PROVINCE OF BRITISH COLUMBIA

REPORT

ON THE

ECONOMIC CONDITIONS IN CERTAIN IRRIGATION DISTRICTS IN THE PROVINCE

By

WILLIAM GEORGE SWAN

Appointed a Commissioner under
the "Public Inquiries Act"

PRINTED BY
AUTHORITY OF THE LEGISLATIVE ASSEMBLY.

VICTORIA, B.C.:
Printed by CHARLES F. BANFIELD, Printer to the King's Most Excellent Majesty.
1928.

CONTENTS.

	Page.
Introduction	5
Instructions	5
Capital Borrowings of Districts	6
Summary of Evidence—	
Vernon Irrigation District	6
South-east Kelowna Irrigation District	13
Scotty Creek Development District	15
Black Mountain Irrigation District	16
Glenmore Irrigation District	18
Westbank Irrigation District	19
Peachland Irrigation District	20
Naramata Irrigation District	21
West Summerland	21
Winfield	22
Grand Forks Irrigation District	22
Heffley Irrigation District	24
Victoria Sitting	25
Letter from Hon. T. D. Pattullo	29
Report on Condition of Works and Detail Recommendations	31
General Summary	33
Findings	35
Recommendations	37
Appendix—Victoria Sitting	40
Personnel present	40
Evidence—	
E. A. Cleveland	41
J. C. MacDonald	65
General Discussion	103

Report on the Economic Conditions in Certain Irrigation Districts in the Province.

To His Honour the Lieutenant-Governor
of the Province of British Columbia:

SIR,—Acting in accordance with Order in Council, approved the 26th day of July, 1927, I did in accordance with instructions contained therein proceed to the irrigation districts concerned, and commencing August 9th, 1927, did hold inquiries commencing in the City of Vernon, B.C. This inquiry was continued throughout the various irrigation districts of the Interior, and information was obtained relative to the subjects on which under the said Commission I was empowered to accept evidence, and report thereon.

The Order in Council is as follows:—

Whereas by an Order of the Administrator in Council, dated the 26th day of July, A.D. 1927, it is directed that a Commission under the provisions of the "Public Inquiries Act" be issued to you, William George Swan, appointing you to be a sole Commissioner to inquire into the economic conditions in the several areas under the irrigation projects in the Province for the construction or rehabilitation of which Provincial moneys have been loaned from the Conservation Fund, and for that purpose you are authorized to enter upon and inspect the said irrigation projects, and on review of the history of the said projects and of all the conditions relative thereto, and on consideration of the evidence produced, to report on the conditions which led up to the creation of the Conservation Fund, and to report whether in your judgment:—

(1.) The financial assistance rendered by the Province in 1918 and subsequent years was necessary and justifiable and whether the methods adopted were advisable:
(2.) The improvement district form of organization was suitable to the conditions obtaining where the districts have been constituted:
(3.) The funds advanced have been expended to good advantage in all cases, and, if not, where the responsibility lies:
(4.) The operations of the district have been properly conducted and the duties of the trustees conscientiously carried on:
(5.) The respective functions of the districts and the Department are properly related:
(6.) The conditions and cost of irrigation in these districts compares favourably or otherwise with those in the districts in the Province financed in other ways:
(7.) The cost of irrigation bears a reasonable relation to other costs of production and returns of various kinds of crops:
(8.) The increase in cost of irrigation since the systems under review were first constructed is attributable to the increase in labour and material costs during the same period:
(9.) The application of any of the bases of charges in operation under the reclamation services in the United States is feasible and advisable:
(10.) The adoption of a gradation of charges according to value of land or kind of crop is equitable or advisable:
(11.) The cost of irrigation has contributed to the lack of success in the fruit industry, and, if so, to what extent;

and to make such recommendations as you consider may better the conditions prevailing in the districts:

NOW KNOW YE that, under and by virtue of the powers contained in and conferred by the said recited Act, and of all and every powers and power vested in us in that behalf, and by and with the advice of Our Executive Council, We, reposing trust and confidence in your loyalty, integrity, and ability, do hereby confer upon you, the said William George Swan, the powers of making inquiry into all and every the matters aforesaid.

And We direct you, the said William George Swan, to report in writing the facts found by you to Our Lieutenant-Governor of Our said Province immediately or as soon as conveniently may be after you shall have concluded such inquiry, and the opinions which you may have formed in relation to the matters aforesaid as a result of such inquiry, with such recommendations as you may think proper.

By Command.

T. D. PATTULLO,
Acting Provincial Secretary.

In order to understand the financial position of the districts at this time, below is given a summary of information prepared by the Department and corrected to February 18th, 1927.

CAPITAL BORROWINGS FOR IRRIGATION SYSTEMS.

District.	Irrigable Acreage.	Amount borrowed from Conservation Fund.	Moneys borrowed from other Sources.	Capital Borrowings per Irrigable Acre.
Black Mountain Irrigation District	4,711	$483,215.36	.....	$103.00
Glenmore Irrigation District	2,402	214,440.30	.....	89.00
Naramata Irrigation District	1,032	94,432.68	.....	91.50
Peachland Irrigation District	738	39,562.68	.....	53.50
South-east Kelowna Irrigation District	4,600	342,235.90	.....	74.50
Vernon Irrigation District	11,821	811,666.56	.....	68.50
Westbank Irrigation District	715	35,080.00	.....	49.00
Grand Forks Irrigation District	2,733	267,192.67	.....	97.70
Oyama Irrigation District	383	.....	$35,000.00	91.40
Kaleden Irrigation District	543	2,194.65	31,500.00	63.40
Robson Irrigation District	261	20,000.00	4,000.00	92.00
Malcolm Horie	332	3,000.00	.....	9.03
Heffley	765	30,000.00	.....	39.20
Scotty Creek Development District	879	37,346.03	.....	42.40
Vinsulla Irrigation District	558	10,000.00	.....	17.90
Erickson W.U.C.	280	12,500.00	.....	44.60
Marble Canyon	.....	9,000.00	.....	.....
Penticton Municipality	2,576	25,000.00	342,000.00	142.25
Summerland Municipality	3,784	.....	402,500.00	106.00
		$2,445,172.18		

From this summary it will be seen at once the position of each of the districts with respect to the Conservation Fund.

In dealing with this subject it is my intention to make a summary of the evidence which was given before me in the various districts and to comment thereon with reference to the affairs of each district. I propose to follow with my comments on the various clauses set out in the Commission and finally to set forth briefly the conditions as I found them, and my recommendations.

VERNON IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

There was placed before me a brief review of the history which preceded the formation of the Vernon Irrigation District. However, inasmuch as this matter has been dealt with very fully by the D. A. McDonald Inquiry of 1919 and 1920, following which the Vernon Irrigation District was organized on the advice of this Commission, I do not propose to enlarge on this phase of the subject.

The following petition was submitted by the trustees of the district, the principal clauses of the request of the British Columbia Government being as follows:—

(*a.*) The cancellation of all interest to date—namely, $205,654.88:

(*b.*) The cancellation of all interest accruable upon past advances for permanent structures on $407,184:

(*c.*) The extension of the repayment periods upon the permanent structures from thirty to sixty years.

This submission was made by Colonel Edgett, acting for the trustees of the Vernon Irrigation District, who made repeated comments, such as "We cannot retire the principal and pay interest as well." Or "We feel we cannot pay it." Colonel Edgett set forth the difficulties of the past five years with which the growers had to contend in the irrigation district. He showed that more than fifty properties have been abandoned even under moratorium conditions, this number representing about 15 per cent. of the total taxpayers of the district. In many cases

the abandoned lands have been taken up by Southern Europeans and Orientals, and the witness in no uncertain terms set forth his denouncement of any policy which would permit delinquent or reverted lands being taken over by a class of settler who by a lower standard of living is able to compete unfairly with the existing settlers. To a question asking how the district could expect to receive further moneys from the Conservation Fund for additional improvements which are now contemplated and will shortly become necessary for future water-supply of the district, and at the same time propose cancellation of existing debts, Colonel Edgett did not care to make comment, but believed the request for relief was reasonable. He set forth in his evidence the fact that the district would require additional funds to increase its storage-water supply, the expenditure to be in the neighbourhood of $90,000.

Following the evidence of Colonel Edgett on behalf of the trustees of the district, information as to the nature of the operations over the various classes of agriculture in the district was given by some twelve of the growers.

D. W. Spice, who operates a mixed-farming proposition of some 50 acres, of which 20 acres are in young orchard, stated that he could make a success of his operation with irrigation-water at $5 per acre.

R. Clark, who operates 24 acres of truck and hay land and has been a farmer all his life and holds land under the Soldiers' Settlement Board, has had to have relief from the Board in order to remain on his land.

Several other users made complaints of the present rates for water, but set out forcibly the fact the price paid for water to the district was less of a handicap to their operations than was the fact that there was almost every year a shortage of water for the proper cultivation of orchard and mixed-farming lands. The outside prices which these users could afford to pay for water were set in evidence at $15 per acre for orchard-bearing lands and $5 per acre for mixed-farming lands. It may be noted that there is no classification in the district at the present time which provides that the mixed-farming lands shall pay any lesser rate than those in full-bearing orchards. This policy is generally in effect throughout the irrigation districts, water being sold and delivered to the lands on the basis of the cost of the service and not on a consideration of what the land will produce.

Stephen Freeman, who operates a ranch on the White Valley Road and combines in his operations dry-farming, mixed farming under irrigation, and orchard operations, set forth the change in conditions over various years from the time of formation of the district in 1920 to date. He showed that immediately after the formation of the district fruit products brought a very high price in comparison with to-day's prices, averaging in some cases $2 per box, whereas of recent years prices had dropped down below 50 cents, and in some cases had actually been put through the packing-houses at a loss to the grower. He freely admitted that with sufficient water and prices which would give the grower $1 net per box for his fruit there would be no difficulty in carrying a $15 per acre charge on orchard lands, or even higher. Like many others, he set the maximum price for irrigation-water for mixed-farming lands at $5 per acre.

Thomas Richmond, one of the oldest farmers of the district, set forth that the reason for difficulty in carrying irrigation charges lies in the fact that the prices received for the product from the land even with an increased output have not kept pace with the costs of irrigation and other living costs. He agrees that the scale of living has been materially raised and that this adds additional difficulties to the situation. He paid strong tribute to the former manager of the White Valley Irrigation Company, Mr. E. B. Knight, setting forth the tireless efforts of Mr. Knight to keep in operation an irrigation system for many years at the point of collapse, with the most limited of means. Mr. Richmond, who has been operating irrigated lands for thirty-five years, suggests that the lands should be classified according to their productive value and that they should not be assessed with water rates which they are unable to bear. He advocates a higher rate for the better class of land and a lower rate for the mixed-farming land. Naturally such a recommendation does not find particular favour with those owners and operators of orchard lands.

Doctor W. A. L. Jackson submits that supply of irrigation-water is not a business venture and that it cannot be expected to pay. He suggests that the Provincial Government should recognize this situation and should give a form of relief accordingly.

Colonel C. E. Edgett returned to the stand to give evidence on his own operation and pointed out the difference in irrigation rates from the time of the purchase of his property to the present

date. He is a holder in the Coldstream District and as such was in a favourable position in the early days of receiving a very low rate for irrigation-water under his contract with the Coldstream Estate. Colonel Edgett has kept a very accurate record of returns from his 10 acres of orchard, and over a period of seven years averages out the cost of producing his fruit at 67 cents per box. This allows interest on the investment. It will be noted later that the Department of Agriculture's allowance for the production of fruit is 80 cents, but this is based on a higher interest rate and a higher valuation to the investment. Colonel Edgett also submitted very interesting evidence on the question of packing charges, which he appeared to have reduced to 32 cents per box. This is about 9 cents lower than the average packing-house charge in the valley. In spite, however, of his reasonable cost of operation, which includes a very large amount of his own time, Colonel Edgett finds it necessary to go elsewhere to build up his capital reserve and suggests that he will in ten years return to live on his ranch. He makes a very strong plea for the retention of the present settlers on their property and strongly resents the intrusion of Oriental and cheap Southern European farm-labourers to this district. He submits that this cheap labour will be a factor in lowering the crop prices.

John Kidston, a prominent fruit-grower of this district, restated briefly his contentions as set forth at the D. A. McDonald Inquiry. His contentions may be briefly stated on page 100 of the transcript, reading as follows:—

"The Government undertook the responsibility for making that investigation and submitted statements through its engineers which showed definitely what the maximum annual charges would be after the whole system had been put in good shape and provision made for an ample supply of water for the whole district. On the faith of these statements we incorporated. It has since transpired:—

"(1.) That the charges incurred to date greatly exceed the figures put up by the Government:

"(2.) That the system has never been put in the good shape contemplated:

"(3.) That there is not an ample supply of water:

"(4.) That there will be a still further excess in costs when the construction and reconstruction necessary to fulfil the governmental conditions have been completed.

"We contend that the Government should assume responsibility for all annual charges in excess of the specific amounts which they assured us would be our maximum annual liability and on the faith of which assurance the district was formed."

He maintains that at the time of formation of the district the Government of the day had expressed its disapproval of the low rates existing in irrigation districts and had shown a strong inclination to use their powers and other means to deprive the users of water under the Coldstream system of their rights—namely, their low rates of from 30 cents to $2.50 per acre per annum. He emphasizes very strongly the suggestion at the time of formation made before the formation committee and the users of the locality, acquiesced in by the Government representative, Mr. Davis, that the total cost for water would not exceed $5 or $6 per acre per annum. Mr. Kidston finds fault with the payment of the obligations to the bondholders even though no interest was paid in settlement. He does not suggest how the holdings could have been taken over without clearing the bonded indebtedness. He maintains that the district in its formation employed the Government Water Rights Branch as their consulting authority, and that in consequence neither the trustees nor the water-users gave any particular thought to checking the rates; this, in spite of the fact that the trustees or their managers were in the best position undoubtedly to know what the costs of upkeep, and therefore the tolls should be. Mr. Kidston agrees that Major MacDonald, the construction engineer under the Water Rights Branch, had at the McDonald Inquiry placed his figures for acquisition and construction costs at $600,000, whereas the actual borrowings to date have exceeded this amount by not more than 20 per cent. However, as set forth by him, certain construction has still to be carried out to complete the system. Mr. Kidston also claimed that certain funds were incompetently expended during the period immediately prior to the formation of the district and during a further period thereafter when the advice of the Department was being requested and accepted. He insists that the holders of agreements with the former Coldstream Estate were in such position that they could have succeeded in maintaining their more favourable rates as mentioned. The McDonald Inquiry does not agree on this point, but in its findings states:—

"It would appear that Mr. Kidston said all that could be said in support of the users' contention, but we are not convinced, owing to want of privity of contract between the user and the

company, that there is any direct obligation of the company to a user which could be enforced at the suit of a user."

He does not agree either with the findings of this former Commission, which further in connection as to the condition of the system finds as follows:—

"Your Commissioners having considered all the evidence adduced and being convinced that the White Valley Company is financially unable to carry on its operations and that the Coldstream Company has not a supply of water available, sufficient for the needs of the users under its system, are of the opinion that a development district ought to be formed and the works of both companies taken over by such district."

Mr. Kidston maintains that the formation of the district was not in the best interests of the users. He does not deny that the orchard lands can carry the present charge, but believes that in view of the low tentative figures at the time of formation of the district the Government should carry sufficient of the load to maintain these figures.

F. D. Stevenson, who grows fruit, carries on some dairying, and raises a certain amount of vegetables, believes that the main difficulty lies in overproduction. He states he finds no money in dairying nor has he succeeded apparently in making any money out of his operation. He makes a somewhat pertinent remark when he states:—

"At least I was better off to go and work for the Chinamen in the spring-time and get what I could get out of them than I would be if I stayed at home and grew vegetables myself."

He further stated he did not always get paid by the Chinamen, since occasionally they pulled out from leased lands when the prospects for a final return did not look too well.

Colonel C. E. Edgett again appeared before the inquiry and asked leave to submit a revised request from the trustees for relief as follows:—

(*a.*) Cancellation of all interest to date:

(*b.*) Remission of interest on past and prospective loans for permanent structures for a period of ten years:

(*c.*) Postponement of demand for repayment of principal on permanent structures until the industry is on its feet.

F. E. R. Wollaston, manager of the Coldstream Ranch, briefly outlined the history of the land and irrigation operations of the Coldstream Company. Mr. Wollaston requested consideration that the district should be placed on a basis as nearly as possible to that existing in the operations of the Federal Reclamation Service of the United States. He believes the Province should function in the same way as the Federal authorities do in the Republic to the South. He instances the Oliver project as one very nearly resembling administration under the United States Reclamation Service and believes that by comparison with Oliver the other districts are suffering a hardship. He maintains that the users in his district are carrying a portion of the Oliver load. With reference to the willingness of the Province to assist by remitting the carrying charges on reverted lands, he makes the following statement:—

"Though the Government is unwilling to pay part of the costs as a means of keeping the settler on the land, it is apparently willing to pay the entire share of such lands as may be abandoned by their owners and have reverted to desert. This is provided for by the 1925 amendments to the 'Water Act.'"

He petitions strongly for keeping the old settlers on the land wherever possible. He made reference to the recommendations of the Fact Finders' Committee appointed by the United States Reclamation Service, wherein it is proposed to levy charges in accordance with the ability of the lands to produce—namely, based on the gross annual returns from the land. He sets out very strongly the inability of those lands other than orchard lands to pay the present water rates. He instanced the difficulties as to varieties of fruit, setting forth that the public are fickle in their choice of fruit from time to time and that a favourite variety of to-day may be discarded a year hence. He does agree, however, that they have learned from experience those varieties which are best suited to the climate and have ability to withstand winter conditions. He shows, however, the difficulty of replanting to better varieties, since capital for this expense is available in so very few cases. He packs his own fruit-crop at about the same price as the Vernon Fruit Union. It was brought out in his evidence that the packing costs had been reduced during the past four years by the Fruit Union to the *extent of 15 cents per box.* Inasmuch as the Vernon District pioneered fruit-culture in the Interior, he believes that they should have special consideration, since the experimentation with varieties has been very expensive for them. Mr. Wollaston suggests that it would be a fair and reasonable step on the part of the Government

to take over the storage-works and main ditches of the irrigation systems, basing his suggestion on the maintenance by the Government of the main roads through the country. He suggests this would make a much more workable organization, since it would relieve the districts of unnecessary red tape, although when pressed for an explanation of the red tape involved in the district's operations he did not clear up this point. He believed with many others that the growers should receive $1 net from the packing plant for their fruit in order to make the raising of fruit reasonably profitable and attractive. With Colonel Edgett he finds that approximately 65 cents is the actual cost on his orchards for raising fruit. His prices for the past four years have been very much less than this amount.

Major M. V. McGuire, who operates a considerable tract of orchard lands under part of the old Coldstream system, places the price of production at 66½ cents per box for fruit as compared with the Department of Agriculture's average of 80 cents. He submitted the returns for his operations for several years and during the past four years his prices were very considerably below the cost of production. He states that his cost of irrigation varies from 7 per cent. to over 20 per cent. of the value of the crop during the variable prices of the past four years. His packing costs were approximately the same as those of the Union—namely, 40½ cents.

J. L. Webster appeared and pressed for a separation of the old Coldstream area from the present district. He submits that they could carry on much more cheaply and set forth in some detail the manner in which this could be accomplished.

J. G. Robison, who operates orchard land on what is known as the B.X. area, states: "We could afford to pay more for water to-day if we were assured of sufficient water." He agrees that under the operations of the district the water service is improving each year. He sets his price for producing fruit at 60 cents per box and adds 50 cents for packing and selling charges, making his minimum price at the packing plant $1.10 per box. This does not include any profit.

R. Woods, a fruit-grower on the B.X., sets forth the following detail cost per box of fruit: Picking, 5 cents; packing, 12 cents; crates, 9 cents; crate material, 16 cents; total, 42 cents. This total is incomplete and will be referred to elsewhere.

Major P. J. Locke appeared on behalf of the Springfield Ranch at Lavington. He operates 219 acres in mixed farming and a small amount of orchard. He appears to have been making every endeavour to make a success out of his operation, but has as yet been unable to balance his ledger for any one year's operation. He is, however, going more into dairying and the results appear to be more promising. Witness states he finds the water rate out of proportion to returns from his land and much the heaviest charge against his land. He has secured records of dairying operations in the Lower Fraser Valley and believes that it will never be possible to compete on anything like the same terms with land which is so much more favourably situated. He points out that the Vernon Irrigation District, while usually referred to as a fruit-growing one, is in reality in fruit to the extent of less than 40 per cent.

George Heggie, who operates the Belgian Orchards Syndicate and the L. & A. Company's properties, submitted returns from his orchard operations for the years from 1921 to 1926. He shows a varying loss in operation in all these years, although during the years 1919 and 1920 with better prices he was able to make a profit. He finds it very difficult to answer the question as to how much he can afford to pay for water and shows that this is so entirely dependent on the prices of their fruit that the present rate might be very equitable with an improved price for the fruit products. He set forth various sales operations of the L. & A. Company and it is apparent that his company has done its utmost to make the sales of their lands as light as possible for the purchasers. They have in many instances greatly reduced the original sales price and have for several years at a time rebated interest charges on unpaid balances. He claims that $4 per acre is the outside figure which ordinary hay and wheat lands can stand under the irrigation system as an annual per acre charge.

Colonel W. M. Armstrong laid before the Commission the question of seepage in certain areas and the damage which this is causing to full-bearing orchards. This condition is not an unknown one in irrigation projects.

Price Ellison, former Minister of Finance, made a very strong plea for the district and industry generally and stressed the need for a greater supply of water. He believes that the Government has strong moral obligations to the settler, both due to the fact that it permitted and encouraged settlement through the operations of private land companies and did on its own account advertise Central British Columbia irrigated lands abroad, more particularly in the United Kingdom.

Maurice Middleton, District Horticulturist, agreed that the Vernon District was in a somewhat difficult position due to poor varieties. He believes that at least *25 per cent.* of the present varieties will have to be taken out and replaced. He is optimistic of the possibilities for returns as to quantities and prices for proper varieties. He sets forth these varieties in the following order of merit: McIntosh, Jonathan, Delicious, Yellow Newtown, Rome Beauty, Stayman Winesap, Ordinary Winesap, Wealthy, Transparent, and includes the Duchess as the most favourable early variety. Mr. Middleton stressed the need of cover-crop, but appreciates the difficulty of properly maintaining the same without an ample supply of water. He sets forth its need in order to maintain the humus in the soil and to act as a blanket for the roots against winter frost.

E. J. Chambers, the president and general manager of the Associated Growers of British Columbia, presented the statement for the operations of his association for the 1926 season. He finds the Prairie Provinces afford his primary market, but believes that considerable development for sales of their output can be developed in the export market. He does not look upon the Lower Mainland as being a large user of Interior fruits, but one which should be developed.

F. G. DeWolfe, general manager and engineer for the Vernon Irrigation District, appeared and set forth in a businesslike fashion operation detail of the district. He submitted a programme of maintenance, replacements, and extensions for the years 1927 to 1932. He summarizes the replacement requirements as follows:—

1928	$30,900.00
1929	17,300.00
1930	25,400.00
1931	31,500.00
1932	42,600.00
Total	$147,700.00

He estimates that $90,000 will be required for further storage-works in order to develop additional storage of 4,500 acre-feet. In addition to this he figures that over a period of five years $20,000 will be required for lining of ditches against seepage. He instances the very low run-off of water during the past three years, the reservoirs at no time being filled to spillway-level. He believes that the lands in the district require at least 2 acre-feet of irrigation-water. This includes both flood and storage water. He submitted figures showing that the operation costs of the district will stand permanently at from twenty to tweny-five thousand dollars per annum. He paid tribute to the former good work of Mr. E. B. Knight, whom he stated had efficiently and conscientiously maintained the system for many years.

Doctor K. C. McDonald, who was the member of the Provincial Legislature for North Okanagan at the time of the formation of the Vernon Irrigation District, appeared before the Commission and set forth very fully his negotiations on behalf of the district at the time of its formation. He states briefly:—

"The situation here at that time was such that I could see no other hope of continuation of water-supply unless the Government were prepared to grant the necessary advance, and when that legislation was created it was done for the prosperity of the district."

He makes reference to the advances of moneys under the Conservation Fund for the reconstruction of Aberdeen Lake Dam in 1923, setting forth the Department's objection to the figures submitted by the district, but notes the Department's final acquiescence to the amount requested, and in summing up makes this remark:—

"I think, if there was anything needed to satisfy this Commission that the responsibility for all expenditures was solely on the shoulders of the trustees, that that situation amply justifies it."

In reply to a question: "Do you think if the holders of agreements with the Coldstream Company had known they were going to pay $10 and $12 for their water they would still have joined?" He replied: "I doubt very much they would, Mr. Commissioner, doubt very much; but I do think this: that what impelled them to come in was the necessity for future supply of water, the necessity for continuity of service, and sufficiency of water."

He believed that there had been mistakes made both by the Government and by the Formation Committee in preparing figures for submission to the users at the time of organization of

the district, but submitted that all negotiations had been carried on in good faith and primarily in the interests of the users. He contended that if they had received value for the money spent the users should not object to paying the carrying costs. During Dr. McDonald's evidence the question of operating cost was touched and extravagances by the trustees was suggested; thereupon the secretary, Mr. Hamilton Lang, submitted the following operation figures:—

1922	$39,756.73	
1923	33,591.48	
1924	28,950.68	
1925	32,715.03	
1926	23,881.61	
1927	25,000.00	(estimated)

F. G. DeWolfe, recalled, submitted the following remarks on the question of forest-growth as affecting irrigation run-off. He advised that he had discussed the matter with District Forester Melrose. His report reads as follows, page 342:—

"From observation made over the past four winters the following inspection has been obtained:—

"(1.) That approximately only 50 per cent. of the snowfall reaches the ground, the balance being held up on the crowns of the trees:

"(2.) The snow that is held up on the branches of the trees mostly goes off in evaporation:

"(3.) The snow that does reach the ground does not melt and run off quickly on account of the shade protection of the dense growth:

"(4.) The dense forest-cover does not allow of frost-penetration into the ground to the same extent as in open country.

"Forest-cover conditions that would be ideal to a quick run-off into storage-reservoirs obtain in open glade country such as is found on the high plateaus in the Interior of British Columbia.

"These conditions would result:—

"(1.) In all the snowfall reaching the ground:

"(2.) Frost-penetration of the ground, which prevents the sub-surface taking up much of the run-off:

"(3.) The light forest-growth would protect the snow sufficiently from drifting and keep the warm or Chinook winds of the winter months from the snow.

"The results of denuding this forest-cover to these conditions are indefinite, but it is estimated that the run-off would be increased from 25 to 40 per cent."

When questioned on the point of doubtful or incompetent expenditure for the works now controlled by the district, Mr. DeWolfe believed that about $50,000 would be the outside figure, of which amount he considers $35,000 had been expended under the district's control in the years 1922 and 1923.

T. R. French, who operates some 500 acres on the White Valley Road, outlined the difficulties of carrying on a mixed-farming operation under the present water rates. He submitted it was impossible to carry a $15 charge on mixed-farming lands and succeed.

Hamilton Lang, secretary to the Vernon Irrigation District, set forth briefly the financial affairs of the district and the method of land classification for the payment of irrigation charges. He shows that approximately fifty parcels of land have reverted to the district since its inception, or about 15 per cent. of the whole. In addition, 10 per cent. more of the lands are apt to revert and will in his opinion be sold for taxes unless some relief is forthcoming.

A. T. Howe, who operates in a large way on the shores of Long Lake, made a very strong appeal to retain the present settlers on the land. He states: "We really have in this dry belt a very fine class of settlers, people who moved into here the same as myself with money—money we had made in other parts of Canada or in other countries. These people work unsparingly; are great home-lovers and will stay with their lands just as long as there is any daylight for the future ahead of them." He believes that the Oliver District is being subsidized and that this should form sufficient reason for relief to the balance of the irrigation districts. He calls for a working to the common good and believes that British Columbia as a whole would not in any way object to coming to the assistance of the irrigation districts if their problem is properly presented.

SOUTH-EAST KELOWNA IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

H. B. Everard, secretary for the district, began the evidence of the inquiry in this district by submitting a statement on behalf of his trustees. He set forth the original estimate of water cost to the district as from $12 to $15 per acre per annum, and pointed out the 1927 rates, with the lifting of the moratorium, would bring the total cost of water service to $23.70 per acre, this amount including a domestic tax of $5.20 which should be deducted. In their petition the trustees ask that the repayment for permanent works should be extended from thirty to sixty years. They further point to the United States Reclamation Service and the Oliver project as a basis for charges and submit that they should be allowed relief to bring them into line with the rates in effect in the latter project.

Captain C. H. Taylor testified that he had been under very heavy tax penalties and strongly urged that the amount of tax penalties should be substantially decreased. He agreed that the question of tax penalties should not affect the industry were it in a healthy condition, but he believed that under the present conditions such penalties are a very serious handicap. Discussion on this point ended by information from the district secretary to the effect that this question was being reviewed before the convention of the municipalities of British Columbia at Nanaimo later in the autumn.

R. M. Grogan, fruit-grower of this district, complained that the amount of water available is insufficient to grow cover-crop, which in his opinion is essential. He set forth the prices for the product from his trees from the year 1919 to and inclusive of 1926, which showed a gradual reduction from $1.63 at the packing-house in 1920 to 39¾ cents in 1926. Mr. Grogan is very much against the idea of clean cultivation, and stated that he would not dream of it unless water-shortage made it necessary. He places his cash outlay per box of fruit at 56½ cents, whereas his average returns for this period were only 48⅙ cents. He believes that the rates in effect in the district are reasonable, provided there is an ample supply of water and a reasonable price for the product. By his records of bringing his orchard into full bearing, he obtains a resultant cost of aproximately $1,000 per acre. This is based on an outlay of $100 per annum per acre from the time of planting until the orchard is in full bearing. *He strongly urges that the duty should be taken off all spraying materials. This duty is now 20 per cent.*

P. Casorso, who operates the Home Ranch of several hundred acres in the interests of his father, gave evidence as to the returns from this land. He has apparently experimented with almost every known class of mixed farming with the possible exception of dairying, and does not appear able to obtain much over $30 per acre gross from his land. He is now experimenting with tobacco and hopes to get better results. His results to date would so indicate, since he has netted $125 per acre with this experiment, although he maintains the growing has taken almost an equivalent amount out of the soil and must be replaced by fertilizer. He places the maximum rate for water for mixed-farming lands at $5 and believes that part of the difference should be borne by the orchard lands.

