461</u>

1.2 Unit Salary Costs

A - Station Units (Appendix B)	313.050	
B - Direct Operations Salary (as O&M)	\$1,764,461	
	Direct Operations Unit Salary Cost (B / A)	\$5,636

1.3 O&M Costs

1.3.1 Hydrometric Conventional (from Line Object Totals)	\$905,421	
1.3.2. Hydrometric Remote (from Line Object Totals)	\$169,333	
1.3.3 Sediment Program (from Line Object Totals)	\$10,320	
	Direct Operations Operational Costs	<u>\$1,085,074</u>

1.4 Unit O & M Cost

A - Station Units (Appendix B)	313.050	
B - Direct Operations O&M	\$1,085,074	
	Direct Operations Unit Salary Cost (B / A)	\$3,466

1.5 Direct Operations Station Unit Cost

Unit Salary Cost (sec 1.2)		\$5,636
Unit O & M Cost (sec 1.4)		\$3,466
	Total	<u>\$9,102</u>

1.6 Capital Depreciation

Motor Vehicles Hydrometric (Appendix C)		\$72,569
Field Equipment amortized over 10 years		
Depreciation Forward		\$39,046
Purchase 2008 - 2009	\$67,402	\$6,740
EDP Equipment amortized over 4 years		\$21,417
	Capital Depreciation Direct Operations	<u>\$139,772</u>

*Note: References made to Appendix and line objects on this page, references the details in data workbooks

CANADA – ALBERTA
 2008 – 2009 Memorandum of Agreement for Water Quantity Surveys
APPENDIX B – Schedule D Annual Payment Details 2008 – 2009

2.0 INDIRECT OPERATIONS

2.1 Salaries

Salaries for personnel charged to the indirect operations (Appendix A)		\$213,792
Overtime (Appendix A)		\$10,069
Indirect Operations Salary		<u>\$223,862</u>
O & M Conversion = 0.2 X Indirect Operations Salary		\$44,772
Indirect Operations Salary (as O&M)		<u><u>\$268,634</u></u>

2.2 Unit Salary Costs

A - Station Units (Appendix B)	313,050	
B - Indirect Operations Salary (as O&M)	\$268,634	
Indirect Operations Unit Salary Cost (B / A)		\$858

2.3 Operational Costs

2.3.1 Indirect Operations (O&M)	\$46,688
2.3.2 Training (O&M)	\$94,805
2.3.3 Computer Software and Supplies	<u>\$26,614</u>
	\$168,106

2.4 Unit O & M Cost

A - Station Units (Appendix B)	313,050	
B - Indirect Operations Salary (as O&M)	\$168,106	
Indirect Operations Unit Salary Cost (B / A)		\$537

