CANADA / ONTARIO
COST SHARING AGREEMENT
FOR
WATER QUANTITY SURVEYS
ANNUAL REPORT
1985/86

SEPTEMBER 1986

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CANADA/ONTARIO COST SHARING AGREEMENT

FOR

WATER QUANTITY SURVEYS

ANNUAL REPORT

1985/86

TO Mr J N Bishop
Mr M G Lewis
Administrators for Ontario

Mr E T Wagner Administrator for Canada

FROM Members of the Ontario Coordinating Committee

In accordance with Article XII of the Memorandum of Agreement signed June 10 1975 covering the water quantity surveys in the Province of Ontario we submit herewith the annual report for the fiscal year 1985/86

Province of Ontario

Government of Canada

Environment Canada

P N Gryniewski Ontario Ministry of Natural Resources

L A Logan Ontario Ministry of Environment

Ontario Hydro

C W Stevens (Alt Member) Ontario Hydro

EXECUTIVE SUMMARY

This is the eleventh annual report which describes the cost sharing of water quantity and sediment data collection under the terms of a Memorandum of Agreement between Canada and Ontario

The Coordinating Committee established under the terms of the Agreement met once during the year to plan and coordinate the construction maintenance and operation of the hydrometric/sediment network. A Network Evaluation and Planning Sub-committee established to formalize a review of the need for existing and future stations had its first meeting. There were no changes in the committee membership during the year.

Effective April 1 1985 the Ontario network operated by the federal Water Resources Branch consisted of 428 hydrometric stations of which 51 were operated by the Manitoba District of the Water Resources Branch The sediment network has 43 continuous seasonal and miscellaneous stations operated by Water Resources Branch Guelph

Although there were a number of staff vacancies in Water Resources Branch Guelph data collection programs were completed according to plans. The highest discharge measurements for the period of record were obtained for a number of streams and rivers flowing into Lake Huron during the Easter weekend. During the year 2 710 discharge measurements were taken and additional 1 840 visits were made to stations. Seven new gauging stations were constructed and nine were upgraded.

Arrangements were completed for the cost sharing of DCPs at northern stations DCP units were installed at 6 sites leaving a total of 13 to be installed over the next two years under the Federal DCP Expansion Program. The daily retrieval of DCP data from NESS and subsequent transmission to the Water Resources Branch Regions via Headquarters was initiated to improve real-time data services and operational information.

A contract on Sediment Issues and Data Needs in Ontario was completed One of the features of the contract was a sediment data users workshop which was used to develop and test recommendations in the report

The Network Evaluation and Planning Sub-committee prepared work plans for its activities and work began on a data users questionnaire to identify redundant existing and future data requirements. A network review of stations on tributaries to the Great Lakes (Canadian portion) was undertaken to identify stations that will be used for timely reporting of run-off conditions in the basin

The unit cost of operating a station during 1985/86 was \$3 313 per station-year for conventional stations and \$6 785 per station-year for remote stations. These costs represent an increase of 3 5% and 0 6% over 1984/85 for conventional and remote stations respectively. The total shareable portion of the program including costs for the network in Northwest Ontario was \$1 635 300 of which the Provincial share was \$790 315. The three provincial agencies shared the cost as follows.

Ontario	Ministry	of	Natural Resources	\$5	571	003
Ontarıo	Ministry	of	Environment	\$1	17	741
Ontario	Hydro			\$	35	136

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1 0 INTRODUCTION

This is the eleventh annual report which summarizes activities of the Canada/Ontario Coordinating Committee and provides information related to the Canada/Ontario hydrometric and sediment networks. Cooperative arrangements for the cost sharing of the network were established by a Memorandum of Agreement between Canada and Ontario in 1975. A sample copy of the agreement which is similar for all provinces and the territories is included in the National Annual Reports on Water Quantity Surveys. Federal/Provincial Cost Sharing Agreements, which is prepared by Water Resources Branch (WRB). Headquarters

The Agreement establishes between Canada and Ontario the basis on which cooperative water quantity surveys will be undertaken and cost shared. It requires that the Administrators establish a Coordinating Committee to plan and review network operations and prepare annually Schedules A and D for their approval. For this year 1985/86. Schedule A (Appendix A) lists the gauging stations in operation and covered by the Agreement and Schedule D (Appendix B) gives the annual cost sharing payment to be paid by Ontario to Canada.

The water quantity survey network in operation at March 31—1975 was reviewed to determine the division of responsibility between the federal and Ontario governments. Each station was designated either Federal Federal/Provincial or Provincial the designation not only indicating the prime purpose but also the financial responsibility. The Federal government pays 100% of the costs of operation and construction of stations designated "Federal" and 50% of the specified costs of stations designated 'Federal/Provincial. The province pays 100% of the specified costs of operation and construction of stations designated "Provincial" and 50% of the specified costs of operation and construction of stations designated "Federal/Provincial"

In Ontario three provincial agencies Ministry of Natural Resources (MNR) Ministry of Environment (MOE) and Ontario Hydro (OH) all participate in the cost sharing of the network along with several federal agencies

In 1977 a set of national guidelines was developed for designating stations in the above categories. In 1982/83 these guidelines were revised and formally accepted by the Administrators for implementation beginning April 1 1984. These guidelines are included in the previously mentioned national report.

It should be noted that because of geographical location a portion of the Ontario network in the northwest part of the province is operated by the Manitoba District of the Western and Northern Region of the Inland Waters Directorate. All stations in this area were classified as "Federal" in 1985/86 and therefore do not affect payments made by the Province of Ontario. (The Manitoba District prepares a separate Annual Report for this portion of the network in Northwest Ontario)

As the "operating party" the Water Resources Branch Ontario Region has prepared this annual report on behalf of the Canada/Ontario Coordinating Section 2 deals with Committee activities Section 3 provides Committee information on the water quantity/sediment network including its historical development changes in 1985/86 and gives highlights on construction and operation of the network over the past year section concludes with a summary of network planning and evaluation activities as conducted by the Hydrology Division of WRB highlights advancements made in data processing and dissemination and Section 5 provides financial information on network costs and the shareable portion for each party Section 6 has been included to better inform the administrators and agencies of anticipated issues and activities

2 0 COMMITTEE ACTIVITIES

The Coordinating Committee met formally on January 21 1986 at the offices of Ontario Hydro. In addition to the annual on-going business of preparing Schedules A and D and planning and approving the construction and maintenance program items of interest included

- briefing on the status of the Rice Lake/Sturgeon Lake Three Year Inflow/Outflow Study undertaken by MOE through a contract
- discussion on the costs and advantages of a new aluminum over-sized look-in shelter developed by WRB
- briefing on the status of program reviews within Environment Canada with special attention on the Inquiry on Federal Water Policy and the R C Walker Study
- briefing on the status of the DCP expansion program Subsequently Ontario Hydro and MOE agreed to cost share the installation of the units at remote stations
- discussion on the progress to date of the Network Evaluation and Planning Sub-committee
- distributed for comment the Discussion Paper on Real-Time Data Services provided by WRB Headquarters to all parties
- status report on the Sediment Issues and Data Needs contract

Provincial members of the Coordinating Committee were also in frequent contact with WRB regarding network operations and the provision of data. A meeting was held with MNR officials to discuss various options for reducing operating costs of the network and thus pass along savings to MNR. Options discussed were reduction of field trips conversion of full-time stations to seasonal stations and discontinuing stations or having the Conservation Authorities operate or pay for the operation of stations. Although rising operating costs remain a concern to all agencies none of these options have been implemented.

Arrangements were made with MOE to cost share for one year (1986/87) the operations of 3 hydrometric stations previously funded by the Lake of the Woods Control Board. These stations are operated by the Manitoba District of WRB

During the year there were no changes in membership of the Committee although notice was given that the Ontario Hydro representative Mr John Spratt would be retiring in July 1986

Official minutes of all Coordinating Committee meetings and Network Evaluation and Planning Sub-committee meeting are available from the Guelph office of WRB

3 O HYDROMETRIC AND SEDIMENT NETWORKS

3 1 History

The numbers of hydrometric stations in the Ontario network by category as of April 1 each year are displayed graphically in Figure 1. These numbers include all stations operated under Schedule A by WR8 (Guelph and Winnipeg) and Ontario Hydro in the Province of Ontario since implementation of the Agreement on April 1 1975. Of interest is that the total number of stations on April 1 1975 was 416 which has increased to 428 as of April 1 1985. During the eleven year period the network reached a maximum of 449 stations in 1984 and a minimum of 404 stations in 1978 and 1979. The significant drop in stations from 1984 to 1985 was largely due to the Manitoba District transferring the operation of 22 stations to the Freshwater Institute of the Department of Fisheries and Oceans on April 1985. These stations are now considered contributed data stations.

A number of agencies like the Freshwater Institute contribute their hydrometric data to HYDAT and these data are published by WRB. In 1975 there were 71 contributed data stations which has increased to 126 as of April 1 1985

Including contributed data stations which complement the network operated under the Canada/Ontario Agreement the number of stations in Ontario has increased from 487 in 1975 to 554 as of April 1 1985 Overall it can be concluded that there has only been a modest increase in the network over the period of the Agreement and that discontinued stations have been replaced with new stations to meet data needs at other sites

In 1984/85 WRB added 24 seasonal and miscellaneous stations to the sediment network. This was done to provide additional coverage in Southern Ontario at minimal extra cost and to assist in determining the

need for regular sediment stations and the sampling strategy to be used As of April 1 1985 there were 43 regular seasonal and miscellaneous sediment stations. All were operated by WR8 Ontario Region. The lowest number of stations operated in the network in the 11 year period was 12

Tables 1 2 and 3 in Appendix E provide additional information on the network

3 2 Network Changes During 1985/86

During 1985/86 12 hydrometric stations were added and 7 discontinued in the province (10 and 3 in the portion of the network operated by WRB Guelph)

New hydrometric stations added were as follows

Station <u>Number</u>	Station	<u>Type</u>	Classification	Operated by
02HB021	Ancaster Creek at Ancaster	QR	P1-MNR	WRB-Guelph
02FC017	Beatty Saugeen River near Holstein	QR	P1-MOE	WRB-Guelph
02CG003	Blue Jay Creek near Tehkummah	QR	P1-MOE/MNR	WRB-Guelph
05PB020	East Trib to Dashwa Lake near Atikokan	QR	Fed-1	WRB-Winnipeg
02GC029	Kettle Creek above St Thomas	QR	P1-MNR	WRB-Guelph
04LK001	Mattawishkwia River at Hearst	QR	P2-MOE	WRB-Guelph
02AB019	McVicar Creek at Thunder Bay	QR	P1-MNR	WRB-Guelph
05PB019	Northeast Trib to Dashwa lake near Atikokan	QR	Fed-1	WRB-Winnipeg
02MC027	Raisin River at Black River (Feb-May)	QR	P1-MNR	WRB-Guelph
02MC028	Rivere Delisle near Alexandria	QR	P1-MNR	WRB-Guelph
02MC030	South Raisin River near Cornwall (Mar-May)	QR	P1-MNR	WRB-Guelph
0200012	Sturgeon River at Upper Goose Falls	QR	P1-MNR	WRB-Guelph

Hydrometric stations discontinued were as follows

Station Number	Station	Туре	<u>Classification</u>	Operated by
05QE013	Ball Lake at Ball Lake Lodge	HR	Fed-1	WRB-Winnipeg
05P0030	Lake of the Woods at Solux Narrows	HR	Fed-3	WRB-Winnipeg
04CA001	Sandy Lake at Sandy Lake	НМ	Fed-4	WRB-Guelph
05QE014	Separation Lake at Walstens Outpost	HR	Fed-1	WRB-Winnipeg
0200011	Sturgeon River at Lower Goose Falls	QR	P1-MNR	WRB-Guelph
02LA017	Tay River below Bob's Lake	QR	Fed-l	WRB-Guelph
05PE021	Winnipeg River at Whitedog Indian Reserve	HR	Fed-1	WRB-Winnipeg

A number of changes were also made to the sediment network. Seven miscellaneous stations were added and seven discontinued. Two seasonal stations were also discontinued.

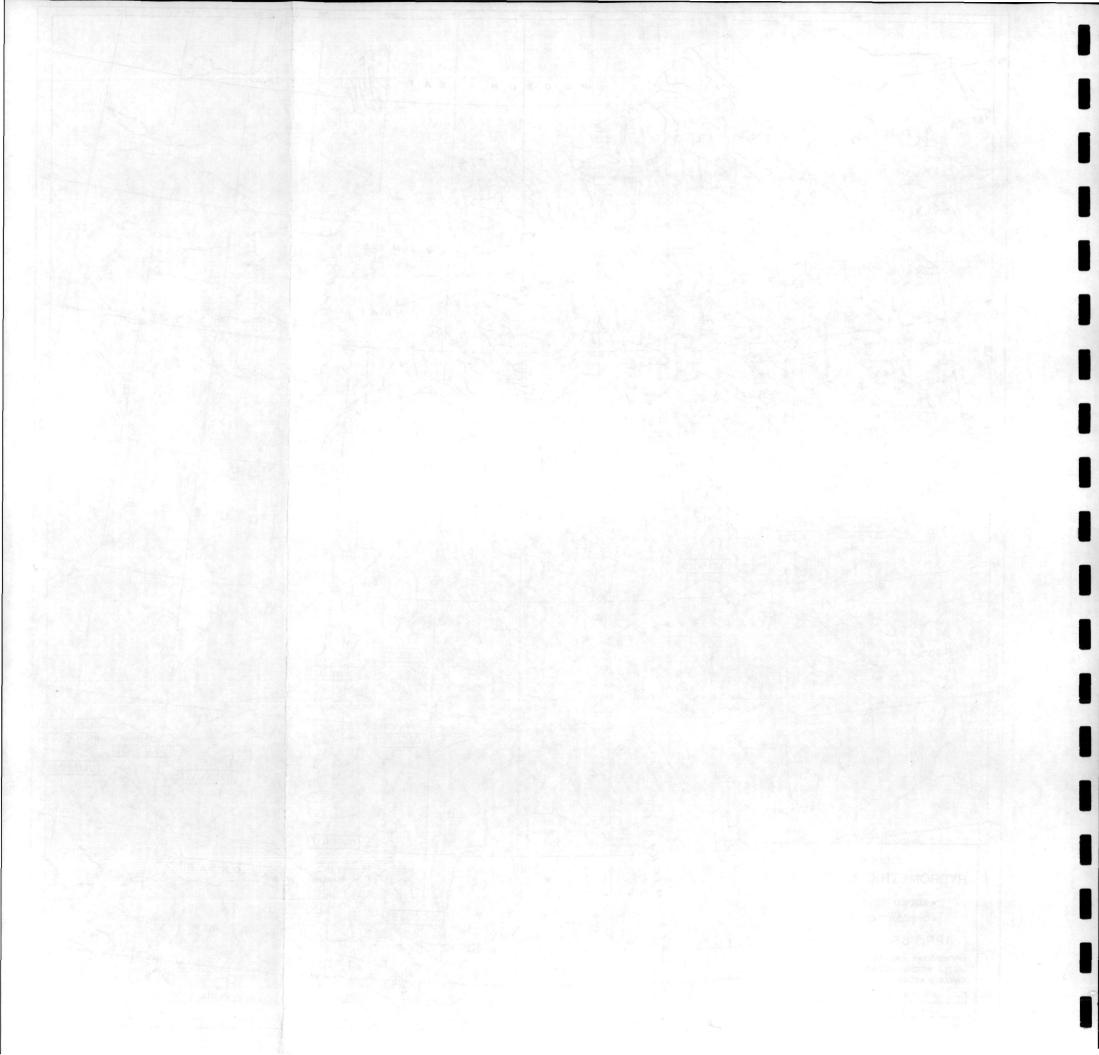
Locations of all hydrometric and sediment stations that were added or discontinued are shown in Figures 2 and 3. Additional information on network changes and in Schedule A over this reporting period is given in Appendix C and in the tables of Appendix E.

3 3 Network Construction and Maintenance

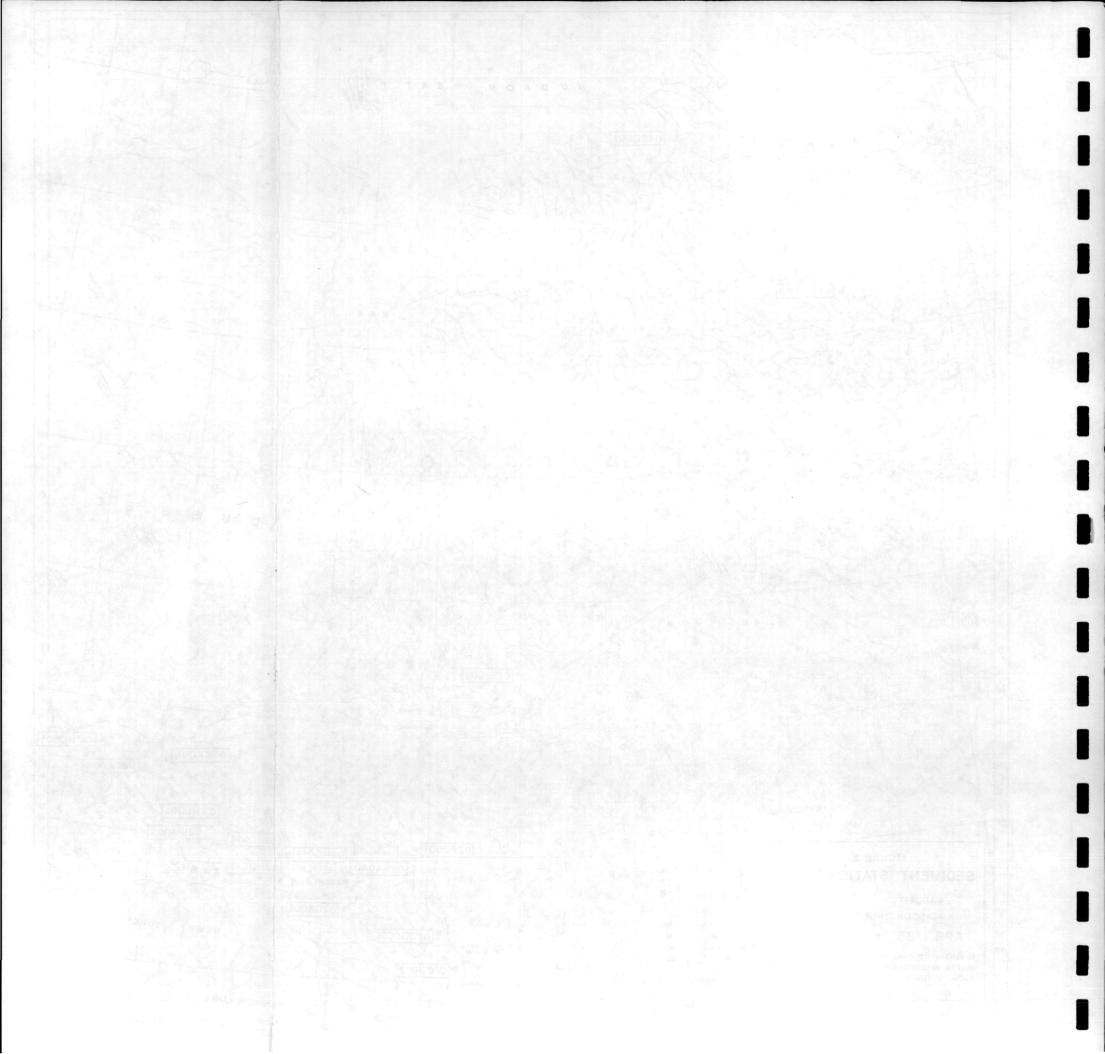
The WRB Ontario Region Construction Team were faced with a heavy schedule of projects during 1985/86. The program was hampered by the lack of key construction personnel through various periods during the year. Projects were carried out in the following categories.











a) Field Investigations

Included in this category were

- on-site field reconnaissance of new and existing site locations
- 11) preparation of project site plans
- iii) obtaining necessary approvals for hydrometric/sediment installations
- iv) investigations of specific problems requiring immediate remedial action

During the year six such investigations were conducted

b) New Construction

This category includes installation of stilling wells intakes instrument shelters artificial controls cableways access roads and some instrumentation. Such construction is associated with new stations or the relocation of existing stations because of poor quality of records or bridge reconstruction. The following projects were undertaken in this category.

New <u>Stations</u>		<u>Classification</u>
02CG003	Blue Jay Creek near Tecummah	P-1 MOE/MNR
02GC029	Kettle Creek above St Thomas	P-1 MNR
04LK001	Mattawishkwia River at Hearst	P-2 MOE
02AB019	McVicar's Creek at Thunder Bay	P-1 MNR
02AB008	Neebing River near Thunder Bay	F-3 DOE
02FC017	Beatty Saugeen River near Holstein	P-1 MOE
02DC012	Sturgeon River at Upper Goose Falls	P-1 MNR

c) Upgrading of Station

It is necessary in some situations to improve the capability of existing stations to collect more accurate or timely data. In order to do so it is required that the Construction Section install artificial controls erect larger shelters to house added instrumentation for real-time data access and install essential services such as hydro and telephone and construct sediment sampler housing. Nine projects were carried out in this category.

d) Maintenance

General maintenance projects were carried out at a number of stations and included such work as replacement of shelter doors repairs to cableways intake repairs straightening of wells and bank stabilization

All major construction projects were screened for local environmental effects under the Federal Environmental Assessment and Review Process. A report documenting screening decisions is on file at the WRB office in Guelph

Details of the 1985/86 construction program are provided in the Annual Construction Report 1985/86 which is available from WRB office in Guelph

3 4 Network Operations and Field Surveys by WRB, Ontario Region

Despite several vacancies due to retirements and resignations at the Hydrometric Technician and Supervisor level data collection programs were successfully completed Taking into account the type of stations (water level or discharge) seasonal stations start-up of new stations record loss and discontinued stations during the year 359 54 equivalent station-years of hydrometric data were collected by WRB. Ontario Region To collect this information approximately 2.710 discharge measurements and 1 840 additional station visits were made to hydrometric stations over the reporting period Total field staff PY's devoted to hydrometric collection (Hydrometric supervisors technicians terms and students) were approximately 23 0

The 1984 hydrometric data computations and approval for publication was completed on April 26 so that the data could be sent to the WRB Head-quarters by the target date of May 1

The Federal DCP Expansion Program continued at remote sites in Northern Ontario with the purchase of seven Bristol DCP's. Due to the late delivery of this equipment only six stations had DCP's installed during 1985/86. These are noted below

Fawn River below Big Trout Lake
White River below White Lake
Little Current River at Percy Lake
Kenogami River near Mammamattawa
North French River near the Mouth
Moose River above Moose River

During 1985/86 the two Provincial agencies Ontario Hydro and the Ministry of Environment agreed to participate in the DCP program at Federal/Provincial and Provincial funded stations and share in the capital construction and on-going operation and maintenance costs based on present cost sharing arrangements. A total of ten Federal/MOE one MOE one Federal/Ontario Hydro and one Ontario Hydro funded DCP's will be installed over the next two years

WRB monitored high flow periods during 1985/86 and obtained the highest discharge measurments for the period of record on a number of streams and rivers flowing into Lake Huron during the Easter weekend in April 1985. High record temperatures, combined with precipitation and a ripe snow pack caused major and minor flooding in a number of communities from as far as Huntsville in the south to Kashechewan at the mouth of the Albany River in the north. A number of families had to be evacuated in centers such as Searchmont. Onaping Falls and Kashechewan. Water levels recorded on the Ottawa River near Westmeath and Britannia were also in the high range in April. 1985 and the highest discharge measurement for the period of record was obtained at the Petawawa River near Petawawa gauging station. During the 1986 spring freshet a mild spell passed through Southern Ontario. From March 16th to 19th. This was accompanied by

approximately 25 mm of rain over the period which caused a majority of streams to reach high levels. Although no major flooding was reported WRB technicians took a number of priority one discharge measurements in the south central and south eastern sections of Ontario

The second sediment monitoring program was carried out September 9-18 1985 to assess the impact of the Goderich Harbour Expansion Project. All sectors were re-surveyed except the interior of the breakwater (due to dredging). The WRB used the HYDAC 200 system to sound the area and take bedload samples. Potential impacts from the expansion project relate to ice jamming flooding and increased sedimentation at the mouth of the Maitland River.