C. N. Slagg, chief of the Tobacco Division of the Dominion Department of Agriculture, gave some very interesting information on the growth and experiments with tobacco as carried on at the Dominion Experimental Farm at Summerland and also on various private properties which they have under review. He believes that White Burley can be grown successfully in the Southern Okanagan area and that this variety will not be unduly hard on the fertility of the soil. He is satisfied that this product can be grown with less water than is required for general irrigation and believes that a normal crop on suitable lands in the district would run from 1,500 to 1,800 lb. per acre. According to their experiment he finds that the culture of White Burley is no more exacting on the soil than a crop of corn, tomatoes, or potatoes. He places the cost of fertilizer, whether it be through preparation of cover-crop, manure, or chemicals, at less than $50 per acre. According to Mr. Slagg, the demand last year for Canadian-raised tobacco in the United Kingdom market was very considerable. He does not believe it advisable to attempt to compete in the domestic market with the Eastern-grown product, since there would be a differential of from 3 to 4 cents in favour of the latter if delivered to the tobacco-manufacturing centre of Montreal. As to the quality of the tobacco, he states: "I feel that the Burley tobacco grown in the Okanagan is of very good quality."

Colonel G. W. G. Lindsay gave evidence on the operation of a very excellent orchard having an area of some 38 acres in full bearing. This orchard is located on the upper bench, but on comparatively level land. Colonel Lindsay has been clean-cultivating for many years and has apparently succeeded very well in the matter of output and quality of his fruit. He does, however, keep up his soil by the use of a certain amount of fertilizer each year. Due to the flat nature of his holding there was not the same tendency to wash out the humus in irrigating as takes place on some of the hillside lands. He believes the irrigation rates are entirely reasonable, but was very insistent in demanding a greater amount of water. The average from this orchard is probably somewhat in excess of 400 boxes per acre. He places the cost of his fruit at 70 cents per box exclusive of interest on what he termed as capital borrowings; apparently interest on a portion of the investment is included in the amount given. He complains that a certain portion of his land cannot be developed because of water-shortage and that in consequence the grading of this land and its rate should be lowered. He does not, however, find any fault with the fact, as he secures at least a portion of the water available for the undeveloped land and makes use of it in the operation of his orchard.

T. L. Gillespie, a fruit-grower on the K.L.O. bench, sums up his opinion of the present conditions by the following remarks:—

"This fruit business has got to a state where the public has to pay a better price and the Government has to help on the water rates in a big way so as to reduce the cost of it if it is to continue."

He finds no fault with existing rates provided he can obtain $1 net at the packing-house for his fruit. He makes reference to an adequate supply of water which he states can be obtained by diversion from the Kettle River at a cost of $200,000, but there does not appear to be any accurate data on this project, and, furthermore, there is a great deal of uncertainty as to its practicability. He points out that ten years ago the Government Department of Agriculture recommended certain varieties of trees, the product of which is not now saleable at a profit, and in consequence these varieties have to be removed and the orchards replanted.

Mr. Gillespie strongly commends the Government for the excellent piece of legislation which he considers the "Water Act," as now revised, constitutes, and considers that the users have been treated very fairly indeed at the hands of the Government.

Captain R. T. Graham, who operates a 10-acre orchard under the Soldier Settlement Board, brought out the question of damage to trees by the inroads of the codling-moth. He states:—

"I think that when the codling-moth gets into the district it should be cared for by the whole district and not by the particular grower who happens to be hit by it. I think it should be on the same basis as tubercular cattle. They kill your cattle, but you are reimbursed."

C. R. Reid, the owner of 44 acres of full-bearing orchard on the bench land, gave evidence on his operations. He appears to have an excellent orchard and according to the record of returns from his operations the industry is now on the up-grade. As one of the trustees he was questioned by the meeting on the cost of administration by the district. It was disclosed that the trustees were paid originally $400 per annum for their services, but this was later reduced to $5 per meeting. The number of trustees is five and it was generally conceded that this was a minimum for reasonable and convenient administration.

H. C. S. Collett, of the South Kelowna Land Company, gave evidence as to the operations of his company. Of 4,600 acres of irrigable lands in the district, Mr. Collett's company originally owned 1,400, and of this acreage they have deemed it economy to allow 900 acres to revert to the district. He believes that the rates are reasonable under ordinary conditions and sets out that the trouble of the present situation is due to a lack of sufficient water for irrigation and poor marketing.

W. Marshall, the owner of 40 acres of bearing orchard, stressed the need for more water. He had experimented with clean cultivation, but found that manure was costing him annually in the neighbourhood of $100 per acre. He believes that the only solution is in cover-crop, but that this can only be carried out with the assurance of ample water.

R. M. Hart, the owner of some 30 acres of excellent orchard land, submitted a statement showing that his expenses for the past six years' period were $5,000 in excess of his total revenue. According to his records over the six years' period the cost of irrigation-water averaged 5 cents per box. He set forth the fact that cover-crop was being introduced in many new orchards and

stressed the point that a great deal of additional water was required during the years of developing cover-crop, and on this account more water would be needed in the immediate future than ever before, and more than would be necessary in the future.

At a final meeting with the trustees of the district the question of classification of lands according to their ability to pay was fully discussed and the trustees believed that some reclassification on this basis should be given careful consideration by the Government and the districts.

SCOTTY CREEK DEVELOPMENT DISTRICT.

SUMMARY OF EVIDENCE.

This district was formed under the "Dyking and Drainage Act" and its organization, therefore, is somewhat different to the other irrigation districts.

Thomas Bulman, the owner of 240 acres in the district, submitted at considerable length the situation in which he found himself due to the loss of certain rights on Mill Creek, and further due to the issuance of the final licence for his land. He states in the matter of borrowings from the Conservation Fund:—

"This was granted, and then, without reference to myself as owner of the land, and ignoring the understanding we farmers had among ourselves, the Water Board had the land actually under cultivation surveyed and issued licences on the storage system according to this acreage."

This, Mr. Bulman claims, has placed a considerable portion of his land now in the geographical district of Scotty Creek without water and dependent as to results in the future on dry-farming operations. He states that his average net return for nine years prior to issuance of final licence was $4,000 per annum, and that during the same period he paid $90,000 to hired help. In discussing the question of Mill Creek, Mr. Bulman made reference to the consent of the users in the Scotty Creek Development District foregoing certain rights in the interest of Glenmore Irrigation District, and, inasmuch as they received no return for foregoing such rights, believed that they should be compensated by a greater consideration in issuing the final licences. In commenting on the situation as it affects Mr. Bulman, Mr. Hereron, a trustee for the district, stated: "It is a valuable property and he has lost his rights." Mr. Hereron states in addition that he considers that the Glenmore people are now getting water to which Mr. Bulman is entitled, and he further states that it appears to him the situation is not dealt with in a fair and equitable manner. It is set out, however, in the evidence that the division of the water was made on behalf of the interested parties by Mr. Groves, consulting engineer on irrigation-work at Kelowna. Considerable stress was laid on the shortage of water and the question of additional storage was referred to. However, the proposal would provide for only 213 acre-feet of storage and this at a cost disproportionate to the results. A comparison was made with the situation in Glenmore District, in which it was pointed out that, although water was not being used on certain of the Glenmore District lands, final licences had not been issued and there were no cancellations of rights.

Mr. Hereron, chairman of the trustees for the district, gave evidence as to the operation of their system and referred to the cost of water. Under the moratorium the water would appear to cost about $3.40 per acre per annum, and with the moratorium lifted would approximate $6.80. He complained that the Government had fixed the rate for farm-labour at $3 per day and board, and, while he did not begrudge the rate to the men, submitted that their operations would not stand this rate. His complaint cannot be confirmed.

Henry Sands, who operates 43 acres of orchard and truck land, complains bitterly as to the amount of water available and states he has no objection to paying a considerably higher rate if ample water is available. He states: "When I first came to the country all the farmers had a good supply of water, but it is going dry and getting worse every year." In his opinion the entire dry belt is each year becoming drier through a general change in climatic conditions. It was stated during his evidence that the loss due to seepage of the creeks which form the main source of supply amounted to 50 per cent., from which it would appear that the remedying of this defect would solve the question of water-shortage.

BLACK MOUNTAIN IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

Inasmuch as the trustees had prepared a memorandum for presentation and desired to have this discussed over a round-table conference the evidence of the individual owners was taken.

D. E. Oliver, who operates 7½ acres of orchard lands in addition to an adjoining acre of mixed farming, gave evidence on the question of varieties. His orchard has been planted almost entirely to Jonathans, and of late years the price has been very inadequate. He submits that, inasmuch as the Government's advice had to do with this planting, he should receive assistance from this source until he can replant in more favourable varieties, or, in other words, requests that the Government should subsidize the industry generally until better varieties can be brought to the full-bearing stage. He submits that the supply of water is very inadequate for his purpose.

A. E. A. Harrison, who has farmed in this district for twenty years, set forth his experience that due to lack of sufficient water some 12 acres of orchard lands was now practically useless, having been dried out and frozen out. He states: "This is one of the fairest Provinces of Canada to live in and the darnedest to make a living in." He asks: "What prospects have our children on a farm under these conditions? How do you expect them to stay on the land?" He further advises that he would sell out immediately if it were possible to make a sale, but because of the high water rates his land has no sale value. He came to the Province in 1908 with $12,000 and is now in a position where his property is mortgaged and his funds are gone.

Captain C. R. Bull, a trustee of the district, is the owner of 29 acres of excellent orchard land on what is known as the Belgo Estate. He is getting a substantial return from his orchard, but makes strong reference to the shortage of water. He states that the cost of irrigation for an ample supply of water on first-class land is not out of proportion to other costs which they have to meet in producing fruit. He believes that the water-shortage in his district has been largely solved by recent construction-works which make available to their storage the waters of Mugford and Hilda Creeks. He is strongly of the opinion that none of the lands which are not now receiving water should again be admitted to the irrigation classification. He believes that the poorer class of lands can succeed under an irrigation charge of from $5 to $6 an acre, but that any amount in excess of this will eventually cause the lands to revert. He contends strongly for a classification of lands according to their ability to pay the irrigation charges. In speaking of the history of the formation and development of the district, he states: "I consider myself that the Department have done their job very conscientiously and very thoroughly since they came into the district. There are bound to be mistakes crop up just as much in a district, we will say, as in a Government, and they seem to me to have done all they could; the only thing is our rates are higher, as you know, than were first mentioned." He requests that serious consideration be given to an interest rate of 4½ per cent. instead of the prevailing rate of 6 per cent. on the Conservation Fund borrowings.

A. C. Loosemore, the owner of 17 acres of full-bearing orchard on the Rutland bench, gave evidence that he believed poorer lands must have immediate relief. He also points out that at the same time there should be some relief for the better class of lands. In commenting on the history of the district, he states: "We were up against it. The old water companies were bankrupt; systems were run down and they had no money to renew them. The Government was the only place we could get the money from, and they had to get these municipalities formed." He suggests the Government were interested in having the municipalities formed, and in this connection boosted the formation of same, but agreed that there was no other method available whereby moneys could be advanced except through some such formation as now in effect.

Felix Casorso, who operates the Black Mountain Cattle Company, applies for relief against the present prices. He states that from his experience he believes that mixed-farming lands, of which he is the owner, can pay a rate of $8 per acre per annum for water service.

Several owners of lands within the district complained against the cost of irrigation charges, whereas at the same time they are faced with a serious difficulty of draining their lands, which lie more or less at creek-level within the district. Some areas of these lands have not only to pay the irrigation charge, but at certain periods are almost inundated by seepage-water, the exact origin of which is difficult to determine. It would appear that these lands were operated

under a drainage system of their own, but for administration purposes were taken into the district. They submit that their problem should have had special consideration both of the Government and the district. They state that in some cases no irrigation-water whatever is needed for their lands.

George Schofield, the owner of 11 acres of fruit lands on the Rutland flats, sets forth the difficulties under which he has operated—namely, a porous soil with insufficient water to keep his trees in good condition, and in an area somewhat subject to frost. He finds fault with the Government Department not having advised himself and others of the situation which was likely to occur and which now prevails. He set forth the fact that without proper water to take his trees into the winter in a healthy condition his orchard could not hope to come through in good condition. He has lost many trees in consequence. Some discussion developed during Mr. Schofield's evidence as to the amount of reverted lands within the district; this was found to be between 400 and 500 acres, or approximately 10 per cent. of the whole.

Mrs. A. Wilson, the owner of 50 acres within the district, complains that she never had any desire to have her lands included in the district, and certainly not under the irrigable classification. She asks: "Why should I have to pay $15 an acre for water when I didn't ask for water?" She has found it necessary to abandon her property for a portion of the year in order to make a livelihood. She states, in reference to a suggestion that she should sell her lands, that it is practically impossible to do so, and that it is more than a hardship to hang on.

A. McMurray, a trustee of the district, made a comparison of previous rates which were charged to the users with those now in effect. He set forth that from the figures of the Government representatives at the time of formation of the district the tax, which covered all carrying charges, was estimated at $8.30 per acre and the tolls at $2. It would appear that the amount of taxes was fairly accurate, but that the tolls were considerably too low. It was suggested that the users in the district should have been more familiar with the proper tolls than the Government representatives, based on past experience, but it developed that due to lack of knowledge as to proper maintenance of the system there was every possibility of erring in the estimated amount of these tolls. Mr. McMurray believes that $5 is the outside amount which the users of his district can pay for taxes, to which would be added tolls. This would not appear to be in line with the opinions of other users.

MEETING WITH BOARD OF TRUSTEES.

The affairs of the district were generally discussed at a meeting of the Board of Trustees following the hearing; and it was submitted that certain causes were the outstanding reasons for the unsatisfactory state of affairs in the district to-day. It was stated: "We know that all parties concerned have acted in perfectly good faith and that the adverse circumstances hereinafter recited were largely beyond control." The reasons for the difficulties within the district were set down as follows:—

(*a.*) Insufficient water:
(*b.*) Inclusion of poor lands within their boundaries:
(*c.*) The presence in many orchards of unmarketable and low-priced varieties of fruit:
(*d.*) The disorganization of the agricultural industry in the Okanagan:
(*e.*) Incorrect initial estimate of the rate of expenditure for renewals; and, lastly, the exceptionally high price of labour and materials at the time of greatest outlay in 1921 and 1922.

The trustees wish to point out that the growers of the North Okanagan made the following expenditures in the general public interest in 1926: Freight charges, $2,000,000; wages, $1,125,000; lumber for boxes, $600,000; wrapping-paper, $100,000; nails, $25,000.

The acquisition cost of the system was set forth—namely, $100,000—and with this figure the trustees appear to have been well satisfied. They appear to be particularly anxious that no new lands should now be classified as irrigable, thereby cutting down the amount of water now available for lands being served. One of the trustees remarked as follows:—

"I don't want to see fellows have to go out from their homes, but we do not want to see any land we have lost, which we know is not any use being brought in."

A considerable discussion took place on the question of burning off the forest-growth from the watersheds, but inasmuch as this is very fully referred to at the Glenmore hearing it is deemed advisable to note it more fully in the summary of the Gelnmore evidence.

GLENMORE IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

W. R. Reed, secretary and superintendent for the district, spoke on behalf of the trustees and the users in the district. He pointed out that it would appear from their repayments to the Conservation Fund that Glenmore was in a better position generally than other districts. He stated this was not true, but that the more favourable financial statement was reflected in the less favourable balance on the farmers' books. He went very fully into the question of water-shortage, and stated: "Glenmore does not enjoy an average supply of storage-water sufficient to produce profitable crops." The trustees appear to feel strongly on the point that in view of the large repayments they should of late years have been refused an advance of further funds for the improvement of their storage facilities. They maintain stoutly that there is no equitable reason why the advance requested should not be forthcoming. Their borrowings are on a different basis from those of other districts—namely, on a repayment to take care of actual and expected borrowings. Repayments are based on moneys which they expected to borrow in the future, whereas other districts are based on the actual borrowings. This appears to have been arranged by the Department because of the fact that large replacements were expected at an early date. Apparently the expected replacements have not been as heavy as calculated, and the district would appear to be in a better position accordingly.

There appears to be a considerable difficulty existing between the users under the Ellison system, which secures its water from a common source with the Glenmore District, the proportions being 25 per cent. to Ellison and 75 per cent. to the Glenmore District. There exists a dispute between the two communities, in which the Bulman interests have received a demand for payment of certain moneys expended by Glenmore in storage-works on Mill Creek. This is not a matter for the Courts and should be settled on a basis equitable to the parties interested. Glenmore trustees find fault with the refusal on the part of the Department to allow them to carry over a surplus of storage-water from one year to the next. The difficulty in this can be quite readily seen, but their request appears to have some merit. In speaking for the trustees, Mr. Reed states: "A grave injustice has been done to Glenmore by saddling upon us the responsibility of supplying the Ellison lands with storage and headwork facilities." It was shown that a very small amount of water was available for the Glenmore users, their average for seven years being 1.1 acre-feet per acre of both storage and flood water. Under the circumstances, it is remarkable that their orchard lands, which form the bulk of their acreage, should be in so healthy a condition.

They propose an improvement of storage at the north-end of the district and have made request of the Department to make available for them certain conservation funds for this purpose.

The question of loss of water due to evaporation on the watersheds was very fully discussed, and a report of Consulting Engineer F. W. Groves, of Kelowna, was submitted in this connection. This matter appears to have been gone into very fully, and the Groves Report would indicate that an increased run-off of 794 acre-feet would be made available if the forest-growth were removed. They appreciate the difficulty of financing such work and state that the district has no fund available therefor. Such an increase would represent approximately 40 per cent. additional water.

They appear to have investigated the question of pumping from Okanagan Lake, but their report states that the lift—namely, 275—would place the cost beyond their means. Evidence was also submitted by Mr. Reed for bringing flood-water from Mission Creek through the Black Mountain Company's ditches, but there appeared to be considerable doubt as to the ability of the Black Mountain system as now designed to carry any such water. Mr. Reed indicates the rates to be about $16 per annum per acre for water service.

Mr. John Thompson, successful fruit-grower who operates 43 acres, stated that the present rate for water was entirely satisfactory provided there were ample water. He would be quite agreeable to paying an additional price for water if it were made available. He stresses the need of cover-crop to keep up the soil, but points out the difficulty of maintaining a good cover-crop with so small an amount of irrigation-water made available. He submitted certain figures

on the operation of his orchard, and over a period of several years fixes his cost of production at 61.7 cents per box, all charges included.

It developed during discussion of the evidence of Mr. Thompson that the addition of ½ acre-foot would satisfactorily take care of the present water-shortage.

J. C. Clarke, one of the trustees of the district, who operates 10 acres of orchard land, gave evidence setting forth the returns from his land in detail during the years 1924 to date. He also showed that over the six years' operations he had received for his fruit $4,244.60, which worked out at 54 cents per loose box. Needless to say, this is a very small return from the operation of orchard land. He estimates that with 2 acre-feet of water he could increase the return from his lands by 50 per cent. Like a number of the other growers in this district, he does not approve of any reclassification of lands which would give the mixed-farming areas a better rate.

R. W. Corner, a fruit-grower of this district, describes a number of possible sources of additional water. These have all been placed before the district trustees and the Department, so that it is unnecessary to enlarge on them. He is strongly against any reclassification of lands in his district which would result in a lower rate to the owners of mixed-farming land.

Evidence was given by the secretary during the course of Mr. Corner's evidence that of the total area in Glenmore approximately 70 per cent. was in developed fruit lands. It was also brought out that it was the general opinion of the growers that it would be an excellent thing for this district if certain poor-grade lands were allowed to revert and the available water turned over to the orchard lands in the district. It was generally conceded that ½ acre-foot would generally enable a very good return to be obtained from the orchard lands in this district. During the past seven years the average amount of water to the land has been 1.1 acre-feet.

E. Hardwick, who operates mixed-farming lands and a small orchard in this district, states: "As soon as I get sufficient water I am willing to pay just as much for that as I am for my orchard." By this he refers to the lands which he cultivates under a mixed-farming operation. He was also against any regrading of land.

Thomas Bulman sets forth at considerable length the difficulties now existing between the growers of the Ellison District and the Glenmore District, who obtain their water from a common source. As this matter has already been before the Water Board, no comment on the attitude of the Board for the present seems advisable, but it would seem to be in the best interests of all concerned that their differences should be settled at an early date, since the dispute provides an uncertainty, more especially with reference to the Ellison lands.

WESTBANK IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

J. Faulkner, who operates two orchards in the district, laid great stress on the question of seepage to his bottom lands. It seems to be agreed by those present at the inquiry that these lands and adjoining lands are suffering severely due to seepage from irrigation-water delivered to the upper levels. Considerable difference of opinion developed as to where the responsibility lay, and this matter will be further referred to.

I. L. Howlett, who operates hay lands on the upper bench, answered the question of seepage by a suggestion that this was probably caused to a greater extent through creek-overflow than from the run-off from his lands. He suggested that the lands which were suffering from seepage should be further underdrained, but it would appear that a very considerable programme of underdrainage had already been effected without permanent relief. Mr. Howlett complained of the difficulties of carrying on under present conditions of prices for farm produce, and believed that, inasmuch as the Provincial Government had been instrumental in bringing new settlers into the irrigated areas, they had a certain responsibility in seeing that they were not forced to leave their lands. It developed during this evidence that the district was reasonably well served as to the amount of water available for irrigation purposes, but that they believed themselves to be dangerously short of adequate storage.

C. T. Garraway, who operates 80 acres of upper bench land within the district, complains that he is required to pay $10 per acre for his water service although he takes no water for his

lands. He feels that he must shortly allow his lands to go for taxes unless some relief is forthcoming. He also complains of the bonus of $3.50 per acre which is payable from certain lands for three years in addition to all other charges. He believes this bonus is a hindrance to land settlement in their district. He states that under the conditions it is impossible for any one without ample funds to hope to be able to plant new orchards in this district. He suggests that there should be delayed payments of water rates on young orchard lands to enable them to be brought to the production stage. He agrees that there is ample water for irrigation purposes.

Several other growers of this district gave evidence and it seemed to be agreed by all that the seepage problem in this district was a serious one, and one which should receive early consideration if great damage were to be avoided in those orchards lying immediately below the upper bench. It also developed during the evidence of Mr. A. E. Drood that the district was in a peculiar position in respect to its domestic water. It would appear that the domestic service is in a very bad state of disrepair and that due to the priority of borrowings under the "Water Act" it was not possible for the district to finance its domestic system elsewhere. The amount involved is not large, being set at $3,000, and they request that this amount should be made available by the Province from its Conservation Fund.

PEACHLAND IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

J. Wilson, an operator of orchard and mixed-farming lands, states that the soil in the Peachland District is generally of a very poor quality, and that the district is suffering from poor varieties planted in the earlier years, when experience was not available as to what varieties would do best under the local conditions. Like many others in this district, his orchard suffered severely from the heavy frost of the winter of 1924. It developed during his evidence that one-sixth of the lands in this district had reverted during the year 1926. In spite of the set-backs of previous years, Mr. Wilson, like a number of other growers in this district, is replanting in better varieties. It would appear, according to his evidence, that there is ample water in the earlier weeks of the irrigation period, but that there is a general shortage after the 15th of August, because of lack of adequate storage. Considerable discussion arose as to the diversion of certain waters on the summit between the Nicola and the Okanagan Valleys, and it was strongly argued that certain waters which are now going into the Nicola Valley by Pennask Creek rightly belonged to the users in the Peachland District. The evidence showed that this matter had already been before the Department and a ruling apparently had been given.

R. Harrington, chairman of the Board of Trustees, set forth that there had been an application to the Department for a loan of $2,500 for diversion-ditch purposes in order to improve the storage run-off. It would appear from the evidence that this request had not been favourably viewed by the Department. It would appear that considerable relief would be forthcoming from this expenditure, provided the waters in question were rightfully due to the owners of land in this district.

Mr. Harrington, who is also Reeve of the municipality, set forth that the position in the municipality itself was being steadily improved, and while their taxes had been very high, there should be a considerable reduction in 1929, when $20,000 of the bonded indebtedness would be written off. However, he points out that the present combined water rates and taxes make a load too heavy for many to bear.

A number of other users in this district gave evidence, all of which pointed out the severity of conditions under which settlers had operated since 1921. The main discussion, however, centred around the question of the right of the district to certain waters which were now being diverted to the Nicola Valley. They appear to feel they had been very badly used to date in this connection, and that the only reason why these waters were not now available to their lands lay in the oversight of a former officer of the district failing to record the necessary information with the Provincial Government as required under the Act.

NARAMATA IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

J. Nuttal, a fruit-grower in this district, gave evidence and strongly stressed the question of water-shortage. He set forth the possibilities for increased storage, and it would appear from the information now available that additional storage to any substantial extent can only be provided at a very considerable cost. It developed during Mr. Nuttal's evidence that the district had maintained its works at considerable expense, owing to their condition. Mr. Nuttal spoke on a number of the clauses of the Commission, and according to his opinion the Government had been very fair in their treatment of operators of irrigated districts of the Interior.

Captain F. D. A. Langduock, in evidence, stated that he believed that the Government aid in 1919 and subsequent years was very necessary and that it would have been impossible to borrow from any other source. He was also satisfied with the acquisition cost, which was a nominal one, only requiring payment by the district of $3,000. He stated that in the operation of his orchard he used both fertilizer and cover-crop to advantage. It would appear that Captain Langduock secured a very good return from his orchard operations, exceeding 500 boxes per acre. The question of borrowings from the Conservation Fund was brought out during this evidence, and while this appeared to be high, exceeding $100 per acre capital charge, the returns from the lands would appear to warrant this loan.

A complaint was voiced during this evidence that one of the present trustees was incompetent and had failed in the performance of his duties as trustee. There appeared to be no machinery whereby the district could rid itself of this undesirable trustee, and an urge was made that the Government should provide the necessary machinery under the Act.

Thomas Kenyon, an orchardist of this district, submitted that due to the gravelly subsoil of his property the water available was entirely inadequate, though he admitted receiving at least 2½ acre-feet per acre per season. He found the same difficulty with relation to later storage of water, and submitted that, due to lack of sufficient storage capacity, the district suffers due to a shortage of water for the later irrigations.

During this evidence the question of taxes which appear to have been paid by the district on lands already reverted to the Government was brought up for discussion, and the users feel that there should be a refund by the Provincial Government on these taxes, that the Province should reimburse the district for taxes so collected from and paid by the other owners of lands within the district.

Several written communications were received setting forth the views of absent owners on the question of the various clauses of the Commission, and a letter signed "C. Cargill" states: "There is a percentage of orchards in our belt which do not annually yield a sufficient crop to support the orchardist. Some make good this deficiency by working out from time to time, and some of these orchards have absentee owners who presumably draw their incomes from other sources." This does not appear to be a prevalent condition in this district.

WEST SUMMERLAND, B.C.

No inquiry was held in this municipality, but a meeting was arranged with the Municipal Council, and at this meeting matters of importance and interest to the district were freely discussed. It would appear that the Municipality of Summerland has girded its loins with considerable courage and industry and had in the face of very high rates succeeded in keeping its head financially above water.

It would appear that Summerland has developed almost all of its practical storage-basins, and while they do not get ample water, they have with the development of cover-crop improved the soil, so that the amount of water necessary for certain lands is gradually decreasing.

The municipality would appear to have a justifiable grievance in a small way with the Dominion Experimental Farm, whereby it undertook to supply water for the latter project on a payment of $10,000 advanced for capital works. Since that time it has transpired that, due to increased costs of living and of operation, the municipality is supplying this water at a loss. The Experimental Station constitutes a considerable area; pays no taxes, neither school nor property; and educates its children at the expense of the municipality.

The Municipality of Summerland has no advance from the Conservation Fund, and the trustees submit that any general form of relief made applicable to the irrigation districts should include a consideration of some form of bonus to the users within this municipality whereby they would be placed on a parity with all the other districts.

The question of final licences was also brought up, and a strong urge was made that these should not be issued without reasonable time being given the owners to clear up certain lands which would not be excluded. They believe that this would work a hardship to considerable lands which still require to be cleared and underdrained.

WINFIELD, B.C.

As in the case of West Summerland, while no official hearing was called for Winfield, there was a meeting with the water-users and a number of points which appear to be exercising the minds of these people were given prominence.

It would appear that the Board of Investigation has from time to time examined into the question of rates in effect under this system, which is privately owned and operated, and has already this year fixed a rate of $5.60 for 1 acre-foot, $7.10 for 1½ acre-feet, and $8.60 for 2 acre-feet. This compares with a rate of $6 per acre-foot requested by the operating company. It would appear that the users generally are agreed that they should pay an adequate rate for the proper maintenance of the system and for the service from operation, but there has been some doubt in the minds of the members of the Board of Investigation that moneys so raised might not, in their entirety, find their way to the maintenance and operation of the project. It would appear that if the Board of Investigation could be assured on this point they would grant a better rate than is now in effect. The owners of the system, who are known as the Okanagan Valley Land Company, are apparently content to operate the system without securing any return for the capital sum invested. They apparently desire the sum of approximately $16,000 from tolls in order that they may carry on an adequate operation. Inasmuch as irrigation-water is brought across the valley by siphon, it would appear that the rates in effect are very reasonable indeed.

Mr. Logie, manager of the Okanagan Valley Land Company, has filed a statement setting forth the affairs of his company as at the end of 1926. A copy of this statement will be found with the exhibits.

The users of this district also appear to be considerably exercised as to their rights on the creek which supplies the water for their system. It would appear that there is a certain contention which involves the Posthill Ranch. Mr. Logie assured me, as Commissioner, that there was no right on Vernon Creek involving the property of the Posthill Ranch, but, according to the records of the Department, this information is not correct. A storage record on Vernon Creek appears to have been granted to the lands included in the Posthill Ranch. This matter apparently has been dealt with by the Board of Investigation.

GRAND FORKS IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

O. Ponnoyer, secretary of the district, submitted a statement on behalf of the trustees wherein he set out the principal differences between the operations of his district as compared with those of other irrigation districts in the Interior. He maintained that their system was more a reclamation and improvement project rather than a water district. He set forth the fact that the lands generally in this district had been impoverished through many years of dry-farming. He stated that their experience had shown that a number of small pumping units could have been more cheaply operated than the two large units which now supply the district. He showed the serious difficulty which the owners encountered in having to level off their lands in order that water might be carried in the course of irrigating the ordinary way to all parts of the property. This would appear to be a real difficulty and expensive to overcome, this difficulty being due to the general flatness of the lands in the district. Mr. Ponnoyer showed that many of the orchards which were planted after their irrigation system was installed were wiped out almost immediately thereafter, due to an unhealthy condition following lack of water in years prior to the installation of the irrigation system. The heavy frost of the winter of

1924 killed off many hundreds of acres of orchard, and this witness states that the owners are not now in financial position to be able to replant. The most they can afford to do is raise root and vegetable crops, but as there is almost no local market for this produce it has to be marketed at Vancouver and Prairie points, and the return is not large.

