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# Sixth Annual Report

ON ACTIVITIES UNDER THE MARITIME  
MARSHLAND REHABILITATION ACT FOR  
THE FISCAL YEAR ENDED MARCH 31, 1955



CANADA DEPARTMENT OF AGRICULTURE  
MARITIME MARSHLAND REHABILITATION ADMINISTRATION



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Cover Photo

An aerial view of a section of Westcock Marsh showing new dyke protecting farm lands. Photo also shows the drainage ditches and the borrow trenches on the outside of the dyke from which the dyke fill was obtained. Photo was taken when the tide was part way out. At high tide all land in the photograph is covered except the dyke and the farm land protected by it. (Photo N. B. 5/39)

## ACTIVITIES UNDER THE MARITIME MARSHLAND REHABILITATION ACT.

### Introduction & Organization

The Maritime Marshland Rehabilitation Act was passed by the Parliament of Canada on June 30, 1948, in order to permit the establishment of an organization with a program aimed at reclaiming and developing the marshlands of Nova Scotia, New Brunswick and Prince Edward Island.

The marshland reclamation and development program was set up as a co-operative undertaking and in 1949 the Provincial Governments entered into agreements with Canada to define the scopes of work to be undertaken by each participant.

Canada undertakes the construction and reconstruction of necessary protective works (dykes, aboiteaux and breakwaters) and the maintenance of such works as required. Canada also provides all engineering services in connection with the marshland rehabilitation program.

The Provinces organize and negotiate agreements with the marsh owners before any works are considered. The Provinces arrange for the acquisition of lands required for the construction of the protective works. They are responsible for the provision of adequate fresh-water drainage and the development of an effective land-use program.

It is estimated that there are about 90,000 acres of marshland scattered throughout the Maritime Provinces. The great majority of these marshes are located along streams that flow into the Bay of Fundy and many others have developed along the banks of the upper reaches of the Bay itself. The marshlands are composed of silt soils deposited by high tides and are of no appreciable value if not protected by dykes and aboiteaux. When they are properly protected from salt water flooding, and fresh-water drainage ditches are provided, the land with proper cultural treatment, is considered to be the most productive in the Maritimes. The marshes form an essential part of many Bay of Fundy farms which could not survive as profitable and productive enterprises with upland fields alone.

When the marsh owners and the Provincial Government concerned have entered into an agreement and the marsh has been formally designated by the Province as an incorporated marsh body, this Administration is requested to provide surveys and engineering data and cost estimates for each proposed project. Such information is prepared for the Provincial authorities and the marsh owners. The plans and estimated costs are also presented to the Maritime Marshland Rehabilitation Advisory Committee for their consideration.

This Committee was formed in 1949 and is composed of members who are well acquainted with the subject of marshland rehabilitation. The Committee reviews plans, estimated costs and the

need for each project and makes recommendations to the Minister of Agriculture (Canada) with respect to proposed protective works. The Committee convened on four occasions during 1954-55. Since the Committee was originally established they have recommended that protective structures be built on 63 projects in Nova Scotia, 32 in New Brunswick and 1 in Prince Edward Island. They have also recommended that work not be considered at this time on seven projects and sections of three others in New Brunswick, nor on sections of eleven projects in Nova Scotia.

The Headquarters of the Maritime Marshland Rehabilitation Administration was established in 1949 in Amherst, Nova Scotia. Work performed under the terms of the act is directly controlled by a Director who is responsible to the Deputy Minister of Agriculture in Ottawa.

District offices are located in Windsor, Nova Scotia and Moncton, New Brunswick. Temporary field offices are set up near job sites, during the construction of large projects and also in the vicinity of marshland rehabilitation activities in various areas. The locations of field offices change almost every year according to where the construction work is concentrated. In addition to the administrative and accounting offices in Amherst, there are engineering offices which are established under the following sections:

(1) Surveys, Design and Drafting; (2) Drainage (3) Soil Mechanics; (4) Construction (5) Seeding; (6) Workshops. A more detailed description of the functions of the engineering branch may be found in this Administration's Fourth Annual Report.

#### Accomplishments and Notes on Activities during the year.

Up to March 31, 1955 the Provinces had incorporated 139 marsh bodies and had requested that the reclamation of these areas be considered. The breakdown of incorporated marsh bodies by provinces is as follows:

89 in Nova Scotia  
49 in New Brunswick  
1 in Prince Edward Island

The number of acres of marsh included in the above incorporated areas is as follows:

	<u>Protected</u>	<u>Salt or Unprotected</u>	<u>Total</u>
Nova Scotia	31, 185	8, 644	39, 829
New Brunswick	27, 015	8, 030	35, 045
Prince Edward Island	275	-	275
	<u>58, 475</u>	<u>16, 674</u>	<u>75, 149</u>

It is considered that the 75, 149 acres of marshland are closely associated with 436, 000 acres of adjacent farmlands - 310, 000 in Nova Scotia and 126, 000 in New Brunswick.

During the sixth year of operations under the Maritime Marshland Rehabilitation Act (fiscal year 1954-55) the following works were undertaken by this Administration:

1. Major construction of protective works on 35 projects.
2. Maintenance work on 67 projects.
3. 36 new aboiteaux were constructed.
4. 48 old aboiteaux were eliminated. In such cases, fewer numbers of new aboiteaux were required since drainage patterns were redesigned to have fresh-water drainage flow through new aboiteaux and bypass the old structures.
5. 36 aboiteaux were repaired.
6. 21.4 miles of new dyke was constructed.
7. 7 miles of existing dyke was repaired and strengthened.
8. 5.6 miles of special dyke facing was installed or repaired.
9. 1.4 miles of bank protection was placed.
10. 43.3 miles of dyke right-of-way was seeded.

Departmental machinery and personnel are used to construct the majority of aboiteaux, however, the construction of very large aboiteaux and much of the dyke building is undertaken by earth moving contractors on a unit price contract basis. Such contract work is planned, laid out and closely supervised by departmental staff. One contract for dyke construction and two for drainage works, which had been held over from the previous year, were completed in 1954-55. In 1954-55 twelve works contracts were awarded in Nova Scotia and New Brunswick. Eight of these contracts were not completed during the fiscal year. Included among the contracts being carried into the 1955-56 year are the Shepody River Project contracts for the construction of Stages 1 and 2 and for the supply and erection of the steel gates and hoists.