In support of the data collection program for the sediment network 1 380 samples were submitted to the sediment laboratory and 1 956 analyses were performed. An estimated 1 0 PY was utilized for the sediment program in field office and laboratory work

3 5 Network Evaluation and Planning

The purpose of network evaluation is to determine the effectiveness and efficiency of an existing network in terms of meeting present and future data requirements. Effectiveness is a measure of how well the network can meet the data requirement while efficiency is measure of the cost to produce the data. The purpose of network planning is to develop a plan for enhancing the overall effectiveness and efficiency of a network. The plan could include construction/operation of new stations and/or modified/discontinued operation of existing stations.

Network evaluation and planning continued to be a priority during 1985/86 Table 1 summarizes the most significant activities. A particularly significant activity was the creation of a Network

Evaluation and Planning Sub-committee (NEPS) of the Canada/Ontario Coordinating Committee NEPS is coordinating the network evaluation and planning activities of the member agencies

It is anticipated that network evaluation and planning will continue to be a priority during 1986/87. Major activites will include the distribution of questionnaires to data users updating station evaluation reports for all Federal and Federal/Provincial stations and a pilot study on optimization of the water quantity inventory network

TABLE 1
SUMMARY OF NETWORK EVALUATION AND PLANNING
ACTIVITIES DURING 1985/86

Network	Activity	Particpating Agencies	Status On March 31/85	Results/Progress
Ontario	Station Classification Review (based on National Guidelines)	WRB/Ontario WRB/Man-NW Ont MOE OH MNR	Continuing	Updated classification for all stations
F F/P stations excluding Manitoba stations	Station Priorization Study	WRB/Ontario	Continuing	Preliminary priority levels (ie priority to WRB) have been assigned
Ontario	On-going network review to identify new stations required and stations no longer required	WRB/Ontario MNR OH MOE WRB/Man-NW Ont	Continuing	Reviewed Farewell Cr at Oshawa O2HDO14 Harmony Cr at Oshawa O2HDO13 Sandy Lake at Sandy Lake O4CAOO1 Twenty Mile Cr near Balls Falls O2HAOO6
Great Lakes Basın (Canadıan Portion)	Network review to identify suitable stations for mon- itoring runoff conditions in the Canadian portion of the Great Lakes Basin	WRB/Ontario WPMB/Ontario	Continuing	17 stations were selected for use in the monthly reports
Ontario	On-going review of the present uses of Ontario hydrometric data and identification of any new/future requirements for data	WRB/Ontario WRB/Man-NW Ont MOE OH MNR	Continuing	Numerous reports have been reviewed and the adequacy of data used in various studies (eg FDRP Regional Flood Frequency Study) has been noted Prepared summary of data requests

4 O DATA PROCESSING AND DISSEMINATION

Several initiatives were planned or taken by WRB to improve its level of service to data users through enhancement of the minicomputer system. In early 1985 WRB Headquarters commenced the daily retrieval and subsequent distribution of DCP data from NESS to Regional Offices. Agencies have expressed interest in obtaining these data directly from the Regional Office data files and it is expected that this service will be available in 1986/87

To permit the retrieval of data files by non-WRB data users a routine was written that will control the activities of a data user while signed—on to the WRB Guelph minicomputer. The use of this routine is to allow the data user to retrieve data files created by the Data Control Section in response to a request for data. This routine will also form the basis for a routine permitting access to the DCP data files by the Cost Share Agreement partners

The minicomputer system was enhanced via the installation of "RSXIIm+' operating system the "DECnet" communications system which links all of WRB minicomputers together and the purchase of high volume/rapid access disk packs to provide greatly increased storage capacity for the hydrometric data

The hydrometric staff received training on the use of the hydrometric data processing routines. Training included the areas of inputting the data to the appropriate files running the processing routines and the operation of a Stream Accounting Program for use in estimating missing record. The hydrometric staff are now entering the data themselves and running the processing routines.

Arrangements were made for the monthly reporting of streamflow conditions for selected streams discharging to the Great Lakes. The report is expected to provide more recent information on runoff to the lakes and to assist in assessing impacts on lake levels at a time when record highs are being established

5.0 NETWORK OPERATING COSTS

Costs to operate the network, identified as operational costs in Schedule B of the Agreement, were computed based on actual costs provided in financial statements or recorded for the purpose of computing shareable costs. The per station cost based on actual equivalent station years of data was \$3,313 for conventional stations and \$6,785 for remote stations. Table 2 gives a comparison of the actual unit costs for 1985/86 to estimated unit costs for 1985/86 and actual costs for 1984/85.

TABLE 2
COMPARISON OF UNIT COSTS FOR
OPERATING WATER QUANTITY STATIONS

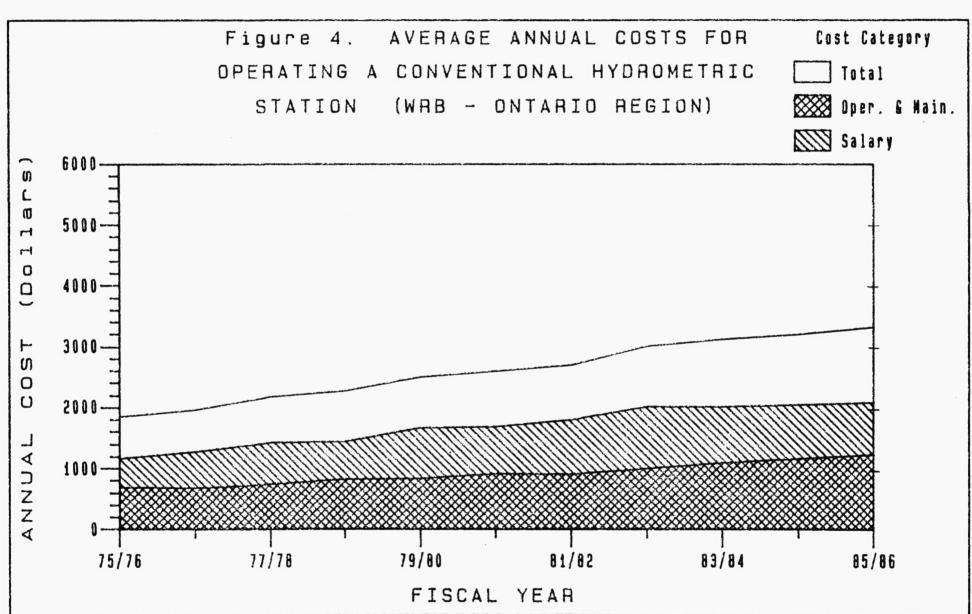
	1984/85 Actual Costs	1985/86 Estimated Costs	1985/86 Actual Costs	% Increase (Decrease) from 1984/85
Conventional	\$3,200	\$3,440	\$3,313	+3.53%
Remote	\$6,741	\$6,970	\$6,785	+0.65%

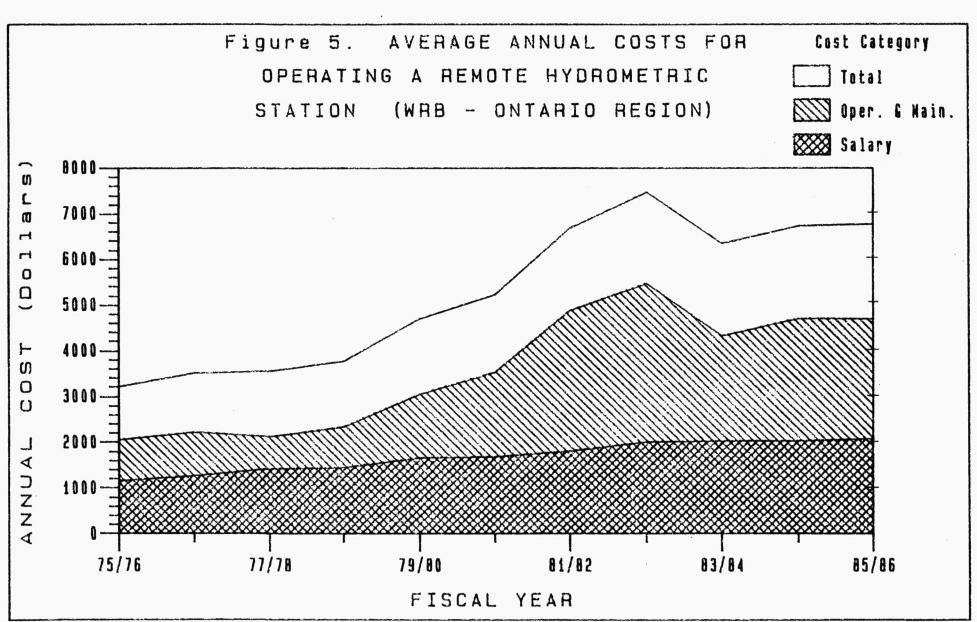
Operation of conventional stations over 1985/86 was considered normal in terms of number of trips made. However, a number of staff vacancies contributed to a lower cost than estimates used for preparing Schedule D.

Operating costs for remote stations remained about the same due to cancellation of the January trip to some stations serviced from the North Bay office, combining a construction trip with a regular hydrometric trip, and on two occassions using MNR aircraft at a much lower cost than the commercial charter aircraft.

Figures 4 and 5 give a comparison of unit costs per station for remote and conventional stations since 1975. It can be seen that for conventional stations the increase has been relatively constant while

*			





remote stations have varied considerably, largely because of the number of trips taken. Generally the cost of operating a remote station is twice that of a conventional station.

The total shareable cost for construction of new stations and operation and maintenance of the network in the province was \$1,635,300 of which the provincial share was \$783,900 or 47.9%. Table 3 gives a summary of cost comparisons by agency. Appendix D provides tables which derive the cost data for each agency. It must be noted that the cost for using MNR aircraft was \$1,615 over 1985/86 and although it was included in the operational costs, it has not been included in any of the totals as a credit to MNR.

Over and under payments by the province were last reconciled up to and including the year 1983/84. Table 4 summarizes the over and under payments since 1975 and indicates when payments were balanced. For 1985/86, MNR and Ontario Hydro received credits of \$13,854 and \$1,229, respectively, due to over payments while MOE under paid by \$4,526.

Additional cost information is also provided in Appendix E which gives tables that are used for reporting information for the national report on Water Quantity Surveys.

TABLE 3 SUMMARY OF COST COMPARISONS BY AGENCY 1985/86

	Schedule 'D'	Recovered And Paid During 1985/86	Actual Cost	Difference (cost re- covered less actual cost)
) Hydrometric Operations				
1. MNR 2. MOE 3. OH 4. WRB (to OH)	\$536,820 160,410 36,255 6,435	\$536,820 <u>1</u> 160,410 36,255 6,435	\$522,707 164,936 35,026 6,435	+ \$14,113 - 4,526 + 1,229
Subtotal	\$739,920	\$739,920	\$729,104	+ \$10,816
) Sediment				
1. MNR	\$ 4,000	\$ 4,000	\$ 4,259	- \$ 259
Subtotal	\$ 4,000	\$ 4,000	\$ 4,259	- 259
) Construction				
1. MNR 2. MOE	\$ 67,500 11,500	\$ 38,191 12,805	\$ 38,191 12,805	0
Subtotal	\$ 79,000	\$ 50,996	\$ 50,996	0
) Specialized Equipment				
1. MNR 2. OH	\$ 10,800 600	\$ 5,846 110	\$ 5,846 110	0
Subtotal	\$ 11,400	\$ 5,956	\$ 5,956	0
TOTAL	\$834,320	\$800,872	\$790,315	+ \$10,557
Total Actual Cost MNR Total Actual Cost MOE Total Actual Cost OH Total Actual Cost WRB Pa	id to OH	- \$571,003 - 177,741 - 35,136 - 6,435		
*	TOTAL	\$790,315		

NOTE: $\underline{1}$ does not include credit of \$1,615 to MNR for use of MNR aircraft during 1985/86

	1975/76 <u>l</u>	1976/771	1977/78 <u>1</u>	1978/792	1979/80 <u>3</u>	1980/81 <u>3</u>	1981/82 <u>4</u>	1982/83 <u>4</u>	1983/84 <u>4</u>	1984/85	1985/86
Hydrometric Operations											
MNR	+6,071	-5,008	+ 542	-2,058	+4,667	-28,692	-19,537	-28,334	- 1,072	-25,623	-14,113
MOE	+2,293	+1,275	-3,190	-3,493	+4,028	- 8,505	- 3,286	- 2,393	-11,617	-11,323	+ 4,526
. ОН	- 354	-1,427	0	- 300	+ 354	- 1,506	- 574	- 745	- 2,745	- 3,571	- 1,229
<u>Sediment</u> MNR	+ 4	+ 431	- 523	- 24	-1,329	- 2,603	- 4,454	- 1,749	+ 1,142	. 2 260	. 250
MNK	+ 4	+ 431	- 323	- 24	-1,329	- 2,003	- 4,454	- 1,749	+ 1,142	+ 2,360	+ 259
									TOTAL	-38,157	<u>-10,557</u>

NOTE: +

- + Indicates that actual costs are more than the funds recovered
- Indicates that actual costs are less than the funds recovered
- $\frac{1}{2}$ Over/under payments for 1975/76, 1976/77 and 1977/78 were reconciled on the second quarter billing for 1978/79
- 2 Over/under payments for 1978/79 were reconciled on the second quarter billing for 1979/80
- 3 Over/under payments for 1979/80 and 1980/81 were reconciled on the second quarter billing for 1982/83
- 0ver/under payments for 1981/82, 1982/83 and 1983/84 were reconciled on the second quarter billing for 1984/85

6.0 FUTURE PROGRAMS AND ISSUES

It is expected that 5 new provincial stations will be constructed and added to the network in 1986/87. In addition, the joint Canada/Ontario Soil and Water Environmental Enhancement Program (SWEEP) in Southwestern Ontario will require the construction and operation of 6 stations for its pilot watershed demonstration program. Construction of the stations in 1986/87 is dependent upon the selection of the watersheds by fall 1986.

Review and evaluation of the network will continue. It is expected that with potential cuts in PY resources, and the need to accommodate new stations, it will be necessary to discontinue several low priority stations. Information to identify the lower priority stations is currently being gathered by WRB.

The sediment data collection program will continue to be evaluated in light of the study on issues and data needs. Action plans will be prepared based on recommendations from the study, direction from Headquarters and resources available.

With the WRB EDP system and DCP expansion program a good start has been made on enhancing real-time data collection, storage and dissemination. A background discussion paper was distributed to the provincial agencies to increase awareness of actions needed and solicit input on a policy document on level of service. The Coordinating Committee will continue to be involved in developments in this area over the next few years.

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APPENDIX A

SCHEDULE 'A'

MEMORANDUM OF AGREEMENT BETWEEN

GOVERNMENTS OF CANADA AND ONTARIO

FOR WATER QUANTITY SURVEYS

1985/86

SCHEDULE A

Water Quantity Survey Stations

A complete listing of active water quantity survey stations in the province of Ontario is included in the Schedule. The list designates each water quantity survey station as a Federal, Federal/Provincial, or Provincial interest and identifies the operating party and the agency or agencies funding the operation of the station.

The categories for the listing according to guidelines implemented April 1, 1984 are as follows:

Federal 1 - Federal Departmental Programs Federal 2 - Interprovincial Waters Federal 3 - International Waters Federal 4 - National Water Quantity Inventory Federal/Provincial 1 - Federal/Provincial Agreement Federal/Provincial 2 - River Basin Management Federal/Provincial 3 - Regional Water Quantity Inventory Provincial 1 - Provincial Departmental Programs Provincial 2 - Specific Purpose Monitoring Requirement

All of the above stations are operated by WRB, Environment Canada, with the exception of 6 water level stations that are operated by Ontario Hydro. The Schedule also includes contributed data stations, i.e. stations operated by either WRB (DFO, Tides and Water Level stations) or by another agency.

CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR:

SCHEDULE A FOR THE FISCAL YEAR: 1985/1986

APR 1 1985

INDEX OF HYDROMETRIC CODES

GAUGE INFORMATION ******* H=WATER LEVEL STATION
M=MANUAL STATION
P=POWERPLANT RATING
Q=DISCHARGE STATION
R=RECORDING STATION S=SUMMATION OF FLOW

DATA MEASURED ***** N=NORTHERN REMOTE STATIONS S=SEDIMENT SAMPLING Q=WATER QUALITY SAMPLING T=CONT. WATER TEMPERATURE M=TELEMARK L=SATELLITE STATION D=TELEPHONE DATA LOGGERS

TECHNICIAN CODE INDEX

S.CENT.ONT.AREA	S.E.ONTARIO AREA	S.W.ONTARIO AREA	NORTH BAY AREA	OTTAWA AREA	THUNDER BAY AREA
*********	************	*************	*****	******	***********
10=PAT RYAN	20=REG LEBLANC	30=VACANT	40=VACANT	50=DOUG ROWE	60=ROSS BISHOP
ll=J.FIRMAN	22=B.RUSSELL	31=D.LAWLOR	41=D.COPELAND	51=G.WIGGINS	61=B. PESSAH
13=S.TEEPLE	23=K.MUNN	32=G.MELENDY	42=J.DOUCET	52=B.MAGEE	62=K.MILLER
14=M.ABRAHAMSE	24=B.REES	33=C.WARDLAW	43=E.WAUGH	53=J.MYKE	
		34=B.SMITH	44=D.JACKSON		
			45=P.LAVOIE		

EXTERNAL SOURCE INDEX

00=WINNIPEG DISTRICT STATIONS 70=ABITIBI-PRICE INC (NORTH BAY) 73=EDDY FOREST PRODUCTS LIMITED (NORTH BAY) 76=SPRUCE FALLS POWER AND PAPER CO. LTD. (NORTH BAY) 77=GREAT LAKES POWER COMPANY LTD. 78=INTERNATIONAL NICKEL CO. OF CANADA LTD. (NORTH BAY) 80=ONTARIO HYDRO (NORTH BAY) 81=ONTARIO HYDRO (GUELPH - RUN MANUAL PROGRAM) 82=ONTARIO HYDRO (GUELPH - KEY IN DATA) 83=ONTARIO HYDRO (THUNDER BAY) 84=PARKS CANADA TRENT-SEVERN WATERWAY (KEY IN DATA) 84=PARKS CANADA TRENT-SEVERN WATERWAY (KEY IN DATA) 95=INT. LAKE SUPERIOR BOARD OF CONTROL (KEY IN DATA) 86=INT. ST.LAWRENCE BOARD OF CONTROL (CORNWALL - KEY IN DATA) 87=COORD. COMMITTEE ON GREAT LAKES (BURLINGTON - KEY IN DATA) 88=M.E.D.S. - TIDES AND WATER LEVELS. OTTAWA (VIA WRB HQ'S) 90=ONT. MIN. OF ENVIRONMENT (SENDS OUTPUT CARDS AND PRINTOUTS) 91=ORILLIA LIGHT AND POWER (KEY IN DATA) 92=DEPARTMENT OF PUBLIC WORKS (KEY IN DATA) 93=ST.LAWRENCE SEAWAY AUTHORITY (KEY IN DATA) 94=DEPT. FISHERIES 3 OCEANS. FRESH WATER INSTITUTE

FUNDING CODES FOR STATIONS

AA =FEDERAL 1:FED.DEPT.PROGRAMS:OPERATED BY FED(WSC)
AAS=FED DEPT PROGRAMS: OPERATED BY FED(WSC);SEDIMENT
BA =FEDERAL 2:INTERPROV. WATERS:OPERATED BY FED(WSC)
CA =FEDERAL 3:INTERNATL. WATERS:OPERATED BY FED(WSC)
DA =FEDERAL 4:NAT.WAT.QUAN.INV.:OPERATED BY FED(WSC)
EAD=FED-PROV 1: OPERATED BY FED(WSC): OMGE
FAE=FED-PROV 1: OPERATED BY FED(WSC): OMIN
GAC=FED-PROV 2: OPERATED BY FED(WSC): OMIN
GAE=FED-PROV 2: OPERATED BY FED(WSC): OMNR
GBC=FED-PROV 3: OPERATED BY PED(WSC): OMOR
HAD=FED-PROV 3: OPERATED BY FED(WSC): OMOE
TAC=PROVINCIAL 1: OPERATED BY FED(WSC): OMOE HAD-FED-PROV 3: OPERATED BY FED(WSC): OMOE IAC-PROVINCIAL 1: OPERATED BY FED(WSC): ONT.HYDRO IAD-PROVINCIAL 1: OPERATED BY FED(WSC): OMOE IAE-PROVINCIAL 1: OPERATED BY FED(WSC): OMOE IAE-PROVINCIAL 1: OPERATED BY FED(WSC): OMOE/OMNR IAG-PROVINCIAL 1: OPERATED BY FED(WSC): ONT.HYD/OMNR IAS-PROV.PROGRAMS:OPERATED BY FED(WSC): SEDIMENT JAD-PROVINCIAL 2: OPERATED BY FED(WSC): OMOE/OMNR RAT-CONTRIBUTED DATA: OPERATED BY FED(WSC): MEDS/CHS RBC-CONTRIBUTED DATA: OPERATED BY PROV(ONT.HYD.): RBD-CONTRIBUTED DATA: OPERATED BY PROV(OMOE): RED-CONTRIBUTED DATA: OPERATED BY PROV(OMOE):

NOTES: 1) DRAINAGE AREAS: ALL FIGURES SHOWN ARE IN METRIC UNITS (KM2).