It was shown that a great deal of land had already reverted to the district, and Mr. Ponnoyer states that this district must have some substantial relief if its existence is to be maintained. In summing up his statement submitted at he inquiry, he stresses the following points:—

(*a.*) The district is called upon to repay to the Conservation Fund a large sum of money which should not have been expended on one large pumping system in Unit No. 1:

(*b.*) That a large acreage of land unsuitable for agriculture should never have been included in the district:

(*c.*) The system installed is not, in many cases, adequate to serve the land which it was intended to serve:

(*d.*) The Government should assist or undertake to subdivide and dispose of a large acreage which has already reverted for taxation:

(*e.*) The "Water Act" should be amended to protect the district in the collection of its water tolls in tax-sale proceedings, and they should be placed on the same basis as taxes in this respect:

(*f.*) That in their opinion their district can only be expected to repay the principal on a basis of $3 per acre spread over a period of thirty years.

And in reply to a question as to interest, it was intended, according to Mr. Ponnoyer, that there should be no interest charge.

On the question of the disposal of reverted lands, Mr. Atwood, a long-time resident in this district, states: "I have spent thirty-five years in British Columbia and over twenty-five years in this district, and have helped to build up this country. I should receive consideration before a newcomer who is being settled at Oliver. I have spent the best part of my life trying to make it go and I am gradually going broke. I am speaking for myself, but, at the same time, I am only one of a very great number."

Several of the settlers who spoke appeared to think that preference was being given to the users in the Oliver District, and that point was strongly urged that in the resettlement of reverted lands in the Grand Forks District the original settlers should be given some sort of preference.

D. McPherson, M.L.A. for Grand Forks, spoke at some length on the problems of his district. He set forth the importance of the irrigated areas to the Province and submitted that relief should be given in the same way as the Province at large has carried the Pacific Great Eastern Railway project. With regard to the Grand Forks irrigation system, he states: "The irrigation scheme was too ambitious. It was assumed that practically all lands served by irrigation would become a producing garden, so to speak." Mr. McPherson spoke appreciatively with reference to the relief which is now being put into effect whereby the Province assumes the carrying charges on reverted lands. He believes, however, that in the matter of reverted lands every effort should be made to retain the original settlers on these lands, or at least a portion of them. He states: "It does not seem to me to be the right way to solve a condition of this kind, to chase an old-timer, a good citizen, chase him off the land and have the Government resell his land to a newcomer for the amount of the taxes, who has had nothing to do with developing the district." Mr. McPherson believes that the present situation demands drastic treatment and that the pruning-knife should be used in relation to the payments due the Government, and suggests that, if the Government is going to err, it had better err on the side of generosity.

Mr. Laws, who operates a quantity of land in this district, set forth that during recent years the larger the area which a farmer had to operate the greater were his annual losses. He states that due to bad years of farming and marketing it has been practically impossible to finance anywhere for works for distribution, with the result they are, so to speak, still more or less dry-farming on the greater portion of the lands. He states that they are in a position of being unable to afford to take water to their lands, due to the cost of levelling operations, but at the same time they must pay the irrigation charges. With regard to the quality of the land, their apples will keep two weeks longer than those of the Okanagan; they are hardier and have better keeping qualities. He attributes this to a hardier climate. He states that the farmers have a very considerable alfalfa market at Trail which is being developed.

A number of other growers in the district, including Mr. Lawrence, Mr. Kerman, and Mr. Galloway, gave evidence on the conditions, past and present. It seemed to be generally agreed that the salvation for the district lay in the growing of fruit, but that due to depleted finances it would be possible to bring these lands under fruit-cultivation at only a very slow rate. This would seem to be the best that can be done provided no outside capital is forthcoming; in other words, new settlers with private means must come in to this district if its recovery is to take place in the near future.

HEFFLEY CREEK IRRIGATION DISTRICT.

SUMMARY OF EVIDENCE.

A sitting of the Commissioner was held at Heffley Creek, on the North Thompson River, following the hearings in Central and Southern British Columbia. This district is one entirely set out in mixed-farming operations, fruit-growing being practically unknown. This system is a joint operation by gravity and pumping, power for the latter operation being supplied by the City of Kamloops.

R. B. Homersham, secretary and superintendent for the district, submitted a statement setting forth the general phases of the operation, the rates payable for irrigation within the district, and the situation with respect to repayment to the Conservation Fund. It would appear that the higher lands received the water rights of the lower lands within the district on the condition that the owners of these lands on the upper level should contribute towards the pumping system to irrigate the low-lying lands. The district was formed on this basis. The evidence indicated that the users under the gravity system were receiving an entirely inadequate supply of storage-water. Much early water appeared to be lost because its run-off was too early to be used on the land. This meant that storage-water only was available and this amounted to about 1 acre-foot per season. This was claimed to be entirely inadequate. The question of storage was consequently raised, but it would not appear that the district has any large storage of value which can be obtained or increased at reasonable cost. Some smaller storages can be provided reasonably.

These mixed-farming lands do not appear to get as good a return as those farther south in Central British Columbia, as it is instanced in the case of alfalfa there appears to be only one crop cut annually, the balance being required, such as it is, for pasturing.

H. L. Devick, who operates on the upper benches, states with respect to irrigation-water: "My average has been 1¼ feet per acre. I usually irrigate twice for two crops and I require to irrigate twice for two crops, and for about fifteen years I have never had sufficient water to irrigate the second crop, and many years not sufficient to irrigate my first crop properly." However, with respect to providing additional storage, Mr. Palmer, a user of this district, states the district is carrying all the debt to-day it can carry. It cannot do with any higher charges, and for this reason he believes that no additional borrowings should be made to provide further storage.

F. B. Stewart, one of the trustees of the district, states: "We have practically 25 per cent. of the land in this district which ought to be ploughed up and reseeded, since such land is not giving more than a 50-per-cent. return." He states, however, that they have not the money for reseeding. With respect to lands in the district owned by the Soldier Settlement Board, it was brought out during his evidence that the general opinion in the district was that these Soldier Settlement lands would not succeed. This did not appear to be borne out by my observations, nor my discussions with the officer of the Soldier Settlement Board as to the position of lands which his Board controls.

Considerable discussion arose as to the cost of maintaining the pumping system. There would appear to be considerable doubt as to whether the pumping operations had been carried out to the best advantage; the maintenance bill appeared to be very high.

Recalled on the matter of interest, Mr. Palmer stated he believed the rate of interest on the borrowed money was much too high. He also finds fault with the Provincial land assessments, and he states: "The land in many places is worth not more than $3 an acre, but it has been assessed at $100." A number of similar complaints of this nature were received and I deem it my duty to call attention to this matter.

A. Devick spoke on the question of penalties and the due date of payment of irrigation taxes. He states that he does not get the entire returns for his year's operations until after the 1st of February, the last day on which irrigation taxes can be paid without penalty. He believes that the full penalty should not become effective immediately following the due date for irrigation taxes, but should be a graded penalty as in use by many municipalities spread over a period of two or three months.

The question of increased storage and burning-off of forest-cover was discussed at some length by several witnesses. The value of storage-water is unquestionably a very considerable one in this district for the upper lands. There should be no shortage of water for those lands in the pumping area. It is entirely a matter of the cost of pumping. No particular suggestion was made as to how forest-cover might be safely disposed of.

VICTORIA SITTING.

The inquiry was resumed at the Parliament Buildings at Victoria on October 11th, when there were present representatives of the Water Branch, former Water Comptroller, Mr. E. A. Cleveland, and representatives from almost all the irrigation districts of British Columbia. A very free and open discussion of all matters having a bearing on this subject ensued, and a much clearer understanding of many points resulted.

Mr. E. A. Cleveland, former Water Comptroller of the Province, was called, and gave the following evidence. He outlined briefly what prompted the formation of the irrigation districts in the Interior of British Columbia. He stated that it followed vigorous representations made by representatives from these districts that a reorganization should take place. He stated that the Government made available a Conservation Fund from which they were prepared to make money grants with a desire to rehabilitate the irrigation areas, the idea being it could be best done by co-operative effort. Mr. Cleveland gave at some length the details of the formation of the water districts. He stated that the negotiations were always conducted in a round-table sort of fashion, comprising many meetings, and that the assistance of his Department was, wherever possible, given freely and willingly. He stated, further, that the revised "Water Act" was the result of those many round-table conferences, and that the changes were made only after the fullest consultation with the organization committees. He believed that the method by which the districts were able to obtain advances from the Government was the most simple and by far the most advantageous method to be found to enable the districts to secure the necessary funds and to carry out a well-planned schedule of improvements. Questioned as to the acquisition costs by the districts, Mr. Cleveland stated that these matters were entirely in the hands of the formation committees, and that the officers of the Government had at no time any hand whatsoever in fixing or helping to fix the amount to be paid for acquisition. He believed that in all cases the acquisition costs were very low indeed.

Questioned by Mr. John Kidston, of Vernon, as to why the Government did not take advantage of the clause in the "Water Act" which provided that works appurtenant to the lands could be taken over without compensation if the operating company failed to supply water, Mr. Cleveland stated that they had found, on consideration, that this Statute contained much indefiniteness, and what might be considered a very good thing to do in a specific case might be a very inadvisable thing to do in another.

On the matter of the form of organization which the districts should take, Mr. Cleveland stated that, after much discussion, it was decided that the administration of the districts should not only be as simple as possible, but should have as complete local administration without any unnecessary limitations on it by the Government. This he believed the water district form of organization had accomplished. Questioned as to the suggestion that the Government should take over storages and main canals of the irrigated districts, Mr. Cleveland believes that this is not a practical suggestion, and that furthermore the policy of the present Administration had always been against such suggestion.

Questioned as to the reasons for excess of actual figures under present operation as compared with those figures which were freely discussed during the formation period of the districts, Mr. Cleveland stated that he believed the increases were due to increases in labour and material costs, a lack of authentic information on actual operating costs, and to the fact that under the co-operative system as effective by the district form of organization the individuals demanded and received better service than was in effect under private operation.

Questioned by Mr. Crease, representing the Coldstream Estates, Limited, as to whether the welfare of the dry belt was of public concern to the Province as a whole, Mr. Cleveland stated that he believed this to be so, without argument. Mr. Crease also stressed the point that greater areas under the irrigation districts were in use for mixed farming, and stated that, whereas it was generally conceived that irrigation was only affecting fruitmen, it really affected the farming industry as a whole to a very great degree. With this Mr. Cleveland agreed. Mr. Crease further suggested that the irrigation district form of organization was evolved and simply put on trial with an idea that it would be altered to suit conditions. With this Mr. Cleveland did not agree, and stated that it was the intention to advance money to the districts on the expectation that they would repay in full such advances, since it was believed that the district form of organization was entirely practical, and experimental, if any, to a very small degree.

Questioned as to the responsibility of the Government for the earlier figures supplied in connection with probable cost of irrigation as to district formation, Mr. Cleveland stoutly maintained that the Government accepted no responsibility whatever in this matter; that they gave every assistance they could in order to arrive at a probable operating cost. He believes that, inasmuch as the acquisition cost was entirely a matter for the organization committee or the district, and that the local knowledge of operating costs was the only one available, the committees of formation were in the best position to know what to expect in the way of carrying charges or operating costs. Speaking on the question of probable operating costs with respect to the Vernon Irrigation District, Mr. Wollaston, of the Coldstream Estates, Limited, during Mr. Cleveland's evidence stated that "the committee of organization came and looked at our books and Mr. Knight's books, and saw how much we were spending and averaged it over the whole acreage." This appears to be the only real source of information which the organization committee of the District of Vernon had as a guide before the formation of the district.

Questioned as to reclassification of lands, based more or less on their ability to produce, Mr. Cleveland stated that this had been seriously considered by himself and his officers during his term of office, but, inasmuch as it would lead to increasing the rates payable by the orchardist, the opposition to such a suggestion was so great that it was not seriously considered. Asked as to the suggested form of reclassification at the expense of the Government, in view of the relief which was now granted on carrying charges on reverted lands, Mr. Cleveland stated that he believed it to be full of difficulties which might be considered more or less minor ones, but to put into effect any such reclassification would certainly be full of small practical difficulties.

On the question of the moratorium, Mr. Cleveland stated that this was put into effect solely on representations made by the users, numerous delegations having come down from the irrigation districts to Victoria to press for the moratorium.

On the question of preferential treatment which has been suggested on many occasions for settlers under the Oliver District, Mr. Cleveland set forth that this project was undertaken by the Government as a measure of soldier relief, and that the contractor had instructions to employ only returned men so long as same were available on construction-works. He stated that, once the project had been completed, it remained for the Government to secure the best prices it could for the lands under the irrigation project, and to settle them as quickly as possible in order that the maximum revenue might be derived therefrom. He considers this a strictly business proposition on the part of the Government; that is to say, once the urge for the project and its completion have been assured.

Considerable discussion then arose as to marketing conditions under the new Board of Control, and it was suggested that because of the low rates Oliver could compete with the other districts in the matter of cost of production. It was generally agreed, however, that by the time the Oliver District had reached its maximum of production the markets would probably have increased by a considerably greater margin.

Major J. C. MacDonald, Water Comptroller, Department of Lands, was called, and gave evidence along the following lines:—

He set forth that at the commencement of his duties in connection with Interior irrigated lands he was appointed to assist the then Water Comptroller, E. A. Cleveland, his special instructions at the outset being to take over the supervision of expenditures of Peachland, Naramata, Glenmore, and Rutland communities. He was also instructed to inform himself of conditions of the White Valley system at Vernon, at that time under the management of Mr. E. B.

Knight. His instructions from his Department were that he should assist the committees of reorganization in every way possible, more particularly on engineering matters. This reorganization naturally included many changes in the "Water Act," and Major MacDonald states he recollects having committees from Glenmore-Rutland and South-east Kelowna all at Victoria for the express purpose of reviewing proposed revisions relating to irrigation and advising upon as to how they thought it would apply in their own districts. In the matter of reorganization and formation of the districts, Major MacDonald states: "I attended many committee meetings; twenty-five meetings in connection with Vernon. I know we had ten meetings in four days." He states, with respect to governmental policy at the time of reorganization: "Our position all the way through was, the Government was prepared to advance the sums agreed upon by the organization committees." This statement refers to acquisition costs. Where matters on which difference of opinion arose between himself or his Department and the trustees or the committees of organization, he states: "Before I discussed these questions with outsiders or expressed a view of any kind at all, I arrived at the same view as the trustees or made them arrive at mine."

With respect to an estimate given by his assistant, Mr. Davis, in 1917, to the organization committee at Vernon, Major MacDonald states that neither he nor his Department had any knowledge of such estimate. He stated that at this time they were dependent for their figures upon records from the White Valley Company which were somewhat inadequate. Major MacDonald states that the Davis estimate referred to was never discussed with the Vernon Organization Committee during any of the numerous meetings which he attended.

Questioned as to the interest charge on Conservation Fund borrowings, Major MacDonald shows that the original borrowings were made on an even 6-per-cent. basis, and that it was only within the last few months that the very low rates now in effect had been received by the Government on borrowings. Furthermore, he showed that it was not possible to immediately wipe out the borrowings at the higher rate, but he believed that in a reasonably short period of time Conservation Fund money could be refunded at the more favourable rates now being received. He stated that the more recent borrowings by the British Columbia Government were at 4.62 per cent. interest. He believed that the existing rate could and would be cut down in the near future. He also found no fault with the suggestion that the period for refunding permanent works be increased from thirty to fifty years.

Questioned as to the attitude which his Department would take in the matter of future borrowings for extension of works, more particularly those of storage, should the districts at the same time request the cancellation of any of the existing indebtedness, Major MacDonald states: "I am in the position of a branch bank manager. I can only advise a loan if I am satisfied that loan is going to be repaid with interest."

Questioned on the shortage of irrigation-water of the past three years, Major MacDonald states that he has been very much disappointed in the run-off of recent years, and he doubted if he would have been justified in recommending the advances which have been made, could he have known the shortage in storage-water which was likely to occur. He states that in 1924 the run-off from Okanagan Lake was only 47 per cent. of normal. He believes this a fair test of the run-off in this area generally. He believes that the storage question is of great importance and must be carefully studied in the interest of the districts. He states that undoubtedly there are a number of cases where more water should be provided.

Speaking of the revision in the Act, section 272, paragraph (3), relating to authority given the Minister to rebate carrying charges on reverted lands, Major MacDonald states: "The effect is this: it is no longer a joint liability of the users to the Conservation Fund. The liability, as far as the indebtedness to those funds is concerned, is purely a several liability. It is apportioned." He states further: "Originally the indebtedness of the district was registered, but that is wiped out, and now the only notification in the Registry Office is that the property is within the boundary of an improvement district." Questioned as to whether the relief concerning delinquent lands would be permanent, he states: "The intention is it will carry right on, but it will not apply to future borrowings."

Discussion at very considerable length took place as to a reclassification of lands based more or less on their ability to produce. Major MacDonald states: "This is not a reclassification, but is rather a form of Government relief." It was agreed that it should be termed "A reclassification at Government expense." In this connection the following statements were made: "It is only right and proper the Government should pay irrigation rates on Government

lands, but it is not the same proposition to say the Government should pay irrigation rates on privately owned lands." And later: "It would appear in the interests of the districts to let this lower grade land revert. Personally, I do not see how any other scheme could be worked out. I can see so many difficulties in sight I don't believe it would work." He believes that the result would be a tendency on the part of other lands to endeavour to obtain classification at a lower rate. He stated: "We had a definite instance of that in the case of Grand Forks already." Later he states: "This is a situation which requires a surgical operation and you cannot cure these things without hurting somebody." In reply to a question, "Would it not be apparent it would be injurious to allow large areas of land to go out of cultivation?" Major MacDonald finally stated: "The only way you can tell whether the land can pay or not is to put it through the acid test." Captain Bull, of the Black Mountain District, in this connection showed that they had within their own district given certain relief to mixed-farming lands of a poor grade in order to retain these lands in the district and receive a partial rather than no revenue whatever. He believed this to be a good policy, but he states there is a limit to the length to which a district can go in this connection.

Major MacDonald was not prepared to state whether lands which reverted to the Province would lie dead or would be resold. He suggested later in his evidence that they would probably be resold, but this was a matter of departmental policy. He laid considerable stress on the value to the rest of the lands in any district of the water which would be made available by the reversion of the poorer-grade lands. He believed that in some cases this would solve the question of additional storage now confronting the trustees. He summed it up finally by stating he believed it would be in the best interests of the Province and the districts from every point of view that these poorer-grade lands should revert and, unless there was good reason, be excluded from the lands within any district. Much discussion ensued on the hardship to existing settlers having to lose their lands. It was shown that in many cases, due to non-payment of irrigation and other taxes, a good many owners had now no equity in their holdings. However, it was generally conceded to be a hardship that settlers of twenty and twenty-five years' standing should now find it necessary to leave the lands on which they had struggled so long to make a livelihood. One serious drawback to the reversion of lands was voiced in the case of those interested in the Coldstream Municipality. It was the opinion of several of the representatives from the Vernon District that a $3 or $4 reduction in irrigation charges would enable some 3,000 acres to remain within the district. If, on the contrary, these lands, which lie largely in the Coldstream Municipality, reverted to the Government, municipal taxation would cease. Mr. Lindley Crease asked the following question of Mr. DeWolfe, manager for the Vernon Irrigation District: "The result would be, according to your opinion, that if the lower-grade lands revert in that municipality, causing a heavy increase in municipal taxes on unreverted lands ——" Mr. DeWolfe states: "It would knock them all out. Question: It would knock them all out? Answer: In time, yes."

Questioned as to the Oliver project, Major MacDonald's views coincided with those given by Mr. Cleveland, so it is not necessary to enlarge on the discussion of the Government policy with respect to this project.

Major MacDonald then gave at considerable length an outline of conditions as he found them in the irrigation districts of the State of Washington. There is considerable interesting and enlightening information contained in this statement, and it is recommended to those who have an interest in fruit-growing in the irrigation districts that they request of the Department a copy of the evidence submitted in this connection. It was shown that, under Federal aid, conditions were more favourable to the growers than are in effect anywhere in British Columbia. The projects are carried out on a more extensive scale and ample water for every purpose is provided. The rates generally are lower, production is much greater than ours, and the only drawback in the case of these Federal reclamation schemes lies in the heavy State and county taxes which are assessed in most instances. On the contrary, under some of the State projects, conditions are less favourable than are found in British Columbia irrigated districts. Taken altogether, their problems and conditions in the State of Washington greatly resemble our own, and they have, in many cases, gone through experiences similar to our own, so that for this reason the information set forth on these points is interesting and instructive.

The hearing concluded with a strong appeal by the representatives of all districts for aid to the settler on mixed-farming lands. It was strongly argued that he, the old settler, should

have consideration and preference over any newcomer who might later on acquire delinquent lands for arrears of taxes.

The Victoria sessions of the inquiry brought out so much frank discussion on all matters which had been previously referred to, and in many cases only lightly considered in evidence, that I believe it would be advisable for the Department to consider publishing, for the benefit of the irrigationists and all others interested, these proceedings verbatim.

A letter from the Hon. T. D. Pattullo, Minister of Lands, was submitted following the conclusion of the hearing. It sets forth briefly the history of the irrigation industry and the attitude of the Government and the Department on this question. From this statement and the many departmental records which I have had an opportunity to examine, it is apparent that the present Minister of Lands and his officers have appreciated the importance of their problem, and have, as they were found to occur, attacked vigorously the difficulties confronting the Province on the question of irrigation of lands of the dry belt.

The communication of the Honourable the Minister of Lands is as follows:—

Major W. G. Swan, C.E.,
Commissioner, Irrigation Inquiry,
629–630 Birks Building, Vancouver, B.C.

VICTORIA, October 26th, 1927.

DEAR SIR: RE IRRIGATION INVESTIGATION.

Before your investigation of this matter is closed, I would like to make a statement as to the understanding and policy of the Administration in respect to this important question, in order that it may be a matter of record.

For a considerable time prior to 1916 it was apparent that the situation in respect of the irrigation problem in the dry belt was rapidly reaching an acute stage, and that this position was so recognized was evidenced by the fact that in 1914 the Administration of that time caused an investigation to be held, report of which in this connection is on record in the Water Department. No action was taken by the then Administration in connection with this report.

Immediately upon the advent of the present Administration to office in the late fall of 1916, representations were made as to the conditions existing in the dry belt, and it was apparent that the problem required immediate attention, and that unless remedial measures were adopted grave consequences would ensue.

The problem had its genesis in the fact that some years previously a number of companies had undertaken the development of various tracts of land by the installation of water systems. It appeared to be their purpose to sell the land at as high a price as possible, and to effect this they undertook to deliver water at a low price. No proper provision was made for depreciation, repairs, or new extensions. The inevitable happened. With the collapse of the boom which had taken place, the companies found themselves in difficulties. So extreme did the situation become that in some instances they went into the hands of receivers. The Government caused an investigation to be held, and it was evident that the practices of some of the organizations were not only grossly improvident, but extremely reprehensible. An example of this is to be found in the case of the Central Okanagan Land and Orchard Company, where, according to the evidence given before the Commission which was appointed to carry on an investigation, it was clearly shown that the parent organization, through the manipulation of two subsidiary concerns, succeeded, if not legally, actually in getting rid of its responsibilities, leaving the subsidiary companies and the water-users to work out the problem as best they might.

It seems clear that a great deal of the difficulty of the present situation is due to the unsound methods followed at the inception of these undertakings. The Government was, therefore, faced with the problem as to how to preserve all interests involved as far as possible. Provision was finally made for the creation of water improvement districts and the taking-over of the water systems by the improvement districts. This was effected through the establishment of a Conservation Fund, out of which the Government advanced to the various districts moneys for the acquirement and improvement of the systems. It was clearly the intention that the improvement districts were to be responsible for their own administration as is evidenced by the various enactments passed by the Legislature. My explicit instructions to the Water Comptroller were that under no circumstances would the Government accept any responsibility in connection with the construction of the systems, nor of the cost thereof and the consequent rates that the lands under the systems would have to bear. The services of the Water Branch were made available

in an advisory way to assist the various districts to organize and, subsequently, to be of such assistance as possible in an advisory way in the innumerable details that would necessarily arise, but under no circumstance was the Government responsible for the rates that were to be charged. I have not been able to ascertain that any officer of the Government has ever made any statement that water charges would not exceed a given figure.

I made many trips to the Interior dry belt during the process of the working-out of this problem, and the impression which I always received from the water-users was that the charge per acre was comparatively inconsequential; in effect, what they said was: "Give us the water —we don't care what the charge is."

In the attempts that have been made to fasten responsibility upon the Government, it should be noted that the Government did not deliberately intrude itself into the situation, but took action upon the request of the water-users themselves. The situation was that the water-users found themselves in an impasse. Their position was desperate and they turned to the Government for relief, and they neither asked for nor received any guarantees as to what the water charges would be.

As soon as the Government was committed to the loaning of large sums of money to the various districts, and the work had got well under way, an agitation was fomented and kept going ever since to relieve the districts of part of the charges and to put them on the Province at large, and I think there is no doubt that this constant agitation had much to do in distracting the attention of the water-users from the more vital and more important factors of their problem. Had other conditions been favourable, including a good price for their products, the water charges would not have occupied a so conspicuous place in the consideration of the water-users, but when people are in difficult circumstances it will be found that the first place they look for relief is from the Government.

At the time of the formation of the various water districts it was considered advisable to include in each district as large an area of the lands of the district as could economically be supplied with water, in order that the cost per acre might be spread over as many acres as possible. The classifications that were made were made and approved by the water improvement districts. It was not, however, contemplated that these classifications should be irrevocable. The problem was clearly one that would require adjustment from time to time as circumstances indicated, and it was also realized that in all probability amending legislation would be necessary. To meet conditions in the light of eventualities, ameliorating legislation was passed from time to time.

Careful and minute investigations were carried on by the Water Department. These investigations clearly show that there are areas included in the districts which from a productive standpoint will be unable to meet the charges piled up against them. Again, there are areas of good quality suffering from improper admixture of varieties, while the human equation also must be taken into account. There have been faulty methods as well as entire unsuitability, and there would seem to be no doubt that many water-users were doomed to failure quite irrespective of the water charge; in fact, it is clear that were the entire water charge remitted there would still be many failures.

Under legislation that had been passed, the lands of the district were jointly and severally liable for the water charges, and it became evident that some of the water-users who were able to carry their own charges would be put in an extremely awkward position if they were compelled to carry the charges upon adjacent lands as well. To meet this situation an amendment was passed under which relief could be granted by the Lieutenant-Governor in Council, and it is the policy of the Government, so far as the amounts owing to the Conservation Fund are concerned, that each parcel of land within an improvement district shall be responsible only for the amount of the levy against itself. In respect of any parcels which revert to the district and which in turn are transferred to the Province, the amount due to the district for such parcels will not be demanded from the district for repayment into the Conservation Fund, but the district will be relieved from the annual payment due to the Conservation Fund in respect of these reverted lands. In some districts this will mean a very large measure of relief to existing water-users.

As your investigation covers a wide scope, I refrain from expressing any opinion as to the future, but have tried to indicate to you very briefly the history of the problem as it has appeared from time to time.

Faithfully yours,

(Signed) T. D. PATTULLO.

REPORT ON CONDITION OF WORKS AND DETAIL RECOMMENDATIONS WITH REFERENCE TO VARIOUS DISTRICTS.

VERNON IRRIGATION DISTRICT.

I found the works of the Vernon Irrigation District to be generally in a good state of repair. There is, however, at the present time an insufficient supply of storage-water for conditions found to obtain in the drier years. Evidence was submitted on the question of the possibility of additional storage-water, together with the cost of such works. This problem has been carefully studied by the officers of the district, and I am convinced that the Department should favourably consider the advancing of additional funds to this district for the purpose of increasing its storage-reservoirs.

There exists a very expensive portion of the Vernon Irrigation District in the Swan Lake siphon, together with the distribution-works between Goose Lake and Okanagan Landing. It is doubtful if the cost of maintaining these works is commensurate with the return from the lands which they serve, and I would recommend that the district and the Department should fully consider in the near future the question of terminating the north end of the present distribution system at the point where water now enters the Swan Lake siphon.

SOUTH-EAST KELOWNA IRRIGATION DISTRICT.

The works of this district are maintained in a good state of repair, and the duties of the district officers are being efficiently carried out. There appears to be generally an ample supply of water with the exception of some of the higher lands underlain by a very poor subsoil. However, it is doubtful if any large increase in storage can be obtained at reasonable cost. There certainly does not appear to be any local supply to augment the existing.

SCOTTY CREEK DEVELOPMENT DISTRICT.

The works of this district are simple in nature and are in a comparatively good state of repair. There is a comparatively small amount of temporary construction in existence. The supply of water at the reservoir would appear to be ample, but there is a very large loss in conveying this water to the main distribution-ditch. The district should seriously consider the question of bringing a greater percentage of its water to the lands. The main loss occurs immediately above the intake-works, where, due to a deep gravel and boulder bed, much of the storage-water is lost in transit.

BLACK MOUNTAIN IRRIGATION DISTRICT.

This district contains a large proportion of mixed-farming lands of low quality. It is almost a certainty that a considerable portion of these lands will revert to the district at an early date. While there is a very considerable supply of storage-water available, the porous nature of the subsoil makes the demand greater than in many areas. There does not, however, appear to be any reasonable point at which any substantial amount of additional storage-water can be conserved. It is probable, therefore, that the shortage of water existing in this district will have to be met largely by the additional water which will become available due to a decrease in irrigable lands through the reversion of the least productive tracts.

The works of this district were found to be in good condition and well maintained, although there is a considerable amount of temporary construction in their make-up.

The trustees of this district strongly submitted that none of the lands which have now reverted should again be brought under water.

GLENMORE IRRIGATION DISTRICT.

The works of this district were inspected and found to be in an excellent state of repair, with the possible exception of the Glenmore siphon. This steel siphon, however, is still functioning and being maintained as well as possible. There is a distinct water-shortage in this district, although the users have made splendid use of the water available. The management is good and I see no reason why the request for the advancement of additional moneys to increase the storage capacity of the present reservoir situated at the north end of the Glenmore District should not be granted. Glenmore is particularly anxious that there should be no reclassification

of lands, and under the water-storage conditions existing in this district their position in this respect seems to be sound.

A controversy exists between this district and the users of water under the Ellison District on the opposite side of the valley. They have a common source of water-supply. The differences of opinion in this connection should be settled without delay.

The question of burning off forest-cover was very fully considered at this hearing, and, while it would appear to be strongly recommended by Mr. Groves, consulting engineer for the district, and others, it is quite apparent this is an expensive matter and one which cannot be undertaken because of cost at this time.

WESTBANK IRRIGATION DISTRICT.