Although drainage contracts are awarded and paid for by this Administration as work progresses, all such payments to the contractors concerned are recovered from the Provincial governments.

This Administration undertook drainage works on five other projects, as requested by the Provinces and at the Provinces expense. In addition, M.M.R.A. engineers supervised several other marsh drainage projects which were under construction by the provincial governments.

M.M.R.A. drainage engineers and officials of the Nappan Experimental Farm continued with their investigations of various drainage systems and studies of the relationship between soil moisture, temperature, water table and crop yields on marshland soils.

Work progress was impeded by wet weather and exceptionally high tides during the fall of 1954. On September 11, 1954 hurricane "Edna" struck the Maritimes. This storm coincided with the beginning of a high tide cycle and many old structures were severely damaged, particularly along the Petitcodiac River in New Brunswick. The driving tides also washed fill from many new dykes and delayed construction schedules by several weeks. Emergency repair work was necessary on

a number of projects at the head of the Bay of Fundy. On Pré d'en Haut Marsh, Westmorland County, N.B., protective structures had to be rebuilt immediately. This work had been planned for the following year but could not be postponed.

### SPECIAL PROJECTS

#### The Shepody River Project

The main purpose of constructing a control dam, or aboiteaux, on this river is to protect some 5,500 acres of fertile marshland from salt water (tidal) flooding. Construction of this dam will also eliminate the necessity of reconstructing miles of dyke, bank protection structures and many small creek aboiteaux in the valley above the site of the large dam. Maintenance of this single large structure will also be more concentrated and more economical than the maintenance which would be required on lengthy running dyke and many small creek aboiteaux.

At the close of the 1954-55 fiscal year, rock fill was partially blocking the Shepody River, the sluiceway was cut into the river bank to the desired depth, the coffer dams were being maintained to keep the tide out of the sluiceway and the concrete floor and piers for the control gates were partially constructed. During the year a contract was awarded for the supply and erection of the electrically operated control gates and hoist mechanism.

Work on this project was commenced in the fall of 1953 and it is planned to have the main works completed during the 1955-56 fiscal year.

#### The Isgonish River Project

During the year covered by this Report, a cost-share arrangement was approved by the Government of Canada and the Nova Scotia Department of Highways and Public Works for the construction of a combined bridge-aboiteau across the Isgonish River, Colchester County, Nova Scotia. This bridge-aboiteau will protect some 476 acres of marshland and will also replace the temporary Route 2 highway bridge across the Isgonish River.

A contract was awarded by the Department in October, 1954 for the building of this structure and by March 31, 1955 the main highway had been diverted and the concrete sluices had been poured in the excavation. In addition earth fill was being placed and plans were well advanced for the construction and installation of the three 6' x 10' control gates.

It is expected that this project will be completed early in the 1955-56 fiscal year.

#### The Tantramar River Project

This project, to date, consists of a proposal to erect a dam, with provision for complete fresh-water discharge, across the Tantramar

marshes from flooding by tide water and thus eliminate the need of constructing new or reconstructing existing dykes and numerous aboiteaux.

Definite recommendations have not been submitted to the Government of Canada, pending the preparation of plans and the successful completion of the Shepody River Dam.

The Annapolis River Project

A complete study of this Project, which was an investigation to determine the feasibility of erecting a dam across the Annapolis River, has been made. Such a structure, complete with adequate fresh-water discharge facilities, would protect approximately 4300 acres of marshland and could be modified to serve as a highway crossing. The purpose of such a structure, insofar as protection to the marshland is concerned, would be similar to that of the Shepody River Dam or a dam across the Tantramar River.

The study made has indicated the cost of such a structure to be much greater than is warranted to provide protection to the area concerned against tide water flooding.

Project No.	Name of District	Area in Acres	Remarks
1	Colchester	100	
2	Windsor Forest	100	
3	Yarmouth (Great Dyke)	100	
4	Dixie Ann	100	
5	Dugas	100	
6	Salisbury	100	
7	Annapolis River (Dyke)	100	
8	Grand Pre	100	
9	Windsor	100	
10	Upper Millville	100	
11	Lower Millville	100	
12	Yarmouth (Dyke)	100	
13	Yarmouth (Dyke)	100	
14	Yarmouth (Dyke)	100	
15	Yarmouth (Dyke)	100	
16	Yarmouth (Dyke)	100	
17	Yarmouth (Dyke)	100	
18	Yarmouth (Dyke)	100	
19	Yarmouth (Dyke)	100	
20	Yarmouth (Dyke)	100	
21	Yarmouth (Dyke)	100	
22	Yarmouth (Dyke)	100	
23	Yarmouth (Dyke)	100	
24	Yarmouth (Dyke)	100	
25	Yarmouth (Dyke)	100	
26	Yarmouth (Dyke)	100	
27	Yarmouth (Dyke)	100	
28	Yarmouth (Dyke)	100	
29	Yarmouth (Dyke)	100	
30	Yarmouth (Dyke)	100	
31	Yarmouth (Dyke)	100	
32	Yarmouth (Dyke)	100	
33	Yarmouth (Dyke)	100	
34	Yarmouth (Dyke)	100	
35	Yarmouth (Dyke)	100	
36	Yarmouth (Dyke)	100	
37	Yarmouth (Dyke)	100	
38	Yarmouth (Dyke)	100	
39	Yarmouth (Dyke)	100	
40	Yarmouth (Dyke)	100	
41	Yarmouth (Dyke)	100	
42	Yarmouth (Dyke)	100	
43	Yarmouth (Dyke)	100	
44	Yarmouth (Dyke)	100	
45	Yarmouth (Dyke)	100	
46	Yarmouth (Dyke)	100	
47	Yarmouth (Dyke)	100	
48	Yarmouth (Dyke)	100	
49	Yarmouth (Dyke)	100	
50	Yarmouth (Dyke)	100	
51	Yarmouth (Dyke)	100	
52	Yarmouth (Dyke)	100	
53	Yarmouth (Dyke)	100	
54	Yarmouth (Dyke)	100	
55	Yarmouth (Dyke)	100	
56	Yarmouth (Dyke)	100	
57	Yarmouth (Dyke)	100	
58	Yarmouth (Dyke)	100	
59	Yarmouth (Dyke)	100	
60	Yarmouth (Dyke)	100	
61	Yarmouth (Dyke)	100	
62	Yarmouth (Dyke)	100	
63	Yarmouth (Dyke)	100	
64	Yarmouth (Dyke)	100	
65	Yarmouth (Dyke)	100	
66	Yarmouth (Dyke)	100	
67	Yarmouth (Dyke)	100	
68	Yarmouth (Dyke)	100	
69	Yarmouth (Dyke)	100	
70	Yarmouth (Dyke)	100	
71	Yarmouth (Dyke)	100	
72	Yarmouth (Dyke)	100	
73	Yarmouth (Dyke)	100	
74	Yarmouth (Dyke)	100	
75	Yarmouth (Dyke)	100	
76	Yarmouth (Dyke)	100	
77	Yarmouth (Dyke)	100	
78	Yarmouth (Dyke)	100	
79	Yarmouth (Dyke)	100	
80	Yarmouth (Dyke)	100	
81	Yarmouth (Dyke)	100	
82	Yarmouth (Dyke)	100	
83	Yarmouth (Dyke)	100	
84	Yarmouth (Dyke)	100	
85	Yarmouth (Dyke)	100	
86	Yarmouth (Dyke)	100	
87	Yarmouth (Dyke)	100	
88	Yarmouth (Dyke)	100	
89	Yarmouth (Dyke)	100	
90	Yarmouth (Dyke)	100	
91	Yarmouth (Dyke)	100	
92	Yarmouth (Dyke)	100	
93	Yarmouth (Dyke)	100	
94	Yarmouth (Dyke)	100	
95	Yarmouth (Dyke)	100	
96	Yarmouth (Dyke)	100	
97	Yarmouth (Dyke)	100	
98	Yarmouth (Dyke)	100	
99	Yarmouth (Dyke)	100	
100	Yarmouth (Dyke)	100	