2) UNITS COLUMN: ALL GAUGES OPERATE IN METRIC UNITS EXCEPT AS NOTED.

APR 1 1985

FEDERAL 1: FEDERAL DEPT. PROGRAMS. OPERATED BY FEDERAL(WSC)

STA.NO.	DR.AREA DIST.	TECH. GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
02JE019 050E013 02EC002 02JC008 02HF003	1130.00 G 0.00 W 1520.00 G 1780.00 G 1270.00 G	43 QR 00 HR N 24 QR M 43 QR L 23 QR M	AA AA AA AA	AMABLE DU FOND R AT SAMUEL DE CHAMPLAIN P.P. BALL LAKE AT BALL LAKE LODGE (S) BLACK RIVER NEAR WASHAGO BLANCHE RIVER ABOVE ENGLEHART BURNT RIVER NEAR BURNT RIVER		1 2 3 4 5
02MA002 02MA003 05QE008 05QC001 02HK003	394.00 G 904.00 G 1690.00 W 4920.00 W 1990.00 G	52 QR M 52 QR 00 QR N L 00 QR M 23 QR M	AA AA AA AA	AMABLE DU FOND R AI SAMUEL DE CHAMPLAIN P.P. BALL LAKE AT BALL LAKE LODGE (S) BLACK RIVER NEAR WASHAGO BLANCHE RIVER ABOVE ENGLEHART BURNT RIVER NEAR BURNT RIVER CATARAQUI R. AI CHAFFEYS LOCKS (OCT15-MAY15) CATARAQUI RIVER AI KINGSTON MILLS CEDAP RIVER BELOW WABASKANG LAKE CHUKUNI RIVER NEAR EAR FALLS CROWE RIVER AI MARMORA		6 7 8 9 10
02KA010 02HH001 05PB022 05PB021 02HD014	0.25 G 241.00 G 0.00 W 0.00 W 58.50 G	53 QR 23 QR 00 QR L 00 QR L 11 QM S	AA AA AA AA	CROWE RIVER AT MARMORA EAST TRIB.TO PERCH L INLET NO.2 NR CHALK RIVER EELS CREEK BELOW APSLEY EYE R NR BENDING LK RD NR ATIKOKAN EYE R UPSTREAM OF BENDING LK RD NR ATIKOKAN EAREWELL CREEK AT OSHAWA (SED.FEB-MAY) FRENCH RIVER AT CHAUDIERE DAM GOULAIS RIVER NEAR SEARCHMONT GRASSY NARROWS L. AT GRASSY NARROWS (S) GULL RIVER AT NORLAND HARMONY CREEK AT OSHAWA (SED.FEB-MAY) LAC SEUL AT HUDSON LAC SEUL AT HUDSON LAC SEUL AT LAC SEUL LAKE SIMCOE NEAR GAMEBRIDGE LITTLE FRENCH RIVER AT OKIKENDAWT ISLAND LONG-LEGGED RIVER BELOW LONG-LEGGED LAKE MATTAWA RIVER BELOW BOUILLON LAKE MIDDLE SEVERN RIVER AT WASHAGO MISSINAIBI RIVER AT MATTICE MISSISSAGUA RIVER BELOW MISSISSAGUA LAKE		11 12 13 14 15
02DD017 02DD016 02BF002 05QE015 02HF002	0.00 G 0.00 G 1160.00 G 0.00 W 1280.00 G	45 0M 45 0H 44 0R 0L 00 HR N 23 0R M	AA AA AA AA	FRENCH RIVER AT CHAUDIERE DAM FRENCH RIVER AT PORTAGE DAM GOULAIS RIVER NEAR SEARCHMONT GRASSY NARROWS L. AT GRASSY NARROWS (S) GULL RIVER AT NORLAND		16 17 18 19 20
02HD013 05QB003 05QB002 05QB001 02EC015	41.60 G 0.00 W 0.00 W 0.00 W 0.00 G	11 QR S 00 HR D 00 HH 00 HR N L 23 HR	AA AA AA AA	HARMONY CREEK AT OSHAWA (SED.FEB-MAY) LAC SEUL AT GOLDPINES LAC SEUL AT HUDSON LAC SEUL AT LAC SEUL LAKE SIMCOE NEAR GAMEBRIDGE		21 22 23 24 25
02DD020 05QE012 02JE020 02EC013 04LJ001	0.00 G 548.00 W 909.00 G 0.00 G 8940.00 G	45 QM QR N L 43 QR 24 QM 41 QR D	AA AA AA AA	LITTLE FRENCH RIVER AT OKIKENDAWT ISLAND LONG-LEGGED RIVER BELOW LONG-LEGGED LAKE MATTAWA RIVER BELOW BOUILLON LAKE MIDDLE SEVERN RIVER AT WASHAGO MISSINAIBI RIVER AT MATTICE		26 27 28 29 30
02HH002 02KF006 02BE005 02BF012 02BF009	326.00 6 2900.00 6 11.50 6 1.15 6 2.02 6	23 QR 52 QR SD 44 QR 44 QR 44 QR	AA AA AA AA	MISSISSIPPI RIVER AT APPLETON MISC.SED. NORBERG CREEK(SITE A) ABOVE BATCHAWANA RIVER NORBERG CREEK(SITE F)AT OUTLET OF BATCHAWANA L NORBERG CREEK (SITE E) BELOW BATCHAWANA LAKE		32 33 34 35
02BF007 02BF006 02BF008 02CD008 02CD009	5.40 G 8.64 G 4.08 G 2.09 G 2.76 G	44 QR 44 QR 44 QR 42 QR 42 QR	AA AA AA AA	NORBERG CRK.(SITE C)AT OUTLET OF LIT. TURKEY L NORBERG CREEK(SITE B)AT OUTLET OF TURKEY LAKE NORBERG CREEK (SITE D) BELOW WISHART LAKE HORDIC MINE TAIL.DIT.(1) NR EL.LK.(APR1-NOV1) NORDIC MINE TAIL.DIT.(2) NR EL.LK.(APR1-NOV1)		36 37 38 39 40
02CD010 02EA010 02HJ002 02KF005 02LB010	3.01 G 149.00 G 7360.00 G 90900.00 G 0.00 G	42 QR 43 QR Q T 23 QR 50 QR M 51 HR	AA AA AA AA	NORDIC MINE TAIL.DIT.(3) NR EL.LK.(APRI-NOVI) NORTH MAGNETAWAN RIVER ABOVE PICKEREL LAKE OTONABEE RIVER AT LAKEFIELD OTTAWA RIVER AT BRITANNIA OTTAWA RIVER AT CUMBERLAND		41 42 43 44 45
02JE011 02JE013 02KA003 02KA004 02KA005	0.00 G 0.00 G 7.30 G 0.93 G 3.60 G	43 HR M 43 HR M 53 GR T 53 GR 53 GR	AA AA AA AA	OTTAWA RIVER AT LAKE TIMISKAMING OTTAWA RIVER AT MATTAWA PERCH LAKE OUTLET NEAR CHALK RIVER PERCH LAKE INLET NO 1 NEAR CHALK RIVER PERCH LAKE INLET NO 2 NEAR CHALK RIVER		46 47 48 49 50

APR 1 1985

FEDERAL 1: FEDERAL DEPT. PROGRAMS. OPERATED BY FEDERAL(WSC)

STA.NO.	DR.AREA DIST.	TECH. GAUGE DAT	FUND.CD.	STATION NAME	UNITS	ю.
02KA006 02KA007 02KA008 02KB001 02LA012	0.31 G 0.24 G 0.11 G 4120.00 G 3120.00 G	53 QR 53 QR 53 QR 53 QR M 52 QR M	AA AA AA AA	PERCH LAKE INLET NO 3 NEAR CHALK RIVER PERCH LAKE INLET NO 4 NEAR CHALK RIVER PERCH LAKE INLET NO 5 NEAR CHALK RIVER PETAWAWA RIVER NEAR PETAWAWA RIDEAU RIVER BELOW MANOTICK		51 52 53 54 55
02LA011 02LA004 02LA005 05QE011 05QE014	1920.00 G 3830.00 G 1290.00 G 0.00 W	52 QR M 51 QR D 52 QR D 00 HR N 00 HR N	AA AA AA AA	RIDEAU RIVER BELOW MERRICKVILLE RIDEAU RIVER AT OTTAWA RIDEAU R. ABOVE SMITH FALLS OCT 1 - APR 30 SALVESEN LAKE NEAR OUTLET SEPARATION L. AT WALSTEN,S OUTPOST CAMP (S)		56 57 58 59 60
02EC006 02EC007 02EC014 02EC005 02LB005	0.00 G 0.00 G 5310.00 G 0.00 G 3810.00 G	24 QM 24 QM 24 QR D 24 QM 51 QR S M	AA AA AA AA	SEVERN RIVER AT BIG FALLS SEVERN RIVER AT LITTLE FALLS SEVERN RIVER ABOVE WASDELL FALLS SEVERN RIVER AT WASHAGO SOUTH NATION R. NR PLANTAGENET SPRINGS S.SED.		61 62 63 64 65
050A004 050E009 02LA017 02LA016 02HA016	4740.00 W 1530.00 W 357.00 G 786.00 G 4.38 G	00 QR N L 00 QR N 52 QR D 52 QR D 13 QR	AA AA AA AA	STURGEON RIVER AT MCDOUGALL MILLS STURGEON RIVER AT OUTLET OF SALVESEN LAKE TAY RIVER BELOW BOB'S LAKE TAY RIVER AT PORT ELMSLEY THREE MILE CREEK AT MOUNT HOPE		66 67 68 69 70
02HK004 02HK902 02KA009 05QC003 05QD006	12000.00 G 9090.00 G 2.88 G 2370.00 W 6370.00 W	23 QR M 23 QR M 53 QR 00 QR 00 QR M	AA AA AA AA	TRENT RIVER AT GLEN ROSS TRENT RIVER AT HEALEY FALLS (SPILLWAY) TRIB. TO PERCH LAKE INLET NO.2 NR CHALK RIVER TROUTLAKE RIVER BELOW BIG FALLS WABIGOON RIVER NEAR QUIBELL		71 72 73 74 75
02HA015 05PF051 05PE021	2.08 G 0.00 W 0.00 W	13 QR 00 HR N 00 HR	AA AA AA	WELLAND RIVER NEAR MOUNT HOPE WINNIPEG RIVER ABOVE BOUNDARY FALLS (S) WINNIPEG R. AT WHITEDOG INDIAN RES. (S)		76 77 78

WINNIPEG:	REMOTE	-	WATER LEVEL	=	6
		-	DISCHARGE	=	4
	CONVENTIONAL	-	WATER LEVEL	=	43599
	SUB-TOTAL	_	DISCHARGE WATER LEVEL	=	5
	205-101HF	_	DISCHARGE	=	9
	TOTAL		21041	=	18
GUELPH:	REMOTE	-	WATER LEVEL	=	0
	COMMENTATIONAL	-	DISCHARGE	=	Ō
	CONVENTIONAL	_	WATER LEVEL DISCHARGE	=	4 56
	SUB-TOTAL	_	WATER LEVEL	=	4
		_	DISCHARGE	=	56
	TOTAL			=	60

CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR:

SCHEDULE A FOR THE FISCAL YEAR: 1985/1986

APR 1 1985

FEDERAL 2: INTERPROVINCIAL WATERS, OPERATED BY FEDERAL(WSC)

STA.NO. DR.AREA DIST. TECH. GAUGE DATA FUND.CD. STATION NAME UNITS NO. 1

05RC001 5730.00 W 00 QR N L BA BERENS RIVER ABOVE BERENS LAKE

SUMMARY

- WATER LEVEL = - DISCHARGE = WINNIPEG: REMOTE

CONVENTIONAL - WATER LEVEL = ō

- DISCHARGE = - WATER LEVEL = - DISCHARGE = SUB-TOTAL 0

1 1 0 TOTAL REMOTE - WATER LEVEL =

GUELPH:

CONVENTIONAL - WATER LEVEL = 0

SUB-TOTAL - WATER LEVEL = 0

- DISCHARGE = 0

SUB-TOTAL - WATER LEVEL = 0

- DISCHARGE = 0

TOTAL

APR 1 1985

FEDERAL 3: INTERNATIONAL WATERS. OPERATED BY FEDERAL(WSC)

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DATA	FUND.CD.		UNITS	NO.
05P8018 02FF002 02CE002 05PA012 02BF001	332.00 865.00 1350.00 4510.00 1190.00	₩ G	00 32 44 00 44	OR D OR S OR M OR N L	CA CA CA CA	ATIKOKAN RIVER AT ATIKOKAN AUSABLE RIVER NEAR SPRINGBANK AUX SABLES RIVER AT MASSEY BASSWOOD RIVER NEAR WINTON BATCHAWANA RIVER NEAR BATCHAWANA BAYFIELD RIVER NEAR VARNA MISC.SED. BEAR CREEK BELOW BRIGDEN BEAVER RIVER NEAR CLARKSBURG BIG CREEK NEAR WALSINGHAM BIGHEAD RIVER NEAR MEAFORD	ENGL ISH	1 2 3 4 5
02FF007 02GG009 02FB009 02GC007 02FB010	466.00 533.00 572.00 591.00 293.00	66666	31 33 24 34 24	QR S QR D QR D QR S QR	CA CA CA CA	BAYFIELD RIVER NEAR VARNA MISC.SED. BEAR CREEK BELOW BRIGDEN BEAVER RIVER NEAR CLARKSBURG BIG CREEK NEAR WALSINGHAM BIGHEAD RIVER NEAR MEAFORD		6 7 8 9
02GC026 02BB002 02AC002 02HD006 02HB011	676.00 1980.00 2980.00 82.90 235.00	88888	34 61 60 11 13	QR S M QR S QR QR QR	CA CA CA CA	BIG OTTER CREEK NEAR CALTON BLACK RIVER NEAR MARATHON MISC.SED. BLACK STURGEON RIVER AT HIGHWAY NO 17 BOWMANVILLE CREEK AT BOWMANVILLE BRONTE CREEK NEAR ZIMMERMAN		11 12 13 14 15
02ED007 02HB002 02AB015 02HC024 02HC006	177.00 795.00 492.00 316.00 249.00	6 6 6	24 13 60 22 11	QR QR SD QR QR SD QR M	CA CA CA CA	COLDWATER RIVER AT COLDWATER CREDIT RIVER AT ERINDALE CURRENT RIVER NEAR STEPSTONE DON RIVER AT TODMORDEN (SED.FEB-MAY) DUFFINS CREEK AT PICKERING		16 17 18 19 20
02HB004 02HC030 05PA010 02HD012 02GB001	199.00 204.00 0.00 232.00 5210.00	66366	13 22 00 11 14	QR SD HR QR SD QR S	CA CA CA CA	BIGHEAD RIVER NEAR MEAFORD BIG OTTER CREEK NEAR CALTON BLACK RIVER NEAR MARATHON MISC.SED. BLACK STURGEON RIVER AT HIGHWAY NO 17 BOWMANVILLE CREEK AT BOWMANVILLE BRONTE CREEK NEAR ZIMMERMAN COLDWATER RIVER AT COLDWATER CREDIT RIVER AT ERINDALE CURRENT RIVER NEAR STEPSTONE DON RIVER AT TODMORDEN (SED.FEB-MAY) DUFFINS CREEK AI PICKERING EAST OAKVILLE CREEK NEAR OMAGH ETOBICOKE CREEK BELOW Q.E.W. MISC.SED. FRENCH LAKE NEAR ATIKOKAN GANARASKA RIVER ABOVE DALE MISC.SED. GRAND RIVER AT BRANTFORD MISC.SED. HARRIS RIVER AT HWY NO 69 HIGHLAND CREEK NEAR WEST HILL MISC.SED. HUMBER RIVER AT WESTON KETTLE CREEK AT ST THOMAS MISC.SED. LAC LA CROIX AT CAMPBELLS CAMP LAKE OF THE WOODS AT CLEARWATER BAY LAKE OF THE WOODS AT KEEWATIN LAKE OF THE WOODS EAST OUTLET AT KENORA P H LAKE OF THE WOODS OUTLET AT MINK CREEK		21 22 23 24 25
02EA013 02HC013 02HC003 02GC002 05PA011	35.50 88.10 800.00 329.00 0.00	6666	45 22 22 32 30	OR OR SD OR M OR S M HR N L	CA CA CA CA	HARRIS RIVER AT HWY NO 69 HIGHLAND CREEK NEAR WEST HILL MISC.SED. HUMBER RIVER AT WESTON KETTLE CREEK AT ST THOMAS MISC.SED. LAC LA CROIX AT CAMPBELLS CAMP		26 27 28 29 30
05PD011 05PD029 05PB008 05PE014 05PE006	0.00 0.00 0.00 0.00	#######################################	00 00 00 00	HR N L HR N L HR D HR M	CA CA CA CA	LAKE OF THE WOODS AT CLEARWATER BAY LAKE OF THE WOODS AT CYCLONE ISLAND LAKE OF THE WOODS AT HANSON BAY LAKE OF THE WOODS AT KEEWATIN LAKE OF THE WOODS EAST OUTLET AT KENORA P H		31 32 33 34 35
05PE005 05PD030 05PE011 05PD001 05PC016	0.00 0.00 0.00 0.00 243.00	H	00 00 00 00 00	OR HR OR HR ML OR	CA CA	LAKE OF THE WOODS AT SIOUX NARROWS (SEASONAL)	ENGLISH	37 3 8
02BA003 02HC028 02EA011 02BD003 02FE004	1320.00 77.70 2850.00 1930.00 1760.00	66666	61 22 45 61 31	QR QR QR QR M QR	CA CA CA CA	LITTLE PIC RIVER NEAR COLDWELL LITTLE ROUGE CREEK NEAR LOCUST HILL MAGNETAWAN RIVER NEAR BRITT MAGPIE RIVER NEAR MICHIPICOTEN MAITLAND RIVER NEAR DONNYBROOK		41 42 43 44 45
02AB016 02GB010 02CC008 02HL001 02EB011	145.00 171.00 9300.00 2620.00 0.00	66666	62 13 44 11 24	QR QR QR QR SD QR	CA CA CA CA	MCINTYRE RIVER AT THUNDER BAY MCKENZIE CREEK NEAR CALEDONIA MISSISSAGI RIVER AT MISSISSAGI CHUTE MOIRA RIVER NEAR FOXBORO MISC.SED. MOON RIVER AT HIGHWAY NO 69		46 47 48 49 50

APR 1 1985

FEDERAL 3: INTERNATIONAL WATERS. OPERATED BY FEDERAL(WSC)

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DATA	EUND.CD.	STATION NAME	UNITS	жо.
02EB012 05PA003 05PA006 02GC022 02HM007	0.00 0.00 13400.00 181.00 694.00	W	24 00 00 34 52	QR HR N L QR N QR S QR S M	CA CA CA CA	MUSKOKA RIVER AT HIGHWAY NO 69 NAMAKAN LAKE ABOVE KETTLE FALLS DAM NAMAKAN RIVER AT OUTLET OF LAC LA CROIX NANTICOKE CREEK AT NANTICOKE MISC.SED. NAPANEE RIVER AT CAMDEN EAST MISC.SED.		51 52 53 54 55
02AB008 02ED003 02HB005 02BB003 02AA001	187.00 1180.00 95.60 4270.00 1550.00	66666	62 24 13 61 60	QR S M QR M QR M QR	CA CA CA CA	NEEBING RIVER NEAR THUNDER BAY NOTTAWASAGA RIVER NEAR BAXTER OAKVILLE CREEK AT MILION PIC RIVER NEAR MARATHON PIGEON RIVER AT MIDDLE FALLS	ENGL ISH	56 57 58 59 60
05PC011 05PB015 05PC019 05PB007 05PC002	461.00 443.00 38600.00 0.00 38600.00	7	00 00 00 00	QR M QR N QP Q HR M HM	CA CA CA CA	PINEWOOD RIVER NEAR PINEWOOD(S) PIPESTONE RIVER ABOVE RAINY LAKE RAINY RIVER AT FORT FRANCES RAINY LAKE NEAR FORT FRANCES RAINY RIVER AT FORT FRANCES INT FALLS P P		61 62 63 64 65
05PC004 05PC005 05PC003 05PC018 02HC022	38600.00 38600.00 38600.00 50200.00 186.00	# 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16	00 00 00 00 22	HR HM HR QR L QR M	CA CA CA CA	RAINY RIVER AT FORT FRANCIS INT FALLS PP FB RAINY RIVER AT FORT FRANCIS INT FALLS PP CANAL RAINY RIVER AT FORT FRANCIS INT FALLS PP TR RAINY RIVER AT MANITOU RAPIDS ROUGE RIVER NEAR MARKHAM	ENGLISH ENGLISH	66 67 68 69 70
02HM003 02FA001 02FC001 02CD001 02HD007	891.00 927.00 3960.00 1350.00 77.70	99999	11 31 31 42 11	QR S QR QR D QR QR	CA CA CA CA	RAINY RIVER AT MANITOU RAPIDS ROUGE RIVER NEAR MARKHAM SALMON RIVER NEAR SHANNONVILLE MISC.SED. SAUBLE RIVER AT SAUBLE FALLS SAUGEEN RIVER NEAR PORT ELGIN SERPENT RIVER AT HIGHWAY NO 17 SOPER CREEK AT BOWMANVILLE		71 72 73 74 75
02MC009 02HB010 02CA003 05PC010 02FB007	0.00 166.00 0.00 168.00 181.00	06696	51 13 44 00 24	OR OR M HR OR OR	CA CA CA CA	S. RAISIN R. DIVERSION AT LONG SAULT(JUN-SEP) SPENCER CREEK AT DUNDAS ST HARYS RIVER NEAR GARDEN RIVER STURGEON RIVER NEAR BARNICK(S) SYDENHAM RIVER NEAR OWEN SOUND THAMES RIVER AT THAMESVILLE TWENTY HILE CREEK AT BALLS FALLS WANAPITEI RIVER NEAR WANUP WELLAND RIVER BELOW CAISTOR CORNERS WHITE RIVER BELOW WHITE LAKE WILHOT CREEK NEAR NEWCASTLE WILHOT CREEK NEAR NAPANEE WILHOT CREEK NEAR NAPANEE WILHOT CREEK NEAR NAPANEE WILHOT CREEK NEAR NAPANEE WINNIPEG RIVER BELOW LAKE OF THE WOODS OUTLETS WINNIPEG R. BELOW NORMAN DAM & POWERHOUSE		76 77 78 79 80
02GE003 02HA006 02DB005 02HA007 02BC004	4300.00 293.00 3130.00 230.00 4170.00	6666	33 13 45 13 61	QR M QR QR QR QR N	CA CA CA CA	THAMES RIVER AT THAMESVILLE TWENTY MILE CREEK AT BALLS FALLS WANAPITEI RIVER NEAR WANUP WELLAND RIVER BELOW CAISTOR CORNERS WHITE RIVER BELOW WHITE LAKE		81 82 83 84 85
02HD009 02HM004 05PE001 05PE020 05PE012	92.60 112.00 0.00 70400.00 0.00	# G	11 52 00 00 00	OR D OR HM OP HR	CA CA CA CA	WILMOT CREEK NEAR NEWCASTLE WILTON CREEK NEAR NAPANEE WINNIPEG RIVER BELOW KENORA POWERHOUSE WINNIPEG R. BELOW LAKE OF THE WOODS OUTLETS WINNIPEG R. BELOW NORMAN DAM & POWERHOUSE		86 87 88 89 90
02AC001	736.00	G	60	QR	CA	WOLF RIVER AT HIGHWAY NO 17		91

CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR:

SCHEDULE A

FOR THE FISCAL YEAR: 1985/1986

APR 1 1985

FEDERAL 3: INTERNATIONAL WATERS, OPERATED BY FEDERAL(WSC)

SUMMARY

WINNIPEG: REMOTE - WATER LEVEL = 3
- DISCHARGE = 3
- CONVENTIONAL - WATER LEVEL = 13
- DISCHARGE = 10
- SUB-TOTAL - WATER LEVEL = 16
- DISCHARGE = 13
- TOTAL = 29
- GUELPH: REMOTE - WATER LEVEL = 0
- DISCHARGE = 1
- CONVENTIONAL - WATER LEVEL = 1
- DISCHARGE = 60
- SUB-TOTAL - WATER LEVEL = 1
- DISCHARGE = 61
- DISCHARGE = 61
- DISCHARGE = 61
- DISCHARGE = 62

APR 1 1985

FEDERAL 4: NATIONAL WATER QUANTITY INVENTORY, OPERATED BY FEDERAL(WSC)

STA.NO.	DR.AREA I	DIST.	TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
04ME003 04GC002 04HA001 04FB001 04FC001	27500.00 16300.00 118000.00 24200.00 36000.00	66666	43 61 41 61 41	OR NS OR N OR NS L OR N OR NS L	DA DA DA DA DA	ABITIBI RIVER AT ONAKAWANA MISC.SED. ALBANY RIVER BELOW ACHAPI LAKE ALBANY RIVER NEAR HAT ISLAND MISC. SED. ATTAWAPISKAT RIVER BELOW ATTAWAPISKAT LAKE ATTAWAPISKAT R. BELOW MUKETEI R. MISC. SED.		1 23 4 5
05PD026 04CE001 04GB005 02DD015 04EA001	744.00 0.00 1170.00 106.00 10400.00	W GGGG	00 61 62 41 41	QR HM N QR N L QR QR N L	DA DA DA DA DA	BERRY CREEK AT OUTLET OF BERRY LAKE BIG TROUT LAKE AT TROUT LAKE BRIGHTSAND RIVER AT MOBERLY LAKE COMMANDA CREEK AT COMMANDA EKWAN RIVER BELOW NORTH WASHAGAMI RIVER		6 7 8 9
05QA002 04CE002 04KA002 04JA002 04JG001	6400.00 4350.00 133.00 3780.00 26200.00	90000	00 61 43 41 41	QR L QR N L QR QR QR N	DA DA DA DA DA	ENGLISH RIVER AT UMFREVILLE FAWN RIVER BELOW BIG TROUT LAKE HALFWAY CREEK AT MOOSONEE KABINAKAGAMI RIVER AT HIGHWAY NO 11 KENOGAMI RIVER NEAR MAMMAMATTAWA		11 12 13 14 15
04KA001 04JF001 02EA006 04LG004 04GF001	4250.00 5360.00 650.00 60100.00 1890.00	66666	43 41 43 43 41	OR N OR N OR HS L OR N	DA DA DA DA DA	KWATABOAHEGAN RIVER NEAR THE MOUTH LITTLE CURRENT RIVER AT PERCY LAKE MAGNETAWAN RIVER NEAR BURKS FALLS HOOSE RIVER ABOVE MOOSE RIVER MISC. SED. MUSWABIK RIVER AT OUTLET DE MUSWABIK LAKE		16 17 18 19 20
04MF001 02EA005 04JD005 04CA001 04CC001	6680.00 321.00 2020.00 0.00 94300.00	66666	43 43 41 62 61	QR N QR M QR HM N QR NS L	DA DA DA DA DA	NORTH FRENCH RIVER NEAR THE MOUTH NORTH MAGNETAWAN RIVER NEAR BURKS FALLS PAGWACHUAN RIVER AT HIGHWAY NO 11 SANDY LAKE AT SANDY LAKE SEVERN RIVER AT LIMESTONE RAPIDS MISC. SED.		21 22 23 24 25
04DC002 04JC003 05PB014 04DC001	3290.00 4870.00	G H G	41 41 00 61	QR N L QR QR QR NS L	DA DA DA DA	SHAMATTAWA RIVER AT OUTLET OF SHAMATTAWA LAKE SHEKAK RIVER AT HIGHWAY NO 11 TURTLE RIVER NEAR MINE CENTRE WINISK R. BELOW ASHEWEIG R. TRIB. MISC. S		26 27 28 29

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FEDERAL-PROVINCIAL 1: OPERATED BY FEDERAL(WSC); O.M.O.E.

STA.NO.	DR.AREA DIST.	TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	NO.
02GC018 02AB006 02ED005 02CA002 02GH002	287.00 G 6470.00 G 295.00 G 108.00 G 125.00 G	32 62 24 44 33	QR S M QR QR QR QR	ead ead ead ead ead	CATFISH CREEK NEAR SPARTA MISC.SED. KAMINISTIQUIA RIVER AT KAMINISTIQUIA MAD RIVER NEAR GLENCAIRN ROOT RIVER AT SAULT STE MARIE RUSCOM RIVER NEAR RUSCOM STATION		1 2 3 4 5

WINNIPEG:	REMOTE	_	WATER LEVEL	=	0
		-	DISCHARGE	=	Ō
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	5
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	05055
	TOTAL.			=	- 5

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FEDERAL-PROVINCIAL 1: OPERATED BY FEDERAL(WSC): O.M.N.R.

STA.NO.	DR.AREA DIST	. TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	ΝО.
02HC027 02GB007 02DD010 02GC008 02HC033	58.00 G 360.00 G 13900.00 G 134.00 G 70.60 G	22 14 45 34 22	OR OR OR OR	S H	FAE FAE FAE FAE	BLACK CREEK NEAR WESTON FAIRCHILD CREEK NEAR BRANTFORD MISC.SED. FRENCH RIVER AT DRY PINE BAY LYNN RIVER AT SINCOE MINICO CREEK AT ISLINGTON		123345
02HD008 02FE009 02GG003	95.80 G 376.00 G 1160.00 G	11 31 33	QR QR QR	SD SD	Fae Fae Fae	OSHAWA CREEK AT OSHAWA SOUTH MAITLAND RIVER AT SUMMERHILL SYDENHAM RIVER AT FLORENCE (SED.FEB-MAY)		6 7 8

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	9
	CONVENTIONAL	-	MILLENIE MELME	=	0000000000000
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	8
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	8
	TOTAL			=	8

APR 1 1985

FEDERAL-PROVINCIAL 2: OPERATED BY FEDERAL(WSC): ONTARIO HYDRO

STA.NO	DR.AREA D	DIST.	TECH.	GAUGE 1	DATA	FUND.CD.	STATION NAME	UNITS	Ю.
02KC00 02KD00 04LM00 02KD00	4 5800.00 1 22900.00	6 6 6	53 53 43 53	OR OR OR N OR	н	GAC GAC GAC GAC	BONNECHERE RIVER NEAR CASTLEFORD MADAWASKA RIVER AT PALMER RAPIDS MISSINAIBI R BELOW WARDOSE R YORK RIVER NEAR BANCROFT		1 2 3 4

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	Ξ	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	1
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	3
	SUB-TOTAL	-	MILLER BELLER	=	0
		-	DISCHARGE	=	4
	TOTAL.			=	4

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FEDERAL-PROVINCIAL 2: OPERATED BY FEDERAL(WSC): O.M.N.R.

STA.NO.	DR.AREA DIS	T. TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	Ю.
02LA007 02DD006	559.00 G 0.00 G	52 45	QR HR	D	gae gae	JOCK RIVER NEAR RICHMOND LAKE NIPISSING AT NORTH BAY		1 2

SUMMARY

WINNIPEG: REMOTE - WATER LEVEL = 0 CONVENTIONAL - WATER LEVEL =

CONVENTIONAL - WATER LEVEL =

DISCHARGE =

SUB-TOTAL - WATER LEVEL =

DISCHARGE = 0 0 0 TOTAL TOTAL
REMOTE - WATER LEVEL =
- DISCHARGE =
CONVENTIONAL - WATER LEVEL =
- DISCHARGE =
SUB-TOTAL - WATER LEVEL =
- DISCHARGE = GUELPH: 0 1 1 2 TOTAL

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FEDERAL-PROVINCIAL 2: OPERATED BY PROVINCE(ONTARIO HYDRO)

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
04MD002 02JD011 02KD007 02DC008 04MB003	2870.00 1370.00 2720.00 2360.00 238.00	66666	82 82 82 82 82	OH OH OH OH OH	GBC GBC GBC GBC GBC	FREDERICK HOUSE RIVER AT F.H. LAKE DAM LADY EVELYN RIVER AT LADY EVELYN LAKE DAM MADAWASKA RIVER AT BARK LAKE DAM TEMAGAMI RIVER AT RED CEDAR LAKE DAM WATABEAG RIVER AT WATABEAG LAKE DAM	ENGL ISH ENGL ISH	1 2 3 4 5
02JD012	1780.00	G	82	QM	GBC	WEST MONTREAL RIVER AT MISTINIKON LAKE DAM	ENGLISH	6

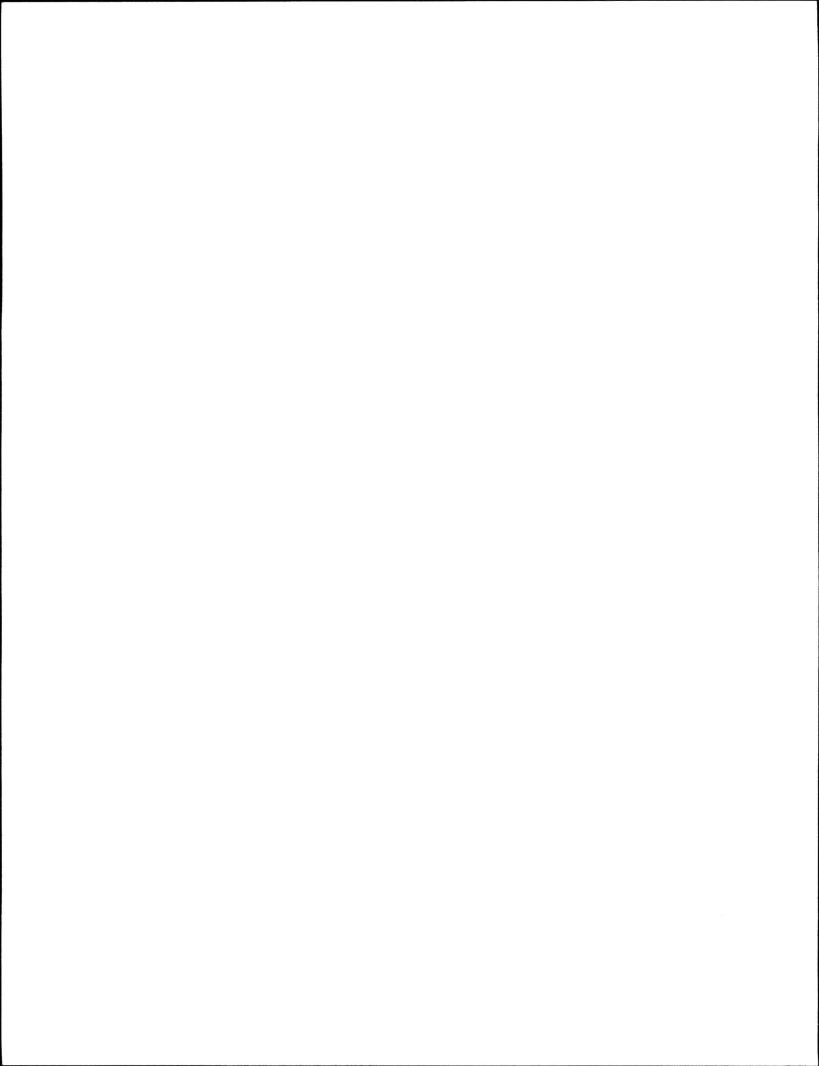
WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE		WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	6
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	00006066
	TOTAL			=	6

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FEDERAL-PROVINCIAL 3: OPERATED BY FEDERAL(WSC): 0.M.O.E.

							•		
STA.NO.	DR.AREA	DIST.	TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	NO.
04DB001 04GA002 04GB004 04FA001 04FA003	7950.00 5390.00 11200.00 9010.00 4900.00	6	61 62 61 62 61	QR QR QR QR QR	N L	HAD HAD HAD HAD HAD	ASHEWEIG RIVER AT STRAIGHT LAKE CAT RIVER BELOW WESLEYAN LAKE OGOKI RIVER ABOVE WHITECLAY LAKE OTOSKWIN RIVER BELOW BADESDAWA LAKE PINEIMUTA RIVER AT EYES LAKE		122345
04DA001 04CA003 04CD002 04CA004 04CA002	5960.00 619.00 4270.00 0.00 36500.00	6	62 62 62 62 62	QR QR QR QR QR	NS N N	HAD HAD HAD HAD HAD	PIPESTONE RIVER AT KARL LAKE ROSEBERRY R. ABOVE ROSEBERRY LAKES MISC. SED. SACHIGO RIVER BELOW OUTLET OF SACHIGO LAKE SEVERN RIVER BELOW OUTLET OF DEER LAKE SEVERN RIVER AT OUTLET OF MUSKRAT DAM LAKE		6 7 8 9 10
04CB001	10800.00	G	62	QR	Н	HAD	WINDIGO RIVER ABOVE MUSKRAT DAM LAKE		11

WINNIPEG: REHOTE - WATER LEVEL :	=	0
- DISCHARGE	=	0
CONTRACT TORNIA MILLER DEFILE	=	00000000
- DISCHARGE	=	0
SUB-TOTAL - WATER LEVEL	=	0
- DISCHARGE	=	0
TOTAL	=	0
GUELPH: REMOTE - WATER LEVEL	=	0
- DISCHARGE	=	10
CONVENTIONAL - WATER LEVEL	=	0
- DISCHARGE	=	1
	=	0
- DISCHARGE	=	11
TOTAL	=	11



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PROVINCIAL 1: OPERATED BY FEDERAL(WSC); ONTARIO HYDRO

STA.NO.	DR.AREA DIS	ST. TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	NO.
04GD001 04LD001 02JD009 04JC002 02KC005	2410.00 G	41 41 43 41 53	QR N QR D QR QR HR	IAC IAC IAC IAC IAC	ALBANY RIVER ABOVE NOTTIK ISLAND GROUNDHOG RIVER AT FAUGUIER MONIREAL RIVER AT MOUNTAIN CHUTES NAGAGAMI RIVER AT HIGHWAY NO 11 OTTAWA RIVER NEAR WESTMEATH		1 2 3 4 5
02AB009	2800.00 G	62	QR	IAC	SHEBANDOWAN RIVER AT SUNSHINE		6

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	ō
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL		WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	1
	CONVENTIONAL	-	WATER LEVEL	Ξ	1
		-	DISCHARGE	=	4
	SUB-TOTAL	-	WATER LEVEL	=	1
		-	DISCHARGE	=	5
	TOTAL			=	6

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PROVINCIAL 1: OPERATED BY FEDERAL(WSC): O.M.O.E.

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	NO.
02GA030 02GD018 02EC011 02EC008 02AD010	49.70 144.00 282.00 274.00 650.00	6666	14 32 23 23 60	QR QR QR QR QR	D	IAD IAD IAD IAD IAD	ALDER CREEK NEAR NEW DUNDEE AVON RIVER BELOW STRATFORD BEAVERTON RIVER NEAR BEAVERTON BLACK RIVER AT BALDWIN BLACKWATER RIVER AT BEARDMORE		1 23 4 5
02HF004 02BB004 02HM005 02DB007 02LB012	21.80 201.00 155.00 59.00 76.70	9999	23 61 52 45 51	QR QR QR QR QR		IAD IAD IAD IAD IAD	ALDER CREEK NEAR NEW DUNDEE AVON RIVER BELOW STRATFORD BEAVERTON RIVER NEAR BEAVERTON BLACK RIVER AT BALDWIN BLACKWATER RIVER AT BEARDMORE BOB CREEK NEAR MINDEN CEDAR CREEK NEAR HEMLO COLLINS CREEK NEAR KINGSTON CONISTON CREEK ABOVE WANAPITEI RIVER E BR SC. R NR ST ISIDORE DE PRESCOTT MAR1-DECI		6 7 8 9
02AE001 02EC009 02CF012 04FA002 02LA006	616.00 181.00 207.00 1540.00 409.00	6 6 6	60 24 42 62 51	OR OR OR OR OR	S H H	IAD IAD IAD IAD IAD	GRAVEL RIVER NEAR CAVERS MISC.SED. HOLLAND RIVER AT HOLLAND LANDING JUNCTION CREEK BELOW KELLEY LAKE KAWINOGANS RIVER NEAR PICKLE CROW KEMPTVILLE CREEK NEAR KEMPTVILLE LITTLE NORDIC CREEK AT ELLIOT LAKE MILLHAVEN CREEK NEAR MILLHAVEN MOOSE CREEK AT LEVACK OUSE RIVER NEAR WESTWOOD PINE RIVER AT LURGAN PORCUPINE RIVER AT HOYLE REESOR CREEK ABOVE GREEN RIVER SERPENT RIVER AT OUTLET OF DUNLOP LAKE SERPENT RIVER ABOVE QUIRKE LAKE SERPENT RIVER BELOW PECORS LAKE SERPENT RIVER BELOW QUIRKE LAKE STOKES RIVER NEAR FERNDALE VERMILION RIVER NEAR VAL CARON VEUVE RIVER NEAR VERNER		11 12 13 14 15
02CD007 02HM006 02CF013 02HJ003 02FB001	4.58 150.00 40.60 282.00 154.00	66666	42 52 45 23 31	OR OR OR OR		IAD IAD IAD IAD IAD	LITTLE NORDIC CREEK AT ELLIOT LAKE MILLHAVEN CREEK NEAR MILLHAVEN MOOSE CREEK AT LEVACK OUSE RIVER NEAR WESTWOOD PINE RIVER AT LURGAN		16 17 18 19 20
04MD004 02HC039 02CD002 02CD004 02CD006	401.00 38.30 109.00 567.00 157.00	66666	43 11 42 42 42	QR QR QR QR QR	Ī	IAD IAD IAD IAD IAD	PORCUPINE RIVER AT HOYLE REESOR CREEK ABOVE GREEN RIVER SERPENT RIVER AT OUTLET OF DUNLOP LAKE SERPENT RIVER BELOW PECORS LAKE SERPENT RIVER ABOVE QUIRKE LAKE		21 22 23 24 25
02CD003 02FA002 02CF011 02DD012 02LB018	319.00 50.50 704.00 741.00 99.50	6 6 6 6	42 31 45 45 51	QR QR QR QR QR		IAD IAD IAD IAD IAD	SERPENT RIVER BELOW QUIRKE LAKE STOKES RIVER NEAR FERNDALE VERMILION RIVER NEAR VAL CARON VEUVE RIVER NEAR VERNER W BR SC. R NR SI ISIDORE DE PRESCOTT MARI-JUNI		26 27 28 29 30
02ED011	168.00	G	24	QR		IAD	WYE RIVER AT WYEBRIDGE		31

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	31
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	31
	TOTAL			=	31

APR 1 1985

PROVINCIAL 1: OPERATED BY FEDERAL(WSC); O.M.N.R.