2.5 Indirect Operations Station Unit Cost

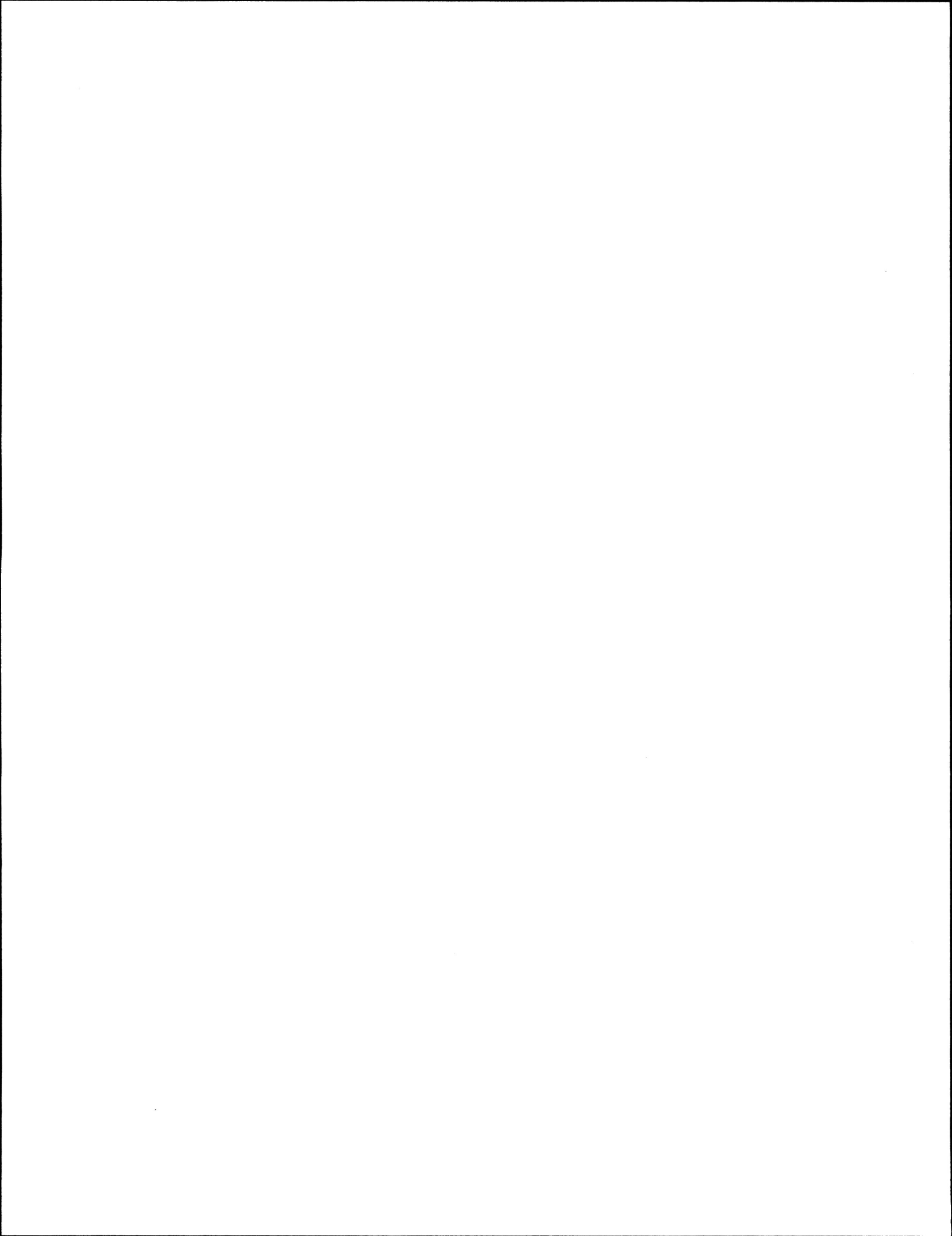
Unit Salary Cost (sec 2.2)	\$858
Unit O & M Cost (sec 2.4)	<u>\$537</u>

Total \$1,395

3.0 TOTAL OPERATIONS UNIT COST

A - Unit Costs Direct Operations (item 1.5)	\$9,102
B - Unit Cost Indirect Operations (item 2.5)	<u>\$1,395</u>
Total Operations Unit Costs (A + B)	\$10,498

Note: References made to Appendix and line objects on this page, references the details in data workbook calculations.



APPENDIX C

Schedule D

Annual Payment Estimates

2008 – 2009

CANADA – ALBERTA
 2008 – 2009 Memorandum of Agreement for Water Quantity Surveys
APPENDIX C – Schedule D Annual Payment Estimates 2008 – 2009