The Westbank system is in good condition and appears to be well managed. There is, however, considerable difficulty and loss due to seepage on the upper fringe of the fruit lands of this district. Much difference of opinion was in evidence as to the source of the seepage-water. It would, in my opinion, be valuable to have the Department examine carefully into this matter to determine the exact cause of the seepage and prescribe the remedy. It should go further, in fact, and see to it that the district applies the remedy, since otherwise the loss to full-bearing fruit-trees will be a considerable set-back to this community.

There appears to be some difficulty in raising funds for the renewal of their domestic water service. The trustees would appear to require some guidance in this connection, which service can best be given by the departmental officers.

PEACHLAND IRRIGATION DISTRICT.

The Peachland Irrigation District has seen hard times, and is still suffering severely from heavy loss to orchards due to the severe frosts of 1924 and earlier years.

This system is not in a good state of repair and a considerable programme of renewals will be necessary very shortly. However, the borrowings of this district are not heavy. The municipality will, in 1929, complete the payment of a considerable sum borrowed for general improvements, and on the retirement of this amount the taxpayers will generally be in an improved position. I consider that the growers in this district have shown a good deal of fortitude in holding on, and I am satisfied the majority of them will now succeed in rehabilitating themselves. The district will require during the next ten years a certain amount of mothering by the Department.

The trustees appear to feel that they have been unfairly treated in the division of storage-water as between themselves and the Nicola Valley interests. The Department has apparently ruled on this matter, but it is my opinion that an open discussion with the trustees of this district by the Water Comptroller on this subject will clear up this misunderstanding.

NARAMATA IRRIGATION DISTRICT.

An inspection of the works of this district showed them to be in a very good state of repair. The affairs of the district are well administered and the growers as a whole are prospering and satisfied. This district is given over almost entirely to fruit-culture and some of the best orchards in the valley are to be found therein.

There is an apparent shortage of water for some of the lands due to their gravelly subsoil nature. The trustees have a programme for additional storage, but this appears to be somewhat expensive. It would appear, however, advisable to find additional storage, even at some cost, as soon as a reasonable reduction has been made in the present borrowings from the Conservation Fund. This is an excellent district and can carry a heavier loan charge per acre than many of the remaining districts of the Interior.

GRAND FORKS IRRIGATION DISTRICT.

The Grand Forks project is distinctive as compared with the operations of the other irrigation districts in this valley, inasmuch as they have an unlimited supply of water from the Kettle River which is brought to the land by pumping. Considerable semi-dry farming was carried on in this area prior to the installation of their irrigation system. This resulted in impoverishing the lands and the orchards which were planted out at that time to such an extent that the new irrigation system was installed at too late a date to give the service which would have been of

great value five years previously. The general installation is more or less permanent in character and is in a very good state of repair. The project, however, as a whole, was in some respects badly conceived, and was at the outset planned in too elaborate a manner. It would undoubtedly have been much better had the pumping system been tried out on a smaller tract and had been added to in small units. This would have proved this system of irrigation and undoubtedly would have greatly reduced the borrowings of the district.

In addition to hearing the evidence of the trustees and others of this district, I have had an opportunity of examining the departmental records. It would appear to me that the trustees of this district have not given their best efforts to face their obligations to the Government, inasmuch as they have taken undue advantage of an extension to the moratorium, and have, in addition, failed to set their irrigation rate at a sum which would take care of their annual obligations to the Conservation Fund. Undoubtedly the users have suffered severely due to loss by frost of growing orchards. I am satisfied, however, that this situation will require early and special consideration of the Department.

HEFFLEY CREEK IRRIGATION DISTRICT.

This is distinctly a mixed-farming proposition, the source of the water being from storage to the upper levels and by pumping from the Thompson River to the lower areas. Storage is insufficient, and the early run-off is lost because it occurs at a time when the lands are not yet ready to receive irrigation-water. Additional storage can be obtained at a reasonable outlay, but apparently the users of this district are not prepared to assume any further obligations by borrowing.

To the lower levels water is provided by electrically driven pumps from Kamloops municipal power. Unnecessarily heavy outlay for maintenance of these pumping operations has occurred in the past. This condition should not be allowed to continue from year to year, and I would recommend both to the trustees and to the Department that they take effective steps to put the operation of these pumping plants on a better basis.

The feeling of the settlers in this district is that assessment values are too high. This question has been referred to already.

GENERAL SUMMARY.

After hearing the evidence placed before me at the meetings in the various districts, and after a careful inspection of the irrigation-works and general condition of orchard and other lands in the districts, and discussing the situation with business-men, bankers, and others who are interested in the welfare of the irrigated areas, it is very apparent that considerable hardships have existed in these areas since the year 1922. It should be pointed out, however, that as early as 1915 the irrigated sections of the Interior were faced with serious difficulties. A report by A. R. Mackenzie at that time set forth some of these. The D. A. McDonald Commission in 1919 and 1920 delved further into the problem. These difficulties culminated in 1922 following the collapse of the market for fruit and farm products generally.

The reasons, I believe, are very well set forth in several cases in the submissions made by the trustees of the districts, but, generally speaking, these hardships are attributable, firstly, to a world-wide depression in the prices received for the product from the lands; secondly, to poor marketing conditions; and, lastly, to the unsatisfactory condition in which the various irrigation systems were left when the large land companies who operated the same found themselves in a position where they could no longer carry on. This burden fell upon the shoulders of the settlers of the districts and on their lands.

In listening to the evidence of individuals one cannot help but be sympathetic with the difficulties which they have fought to overcome and the position in which many settlers, who have put all their capital into their homes and lands and operations, are now finding themselves, faced with the problem of having to make a livelihood entirely from the operation of these lands.

The question of irrigation is a vital one to the settlers of these irrigated districts, but I am fully convinced that the question of supply, which during the recent dry cycle of years has been entirely inadequate, has a much greater bearing on the success or otherwise of their operations than has the price which the user must pay for the service. In the case of orchard lands with

anything like an adequate return for the product, I am satisfied that the present rates are not an unduly heavy burden on the users. However, while we are accustomed to look upon the large irrigated districts of the Interior of British Columbia as fruit lands, they actually form the smaller portion of the whole. The area of irrigated districts under fruit does not exceed 30 per cent. of the whole, and accordingly we have very much before us the problem of irrigation costs for mixed-farming and other lands. I am satisfied generally that the mixed-farming lands cannot carry a rate of $15 per acre. So many factors, including the personal one, affect the amount which they can carry that it is difficult and speculative to fix a figure. It would appear to be not more than $10 per acre nor less than $5 per acre from the evidence submitted. Undoubtedly truck-farming can, under suitable marketing conditions, carry the normal rate, and tobacco would appear to be readily able to carry such a rate. The general return from mixed-farming land does not greatly exceed $30 per acre, and if the water charge form 50 per cent. or more of the gross return, it will be seen that this is a very heavy load indeed. These lands must come in for some form of relief from the present rates, or it is only a matter of time until the settlers will lose their holdings through reversion to the Government or the district due to non-payment of taxes.

As to fruit-bearing lands, the cost of water will not, in general, exceed 6 cents per box of fruit packed. This is based on the Department of Agriculture's average of 253 boxes per acre. This charge, as will be seen, is only the equivalent of the cost of picking, is less than the cost of pruning and spraying, and with anything like an adequate return for the product will form only a comparatively small amount of the costs of production. I am not in the least pessimistic for the future of the fruit industry in the irrigated districts. The appointment of the Board of Control has made its beneficial effect apparent already in its brief operations. Proper marketing will, I believe, entirely solve the difficulties under which the fruit industry has been labouring for the past five years. The Board of Control further determines the marketing of the mixed-farming products, more particularly all class of vegetables, but it would appear that its field in this direction is somewhat limited, inasmuch as areas outside the control, more particularly those in the Fraser Valley, have profited this year in the sale of their products at the expense of those growers in the irrigated districts where the Board of Control fixes the movement of the product to the market.

Comparisons have been made from time to time throughout the inquiry with those irrigation projects in the State of Washington, where much better returns were being received from the land. This is unquestionably true, and it is almost invariably due to the fact that a much greater amount of irrigation-water is available for their operations. It has been suggested that the districts should be treated by the Government similarly to those areas operating under the United States Reclamation Service. In this connection it should be pointed out that the United States Reclamation Service is a Federal operation. Its funds are made available from the sale of lands, oil leases, etc., by the Federal Government, and thereby there is created a very large conservation fund on which the Federal authorities for their irrigation-works require the repayment of principal only. However, we should not lose sight of the fact that in the State of Washington, districts which I have visited and investigated in considerable detail, the State and county taxes are very much greater than those which our settlers are required to carry, in many cases exceeding $30 per acre.

The Oliver project has been referred to as a basis on which the other districts should be treated. This project was undertaken because of an urge upon the Government immediately following the war for certain relief and concessions to the returned soldier. Whether it was justified or not, the demand by the public and the press was so great that I am satisfied no Government could have withstood the demand, whether it embarked on this particular project or some other which might have been very much less useful and successful. The Oliver project is one which lends itself admirably to a cheap supply of water. The Government price for lands was set at an amount sufficient to repay the cost of the installation; averaging $150 per acre for unimproved lands under the system. The soil is sandy and porous, and will require much building-up with cover-cropping and fertilizer. Unimproved lands can be purchased in other districts for $50 an acre. Under the circumstances I cannot see that the settler under the Oliver project is particularly favoured by comparison with those in other districts. So that it scarcely needs the argument of special consideration for the returned man to justify the rates in effect under the Oliver project.

A great deal of discussion took place, both during the sittings of the inquiry in the various districts and at the concluding hearing in Victoria, as to the form of relief necessary to enable the present settlers to remain on the land. All were agreed it was undesirable to introduce into these splendid districts a class of people from the Orient or Central Europe whose standard of living is much lower than that of our own settlers. It was readily recognized that mixed-farming lands must have some definite reduction to their present carrying charges for irrigation if they were to succeed. The general shortage of irrigation-water was admitted to be a serious factor, but before going into any great expenditure for new works it was thought advisable to give consideration to the prospect of a cycle of years of better water conditions. It was shown that the cycle covering the past six years has been the worst on record for the Interior country. However, I am fully convinced that this is a problem which must be attacked courageously, and that before we can hope to get the proper return from these lands more water must generally be made available where this is economically reasonable.

There is no doubt that a certain portion of the mixed-farming lands will have difficulty in succeeding with the lowest irrigation charge which can be offered, and it would, in my opinion, be advisable to allow these lands to return to dry-farming. As a matter of fact, a considerable amount of such lands has already reverted, so that the process of reversion is already in effect. It will be seen that under such conditions more water will be made available for the better class of lands, and I believe this is a sound, economic policy to pursue.

Under section 272 of the "Water Act," subsection (3), provision is made whereby the Lieutenant-Governor in Council may, on recommendation of the Minister, permit the carrying charges of reverted lands to be taken over by the Province. The application of this measure is of great general advantage to the districts, but, as will be readily seen, it means that for the time being no revenue will be obtainable from such lands until resold and that the Province will be carrying the entire load for such lands. One aspect of this is summed up in the evidence of Mr. Wollaston, of Vernon, when he states:—

"Though the Government is unwilling to pay part of the cost as a means of keeping the settler on the land, it is apparently willing to pay the entire share of such lands as may be abandoned by their owners and have reverted."

Mr. Wollaston suggests, as do many others, that taxation of lands according to their ability to produce is a better solution. The classification of land on such a basis presents many difficulties, but is, I believe, worth consideration, and I would strongly recommend that the trustees of the various districts fully investigate this suggestion with a view of adopting it in some form or in part. In the event of acting upon this recommendation, there should be the fullest co-operation between the Department and the districts.

FINDINGS.

I find with respect to the clauses of my Commission that the conditions are as follows:—

(1.) Whether the financial assistance rendered by the Province in 1918 and subsequent years was necessary and justifiable and whether the methods adopted were advisable.

I am satisfied that irrigation generally in the Interior of British Columbia could not have carried on without governmental assistance due to the run-down condition of the various irrigation systems following the collapse or pending collapse of the many large land companies which were operating them. I believe that the assistance of the Government was both necessary and justifiable and that the methods adopted, which had the most serious consideration of the officers of the Department and the users themselves, were the best that could have been evolved.

(2.) Whether the improvement district form of organization was suitable to the conditions obtaining where the districts have been constituted.

There appear to be no major defects whatever in the improvement district form of organization as now functioning. It is similar in many respects to a parallel form of organization in the State of Washington.

(3.) Whether the funds advanced have been expended to good advantage in all cases, and, if not, where the responsibility lies.

I am satisfied that there has been no misappropriation of funds for any of the expenditures under the Conservation Fund. Some mistakes have been made in carrying out improvement-

works in various districts, but all expenditures of this class are subject to errors in judgment, and I am satisfied that there has been less loss due to poor judgment in these expenditures than is usual in such cases.

(4.) Whether the operations of the district have been properly conducted and the duties of the trustees conscientiously carried on.

I find the trustees, with few exceptions, are very conscientious in the discharge of their duties. They receive only a nominal pay for such service as they give and in general their time is given unstintingly in the interests of their various districts.

(5.) Whether the respective functions of the districts and the Department are properly related.

While a few complaints were voiced that decisions of the Department to requests by the districts had not been fully considered, and that in such cases there was a definite cause of complaint, these are matters which can only be understood by lengthy discussion of the merits of each, but I find that almost without exception there is the best of co-operation between the district officers and the Department.

(6.) Whether the conditions and cost of irrigation in these districts compares favourably or otherwise with those in the districts in the Province financed in other ways.

A careful examination was made of the Oliver project and a number of privately operated projects of the Interior, and I am forced to the conclusion that the only real advantages which any one district may have over another lie in the variations in the soil and the comparative costs of bringing water to the lands.

In the systems financed otherwise the following rates were found to be in effect: Kaleden, $18.25 per acre; Oyama, $12.50 per acre; Summerland, $11.75 per acre; Penticton, $17 per acre. These rates, it will be seen, are more or less in line with those in effect in the districts financed by the Government.

It should be noted that the systems above referred to are in all cases carrying on and paying their way and represent a worthy object-lesson for some of the irrigation districts financed by governmental assistance who have carried on constant agitation for further relief from the Government.

(7.) Whether the cost of irrigation bears a reasonable relation to other costs of production and returns of various kinds of crops.

It has been shown that the cost of irrigation exclusive of distributing of water within the orchards or other lands will vary from 5 to 7 cents per box of fruit produced and sold. This is equivalent to the cost of picking; it is less than the cost of spraying and pruning; it is about half the cost of selling; and is less than half the cost of applying fertilizer where manure or commercial fertilizers are used.

In the case of fruit-growing, while the irrigation charges have been a considerable burden during the past six years, they should, in my opinion, be readily carried by the growers of fruit under normal marketing conditions. In the case of mixed farming, however, under present methods of cropping, the existing rates are undoubtedly burdensome.

(8.) Whether the increase in cost of irrigation since the systems under review were first constructed is attributable to the increase in labour and material costs during the same period.

There is no doubt that the increase in cost of irrigation is attributable mainly to the general increase in cost of material and labour which has taken place during the past twenty years. Common labour in 1910 was paid 25 cents per hour; to-day the rate is from 40 to 50 cents per hour. Skilled labour employed in manufacturing has had a corresponding increase, and while the cost of material has not in general been increased to such an extent, its actual cost to-day is very much greater than at the time of construction of these irrigation systems. This is not true of replacements, extensions, or new systems built since the year 1919. The peak of construction costs was reached in 1920, but the large proportion of the works of these districts were originally constructed by the private land companies many years prior to the period in question. However, there has been one very serious increase in the cost of irrigation during the past ten years. This is due to the inclusion of many acres under the various systems and the extension of works to serve the same; neither of which was warranted. These are matters which were entirely in the hands of the local settlers, and it is doubtful if any Government influence or control in any way affected this situation.

(9 and 10.) Whether the application of any of the bases of charges in operation under the reclamation services in the United States is feasible and advisable; and whether the adoption of a gradation of charges according to value of land or kind of crop is equitable or advisable.

It has been pointed out that advantageous conditions exist under the United States Federal Reclamation Service, but, inasmuch as the Dominion Government does not come to the aid of the Province in this respect, it cannot be hoped that such favourable conditions can obtain here. The State Reclamation Service is quite similar to the form of operation carried on by the Provincial Government, and its costs of operation are generally quite as high as ours. The Federal Reclamation Department of the United States appointed a Fact Finders' Committee some three years ago, who brought down a recommendation to the effect that irrigation charges should be based on the gross returns from the soil. I am officially advised that this basis of charges is not now in use by the Reclamation Service, although it has already been arranged to put it into effect in the Kittitas Reclamation District, which centres around Ellensburg, Washington. It is considered unworkable in operation. I am satisfied that the basis of charges in operation under the water district form of organization in force in the Province of British Columbia is upon a sound business basis.

(11.) Whether the cost of irrigation has contributed to the lack of success in the fruit industry, and, if so, to what extent.

Undoubtedly the cost of irrigation to the fruit industry during the past six years would have been felt severely had not the moratorium been in effect. There is, however, every reason to believe that with an improvement in prices, which the operations of the Board of Control would seem to promise, the present irrigation charges as applied to the fruit industry will not be onerous.

In addition to the foregoing there is raised in this Commission the question of a review of the history of the irrigation projects. In this connection I would refer to the claims set forth very strongly by a number of individuals of the Vernon Irrigation District, that in the formation of their district they had been very badly misled by the Government officers as to the charges which, under the district form of government, they would in future have to meet. It is contended that the formation committee and the users generally depended solely upon information supplied by the Government representatives who were present in this area at the time of formation of the district. They say in effect: "We employed the Government as our consulting experts, and we had no cause to expect that information supplied by them would be other than accurate." It is contended that a price of $5 per acre per annum was the one generally spoken of by the Government officers. There is no doubt that this figure was mentioned during organization proceedings, but I find that, so far as the estimated costs of the works to be taken over, improved, and extended, on the information available at the time to the Government engineers, the estimated figures are not seriously out of line. So far as water tolls to be charged for operation and maintenance, I am satisfied that the former management of the White Valley Company was in very much better position to supply this information than the officers of the Government could be. Apparently the Vernon District, like other districts which were advanced money from the Conservation Fund, did in general receive good value for its expenditure. I am convinced they could not have carried on without the Government aid, and I feel that the Government was reasonably generous in coming to their assistance. No doubt many of the growers were disappointed when the actual cost of carrying their system, and tolls, was found to total approximately $15 an acre, but inasmuch as there was, in my opinion, no other way out, and value has been received, I find no merit in the suggestion that the Government or the people of the Province in general should carry the difference between the existing rate and the $5 rate already referred to.

RECOMMENDATIONS.

(1.) I would recommend that the interest rate on borrowings from the Conservation Fund should, as soon as possible, be reduced from its present rate of 6 per cent. (the rate in effect at the time of creating the Conservation Fund) to the lowest rate at which money is available to-day to the Provincial Government.

(2.) I would further recommend that the repayment on permanent structures be increased from thirty to fifty years.

(3.) If the lands other than those suitable for orchard culture or other form of intensive cultivation are to remain in production, some means must be found of reducing the irrigation

charges beyond what the present proposed measures of relief will accomplish. A modified gradation of charges according to the ability of the land to pay has been strongly advocated, but unfortunately it presents many difficulties. These are:—

(*a.*) The impossibility of obtaining uniformity for the same classifications of lands in the various districts, and for the varying classifications of mixed-farming lands within the same district:

(*b.*) The difficulty of providing a workable measure for such reclassification:

(*c.*) The difficulty of withstanding the objections which must follow any attempted reclassification:

(*d.*) The impossibility of eliminating the personal factor in approaching a reclassification.

It is only to be expected, and as a matter of fact has been freely admitted by some district trustees in discussion, that any special relief designed for low-grade lands which may be granted at the expense of the Government will only be limited in its extension by the definite requirements of the Government.

It is therefore apparent that under any such scheme the Government would of necessity take part in the classification of lands for assessment purposes. The classification of land has from the beginning and under the existing form of organization must remain a function of the trustees of the districts.

It therefore appears that any classification along the lines proposed must be carried out within the districts, such as has already taken place in a very small way in the Black Mountain Irrigation District. If the users are convinced that any such classification is necessary, it can well be put into effect and the benefits of the relief already granted, or which may be granted subsequently in consideration of these findings, distributed accordingly. Such a course would be the best possible evidence of the good faith of the water-users and should be taken into account by the Government in the consideration of any further relief. Should the trustees of the districts decide on such reclassification, and should not the general conditions of the industry improve over the situation of the last three years, I believe the Government would be fully warranted in carrying a share of the load in the way of bonus until such conditions have improved.

(4.) I would recommend that early consideration be given to the question of further Government assistance to provide a greater amount of storage-water generally for irrigation purposes. I consider that the Government's equity in these systems will be thereby enhanced.

(5.) I believe provision should be made whereby the transfer of water can be made within the district so that the purchaser of poor-grade irrigable lands can transfer its rights profitably to better holdings which he may own in the district. This is a question of district control.

(6.) I would recommend that there be no compounding of interest on the repayment of arrears under the moratorium.

(7.) I consider some steps should be taken by increasing the scope of the Board of Control to eliminate unfair competition from those areas not now controlled, whereby all can market on the same basis. This would apply more particularly to vegetable and root crops.

(8.) I have made a survey of transportation rates from the Interior irrigation districts to various Prairie points now in effect on vegetables and fruit. These rates appear to be in general too high, and should be revised.

I would point out that the Province has already put into effect a very substantial form of relief whereby it carries the fixed charges for irrigation improvements on all lands which revert to the district or to the Province. This is the most substantial step in providing relief which has yet been brought forward.

It should be noted that throughout the hearings in the various districts the evidence has been given largely by the users who quite naturally desire to improve their position. Quite naturally they have made submissions in their own interests, and have no doubt in most cases quite unintentionally placed the position of the Province in second place. In general, however, I feel that the users have been fair in their attitude both toward their trustees and the departmental officials.

In conclusion, I would point out that there exists to-day an investment in Central British Columbia irrigated lands of approximately $30,000,000. This does not include the investments in the cities, towns, or villages, Government roads or transportation systems.

There are to be found on the land to-day some settlers who are unsuited for their occupation. The number of these, however, is comparatively small. The general class of settler on the land to-day is intelligent, hard-working, and persevering and is entitled to every assistance which his fellow-citizens of British Columbia can give without imposing an undue burden upon themselves.

It should be unnecessary for me to add that in endeavouring to find a solution for the difficulties which have of late years confronted the settlers of the irrigated districts, these settlers, and more particularly their trustees, have an equal obligation with the Government in endeavouring to better conditions. The phrase "destructive paternalism" has been used with reference to governmental aid to industry. The districts must, to their utmost ability, carry their own load and solve their own problem, if the settlers and the irrigation industry is to find a sound and permanent foundation for the future.

All of which is respectfully submitted.

W. G. SWAN,
Commissioner.

Dated at Vancouver, B.C., this sixteenth day of December, A.D. 1927.

APPENDIX.

HEARING BEFORE THE COMMISSIONER IN THE CEDAR COMMITTEE ROOMS, PARLIAMENT BUILDINGS, VICTORIA, B.C., OCTOBER 11TH, 1927.

(Inquiry resumed pursuant to adjournment.)

The Commissioner: If you will come to order, gentlemen, we will proceed. I have been carrying on this inquiry in quite an informal fashion, so you are free to smoke. As you are probably aware, it was decided the final sitting of this Commission should be held in Victoria in order that we might take evidence from the former Water Comptroller, Mr. Cleveland, from the Water Comptroller, and from the Minister, in order that we might have the Government's side of this question; and you have been invited to attend here in order that any point on which you might wish to express an opinion and points you might want further information on could be developed in the evidence to be submitted here to-day. I think it is probably unnecessary for me to re-enumerate the clauses of this commission. I think, with the possible exception of Mr. Cleveland, you have all heard them read before, and I understand these were submitted to Mr. Cleveland at the time of the drawing of the commission. Unfortunately the Minister is absent in the Upper Country and it is doubtful if he will be able to return at a convenient time, and I do not propose to adjourn and ask you to stop over awaiting his return; but I believe, inasmuch as the operations of the Department have been carried on almost entirely through the hands of the former Water Comptroller and the present Water Comptroller, that it will be possible for us to derive what evidence we want from these two gentlemen. Mr. Cleveland, you have seen this commission, have you?

Mr. Cleveland: Yes, Major Swan.

The Commissioner: Would you care to have that in your hand? Are you familiar with the clauses? Perhaps you do not need it.

Mr. Cleveland: No, I am not familiar. I saw it only once. I have not looked it over since and have not a copy.

The Commissioner: You may take that. Gentlemen, will you just go around the room and give your names and whom you represent.

Mr. John Kidston (Miktow Ranch): Mr. E. Davis, Water Branch, Victoria; Major J. C. MacDonald, Water Comptroller; Major O. F. D. Norrington, District Engineer, Kelowna; Mr. E. A. Cleveland, former Water Comptroller; Mr. H. B. Everard, Associated Districts and also as secretary of Scotty Creek and South-east Kelowna Irrigation Districts; Captain C. R. Bull, Black Mountain Irrigation District; Mr. J. C. Clarke, Glenmore Irrigation District; Mr. W. R. Reed, Glenmore Irrigation District; Major M. V. McGuire, Vernon Irrigation District; Mr. T. R. French, Vernon Irrigation District; Colonel Edgett, Vernon Irrigation District; Mr. F. G. DeWolfe, Vernon Irrigation District; Mr. C. Varcoe, Water Branch, Kamloops; Mr. F. R. A. Wollaston, Coldstream Ranch; Mr. Lindley Crease, K.C., Coldstream Ranch; Major J. W. Clark, Water Branch, Victoria; Mr. W. Blane, Water Branch, Nelson.

The Commissioner: Before we proceed, gentlemen, I am going to ask Mr. Cleveland to give his evidence first in order that if we should run over until to-morrow he would not be delayed. Is there any point any one either on his own behalf or as representing a district would like to bring forward at this time? I don't mean as a matter of inquiry which may have developed since our hearing, but with regard to any instructions which you might care to receive for this sitting at Victoria. Will you sit in, Mr. Cleveland?

Mr. Cleveland: Shall I take this seat?

The Commissioner: I think so. You might pull it a little that way, probably.

Mr. Cleveland: May I sit?

Colonel Edgett: Mr. Commissioner, will we be permitted to ask any questions the same as we were at the Vernon hearing?

The Commissioner: Yes, by all means; that was the idea of having the districts represented here. I would just ask this, as we have done before; I only want one question at a time, and as far as possible not to interrupt the evidence on any particular point until it is completed.

E. A. CLEVELAND testifies as follows:—

The Commissioner: Mr. Cleveland, you were the Water Comptroller during the early formation of the water districts, were you not? A.—I became Comptroller in February, 1919.

Q.—Had there been any districts formed before you took office? A.—There had been no irrigation districts formed before that.

Q.—I wonder if you would outline briefly what prompted the formation of the irrigation districts in the Interior of British Columbia? A.—I would be glad to do that, Mr. Commissioner, as far as I can. When I became Comptroller of Water Rights I understood there had been representations from time to time made to the Government to do something to alleviate the growing distress in the communities where irrigation was practised or irrigation companies functioning. The companies had, many of them, if not all, gotten into very bad financial conditions; some were in the hands of receivers and others were being carried on increasingly getting into debt—their structures were becoming no longer useful through age and often through inadequacy or through bad construction sometimes. There was also the question of insufficiency of water and matters of that sort. My understanding was that these representations, as I said before, were very vigorously made to the Government, so that among the duties that I was charged with by the Minister of Lands on my taking office were those, to use a better term, reorganization of the irrigation communities. When I say communities, I don't mean the water communities under the "Water Act," but the areas which were existing by reason of irrigation in a public way or companies. Already, that is before 1919, some money had been loaned from the Conservation Fund, that fund having been established by the Government under preceding legislation. I can't quite say the date of that legislation, however, the Conservation Fund had been established and a sum of money had been set aside for that purpose.

Q.—Advances had been made to irrigation companies? A.—Advances had been made to the White Valley, there had been more than one advance to Vernon, and I think an advance to Peachland, and I am not quite certain, but possibly to Naramata.

Q.—How were those loans secured, Mr. Cleveland? A.—Those were direct loans to the companies. I am not sure whether in the case of Peachland it was not to a receiver of the company; I can't quite say.

Q.—Had you security for the loans? A.—You see, I was not here, Mr. Commissioner, when those loans were made, and I do not recall the terms of the "Water Act" at that time under which those loans were made. I do know they were made directly to the irrigation companies, or to the representatives of the companies who were operating.

Q.—It has been suggested in two or more cases that the Government had in mind the formation of the water districts for one reason; that is, to have its security put on a better basis, and was endeavouring to lighten its obligations by making it more secure by putting it on the people or on their property? A.—I think, Mr. Commissioner, that that is not a correct statement; at any rate, I have no recollection of ever having heard such a suggestion. The position as I know it was that the irrigation districts must have of necessity somebody to come to their relief. The Government was absolutely the only source from which relief could be got. The Government under the terms of the "Water Act" had a fund at its disposal and was prepared to and evidently desired to go in or, shall I say, rehabilitate these areas and assist them, the idea being it could be best done by a co-operative effort, by a reorganization of a district, and to that end the "Water Act" required to be amended to make it possible, since the legislation covering water districts in the Act at that time was thought to be hardly workable, or rather entirely unworkable.

Q.—I was under the impression, perhaps mistakenly, that the revolving fund, the Conservation Fund, was brought into being concurrently with the formation of the district? A.—No; you are mistaken in that, may I say, Mr. Commissioner. The Conservation Fund had been established, I should judge, for one or two years before the period I speak of, beginning in the early part of 1919; and from that fund moneys had already been loaned to the irrigation companies. I say then it was considered that the best way to handle the problem was to organize the areas under particular systems into districts; to lend these districts the moneys necessary to renew the structures and enlarge or increase, as the case might be, and to provide works for the storage of water. To that end investigations were made in 1919 and in 1920 in the field to determine as far as could be done in that time what storage was available on either side of the Okanagan Valley from the end around Vernon away to the foot of the lake, what lands to which water

was or could be made accessible and whether those things were within the realm of practicability. These surveys, as you know, covered a large area and with a relatively short season had to be made not in complete detail, but yet with sufficient detail to show what promise there was of water available to the lands in the areas; and I think—this does not apply to Vernon so much as the areas south of Vernon—land was surveyed and an attempt made to roughly classify it to see what would require irrigation and what would not. You will readily understand, Mr. Commissioner, that there might be in any given situation a lake or lakes which it would be possible to bring to a certain area if the area perhaps was big enough to justify the expenditure, or, on the other hand, there were sources of water-supply available to an area but were not sufficiently large to include all the irrigable lands which might lie under it. Therefore, in cases like that which ought to be included in the district—Glenmore is a case in point—they had to be restricted. In other cases, and I would cite the South-east Kelowna District as an example, there were lakes at the head of Mission Creek which it was thought might be brought in, in addition to the supply from Canyon Creek and Hydraulic Creek, for the areas under that district, and with that was the question of the possible cost of bringing the water or sufficient of it and the necessary areas under it to justify it. The organizations were carried on something like this: In each district there was a committee formed, and I think the committees were always appointed by the growers in the particular areas. The committees generally consisted of practical growers, shall I call them, in the particular area, many of the best men in the district being on the committee. The negotiations were always conducted in a round-table sort of fashion; some of them were quite extended and took a considerable number of meetings. The Government's position was this: Certain principles had been set out, first, that the money would be loaned by the Government provided an organization was made to carry on the activities of the district; legislation would be introduced which would make the districts as simple of administration as possible; the Government would advance the money if and when it was necessary to buy the irrigation system and put it into the hands of the district; it would advance that money by way of loans at an interest rate just about what money was costing the Government or just slightly over. I think the interest rate was fixed then at 6 per cent., and what with the handling of the money it was costing the Government just about 6 per cent.; that the districts themselves or the owners of land thereunder would be responsible for the total cost of the irrigation project.