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	NO.
02LB008 02MC026 02HK006 02GC006 02BF004	440.00 124.00 541.00 363.00 51.50	6666	51 51 23 34 44	QR QR QR QR QR	D	IAE IAE IAE IAE	BEAR BROOK NEAR BOURGET BEAUDETTE RIVIERE NEAR GLEN NEVIS BEAVER CREEK NEAR MARMORA BIG CREEK NEAR DELHI BIG CARP RIVER NEAR SAULT STE. MARIE		1 2 3 4 5
02GC017 02GC010 02HL003 02HE001 02GA031	93.20 342.00 401.00 13.90 44.50	G G	34 34 53 11 14	QR QR QR QR	M	IAE IAE IAE IAE	BEAR BROOK NEAR BOURGET BEAUDETTE RIVIERE NEAR GLEN NEVIS BEAVER CREEK NEAR MARMORA BIG CREEK NEAR DELHI BIG CARP RIVER NEAR SAULT STE. MARIE BIG OTTER CREEK ABOVE OTTERVILLE BIG OTTER CREEK AT TILLSONBURG BLACK RIVER NEAR ACTINOLITE BLOOMFIELD CREEK AT BLOOMFIELD BLUE SPRINGS CREEK NEAR EDEN HILLS		6 7 8 9
02FE014 02HB016 02HK009 02GA023 02GH003	77.70 124.00 82.30 118.00 159.00	66666	31 13 23 14 33	QR QR QR QR QR	D M D	IAE IAE IAE IAE	BLYTH BROOK BELOW BLYTH BRONTE CREEK AT PROGRESTON BURNLEY CREEK ABOVE WARKWORTH CANAGAGIGUE CREEK NEAR ELMIRA CANARD RIVER NEAR LUKERVILLE		11 12 13 14 15
02KF011 02FC011 02LB006 02GD011 02DD014	269.00 163.00 433.00 93.20 37.30	66666	53 31 51 34 42	QR QR QR QR	D D	IAE IAE IAE IAE	BLYTH BROOK BELOW BLYTH BRONTE CREEK AT PROGRESTON BURNLEY CREEK ABOVE WARKWORTH CANAGAGIGUE CREEK NEAR ELMTRA CANARD RIVER NEAR LUKERVILLE CARP RIVER NEAR KINBURN CARRICK CREEK NEAR CARLSRUHE CASTOR RIVER AT RUSSELL CEDAR CREEK AT WOODSTOCK CHIPPEWA CREEK AT NORTH BAY		16 17 18 19 20
02KF013 02KF010 02HC023 02HK007 02GA039	280.00 614.00 62.20 159.00 272.00	6	53 53 22 23 14	QR QR QR QR	D D D S	IAE IAE IAE IAE IAE	CLYDE RIVER AT GORDON RAPIDS CLYDE RIVER NEAR LANARK COLD CREEK NEAR BOLTON COLD CREEK AT ORLAND		21 22 23 24
02GA028 02HE002 02HB019 02HB018 02HB001	578.00 114.00 59.50 402.00 205.00	G G	14 11 13 13 13	QR QR QR QR QR	D D D	IAE IAE IAE IAE	CONESTOGO RIVER ABOVE DRAYTON MISC.SED CONESTOGO RIVER AT GLEN ALLAN CONSECON CREEK AT ALLISONVILLE CREDIT RIVER ALTON BRANCH ABOVE ALTON CREDIT RIVER AT BOSTON MILLS CREDIT RIVER NEAR CATARACT CREDIT RIVER NEAR CATARACT CREDIT RIVER MEAR ORANGEVILLE CREDIT RIVER WEST BRANCH AT NORVAL CROWE RIVER NEAR GLEN ALDA DEPOT CREEK AT BELLROCK DINGMAN CREEK BELOW LAMBETH DON RIVER AT YORK MILLS DUFFINS CREEK ABOVE PICKERING EAST RIVER NEAR HUNTSVILLE EAST HUMBER RIVER AT KING CREEK		26 27 28 29 30
02HB020 02HB013 02HB008 02HK005 02HM002	32.30 62.20 127.00 456.00 189.00	G	13 13 13 53 52	OR OR OR OR	D D D	IAE IAE IAE IAE	CREDIT RIVER ERIN BRANCH ABOVE ERIN CREDIT RIVER NEAR ORANGEVILLE CREDIT RIVER WEST BRANCH AT NORVAL CROWE RIVER NEAR GLEN ALDA DEPOT CREEK AT BELLROCK		31 32 33 34 35
02GE005 02HC005 02HC019 02EB013 02HC032	146.00 88.10 93.50 593.00 94.80	G G	32 22 11 43 22	QM QR QR QR	D L	IAE IAE IAE IAE IAE	DINGMAN CREEK BELOW LAMBETH DON RIVER AT YORK MILLS DUFFINS CREEK ABOVE PICKERING EAST RIVER NEAR HUNTSVILLE EAST HUMBER RIVER AT KING CREEK		36 37 38 39 4 0
02HC009 02GA029 02HC017 02KF014 02GD010	197.00 236.00 63.20 277.00 150.00	G	22 13 22 53 32	QR QR QR QR QR	н	IAE IAE IAE IAE	EAST HUMBER RIVER NEAR PINE GROVE ERAMOSA RIVER ABOVE GUELPH ETOBICOKE CREEK AT BRAMPTON FALL RIVER NEAR FALLBROOK FISH CREEK NEAR PROSPECT HILL		41 42 43 44 45
02HD003 02GA003 02GA014 02GA016 02GA034	67.30 3520.00 694.00 800.00 1170.00	G G	11 14 14 14	QR QR QR QR QR	D L	IAE IAE IAE IAE IAE	GANARASKA RIVER NEAR OSACA GRAND RIVER AI GALT GRAND RIVER NEAR MARSVILLE GRAND RIVER BELOW SHAND DAM GRAND RIVER AI WEST MONTROSE		46 47 48 49 50

APR 1 1985

PROVINCIAL 1: OPERATED BY FEDERAL(WSC): O.M.N.R.

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DAT	A FUND.CD.		UNITS	. NO.
02HB012 02GB006 02HC025 02HC047 02KF012	82.60 150.00 303.00 117.00 203.00	6666	13 14 22 22 23 53	QR QR QR S M QR QR	IAE IAE IAE IAE	GRINDSTONE CREEK NEAR ALDERSHOT HORNER CREEK NEAR PRINCETON HUMBER RIVER AT ELDER MILLS HUMBER RIVER NEAR PALGRAVE INDIAN RIVER NEAR BLAKENEY		51 52 53 54 55
02HJ001 02CF005 02GB009 02JC010 02GA024	110.00 89.10 91.90 256.00 59.60	G G G	23 42 14 43 14	QR D QR QR QR N I QR	IAE IAE IAE IAE	JACKSONS CREEK AT PETERBOROUGH JUNCTION CREEK AT SUDBURY KENNY CREEK NEAR BURFORD LARDER RIVER ABOVE RAVEN LAKE LAUREL CREEK AT WATERLOO		56 57 58 59 60
02DD013 02GH011 02HC029 02FE007 02GC015	70.40 50.50 130.00 326.00 104.00	G G	42 33 22 31 34	QR QR QR D QR D QR S M		JACKSONS CREEK AT PETERBOROUGH JUNCTION CREEK AT SUDBURY KENNY CREEK NEAR BURFORD LARDER RIVER ABOVE RAVEN LAKE LAUREL CREEK AT WATERLOO LA VASE RIVER AT NORTH BAY LITTLE RIVER AT WINDSOR LITTLE DON RIVER AT DON MILLS LITTLE HAITLAND RIVER AT BLUEVALE LITTLE OTTER CRK NR STRAFFORDVILLE MISC.SED.		61 62 63 64 65
02FD002 02GA033 02MB006 02HC018 02FE011	54.90 64.70 0.00 106.00 112.00	6 6 6	31 13 52 11 31	GR DF GR GR GP GR DI	IAE IAE IAE	LUCKNOW RIVER AT LUCKNOW LUTTERAL CREEK NEAR OUSTIC LYN CREEK NEAR LYN LYNDE CREEK NEAR WHITBY		66 67 68 69
02FE005 02FE002 02HG001 04LA002 02GE007	528.00 1630.00 189.00 5540.00 202.00	6 6 6	31 23 43 33	QR DM QR D QR M QR S M	IAE IAE IAE IAE	MAITLAND RIVER ABOVE WINGHAM MAITLAND RIVER BELOW WINGHAM MARTPOSA BROOK NEAR LITTLE BRITAIN MATTAGAMI RIVER NEAR TIMMINS MCGREGOR CREEK NEAR CHATHAM (SED.FEB-MAY) MEDWAY RIVER AT LONDON MIDDLE MAITLAND RIVER NE BELGRAVE MIDDLE MAITLAND RIVER ABOVE ETHEL MIDDLE MAITLAND RIVER NEAR LISTOWEL MIDDLE THAMES RIVER AT THAMESFORD MISSISSIPPI RIVER AT FERGUSONS FALLS MOIRA RIVER NEAR DELORO NITH RIVER MEAR CANNING MISC.SED. NITH RIVER AT NEW HAMBURG NOITH CREEK AT SHORIDY		71 72 73 74 75
02GD008 02FE008 02FE013 02FE003 02GD004	200.00 647.00 416.00 77.70 306.00	G G	32 31 31 31 32	QR D QR D QR D QR DM	IAE IAE IAE IAE	MEDWAY RIVER AT LONDON MIDDLE MAITLAND RIVER NP BELGRAVE MIDDLE MAITLAND RIVER ABOVE ETHEL MIDDLE MAITLAND RIVER NEAR LISTOWEL MIDDLE THAMES RIVER AT THAMESFORD		76 77 78 79 80
02KF001 02HL005 02GA010 02GA018 02GA038	2620.00 308.00 1030.00 552.00 326.00	G G	52 23 14 14 14	QR D QR QR S QR QR	IAE IAE IAE IAE	MISSISSIPPI RIVER AT FERGUSONS FALLS MOIRA RIVER NEAR DELORO NITH RIVER NEAR CANNING MISC.SED. NITH RIVER AT NEW HAMBURG NITH RIVER ABOVE NITHBURG		81 82 83 84 85
02CF009 02EB004 02LB017 02FC013 02GD003	21.50 1390.00 69.20 262.00 1450.00	G G	42 24 51 31 32	OR OM OR OR OR	IAE IAE IAE IAE	NOLIN CREEK AT SUDBURY NORTH BRANCH MUSKOKA RIVER AT PORT SYDNEY NORTH BRANCH SOUTH NATION RIVER NEAR HECKSTON NORTH SAUGEEN RIVER NEAR PAISLEY NORTH THAMES RIVER BELOW FANSHAWE DAM		86 87 88 89 90
02GD014 02GD005 02GD015 02HD004 02CF010	319.00 1080.00 1340.00 42.70 1570.00	G	32 32 32 11 45	QR D QR D QR SD QR	IAE IAE IAE IAE	NORTH THAMES RIVER MEAR MITCHELL NORTH THAMES RIVER AT ST MARYS NORTH THAMES RIVER NEAR THORNDALE MISC.SED. NORTH WEST GANARASKA RIVER NEAR OSACA ONAPING RIVER NEAR LEVACK		91 92 93 94 95
02EB014 02FF008 02HL006 02GC012 02LB022	601.00 110.00 205.00 51.30 152.00	G G	24 32 53 34 51	QR D QR S I QR QR I	IAE	OXTONGUE RIVER NEAR DWIGHT PARKHILL CRK AB. PARKHILL RESERVOIR MISC.SED. PARKS CREEK NEAR LATTA PATTERSON CREEK NEAR SIMCOE PAYNE RIVER NEAR BERWICK		96 97 98 99 100

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PROVINCIAL 1: OPERATED BY FEDERAL(WSC): O.M.N.R.

STA.NO.	DR.AREA DIS	. TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
02MC001 02HK008 02HA014 02FC016 02FC002	404.00 G 86.70 G 60.90 G 329.00 G 2150.00 G	51 11 13 31 31	QR SD QR D QR S M QR DM QR DM	IAE IAE IAE IAE	RAISIN RIVER NEAR WILLIAMSTOWN MISC.SED. RAWDON CREEK NEAR WEST HUNTINGDON REDHILL CREEK AT HAMILTON MISC.SED. SAUGEEN RIVER ABOVE DURHAM SAUGEEN RIVER NEAR WALKERTON		101 102 103 104 105
02GA037 02EC010 02HD010 02HL004 02DD009	25.10 G 42.90 G 64.70 G 712.00 G 316.00 G	14 22 11 53 41	QR QR QR QR D QR	iae iae iae iae	SCHNEIDER CREEK AT KITCHENER SCHOMBERG RIVER NEAR SCHOMBERG SHELTER VALLEY BROOK NEAR GRAFTON SKOOTAMATTA RIVER NEAR ACTINOLITE SOUTH RIVER AT SOUTH RIVER		106 107 108 109 110
02EB008 02LB020 02LB013 02LB009 02LB007	1390.00 G 189.00 G 2410.00 G 1050.00 G 246.00 G	24 51 51 52 52	QM QR QR M QM QR	IAE IAE IAE IAE IAE	SOUTH BRANCH MUSKOKA RIVER AT BAYSVILLE SOUTH CASTOR RIVER AT KENMORE SOUTH NATION R. AT CASSELMAN SOUTH NATION RIVER AT CHESTERVILLE (MAR-MAY) SOUTH NATION RIVER AT SPENCERVILLE		111 112 113 114 115
02FF004 02FC012 02GA040 02GA015 02HB015	41.40 G 635.00 G 167.00 G 593.00 G 63.50 G	32 31 14 14 13	QR M QR D QR QR QR M	IAE IAE IAE IAE	SOUTH PARKHILL CREEK NEAR PARKHILL SOUTH SAUGEEN RIVER NEAR HANOVER SPEED RIVER NEAR ARMSTRONG MILLS SPEED RIVER BELOW GUELPH SPENCER CREEK NEAR WESTOVER		116 117 118 119 120
02DC004 02GH001 02DC011 02GG002 02GG005	2980.00 G 14.20 G 1800.00 G 730.00 G 172.00 G	44 33 44 33 32	QR L QR N L QR D QR M	IAE IAE IAE IAE IAE	RAISIN RIVER NEAR WILLIAMSTOWN MISC.SED. RAMDON CREEK AFAR WEST HUNTINGDON REDHILL CREEK AT HANITON MISC.SED. SAUGEEN RIVER ABOUE DURHAM SAUGEEN RIVER NEAR WALKERTON SCHNEIDER CREEK AT KITCHENER SCHOMBERG RIVER NEAR SCHOMBERG SHELTER VALLEY BROOK NEAR GRAFTON SKOOTAMATTA RIVER NEAR ACTINOLITE SOUTH RIVER AT SOUTH RIVER SOUTH BRANCH MUSKOKA RIVER AT BAYSVILLE SOUTH RATION R. AT CASSELMAN SOUTH NATION RIVER AT CHESTERVILLE (MAR-MAY) SOUTH NATION RIVER AT SPENCERVILLE SOUTH SAUGEEN RIVER NEAR PARKHILL SOUTH PARKHILL CREEK NEAR PARKHILL SOUTH PARKHILL CREEK NEAR PARKHILL SOUTH PARKHILL CREEK NEAR HANOVER SPEED RIVER BELOW GUELPH SPENCER CREEK NEAR WESTOVER STURGEON RIVER NEAR ARMSTRONG MILLS SPEED RIVER BELOW GUELPH SPENCER CREEK NEAR WESTOVER STURGEON RIVER NEAR GLEN AFTON STURGEON RIVER AT LOWER GOOSE FALLS SYDENHAM RIVER AT ALLACEBURG TEESWATER RIVER NEAR PAISLEY THAMES RIVER AT BYRON THAMES RIVER AT BYRON THAMES RIVER AT GHATHAM THAMES RIVER MEAR DUTTON THAMES RIVER NEAR BALING THAMES RIVER AT INNERKIP THAMES RIVER AT HORDOR VENISON CREEK NEAR FAIRVIEW REST DUFFINS CREEK AT GREEN RIVER WEST DUFFINS CREEK AT GREEN RIVER WEST HUMBER RIVER AT HIGHWAY NO 7		121 122 123 124 125
02GG008 02FC015 02GE002 02GE004 02GE006	2680.00 G 663.00 G 3110.00 G 4610.00 G 3760.00 G	33 31 32 33 33	HR D QR D QR DM HM M QR M	IAE IAE IAE IAE	SYDENHAM RIVER AT WALLACEBURG TEESWATER RIVER NEAR PAISLEY THAMES RIVER AT BYRON THAMES RIVER AT CHATHAM THAMES RIVER NEAR DUTTON		126 127 128 129 130
02GD001 02GD016 02GD021 02GD012 02GD019	1340.00 G 518.00 G 149.00 G 254.00 G 36.00 G	32 34 34 32	QR D QR DT QR SD QR	IAE IAE IAE IAE IAE	THAMES RIVER NEAR EALING THAMES RIVER AT INGERSOLL THAMES RIVER AT INNERKIP THAMES RIVER AT WOODSTOCK TROUT CREEK NEAR FAIRVIEW		131 132 133 134 135
02GD009 02GH004 02GC021 02GD020 02HC026	140.00 G 29.60 G 68.40 G 108.00 G 98.10 G	32 33 34 32 11	QR QR QR QR D QR D	IAE IAE IAE IAE IAE	IROUT CREEK NEAR ST MARYS TURKEY CREEK AT WINDSOR VENISON CREEK NEAR WALSINGHAM WAUBUNO CREEK NEAR DORCHESTER WEST DUFFINS CREEK AT GREEN RIVER		136 137 138 139 140
02HC031 02AB017 02GB008 02CF007 02CF008	148.00 G 210.00 G 383.00 G 272.00 G 155.00 G	22 62 14 45 45	QR D QR L QR QR	IAE IAE IAE IAE IAE	WEST HUMBER RIVER AT HIGHWAY NO 7 WHITEFISH RIVER AT NOLALU WHITEMANS CREEK NEAR MOUNT VERNON WHITSON RIVER AT CHELMSFORD WHITSON RIVER AT VAL CARON		141 142 143 144 145
02ED009 02ED010 02GD013	94.80 G 127.00 G 38.80 G	24 24 32	QR QR QR	IAE IAE IAE	WILLOW CREEK ABOVE LITTLE LAKE WILLOW CREEK AT MIDHURST WYE CREEK NEAR THORNDALE		146 147 148

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PROVINCIAL 1: OPERATED BY FEDERAL(WSC); O.M.N.R.

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	()
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	2 2
	CONVENTIONAL	-	ALITHU PRITA	=	2
		-	DISCHARGE	=	144
	SUB-TOTAL	-	WATER LEVEL	=	2
		-	DISCHARGE	=	146
	TOTAL			=	148

APR 1 1985

PROVINCIAL 1: OPERATED BY FEDERAL(WSC): O.M.O.E./ O.M.N.R.

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DAT	FUND.CD. STATION NAME	UNITS NO.
02AB014 02BA002	112.00 1190.00	_	60 61	QR QR	IAF NORTH CURRENT RIVER NEAR THUNDER IAF STEEL RIVER NEAR TERRACE BAY	BAY 1 2

WINNIPEG:	REMOTE	-	WATER	LEVEL	=	0
	CONVENTIONAL	-	DISCHA		=	0
	COMARMITOWHE	_	DISCHA		=	0
	SUB-TOTAL	-	WATER	LEVEL	=	0
		-	DISCHA	RGE	=	0
	TOTAL				=	0
GUELPH:	REMOTE	-	WATER		=	0
		-	DISCHA	RGE	=	0
	CONVENTIONAL	-	WATER		=	0
		-	DISCHA	RGE	=	2
	SUB-TOTAL	-	WATER	LEVEL	=	02022
		-	DISCHA	RGE	=	2
	TOTAL				=	2

APR 1 1985

PROVINCIAL 1: OPERATED BY FEDERAL(WSC); ONTARIO HYDRO/ O.M.N.R.

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNIIS	Ю.
02CB003 02CC005 02CC010	1440.00 1960.00 1190.00	Ğ	44 42 42	QR QR QR	IL M	IAG IAG TAG	AUBINADONG RIVER ABOVE SESABIC CREEK LITTLE WHITE RIVER NEAR BELLINGHAM LITTLE WHITE RIVER BELOW BOLAND RIVER		1 2 3

WINNIPEG:	REMOTE	_	WATER LEVEL	Ξ	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			Ξ	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	3
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	3
	TOTAL			=	3

APR 1 1985

PROVINCIAL 2: OPERATED BY FEDERAL(WSC); O.M.O.E.

STA.NO.	DR.AREA DIST.	TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
02FF009 02GA041	113.00 G 62.90 G	32 14	OR OR	JAD JAD	AUSABLE RIVER NEAR EXETER GRAND RIVER NEAR DUNDALK		1 2

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	Ξ	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	00000202
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	2
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	2
	ΤΠΤΔΙ			=	2

CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR:

SCHEDULE A FOR THE FISCAL YEAR: 1985/1986

APR 1 1985

PROVINCIAL 2: OPERATED BY FEDERAL(WSC): O.M.O.E./. O.M.N.R.