APPENDIX 1

PROJECTS AS OF MARCH 31, 1955

Note:- Acreages are only shown for Bodies incorporated by the Provinces.

Acreages are based on information compiled as at March 31st, 1955.

(x) Portion of area out to sea, some of which may be reclaimed.

(o) Complete area out to sea, some of which may be reclaimed.

(1) Includes dyke right-of-way, creeks and roads and Class 4 area.

Project No.	Name of Marsh	Location	(1) Protected Marsh	Acreage Salt or Unprotected Marsh
<u>NOVA SCOTIA</u>				
N. S. 1	Comeau	Anna. Co.	288	22
N. S. 2	Windsor Forks	Hants Co.	465	41
N. S. 3	Falmouth Great Dyke	Hants Co.	974	41
N. S. 4	Queen Anne	Anna. Co.	477	70
N. S. 5	Dugau	Anna. Co.	177	25
N. S. 6	Saulnierville	Digby Co.	73	
N. S. 7	Annapolis River Survey	Anna. Co.		
N. S. 8	Grand Pré	Kings Co.	2532	177
N. S. 9	Woodworth-	Anna. Co.	203	68
N. S. 10	Upper Belleisle	Anna. Co.	249	17
N. S. 11	Truro Dykeland Park	Col. Co.	754	35
N. S. 12	Victoria Diamond Jubilee	Col. Co.	527	75
N. S. 13	Dentiballis	Anna. Co.	349	62
N. S. 14	Elderkin	(x) Hants Co.	95	181
N. S. 15	Isgonish	Col. Co.	450	26
N. S. 16	Castle Frederick	Hants Co.	146	18
N. S. 17	Falmouth Village	Hants Co.	78	29
N. S. 18	Ryerson	Anna. Co.	78	14
N. S. 19	Bridgetown (Province has requested no action)	(x) Anna. Co.	64	
N. S. 20	Advocate	Cumb. Co.	433	125
N. S. 21	Upper Nappan	Cumb. Co.	462	30
N. S. 22	Gaspereau River Survey	Kings Co.		
N. S. 23	Masstown	(x) Col. Co.	333	958
N. S. 24	Noel Shore	(x) Hants Co.	87	273
N. S. 25	South Maitland (Province has requested no action)	Hants Co.	34	



Project No.	Name of Marsh	Location	Acreage	
			(1) Protected Marsh	Salt or Unprotected Marsh
N. S. 26	Stirling Brook	(o) Hants Co.	--	99
N. S. 27	Newport Town	Hants Co.	326	80
N. S. 28	Scott' s Bay	(o) Hants Co.	--	71
N. S. 29	Pré Rond	Anna. Co.	154	23
N. S. 30	Alian River	(x) Anna. Co.	123	246
N. S. 31	Fox Bow	Anna. Co.	303	13
N. S. 32	Mount Anne	Anna. Co.	162	16
N. S. 33	Windermere	Anna. Co.	163	9
N. S. 34	Moschelle	Anna. Co.	68	9
N. S. 35	Ricketson	Anna. Co.	60	5
N. S. 36	Rosette	Anna. Co.	42	6
N. S. 37	Walker	Anna. Co.	63	6
N. S. 38	St. Croix	(x) Hants Co.	220	48
N. S. 39	Round	Col. Co.	84	25
N. S. 40	Fort Belcher	Col. Co.	181	46
N. S. 41	Habitant	Kings Co.	677	--
N. S. 42	Amherst Point	Cumb. Co.	2205	346
N. S. 43	Annapolis Royal Town	Anna. Co.	84	21
N. S. 44	Converse	Cumb. Co.	776	62
N. S. 45	Barronsfield	Cumb. Co.	229	31
N. S. 46	River Hebert	(x) Cumb. Co.	1055	160
N. S. 47	Selmah	Hants Co.	171	12
N. S. 48	Centre Burlington	(o) Hants Co.	--	223
N. S. 49	Scotch Village	Hants Co.	87	3
N. S. 50	Herbert River	Hants Co.	59	10
N. S. 51	Morse	Anna. Co.	61	3
N. S. 52	Rossway	(o) Digby Co.		
N. S. 53	John Lusby	(x) Cumb. Co.	776	1247
N. S. 54	Minudie	Cumb. Co.	2310	
N. S. 55	Seaman	Cumb. Co.	425	20
N. S. 56	Wellington	Kings Co.	3103	25
N. S. 57	New Minas	(x) Kings Co.	265	72
N. S. 58	Granville Centre	(x) Anna. Co.	135	68
N. S. 59	Brown Salt Pond	Yar. Co.	277	--
N. S. 60	Morse Bishop	Anna. Co.	83	7
N. S. 61	Kennetcook	Hants Co.	163	24
N. S. 62	McKay	Cumb. Co.	152	1
N. S. 63	Maccan	(x) Cumb. Co.	109	119
N. S. 64	Glenholme	(x) Col. Co.	240	171
N. S. 65	Bishop Beckwith	Kings Co.	549	154
N. S. 66	Flemming Marsh Body	(o) Col. Co.		304
N. S. 67	Onslow-North River	(x) Col. Co.	414	130
N. S. 68	Tregothic	Hants Co.	539	23
N. S. 69	Martock	Hants Co.	1466	54
N. S. 70	Cheggoggin	Yar. Co.	426	--
N. S. 71	Goose Bay	Yar. Co.	230	5
N. S. 72	Horton	(x) Kings Co.	221	229
N. S. 73	Mill	Anna. Co.	59	6
N. S. 74	Tupperville	Anna. Co.	199	15