Q.—Is it customary on Government loans to charge an administrative charge? A.—I couldn't say, Mr. Commissioner. I have had no experience with Government loans other than irrigation loans, and perhaps loans to those who purchased land in the University Endowment Lands, where a fixed rate of interest was set, but I do know in this particular instance it was regarded that 6 per cent. was just as nearly the cost of the money then to the Government—that was considered certainly by the Minister.

Q.—As a matter of fact, some of the revolving loan was obtained at 6 per cent., was it not? A.—All of it. No other rate was ever charged as far as I know.

Q.—I mean—— A.—Oh, paid by the Government?

Q.—Yes? A.—I think at the time the early loans were made the money was costing the Government as nearly as possible 6 per cent. That is my recollection of the situation.

Q.—The Dominion Federal loans do not, as far as I know, bear any administrative charge? A.—No? Well, I would not say that the administrative charge was included in that 6 per cent. As I have already said, I believe 6 per cent. was about what the money was then costing the Government.

Q.—Quite so? A.—The administration of a district was to be as simple as possible; the negotiations as direct as possible. There was, of course, a discussion or a question as to what would be the best way to have the districts proceeded with in the way of rehabilitating themselves. I recall the question of the issue of bonds or debentures by the districts was one of the suggested methods, but on consideration it was concluded that the bad credit the districts had would not permit of their selling bonds at all unless they were guaranteed; and if the Government guaranteed the bonds, what might happen if a district did not feel like paying its bills would be the bondholders would ask the Government for the interest and the principal, and what would happen would be the Government would simply have to pay; and it was considered the better form of formation was one by which the Government would lend the money to the districts and let the districts carry on their own operations. May I say, Mr. Commis-

sioner, I had some experience with the making of bond issues, and when I realize the tremendous amount of work there is in the making of a bond issue I considered that the very, very simple manner in which the districts were able to get their money from the Government certainly had very great merits. The usual—and I am perhaps a little ahead of my story—the usual way in which the money was advanced was something like this: A district made a request for a loan and it was understood loans would be made only for necessary purposes, not simply because it was desired, but it must be necessary in order to permit of the district getting along and carrying out its operations. A request would be made for a loan for a certain purpose. An engineer of the Department, usually Major MacDonald —an engineer of the Department would look over the situation to see whether in his opinion the works were necessary. If he advised that in his opinion the works were necessary and that the sum requested was reasonable, it generally became my business to take the request to the Minister; and if the Minister was agreeable, simply refer back to the district which put through a by-law—a very simple arrangement—and when the by-law came down the Order in Council was prepared, which the Minister took into the Executive, and the money or such part as was required was then available. It was extremely simple without frills or furbelows. Now, to go back to the organization. Some of these organizations took a very considerable time. There were many aspects of the reorganization of a district that required attention. There was the question of what was to be paid for the system to be taken over—if anything was to be paid. Some of the systems were financially greatly complicated. These questions were discussed, as members of the various committees who were present can tell you—were discussed very freely and very frankly. The position that the representatives of the Government took was the money would be made available, what is the best that can be done; what do you as the users under the old company, what do you feel should be paid for the system, if anything. These discussions, apart from the negotiations for the systems, often occupied a good deal of time, and it was not a case where the Government said we will pay or advance so much to pay this for the system, but it was a case of those around the table deciding what was to be paid for it, or what they could afford to pay, or what they thought it was reasonable to pay; then they would take that back from the organization committee to a larger committee of those under the system, and then come back to the organization committee again and decide what should be done.

Q.—Was it ever argued that the system was appurtenant to the lands? A.—Oh, many arguments, Mr. Commissioner, were put forward; many of them had rather big holes in them and some had holes which were not quite so obvious.

Q.—Do you mind if we dwell on that? You are speaking now of the acquisition of the systems? A.—Yes.

Q.—Do you mind if we dwell on it just a moment? A.—Very well.

Q.—It has been given in evidence that the Minister more or less promised that in acquiring these systems no money would be paid for their acquisition. Mr. Kidston in his evidence has given an extract from a newspaper report of a speech by the Honourable Mr. Pattullo in the year 1919, from which one might be led to believe it was the intention of the Department to have these systems taken over without cost to the Department or to the users. I have found it very difficult to see how it would have been possible to get title to those systems without taking cognizance of and satisfying the bondholders. I presume the question of the bondholders' interest in those systems was very much before you at the time of acquisition? A.—Yes, Mr. Commissioner. I, of course, cannot say what the Minister promised or did not promise, but I can hardly conceive of the Minister of Lands making any promise of that sort when he was cognizant all the way along of just what was going on in each of these reorganization areas, and the Minister knew perfectly well that negotiations were being carried on for the acquisition of the systems and that money was being provided or it was expected that money would be provided for the acquisition of the systems; just like for other purposes, and indeed I recall very well the Kelowna Irrigation Company, the liquidator of the Dominion Trust Company, coming over to see the Minister about an offer that had been made to clear them out of the way. The Dominion Trust Company had some sort of a hold on the Kelowna Irrigation Company. It was a very complicated matter, and a certain offer was made to the Dominion Trust Company to get out, to clear up the title. I recall Mr. Gwynn coming over to see the Minister and rather vigorously attacking the amount of money which was offered to him as being entirely inadequate to get the title cleared up, to get him out. So that the Minister knew all along what was being done

and was kept well acquainted with what these negotiations were. It was not a high-handed operation by the officials of the Department, so I cannot understand a thing of that sort having been credited to the Minister.

Q.—I have formed a definite opinion that title could not have been obtained otherwise. I don't know whether that is a legal point entirely of which a layman might not have definite knowledge, but I cannot see how we could have been prepared to give definite title to the water districts unless the bonded indebtedness had been met or satisfied? A.—If you, Mr. Commissioner, had been present at some of the organization committees, I think you would have realized how impossible it was to go in and take away from a company a system which it had paid for and had been operating for some years and collecting tolls for. You could not have gone in and said to the receiver of the Kelowna Irrigation Company: "Here, you get out of the way, I am going to confiscate your system." If we had gone to the Coldstream Company and said, "Here, we are going to take your system and do not propose to compensate you," I imagine Mr. Crease, who is present, would have brought his guns to bear on us at once. It was always a question in the organization committees how much was to be paid for it, how the equity of the company in the system should be ascertained, how much compensation should be granted. No; I must say, Mr. Commissioner, it is news to me that there was any suggestion that the companies' properties, for whatever they were worth or however they may have been obligated for loans and that sort of thing, were to be taken over without compensation.

Q.—Might I just make this remark before this sitting this morning: I do not place an undue amount of importance on this question which is somewhat controversial, but I would like to get it on the record and for that reason I have asked Mr. Cleveland this question; I would like to get all the light I can do on the history of it, and I am hoping when I come to a conclusion on it the matter will be buried for all time. That is my only reason for touching a point on which there is a variety of opinions apparently as has been put before me since this inquiry opened. It is not, as you can understand, a constructive point in connection with the end we are endeavouring to obtain, but I want to wash it out.

Mr. Wollaston: Mr. Commissioner, the alleged speech of Mr. Pattullo was in 1919, whereas the negotiations took place in 1920.

The Commissioner: It might have been considered binding for a twelve-month period, I suppose.

Mr. Wollaston: Mr. Cleveland seemed to state he didn't know about it. It came up before the real negotiations took place.

Mr. Kidston: Might I just ask one question that I would like to ask Mr. Cleveland, or I will wait until the end, if you like.

The Commissioner: I don't think it would interrupt at all. It might be, when we get to a point which is of importance, it might be well to develop it then for fear we lose sight of it.

Mr. Kidston: As Mr. Wollaston has mentioned, the speech was in 1919 and the real negotiations were in 1920, but the point I want to mention is that in the amendment to the "Water Act" a clause was inserted under which, if a company failed to supply water or ceased to do it, the Government had the power to declare the works appurtenant to the land and take them over, and there was no compensation to be paid for taking them over under the Act.

Mr. Cleveland: You are correct, Mr. Kidston, in your statement. In the "Water Act" in 1918, that is before the date I am now speaking of since my knowledge began in the early part of 1919—there was already in the "Water Act" those clauses concerning appurtenances.

Mr. Kidston: Yes.

Mr. Cleveland: Very defective, or my own judgment was they were always very defective, because they did not show what was going to happen to the system after it was taken over or declared to be appurtenant. We had many discussions on that question of appurtenance, because in one instance in one of the little areas down the lake it looked at one time as though the works were going to be declared appurtenant to the land, but these difficulties which arose out of indefiniteness of the Statute showed that, although it might be a very good thing to do in one specific case, it would be a very inadvisable thing to do in another.

Mr. Kidston: The point I wanted to make was the clauses were there and placed there, we believe, with the object the Government being able to take over these systems if the water was not supplied, and take them over without compensation.

Mr. Cleveland: They were in the Act in 1919, the so-called appurtenant clauses.

Mr. Kidston: That is all, thank you.

The Commissioner: All right, Mr. Cleveland. Have we diverted your line of thought? A.—I don't just know where I was at, Mr. Commissioner.

Q.—You had given the history of the formation of the districts by meeting at round-table conferences, and you had made reference to the acquisition? A.—Yes. On that question of acquisition I think it is quite right to say, not think—I know it is perfectly right to say the organizing committee was the committee who settled what was to be paid for the system. It was not a case where the Government came in and said: "You shall pay so and so." If I have conveyed any sort of a correct picture of these organization proceedings, you will see that to one or two Government officials there were six, eight, ten prominent growers of the district who were all co-operating in a most friendly and frank manner to see what could be done to get an organization to which money could be loaned for the purpose of improving the situation so that they could carry on.

Q.—Did the companies freely admit in most cases that they could not carry on? A.—I would say that, with the exception of a company like the Coldstream, there was no question about whether they could carry on or not.

Q.—It was definite that they could not carry on? A.—Oh, yes. The companies had reached that stage. Take the White Valley Company—the White Valley Company had a bonded indebtedness on which, if my memory serves me right, it had not paid a cent of interest for eight years and had a current indebtedness at the Bank of Montreal in Vernon on which the bank was more or less pressing. What other indebtedness it had just slips my memory at the time. The Kelowna Irrigation Company was just getting on from hand to mouth and was in the hands of a receiver. Some of the smaller ones down at the end of the lake, like Peachland, were in very sore straits indeed. There was no question about the Government going in. I don't think it could be said this was a voluntary act on the part of the Government to go in except in response to the urgent representations to come in and assist the situation and make it possible for the operators to carry on.

Q.—I presume it was the urging of the people in the irrigation districts which brought the matter forcibly to the attention of the Government? A.—That was my understanding. You understand these representations must have been made before I came into the Government service; but it was always my understanding, and I realized, immediately I got to work with the staff, that there was good reason for the request, because the physical condition of the structures in the districts was such that many of them could not continue to deliver water and somebody had to step in and make it possible to continue irrigation. Did I say, Mr. Commissioner, that in the formation or organization of the districts an attempt was made in redrafting pretty much the whole of the sections of the "Water Act" which had to do with irrigation districts. An attempt was made to have the organization as simple as possible; to have the administration of the districts not only as simple as possible, but to have it as a complete local administration without any unnecessary limitations on it by the Government. You will remember, I think, that pretty much the only thing that the district had to do with the Government besides borrowing money was simply to file a copy of each of its by-laws with the Department, so that the Government knew what the district was doing as it was going on. The district fixed its own rates, for instance, without reference to the Government.

Q.—I suppose the people of the district through those committees were pretty well consulted in the formation of the Act? A.—I think they were. They used to come down to the sitting of the Legislature and their member took a hand in the revision of the "Water Act."

Q.—It would appear to me the idea was to give them a workable instrument in the "Water Act"? A.—That was the whole idea and to make an organization to which the Government could lend money for their purposes, and I do think it was as simple as could have been made and the negotiations were as direct as they could possibly have been.

Q.—You spoke of making the control local to the greatest possible extent. Mr. Wollaston in his evidence at Vernon suggested that the storage and main canals should be the function of the Department, the Government of the Province, and he also said he thought it would do away with a good deal of delay and red tape which took place in the management of the district. It occurs to me that would have worked out in the contrary way, that with the local control the delay and red tape in negotiations at long range should have been eliminated? A.—I don't know what Mr. Wollaston meant by red tape, as I feel they are really very simple. If he is speaking of negotiations before it was formed, that is one matter; but if he is speaking of

negotiations after it was formed, the simple negotiations between the district and the Government consisted in getting loans season by season. Whether that was surrounded by red tape or not, I feel they could not have been reduced to simpler terms. Indeed, loans were often got just as fast or as quickly as the district asked for them. The main thing was to find out if they were necessary, and indeed that got to the point where they took the engineer over the area before they made the request, so that the engineer could say, "This is necessary," and the request was then taken to the Minister and very often the Order in Council was through at the very next sitting of the Executive Council. Perhaps if you would ask Mr. Wollaston what the red tape was——

Q.—I did ask him before.

Mr. Wollaston: I did not mean external red tape with the Department. It was Mr. Young's attitude and the secretary under him more than the Water Comptroller under the Act. I think, myself, that if there was control of reservoirs and main ditches in the Government and the internal distribution left to the users it could be done cheaper. We have a large block of land. We could run that without any staff and we could get our water cheaper. Under the old Coldstream Company we only had one water bailiff for about 2,500 acres, with a little help from the office. That is about a quarter of all the land in the Vernon Irrigation District, and it requires administrative measures about forty times as much as we had in the Coldstream.

The Commissioner: I think Mr. Wollaston was comparing a simple operation in the Coldstream with what was found necessary in order to operate the White Valley when it was formed.

Mr. Wollaston: Not only the White Valley, but the Vernon Irrigation District.

The Commissioner: And the Vernon Irrigation District.

Mr. Wollaston: I think small areas, especially in the Vernon Irrigation District, where it is cut up into municipalities, there are small blocks which could get along without the expense of supplying water to Lavington and Swan Lake. Let each people work out their own solution as to the cost of their distribution. If one section wants cast-iron flumes and brass valves, let them have it. Another one could look at their flume and say, "Oh, it will last another year," but if Lavington is going to help us pay for it, we want this taken out and another one built this year. If a municipality or a section had to do their own work they would make it stick out as long as they could.

The Commissioner: I didn't see any works in the entire irrigation district, Mr. Wollaston, that had been pulled out before their time was due, and some were in long after they were due.

Mr. Wollaston: Some might have survived a little longer, but at the same time I think a good deal of that could have been done. You can always get along if you have to depend on yourself. Then, you see, under the district there are a lot of 5-acre lots getting delivery, whereas if you had a larger block of land you would only get delivery for 40 acres. You will find lots of 5-acre delivery under the district. You will find seven—eight points of delivery, whereas if the Coldstream were doing it there would only be one point of delivery for 40 acres. We used to operate about 260 acres for two points of delivery.

The Commissioner: Your original lease called for 40-acre delivery.

Mr. Wollaston: The original lease; but if a man had a 5-acre block he would sometimes try and get water delivered over it.

The Commissioner: Did you ever consider that suggestion, Mr. Cleveland, that the reservoirs and main canals should be controlled or operated by the Government? A.—That suggestion, Mr. Swan, I think had been made before I became attached to the Government service; but my instructions were that in these reorganizations, that the users, the irrigators were to pay the whole cost; therefore I had no authority to consider that. The Minister of Lands, I think, has stated on many occasions that he would be no party—I don't know what his views are now, I may say.

Q.—Quite so? A.—But in those early days he would be no party to any reorganization under which the Government would assume any part of the cost.

Q.—I cannot help think that the simplest operation was that which is now in effect—namely, the entire control in one party. The divided control would not appear to me as a move for improvement on a business basis? A.—If I may say, Mr. Commissioner, this very point which Mr. Wollaston has raised has had some influence on the question of rates. I understand, and I have not heard from you, nor have I seen any evidence, that this question of estimates of costs and therefore the annual cost has been before you; but I would say I did see an article by

Mr. Wollaston in the Vernon paper in which that subject was touched upon, and I can now see by Mr. Wollaston's statement that he feels—I cannot put words in his mouth—but judging from the article he feels the costs of conducting the operations of the district are greater than they were thought at the time they would be, by reason of this very fact, as he says, although it is somewhat exaggerated, I might say, speaking of brass valves and cast-iron pipes and that sort of thing. It is quite a natural thing, I would say, in a district where every irrigator is a co-owner of the works, because that is what it amounts to, that the service demanded will be of a much higher character than if the service was controlled from an irrigation company where the conduct of a company was in the hands of a manager. He would simply say: "There is the flume and it carries so-much water; get what you can from it; I can't help it; I have no money to fix it this year." But in a co-operative district every man would naturally ask for as much as his neighbour was getting. I think that accounts, Mr. Commissioner, for a very considerable portion—I imagine from the article of Mr. Wollaston I have referred to, of the increase in the cost, the annual cost over what they were thought to be, and I can say in the Vernon District my recollection is the annual cost of operation was on some preliminary figures taken from the White Valley Irrigation Company, and the general consensus of opinion as to what the White Valley costs were—the annual operating cost was taken as $1.50 per acre, whereas it has run to something like $6 or $7 an acre, I think.

Mr. Crease: Mr. Commissioner, if I might just ask Mr. Cleveland a question at this point while we are on this branch of the subject it might help to clarify the situation, the affairs or the origin of these proceedings for the protection of the district owing to the condition in which the water-users were then found and the supply of water then was. Mr. Cleveland, why was it that any action was taken on the part of the Government to give any assistance to the water-users in the dry belt? A.—Mr. Commissioner, I think I have already——

Q.—I mean apart from their calling upon the Government for assistance? A.—I should say, Mr. Commissioner, in reply to Mr. Crease's question, it was simply because the irrigators had called upon the Government for assistance and the Government acceded to their request to assist.

Q.—Would it not have been possible to have denied that request? A.—Oh, quite.

Q.—And what would have been the consequence? A.—The district would have perished, I should say, except a certain part, such perhaps as the Coldstream, which might have—I can't say, but which might have gotten along. I think, under the White Valley system they must surely have perished. I speak now of the whole operation of the district.

Q.—That would be the conclusion to which you would come after years of considerable investigation of conditions and your extensive knowledge as to the condition of affairs of the company, that if it had not been for the Government stepping in at that time those districts would have perished? A.—That is my opinion.

Q.—And there would have been great confusion owing to the breaking-down of the system, and it would have been a matter of disaster to the Province as a whole? A.—It certainly would have been a matter of disaster to those districts, and it must have had a reflecting action on the Province.

Q.—It was really then a big question? A.—Quite an important question.

Q.—Of public concern, and the Government acted for the benefit of the whole Province and in the interest of the whole Province, and decided to step in and come to their assistance? A.—I cannot quite say, Mr. Crease, what view the Government, as the Government, took of it, but I know what my instructions were.

Q.—Well, actions speak for themselves? A.—Yes, to go forward and assist as fast as possible the reorganization of these districts, and to see that they were provided, or the situation was such they could be provided by way of loans with money to carry them on.

Q.—Then the matter was given careful consideration and an effort was made to provide such assistance as according to the powers that be would accrue to the greatest benefit of the Province? A.—Certainly—I may not go so far as that, perhaps, because the policy was not mine; that is, the policy of whether they should heed the Macedonian cry or otherwise; that was a policy which the Government settled. My instructions were quite explicit to go over and, as far as I was able and with the assistance of the staff of the Lands Department in the Water Rights Branch, to effect these reorganizations.

Q.—The point I am coming to is it is admitted the welfare of the dry belt is a public concern to the whole Province? A.—I take it, Mr. Crease, that would go without argument.

Q.—Without argument? A.—I take it so.

The Commissioner: We know we have an interest in the irrigated districts of something like $35,000,000 and there are the villages, towns, and settlements there which are dependent solely upon the success of irrigation. I don't think one can deny it is a Provincial problem of very considerable concern.

Mr. Crease: Thank you.

Q.—Then the course which was taken of giving financial assistance to those regions by means of creation of irrigation districts and of loans to them was one course out of several possible alternatives, was it not? A.—Yes. I wouldn't say that that was the only thing that could have been adopted to rehabilitate the districts.

Q.—The conditions which were prevailing were really unprecedented up to that time in the Province? A.—I think so.

Q.—And it was necessary to deal with a new state of affairs on which there had been no previous experience to guide you?

The Commissioner: What do you mean by unprecedented at that time in the Province?

Mr. Crease: There never had been such a similar condition of affairs in a large, poorly watered dry area.

The Commissioner: You mean to say—are you speaking now of the years 1918, 1919, and 1920?

Mr. Crease: 1917, 1918, 1919, and 1920.

The Commissioner: As a matter of fact, in 1918, 1919, and 1920 the position of the users was that they were better off then than they are to-day, according to the evidence I have received. In the years 1918, 1919, and 1920 they spent a great deal of money.

Mr. Crease: But in the dry belt, I am speaking now of it as a whole. Looking at the whole problem as it existed originally, those districts were for the main part—certain areas had some farming going on and very little fruit-growing. Later, when it was found the land would produce fruit, water was introduced by individual effort on to the land for orchard purposes and the district grew into a fruit-producing district. When I say the district, I mean the dry belt. Then it was found that the supply of water and the means of conveying it to the lands broke down. In the meantime large investments had been made of money with a view of producing from the soil, and what I wish to emphasize is not only fruit, but farm products of all kinds. That is what I mean when I say the condition was unprecedented. There had never been before in the experience of the Province a break-down of agricultural production on such a large scale for want of supply of water.

The Commissioner: Imminent.

Mr. Crease: In fact and imminent both; had broken down in a great part and was breaking down more and more every year. That was, roughly speaking, the problem with which the country was confronted, was it not, Mr. Cleveland? A.—That is a very fair statement, I think, of the general conditions in those districts which were irrigated by company systems.

Q.—What I would like to bring out is, this problem does not affect only the fruit-growers, but also all producers from the soil in those districts? A.—I think that is quite a fair statement, that all those who farmed, whether for hay or for fruit, under these irrigation systems were in such a position that they were, as the Commissioner says, in imminent danger of being extinguished as a producing class.

Q.—That is the one thing I would like to emphasize, really stress before you, Mr. Commissioner. It is not only the fruitmen who are involved, but also the farmers in the whole Province. It is hard to say which of the two are more important, but the press and those who perhaps are not so familiar with the matter seem to regard the whole question as one affecting the fruitmen, whereas it affects the farming industry to a very, very great degree. Is that not so, Mr. Cleveland? A.—The farming industry under those irrigation systems, yes, surely. They all depend on water, both fruit, the truck and the hay farmers, where they are under irrigation systems.

The Commissioner: I am not overlooking that, Mr. Crease. I can assure you it has been put forward rather forcibly before this inquiry.

Mr. Crease: There is just one other question: About this method of giving relief, Mr. Cleveland, was it not contemplated it was more or less in the nature of experimental relief liable to change as experience might dictate? A.—I can't say what the Government who controlled the

policy had in mind concerning that. It is quite true, as you have pointed out, that no such situation had existed theretofore in the dry belt, and they were perhaps as good a solution as any to meet the situation. The situation was met in the best way those in charge and those with whom they were co-operating knew how to meet it at that time; and I can recall very well that, in answer to those who said the Government should own the reservoirs and main canals, I said my instructions were that the burden was to be put where the Government believed it should be—namely, on the irrigators. It would be seen in the course of time how well or how badly the burden was carried, but beyond that I couldn't go because I had no instructions.

Q.—For instance, it was clearly contemplated an irrigation district might have to be dissolved or the boundaries of an irrigation district would have to be altered? A.—Yes; provision was made for that inclusion or exclusion.

Q.—Which would point to what I said that it was contemplated experience might require some change in the method of dealing with the problem in part or in whole? A.—I take it that any problem of large size, without presuming to dictate to those who are attempting to solve it, is always subject to revision. I take it, Mr. Commissioner, am I not correct, that your business in this inquiry is to gather such information to review what, in your judgment, is wrong with the system and what, in your judgment, remedy might be applied. If I am correct in that it answers Mr. Crease.

Q.—For instance, Mr. Cleveland, I think the records will show it, the licences in the Coldstream while they were being dealt with were preserved, so in the case of a dissolution of the district all the water licences would revert to the owners? A.—Yes; there was provision made in the Act that in case of dissolution of a district the licences remained as they were. They were not cancelled.

The Commissioner: Mr. Crease, I think Mr. Wollaston made exactly the same statement at Vernon that the irrigation districts were in the form of an experiment. What had you in mind, that they were an experiment financially?

Mr. Crease: No; the whole method of dealing with the problem was an experiment to be tried out for a series of years. My one object in bringing this to your attention, Mr. Commissioner, is lest the impression should be given that the methods adopted were cast iron and unchangeable. I think I have now established right from the very beginning they were considered more or less a trial, experimental, subject to change as necessity or wish might dictate.

The Commissioner: And the Act was made sufficiently elastic.

Mr. Crease: Yes. This was contemplated by the Act.

The Commissioner: I was wondering if you had in mind that at the time of the formation the districts should try this out, and if they found they got into difficulties they might come back to the Government and say: "We can't carry this load and ought to be relieved of it." That is not what you had in mind. You meant the whole problem was a matter of revision in case of failure.

Mr. Crease: No. Any improvements which might be made in the Act if it was found by experience great advantage could be gained by some other way of dealing with it. It was always left open.

The Commissioner: The Act can always be changed, I presume.

Mr. Crease: I agree with you, but it was part of the initial Act and was always considered that this was by way of experiment.

Mr. Cleveland: Mr. Commissioner, may I refer to that. I would not like to follow Mr. Crease quite so far as that in saying this was experimental in the sense that we were just trying it out; if it works, well and good; if it does not work, we will turn it upside down or try something else, because that was certainly beyond any possible idea I, as representing the Minister in this reorganization, ever had. I had certain instructions, as I have already said, and if the districts were prepared or if reorganization could be made on the basis of law, well and good; but neither would I go so far as to say those things were like the laws of the Medes and Persians, would not be changed or could not be changed, but they were made and they were thought to be an effective way of dealing with the situation as it was. That is my view of the thing.

Mr. Crease: I think we coincide fairly well on that. I am not suggesting that we should just hop like mosquitoes from one point to another, but remain stationary on one thing and give it a fair trial, say something like five years—I think that was the period mentioned by some one at the time. I am not suggesting that it would be changed perhaps whimsically without good

reason, but it was contemplated it was quite possible that good reason would arise for a change when the whole subject would be reconsidered. For instance, take the case of the Vernon Irrigation District; that might have to be divided. There was a great question as to whether the district should extend beyond, I think, Mr. French's place, whether it should cover all the estate, I think it was called in 1914, down towards Swan Lake.

The Commissioner: Well, that is a matter for a good deal of consideration. I have had individuals, mostly by letter, write and suggest that they would be in a much better position if they could get out of the district, or be put under some other control; but that is something which cannot be lightly dealt with. It would be a matter largely, I should think, for the districts.

Mr. Crease: I fancy this problem is too heavy to be lightly dealt with.

The Commissioner: I meant the changing of boundary-lines or eliminating any part of the land from the district.

Mr. Crease: Unquestionably.

The Commissioner: It would have to be approached very carefully by the districts, and I am certain that the Department would not act without a recommendation from the district.

Mr. Crease: I do not want to occupy too much time, but might I be allowed to suggest, in connection with the suggestion that the Crown should take over the reservoirs and main canals, that as legally under the "Water Act" it has assumed the control of all water in the Province it might properly assume the distribution or conveyance of that water in the main reservoirs or canals. Section 4 of the "Water Act" says: "The property in and the right to the use of all the water at any time in any stream in the Province is for all purposes vested in the Crown in the right of the Province, except only in so far as private rights therein have been established under special Acts or under licences issued in pursuance of this or some former Act relating to the use of water."

The Commissioner: You and Mr. Wollaston have travelled so much in harness, Mr. Crease, I think your ideas are almost parallel. Mr. Wollaston has argued this point almost from the same angle you are.

Mr. Crease: We do not always work in harmony.

Mr. Kidston: Not in public, anyway.

The Commissioner: I think the proposal that the Government should assume responsibility for the reservoirs and main canals is pretty well covered.

Mr. Crease: I do not want you to miss my point. I don't think this has been referred to by anybody. Since the Crown has assumed or declared that the water is vested in the Crown, that gives a logical reason or excuse, if you like, why it should assume the responsibility of the water in the main canal.

The Commissioner: Would you suggest any reason why that should be done in the case of irrigation districts any more than in the case of the water-supply in the case of Vancouver. I should think they are very much parallel.

Mr. Crease: I have not considered that at all. I am unable to answer that.

The Commissioner: Really, when that suggestion is made, Mr. Crease——

Mr. Crease: One is supplying water to a city where there are a great number of users and where the tolls or rates can easily be raised because there are so large a number of people to pay for them. The other is the problem of a very extended amount of land, agricultural land at the present time sparsely populated.

The Commissioner: Mr. Crease, pardon me just a moment. In the Government of the Province the very idea of the formation of municipalities under their water districts and such organizations, the Government certainly has in mind the distribution of responsibility. You can understand, if the Government were to start in and be responsible for such operations as you suggest and countless others which would follow, the Provincial Government would shortly carry a load of detail it could not hope to carry and give it attention.

Mr. Crease: It carries the load of the public highways.

The Commissioner: Yes, it carries the public highways and it gets a return for it. That is what your taxes are for. It only carries it in the unorganized districts and on the main thoroughfares. You see, you would be asking, presumably asking the Government to carry the main ditches and reservoirs at their own expense, I take it, out of general revenue.

Mr. Crease: It might be at its own expense, or partially.

The Commissioner: It was more or less suggested to me they should take them over in the same way as they take over the main thoroughfares.

Mr. Crease: Not necessarily. I think the main thoroughfares are controlled by the Government on the basis of the main thoroughfares being a matter of public concern and benefit to the whole Province although they are locally necessary.