SCHEDULE D

CONTRIBUTIONS BY PARTIES
 CANADA –ALBERTA AGREEMENT ON HYDROMETRIC MONITORING

Fiscal Year 2008 - 2009

TYPE OF EXPENDITURE	NO. OF STNS.	TOTAL COST per Schedule B	SHARE	
			FEDERAL	PROVINCIAL
Direct Operations				
Hydrometric Network Operated by WSC	397	\$ 2,795,157	\$ 1,124,046	\$ 1,671,111
Hydrometric Equipment Depreciation		\$ 143,222	\$ 57,595	\$ 85,627
Full Program Sediment Stations	4	\$ 28,343	\$ 4,724	\$ 23,619
Sediment Equipment Depreciation		\$ -	\$ -	\$ -
Indirect Operations				
Hydrometric Network Operated by WSC	397	\$ 415,443	\$ 167,087	\$ 248,377
Full Program Sediment Stations	4	\$ 4,213	\$ 702	\$ 3,511
Projects				
Life Cycle Management	50	\$ 307,266	\$ 111,094	\$ 196,172
Cableway Upgrades	13	\$ 143,427	\$ 110,227	\$ 33,200
Station Decommissioning	34	\$ 76,318	\$ 76,318	\$ -
Network Expansion		\$ 150,000	\$ -	\$ 150,000
TOTAL		\$ 4,063,389	\$ 1,651,773	\$ 2,411,615

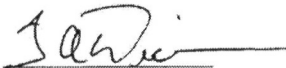
ALBERTA GROSS SHARE: \$ 2,411,615

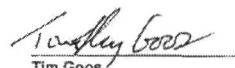
ALBERTA CREDIT:

a) Direct Operation Cost (PAD area plus Oldman Reservoir)	
Hydrometric Stations	\$ (94,477)
Hydrometric Depreciation	\$ (4,841)
b) Indirect Operation Cost (PAD area plus Oldman Reservoir)	\$ (14,042)
c) Direct Costs Water Sciences (\$39,894 X (124.7+0.750) / 313.8)	\$ (15,949)
d) Direct Costs Monitoring (\$5,000 X (124.7+0.750) / 313.80)	\$ (1,999)
e) Christina Lake January -December	\$ (10,335)
TOTAL	<u>\$ (141,642)</u>

ALBERTA NET SHARE: (Alberta Gross Share - Alberta Credit) \$ 2,269,973

Net payment by Alberta to Canada: \$ 2,269,973


 Tom Dickson
 Administrator for Alberta
 Alberta Environment


 Tim Goos
 Administrator for Canada
 Environment Canada

CANADA – ALBERTA
 2008 – 2009 Memorandum of Agreement for Water Quantity Surveys
APPENDIX C – Schedule D Annual Payment Estimates 2008 – 2009

DIRECT OPERATIONS

1.1 Salaries

Salaries for personnel charged to the direct operations (Appendix A)		\$1,446,733
Overtime (Appendix A)		\$65,000
	Direct Operations Salary	\$1,511,733
O & M Conversion		
	= 0.2 X Direct Operations Salary	\$302,347
	Direct Operations Salary (as O&M)	\$1,814,080

1.2 Unit Salary Costs

A - Station Units (Appendix B)	313.800	
B - Direct Operations Salary (as O&M)	\$1,814,080	
Direct Operations Unit Salary Cost as O&M (B/A)		\$5,781

1.3 O&M Costs

1.3.1 Hydrometric Conventional (from Line Object Totals)	\$867,300	
1.3.2 Hydrometric Remote (from Line Object Totals)	\$134,000	
1.3.3 Sediment Program (from Line Object Totals)	\$8,120	
	Direct Operations Operational Costs	\$1,009,420

1.4 Unit O & M Cost

A - Station Units (Appendix B)	313.800	
B - Direct Operations O&M	\$1,009,420	
Direct Operations Unit Operating Cost (B/A)		\$3,217

1.5 Direct Operations Station Unit Cost

Unit Salary Cost (sec 1.2)		\$5,781
Unit O & M Cost (sec 1.4)		\$3,217
	Total	\$8,998

1.6 Capital Depreciation

Motor Vehicles Hydrometric (Appendix C)		\$76,652
Field Equipment Amortized over 10 years Depreciation Forward Estimated		\$25,570
Purchase 2008 - 2009	\$35,000	\$3,500
EDP Equipment amortized over 4 years		\$37,500
	Total	\$143,222

Note: References made to Appendix and line objects on this page, references the details in data workbook calculations

CANADA – ALBERTA
 2008 – 2009 Memorandum of Agreement for Water Quantity Surveys
APPENDIX C – Schedule D Annual Payment Estimates 2008 – 2009