STA.NO. DR.AREA DIST. TECH. GAUGE DATA FUND.CD. STATION NAME NO. UNITS 1

02GG006 267.00 G 33 QR D BEAR CREEK NEAR PETROLIA JAE

SUMMARY

WINNIPEG: REMOTE - WATER LEVEL = 0 REMUTE - WATER LEVEL DISCHARGE =
CONVENTIONAL - WATER LEVEL =
DISCHARGE =
SUB-TOTAL - WATER LEVEL =
DISCHARGE = 0 0 0 0

Õ TOTAL GUELPH: 0

REMOTE - WATER LEVEL =
- DISCHARGE =
CONVENTIONAL - WATER LEVEL =
- DISCHARGE =
SUB-TOTAL - WATER LEVEL =
- DISCHARGE = 0 0 1 TOTAL

APR 1 1985

FEDERAL DEPARTMENTAL PROGRAMS: OPERATED BY FEDERAL(WSC): SEDIMENT

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
04ME003 04HA001 04FC001 02FF002 02FF007	27500.00 118000.00 36000.00 865.00 466.00	666	43 41 41 32 31	QR NS L QR NS L QR NS L QR S QR S	AAS AAS AAS AAS	ABITIBI RIVER AT ONAKAWANA MISC.SED. ALBANY RIVER NEAR HAT ISLAND MISC. SED. ATTAWAPISKAT R. BELOW MUKETEI R. MISC. SED. AUSABLE RIVER NEAR SPRINGBANK BAYFIELD RIVER NEAR VARNA MISC.SED. BIG CREEK NEAR WALSINGHAM BIG OTTER CREEK NEAR CALTON BLACK RIVER NEAR MARATHON MISC.SED. CATFISH CREEK NEAR SPARTA MISC.SED. CONESTOGO RIVER ABOVE DRAYTON MISC.SED. CREDIT RIVER AT ERINDALE DON RIVER AT TODMORDEN (SED.FEB-MAY) ETOBICOKE CREEK BELOW Q.E.W. MISC.SED. FAIRCHILD CREEK NEAR BRANTFORD MISC.SED. FAREWELL CREEK AT OSHAWA (SED.FEB-MAY)		1 23 45
02GC007 02GC026 02BB002 02GC018 02GA039	591.00 676.00 1980.00 287.00 272.00	6	34 34 61 32 14	QR S M QR S M QR S M QR S M	AAS AAS AAS AAS	BIG CREEK NEAR WALSINGHAM BIG OTTER CREEK NEAR CALTON BLACK RIVER NEAR MARATHON MISC.SED. CATFISH CREEK NEAR SPARTA MISC.SED. CONESTOGO RIVER ABOVE DRAYTON MISC.SED.		6 7 8 9
02HB002 02HC024 02HC030 02GB007 02HD014	795.00 316.00 204.00 360.00 58.50	6	13 22 22 14 22	QR SD QR SD QR SD QR S QM S	AAS AAS AAS AAS	CREDIT RIVER AT ERINDALE DON RIVER AT TODMORDEN (SED.FEB-MAY) ETOBICOKE CREEK BELOW Q.E.W. MISC.SED. FAIRCHILD CREEK NEAR BRANTFORD MISC.SED. FAREWELL CREEK AT OSHAWA (SED.FEB-MAY)		-1 C4C3 47L3
02HD012 02GB001 02AE001 02HD013 02HC013	232.00 5210.00 616.00 41.60 88.10	6666	11 14 60 22 22	QR SD QR S QR S QR S QR SD	AAS AAS AAS AAS	GANARASKA RIVER ABOVE DALE MISC.SED. GRAND RIVER AT BRANTFORD MISC.SED. GRAVEL RIVER NEAR CAVERS MISC.SED. HARMONY CREEK AT OSHAWA (SED.FEB-MAY) HIGHLAND CREEK NEAR WEST HILL MISC.SED.		16 17 18 19 20
02GC002 02GC015 02GE007 02KF006 02HL001	329.00 104.00 202.00 2900.00 2620.00	6666	32 34 33 52 11	QR S M QR S M QR S M QR SD QR SD	AAS AAS AAS AAS	KETTLE CREEK AT ST THOMAS MISC.SED. LITTLE OTTER CRK NR STRAFFORDVILLE MISC.SED. HCGREGOR CREEK NEAR CHATHAM (SED.FEB-MAY) MISSISSIPPI RIVER AT APPLETON MISC.SED. HOIRA RIVER NEAR FOXBORO MISC.SED.		21 22 23 24 25
04LG004 02GC022 02HM007 02GA010 02GD015	60100.00 181.00 694.00 1030.00 1340.00	6 6 6	43 34 52 14 32	QR NS L QR S QR S M QR S QR SD	AAS AAS AAS AAS	MOOSE RIVER ABOVE MOOSE RIVER HISC. SED. NANTICOKE CREEK AT NANTICOKE MISC.SED. NAPANEE RIVER AT CAMDEN EAST HISC.SED. NITH RIVER NEAR CANNING MISC.SED. NORTH THAMES RIVER NEAR THORNDALE MISC.SED.		26 27 229 230
02ED003 02EE008 02MC001 02HA014 04CA003	1180.00 110.00 404.00 60.90 619.00	6 6 6	24 32 51 13 61	QR S M QR S M QR SD QR S M QR NS	AAS AAS AAS AAS	GANARASKA RIVER ABOVE DALE MISC.SED. GRAND RIVER AT BRANTFORD MISC.SED. GRAVEL RIVER NEAR CAVERS MISC.SED. HARMONY CREEK AT OSHAWA (SED.FER-MAY) HIGHLAND CREEK NEAR WEST HILL MISC.SED. KETILE CREEK AT ST THOMAS MISC.SED. LITTLE OTTER CRK NR STRAFFORDVILLE MISC.SED. HCGREGOR CREEK NEAR CHATHAM (SED.FER-MAY) MISSISSIPPI RIVER AT APPLETON MISC.SED. MOOSE RIVER ABOVE MOOSE RIVER MISC.SED. NAPANEE RIVER AT CAMBEN EAST MISC.SED. NAPANEE RIVER AT CAMBEN EAST MISC.SED. NORTH THAMES RIVER NEAR BAXTER PARKHILL CRK AB. PARKHILL RESERVOIR MISC.SED. RAISIN RIVER NEAR WILLIAMSTOWN MISC.SED. REDHILL CREEK AT HAMILTON MISC.SED. ROSEBERRY R. ABOVE ROSEBERRY LAKES MISC. SED.		31 32 33 34 35
02HM003 04CC001 02FE009 02LB005 02GG003	891.00 94300.00 376.00 3810.00 1160.00	6 6 6	11 62 31 51 33	QR S QR NS L QR SD QR S M QR SD	AAS AAS AAS AAS	SALMON RIVER NEAR SHANNONVILLE MISC. SED. SEVERN RIVER AT LIMESTONE RAPIDS MISC. SED. SOUTH MAITLAND RIVER AT SUMMERHILL SOUTH NATION R. NR PLANTAGENET SPRINGS S.SED. SYDENHAM RIVER AT FLORENCE (SED.FEB-MAY) THAMES RIVER AT INNERKIP WINISK R. BELOW ASHEWEIG R. TRIBUTARY MISC. S		36 37 38 39 40
02GD021 04DC001	149.00 50000.00		34 62	QR SD QR NS L	AAS AAS	THAMES RIVER AT INNERKIP WINISK R. BELOW ASHEWEIG R. TRIBUTARY MISC. S		41 42

CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR:

SCHEDULE A

FOR THE FISCAL YEAR: 1985/1986

APR 1 1985

FEDERAL DEPARTMENTAL PROGRAMS: OPERATED BY FEDERAL(WSC): SEDIMENT

SUMMARY

WINNIPEG: REMOTE - WATER LEVEL = 0
- DISCHARGE = 0
CONVENTIONAL - WATER LEVEL = 0
- DISCHARGE = 7
CONVENTIONAL - WATER LEVEL = 0
- DISCHARGE = 35
SUB-TOTAL - WATER LEVEL = 0
- DISCHARGE = 35
SUB-TOTAL - WATER LEVEL = 0
- DISCHARGE = 42
TOTAL = 42

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CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR: SCHEDULE A FOR THE FISCAL YEAR: 1985/1986

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APR 1 1985

PROVINCIAL PROGRAMS: OPERATED BY FEDERAL(WSC): SEDIMENT

STA.NO. DR.AREA DIST. TECH. GAUGE DATA FUND.CD. STATION NAME UNITS NO.

02HC025 303.00 G 22 QR S M IAS HUMBER RIVER AT ELDER MILLS

SUMMARY

WINNIPEG: REMOTE - WATER LEVEL =

CONVENTIONAL - WATER LEVEL =

CONVENTIONAL - WATER LEVEL =

DISCHARGE =

SUB-TOTAL - WATER LEVEL =

DISCHARGE =

TOTAL

- WATER LEVEL = GUELPH: REMOTE

0001011 REMUTE - WATER LEVEL =
- DISCHARGE =
CONVENTIONAL - WATER LEVEL =
- DISCHARGE =
SUB-TOTAL - WATER LEVEL =
- DISCHARGE =

TOTAL

APR 1 1985

CONTRIBUTED DATA: OPERATED BY FEDERAL(WSC): H.E.D.S./C.H.S.

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE	DATA	EUND.CD.	STATION NAME	UNITS	NO.
02GH008 02GH007 02GH009 02GF002 02GH010	0.00 0.00 0.00 0.00	G G	33 33 33 33 33	HR HR HR HR	D	RAT RAT RAT RAT RAT	DETROIT RIVER AT AMHERSTBURG DETROIT RIVER AT LASALLE LAKE ERIE AT BAR POINT LAKE ERIE AT ERIEAU LAKE ERIE AT KINGSVILLE		1 23 45
02HA017 02GC028 02GC027 02ED012 02FE012	0.00 0.00 0.00 0.00	G	13 34 32 24 31	HR HR HR HR	D D D	RAT RAT RAT RAT RAT	LAKE ERIE AT PORT COLBORNE LAKE ERIE AT PORT DOVER LAKE ERIE AT PORT STANLEY LAKE HURON AT COLLINGWOOD LAKE HURON AT GODERICH		6 7 8 9
02CG002 02EA014 02CA006 02FA003 02HB017	0.00 0.00 0.00 0.00	G	42 45 44 31 13	HR HR HR HR	D D	RAT RAI RAI RAI RAI	LAKE HURON AT LITTLE CURRENT LAKE HURON AT PARRY SOUND LAKE HURON AT THESSALON LAKE HURON AT TOBERMORY LAKE ONTARIO AT BURLINGTON		11 12 13 14 15
02HD015 02HM008 02HA018 02HC048 02GH005	0.00 0.00 0.00 0.00	G G	11 52 13 22 33	HR HR HR HR	0 0 0	RAT RAT RAT RAT RAT	LAKE ONTARIO AT COBOURG LAKE ONTARIO AT KINGSTON LAKE ONTARIO AT PORT WELLER LAKE ONTARIO AT TORONTO LAKE ST.CLAIR AT BELLE RIVER		16 17 18 19 20
02GH006 02BF010 02BD004 02BA004 02AB018	0.00 0.00 0.00 0.00	G	33 44 61 60 62	HR HR HR HR	D D	RAT RAT RAT RAT RAT	LAKE ONTARIO AT BURLINGTON LAKE ONTARIO AT COBOURG LAKE ONTARIO AT KINGSTON LAKE ONTARIO AT PORT WELLER LAKE ONTARIO AT TORONTO LAKE ST.CLAIR AT BELLE RIVER LAKE ST.CLAIR AT TECUMSEH LAKE SUPERIOR AT GROS CAP LAKE SUPERIOR AT MICHIPOTEN HARBOUR LAKE SUPERIOR AT ROSSPORT LAKE SUPERIOR AT THUNDER BAY ST. CLAIR RIVER AT POINT EDWARD		21 22 23 24 25
02GG010 02GG011 02MB007 02MC022 02MB008	0.00 0.00 0.00 0.00	6	33 52 51 52	HR HR HR HR		RAT RAT RAT RAT RAT	SI. CLAIR RIVER AT POINT EDWARD SI. CLAIR RIVER AT PORT LAMBTON SI. LAWRENCE RIVER AT BROCKVILLE SI. LAWRENCE R. BELOW CORNWALL CANAL SI. LAWRENCE R. AT IROQUOIS ISLAND (AB)		26 27 28 29 30
02MB009 02MC023 02BF011 02CA005	0.00 0.00 0.00	G	52 51 44 44	HR HR HR HR		RAT RAT RAT RAT	ST. LAWRENCE R. AT IROQUOIS ISLAND (BE) ST. LAWRENCE R. AT SUMMERSTOWN ST. MARYS R. AT S.S.MARIE (ABOVE) ST. MARYS R. AT S.S.MARIE (BELOW)		31 32 33 34

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	00000
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	34
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	34
		-	DISCHARGE	=	0
	TOTAL			=	34

APR 1 1985

CONTRIBUTED DATA: OPERATED BY PROVINCE(ONTARIO HYDRO)

STA.NO.	DR.AREA D	IST.	TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	мо.
04ME002 04ME004 05QE005 05QE006 05QE007	23400.00	66444	80 80 00 00	QP QP QP QP		RBC RBC RBC RBC RBC	ABITIBI RIVER AT ABITIBI CANYON ABITIBI RIVER AT OTTER RAPIDS ENGLISH RIVER AT CARIBOU FALLS ENGLISH RIVER AT EAR FALLS ENGLISH RIVER AT MANITOU FALLS	ENGLISH ENGLISH ENGLISH	1 2 3 4 5
04MD003 02AB012 02AB004 02AB010 02AB013	174.00 3760.00 6710.00	6 6 6 6	82 83 83 83 83	HM QM QP QP QM		RBC RBC RBC RBC RBC	FREDERICK HOUSE RIVER AT NIGHTHAWK LAKE GREENWATER CREEK AT OUTLET OF GREENWATER LAKE KAMINISTIQUIA RIVER AT OUTLET OF DOG LAKE KAMINISTIQUIA RIVER AT KAKABEKA FALLS P.H. KASHABOWIE RIVER AT OUTLET OF KASHABOWIE LAKE		6 7 8 9
04JD002 02AD007 04GA001 04GA004 05QB005	0.00	G G	82 82 83 83 00	QH HR QR HR HR	ń ń	RBC RBC RBC RBC RBC	KENOGAMI RIVER AT KENOGAMI DAM LAKE NIPIGON AT MACDIARMID LAKE ST JOSEPH OUTFLOW TO ALBANY RIVER LAKE ST JOSEPH ABOVE RAT RAPIDS DAM LAKE ST JOSEPH DIVERSION ABOVE CONTROL DAM	ENGL ISH	11 12 13 14 15
050B006 04JD003 04JD001 02KE005 02JE021	0.00	₩ 6 6 6	00 81 82 81 82	OR OR HM OP OM		RBC RBC RBC RBC RBC	LAKE ST JOSEPH DIVERSION AT ROOT PORTAGE LONG LAKE DIVERSION TO LAKE SUPERIOR LONG LAKE AT LONGLAC MADAWASKA RIVER AT STEWARTVILLE MATABITCHUAN RIVER AT RABBIT LAKE DAM MATIAGAMI RIVER AT LITTLE LONG RAPIDS MISSISSAGI RIVER BELOW AUBREY FALLS MISSISSAGI RIVER AT RAYNER GENERATING STATION MISSISSAGI RIVER AT RED ROCK FALLS MISSISSAGI RIVER AT RED ROCK FALLS MISSISSAGI RIVER AT ROCKY ISLAND LAKE	ENGLISH	16 17 18 19 20
04LG003 02CB001 02CC007 02CC009 02CB002	4040.00 6840.00 9010.00	6666	80 83 83 83 82	QP QP QP QP HM	L	RBC RBC RBC RBC RBC	MATTAGAMI RIVER AT LITTLE LONG RAPIDS MISSISSAGI RIVER BELOW AUBREY FALLS MISSISSAGI RIVER AT RAYNER GENERATING STATION MISSISSAGI RIVER AT RED ROCK FALLS MISSISSAGI RIVER AT ROCKY ISLAND LAKE		21 22 23 24 25
04GB003 02JD010 02AD008 02AD009 04GB001	0.00 6600.00 24600.00 0.00 13600.00	6 6 6 6	81 80 81 81 82	HR QP QP QR QR		RBC RBC RBC RBC RBC	MOJIKIT LAKE RESERVOIR AT MOJIKIT LAKE MONTREAL RIVER AT LOWER NOTCH GENERATING STA. NIPIGON RIVER AT PINE PORTAGE OGOKI RIVER DIVERSION TO LAKE NIPIGON OGOKI RIVER AT WABOOSE FALLS DAM		26 27 28 29 30
02KC012 02KE009 02KA002 02JE012 02KC013	0.00 89600.00 57500.00 47900.00 0.00	G	81 81 81 81 82	HR QP QP QP HR		RBC RBC RBC RBC RBC	MOJIKIT LAKE RESERVOIR AT MOJIKIT LAKE MONTREAL RIVER AT LOWER NOTCH GENERATING STA. NIPIGON RIVER AT PINE PORTAGE OGOKI RIVER DIVERSION TO LAKE NIPIGON OGOKI RIVER AT WABOOSE FALLS DAM OTTAWA RIVER AT CHAIS FALLS OTTAWA RIVER AT DES JOACHIMS OTTAWA RIVER AT LA CAVE RAPIDS OTTAWA RIVER AT PEMBROKE		31 32 33 34 35
02AB011 02DC003 02DC007 02DC010 02HK802	6660.00 1360.00 0.00	6 6 6 6	83 80 82 82 23				SHEBANDOWAN RIVER AT OUTLET OF SHEBANDOWAN L. STURGEON RIVER AT CRYSTAL FALLS TEMAGAMI RIVER AT CROSS LAKE DAM TEMAGAMI LAKE AT TEMAGAMI TRENT RIVER AT HEALEY FALLS (P.P., EXT. (82))		36 37 38 39 40
04GB002 02DA002 05PE009 05PE010	0.00 0.00 0.00 0.00	G	83 82 00 00			RBC RBC RBC RBC	WABOOSE LAKE RESERVOIR AT WABOOSE DAM WANAPITEI LAKE AT BOWLANDS BAY WINNIPEG RIVER AT MINAKI WINNIPEG R. AT WHITEDOG FALLS POWERHOUSE		41 42 43 44

CANADA/ONTARIO COST-SHARING AGREEMENT ACTIVE STATION LIST FOR:

SCHEDULE A

FOR THE FISCAL YEAR: 1985/1986

APR 1 1985

CONTRIBUTED DATA: OPERATED BY PROVINCE(ONTARIO HYDRO)

SUMMARY

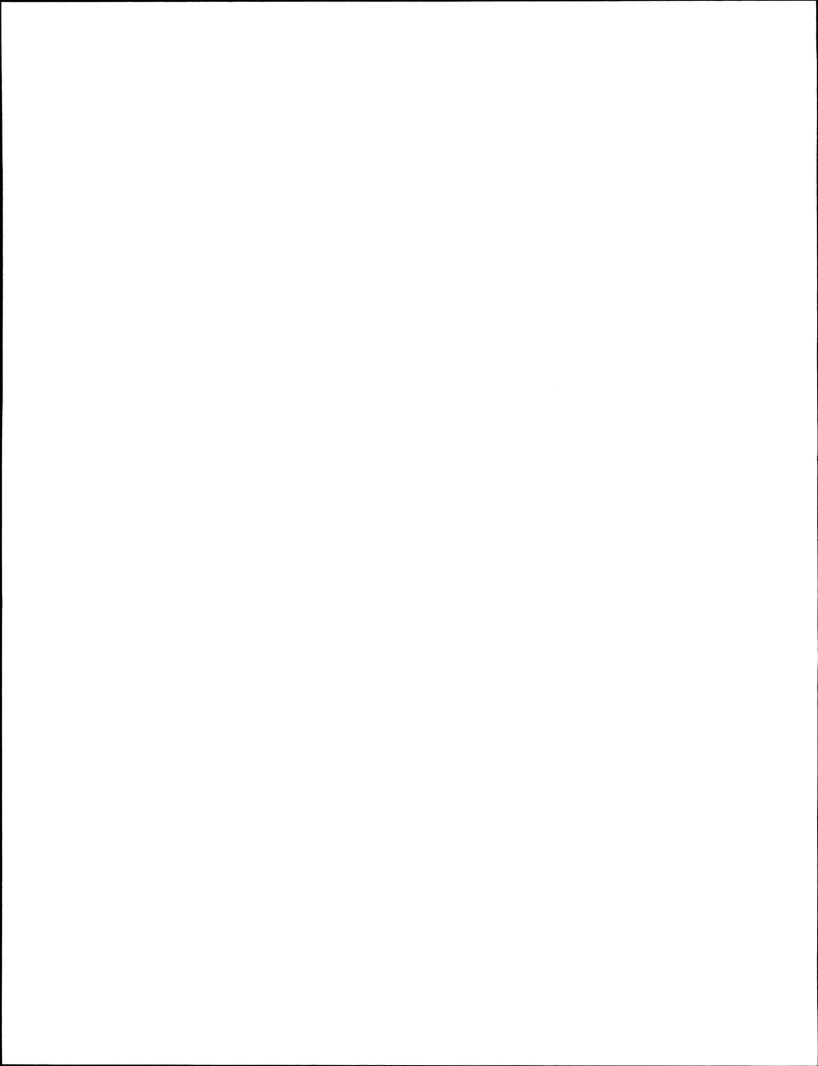
WINNIPEG: REMOTE - WATER LEVEL = 0
- DISCHARGE = 0
CONVENTIONAL - WATER LEVEL = 2
- DISCHARGE = 5
SUB-TOTAL - WATER LEVEL = 2
- DISCHARGE = 5
TOTAL = 7
GUELPH: REMOTE - WATER LEVEL = 1
- DISCHARGE = 1
CONVENTIONAL - WATER LEVEL = 10
- DISCHARGE = 25
SUB-TOTAL - WATER LEVEL = 11
- DISCHARGE = 25
SUB-TOTAL - WATER LEVEL = 11
- DISCHARGE = 26
TOTAL = 37

APR 1 1985

CONTRIBUTED DATA: OPERATED BY PROVINCE(O.M.O.E.)

