## Table of Contents

## PARTI

Recommendations and General Considerations
Preamble — Findings and Recommendations — General Considerations — The Scope of the Inquiry — The Importance of the Prairies to Canada's Economy — The Value of Irrigation — The Problem of Palliser's Triangle — Resources of the Basin — Deficiencies in Basic Data — Legal and Constitutional Complications — The South Saskatchewan River Project — The Estimate of Cost — Cost of Pumping Water to Land — Recovery of Cost — Immediate Effects upon The Economy — The Direct Economic Benefits — Hydro-Electric Power Values — Municipal Water Supply — Other Benefits — Summary of Costs and Benefits — The Qu'Appelle Valley — The Delta Region.
PART X
The River Basin and its Development
CHAPTER 1
Introduction and Acknowledgments
CHAPTER 2
The Geographical Setting

## CHAPTER 3

The Historical Setting	71
I. National Policy and Western Canadian Development — Formulation of National Policy — Western Territories: American Experience — Settlement Prospects in Canadian West — Relationship between South Saskatchewan and Qu'Appelle Rivers — Varying Degrees of Aridity within the Arid Zone — II. Preparation for Settlement in the Canadian West — Confederation and Communications — Dominion Lands Policy — Western Development in the Period from 1867 to 1900 — Improvements in Agricultural Practices: Red Fife and Summer-fallow — III. Establishment of the Canadian Wheat Economy, 1900 to 1930 — Defensive and Economic Aspects of Western Development — Capital Requirements of Prairie Development — Population and Homestead Entries — Agricultural Occupation of Western Lands — Delay in Occupation of Short-grass Plains — Re-introduction of Pre-emption Principle — Relationship between American and Canadian Frontier — Crop Experience on the Canadian Short-grass Plains — Agricultural Investigations in Saskatchewan and Alberta, 1920-21 — Agricultural Re-adjustment during the Nineteen-Twenties — IV. The Disastrous Decade, 1930-39 — Production Record — Price Record — Income, Relief and Debt — Population Movements — Rehabilitation — Summary — V. Effects of Second World War on Prairie Economy — Wheat and Wartime Agricultural Policy — Cash Income and Its Uses — Population Movements during the Forties — Conclusion.	
CHAPTER 4	
Irrigation in Western Canada	131
Introduction — Federal Participation — Corporate Urrigation Development — Alberta Railway and Irrigation Company — Canadian Pacific Railway — Canada Land and Irrigation Company — Present Status of Irrigation Projects — General Progress — Problems of Irrigation Development — Engineering — Colonization — Financial Problem.	
CHAPTER 5	
Yegal and Constitutional Aspects	159
A. Memorandum by John J. Connolly, Q.C. B. Memorandum by H. C. Goldenberg, Q.C.	
CHAPTER 6	
The South Saskatchewan River Project	179
Engineering Features — Selection of Site — Main Dam — Spillway — Outlet Works — Reservoir — Qu'Appelle — Valley — Dam — Hydrology — Water — Utilization — Pertinent — Data — Agronomic — Aspects — Prevailing Temperatures and Frost Free Senson — Growing Season — Hours of Sunshine — Soils — General Appraisal — Irrigation Factors and Water Supply (Memorandum by D. W. Hays) — Irrigation requirements — Use of Water on Large Projects — Variation of Factors — Proportionate Use of Water in Irrigation Season — Estimated Use of Water on South Saskatchewan Project — Power Requirements — Relation of Water Requirements to Water Supply — Maximum Power Plant Capacity — Cost of Pumping Water to Land — Proposed Enlargement of Reservoir — Memorandum on Red Deer River Project.	

## CHAPTER 7

An Estimate of Cost	227
CHAPTER 8	
Long-Run Economic and Social Benefits	235
Introduction — Problem of Identification of Benefits of Public Investment — Primary or Direct Economic Benefits — Assumptions Employed in Determination of Economic Returns — Estimates of Direct Returns to Irrigation — Direct Returns to Power — Direct Benefits to Municipal Water Supplies — Secondary or Indirect Benefits — Indirect Benefits Within Agriculture — Indirect Benefits Outside Agriculture — Indirect Benefits to Governments — Social Benefits — Appendix: Farm Budget.	
CHAPTER 9	
The Immediate Impact on the Economy	257
General Considerations — Note on Methods of Financing the Project — Prospective Annual Outlays — Annual Outlays Compared with Investment in Canada and in Prairie Region — Economic Resources Required by Project — Materials — Labour — Machinery and Equipment — Conclusion.	
PARTIT	
Appendix	275
# was a conference of the conf	
MAPS	
General Reference Map	e 40
Irrigable Areas facing page	<del>- 180</del>
Soil Areas facing pag	e 180