2.0 INDIRECT OPERATIONS

2.1 Salaries

Salaries for personnel charged to the indirect operations (Appendix A)		\$222,630
Overtime (Appendix A)		\$0
	Indirect Operations Salary	<u>\$222,630</u>
O & M Conversion = 0.2 X Indirect Operations Salary		\$44,526
	Indirect Operations Salary (as O&M)	<u><u>\$267,156</u></u>

2.2 Unit Salary Costs

A - Station Units (Appendix B)	313.800	
B - Indirect Operations Salary (as O&M)	\$267,156	
Indirect Operations Unit Salary Cost as O&M (B/A)		\$851

2.3 Operational Costs

(from Line Object Totals)	\$152,500	
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2.4 Unit O & M Cost

A - Station Units (Appendix B)	313.800	
B - Indirect Operations Salary (as O&M)	\$152,500	
Indirect Operations Unit O&M Cost (B/A)		\$486

2.5 Indirect Operations Station Unit Cost

Unit Salary Cost (sec 2.2)		\$851
Unit O & M Cost (sec 2.4)		\$486
	Total	<u><u>\$1,337</u></u>

3.0 TOTAL OPERATIONS UNIT COST

A - Unit Costs Direct Operations (item 1.5)	\$8,998	
B - Unit Cost Indirect Operations (item 2.5)	<u>\$1,337</u>	
Total Operations Unit Costs (A + B)		\$10,335

Note: References made to Appendix and line objects on this page, references the details in data workbook calculations

APPENDIX D

Schedule D

Annual Payment Estimates

2009 – 2010

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APPENDIX D – Schedule D Annual Payment Estimates 2009 – 2010

SCHEDULE D
CONTRIBUTIONS BY PARTIES
CANADA –ALBERTA AGREEMENT ON HYDROMETRIC MONITORING
Fiscal Year 2009 - 2010

TYPE OF EXPENDITURE	STATIONS	Estimated Expenditure	SHARE	
			FEDERAL	PROVINCIAL
Direct Operations				
Hydrometric Network Operated by WSC	397	\$ 2,851,653	\$ 1,141,719	\$ 1,709,935
Hydrometric Equipment Depreciation		\$ 125,138	\$ 50,102	\$ 75,036
Full Program Sediment Stations	3	\$ 28,962	\$ 4,827	\$ 24,135
Sediment Equipment Depreciation		\$ -	\$ -	\$ -
Indirect Operations				
Hydrometric Network Operated by WSC	397	\$ 497,052	\$ 199,005	\$ 298,047
Full Program Sediment Stations	3	\$ 5,048	\$ 841	\$ 4,207
Projects				
Life Cycle Management	60	\$ 376,105	\$ 141,541	\$ 234,565
Cableway Upgrades	7	\$ 142,950	\$ 109,750	\$ 33,200
Station Decommissioning	10	\$ 99,618	\$ 99,618	\$ -
Network Expansion		\$ -	\$ -	\$ -
TOTAL		\$ 4,126,527	\$ 1,747,403	\$ 2,379,125

ALBERTA GROSS SHARE: **\$ 2,379,125**

ALBERTA CREDIT:

a) Direct Operation Cost (PAD area plus Oldman Reservoir)		
Hydrometric Stations		\$ (96,542)
Hydrometric Depreciation		\$ (4,236)
b) Indirect Operation Cost (PAD area plus Oldman Reservoir)		\$ (16,827)
c) Direct Costs Water Sciences (\$5000)		\$ (1,990)
d) Direct Costs Monitoring (\$5,000)		\$ (1,990)
e) Christina Lake January - December		\$ (10,797)
TOTAL		\$ (132,383)

ALBERTA NET SHARE: (Alberta Gross Share - Alberta Credit) **\$ 2,246,742**

Net payment by Alberta to Canada: **\$ 2,246,742**

Original signed by

 Tom Dickson
 Administrator for Alberta
 Alberta Environment

Original signed by

 Jaymie Gadal
 Administrator for Canada
 Environment Canada

APPENDIX E

Projects

2008 – 2009

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APPENDIX E – Projects 2008 – 2009