Project No.	Name of Marsh	Location	(1)	Acreage
			Protected Marsh	Salt or Unprotected Marsh
N. S. 75	Armstrong	Hants Co.	52	4
N. S. 76	Farnham Dyke	Kings Co.	154	64
N. S. 77	Princeport	Col. Co.	43	9
N. S. 78	Athol	(o) Cumb. Co.		215
N. S. 79	Chambers	Hants Co.	54	4
N. S. 80	Starr's Point	(x) Kings Co.	226	357
N. S. 81	Lower Truro	Col. Co.	388	36
N. S. 82	Kentville	Kings Co.	67	11
N. S. 83	Messenger	Anna. Co.	127	8
N. S. 84	Bartlett's Beach	(x) Digby Co.	3	290
N. S. 85	Mantua-Poplar Grove	(x) Hants Co.	257	144
N. S. 86	Central Onslow	(x) Col. Co.	269	53
N. S. 87	Chignecto	(o) Cumb. Co.	--	390
N. S. 88	Burlington	(x) Hants Co.	94	--
N. S. 89	Cogmagun	(o) Hants Co.		400
N. S. 90	Old Barns	(o) Col. Co.	--	125
N. S. 91	Belcher Street	(x) Kings Co.	366	
N. S. 92	Avonport	Kings Co.	263	

TOTAL 31, 185 8, 644

PRINCE EDWARD ISLAND

P. E. I. 1	Johnston River	Queens Co.	275	--
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NEW BRUNSWICK

N. B. 1	Upper Dyke (included in N. B. 51)	(o) Albert Co.		
N. B. 2	Germantown (included in N. B. 51)	Albert Co.		
N. B. 3	Tantramar West -	West. Co.	2317	349
N. B. 4	Allison	West. Co.	196	15
N. B. 5	Westcock	West. Co.	800	225
N. B. 6	Taylor Village	West. Co.	444	105
N. B. 7	Hopewell Hill (included in N. B. 51)	Albert Co.		
N. B. 8	Coyle Landry	West. Co.	127	186
N. B. 9	Harvey (included in N. B. 51)	(x) Albert Co.		
N. B. 10	Shepody River Survey	Albert Co.		
N. B. 11	Belliveau Village	West. Co.	185	15
N. B. 12	Pré d'en Haut	West. Co.	117	23
N. B. 13	Dorchester	West. Co.	1542	235
N. B. 14	Lower Coverdale	Albert Co.	154	15
N. B. 15	Middle Coverdale	Albert Co.	31	22
N. B. 16	Dixon Island	West. Co.	304	96
N. B. 17	New Horton	Albert Co.		554
N. B. 18	Fox Creek	West. Co.	96	13
N. B. 19	Beaumont	West. Co.	207	33

Project No.	Name of Marsh	Location	(1)	Acreage
			Protected Marsh	Salt or Unprotected Marsh
N. B. 20	Gautreau Village	(x) West. Co.	125	105
N. B. 21	Memramcook West	West. Co.	1019	95
N. B. 22	Tantramar River Survey	West. Co.		
N. B. 23	Memramcook River Survey	West. Co.		
N. B. 24	Aulac	West. Co.	1957	534
N. B. 25	Dock	West. Co.	52	4
N. B. 26	Dover	(x) West. Co.	17	35
N. B. 27	College Bridge	(x) West. Co.	708	387
N. B. 28	Upper Coverdale	Albert Co.	45	6
N. B. 29	Log Lake	West. Co.	4240	60
N. B. 30	Calkins	Albert Co.	229	20
N. B. 31	Baie Verte	West. Co.	-	483
N. B. 32	Salem (Province has requested no action)	Albert Co.		65
N. B. 33	West Coverdale	Albert Co.	246	31
N. B. 34	Coverdale	(o) Albert Co.		59
N. B. 35	Waterside	(o) Albert Co.		648
N. B. 36	Boundary Creek	West. Co.	51	1
N. B. 37	Sackville	(x) West. Co.	501	549
N. B. 38	Rockland	West. Co.		234
N. B. 39	Chance Harbour	(o) St. John Co.		
N. B. 40	Woodpoint	(x) West. Co.	43	133
N. B. 41	Turtle Creek	(x) Albert Co.	54	164
N. B. 42	Jones (Province has requested no action)	West. Co.	105	30
N. B. 43	Creek' s	Albert Co.	99	-
N. B. 44	Coles Island	West. Co.	2365	34
N. B. 45	Chartersville	West. Co.	349	31
N. B. 46	Wilson	West. Co.	157	23
N. B. 47	Hillsboro	Albert Co.	955	82
N. B. 48	McAlmon	(o) Albert Co.		67
N. B. 49	La Coupe	West. Co.	1422	
N. B. 50	Black River	(o) St. John Co.	-	31
N. B. 51	Shepody River	Albert Co.	3832	2043
N. B. 52	Little River	(o) St. John Co.	-	130
N. B. 53	Great Marsh	West. Co.	1924	-
N. B. 54	Jones Creek	(o) West. Co.		60
TOTAL			27,015	8,030

TOTAL BY PROVINCES

	Protected	Salt or Unprotected	Total
Nova Scotia	31,185	8,644	39,829
New Brunswick	27,015	8,030	35,045
Prince Edward Island	275	--	275
	<u>58,475</u>	<u>16,674</u>	<u>75,149</u>