The Commissioner: As a matter of business it looks to me it would not work out efficiently for the Government to assume that control.

Mr. Crease: I hope you have not come to a conclusion until you have finally heard all that is to be said.

The Commissioner: I have been two and a half months on this, and I have come to a number of conclusions; while I have not put them on paper they are pretty well solidified in my own mind, until I have been shown, and I have been shown pretty well in most cases what is for the benefit of the water districts to the best of my ability and judgment. Naturally, coming at this point after having heard the case in all these districts, I have come to some conclusions. I would be in a very poor way to judge the information I now want had I not done so.

Mr. Crease: Then I need not argue that point at all. I was putting forward that additional suggestion which I had not observed had been made by any one, that the water was vested in the Crown now under the "Water Act," and therefore it would be logical, if the Crown was so disposed and found it convenient to do so, to assist a matter of public policy by assumption of the reservoirs and main canals.

The Commissioner: I can see the ground for the argument, Mr. Crease, but I do not mind telling you it does not appeal to me. I may be speaking in advance. Mr. Cleveland, you spoke of the inquiry into the operating rates of these irrigation districts. Were you aware that your Department had given certain information as regards the cost of operations in the preliminary organization of these districts? A.—There were alleged estimates, or estimates alleged to have been made by officers of the Department before 1919. Of those I know nothing. There were also estimates alleged to have been made at the time Mr. D. A. now Mr. Justice D. A. McDonald held his inquiry. Of those I know nothing.

Q.—I am speaking now of the costs of operation? A.—During these organization meetings there were various estimates of sorts made—you will understand why—it was often a question of what area would be included in the district. Take the Vernon District as an illustration. The area under the White Valley system had been looked upon as the whole area to be formed into a district. Naturally one had to make some sort of figures to find out what would be the cost of operating that; then if the Coldstream was to be included there would be some difference, seeing there was more water required, and it might be necessary to go farther afield for water. In the same way in considering whether the area north of Swan Lake or whether the area at the west and south of Swan Lake would be included. There was an idea that Mission Mountain should be included in the district. There had to be some sort of working estimate made as to what it would mean to include the area of Mission Mountain in the district. All these things had to be figured up so as to see if they would be within the realm of possibility, or whether they would not. Those estimates were divided into two classes—first, the cost of operations, and, secondly, what the capital charges were going to be due to the capital expenditure.

The Commissioner: Naturally, in conducting an inquiry of this sort, the districts have brought through their trustees and also by individual representations their side of the case, and I have without any intent or endeavouring to be unsympathetic to the submissions, I have argued the case for the Government. Naturally I wanted to bring out information as best I could in a reasonable and practical way. On that question of operation costs, I have said to Mr. Kidston and I think to Mr. Wollaston, and I think possibly to some of the trustees who argued that the information given by Government officials was all the guidance they had and all that was available—I have said I thought on the cost of operations particularly they were in a better position to judge for themselves what the cost of operation would be when that system was put into effect, better than any Government official. Have I made a reasonable argument from your point of view? A.—I think it is entirely reasonable, and I think those who were on the organization committees will bear me out that such estimates as were made were made to show as far as possible what the situation would be. They were largely comparative and I know estimates were never used without a qualification; for instance, one would sit down to see what would be the probable cost of bringing in a certain lake to supply a larger area than would be

supplied without it, the cost of that, the cost of irrigating that larger area as compared with a certain area without the lake. Figures of that sort had to be made and it was in no sense a binding figure. It was simply a matter of comparison to show what it would cost if this particular area was to be included. It was really a matter of the comparative cost of the one area included in the district or excluded from the district. You must understand, Mr. Commissioner, as far as these capital costs were concerned, nothing but a preliminary survey has been made in very many of these areas. A survey of the lake, a cross-section of the site of a suggested dam without any borings, without any actual evidence at all as to what materials were available or what the foundation would be, and often a reconnaissance survey to determine the length of ditch from the lake to the point of distribution. Those things were not involved, and, as I have already told you, the Government during 1919 and 1920 made very considerable reconnaissance at points in and adjacent to the Okanagan Valley, pretty well from top to bottom, to see what these possibilities were, and naturally figures based on preliminary surveys of that sort were of a preliminary nature; and I can recall time and time again of saying—now these figures and I suppose very few, if any, of the figures submitted at the meetings are now preserved—time after time I have said these figures are the best that under the circumstances we can get. In some instances I have said they are a little better than a guess, but they were the best that could be made with the situation before us. Then as there was a lot of negotiation as to what was to be paid the companies for the systems—take the Vernon Irrigation District, one of the last things decided was—and I can remember Mr. Crease day after day at these meetings waiting for, to him, a favourable opportunity to put what he thought the Coldstream should get for its equity in their system. Naturally the sum which was to be paid for the White Valley system, the sum to be paid for the Coldstream system, the sum to be paid down at Kelowna for the S.L.O. or the S.K.L., all these had to be considered and they were not settled until other things were pretty well completed. Then, too, as I said, it is a very dangerous thing, as you must have found out, long before now, Mr. Commissioner, to make a preliminary estimate and then have to hedge it around with qualifications which you often have to do because of lack of precise information on which to make it or often lack of skill on which to make it. Then, again, in giving figures with qualifications, the figures have a habit of going out and being quickly stripped of their clothing and left naked and being received by everybody as the real estimate. That is the position, and I am sure you must have very, very many times found how figures get stripped, as I say, of the qualifications. That is at the bottom of lots of misconception or misapprehension as to what they were or what they meant. I am not putting this forward as any excuse for any figures which were used, because I don't think they need any excuse, and I doubt whether, taking the Okanagan Valley as a whole from top to bottom, the capital expenditures that have been made since the date of those reorganizations, I doubt if they very greatly exceed what was expected at that time. But I have already referred some little time ago to this question of estimated cost of operation, and there is no doubt in the use of estimates which were used in the Vernon area, I think, and if I am wrong I can be corrected, I think it was $1.50 an acre, based, Mr. Commissioner, not on 10,000 acres which are now being operated, but I think on 14,000 acres which has not materialized. That estimate was the result of what was believed to be the experience of the White Valley Company. I have already mentioned one or two things which I think have a very direct bearing as to why that should have been increased. It may have been very much less than it should have been, but in the first instance—that is to say, the $1.50 may have been an incorrect figure for all I can now say, but, just as you suggested, these men who were part of the organization committee had a far better opportunity of knowing what operating costs were likely to be than any engineer from the outside. I think that is quite a fair statement, Mr. Commissioner.

Q.—It would appear to me the users or the organization committee, particularly in the organization of the Vernon Irrigation District, did take the figures, comparative, if you like, as they were at the time, and went on from that time with the proposal expecting to get $6 or $7 water, and they find after years of operation they are coming up against $15 water, and have a good deal of disappointment and hardship, and it has been argued before me the difference was the Government's responsibility and should be carried by the Government? A.—I think that is a very, very incorrect position for anybody to take. It is not that the Government gave any figures of that sort—you realize it was necessary to have figures for a comparative basis, but they were not made the basis of a bargain. It was not as if the Government had gone in to

put the areas or the growers into some sort of a straight-jacket in which they had to operate whether they liked it or not. It was, if I may say, an act of assistance or an act of grace on the part of the Government to go in and say: "Let us put our heads together and see what we can do to make this a going concern and protect this community under irrigation." Estimates were not made the bases of a bargain. I think there has been perhaps rather a tendency to strip the figures of the qualifications, and I want to emphasize, Mr. Commissioner, that these estimates were, if you can dignify them with that name, were qualified always according to the foundation on which they were thought to rest, as to whether the information was good or more or less shadowy, which was often the case.

Mr. Wollaston: Mr. Commissioner, as regards this question of cost of operations, the word "operations" is being used, whereas the total included operations and maintenance.

The Commissioner: Mr. Cleveland has enlarged upon that. I mentioned the word "operations" because he brought up the question of $1.50.

Mr. Wollaston: Those figures, in our district, were got from Mr. Knight—I suppose Major MacDonald will know that—and were given as the figures of what actually was spent, but those figures were not a correct basis because Mr. Knight never had much money to spend, and did not show in his books much more than the cost of the water bailiff, and in our case it came to about 80 cents an acre. We did not have weirs or readings three or four times a week. It was just done by the water bailiff and our operating cost was low and Mr. Knight's costs were low because he had not very much money to spend; but as far as the money actually paid out for operation and maintenance it is a different proposition. That is why in the case here of the Vernon Irrigation District operation and maintenance charges are a good deal higher than just the figures for the operation costs in the original estimate. I don't think it was bad faith on anybody's part. I think the figures were taken from what they were actually spending for the water bailiff. I think Major MacDonald will bear me out that that is where the figures were got.

Major MacDonald: Absolutely.

Mr. Wollaston: They came and looked at our books and Mr. Knight's books and saw how much we were spending and averaged it over the whole acreage.

Major MacDonald: That was the only source of information as to operating costs we had.

Mr. Wollaston: The maintenance did not enter into it.

The Commissioner: Then you do not agree with Mr. Kidston when he says you employed the Government to get that information for you and they should be responsible?

Mr. Wollaston: I am not expressing myself on that. I rather think it was on Mr. Kidston's suggestion the trustees have taken that line. I have not said how they were to share in it; and as to the piece you read in the paper, that was my evidence, Mr. Cleveland.

Mr. Cleveland: So I understand.

The Commissioner: Yes.

Mr. Wollaston: The fact remains the old figures were given by the departmental officials, not as a contract that it was to be done for that—I don't claim that—I think everybody on all sides were trying to figure as nearly as they could. I don't think anything was slurred over.

Mr. Cleveland: Not at all. All were assisting.

The Commissioner: The departmental services were put at your disposal.

Mr. Wollaston: Yes.

Major MacDonald: Would you not put it that rather than the figures being collected by the Department the figures were given by Mr. Knight and yourself as to operations.

Mr. Wollaston: In that particular case, yes.

Major MacDonald: And a good many of the estimates as to construction which were used at times were given by your own people in many cases.

Mr. Wollaston: Yes.

The Commissioner: In the case of Vernon I think Major MacDonald is perhaps more familiar with the estimates of construction than any one else, and I did not propose to develop it with Mr. Cleveland, unless you care to make some comment.

Mr. Cleveland: There is just one other comment, not by way of excuse, because I don't think an excuse is necessary in the world, but by way of explanation, that whereas perhaps capital estimates were made in 1919 and 1920 when construction costs were at the peak, I think they were referable to probably more like pre-war costs in the general belief that costs could not remain at that very high pitch; but, as you are perfectly well aware, costs of construction

including labour and material have, ever since that time, ranged around the 200 mark in the index as against 100 in 1913. So those things would have a very decided influence on the actual carrying-out of the work and on the estimates.

Q.—I think the users in the districts agree there was an increase in costs, construction charges, which was bound to have occurred during the actual period of construction. You wanted to ask some question, Mr. Kidston?

Mr. Kidston: I just wanted to say I have heard nothing to change what I expressed at the hearing at Vernon as to how these estimates were arrived at—namely, that they were comparative. I never had that information at the time. I understood they were intrinsic estimates and I didn't know until recently they were collected from the Coldstream Company and the White Valley Company.

The Commissioner: Are you speaking of the estimated costs of the work or of operations?

Mr. Kidston: Both.

The Commissioner: I asked you at Vernon if you did not consider the best method to obtain information as to operations was from the White Valley. You would not agree with that.

Mr. Kidston: No; you asked as to the people themselves, and I said none of us were in a position to give them. I was not speaking of the White Valley.

The Commissioner: I was speaking of the committee and some of the White Valley directors were members of that committee.

Mr. Kidston: What I said was, we as individuals had no standard to know what things were costing or what amount of water we were getting; but these estimates, I looked upon them as intrinsic estimates gotten out by the Government on their own, and I didn't know they were just collected as Major MacDonald has stated just now.

The Commissioner: What view do you take of the reason given by Mr. Cleveland, or the suggestion given by Mr. Cleveland, rather, that these were preliminary estimates and based only on a very meagre fund of information at the time. Is that a reasonable statement?

Mr. Kidston: I am surprised that they were put forward at all. You must not forget we had definitely asked that a concrete proposition capable of fulfilment in order that we might vote intelligently as to whether we would form a district or not.

Major MacDonald: Asked whom, Mr. Kidston?

Mr. Kidston: The Government.

Major MacDonald: That is news to me.

Mr. Kidston: And the figures were put forward. I quite understand that if the Government had said, "We are not in a position to give any information," all right, then we know where we are, but when the Government gave figures we took them as being reliable figures given by the Government and took them as correct, not as having been merely collected as is now stated.

The Commissioner: I presume you sought the Government assistance in your negotiations as to the formation of a district.

Mr. Kidston: The Government sought our assistance.

The Commissioner: You mean for me to take that seriously?

Mr. Kidston: Seriously. I am talking for the Coldstream internal system. The Government came up and introduced the idea and persuaded us to come into the district. It was not at our instigation at all.

The Commissioner: Did you not have the McDonald report at that time?

Mr. Kidston: Oh, this began long before the McDonald report. This began in 1917.

The Commissioner: The district was not formed until after the McDonald report.

Mr. Kidston: I did not see the McDonald report until 1927; nobody else did.

The Commissioner: Well, you know the report was in a long time before the formation of the district; in fact, the idea of the Commission was to thresh out the matters which had to do with the continuation of the systems——

Mr. Kidston: The McDonald report was never published.

The Commissioner: I am surprised that the users were not sufficiently interested, or that the White Valley at least or its officers were not interested sufficiently to get a copy of that finding.

Mr. Kidston: I told you that from the spring of 1920 on I was not taking an active part. I was ill. But I told you at the session at Vernon none of us ever saw that McDonald report.

The Commissioner: Yes, I had forgotten that. You did tell me that. Mr. Cleveland, I have a resolution from the Vernon Irrigation District, and of course generally what applies to one district might reasonably be expected to apply wholesale, and they have passed a resolution asking for relief in the following lines: (*a*) The cancellation of all interest to date; (*b*) the cancellation of all interest accruable upon past advances for permanent structures; (*c*) the extension of the repayment periods upon the permanent structures from thirty to sixty years. Would you care to pass any comment on the different clauses of that resolution? A.—No, I don't think I should, Mr. Commissioner. You know I have not for about two years been associated with this irrigation matter, with that end of the work, and I am therefore not quite in touch with what has been happening in that time. I have not had the benefit of any of the evidence whatsoever which has been given before your Commission other than the letter I have spoken of of Mr. Wollaston, which I now hear was put before you. I might observe, in respect to the extension of time of repayment from thirty to sixty years, it would not make very much difference, which of course you have already looked into. That reminds me of an omission I have made in speaking of the repayments, the capital repayments, and the principle again on which we operated was the repayment of capital money should be made in periods of time that were not greater than the lifetime of the particular structures into which those moneys were to go.

Q.—I would like to get your views on the classification of lands as to water charges. You are familiar with the policy of the Government now as regards reverted lands, I presume. If you are not, I may tell you they have undertaken to put in operation the cancellation of carrying charges on the loans advanced to the districts for lands which revert due to non-payment of water taxes and are vested in the Government. That has a good deal of value in several lines as you can well imagine. It takes a considerable load off the water districts, whereas if that were not the position you can understand there might be a gradual shrinkage until possibly the last man would be expected to carry the load. It has a second value, inasmuch as such parts of the land which may be taken out of the operations by this action of the Government would no longer be using water, and that additional water becomes available for the lands and the question of expenditure of capital for additional storage is postponed. It has, however, it seems to me, one disadvantage for the Government. It cuts down its revenue. Undoubtedly the general taxes are lost and such revenue as might be obtainable under a classification giving a lower rate to the lower land is also lost. I have discussed this matter pretty thoroughly with Major MacDonald during the trip which we recently had through Washington and up as far as Penticton, and there appear to be certain difficulties in the way of it. The greatest difficulty, apparently, is the security or the lack of security which the Province would have and any justification for giving a lower rate and carrying a higher rate for the distribution of water to lands where the cost is the same throughout. That is on the assumption that commodities are sold on the basis of cost to place them on the market. I am wondering if you would care to give any opinion on the question of classifying these alfalfa, hay, and poorer lands for a better water rate? A.—I have often thought, Mr. Commissioner, it would be an interesting experiment for a district to undertake irrigation on the basis of the value of the production of crops on particular lands, but I have also at once seen what it would probably lead to. It would lead to a reduced water rate for the hay-farmer, the alfalfa-farmer, the truck-grower, and an increased water rate for the orchardist. The orchardists already complain that their rate is too high, and outside of some arbitrary authority putting that regulation into effect in a district, I do not quite see how any district would agree—the trustees of a district would agree to adopt that method, because those who operate an orchard would immediately rise in their wrath and say: "This will bring an increase in what we already consider is a great burden on us, and will allow the truck-farmer and the hay-grower a diminished rate." So I don't quite see as a matter of practical administration within the districts how they could agree to try the experiment.

Q.—I was going just a step farther, Mr. Cleveland. I was suggesting that the Government take over the loss, inasmuch as the Minister is able now to take over the reverted lands and carry the charges? A.—It has interesting aspects, of course, but there would also be the peculiar difficulty, Mr. Commissioner, of settling what is the value of the product from a certain piece of land.

Q.—I did not quite mean that. I thought, with possibly two or three classifications, a classification of orchard lands and another classification, if you like, of all other irrigable lands?

A.—It is full of difficulties which you might consider more or less minor ones, but it is certainly full of small practical difficulties—whether they could be overcome by a decision on the part of the Government as you suggest, to take over and assume the particular costs resulting from the classification; that is to say, leave the orchardist the rate he is now paying and diminish the others, the truck-growers and the hay-growers.

Q.—I suggest it would be less loss on the part of the Government, at any rate? A.—Than to carry the total capital burden of the reverted lands.

Q.—Yes? A.—That might easily be. I think a study of what has happened in the way of reverted lands and what it cost the Government, and it certainly shows a disposition on the part of the Government to assume part of the burden, whether it is worked out on that basis or not. I have no knowledge, but it certainly does involve the assumption by the Government of a part of the capital investment, does it not?

Q.—Undoubtedly. A.—I understand from you, when lands revert, the Government no longer expects the rest of the district to carry the proportion of capital investment relative to that particular area which reverts, but it carries that load itself.

Q.—It reduces the annual amount repayable to the Government by that amount? A.—It reduces the amount of money which it has spent in the district in proportion to the amount of land which reverts, the Government becomes responsible for the capital investment which has been expended on that portion of the land; that is to say, assuming that half of the land in a district reverted and the title became vested in the Government, then the Government would be carrying half of the capital investment, whether it repays itself or pays the Conservation Fund, is another matter. That is a matter of policy, but it simply means half the capital expenditure in that area is now on the shoulders of the Government rather than on the shoulders of the particular lands. Am I right in believing that these lands may be offered again for sale by the Government, but not necessarily with that burden of past irrigation expenses to be carried by them?

Q.—Presumably so; possibly instead of at the high price of the land previously paid for the land a reduction in the price of the land would be made which would take off the carrying charges and relatively leave the total charge at less, making a considerable reduction for the purchase over the previous charge, including land and water rates? A.—In other words—I ask for information.

Q.—We had better leave it possibly to Major MacDonald, but I gather from him, of course, the Government does not tie itself to not dispose of these lands; is that not so, Major MacDonald?

Major MacDonald: The Government may put those lands back for sale at any time, and after washing out the accumulation of charges against them, but it would appear to me that only a small part of those lands might go back.

Mr. Cleveland: In that event, then, the Government has simply assumed that capital burden?

Major MacDonald: The Government has simply assumed that capital burden.

Mr. Cleveland: In respect to all rates?

Major MacDonald: Yes.

Mr. J. C. Clarke: May I say a word on that, Mr. Commissioner?

The Commissioner: Yes.

Mr. Clarke: The question of giving water to lands in a district that are not able, such as hay lands, which are not able to meet the charges depends on the particular district. One district might have an adequate supply of water and be able to furnish that water to these lands at a lower rate, whereas if they continue to charge the present rate the lands could not stand it and would revert to the Crown. The water in that case would not go to the benefit of that district, but would go to waste.

The Commissioner: Why?

Mr. Clarke: We are getting a certain quantity of water for the district and the district feels that we can give water over the whole district. If lands are allowed to revert to the Crown through not being able to pay this water rate, then that is a detriment to the district; but if a lower rate is given, these lands could be made to produce and the cost to the whole district would be lower, would it not?

The Commissioner: No. Do you not understand the arrangement by which authority is vested in the Minister and which the Department proposes to put into effect whereby they will assume the charges against those particular lands.

Mr. Clarke: I am speaking on the previous point, the question of whether it would be good policy to lower the rate to the low-grade lands such as alfalfa. Take the question of Mount Vernon—I was thinking of different districts. Take one district which would have an adequate supply of water, more, perhaps, than the district needs for the orchard lands, and by keeping the lands, the meadow, hay lands in, so that they are able to produce, it would help the rate for all the lands because there would be that many more lands in paying for the water which was used.

The Commissioner: Well, Mr. Clarke, I only heard of one district where they considered the water was sufficient. In the twelve districts which I visited there was always a shortage of water.

Mr. Clarke: Take the Black Mountain District and then take, on the other hand, Glenmore. In Glenmore the condition was found where hay land, if they got some assistance from the Government in the way of a lower rate, it would encourage them to take a water-supply and it would keep them in the district. Of course, it would have to be applied differently to separate districts and not to the whole.

The Commissioner: As a matter of fact, in Glenmore, would it not give you relief?

Mr. Clarke: No.

The Commissioner: Why not?

Mr. Clarke: It might give us relief to produce on the hay lands, but at the same time——

The Commissioner: No, no; you do not follow me. If the poorer lands revert to the Crown, the water which is now being used on those lands would be made available to the fruit lands.

Mr. Clarke: But by letting the land revert it increases the taxes as a whole on the remaining land.

The Commissioner: Why? You do not get the point. The proposal is that the Government in regard to the reverted lands shall assume the charges, and although there might be a slightly higher operating cost since you have to distribute it over a lesser acreage, still the repayment charge, the water tax would not be changed, and those lands which revert, the charges on those lands would be assumed by the Government. You would also receive the benefit of having the water which is now used on those lands made available for the remaining lands.

Mr. Clarke: I understand that point.

The Commissioner: Then why do you say it would increase the burden on the rest?

Mr. Clarke: I am referring to the tolls, not to the taxes.

The Commissioner: There might be a slight increase in the tolls.

Mr. Clarke: Mr. Cleveland is bringing two points against that argument. I thought they were very clear, and I could see the position that he takes, but at the same time there is that feature to be considered.

Colonel Edgett: The point I would like information on in regard to classification is if the water is given—if a lower rate is to be allowed for certain classes of land, what is going to be the effect on the demand for storage-water? Is that not going to be increased considerably?

The Commissioner: It would be unchanged.

Colonel Edgett: There would be a tendency to use more water on the lower-classified lands.

The Commissioner: There would be, of course, providing the water was available, but your water is rationed. You are entitled to so-much water for your year's operations. Your hay lands do not receive more in Vernon than the other lands receive.

Colonel Edgett: They are not using as much now as they would under reclassification.

The Commissioner: You have to limit it.

Colonel Edgett: If, on the other hand, there was not a reclassification and the lands reverted, there would be more water available for the good lands.

The Commissioner: You can understand, if the arrangement were put into effect whereby lands reverted to the Government and were not again brought in *in toto* or not in a very large proportion, then there would be a greater amount of water available for the other lands. That would be a benefit to you in two ways; that is, the Government takes over the carrying charges on the lands which revert, and your storage problem would probably be set back for a period, and your conditions would become considerably easier because you would have more water for the balance of the acreage. That is clear, is it not?

Colonel Edgett: Yes.

Mr. French: At the same time the rest of the land has to bear the extra cost of operation.

The Commissioner: Yes, quite true. The Department is not going to take over the cost of any operations.

Mr. French: No.

The Commissioner: But your operation costs as time goes on will presumably be less and less. You are getting in more permanent structures and probably the decrease would take charge of the shrinkage from the reverted lands.

Mr. DeWolfe: That would hardly apply in our case. The lands which have reverted or are apt to revert are spread all over the district, and in that way we cannot reduce our operating costs. I understand in some districts these lands which have reverted or will revert will be fairly well in one block, and in that way you can reduce the operating and maintenance cost, but ours is spread over the whole district, a distance of 30-odd miles.

The Commissioner: Your operation costs are $22,000 for 10,000 acres.

Mr. DeWolfe: $23,800.

The Commissioner: Then say $2 per acre. Even if your total operation costs remain fixed and you were to lose 25 per cent. of your lands, that roughly would amount to about 60 cents an acre, and the district would receive more water and would have none of the carrying charges on those reverted lands.

Mr. DeWolfe: It is about 25 per cent. All these lands, Mr. Commissioner, which have a good supply of water remain.

The Commissioner: I don't think there is any doubt but what you could sell another 25 per cent. of your water in the Vernon District, and I have no doubt the extra amount of water would be worth more to them than the 60 cents per acre.

Mr. DeWolfe: Undoubtedly.

Mr. Kidston: May I ask if you have any figures as to what amount of water these reverted lands are using?

The Commissioner: Ask Mr. DeWolfe.

Mr. DeWolfe: Are they using much water, those particular lands which are likely to go out?

The Commissioner: Take last year.

Mr. DeWolfe: Yes, Mr. Kidston, they are using as much as they can get.

The Commissioner: Then they are using their share, Mr. Kidston.

Mr. Kidston: Yes, evidently. I was not aware of it.

Mr. French: It looks to me, if the taxes are not changed, there will be a lot more have to go out than what have at the present time. There is a lot of land, you see, growing hay and grain which cannot carry the load. Those people will have to drop out unless there is some change.

The Commissioner: I think we might develop that with Major MacDonald when he gives his evidence, because he can see certain difficulties. I am quite sure the Department has considered this, and I think we had better let it rest until we find out the view-point of the Government on this point, then we can discuss it this afternoon. Mr. Cleveland, would you care to make any remarks on the moratorium? It is generally conceded to-day by officials of the Department and by the users it was a very bad business. Now, was the moratorium brought on solely by representations from the users? A.—Oh, I believe, entirely. I well recall several delegations—I don't know whether more than one delegation in one year, but several delegations to the Minister in relation to or in respect of the moratorium, and delegations that were composed of men from the Vernon Irrigation District, also down around Kelowna, with requests of concessions of some sort, that the charges would be put over for one year at first and then subsequent years, and then another year until the crop returns were in. I don't think, though, Mr. Commissioner, that with my remoteness just now from the problem of irrigation that I should make any comment.

Q.—You don't think the Government would have received payment for its interest and refunding if the moratorium had not been put into effect? A.—I should have thought it would have received much more than it has on the moratorium basis; how much or what proportion of the total due from each district each year would have been received is quite beyond me to say, but it certainly would have received much more than it has under the concession.

Q.—You agree, I presume, it is something to be avoided? A.—It can only have an accumulative effect in the end of increasing the burden.

Q.—You are familiar with the Oliver District? A.—Yes, or was.

Q.—I presume, still are; I don't mean as to growing conditions, but I am speaking now more as to the financing of the operation. It has been put up to me by various districts that the Provincial Government has given the Oliver District a much more favourable rate and a much more favourable irrigation problem to operate than is in effect elsewhere, and that consequently if assistance is given to the Oliver project it should be made to apply to the balance of the districts. What do you think of that proposal? A.—I don't think very much profit could be found in arguing from a premise like that. The Oliver District was undertaken by the Government as a measure of soldier relief, and the construction of the works there were hastened in 1919 and 1920 by the Government in the hope of having available at the earliest possible moment irrigated land for returned men and also relief afforded there for returned men. The Government, therefore, having made a large initial investment, had to look at that problem just as a business-man would, and say: "Here is our investment, what are we to do to as early as possible make the investment a self-carrying one?" That is the definite problem at Oliver and I do not think it is at all related to the other problems. It might readily be said these settlers at Oliver are getting cheaper rates than some other districts, but I can imagine what those who pay high rates in other districts would say if the Government said: "All right, we will put the rates at Oliver double what they are, and no more settlers will come into Oliver." Then the men who advanced that argument would say that is very poor business. I think the Government has been looking at Oliver as a purely business problem; once having put its hand to that plough you have to get your returns as quickly as possible, and you have to place a rate on the land which will induce men to come on to the land. I cannot, myself, see the connection between that and the general irrigation problem. Once having undertaken the Oliver District and having made the expenditure, it has then to look at Oliver as a business proposition and see what is the best thing to get it settled as quickly as possible to make it self-supporting.

Q.—It was suggested to me it created unfair competition, inasmuch cheaper water would permit growing at a cheaper price. I presume you are familiar with the Board of Control having to do with the fixing of prices? A.—Yes; at least, I know of its existence.

Q.—Would you think, under the control of prices, that would be a reasonable criticism? Perhaps some one else would care to answer that? A.—Yes. I would say I don't know now what production Oliver has, and I don't know if the competitive producer of fruit tends to decrease the market value of the production of other districts. If it does, that is a matter of consideration; if it does not, I don't see just what its connection with the other districts is, other than the other districts, like every other citizen in the Province, has the right to say the Government should conduct this in a way which will get the best results from it; in other words, that they should make it self-supporting in the shortest possible time.

The Commissioner: Is there any one who wants any information from Mr. Cleveland?

Captain Bull: I would like to say that, while Oliver is not much of a competitor at the present time, it will be in a few years, because its production is increasing every year. In addition to representing the Black Mountain Irrigation District, I represent the Board of Associated Districts and we would like you to take that into consideration. As a representative of the Board of Associated Districts we consider the fact that Oliver will be an extensive producer as the years go by will make them a dangerous competitor, inasmuch as the more fruit that is produced the less market there is to consume it. As far as the transportation costs are concerned, they are just about the same. There is no trouble about the transportation costs.

The Commissioner: Their product goes to the Prairie market.

Captain Bull: In as far as the transportation is concerned, there is no extra cost.

The Commissioner: What do you say, Major Bull, as to fixing the price for the commodity? Does that not give you the protection you want?

Captain Bull: No, I don't think it will suffice.

The Commissioner: I mean in selling your product f.o.b. cars at Penticton.

Captain Bull: It is the same at Oliver as it is here.

The Commissioner: There is no particular cutting in price, then?

Captain Bull: No; the only thing would be the cost of production and the increased production for the available market.

Colonel Edgett: To my mind the increased production for the available market is the main feature, and in addition there is the feature that they are able to grow their produce down there at much less cost.

The Commissioner: Of course, I think there is no question but what our market is going to be increased materially as the years go on if the improvement in the Prairie Provinces continues, the improvement of the last three years, and it is generally conceded, I think, by the Associated and the individual operators and by the Board of Control that the Prairie market is going to be an increasing market for you and will be the natural outlet for the bulk of your product; that is, I am speaking of fruit and vegetables.