STA.NO.	DR.AREA DIST.	TECH.	GAUGE DATA	FUND.CD.	STATION NAME	UNITS	Ю.
02ED100 02ED102 02EC103 02ED103 02EC101	86.00 G 211.00 G 332.00 G 195.00 G 24.30 G	90 90 90 90	QR QR QR QR M QR	RBD RBD RBD RBD RBD	BEEION CREEK NEAR IOITENHAM BOYNE RIVER AT EARL ROWE PARK PEFFERLAW BROOK NEAR UDORA PINE RIVER NEAR EVERETT UXBRIDGE BROOK AT UXBRIDGE		1 2 3 4 5

					-
WINNIPEG:	REMOTE	-	WATER LEVEL	=	- 0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	TOTAL			=	0
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	5
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	
	TOTAL			=	5



APR 1 1985

CONTRIBUTED DATA: OPERATED BY PRIVATE AGENCY

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE	DATA	FUND.CD.	STATION NAME	UNITS	МО.
04MC001 04MC002 05QD003 04LF001 05PB012	13300.00 9950.00 2510.00 6760.00 0.00	G G H G	70 70 00 76 00	QP QP QP QP HM		RDP RDP RDP RDP RDP	ABITIBI RIVER AT IROQUOIS FALLS ABITIBI RIVER AT TWIN FALLS EAGLE RIVER AT EAGLE RIVER KAPUSKASING RIVER AT KAPUSKASING LAC DES MILLE LACS ABOVE OUTLET DAM(S)	ENGL ISH ENGL ISH ENGL ISH	1 2 3 4 5
04LB001 02BD002 02BE002 05PB009 02EC003	10000.00 5130.00 2880.00 5880.00 5850.00	G G ₩ G	70 77 77 24	QP QP QP QP		RDP RDP RDP RDP RDP	MATTAGAMI RIVER AT SMOOTH ROCK FALLS MICHIPICOTEN RIVER AT HIGH FALLS MONTREAL RIVER NEAR MONTREAL RIVER HARBOUR SEINE RIVER AT STURGEON FALLS GEN STA. SEVERN RIVER AT SWIFT RAPIDS(CONTR.91)	ENGLISH ENGLISH ENGLISH ENGLISH	6 7 8 9
02CE001 02CE004 02CF004 05QD016	11400.00 6800.00 4190.00 2300.00	6 6 8	73 78 78 00	QP QP QP QP		RDP RDP RDP RDP	SPANISH RIVER AT ESPANOLA SPANISH RIVER AT HIGH FALLS VERMILION RIVER AT LORNE FALLS WABIGOON RIVER AT DRYDEN	ENGLISH ENGLISH ENGLISH ENGLISH	11 12 13 14

WINNIPEG:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	1
		-	DISCHARGE	=	3
	SUB-TOTAL	_	WATER LEVEL	=	1
		-	DISCHARGE	=	3
	TOTAL			=	4
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	10
	SUB-TOTAL	-	WATER LEVEL	=	0
		-	DISCHARGE	=	10
	TOTAL			=	10

APR 1 1985

CONTRIBUTED DATA: OPERATED BY FEDERAL(OTHER)

STA.NO.	DR.AREA	DIST.	TECH.	GAUGE DATA	FUND.CD.		UNITS	NO.
02GG012 02DD021 02GH012 05PD027 05PD014	579000.00 0.00 596000.00 0.00 0.78	6	87 45 87 94 94	Q HH Q HR QR	REO REO REO REO REO	LAKE HURON OUTFLOW TO ST.CLAIR RIVER LAKE NIPISSING AT FRENCH R.OUTLET(EXT.(92)) LAKE ST.CLAIR OUTFLOW TO DETROIT RIVER LAKE 114 NEAR KENORA(S) LAKE 114 OUTLET NEAR KENORA(S)		1 23 45
05QD021 05QD017 05QD018 05QD019 05QD015	0.00 0.00 0.00 0.00 0.00	¥	94 94 94 94 94	HR N QR N QR N QR N QR N	REO REO REO REO REO	LAKE HURON OUTFLOW TO ST.CLAIR RIVER LAKE NIPISSING AT FRENCH R.OUTLET(EXT.(92)) LAKE ST.CLAIR OUTFLOW TO DETROIT RIVER LAKE 114 NEAR KENORA(S) LAKE 114 OUTLET NEAR KENORA(S) LAKE 223 NEAR KENORA (S) LAKE 223 OUTLET NEAR KENORA(S) LAKE 224 OUTLET NEAR KENORA(S) LAKE 225 OUTLET NEAR KENORA(S) LAKE 226 OUTLET NEAR KENORA(S) LAKE 226 OUTLET NEAR KENORA(S)		6 7 8 9
05QD008 05QD009 05PD021 05PD023 05PD024	0.52 0.00 0.00 3.63 0.00	A A	94 94 94 94 94	QR N HR N HR QR QR	REO REO REO REO REO	LAKE 227 DUTLET NEAR KENDRA(S) LAKE 227 NEAR KENDRA(S) LAKE 239 NEAR KENDRA LAKE 239 OUTLET NEAR KENDRA LAKE 239 LOWER EAST INLET NEAR KENDRA(S)		11 12 13 14 15
05PD025 05PD015 05QD022 05QD023 05PD020	0.00 7.25 0.00 0.00 0.00	4	94 94 94 94 94	QR QR HR QR HR	REO REO REO REO REO	LAKE 239 UPPER EAST INLET NEAR KENORA(S) LAKE 240 OUTLET NEAR KENORA LAKE 302 NEAR KENORA(S) LAKE 302 OUTFLOW NEAR KENORA (S) LAKE 303 NEAR KENORA(S)		16 17 18 19 20
05PD019 05PD018 05PD017 05PD028 02HA003	0.78 0.00 2.33 0.00 686000.00	W W W W W W W W W W W W W W W W W W W	94 94 94 94 87	QR HR QR QR QP	REO REO REO REO REO	LAKE 239 UPPER EAST INLET NEAR KENORA(S) LAKE 240 OUTLET NEAR KENORA LAKE 302 NEAR KENORA(S) LAKE 302 OUTFLOW NEAR KENORA (S) LAKE 303 NEAR KENORA(S) LAKE 303 OUTLET NEAR KENORA(S) LAKE 304 NEAR KENORA(S) LAKE 470 OUTLET NEAR KENORA LAKE 661 OUTLET NEAR KENORA LAKE 661 OUTLET NEAR KENORA (S) NIAGARA RIVER AT QUEENSTON	ENGLISH	21 22 23 24 25
05PD022 02MC002 02CA001 02EC016 02HA019	780000.00 210000.00 0.00 0.00	666	94 86 85 24 93	QR QP QP QM QR	REO REO REO REO REO	NORTHWEST TRIBUTARY TO LAKE 239 NEAR KENORA(S) ST. LAWRENCE RIVER AT CORNWALL ST MARYS RIVER AT SAULT STE MARIE TRENT CANAL LOCK 42 NEAR WASHAGO(CONTR.84) WELLAND CANAL DIVERSION FROM LAKE ERIE	ENGL ISH ENGL ISH	26 27 28 29 30

WINNIPEG:	REMOTE	-	WATER LEVEL	=	2
		-	DISCHARGE	=	5
	CONVENTIONAL	-	WATER LEVEL	=	5 5 10
		-	DISCHARGE	=	10
	SUB-TOTAL	-	WATER LEVEL	=	7
		-	DISCHARGE	=	15
	TOTAL			=	22
GUELPH:	REMOTE	-	WATER LEVEL	=	0
		-	DISCHARGE	=	0
	CONVENTIONAL	-	WATER LEVEL	=	7
		-	DISCHARGE	=	7
	SUB-TOTAL	-	WATER LEVEL	=	1
		-	DISCHARGE	=	7
	TOTAL			=	8

APPENDIX B

SCHEDULE 'D'
ANNUAL PAYMENT FOR
1985/86

April 30, 1985

SCHEDULE D - 1985/86

This schedule provides a summary of the annual payment. The details of the calculations for operation and construction are available and have been jointly reviewed by officers of each party.

ANNUAL PAYMENT tables are provided separately for each of the three provincial agencies involved in financing the water quantity survey program.

A. ANNUAL PAYMENT for 1985-86 to be paid to Receiver General of Canada by Ontario Hydro.

Operation

Construction

a)	Streamflow and water level installations (6 stations operated by and 4 stations cost shared with Water Survey of Canada and 3 stations cost shared with OMNR).	\$ 36,255	\$ N11	\$ 36,255
b)	Specialized Equipment (cost shared operation of 2 DCP's with OMNR).	\$ 600	\$ Nil	\$ 600
			ANNUAL PAYMENT	\$ 36,855
В.	ANNUAL PAYMENT for 1985-86 to be paid to	Ontario Hydro	by Water Survey of	

	Op	eration	Construction	I	otal	
Streamflow and water level (6 stations cost shared with OH)	\$	6,435	\$ Nil	\$	\$ 6,435	
			ANNUAL PAYMENT	\$	6,435	

C. ANNUAL PAYMENT for 1985-86 to be paid to Receiver General of Canada by Ontario Ministry of the Environment.

	Operation	Construction	Total
Streamflow and water level installations (33 stations operated by and 16 stations cost shared with Water Survey of Canada, and 3 stations cost shared with OMNR).	\$160,410	\$11,500	\$171,910

ANNUAL PAYMENT \$171,910

D. ANNUAL PAYMENT for 1985-86 to be paid to Receiver General of Canada by Ontario Ministry of Natural Resources.

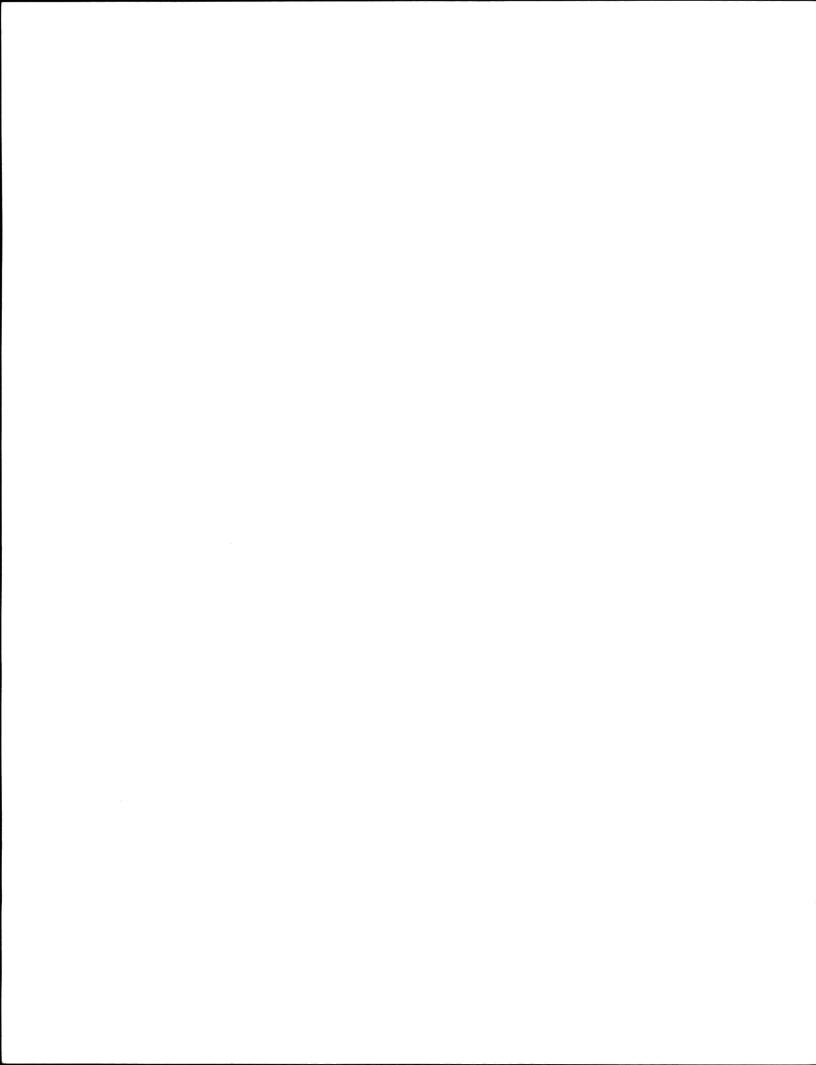
		Operation	Construction	Total
a)	Streamflow and water level installations (148 stations operated by and 10 stations cost shared with Water Survey of Canada and 3 stations cost shared with MOE, and 3 stations cost shared with OH).	\$536,820	\$67,500	\$604,320
b)	Sediment installations (1 station operated by Water Survey of Canada).	\$ 4,000	\$ Nil	\$ 4,000
c)	Specialized Equipment (operation of 11 DCP's) (2 cost shared with OH).	\$ 10,800	\$ Nil	\$ 10,800
	1 -		ANNUAL PAYMENT	\$619,120

Director of Water Resources Branch Ministry of Environment

(Signature)

Director of Conservation Authorities and Water Management Branch Ministry of Natural Resources & TWagner 29 Hay PI (Signature)

Regional Director Inland Waters Directorate



APPENDIX C

CHANGES TO NETWORK AND SCHEDULE 'A'

TABLE C.1 - Changes in Gauging Network, April 1, 1985 to April 1, 1986

TABLE C.2 - Changes to Schedule 'A', April 1, 1985 to April 1, 1986

TABLE C.1

CHANGES IN GAUGING NETWORK - APRIL 1, 1985 TO APRIL 1, 1986

Α.	HYDROMETRIC	STATIONS ADDED			
	1. 02HB021 2. 02FC017 3. 02CG003 4. 05PB020 5. 02GC029 6. 04LK001 7. 02AB019 8. 05PB019 9. 02MC027 10. 02MC028 11. 02MC030 12. 02DC012	Ancaster Creek at Ancaster Beatty Saugeen River near Holstein Blue Jay Creek near Tehkummah E. Trib. to Dashwa Lk. nr. Atikokan Kettle Creek above St. Thomas Mattawishkwia River at Hearst McVicar Creek at Thunder Bay N.E.Trib. to Dashwa Lk. nr. Atikokan Raisin River at Black River(Feb-May) Riviere Delisle near Alexandria S. Raisin Riv. nr. Cornwall(Mar-May) Sturgeon River at Upper Goose Falls	QR QR	P1-MNR P1-MOE/MNR P1-MOE/MNR Fed1 P1-MNR P2-MOE P1-MNR Fed1 P1-MNR P1-MNR	Apr. 1,1986 Dec. 4,1985 Jun.28,1985 Mar 1986 Nov. 19,1985 Nov. 7,1985 Mar 1986 May 23,1985 May 22,1985 Nov. 1985 Sep.12,1985
₿.		STATIONS DISCONTINUED			
	1. 05QE013 2. 05PD030 3. 04CA001 4. 05QE014 5. 02DC011 6. 02LA017 7. 05PE021	Ball Lake at Ball Lake Lodge Lake of the Woods at Sioux Narrows Sandy Lake at Sandy Lake Separation L. at Walstens Outpost Cp Sturgeon River at Lower Goose Falls Tay River below Bob's Lake Winnipeg R. at Whitedog Indian Res.	HR HR HR GR GR HR	Fed1 Fed3 Fed4 Fed1 P1-MNR Fed1 Fed1	Nov. 1985 Nov. 1985 May 1985 Nov. 1985 Apr.22,1985 Jun.30,1985 Nov. 1985
С.		FUNDING AND/OR CLASSIFICATION OF HYDRO			
		Farewell Creek at Oshawa	QM	Fed1 to	Apr. 1.1986
		Harmony Creek at Oshawa	ūχ	P1-MOE Fed1 to	Apr. 1,1986
	3. 05PC016	LaVallee River near Devlin	QR	Pl-MOE Fed3 to	Apr. 1,1986
	4. 05PC011	Pinewood River near Pinewood	QR	FP1-MOE Fed3 to	Apr. 1,1986
	5. 05PC010	Sturgeon River near Barwick	Q.R	FP1-MOE Fed3 to	Apr. 1,1986
	6. 02HD009	Wilmot Creek near Newcastle	ΩR	FP1-MOE Fed3 to P1-MNR	July 1,1985
в.		ES IN THE HYDROMETRIC NETWORK			
	1. 05PB022	Eye River near Coulson Lake -name changed from "near Bending Lake Road near Atikokan"	QR	Fed1	
	2. 05PB 0 21	Eye River near Hardtack Lake -name changed from 'upstream of Bending Lake Road near Atikokan'	QR	Fed1	
	3. 02HB010	Spencer Creek at Dundas (Crossing) -decision made to not apply station name and number to new gauge installed downstream in Nov.1984station name and number retired effective Feb. 1984.		Fed3	Oct.31,1985
	4. 02HB007	Spencer Creek at Dundas -decision made to reactivate old station name and number for new	QR	Fed3	Oct.31,1985
	5. 02CF007	gauge installed in Nov. 1984. Whitson River at Chelmsford -gauge relocated upstream.	QR	P1-MNR	Apr.19,1985

TABLE C.1 (continued)

CHANGES IN GAUGING NETWORK - APRIL 1, 1985 TO APRIL 1, 1986

E. SEDIMENT STATIONS ADDED

1.	0266009	Bear Creek below Brigden(Misc.)	Fed1-Sed	Jan. 1.1986
2.	02BE002	Goulais River near Séarchmont(Misc.)	Fed1-Sed	Jan. 1.1986
	02LA006	Kemptville Ck. nr. Kemptville(Misc.)	Fed1-Sed	Jan. 1.1986 Jan. 1.1986
4.	02HC018	Lynde Creek near Whitby (Misc.)	Fed1-Sed	Jan. 1,1986
5.	02FD001	Pîne River at Lurgan (Misc.)		Jan. 1,1986
6.	02GH002	Ruscom R. near Ruscom Station(Misc.)	Fed1-Sed	Jan. 1,1986
7.	02GA040	Speed R. near Armstrong Mills(Misc.)	Fed1-Sed	Jan. 1,1986

F. SEDIMENT STATIONS DISCONTINUED

1.	02HD014	Farewell Creek at Oshawa (Feb-May) Fed1-Sed	Jul. 1,1985
2.	0268001	Grand River at Brantford (Misc.) Fed1-Sed	Jan. 1,1986
3.	02HD013	Harmony Creek at Oshawa (Feb-May) Fed1-Sed	Jul. 1.1985
	02KF006	Mississippi River_at Appleton(Misc.) Fed1-Sed	Jan. 1,1986
5.	02HL001	Moira River near Foxboro (Misc.) Fed1-Sed	Jan. 1,1986
6.	02MC001	Raisin River nr. Williamstown(Misc.) Fed1-Sed	Jan. 1,1986
	04CA003	Roseberry R. ab. Roseberry Lk.(Misc.)Fed1-Sed	Jan. 1,1986
	02HM003	Salmon River nr. Shannonville(Misc.) Eed1-Sed	Jan. 1,1986
9.	0400001	Severn R. at Limestone Rapids (Misc.)Fed1-Sed	Jan. 1,1986

G. CHANGES TO FUNDING AND/OR CLASSIFICATION OF SEDIMENT STATIONS

1.	02HC025	Humber	River	эt	Elder	Mills	P1-Sed-MNR	to	Apr.	1,1986
----	---------	--------	-------	----	-------	-------	------------	----	------	--------

H. OTHER CHANGES IN THE SEDIMENT NETWORK

1. 02HC024	Don River at Todmorden	Fed1-Sed	Jan. 1,1986
2. 02GD021	 -from seasonal to continuous. Thames River at Innerkip -from continuous to seasonal. -March to May operation 	Fed1-Sed	Jan. 1,1986

I. CONTRIBUTED STATIONS (HYDROMETRIC) ADDED

-- NIL --

J. CONTRIBUTED STATIONS (HYDROMETRIC) DISCONTINUED

1. 05PB012 Lac Des Mille Lacs ab. Outlet Dam Priv. Agen. May 31,1984

TABLE C.2 CHANGES TO SCHEDULE A - APRIL 1, 1985 TO APRIL 1, 1986

FEDERAL CATEGORIES (HYDROMETRIC) *********

A. FEDERAL 1: N	let Change = -4	į
-----------------	-----------------	---

1. 05PB020 E. Trib. to Dashwa Lk. nr. Atikoka 2. 05PB019 N.E. Trib. to Dashwa Lk. nr. Atikoka 3. 05QE013 Ball Lake at Ball Lake 4. 02HD014 Farewell Creek at Oshawa 5. 02HD013 Harmony Creek at Oshawa 6. 05QE014 Separation L. at Walstens Outpost 7. 02LA017 Tay River below Bob's Lake 8. 05PE021 Winnipeg R. at Whitedog Indian Res 9. 05PB022 Eye River near Coulson Lake 10. 05PB021 Eye River near Hardtack Lake	kan New Disc. Disc. Disc. Cp. Disc. Disc.	Mar. 1986 Mar. 1986 Nov. 1985 Jul. 1,1985 Jul. 1,1985 Nov. 1985 Jun.30,1985 Nov. 1985
---	--	--

B. FEDERAL 2: Net Change = 0

-- NIL --

C. FEDERAL 3: Net Change = -5

1.	02HB007	Spencer Creek at Dundas 🤭	New	
2.	05PB030	Lake of the Woods at Sioux Narrows	Disc.	Nov. 1985
3.	05PC016	LaVallee River near Devlin	To FP1-MOE	Apr. 1,1986
4.	05PC011	Pinewood River near Pinewood	To FP1-MOE	Apr. 1,1986
5.	02HD010	Spencer Creek at Dundas (Crossing)	Disc.	
6 -	05PC010	Sturgeon River near Barwick	To FP1-MOE	Apr. 1,1986 Jul. 1,1985
7.	02HD009	Wilmot Creek near Newcastle	To PI-MNR	Jul. 1.1985

D. FEDERAL 4: Net Change = -1

04CA001 Sandy Lake at Sandy Lake Disc. May 1985

FEDERAL-PROVINCIAL CATEGORIES (HYDROMETRIC) **************

A. FEDERAL-PROVINCIAL 1 - OMOE: Net Change = +3

2.	05PC011		River	near	Pinewood	From	Fed3	Apr.	1,1986
3.	05PC010	Sturgeon	River	uear	Barwick	From	Fed3	apr.	1,1386

B. OTHER FEDERAL-PROVINCIAL: Net Change = 0

⁻⁻ No Changes to Remaining Federal-Provincial Catagories --

*	

TABLE C.2 (continued) CHANGES TO SCHEDULE A - APRIL 1,1985 TO APRIL 1,1986

PROVINCIAL CATEGORIES (HYDROMETRIC)

A. PROVINCIAL 1 - ONT.HYD.: Net Change = 0

-- NIL --

1

B. PROVINCIAL 1 - OMOE: Net Change = +3

1.	02FC017	Beatty Saugeen River near Holstein	New	Dec. 4,1985
2.	02HD014	Farewell Creek at Oshawa	Reacti∨′d	Apr. 1,1986
3.	02HD013	Harmony Creek at Oshawa	Reactiv'd	Apr. 1,1986

C. PROVINCIAL 1 - OMNR: Net Change = +7

1.	02HB021	Ancaster Creek at Ancaster	New	Apr. 1.1986
		Kettle Creek above St. Thomas	New	Apr. 1,1986 Nov.19,1985
З.	02AB019	McVicar Creek at Thunder Bay	New	Oct.29,1985
4.	02MC027	Raisin River at Black River (Feb-May)	New	May 23,1985
5.		Riviere Delisle near Alexandria	New	May 22.1985
6.	02MC030	South Raisin R. near Cornwall(Mar-May)	New	May 22,1985 Nov. 1985
7.	02DC012	Sturgeon River at Upper Goose Falls	Йеw	Sep.12,1985
8.	02DC011	Sturgeon River at Lower Goose Falls	Disc.	Apr.22,1985
9.	02HD009	Wilmót Creek near Newcastle	From Fed-3	Jul. 1,1985

- D. PROVINCIAL 1 OMOE/OMNR: Net Change = +1
 - 1. 02CG003 Blue Jay Creek near Tehkummah New Jun.28,1985
- E. PROVINCIAL 1 ONT.HYD./OMNR: Net Change = 0

-- NIL --

- F. PROVINCIAL 2 OMOE: Net Change = +1
 - 1. 04LK001 Mattawishkwia River at Hearst New Nov. 7,1986
- G. PROVINCIAL 2 OMOE/OMNR: Net Change = 0
 - -- NIL --