APPENDIX 11

Expenditures - Fiscal Years:

	<u>1949 - 1954</u>	<u>1954 - 1955</u>
Administration	\$ 247,105.82	\$ 39,820.68
Surveys and Engineering	931,473.80	115,993.53
Workshop and Construction, and Construction Supervision	868,738.77	290,254.59

Construction, Maintenance Projects and Special Surveys:

	Nova Scotia		
Advocate Marsh		106,614.21	4,154.48
Allan River Marsh	" "	3,305.34	2,701.49
Amherst Point Marsh	" "	123,756.45	12,055.16
Annapolis Royal Town Marsh	" "	10,864.83	289.82
Annapolis River Survey	" "	27,049.60	-
Armstrong Marsh	" "	60.75	427.45
Athol Marsh	" "	-	71.35
Barronsfield Marsh	" "	18,671.16	39,323.46
Bishop Beckwith Marsh	" "	13,496.14	43,756.75
Castle Frederick Marsh	" "	43,728.54	438.38
Central Onslow Marsh	" "	-	7,128.19
Centre Burlington Marsh	" "	509.32	-
Chambers Marsh	" "	284.71	14,301.21
Chegoggin Marsh	" "	-	5,628.00
Comeau Marsh	" "	35,859.01	634.35
Converse Marsh	" "	113,251.10	11,744.79
Dentiballis Marsh	" "	68,597.98	11,981.23
Dugau Marsh	" "	22,240.59	1,751.79
Elderkin Marsh	" "	20,936.95	-
Falmouth Great Dyke Marsh	" "	101,181.14	3,443.82
Falmouth Village Marsh	" "	26,356.40	3,442.26
Farnham Dyke Marsh	" "	58.10	27,561.75
Fort Belcher Marsh	" "	30,955.39	4,802.35
Fox Bow Marsh	" "	15,951.73	378.46
Glenholme Marsh	" "	1,349.19	907.18
Grand Pré Marsh	" "	90,022.38	22,677.34
Granville Centre Marsh	" "	6,758.83	1,503.25
Habitant Marsh	" "	12,256.14	159.70
Herbert River Marsh	" "	4,635.22	16,590.41
Horton Marsh	" "	1,056.57	946.51
Isgonish Marsh	" "	2,733.98	114,420.18
John Lusby Marsh	" "	80,608.07	13,922.78
Kennetcook Marsh	" "	41,506.90	3,241.56
Kentville Marsh	" "	26.55	34.50
Lower Truro Marsh	" "	1,936.19	44,655.49
Maccan Marsh	" "	10.34	8,334.95
Mantua-Poplar Grove Marsh	" "	-	3,682.01
Martock Marsh	" "	112,056.27	4,425.24
McKay Marsh	" "	16,287.55	176.43
Masstown Marsh	" "	36,042.83	1,032.44
Messenger Marsh	" "	-	770.30
Mill Marsh	" "	1,605.60	993.69
Minudie Marsh	" "	47,427.38	49,190.17

Construction, Maintenance Projects and Special Surveys:

			<u>1949 - 1954</u>	<u>1954 - 1955</u>
	Nova Scotia			
Morse Marsh	"	"	\$ 1,680.80	\$ 942.87
Morse Bishop Marsh	"	"	688.77	157.50
Moschelle Marsh	"	"	25,478.20	507.70
Mount Anne Marsh	"	"	53,837.07	2,483.14
New Minas Marsh	"	"	21,071.56	12,550.59
Newport Town Marsh	"	"	42,888.49	3,012.30
Noel Shore Marsh	"	"	2,819.79	32.38
Onslow North River Marsh	"	"	15,572.65	24,058.67
Pré Rond Marsh	"	"	5,924.01	644.70
Princeport Marsh	"	"	-	8,863.16
Queen Anne Marsh	"	"	131,049.39	19,120.97
Ricketson Marsh	"	"	867.90	117.85
River Hebert Marsh	"	"	152,363.01	8,362.51
Rosette Marsh	"	"	324.29	-
Round Marsh	"	"	9,940.52	4,703.50
Ryerson Marsh	"	"	10,564.42	17,688.55
Saulnierville Marsh	"	"	6,889.74	4.25
Scotch Village Marsh	"	"	9,880.59	3,336.73
Seaman Marsh	"	"	20,272.71	31.50
Selmah Marsh	"	"	25,723.34	2.80
St. Croix Marsh	"	"	70,782.96	14.75
Starrs Point Marsh	"	"	-	601.71
Tregothic Marsh	"	"	36,503.75	1,042.36
Truro Dykeland Park Marsh	"	"	90,649.11	1,836.90
Tupperville Marsh	"	"	10,092.60	1,399.65
Upper Belleisle Marsh	"	"	28,719.03	1,786.71
Upper Nappan Marsh	"	"	44,497.59	179.58
Victoria Diamond Jubilee Marsh	"	"	49,945.11	24,307.06
Walker Marsh	"	"	1,598.30	544.31
Wellington Marsh	"	"	24,336.01	-
Windermere Marsh	"	"	2,265.41	855.55
Windsor Forks Marsh	"	"	60,661.83	233.11
Woodworth Marsh	"	"	18,255.95	899.14
			<hr/>	<hr/>
Sub-total for Nova Scotia Projects			\$2,216,194.33	\$624,003.17

Allison Marsh		New Brunswick	18,177.99	347.07
Aulac Marsh	"	"	173,906.64	5,647.42
Baie Verte Marsh	"	"	923.03	-
Beaumont Marsh	"	"	37,816.56	11,547.63
Belliveau Village Marsh	"	"	21,639.92	53.69
Boundary Creek Marsh	"	"	4,143.80	-
Calkins Marsh	"	"	82,147.81	7,968.54
Chartersville Marsh	"	"	44,087.30	1,238.30
Coles Island Marsh	"	"	9,155.24	565.18
College Bridge Marsh	"	"	43,827.75	1,281.73
Coverdale Marsh	"	"	19.31	-
Coyle Landry Marsh	"	"	5,441.84	32,387.93