Mr. Crease: On that marketing control proposition, is it possible for any grower of vegetables, we will say, to sell to a local broker considerably below the market control price although the broker who buys from him has to put the goods on the market at the control price; in other words, cannot the producer sell below the market price?

The Commissioner: Is it possible to sell to a local broker below the price fixed by the Board of Control?

Mr. Kidston: Would you sell to brokers at all?

Captain Bull: Mr. Crease means to sell to a shipper.

Mr. Crease: Yes.

Captain Bull: Of course you can. It is a matter of the agreement entered into between the shipper and the grower. When it comes to the market price the shipper sends his stuff out at the same price because that price is fixed by the Board of Control, but the Board of Control has nothing to do with the prices which are arranged between the grower and the shipper.

The Commissioner: Is that a hardship?

Captain Bull: I do not see how it enters into the argument.

Mr. Crease: Would it not affect the question of competition from Oliver?

Captain Bull: No, I don't think so. The price is the same. The only question of competition from Oliver is the cost of production; the cheaper water given to Oliver means a lower cost of production than in other parts of the valley.

Mr. Crease: What I meant was it allows the grower to be a competitor even though he is receiving less, because he is sure of a certain price. He can go on and produce more knowing that he is going to get something and that it is the shipper who is taking the risk of the price.

The Commissioner: Does that not depend on your packing-house?

Mr. French: The way I see it is the shipper can buy from a grower at any price he likes.

The Commissioner: I think we are rather getting away from the subject.

Mr. French: So the grower is not getting the benefit of the prices fixed by the Board of Control.

The Commissioner: You have got a very able man in charge of that and it is operating now. He will probably have to learn something as time goes on, and no doubt will make some changes in the operations, but what I wanted to develop, if possible, was a comparison of the Oliver project with the rest of the valley. I do not think we had better get off on the marketing line. I realize its importance, but the question of working it out is bound to develop some changes from time to time. I would say you have a pretty workable machine and a very capable man in charge, and it is only reasonable to presume that as time goes on it will be improved.

Mr. Crease: Might I not ask Mr. Cleveland if he does not think the fact that Oliver exists is a recognition that public moneys of the Province can be expended on one part of the Province for the benefit of the whole?

Mr. Cleveland: I think I have already stated that the Oliver project was conceived as a soldier relief measure; that having been undertaken and a large expenditure having been made as early as possible after the conclusion of the war——

Q.—That is Provincial expenditure? A.—Provincial expenditure; the Government found itself with this expenditure on its hands. Now, I take it that the Government has to determine at Oliver the problem as an entirely local problem and do its best to get that investment developed into a self-supporting thing in the interests of every taxpayer in the Province as quickly as possible.

Q.—The soldiers were settled on the land? A.—Pretty largely.

Q.—And one of the objects of the Oliver project was to settle men on the land? A.—To settle returned men on the land as quickly as possible.

Q.—Then any further step in the same direction would be to settle others on the land? A.—Quite naturally.

Q.—Therefore the problem was applied to settling men on the land whether they were soldiers or whether they were not? A.—But not as a commercial project. This was started as one kind of a project—namely, dealing with returned soldiers—and large investments were made and the Government was then faced with getting that land settled by anybody as fast as they could in the interests of the taxpayers as a whole. I do think there was a good deal of disappointment in the number of returned men who went on the land three or four years after the war as compared with those who expressed their willingness to go on the land immediately after the war. Returned men found they could get into other positions, and gradually found that they could adjust themselves and found that various enterprises were opening to them, whereas immediately after the war, due to the general slackness of things after the war, it was difficult to find places.

Q.—I am only referring to the principle of the Government supplying Government funds for the settlement of certain areas in the Province as a measure for the benefit of the whole Province, of which you might say Oliver is a very good instance? A.—Quite different from this that we are now considering. I do not imagine for one moment the Government would have entertained the idea of developing Oliver for general settlement had it not been for the returned soldier aspect. They certainly would have left that to some company to undertake.

The Commissioner: Mr. Cleveland, was it ever anticipated the Oliver project would work itself out finally without cost to the Government Treasury? A.—I think it was felt that the Oliver project, if settled quickly, could carry the expense of the irrigation system.

Q.—I presume, in view of the construction at Oliver, the simplicity of receiving its water, the $6 rate for operation costs would be sufficient once the lands are entirely paid for? A.—It was thought that is what would happen, that the $6 would care for it when the area was settled, and I think it was also considered the area would settle much more quickly than it has settled. May I ask a question, Mr. Commissioner, since you have asked me about Oliver, just for information. Does the fact that a considerable amount of fruit and other produce is raised at Oliver have a bearing on the price which the Okanagan growers get for their fruit, or is that fixed by outside production; in other words, is not what you have spoken of as actual competition between the Oliver growers and the growers in the remainder of the valley, or, as Major Bull said, as the production ascends at Oliver which he anticipates, and which seems reasonable, is that going to affect the price which the other growers get for their fruit, or is that an extraneous marketing condition which is fixed by Wenatchee, New York, and the consumption of fruit in the Old Country?

Mr. Clarke: I think the trouble is the increase in production. At the time the Government instituted the Oliver project they went in with the idea of putting the men on the land, and now in order to make it a success they decide to strike the rate at such a figure so that the grower could continue with his fruit-growing. We feel that, as years go on, with the marketing conditions under the control of the Board of Control, the question of production will probably be largely looked after, but in the meantime we feel the Government should look at our situation in the same way as they looked at Oliver and not put us in the position of carrying the load until such times as conditions warrant it. It is the intervening years which we are worried about. I think that would be the solution of the whole matter.

The Commissioner: Mr. Clarke, at the same time take the prices under the private companies. The people of the Coldstream paid 30 cents, 50 cents, $1, $1.50, and $2. If you go back to comparing the commencement of each system or each project, I would say that Oliver is starting at the outset by carrying a much heavier load than had to be done in any other of the districts.

Captain Bull: I do not think there is any chance of a very serious competition in the market. We have certain sections in our own district which are not under irrigation or which are practically free from an irrigation charge. We have a large percentage of stuff which is produced under those conditions, but that does not interfere with the cost of fruit, which is something which is affected by outside conditions.

Mr. Cleveland: That is the point, Mr. Commissioner, on which I wished some light.

Mr. Wollaston: Every apple-tree which is grown increases the supply and destroys the market. The more you cut out the better it is for those that are left. There is overproduction in agricultural produce all over the world; that is what brings the prices down to an unprofitable

level. You said the prices are set by the cost of production. They are not. They are set by the state of the market. It has nothing whatever to do with the cost.

The Commissioner: No, I did not say that.

Mr. Wollaston: We can look back in the record and I think you will find that that is what you said as to how the prices are set, but, leaving that, I think Oliver comes into competition like every other place which produces. The more you cut out the better it is for those who are left.

The Commissioner: Yes, provided you have no increase in your market.

Mr. Wollaston: Whether you have markets or not. The bigger the market the better the price for what is left.

The Commissioner: We understand that. If I had all the engineers out of business I would have a good field, but competition is——

Mr. Wollaston: You always get the top price for the best article. No doubt your marketing in engineering is the same way. I would also like to take issue with Mr. Cleveland on one thing. He said if the Government had not put on the moratorium they would have got more money than they did get. I am quite certain if the Government had not put on the moratorium a greater proportion of the districts would have reverted than have already, because the people simply could not have paid their taxes.

Mr. French: You could not have got them at all. In 1921 we paid taxes out of capital and in 1922, 1923, 1924.

The Commissioner: It amounts to about $20 an acre over the whole area. It is a question of whether you could have raised that in a period of four years, $5 per annum in the Vernon Irrigation District. That would give the answer to that question.

Mr. Wollaston: About $30 actually accumulated, all told.

The Commissioner: There is about $200,000 under the moratorium, is there not, over 10,000 acres?

Mr. DeWolfe: About $25.

Mr. Kidston: There is a remark of Mr. Cleveland's which touches this question very clearly from the other end. He said at present Oliver pays $6. If you raise it to $12 you couldn't sell the lands. I think that answers the question as to what the effect of the $12 rate is on the value of the land, and when we have $23 without the moratorium——

The Commissioner: I take it that if you raise it to $12 you would have to put your land back at somewhat less than $100.

Mr. Kidston: The remark was you would not be able to sell the land.

Mr. Cleveland: Did I say they would not be able to sell the land?

Mr. Kidston: That is what I noted in the back of my head?

Mr. Cleveland: Perhaps the reporter will be good enough to see what I did say. There would be less chance of selling the land is what I rather fancy I said.

Mr. Kidston: The record will speak for itself.

Mr. Cleveland: Whatever term I used, it goes without saying that if the rates were increased it would be much more difficult, of course, to get settlers to go in.

The Commissioner: It means the land price would have to be decreased by a proportionate amount.

Mr. Kidston: If you cut off $100 for $6, what would you take off for the extra $12 that we are saddled with?

The Commissioner: Your rates have gone up since I was in Vernon.

Mr. Kidston: No; it is $23, is it not, without the moratorium? That is my impression. May I ask Mr. DeWolfe?

Mr. DeWolfe: What is it?

Mr. Kidston: What would the rate be in the Vernon Irrigation District without the moratorium?

Mr. DeWolfe: About $14.

Mr. Kidston: Is that it?

Mr. DeWolfe: Yes.

Captain Bull: You say your operating costs are about $8 an acre and your tax rate $7. How can you get it up to $23?

Mr. DeWolfe: I never said it was $23.

Mr. Wollaston: The operating costs amount to $8 an acre, but a lot of the land is not paying operating costs because they do not take the water, so that the balance of a man's land has to pay proportionately that increase. We have been paying the whole tax but have 530 acres which never got a drop of water.

The Commissioner: I think the annual payments are in your case about $110,000 and $25,000 for operations—$135,000—which divided over 10,000 acres give you $13.50 per acre, which is what was put before me at Vernon. Is there anything else you would care to add, Mr. Cleveland? Oh, yes, there is one point which I wanted to mention to you. At the Grand Forks sitting it was suggested to me that the project there had been enlarged from what was originally contemplated more or less at the suggestion or on the advice of officials of the Department. Is there any merit in that suggestion? A.—None whatever.

Q.—That information is not correct? A.—That information is entirely incorrect.

Q.—I was told, I think, that you would take serious objection to that? A.—I don't want to say any more, Mr. Commissioner.

Q.—No. Do you care to make any comment on Provincial taxation in unorganized districts? A.—Seeing I am a taxpayer, I might be expected to say they are too high. No, Mr. Commissioner, I am not sufficiently conversant with those things to express an opinion which would be of any service to you.

The Commissioner: Major MacDonald, would you like to ask any questions of Mr. Cleveland?

Major MacDonald: No, I don't think.

Mr. Wollaston: I would like to ask Mr. Cleveland a question about the Greater Vancouver Water District.

The Commissioner: Do you want it on the record? Is it relevant?

Mr. Wollaston: I think so.

The Commissioner: All right.

Mr. Wollaston: Has not the Greater Vancouver Water District leased from the Provincial Government quite an area for $1 a year at the head of the Capilano to protect its water-supply? A.—Yes, a very large area.

Q.—Which really has a lot of good timber on it and anybody else would have to pay a lot of money for it? A.—Yes it has a considerable amount of timber.

Q.—They are in that way looking after Greater Vancouver's water-supply? A.—To conserve water. If that area were burnt over, as has happened, it is probable Greater Vancouver would have difficulty in getting water.

Q.—The Government would get more revenue from it if they had given a lease to private industry? A.—If it were burnt off, then industries could not come to Vancouver because of lack of water, so that they would get less revenue.

Q.—The people of Vancouver pay their taxes to the city and not to the Province? A.—Quite so; but there is a large aggregation, a large population in Vancouver which indirectly contributes to the Province at large.

Q.—Do you think if that were burnt over Vancouver would come to an end? A.—That is ridiculous.

Q.—Indirectly, if there had been any large timber operations carried on there, it would be for the benefit of the whole Province. It is possibly a matter of policy? A.—Yes.

Q.—I press that point, Mr. Cleveland? A.—I understand what you mean, and I have no doubt the Government thought it would be to the advantage of the whole Province that in the case of a growing metropolis like Greater Vancouver its water-supply should be conserved.

The Commissioner: I think the Government admits that the Province as a whole is interested in the continued existence of the irrigation districts, Mr. Crease and Mr. Wollaston.

Mr. Crease: I don't think every one else does.

Mr. Cleveland: Might I just say this one thing on that point?

The Commissioner: Yes.

Mr. Cleveland: The Government has set aside as forest reserves, without cost to the irrigation districts, very large areas on both sides of the Okanagan Valley.

Mr. Wollaston: Yes; we wish the trees were not there. We would like to have them off.

Mr. Cleveland: It is a parallel case, except in the one case they collect a nominal rental and in the other case they collect none.

Colonel Edgett: I noticed an item in the press the other day that we are entering a wet cycle and the impression given was we need not have much worry in the next few years as to a supply of water. Have you made much study of that proposition?

Mr. Cleveland: I think this is worth putting on record, Colonel Edgett. They say the question of rainfall is intimately associated with a sun-spot period due to some magnetic influence, and that the period of sun-spot influence has not yet reached its maximum; it will probably be 1930 before that period reaches its maximum and then it will decline. Just on what basis they argue that I cannot say, but if the matter of rainfall is associated with sun-spots and the sun-spots are yet to reach their maximum with very pronounced climatic conditions, particularly dry, it looks as though we might have some more dry weather instead of wet.

The Commissioner: I presume, Colonel, you are now thinking of the proposal to increase your storage.

Colonel Edgett: Yes.

The Commissioner: You can develop that with Major MacDonald this afternoon. He is familiar with the conditions in your district and I don't think Mr. Cleveland has had them before him lately.

Mr. Cleveland: Is Major MacDonald familiar with the sun-spot theory?

The Commissioner: He may confirm you in that. Mr. Cleveland, at Heffley Creek on Saturday —I don't know whether I can find the exact reference here in the brief—it was stated that you had promised them some relief at the time they were paying $3,100, I think, total water charges, and you said there must be some form of relief granted, and they said we got the relief by having to pay two years later $4,200. Would you care to make some comment on that? A.—I have no recollection, Mr. Commissioner, of making any such promise. Perhaps Major MacDonald or Mr. Davis or Mr. Varcoe might have.

Q.—I was referring to you personally? A.—Yes, I quite understand; but I certainly have no recollection, and I certainly made no promise of that nature. I do recollect that Heffley Creek was a very difficult district to do anything with. They lagged along and lagged along and would not pay. I think you might interrogate Mr. Varcoe on that. His recollection may be clearer than mine. I do know he has made frequent visits in there and I know Major MacDonald made frequent visits into the district to see if they could not be got on a better business basis. They got an advance by a promissory note before I became Comptroller of Water Rights, a promissory note signed by twenty-five or thirty of the users, and we had a very difficult time in getting them into any kind of an organization at the time when we did, to get them to agree to carry on.

The Commissioner: This is the reference, Mr. Cleveland. It is made by Mr. Homersham, the secretary and treasurer of the district. "Mr. Commissioner, I would like to make this point for your information. The yearly payment when we started our district, on account of repayment of capital borrowings, was $3,181.89. Mr. Cleveland stated that relief of some form would be provided when the reorganization of this district was completed. We organized under the 'Water Act' and at the present time are paying $4,063.40, almost $1,000 per year more than we were when Mr. Cleveland promised the relief. Of that there would be about $2,000 interest charges; that must be at 6 per cent., yes. The point I want to make is taking the land we have here——" Oh, that is really about the end of the reference.

Major MacDonald: I think I may possibly help Mr. Cleveland on that. I don't think Mr. Cleveland ever promised any relief. I think what Mr. Cleveland did suggest was their arrears of payments might be funded if they reorganized, and that is the only thing I can conceive that could have been done as a method of relief. They were heavily in arrears and when the district was reorganized those arrears were funded and added on to the old capital. That is, of course, an increase in the capital account, and also has been an increase since the moratorium over what there was before the moratorium came into effect.

The Commissioner: Was the fact that they were in arrears due to them paying an insufficient rate previously?

Major MacDonald: Yes.

The Commissioner: Is that how they got the $3,100, because they were not keeping up their capital charge?

Major MacDonald: I think the $3,100 is what they probably should have paid, but the $4,100 is due to the fact that to the moratorium money they had other arrears funded before the moratorium came into effect.

The Commissioner: Quite so.

Major MacDonald: So they would be paying an increased rate because of the moratorium and also because of the funding of the arrears.

The Commissioner: Have I on this record here the moratorium interest or cost of that district, do you know, Major MacDonald, in that summary?

Major MacDonald: It may be there.

The Commissioner: I am just anxious to answer that question in my own mind. If that is the situation, then it is answered immediately. No, I don't appear to have it. Perhaps you can verify that.

Mr. Varcoe: Mr. Commissioner, as far as I can remember that district, it was organized originally under the D. and D. Act. They found very great difficulty in collection from several of their members. The powers under that Act were not ample enough for the purpose and the result was there was delinquency from quite a number. This I got from Mr. Homersham himself some years ago. Now, I think that is one of the reasons why their charges went up to what they are now, and, as Major MacDonald said, those charges were funded at the time of organization. That is my recollection of the matter.

Mr. Davis: I think also they were looking for some relief, an extension from fifteen to twenty years on their loan.

The Commissioner: I have no doubt you have that in the records of the office. We can straighten that point up. Are there any other questions of Mr. Cleveland?

(Inquiry adjourned at 12.55 until 2.15 p.m.)

2.15 P.M.

(Inquiry resumed pursuant to adjournment.)

The Commissioner: Is there any point any one would like to make before Major MacDonald gives his evidence, any question or any suggestion? All right, Major MacDonald, if you would.

Major J. C. MacDonald testifies as follows:—

The Commissioner: You have read pretty generally the transcript of evidence from the different irrigation districts? A.—Pretty generally. I don't think I have been through it all. I have not had time to complete it, but I know I have been through most of it.

Q.—I do not want to simply run down the list and ask you a number of these questions. I think they will develop as we go along. I suggest, if you follow along the line of Mr. Cleveland this morning and enlarge upon it, and as you have had to deal with the districts, there undoubtedly will be questions they would like to ask you as you give any evidence, and I think it best to deal with those as the questions come up. It is rather difficult to get your mind back to some of the problems once they have been passed somewhat in the evidence. I suggest you follow along your own lines from the transcript as you have read it. I have made a memorandum of a number of questions and if there are any omissions I will make inquiries of you? A.—First, gentlemen, I might express the Minister's regrets at his inability to be present. I think you all know why he is not here; and before we knew definitely that he was going to Nelson it was too late to postpone this meeting, so there was nothing for it but to let it go through. After that, I think I might review briefly my connection with the Department and how I came into this, and perhaps go over the ground to some extent Mr. Cleveland covered, bringing out one or two points that he did not touch on. I came to the Department the 1st of May, 1919, for the express purpose of going to the Okanagan to assist Mr. Cleveland generally in the work he had to do in these irrigation districts. My instructions were to take over the supervision of expenditures at Peachland, Naramata, and what we then called the Glenmore-Rutland Community; and to familiarize myself generally with conditions throughout the irrigated belt. I was told I did not need to bother with Vernon except to become generally acquainted with the situation there—that the moneys at Vernon were being advanced directly to the White Valley Company and were being expended under the supervision of Mr. E. B. Knight, the manager of that company, acting with the board of directors of the company; that I would have nothing to do for the time being with their expenditures, but I should become acquainted with their situation there, and that I would be able to learn quite a lot from Mr.

Knight; and I may say that I did. My duties in the other districts were really those of a clearing-house—the moneys were expended by committees appointed either by the users or by the Lieutenant-Governor in Council at the request of the users. These committees had their own secretaries who made out vouchers covering all expenditures. These vouchers were passed to me, and if approved by me were passed on to the Government Agent for payment. At the same time I kept a reserve cash fund, an account for each district, from which I paid urgent accounts and secured the money later from the Government Agent. I was not at any time directly responsible for their expenditures; the committees at each point were the responsible parties; but as time went on I naturally came more and more into consultation with these committees and assisted them in every way possible, drawing up sketches or plans of minor alterations they required, and helping them in buying, and doing in the case of Peachland a certain amount of engineering on the ground. The districts were small and could not well afford engineering advice. At the same time I took over the supervision of a field party from the Water Rights Branch which was investigating the area as to sources of water-supply and the flow in Jones Creek. That party was handed over to me by one of the field engineers of the Department who was leaving the service, and I carried on that investigation for about two years, turning in the maps as they were produced in the district. In the late fall of 1919 I came to Victoria and spent about three and a half or four months here working with Mr. Cleveland, Mr. Davis, and Mr. Lane, mainly on a revision of that chapter of the "Water Act" which covered irrigation organizations jointly with representatives of the various districts. I recollect having committees from Glenmore and Rutland, from Vernon, from what is now South-east Kelowna, all in here to Victoria for the express purpose of reviewing the proposed revisions relating to irrigation and advising us as to how they thought it would apply in their own district. In the spring of 1920 I went back to the Okanagan and carried on my previous work of supervising the expenditures—not exactly supervising the expenditures, but passing the vouchers for the various districts, still leaving Vernon out of my list; and worked with Mr. Cleveland and Mr. Lane on the organization of the districts. The greater part of our time, I might say, was taken up with committee meetings. I don't know exactly, but we must have attended something like twenty-five meetings in connection with Vernon. I know we had ten in four days, and none were under three hours, so I think we might be said to have pretty fully consulted the water-users in the organization of these districts. Along in 1920 the districts were organized, November or December, 1920; the first four or five districts were organized, including Vernon, South-east Kelowna, Naramata, Peachland, and Glenmore and Black Mountain. Some of the others came a little later. I think it might be just as well to refer to one point which came up before Mr. Cleveland, Mr. Commissioner, you asked about this, as to whether the organization of these districts was an attempt on the part of the Government to fix the liability for the sums which were already advanced. The sums advanced up to that time were not particularly heavy, but, according to our opinion, were fully secured by the "Water Act" itself, by that section which refers to conservation. We may have been at fault, but I know we were fully satisfied that the sums advanced were fully secured against the lands, and I do not think there was any idea on our part it was necessary to organize districts to protect the Government in its advances already made. If you look at section 275 of the Act as it is now compiled, you will see that in 1919, that is, before the organization of the districts, there was provision for the levying of taxes to recover repayment of the moneys advanced from the Conservation Fund. Now, as I say, some of our legal friends might advise us that was not sufficient for the purpose, but I know we were quite satisfied we were safe in advising the Government to advance funds at that time because we felt that section fully covered the Government in securing their repayment. That is one of the points Mr. Cleveland did not bring out which occurred to me at the moment and I thought I would mention it. Another point—I will cover these points I made a note of during Mr. Cleveland's remarks and get them out of the way. The settlement of the acquisition costs, as Mr. Cleveland pointed out, was entirely in the hands of the organization committees. I remember very clearly at Vernon how long it took before any person would come out and mention any specific sum. Nobody wanted to mention a figure because he was afraid on the one side he was going to mention something more than the other fellow would take, or on the other side something less than the other fellow was willing to give. As far as Mr. Cleveland or any one concerned, as far as any settlement of acquisition costs is concerned, our position all the way through was the Government was prepared to advance the sums agreed upon between

the organization committees and the representatives of the various companies, and that applied in the other cases as well. The only case where anything approaching negotiations was carried on by the Government officials was in the case of the Black Mountain District. That occurred through a visit of Mr. Cross to the city, the owner of the Belgo-Canadian Company. Mr. Cleveland was in town and Mr. Carruthers brought Mr. Cross to my office. We had a few minutes' talk and Mr. Cross came out with the positive statement he would accept $100,000 and not a dollar less. He said he had come up to the office with the intention of asking $150,000 and working down as necessary, but as it was a holiday and everybody was in a hurry he mentioned his bottom price. That price was conveyed by Mr. Cleveland and myself to the organization committee of the Black Mountain, with, I am perfectly safe to say, without even a recommendation on our part. Mr. Cleveland mentioned as well an attempt was made to make the administration of the districts entirely self-contained, and I think if you follow the provisions of the Act closely you will see that was pretty thoroughly done. We have—departmental officials generally have discussed the various points which arise with the trustees, it is true, on many occasions. While I was in the Interior I attended many trustees' meetings and many public meetings and gave such help as I could to the districts in every case. I think I can safely say I never suggested to the water-users during the time I was up there any opposition to the policy outlined by the trustees. I freely admit that at times I was not in accord with the trustees at the start, but before I discussed the question with outsiders or expressed a view of any kind at all I arrived at the same conclusion as the trustees or made them arrive at mine.

Q.—Would that hold true for the last construction at Aberdeen Lake? A.—No, not within recent years. I am speaking of earlier times. There are two or three cases where moneys were advanced to the districts, not only without my approval, but against my decided objection. I do not know that any of these other things are worth raising at the moment. Those points I brought up are merely extraneous and had to do more with my own operations. These others are more of a general nature in the discussion. Now, I think I will leave it to some person else to start me again. The self-starter has stopped for the moment.

Q.—I suppose you are familiar, Major MacDonald, with the contention which was raised by the Vernon Irrigation District, and by one other, that these districts relied upon the Provincial officers to guide them in their negotiations, and that they were very much disappointed to find themselves in a position some years later where the rates for irrigation were doubled? A.—I may say that in going over the evidence and in reading statements that had been prepared earlier, I was rather surprised at the mention of estimates given by Government officials; and in one or two cases a mention of promises made by Government officials. I think you will all agree that Mr. Cleveland had too much brains to make any promise of that sort, and I hope the majority of you will give me credit for having nearly as much, anyway. I could not make out what estimates you were referring to in this very specific way. I searched our own files to see if I could find anything in the way of estimates that had been prepared by us and put out to the general public, and I am free to say I did not find anything except some scrawls of figures which we made up and used at these various meetings, and other typewritten sheets which were prepared from various sources for comparative purposes at the meetings. I heard recently of an estimate which was made by Mr. Davis, I believe in 1917, but I can safely and positively say that I never heard of that until two or three months ago, and as I sat in at every organization committee at practically all these districts, that estimate certainly could not have had very much bearing on the discussions that I heard. Apart from that I don't know of any estimate that exists. I do know, as Mr. Cleveland said this morning, that at various times we compiled figures, figures by the bushel that were secured by all kinds of sources. A great many construction figures were secured from either the records or the recollection of the White Valley Company. In some cases other estimates of construction were made up, say, from cross-sections of dam-sites or some such thing as that without, as Mr. Cleveland pointed out, any borings or any searchings for materials or anything of this sort, and were only just used for comparative purposes. The general use of figures as I recollect it was this: We would be considering—this would be a case in point—we would be considering the advisability of including certain lands in a district. We would take such figures as we had and calculate how the inclusion of that area would affect the annual rate. As I say, those figures were valuable for comparative purposes, because they indicated in a case like that whether it was advisable to include the area in question or not; but they never to my recollection purported to be an accurate estimate at any

stage of the game of the cost to the district. I went back to the evidence I gave before the D. A. McDonald Inquiry to see if I had given any specific figures at that time. Looking over the evidence, I began to think for a moment or two that I had until I found that before the Commissioner I had qualified all these figures at one stage of the game by saying, "This is on the basis of the figures these engineers have been giving," referring to valuations made by other engineers. At the time, you may remember, the Commissioner himself brought in the White Valley and Dutcher and also Groat Sterling was there, and I was apparently comparing figures which had been put forward by some of them and by Mr. E. B. Knight. That the qualification does not appear more strongly in my evidence at that point is due to this: that I had been talking with the Commissioner in the hotel about the effect of expenditures on annual rates. He stated that he would like to have some of this brought out before him. I told him I was not there for the purpose of giving any evidence at all, and that I did not want to appear, so we passed it up at that time, but later on he came to Victoria and again came to me and asked if I would give him some figures or calculations on the estimates which were in existence, and it was definitely understood between us before I went before him that my figures were not primary figures as they might be termed, but were merely calculations on the basis of other figures which were before him; so, having that understanding with him, I did not qualify my remarks before the Commission as fully as I otherwise would have, but, as I pointed out here, I did specifically qualify them on one occasion, because somebody, I forget who it was, asked me to repeat some figures, and I then pointed out more fully that it was only for comparative purposes.

Q.—Mr. Kidston, in his evidence at Vernon, made reference to a report of Mr. E. Davis, of the Water Branch, submitted to the Coldstream Council. That is the one you refer to and you say you are unable to find that? A.—Mr. Kidston submitted a copy of that.

Mr. Kidston: I gave you a copy of that.

The Commissioner: Is that agreed that that is the one?

Major MacDonald: Yes, that is the one that I said I never heard of until I saw it referred to in Mr. Kidston's evidence.

The Commissioner: He says Mr. Davis gave them to understand that the cost would be $4.25 per acre, put down for safety at $5? A.—The point I wanted to make there is those figures to my knowledge never came up before the organization committees at all. I never heard of it until, and was not aware they were in existence until Mr. Kidston's evidence brought it out. And, as I say, as I attended all the meetings I do not believe they could have been put forward without me knowing it.

Q.—Are there any questions of Major MacDonald on his evidence so far? You have seen the request made by the Vernon Irrigation District for the rebating of the interest, and so on? A.—I have seen it, yes, but I don't remember exactly what it was. Can you give me the page?

Q.—It is on page 6 at the bottom of the page. A.—"The cancellation of all interest to date. The cancellation of all interest accruable upon past advances for permanent structures. The extension of the repayment periods upon the permanent structures from thirty to sixty years."

Q.—Do you care to comment on that as to the feasibility of granting such a request, and its effect, if you will, upon future borrowings? A.—No, I am afraid it is not my province to comment on that. These are matters of policy. I am here to carry out the policy and not to outline it. I think I would be going outside of my province entirely to make any comment on that suggestion.

Q.—Would you care to comment on the interest rate? A.—I can give you a little information on the interest rate which may be of value. I am afraid I have not the figures just before me. I should have had them, but it is not material. I can get those later if you wish them. The first moneys which were put into the Conservation Fund cost the Province an even 6 per cent. A considerable portion of that was later refunded at 5 per cent. A little later $1,000,000 was put into the fund, of which about $235,000, if my recollection is correct, cost 6 per cent. and the balance 5 per cent. If I am not mistaken, some of the $235,000 was refunded at 5 per cent. The later moneys put into the fund cost 5 per cent. There was some small portion which cost a shade less, but not much. I can give you those figures if you want them, but the effect of it is that while the borrowing rate at the time the Conservation Fund was set up and when the first advances were made was 6 per cent., and the probability is the rate set on Conservation

Fund advances was based directly on that, the fact is that to-day a considerable portion of that money is not costing the Province 6 per cent.