TABLE C.2 (continued) CHANGES TO SCHEDULE A - APRIL 1,1985 TO APRIL 1,1986

SEDIMENT DATA CATEGORIES

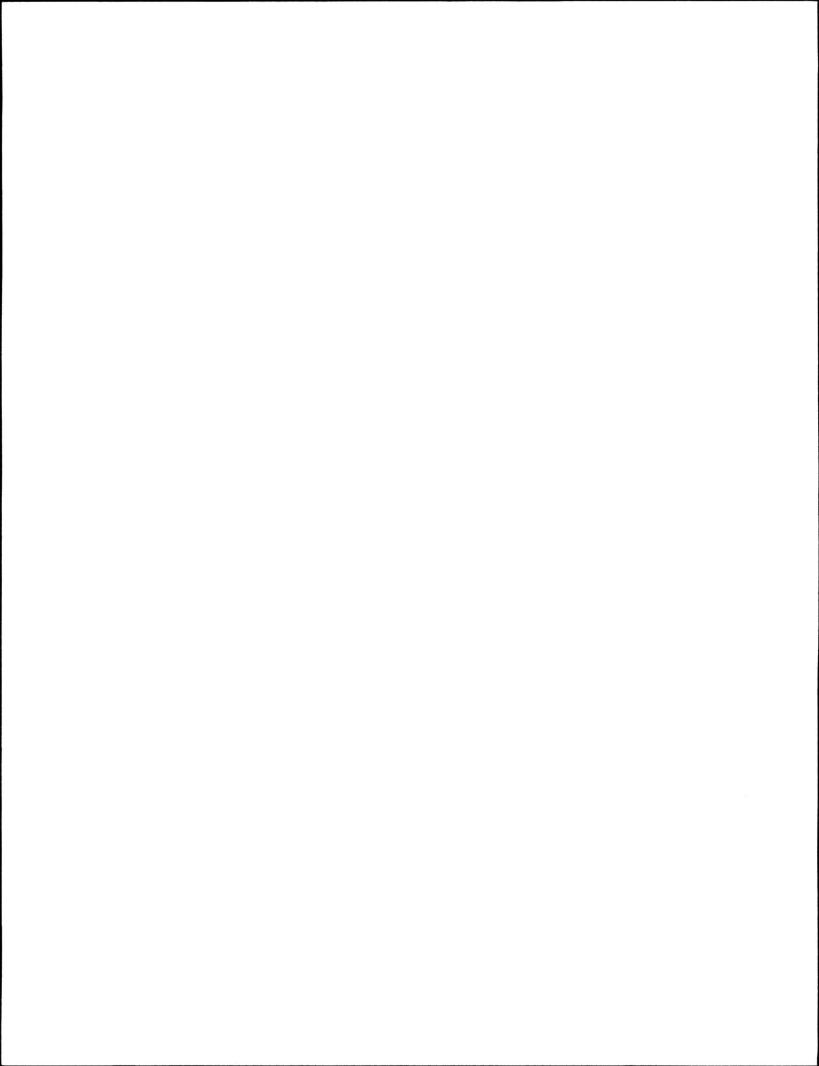
A. FEDERAL 1 - SEDIMENT: Net Change = -2

1.	02GG009	Bear Creek below Brigden (Misc.)	New	Jan.	1,1986
2.	02BE002	Goulais River near Searchmont (Misc.)	New	Jan.	1,1986
	02LA006	Kemptville Creek near Kemptville (Misc.)	New		1.1986
	02HC018	Lynde Creek near Whitby (Misc.)	New		1,1986
	02FD001	Pine River at Lurgan (Misc.)	New		1,1986
6.	02GH002	Ruscom River near Ruscom Station (Misc.)	New		1,1986
7.	02GA040	Speed River near Armstrong Mills (Misc.)	New	Jan.	1,1986
8.	02HD014	Farewell Ck. at Oshawa (Séas. Feb-May)	Disc.	Jul.	1,1985
9.	02GB001	Grand River at Brantford (Misc.)	Disc.		1,1986
10.	02HD013	Harmony Ck. at Oshawa (Seas. Feb-May)	Disc.	Jul.	1,1985
11.	02KF006	Mississippi River at Appleton (Misc.)	Disc.		1,1986
12.	02HL001	Moira River near Foxboro (Misc.)	Disc.	Jan.	1,1986
13.	02MC001	Raisin River near Williamstown (Misc.)	Disc.		1,1986
14.	04CA003	Roseberry R. ab. Roseberry Lakes (Misc.)	Disc.	Jan.	1,1986
	02HM003	Salmon River near Shannonville (hisc.,	hisc.	Jan.	1:1386
16.	04CC001	Severn R. at Limestone Rapids (Misc.)	Disc.	Jan.	1,1986

- B. PROVINCIAL 1 SEDIMENT OMNR: Net Change = -1
 - 1. 02HC025 Humber River at Elder Mills To P2-Sed Apr. 1,1986
- C. PROVINCIAL 2 SEDIMENT OMNR: Net Change = +1
 - 1. 02HC025 Humber River at Elder Mills From Pl-Sed Apr.1,1986 -MNR

CONTRIBUTED DATA CATEGORIES

- A. PRIVATE AGENCY: Net Change = -1
 - 1. 05PB012 Lac Des Milles Lacs ab. Outlet Dam Disc. May 1984
- 8. OTHER CATAGORIES: Net Change = 0
 - -- No Changes to Remaining Categories. --



APPENDIX D

DERIVATION OF ACTUAL COSTS 1985/86

- TABLE D.1 Salaries and Operating & Maintenance (O&M) Costs for Hydrometric Network Operated by WRB, Ontario Region, 1985/86
- TABLE D.2 Derivation of Actual Operating Costs for Hydrometric Stations Operated by WRB, Ontario Regaion, 1985/86
- TABLE D.3 Summary of Shareable Operating Costs by Agency for Hydrometric Stations Operated by WRB, Ontario Region, 1985/86
- TABLE D.4 Actual Expenditures Sediment Program, 1985/86
- TABLE D.5 Summary of Construction Program Costs, 1985/86

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TABLE D.1
SALARIES AND OPERATING & MAINTENANCE (O&M) COSTS FOR HYDROMETRIC NETWORK OPERATED BY WRB, ONTARIO REGION 1985/86

Salaries				
Hydrometric Supervisors Hydrometric Technicians Other - Students, part-time, field help, construction (minor maintenance) etc.				
			\$765,978	
Less Salary for Sediment Network			15,948	
Net Salaries for Hydrometric Network			\$750,030	
Operating & Maintenance (O&M)				
	Common	Conventional	Remote	
Transportation & Communications	\$117,903			
Professional & Special Services	33,154	\$ 14,907		
Rentals	7,535		\$102,274	
Purchased Repairs & Upkeep	38,707			
Utilities, Materials & Supplies	34,713	93,202	18,887	
EDP Shareable Costs $\frac{1}{2}$	20,194			
Repair & Replacement Costs for Current Meters2	10,349			
Vehicle Depreciation	36,290			
Equipment Depreciation	23,668		-	
TOTAL	\$322,513	\$108,109	\$121,161	

NOTE: 1 Based on 1984/85 costs plus 3.3% (Government Price Index) (Ceiling costs as per National Coordinating Committee Meeting - February 6, 1985) Pages 71 and 72 of Compendium Report

See page 77 of Compendium Report

TABLE D.2

DERIVATION OF ACTUAL OPERATING COSTS FOR HYDROMETRIC STATIONS OPERATED BY WRB, ONTARIO REGION 1985/86

Responsible Agency	# of Disc Remote	charge Stations Conventional	# of Wate Remote	r Level Stations Conventional	<u>Equivalen</u> Remote	t Station Yrs of Record* Conventional	Tot Remote	Conventional
Federal (1-4)	18	1231	22	5	18.21	117.00	\$123,555	\$ 387,621
Fed/Prov 1 (MOE)	0	5	0	0	0.00	5.00	0	16,565
Fed/Prov 1 (MNR)	0	8	0	0	0.00	8.00	0	26,504
Fed/Prov 2 (OH)	1	3 <u>3</u>	0	0	1.00	3.00	6,785	9,939
Fed/Prov 2 (MNR)	0	1	0	1	0.00	1.50	0	4,970
Fed/Prov 3 (MOE)	10	1	0	0	10.00	1.00	67,850	3,313
Prov 1 (OH)	1	4	0	1	1.00	4.50	6,785	14,909
Prov 1 (MOE)	0	34 <u>4</u>	0	0	0.00	32.25	0	106,844
Prov 1 (MNR)	3 ⁵	151 <u>6</u>	0	2	1.66	146.25	11,263	484,526
Prov 1 (MOE/MNR)	0	3 <u>7</u>	0	0	0.00	2.75	0	9,111
Prov 1 (OH/MNR)	0	3	0	0	0.00	3.00	0	9,939
Prov 2 (MOE)	0	38	0	0	0.00	2.42	0	8,017
Prov 2 (MOE/MNR)	_0	_1	0	0	0.00	1.00	0	3,313
	33	340	2	9	31.87	327.67	\$216,238	\$1,085,571

NOTE: 1 Includes 2 stations with no data; 4 with 3 months; 2 with 4 months; 2 with 6 months; 1 with 7 months; 2 with 8 months and 1 with 11 months

2 Includes 1 station with no data and 1 with 5 months

3 Does not include 6 stations operated by Ontario Hydro for Federal on a cost share basis

Includes 1 station with 2 months; 1 with 4 months and 1 with 9 months

5 Includes 1 station with 1 month and 1 with 7 months

Includes 2 stations with 1 month; 1 with 2 months; 2 with 5 months; 3 with 6 months, 1 with 9 months and 1 with 10 months

7 Includes 1 station with 9 months

8 Includes 1 station with 5 months

* One water level station equivalent to 1/2 discharge station for costing purposes and includes existing stations operating only a portion of the year

Unit Costs				
Conv. = Sal + 0&M	750,030.00 + 359.54	322,513.00 + 359.54	108,109.00 327.67	
	2,086	897	330	= 3,313
Remote = Sal + O&M	750,030.00 + 359.54	322,513.00 + 359.54	121,161.00 31.87	
	2,086	897	3,802	= 6,785

TABLE D.3 SUMMARY OF SHAREABLE OPERATING COSTS BY AGENCY FOR HYDROMETRIC STATIONS OPERATED BY WRB, ONTARIO REGION 1985/86

Ontario Minis	try of Natural Resources			
Conventional	100% Prov 1 (MNR) 50% Fed/Prov 1 (MNR) 50% Fed/Prov 2 (MNR) 50% Fed/Prov 1 (MOE/MNR) 50% Prov 1 (OH/MNR) 50% Prov 2 (MOE/MNR)	\$484,526/1 26,504/2 4,970/2 9,111/2 9,939/2 3,313/2	= \$ = = = =	484,526 13,252 2,485 4,556 4,970 1,657
Remote	100% TOTAL	11,263/1	= -	11,263 522,709
Ontario Minis	try of Environment			
Conventional Remote	100% Prov 1 (MOE) 100% Prov 2 (MOE) 50% Fed/Prov 1 (MOE) 50% Fed/Prov 3 (MOE) 50% Prov 1 (MOE/MNR) 50% Prov 2 (MOE/MNR) 50% Fed/Prov 3 (MOE)	8,017/1 16,565/1 3,313/2 9,111/2	= \$ = = = = =	106,844 8,017 8,283 1,656 4,556 1,657 33,925
	TOTAL	07,00072	\$	164,938
Ontario Hydro		•		
Conventional Remote	100% Prov 1 (OH) 50% Fed/Prov 2 (OH) 50% Prov 1 (MNR/OH) 100% Prov 1 (OH) 50% Fed/Prov 2 (OHO TOTAL	9,939/2 9,939/2 6,785/1	= \$ = = = = = \$	14,909 4,970 4,970 6,785 3,393 35,027
TOTAL PROVINC	IAL SHAREABLE HYDROMETRIC COST		\$	722,674
<u>Federal</u>				
Conventional Remote	100% Fed 1-4 50% Fed/Prov 1 (MOE) 50% Fed/Prov 1 (MNR) 50% Fed/Prov 2 (OH) 50% Fed/Prov 2 (MNR) 50% Fed/Prov 3 (MOE) 100% Fed 1-4 50% Fed/Prov 2 (OH)	16,565/2 26,504/2 9,939/2 4,970/2 3,313/2 123,555/1	= \$ = = = = = =	387,621 8,283 13,252 4,970 2,485 1,657 123,555 3,393
	50% Fed/Prov 3 (MOE)		=	33,925
TOTAL FEDERAL	SHAREABLE HYDROMETRIC COST		\$	579,141
GRAND TOTAL S	HAREABLE HYDROMETRIC OPERATING COS	Т	\$1	,301,815

TABLE D.4 ACTUAL EXPENDITURES - SEDIMENT PROGRAM 1985/86

Tot	al Ontario Region Program	Federal_	<u>Provincial</u>	Total
	Number of station (full station equivalents)	12	1	13
a)	Salary	\$29,828.31 +	\$ 2,485.69	= \$32,314.00
b)	Operation & Maintenance (O&M) Reporting Object			
	Transportation & Communications Professional & Special Services Purchase, Repair & Upkeep Utilities, Materials & Supplies	\$ 978.00 1,561.90 7.00 509.00	\$ 8.00 219.25 0 396.00	\$ 986.00 1,781.15 7.00 905.00
	Subtotal	\$ 3,055.90	\$ 623.25	\$ 3,679.15
c)	Laboratory Costs (Provincial Station	ns Only)		
	Humber River at Elder Mills	Cost/Sample	# Samples	Total Cost
d)	Bottom Withdrawal Total Concentration Dissolved Solids Total Provincial Laboratory And Laboratory Costs (Federal Stations C		2 94 27	\$ 80.76 1,011.44 58.32 \$ 1,150.52
٠,	Ausable River near Springbank	Cost/Sample	# Samples	Total Cost
	Total Concentration	\$10.76	121	\$ 1,301.96
	Dissolved Solids Total Cost	2.16	19	\$ 1,343.00
	Big Creek_near Walsingham			
	Bottom Withdrawal Total Concentration Dissolved Solids Total Cost	\$40.38 10.76 2.16	1 136 25	\$ 40.38 1,463.36 54.00 \$ 1,557.74
	Big Otter Creek near Calton			
	Bottom Withdrawal Total Concentration Dissolved Solids Evaporation Analysis Total Cost	\$40.38 10.76 2.16 2.92	3 142 142 56	\$ 121.14 1,527.92 306.72 163.52 \$ 2,119.30
	Credit River at Erindale			
	Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	123 18	\$ 1,323.48
	Nottawasaga River at Baxter			
	Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	67 15	\$ 720.92 32.40 \$ 753.32
	South Maitland River at Summerhill			
	Bottom Withdrawal Total Concentration Dissolved Solids Total Cost	\$40.38 10.76 2.16	1 43 9	\$ 40.38 462.68 19.44 \$ 522.50

TABLE D.4 (continued)

Thames River at Innerkip	Cost/Sample	# Samples	Total Cost
Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	235 17	\$ 2,528.60 36.72 \$ 2,565.32
South Nation River near Plantager	net Springs		
Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	31 9	\$ 333.56 19.44 \$ 353.00
Harmony Creek at Oshawa			
Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	12	\$ 129.12 2.16 \$ 131.28
Farewell Creek at Oshawa			
Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	12 2	\$ 129.12 4.32 \$ 133.44
Don River at Todmorden			
Bottom Withdrawal Total Concentration Dissolved Solids Total Cost	\$40.38 10.76 2.16	1 129 21	\$ 40.38 1,388.04 45.36 \$ 1,473.78
MacGregor Creek at Chatham			
Bottom Withdrawal Total Concentration Dissolved Solids Total Cost	\$40.38 10.76 2.16	2 25 14	\$ 80.76 269.00 30.24 \$ 380.00
Sydenham River at Florence			
Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	11 9	\$ 118.36 19.44 \$ 137.80
Northern Miscellaneous Stations			
Bottom Withdrawal Total Concentration Dissolved Solids Total Cost	\$40.38 10.76 2.16	1 15 16	\$ 40.38 161.40 34.56 \$ 236.34
Southern Miscellaneous Stations			
Total Concentration Dissolved Solids Total Cost	\$10.76 2.16	184 165	\$ 1,979.84 356.40 \$ 2,336.24
Projects			
Goderich Harbour			
Hydrometer Analysis Sieve Analysis Total Cost	\$30.06 15.70	1 21	\$ 30.06 329.70 \$ 359.76
NHRI			
Evaporation Analysis Dissolved Solids Total Concentration Hydrometer Analysis Sieve Analysis Total Cost	\$ 2.92 2.16 10.76 30.06 15.70	43 43 43 57 19	\$ 125.56 92.88 462.68 1,713.42 298.30 \$ 2,692.84

				i,

TABLE D.4 (continued)

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	St. Mary's	River	Cost/Sample	# Samples	Total Cost
	Sieve Analy Hydrometer Total	Analysis	\$15.70 30.06	7 3	\$ 109.90 90.18 \$ 200.08
	Total	Federal Laboratory A	nalysis Costs		\$18,658.10
e)	Summary of	Provincial Sediment	Costs		
	Salary O&M Laboratory	\$ 2,485.69 623.25 1,150.52 \$ 4,259.46			
f)	Summary of	Federal Sediment Cos	ts		
	Salary O&M Laboratory	\$29,828.31 3,055.90 18,658.10 \$51,542.31			
g)	Total Sedin	ment Program Costs (P	rovincial and Feder	ral)	
	Salary O&M Laboratory	\$32,314.00 3,679.15 19,808.62 \$55,801.77			

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TABLE D.5
SUMMARY OF CONSTRUCTION PROGRAM COSTS* 1985/86

	Fede		Provincia	- MOE	Provincia	1 - MNR	Pr	ovincia	1 - OH		Provinci	al -	CA	Tota	1
Project	Estimated	Actual**	Estimated	Actual	Estimated	Actual	Esti	mated	Actua	E s	timated	Ac	tual	Estimated	Actual
New Stations	\$15,200	\$ 0	\$16,500	\$12,805	\$38,000	\$25,444	\$	0	\$ () \$	0	\$	0	\$ 69,700	\$38,249
Station Relocations	0	0	0	0	11,500	3,886		0	()	0		0	11,500	3,886
Controls	0	0	0	0	0	0		0	()	0		0	0	0
Cableways	0	0	0	0	0	0		0	()	0		0	0	0
Purchase of Con- struction Materials	36,000	35,013	0	0	0	0		0	. ()	0		0	36,000	35,013
Station Upgrading	0	0	0	0	15,000	8,861		0	()	0		0	15,000	8,861
Major Maintenance	4,750	4,616	0	0	0	0		0		2 -	0	-	0	4,750	4,616
TOTAL	\$55,950	\$39,629	\$16,500	\$12,805	\$64,500	\$38,191	\$	0	\$) \$	0	\$	0	\$136,950	\$90,625

* Does not include construction work carried out by WRB, Winnipeg Office in N.W. Ontario
** Cost of instrumentation not included. Included labour, materials and equipment supplied directly by agency

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APPENDIX E

NATIONAL REPORT TABLES

- TABLE 1 Water Quantity Surveys Gauging Station Data for 1985/86
- TABLE 2 Water Quantity Surveys Comparative Gauging Station Data, April 1, 1975 to April 1, 1985
- TABLE 3 Water Quantity Surveys Detailed Gauging Station Data, 1985/86
- TABLE 4 Water Quantity Surveys Total Program Costs and Shareable Costs for 1985/86
- TABLE 5 Water Quantity Surveys Summary of Shedules 'D' and 'F', 1985/86
- TABLE 6 Water Quantity Surveys Comparison Scheduled and Actual Costs for 1985/86

Province/Territory: Ontario

NOTE: All Tables include data for the Northwest Ontario Network operated by Manitoba District

TABLE 1

WATER QUANTITY SURVEYS GAUGING STATION DATA FOR 1985/86

	No. of Stations	(1)	. Changes dur	ing <u>1985/86</u> (2)	SI	tn. Designatio	n April 1, <u>198</u>	5
April 1 <u>84</u>	April 1 <u>85</u>	Change	Added	Discontinued	Fed.	FP	Prov.	Contrib.
550	554	+ 4	12	7	199 (42)	36 (0)	193 (1)	126 (0)

(1) includes contributed data stations

(2) stations operated by Water Resources Branch

* Bracket Sediment Stations

TABLE 2 WATER QUANTITY SURVEYS COMPARATIVE GAUGING STATION DATA April 1/75 to April 1/85

Fe	ederal Station	ns	F-P Stations		Pro	Provincial Stations			Total Stations		
Apr 1 75	Apr 1 85	Chge	Apr 1 75	Apr 1 85	Chge	Apr 1 75	Apr 1: 85	Chge	Apr 1/75	Apr 1 85	Chge
202	199	- 3	57	36	- 21	155	. 193	<i>∔</i> 38	414	428	<i>†</i> 14

TABLE 3 WATER QUANTITY SURVEYS DETAILED GAUGING STATION DATA 1985/86

F-1	F-2	F-3	F-4	Total F	FP-1	FP-2	FP-3	Total F:P	P-1	P-2	Total P	Contributed	Total-All
78 (42)	1	91	29	199 (42)	13	12	11	36 (0)	190 (1)	3	193 (1)	126 (0)	554 (43)

Bracket Sediment Stations in all catagories.

TABLE 4 WATER QUANTITY SURVEYS TOTAL PROGRAM COSTS & SHAREABLE COSTS FOR 1985/86 (× \$1000)

	Tota	1 Program	Costs		Shareable			areable Co	reable Costs		
P/Yrs	Sal.	Oper.	Сар.	Total	P/Yrs	Sal.	Oper. Const. Total F Share				P Share
49.8	1602.1	867.7	295.2	2765.0	30.7	867.2	647.4	120.7	1635.3	851.4	783.9

TABLE 5 WATER QUANTITY SURVEYS SUMMARY OF SCHEDULES D/F- 1985/86

Streamflow & Water Level		Se	Total	
Operation	Construction	Operation	· Construction	
\$751,320	\$79,000	\$4,000	0	\$834,320

TABLE 6 WATER QUANTITY SURVEYS COMPARISON - SCHEDULED & ACTUAL COSTS FOR 1985/86 (Dollars)

· · · · · · · · · · · · · · · · · · ·												
Salary & Operations		Construction		Total			Annual	Received				
Sch. D/F	Actual Cost	Sch. D/F	Actual Cost	Sch. D/F	Actual Cost	Difference	Payment Received	Minus Actual				
\$755,320	\$739,319	\$79,000	\$50,996	\$834,320	\$790,315	\$44,005	\$800,872 (1)	<i>+</i> \$10,557				

(1) includes \$6,435 which WRB paid to Ontario Hydro for operation of 6 stations

AUTHOR IWD/WRB - Ontario Region

Agr-ONT-8

TITLECanada/Ontario Cost Sharing
Agr. for Water Quant. Surv. '85/86

DATERMOREM BORROWER'S NAME
BORROWED Annual Rept. Ret'o

FORM L1-160WE