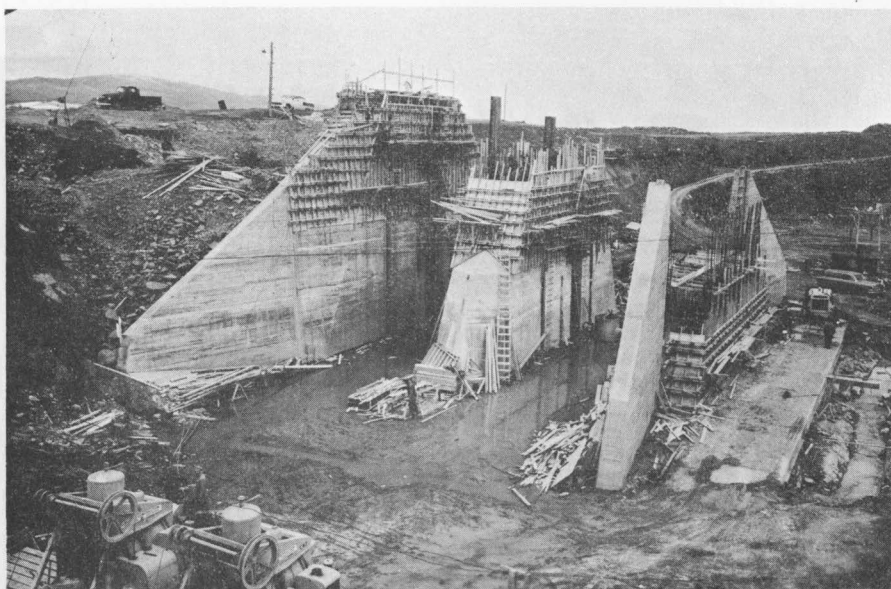
Construction, Maintenance Projects and Special Surveys:

		1949 - 1954	1954 - 1955
Creek's Marsh	New Brunswick	9,428.56	-
Dixon Island Marsh	" "	57,704.43	2,879.51
Dock Marsh	" "	6,715.50	449.35
Dorchester Marsh	" "	147,715.99	3,837.46
Dover Marsh	" "	603.30	10,660.15
Fox Creek Marsh	" "	30,281.19	343.20
Gautreau Village Marsh	" "	5,704.71	39,835.28
Germantown Marsh	" "	11,909.61	-
Hillsboro Marsh	" "	110,188.00	6,143.79
Hopewell Hill Marsh	" "	72,406.13	-
Jones Marsh	" "	4,803.31	-
Log Lake Marsh	" "	16,325.27	3,530.14
Lower Coverdale Marsh	" "	31,440.44	296.62
Memramcook West Marsh	" "	151,969.74	5,318.63
Middle Coverdale Marsh	" "	13,442.51	163.11
New Horton Marsh	" "	1,008.95	-
Pré d'en Haut Marsh	" "	13,346.74	12,968.20
Sackville Marsh	" "	53,399.43	2,716.05
Shepody River Project	" "	330,034.37	316,275.24
Shepody River Survey	" "	26,334.47	-
Tantramar River Survey	" "	23,201.48	-
Tantramar West Marsh	" "	20,855.53	1,754.09
Taylor Village Marsh	" "	75,154.73	438.82
Turtle Creek Marsh	" "	11,895.99	-
Upper Coverdale Marsh	" "	16,321.92	35.25
Upper Dyke Marsh	" "	11,149.33	-
Westcock Marsh	" "	119,944.17	6,241.89
West Coverdale Marsh	" "	49,119.09	1,609.77
Wilson Marsh	" "	27,157.35	548.51
Woodpoint Marsh	" "	464.93	207.00
Sub-totals for New Brunswick Projects		\$1,891,314.36	\$477,289.55
Johnston River Marsh	Prince Edward Island	19,625.00	87.52
		\$6,174,452.08	\$1,547,449.04

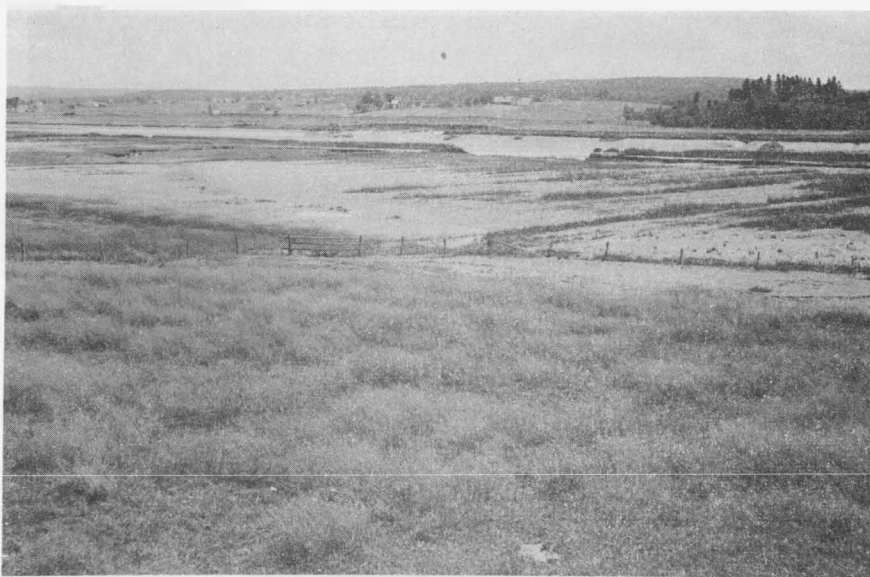




Machines engaged in the excavation of the Shepody River Project spillway during the summer of 1954. This spillway or sluiceway is located in the south bank of the River behind the old Harvey Bank Wharf. Cofferdams are being maintained at either end of this sluiceway until the piers and control apparatus are completely installed in the excavation (Photo N. B. 51/214).