Life Cycle Management Share Calculation

TOTAL Life Cycle Management Shares =

Sum of SHARES for

a) salary, b) project, c) non-project, d) shared equipment, e) single party equipment

Federal	(\$80,327 +\$16,982 +\$24,509 +\$48,452 +\$105,389) =	\$275,659
Provincial	(\$120,873 +\$35,478 +\$36,658 +\$72,468) =	\$265,476

<u>Salary Distribution</u>	<u>Construction & Cableway</u>	<u>Maintenance</u>
	(non-project)	
	base salary	\$117,574
	Overtime	\$6,964
	BPE (@20%)	\$24,908
	Const. Projects	-\$14,111
	Cableway Projects	-\$10,962
		\$124,374
		\$77,314

Note:

A portion of the salary shown above is accounted for in the Construction and Cableway projects. The project based salary is subtracted from total salary before the salary shares are calculated. The balance of salary is distributed using the ratio of station units. This distribution method was selected based on the argument that a flow station normally has more infrastructure and are more complex to manage than a water level station. Station unit distribution reflects this difference more accurately than station equivalents.

a) Salary Shares

Federal	((\$124,374 +\$77,314) * ((123.425) / 309.90)) =	\$80,327
Provincial	((\$124,374 +\$77,314) * ((185.725) / 309.90)) =	\$120,873

b) Construction Project - Shares

Federal	(\$2,069 +(\$29,827 / 2)) =	\$16,982
Provincial	(\$20,564 +(\$29,827 / 2)) =	\$35,478

c) Non-Project LCM Expenditures

Vehicle depreciation, computer software, equipment, tools, communication, repairs, etc = \$61,167

Non-Project LCM Expenditures SHARES are distributed using station units.

Federal	(\$61,167 *123.43 / 309.90) =	\$24,509
Provincial	(\$61,167 *185.73 / 309.90) =	\$36,658

d) LCM Shared Expenditure (Shaft encoder, HDR transmitters) = \$120,920

Federal	(\$120,920 *123.43 / 309.90) =	\$48,452
Provincial	(\$120,920 *185.73 / 309.90) =	\$72,468

e) LCM Projects Funded by Single Party

Federal	\$105,389
Provincial	

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Life Cycle Management Projects

Station No.	Station Name	Designation	Activity	Expenditure
<u>FEDERAL FUNDED PROJECT</u>				
05AC003	Little Bow River at Carmangay	F-2	Install two BMs at marked locations	\$367.85
05BL015	Little Bow Canal At High River	F-2	well pump	\$687.50
05BL023	Pekisco Creek near Longview	F-2	well maintenance	\$1,013.71
				\$2,069
3	salary component of cost			\$713.99
<u>FEDERAL - PROVINCIAL FUNDED PROJECTS</u>				
06AA001	Beaver River near Goodridge	FP-3	site assessment	\$46.88
07JF004	Boyer River near Paddle Prairie	FP-3	decommission assessment	\$302.30
07FD013	Eureka River near Worsley	FP-3	site assessment	\$617.96
05CA002	James River near Sundrie	FP-3	site assessment from vandalism	\$220.35
07GB003	Kakwa River at Highway 41	FP-3	De-mouse	\$617.96
07HF002	Keg River at Highway 36	FP-3	stilling well plumbing repairs	\$2,876.77
05CB002	Little Red Deer River near Water Valley	FP-3	site assessment, heat tape installation	\$1,010.59
07OB006	Lutose River near Steen	FP-3	re-locate shelter away from erosion zone	\$2,632.18
05FA014	Maskwa Creek NO. 1 above Bearhills Lake	FP-3	site assessment	\$48.75
05CC007	Medicine River near Eckville	FP-3	site assessment	\$46.88
05DF001	North Saskatchewan River at Edmonton	FP-3	new shelter, electrical, landscaping	\$15,947.00
05AA035	Oldman River at Range Road 13A	FP-3	New shelter installation	\$2,760.72
05FA012	Pipestone Creek near Wetaskiwin	FP-3	site assessment	\$46.88
07BK009	Sawridge Creek near Slave Lake	FP-3	site assessment	\$308.58
05BL014	Sheep River at Black Diamond	FP-3	well pump	\$687.50
07GF001	Simonette near Goodwin	FP-3	site assessment	\$617.96
07GA001	Smoky River above Hells Gate	FP-2	site assessment	\$308.58
07HA005	Whitemud River near Dixonville	FP-3	site assessment	\$308.98
07AC001	Wildhay River near Hinton	FP-3	site assessment	\$ 420.00
				\$29,827
19	salary component of cost			\$7,044.34