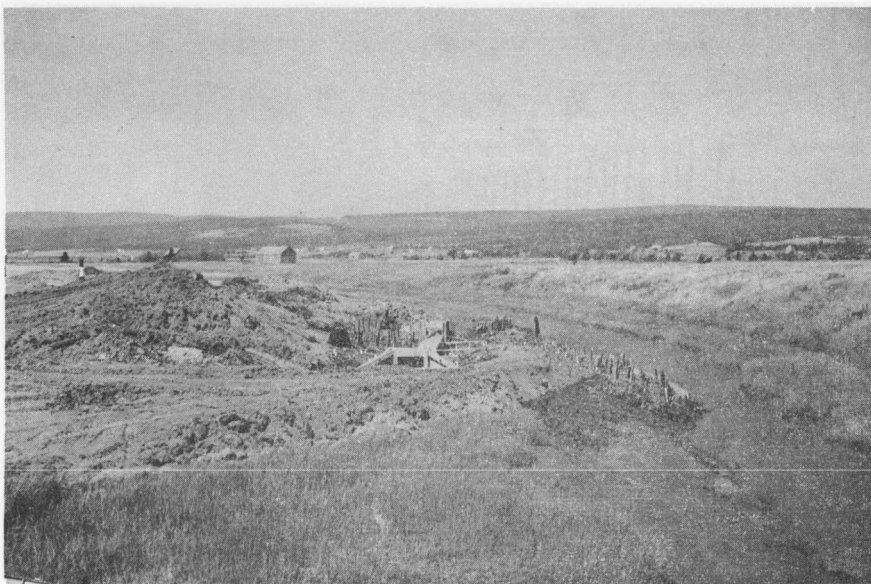
Permanent piers A, B and C of concrete and reinforced steel as of March 31, 1955, at the Shepody Project. Piers E and F will be located to the right of piers shown in the excavation. This view is of the same area as in the above photograph and indicates the progress of work in this section between the summer of 1954 and the spring of 1955. (Photo N. B. 51/275).



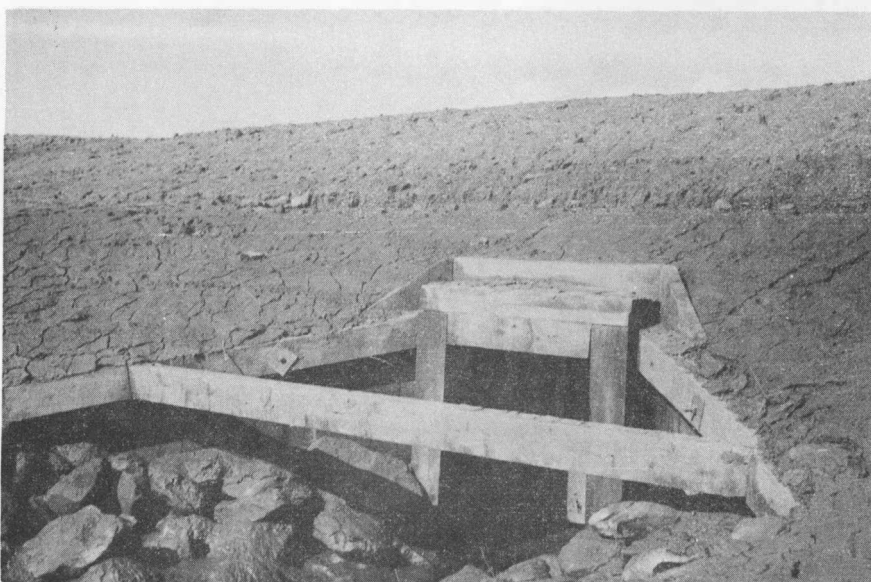
A break in a dyke on Central Onslow Marsh. The marsh was not incorporated when the break occurred however it has since been incorporated by the Province and the dyke has been repaired. Note the accumulation of silt on the marsh from periodic tidal flooding. The lack of growth is evident in this area which has been subject to salt water flooding. (Photo N. S. 86/1).



A heavy growth of broadleaf on the McKay Marsh. This photograph was taken during late spring and indicates the abundant growth on fertile, protected marshland. (Photo N. S. 62/1).

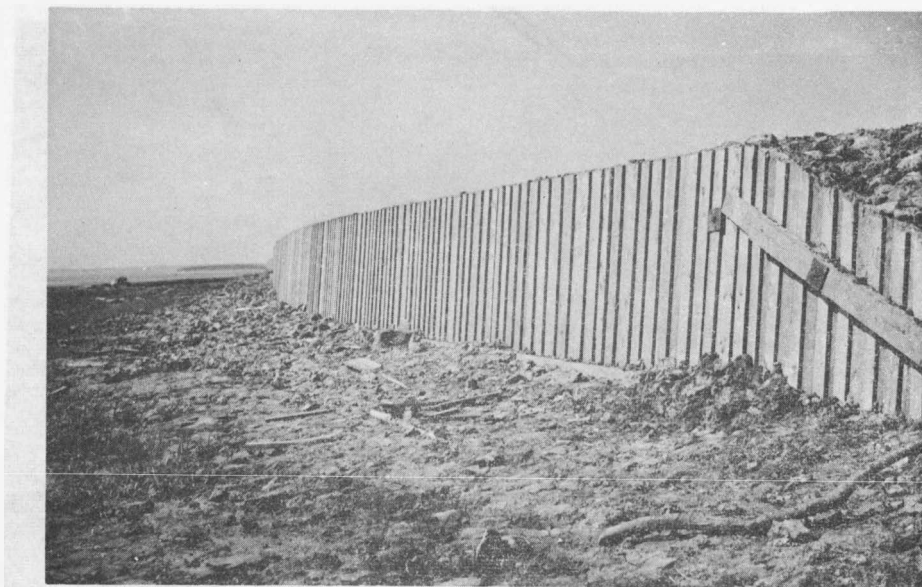


A single-barrel aboiteau sluice being installed on Hopewell Hill Marsh. A stockpile of earth is shown beside the sluice. This earth, plus staked down brush, will be placed on top of the sluice up to dyke level. When the new aboiteau is completed and a new channel for it is excavated, the old creek bed will be blocked off. (Photo N. B. 7/ 6).

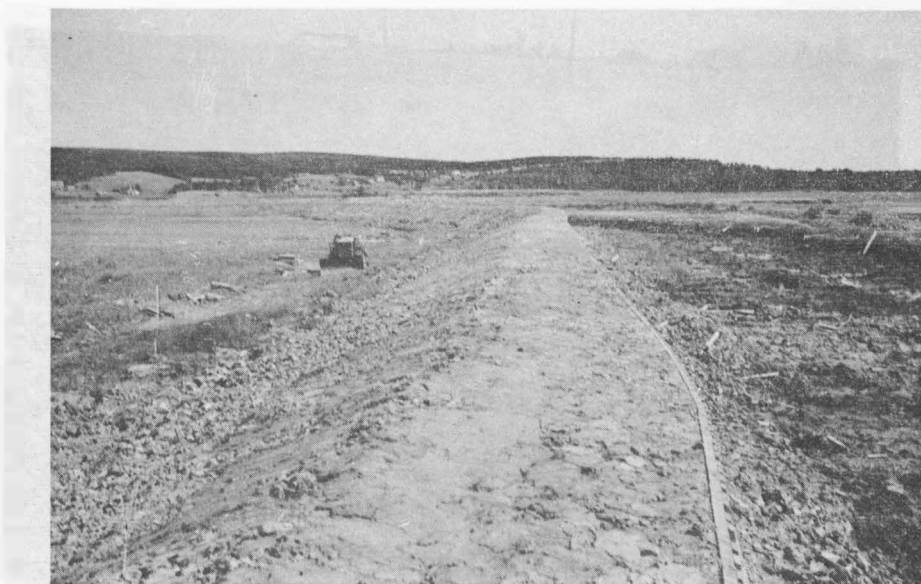


An aboiteau on River Hebert Marsh with a single barrel sluice. This structure is complete except for some finishing work and grass cover. The fill will be seeded to grass to assist in holding the fill in place. (Photo N. S. 46/ 4).

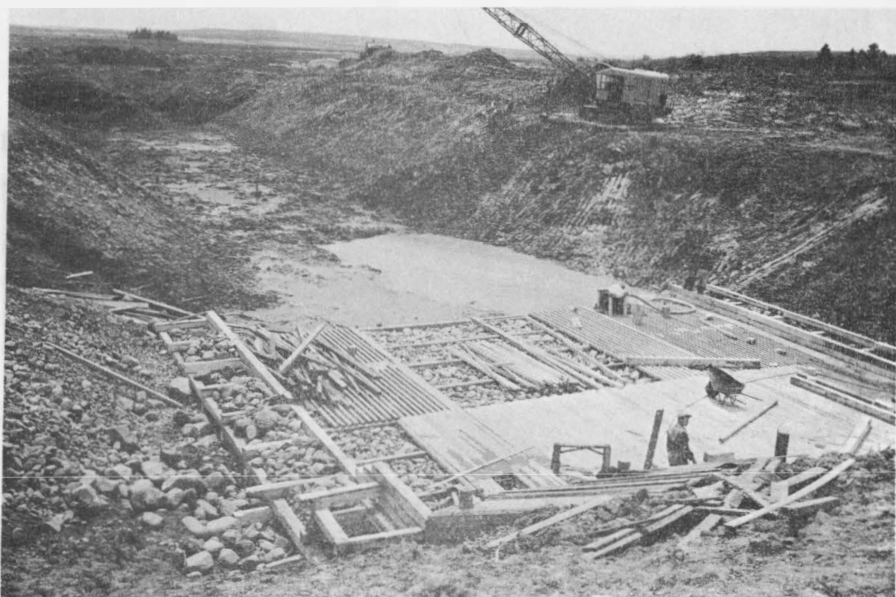




The front or sea side of a section of dyke on Calkins Marsh. This section of dyke is subjected to severe tidal action and plank facing is necessary to prevent the dyke from being undercut and eroded. (Photo N. B. 30/19).



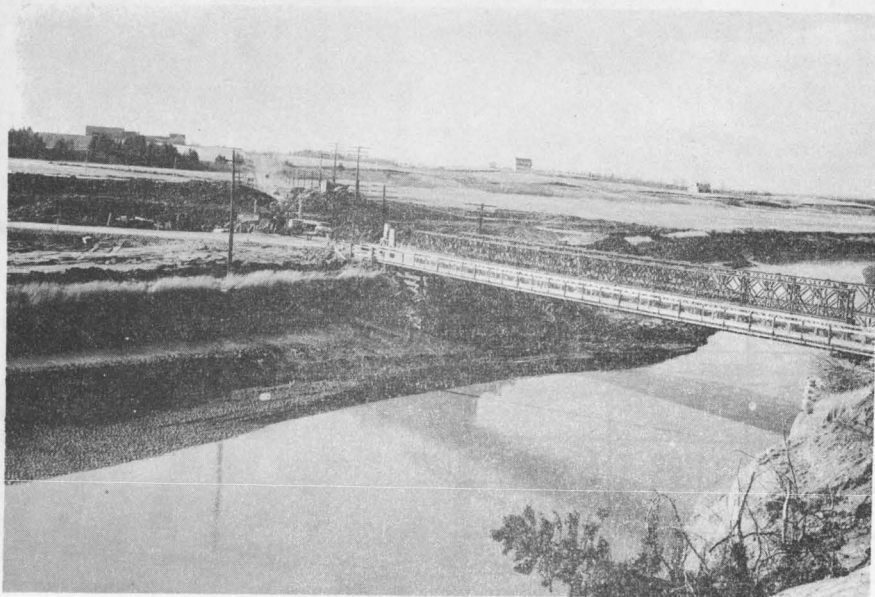
The top side of the plank faced dyke on Calkins Marsh. Steel bolts are located within the fill and run between posts in the inner side of the fill through the plank facing. These bolts hold the plank facing in place and strengthen the structure. The bulldozer inside the dyke is cleaning up the job which is near completion in this photograph. (Photo N. B. 30/20).



The downstream channel of the Isgonish project as seen from the Bridge-aboiteau. The plugs between the channel and the river will be removed when the control gates are installed for use. The rock crib apron is being installed to prevent scouring of the channel (Photo N.S. 15/104).



The upstream side of the Isgonish bridge-aboiteau in the spring of 1955. The three sluices are each 6' x 10'. Rock will also be dumped at the upper end of the plank spillway. (Photo N.S. 15/105).



The Isgonish bridge-aboiteau in the fall of 1954. The temporary Bailey Bridge crossing the present River channel is shown. In the background excavation is under way for the three-barrel concrete sluiceway through which the river will be diverted. (Photo N. S. 15/65).



The partially completed Isgonish bridge-aboiteau in the spring of 1955. Highway traffic is running over the new sluiceway and the Bailey Bridge is still being used to cross the old river channel. This old channel will be blocked and flow diverted through the new structure shown here. This new structure will be equipped with gates to allow fresh-water drainage during low tides and to prevent salt water from entering the valley during high tides. (Photo N. S. 15/100).