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APPENDIX E – Projects 2008 – 2009

Life Cycle Management Projects

Station No.	Station Name	Designation	Activity	Expenditure
<u>PROVINCIAL FUNDED PROJECTS</u>				
07GE005	Bear Creek near Grande Prairie	P-1	reconnaissance alternate location	\$647.90
07GD001	Beaverlodge River near Beaverlodge	P-1	heat tape installation	\$2,531.09
07GD002	Beavertail River near Hythe	P-1	site assessment	\$617.96
07JF002	Boyer River near Fort Vermillion	P-1	stilling well plumbing repairs	\$965.58
05CD005	Buffalo Lake near Erskine	P-1	site assessment	\$647.90
07BF001	East Prairie near Enilda	P-1	site assessment	\$915.58
05CC006	Gull Lake at Aspen Beach	P-1	site assessment	\$46.88
05BL004	Highwood River below Little Bow Canal	P-1	electrical repairs	\$1,562.18
05EA013	Kilini Creek at Township Road 544	P-1	completion of 2007 - 2008 installation	\$533.98
07AG004	McLeod River near Whitecourt	P-1	site assessment	\$303.30
05GA011	Monitor Creek near Consort	P-1	site assessment	\$46.88
05GA003	Monitor Creek near Monitor	P-1	site assessment	\$46.88
05AA032	Oldman Reservoir near Pincher Creek	P-1	Installation new shelter	\$5,546.62
07BE003	Porter Creek above Baptiste Lake	P-1	site assessment	\$704.15
05CA004	Red Deer River Above Pather River	P-1	intake repairs	\$588.55
05CE006	Rosebud River below Carstairs	P-1	site assessment	\$266.99
05EA001	Sturgeon River near Fort Saskatchewan	P-1	bench mark installation	\$266.99
05BH016	West Nose Creek at Calgary	P-1	shelter installation	\$478.29
05DF009	Whitemud Creek at Edmonton	P-1	completion of 2007 - 2008 installation, repairs, and landscaping	\$2,158.58
05AB041	Willow Creek at Oxly Ranch	P-1	site maintenance	\$1,688.13
				\$20,564
20			salary component of cost	\$6,352.18

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APPENDIX E – Projects 2008 – 2009

Cableway Projects

Cableway Shares

Federal (F project+ ((FP project) / 2) =
 (\$21,832+(\$2,913 / 2)) = **\$23,289**

Provincial (P project+ ((FP project) / 2) =
 (\$23,825 +(\$2,913 / 2)) = **\$25,281**

Cableway Project Salary \$10,962

Station No.	Station Name	Designation	Activity	Expenditure Total
05DA009 05AE027	North Saskatchewan River at Whirlpool Point	F-1	site inspection	\$1,735
	St Mary River at International Boundary	F-3	geophysical and structural design of cableway	\$20,097
2			total	\$21,832
			salary component of cost	\$6,500
05AA023	Oldman River near Waldron's Corner	FP-3	Remove Cableway and gauging station infrastructure	\$2,913
1			total	\$2,913
			salary component of cost	\$484
07AC007	Berland River near the Mouth	P-1	complete cableway installation	\$20,383
05AG006	Oldman River near the Mouth	P-1	cable car purchase	\$3,321
07AA007	Sunwapta River at Athabasca Glacier	P-1	cableway assessment	\$120
3			total	\$23,825
			salary component of cost	\$3,978