Q.—Would it be possible to refund the entire revolving—conservation loan and obtain the money at the current rate to-day? A.—I cannot speak with assurance on that point, but I do not think it is possible to do it all. You see, these moneys are put into the fund from various loans. The character of those loans is what determines whether they can be refunded or not. I think, with the present very much cheaper money which is going, all the balance of those moneys would have been refunded if it were possible. I am of opinion that the money which was costing the Province 6 per cent. will continue to cost the Province 6 per cent. until the loan is wiped out. If you would like to get definite information on that I will make an effort to secure it from the Treasury Department.

Q.—I think it would be very valuable? A.—I will endeavour to find out. I think I am correct in saying probably three-quarters has been refunded and is now costing 5 per cent. The remaining quarter could not be refunded.

Mr. Wollaston: May I ask a question? Was the money borrowed specifically borrowed for this purpose or does it come out of the consolidated funds? A.—The first money which was advanced came out of consolidated revenue.

Q.—If the Conservation Fund wants money it draws on the consolidated revenue account? A.—It draws it from loan account. If I am correct, and I think I am, the Lieutenant-Governor in Council has power to put certain moneys into the fund from the consolidated revenue. That must not exceed a certain amount each year. Beyond that amount the money must be voted by the Legislature from certain borrowings. The Legislature will vote a certain amount for certain purposes. The Department of Finance then floats a loan to cover all those purposes and the money comes in out of that loan, so that it is sometimes quite difficult to trace the origin of an exact sum. Of course, there is considerable money in the fund to-day which has come in from repayments. The situation with regard to the money is this: Interest goes back direct to the Treasury, the repayments go back into the fund. We split it in our own branch just on that basis. Now, during the past four years there has been nothing come back to the Treasury on account of interest at all, and all the moneys which have been paid back by the districts have gone back into the fund, because they were in repayment of advances.

Q.—Should not the taxes from the time the moratorium stopped, should not that interest go to the Treasury for—— A.—For 1927?

Q.—1926? A.—No, all that funded interest was still amortized at that time. The only payments asked for 1926 to be paid in 1927 were strictly repayments on construction-works.

Q.—Does it not include some of the unpaid interest? A.—No, that was all funded over the four years' period. You might get that idea in 1925, because the first statements sent out at that time were sent out before the second moratorium was put into effect and they showed interest and repayments, but if you look at the detailed statement which was sent out after the second moratorium was granted you will find it was all for repayment. I am fairly definite on that point.

Q.—Do you know the rate the Government paid for its last loan? A.—Somewhere about 4.62 or '4, somewhere in that neighbourhood. I had the figures but I have forgotten.

Q.—You have seen the reference just now for the refunding period for the permanent works to be extended. Would there be any objection, do you know, from the Department to extending that period to fifty or sixty years as has been suggested, or are you prepared to speak on that? A.—I think I am free to say there would be no departmental objection; that is, as far as the departmental officials are concerned. I cannot speak for the Minister, of course, but speaking of the purely internal affairs of the branch there would be no objection.

Q.—The saving between thirty years and fifty years is about 1 per cent.? A.—Thirty is 1.26.

Q.—And fifty is .34? A.—Yes, nearly 1 per cent.

Mr. Wollaston: If you take fifty years to pay it you would pay about 6.2? A.—It is nearly 1 per cent., .9 of 1 per cent. if you pay interest over the additional time.

The Commissioner: It is just a question of whether posterity should pay a part of that? A.—I might say the cancellation of the interest to date is exactly the same as wiping out a very considerable part of the loan. It does not matter what the district calls it, unless it went into the Government the Government has to take that much less money, and the Government might

as well wipe out a certain portion of the loan as not take interest on it and take repayment of the loan. The effect is exactly the same. It doesn't matter what you call it.

Q.—Would you care to make any comment on the effect of such a request on future borrowings? A.—I don't know that I am in a position to do that. What I can say is this: that in my position I am only authorized to recommend an advance to a district if I am reasonably satisfied the district can repay. That is, under the present policy of the Government I am supposed to be satisfied that the district can repay the advance before I recommend that the advance be made. Naturally I cannot at this stage of the game recommend any further advance until I have other instructions from the Executive.

Q.—In other words, there must be some agreed settlement of the present indebtedness arrived at before a district can expect—— A.—I wouldn't put it that way. I am in the position of a branch bank manager. I can only advise a loan if I am satisfied that loan is going to be repaid with interest. Now, if as a bank manager I had recommended a loan which was not coming in fully, but was under the impression that if part of that was written off and small further sums advanced we might get something back, I could not do it on my own; I would have to go to head office for it. That is my position. My present instructions from my head office, to carry on the analogy, are in effect that I am only to recommend a loan if I am satisfied it will be repaid.

Mr. Wollaston: Repaid with interest? A.—Yes, repaid with interest. I might further say my recommendation is not absolutely necessary—it has not been.

The Commissioner: You are aware, Major MacDonald, I presume, of the requests which have been set before me in the matter of water-shortage in various districts? A.—Yes.

Q.—That further moneys should be advanced for further storage? A.—Yes.

Q.—I suppose that question of future borrowings depends upon the settlement of the present indebtedness? A.—That again is a matter of policy on which I am not qualified to speak. All I can say at this juncture is I cannot in the ordinary carrying-out of my duties recommend a further advance except to one or two districts who have specifically undertaken to pay the whole indebtedness. It might be a bit of news to some of you that there are one or two districts who are ready to pay up.

Q.—Mr. Freeman, in giving evidence before me at Vernon, referred to a visit you made to the district, and he is speaking of the amount of water and sales and says, referring to you, "He was amazed at the small amount of water which was sold in this district." I suppose you are agreed there has been a very serious shortage of water in the district in the past three years? A.—Yes, there is no doubt about it that the past three years before this season just past they have been very, very short. I was under the impression that 1924 was a very, very low year. As a matter of fact, I think the run-off out of Okanagan Lake that year, which is a pretty fair test of the water-supply in that district, was about 47 per cent. of the average of the past ten years and 1925 and 1926 were worse rather than better, so there has been no doubt a very grave shortage of water, I think one is safe in saying, for the last three consecutive years.

Q.—I assume it would not be unreasonable to suggest that money from the Conservation Fund should be made available next year to districts which are suffering under a water-shortage, providing the general indebtedness of these districts is put in a satisfactory condition before that time; that is, that money should be forthcoming? A.—Well, not in all cases. I think that the provision of further storage should be very, very carefully considered in all cases. There are undoubtedly a number of cases where further water should be provided, but because of the shortage we have had these last two or three years I am of opinion there are other cases where the provision of further storage is not necesssary. We have gone through an exceptionally low-water period. Now, to have had sufficient water available in those years would mean a surplus supply in even anything like a normal year, and it would mean money tied up in storage to provide an ample supply in years like those just past would be idle in the normal years of the cycle, if there is such a thing as a cycle.

Q.—You are familiar with the crop returns for the last few years in the irrigated districts? A.—I am afraid I have not kept as fully in touch with crop returns as I should have done.

Q.—I presume you are aware they are below the average and away below the possibilities of that land under the best conditions? A.—Yes, decidedly so.

Q.—Would it not be very much in the interest of the Government to render reasonable aid to provide ample water for the building-up of the returns from that land? A.—It would appear to be a good policy to provide an ample supply of water. Is that sufficient?

Q.—I think it is, and I am going to get you to outline directly the conditions which you found existing in the State of Washington during your trip of inspection through there a month ago. Just to take these in order before I go on with that, I would like to have you refer briefly to the provisions which the Government has now put into effect for taking over lands which have reverted for taxes, and also to discusss the question of revision of classification? A.—Yes.

Q.—And you will perhaps tell us what the difficulties in the way of the suggestion that we had here this morning are, and also the value of the provision you are now putting into effect regarding reverted lands? A.—In 1925 this amendment was introduced into the "Water Act": "Where it appears to the Lieutenant-Governor in Council that any improvement district"——

Q.—Section 272, is it? A.—272 (3)——"suffers loss of revenue through land in the improvement district having heretofore become exempt or hereafter becoming exempt from being taxed by the improvement district, he may relieve the improvement district of the payment of so much of the sums that would otherwise be payable by the improvement district in respect of its indebtedness to the Conservation Fund as in his opinion the circumstances warrant." The section goes on to provide that the Lieutenant-Governor in Council may require that the land be transferred to the Crown. This was put through not long before I came to Victoria and I don't think much was done with it until I came here, and I possibly had more to do with it than any other departmental official. The first intention under this clause was that it should prevent the accumulation of indebtedness which might happen because of lands becoming delinquent. It was first intended that compensation advantages should be taken into account; by that I mean, if a district secured an increased supply of water because of these lands going out, the relief should not necessarily apply; but in a case like Grand Forks, where there is an ample supply of water for all the lands under the system, the district should be relieved of the proportionate part of its repayments to the Conservation Fund. You note it is "relieve the district of the payment of so much of the sums which would otherwise be payable by the district in respect of its indebtedness to the Conservation Fund." In a number of the other districts it was realized that if all the lands at present assessed were brought into irrigation further capital expenditure would be necessary for the provision of more storage-water, or the enlargement of canals or the construction of distribution-flumes, and it was not primarily intended that those districts should get the full relief, but that the actual effect of the passing-out of this land should be calculated and that the relief should apply on that account. Later—I think I can safely say this, because I have gone so far as to advise the districts the amount will not be called for on this basis—the idea of the compensating advantages basis was forgotten, and the intention now is to relieve the district of those sums that reverted lands should pay on account of indebtedness to the Conservation Fund. The effect is this: It is no longer a joint liability of the users to the Conservation Fund. The liability as far as the indebtedness to those funds is concerned is purely a several liability. It is apportioned.

Mr. Wollaston: The titles all show—the certificate of title shows a cloud against the title for the whole amount of the indebtedness of the irrigation district? A.—No, no more than a certificate of title to land in the City of Victoria is clouded by the indebtedness of the city. There is no notation to that effect on the title.

Q.—Yes, a rubber stamp? A.—The stamp is to show that the property is within the confines of an improvement district, but there is no mention of the indebtedness of that district at all, or if there is there should not be. It should be wiped out.

The Commissioner: It was not the intention.

Mr. Wollaston: There have been cases of people turned out of their property in the municipality because they had that indebtedness registered against them? A.—Originally the indebtedness of the district was registered, but that is wiped out, and now the only notification in the Land Registry Office is that that property is within the boundaries of an improvement district; a similar notice, I suppose, as expressed, if you like, in the case of a municipality.

Mr. Everard: May I speak on that?

The Commissioner: Yes.

Mr. Everard: I understand from the Registrar at Kamloops the notice is put on to any certificate of title so that before the land is transferred and a new certificate of title issued the Land Registry Office inquires from each irrigation district whether the taxes have been paid or not. It is now in order for the secretary of each district to issue a certificate that all taxes against the property have been paid, otherwise the Land Registry Office will not register the title.

Mr. Crease: Is that relative to taxes for the current year or for past years?

Mr. Everard: All taxes assessed against a piece of property.

Major MacDonald: That makes your indebtedness purely a several indebtedness.

The Commissioner: Does that answer your question, Mr. Wollaston? A.—Yes. I was not quite certain how it stood, because we have land which has that notice on the certificate of title. It was land within the district and being "B" land was not responsible for any taxation.

Major MacDonald: That, I think, is probably about as clearly as we can put the effect of this relief. I can go a little further and outline possibly just how it is being applied now. The district is notified of the total amount which should be repaid to the Conservation Fund. The trustees are expected to budget to secure that money from the entire irrigable acreage in the district, making no provision for delinquency at all. Whatever money is collected will be received and taken into account where and when the lands which have not paid become delinquent and revert; the district will be credited with the amount that those lands should have paid. As a consequence the district is always technically in default in its payments, but actually is not if it turns in the moneys which are secured from the lands which actually pay. At the present moment we are relieving, too, in our calculations and in the statements we send out, the districts of a portion of those rates which should have been paid by those lands in past years. From the amount of money which we calculate should be repaid by the districts we deduct the sum which should have been paid this year; for instance, which should have been paid in 1926 by lands which have since become delinquent. From the 1928 repayment we will deduct the amount which should have been paid for those lands which have since become delinquent in 1925, and so on until the moneys which have been paid in the past by lands which have since become delinquent are credited to the district. As a matter of fact, a lot of lands which are delinquent have not reverted and until they actually revert we cannot credit the amount of relief.

Captain Bull: Will this relief about delinquent lands be permanent? A.—The intention is it will carry right on, but it will not apply to any future borrowings. I am outlining now the present intention and how we are applying this at the present moment. Of course, the application of this is largely in the hands of the Minister or the Executive, but up to date I have received certain instructions from them and will be able to get certain instructions that I think have warranted me in sending out the statements I have sent out.

Q.—In regard to future borrowings, delinquent lands which go into delinquent tax sales after those borrowings are made, would they come under this scheme? A.—I can't say we have gone quite as far as that in working this out.

The Commissioner: Would it be difficult to draw the line? A.—No. The idea is this: Suppose a district had 4,000 acres originally and has now been reduced by reversions to 3,000, and we know that the Government under this scheme has to accept 75 per cent. of the rates which should otherwise be due, or in effect write off about 25 per cent. of that loan. It would not be within reason for me at this stage of the game to recommend an advance to a district if I knew only 75 per cent. was going to come back. We realize to-day there is only 3,000 acres left in that district, and if the district borrows any more money to-day it should be paid by those 3,000.

Q.—Are you taking cognizance now of lands which are in process of reverting? A.—Oh, yes, if we were aware they were going out when these loans were advanced. An amount of this detail has been left for me to work out. I just get a general outline of how it should be applied and do the rest to the best of my ability.

Q.—Would you state, Major MacDonald, what in your opinion are the difficulties in reclassification of the lands? A.—Well, of course, a reclassification of the lands on an ordinary basis is impossible, because no district would stand for it, in my opinion.

Mr. Wollaston: You mean to reclassify and still produce the same revenue? A.—Yes, still produce the same revenue. When you talk of having some of the lands pay a lower rate and the Government absorb the difference you are not talking of reclassification. You are talking of an extension of relief. That is not reclassification at all. As I understand it, if the district has to raise a certain sum of money and the trustees determine certain lands will pay a higher rate and others lower, that is in effect taking money out of one pocket and putting it in the other, because the value of these lands is capitalized fully. I do not think we need bother our heads about that classification at all, because I don't think any district would attempt to put it over or could put it over.

The Commissioner: As I suggested this morning, this is put forward as an argument against reversion of the land to the Government. Actually the Government would be in a better financial position, presumably at any rate, if it could receive a partial return from some of the poorer classes of land. Is that impossible due to the reason the Government would have no security for that and no such arrangement could be made effective because the Government would have no excuse for doing so? It would not be in possession of the lands? A.—I don't know that the question of security or possession of the lands is absolutely necessary. It is one of the things which enables the Government, I should think, to overrule any opposition which might arise to anything of that sort. It is a very simple matter to explain to almost any one that it is only right and proper the Government should pay irrigation rates on Government lands, but it is not the same proposition to say that the Government should pay irrigation rates on privately owned lands.

Q.—You agree it is cutting down the revenue to the Government coffers by the loss of Provincial taxes from those lands? A.—Yes, but that only applies where there is an ample supply of water. According to the reports we have of water-shortage, which I personally feel are quite correct in some cases, but not in all cases, we would have to go on and make further capital expenditures to provide water for those lands which are only going to pay a partial rate; that means we will have to pay out money to get a return from them and it would never come back from them, so there is nothing in that.

Q.—You do not anticipate they would build up into a better classification by getting more water? A.—I wouldn't like to be the assessor who raised the classification.

Q.—I mean, supposing that they develop from mixed farming into fruit-growing? A.—That again, according to a lot of the discussions we heard this morning, would be rather inadvisable because we would have further competition. No. It would appear in the interests of the districts to let this lower-grade land revert. Personally, I do not see how any other scheme could be worked out. I can see so many difficulties in sight I do not believe it would work. It might be all right—to revert to a specific case—in a place like Grand Forks. They might do something there possibly where we know there is water enough in the river for all the lands, but even there, as far as I can see, it is going to be necessary to have that land revert and pass through Government hands in order to wipe out the accumulation of past charges which have piled up against it. There is no question about it, if that land has any value in its native soil any reorganization of lands would be immediately capitalized by the present owners, and any man who buys that land and pays $100 to the present owner because the Government or the district is absorbing a lot of the arrears against the land is going to be no better off than if he got the land for nothing and paid the arrears of rates.

Q.—You think there would be a tendency on the part of the better lands to endeavour to obtain classification at a lower rate, too? A.—We had a definite instance of that in the case of Grand Forks already. They have quite a lot of land of low grade and run down and it was suggested the district itself might grant a moratorium; that is, the district might permit some of this low-grade land to pay a lower water rate for two or three years until it was built up and then make it up later. Even the best bearing orchards at Grand Forks came forward for a lower classification, and I think possibly two-thirds of the land in the district is under that classification, and consequently they are back to their original rates. It just shows you what the effect would be of an attempt of that sort.

The Commissioner: I can see the practical difficulties of trying to work out such an arrangement, but what my mind always comes back to is the uneconomical effect of losing revenue where it can be avoided. I see the difficulty of giving relief where the Government has no security? A.—Well, coming back to that again; where there is a shortage of water, where there is the necessity of the district of building up all this land to full development, it would mean undoubtedly further capital expenditure and we would be very lucky if we saw the further capital expenditure back from the land, so we could not count on getting anything back in the way of past expenditure. There is a natural solution of that. It is possibly cold-blooded and it is going to hurt, but this is a situation which requires a surgical operation and you cannot cure these things without hurting somebody. The solution might be to have the lands revert and have them sold by the Provincial Assessor for what they would bring, and if it is necessary, in order to bring that land into cultivation that it should have a lower rate, let the Government remit a portion of the rates until it comes up to bearing. I can quite conceive the position where

that land, if it had been bearing the full rate, could not be given away by the Provincial Collector; that even the wiping-out of all the past charges would not be worth a nickel; but if the Superintendent of Lands, who handles those sales, was in a position to assure that land of reduced rates for two or three years, he might be able to give it away.

Mr. Wollaston: Why should he do that to the new owners and not to the old owners? A.—It is only a case of the Government getting a return from it, and it is good business probably on the part of the Province where this land has reverted to the Province.

Q.—Because it has a high rate. If you are going to consider a low rate after it reverts, why not consider the low rate before it reverts?

The Commissioner: Major MacDonald has set forth the difficulties of that very clearly. It would be fine if you could see a way around it, but he says the only justification the Department can have for asking for cancellation of rates is because it is Provincial land. That is where the shoe pinches. I can see from the point of view of a return from the land that is not economically sound, but unless something of a revolutionary character could take place in the matter of getting title to that land and the reason for cancellation of charges being given, it would look as though it would have to go through the process.

Mr. Crease: Mr. Commissioner, what Major MacDonald has been saying is most intensely interesting, because it affects the whole district. There are districts in which there are very large areas of poor farming land and of fruit-growing land on which, if trees did grow, could not bear enough to make a return; therefore, are better utilized for the production of other kinds of crop. Major MacDonald suggests there is a particular difficulty in changing the rate of charges against those two kinds of lands, those which are used for fruit-growing and those which you use for producing other kinds of crop, and because of that difficulty those lands which are not fruit lands should be permitted to revert to the Crown rather than the charges on them should be reduced. Would it not be apparent that it would be injurious to allow large areas of land to go out of cultivation—I am speaking of those lands which produce hay, alfalfa etc., and root-crops, possibly grain—why should those lands be sacrificed more than the fruit lands? A.—I don't know that I follow your point, Mr. Crease; but what is sacrificing the land? It is inability to pay the cost of its own operation.

Q.—If it is shown the charge for the water necessary for growing—— A.—Is that not part of your whole operation?

Q.—Just one second? A.—Yes.

Q.—If it were shown the cost of water on this agricultural land I am referring to is at present too high, more than can be paid for it out of the production from those lands, is that any reason why means should not be found of keeping those lands under production rather than letting them revert to waste land; or, if you like to put it another way, is there any reason why the farmer should not be protected as much as the fruit-grower? A.—I really cannot see your point, Mr. Crease. I may be thick-headed.

The Commissioner: I think, Major MacDonald, what Mr. Crease is coming down to is the fact that by the process which you propose of relief the lands will be out of commission? A.—Yes.

Q.—And will be sold *ad libitum* to strangers possibly; and if the Government can go that far, is it not possible they could go a step which is not quite so far and give a portion of relief and allow the present owner to remain on the land. You have already stated the difficulty? A.—I followed Mr. Crease that far, but when he brought in the clause why these people should not be protected as well as the fruit-growers he confused it in my mind. I cannot get the relationship. The fruit-grower protects himself if he gets returns. The reason we separate him from the others is he should be able to pay.

Q.—What he means is, why should they not try to keep those people on the lands as well as allow the fruit-grower to remain? Why should it not be possible to allow them to keep company with their neighbours? A.—One reason is their neighbours can pay their way and these people cannot. It is a very difficult question.

Mr. Crease: It is a very difficult question. Heavy expenditures have to be incurred for labour and expensive works to bring the water down for the benefit of the two classes of producers? A.—Yes.

Q.—The fruitmen and the agriculturist—the farmer. It may be better policy to let the district become serviceable only to those who can produce the more expensive class of produce,

fruit, or any other natural growth which demand high prices. Possibly that is the case, but it certainly would create a revolution in condition, because there are so many farmers already there who were there before these heavy loads were put on for the benefit of the whole district, we will say, and particularly for the benefit of the fruit-grower. The farmers were established and they were called upon to contribute to the expenses, but the rate of their contribution is now found to be higher than what they can naturally at the present time produce from their lands. If it had not been for the creation of these irrigation districts the farmers probably would have got the water they needed and the fruitmen would not. A.—There again I cannot quite follow along that line of reasoning, Mr. Crease, because we are talking now of lands in the district that are served by works of the district, not bottom lands as compared with other lands. Of course, there are all kinds of lands in a district like Kelowna, low-lying places which are getting a low water rate and lots of areas where water would not benefit the settlers. They are in a different category; but we are discussing lands which are in a district and need water brought to them.

The Commissioner: We must not lose sight of the fact that if water is taken from the poorer class of land it makes water available for the better class of land, and I think Major MacDonald's thought is the benefit to the Province would be better than it is now without any increasing of the load on the land which remains? A.—I can quite see Mr. Crease's point if there is an ample supply of water, and it is not going to be necessary to add to the works within the district to provide an ample supply of water—put it that way; but where the conditions are that reclassification of these other lands means further capital expenditure it means you are laying out money to-day to provide those lands with water in excess of what they can pay for.

Mr. Crease: Would it not be more to the point to prevent the use of more lands than are at present used than to restrict—— A.—That is not sufficient.

Q.— —to restrict those farmers which are already using it? A.—To prevent is not sufficient for your district. According to the evidence we have the water now is not sufficient for the cultivated land. There is no use restricting them. We are beyond that already.

Mr. Wollaston: There was evidence this morning that if a quarter of the district reverted the rate would be 60 cents more. In 1923 we had lots of rain and yet we had an additional amount of $2 an acre to make up in tolls, something like $20,000 additional to make up in tolls because the supply of natural water was so great very little irrigation-water was used.

The Commissioner: Mr. Wollaston, in that event, the total amount you met was rather less than more than in normal years.

Mr. Wollaston: The land was taxed whether we had water or not. We had to make up that deficit in tolls. It was not additional tolls; it was an additional tax.

The Commissioner: You did not on top of that pay the ordinary rate for water?

Mr. Wollaston: Land which did not have water on it at all, like summer fallow.

The Commissioner: Yes, but we have come to the point of looking at the land as carrying a total charge on the average in the various districts. We know in the case of the Vernon Irrigation District the repayment and interest or rather replacement runs at $110,000 and the operations another $25,000. That means you have to take care of a total amount roughly from all operations for annual revenue of $140,000. The proportion of that in tolls is somewhere in the neighbourhood of $4, and it means if you decrease your land under water that the balance of the land will have to pay their proportion only of the increase of the $25,000 operating cost. Under this arrangement the Government when it obtains title to the land rebates those carrying charges. While you may have had this $2 toll you did not pay for the water because you didn't take it.

Mr. Wollaston: But at the same time my land was paying its full tax besides that and didn't have water on it.

The Commissioner: Then it did not pay tolls.

Mr. Wollaston: No, not tolls, but it had an extra $2 tax. This water was going to waste. We were not getting it.

Captain Bull: Major Swan, I would like to put this to Major MacDonald. Speaking for my own district, my idea is to try and fix a rate which will not force the present farmers to leave their own place and leave the district. We know perfectly well there are certain men who can pay and others who cannot, although they may pay a smaller rate. That is our main object before the Commissioner of trying to find a solution. We ourselves have done a few

things which you thought was impossible to grant. We had in our district certain bonus lands which are mentioned in the letters patent. We petitioned the Government to reduce that charge, which came to ourselves, by one-half. We reduced the charge from $50 to $25 directly contrary to the original agreement, because of the general hard-up conditions of those lands. We considered that that was worth our while rather than put them out of business? A.—Yes, and you will come back shortly and ask to wipe out the other $25.

Q.—We will get the whole thing wiped out. Now, again, dealing with the matter of reclassification, we feel that it would be good business if the Government could cut the tax on the poorer lands with a view of possibly increasing it again when they had got on their feet. Personally, we think that these lands are worth keeping in the district, but to give relief on the actual irrigation cost to keep those places in business is beyond our possibility. We couldn't do it, with the amount that we have to raise for repayments, yet the excessive rate that those lands have to pay they cannot pay them and it will mean that they will have to go out of the district. We thought that it would be good business to classify them, and we took that up with Major Swan when he came to Kelowna as being possibly the businesslike way of granting relief, because the Government could save money by retaining those places in business, and again it would grant relief to the other places because these lands would be sharing in the tolls? A.—What you are talking about is not classification at all, but granting further relief for certain specified lands.

Q.—Exactly? A.—What I feel about a lot of these things is it is better to call them by their right name and then we can understand what they are. We only confuse the issue when we talk about reclassification of those lands in that way.

The Commissioner: It is reclassification at the Government's expense? A.—Yes.

Mr. Kidston: There is talk of the fruit-growers being protected. They are not protected. There is talk of the fruit-growers being able to pay the water rates. They have been able to pay the water rates the last few years because they had some capital left or were able to borrow. The average fruit-grower has not paid his rates from his earnings any more than the hay-grower or the root-crop grower.

The Commissioner: I think, Mr. Kidston, we have had before me that the fruit-grower getting a fair return from his orchard and with an adequate price for his product can pay the present rate and more, and I am quite satisfied, from what I have seen of some of the better orchards with good production and with prices anywhere near what they are this year, the irrigation districts of the Interior would not carry any hardships to the orchard land.

Mr. Kidston: That may be your view of it, but we have not had prices like the present year. We have prices this year and a short crop due to a short crop all over the American Continent. You are basing your opinion on the hope we are sure in the future of a big crop and high prices, but in the past we have not had that.

The Commissioner: I am going a little farther than that. I am assuming it is going to be impossible to improve the lands which undoubtedly should take place. I am satisfied that is only a question of water and proper cultivation. If you get an increased production and an improved return with the present controlled prices, I think there is no worry about the future of the fruit industry.

Mr. Kidston: All I am stating now is that for the last few years the average fruit-grower had to borrow or use his capital in order to pay the water rates.

The Commissioner: I think that we are facing a better prospect now and we ought to try and forget the past few years.

Mr. Kidston: That is all right, in the case of hoping, but we are going on facts.

The Commissioner: We are going on facts this year.

Mr. Kidston: We don't know what the facts are until we see the returns.

The Commissioner: You have a fair idea. You know what has taken place already.

Mr. Kidston: All right.

The Commissioner: You know the situation is much improved this year over last year?

Mr. Kidston: Yes, in some things.

Colonel Edgett: Might I ask what boxage per acre you had in mind?

The Commissioner: I do not see any reason, gentlemen, why fruit lands in the Okanagan with proper water should not produce 500 boxes. There are many individual lands which have ample water where they are producing in an exceptional season 1,000 and 1,200 to the acre.

Colonel Edgett: Where they have ample water.

The Commissioner: Yes.

Mr. Wollaston: That is the crux of the whole thing, but what is the average?

The Commissioner: I think that the average for the better class of land is well over 600 boxes. I am speaking of the other side of the line. Is that not your opinion, Major MacDonald?

Major MacDonald: I would hardly put it at 600, but I would put it over 500.

Mr. Wollaston: What is the amount of water?

The Commissioner: An average of 2½ acre-feet.

Mr. Crease: Before we leave this subject of agricultural lands, Major MacDonald, when this agricultural land had reverted would it be supposed to lie dead? A.—It would depend entirely on the circumstances, I would say. For instance, I am not going into departmental policy or anything of that sort, but the possible working-out—the way the present operation of this relief would tend to go of its own accord—it is going to be diverted considerably by pressure from various sides, some of it possibly by myself, some by the growers, some by other interests, and so on; but the tendency would be this: that when the land reverts it will be offered for sale by the Superintendent of Lands unless it appears in the interests of the district to have it lie idle. By that I mean if there is a scarcity of water in that district the Superintendent of Lands will probably be well advised to hold them off the market, but if there appears to be an ample supply of water for the lands remaining in cultivation and for some of the reverted land, then that reverted land will be offered for sale by the Superintendent of Lands, who will get what he can for it.

Mr. Crease: And then what would happen with the charges? A.—The charges would carry on as before.

Q.—What would be the upset price for that land? A.—The upset price might be zero. It would be what the Superintendent of Lands could get for it. If the upset price was the whole existing tax charges the district could sell it. The district can sell at any time for the old charges, but in order to get the old charges, which are a burden which the land cannot bear in addition to the water rates, lifted, it must go through the process of reversion to the Crown. That is the only way the old accumulation of charges can be wiped out.

Q.—Take a case under the conditions you have recited, or a resale of the land, could the original owner rebuy the land? A.—He could, yes.

Q.—And thus get rid of the burden of taxes? A.—Yes; but the present idea or attitude of the Superintendent of Lands is, I may say, he will not consider an application for repurchase from a past owner in occupation except at the regular upset price. He realizes fully that that would be just a means—if there was given preference to the present owner it would be just a means of wiping out all of the present irrigation charges in all the districts. There is the danger of that.

Q.—Then take the case of a former owner wishing to pay his taxes and being unable to do so on account of the size of them, he would lose his land? A.—Yes.

Q.—And see a stranger go in and get the benefit of it? A.—Possibly so.

Q.—The stranger will get relief? A.—It happens in all tax sales—no, the stranger would not get relief if the land can bear the charge. This is all in the future; but what I am trying to outline is where this is likely to go when the land reverts. When the land reverts it comes back to the Superintendent of Lands. He calls for bids with the understanding it is to pay the full irrigation rate from the date of purchase.

Mr. Wollaston: All the arrears under the moratorium? A.—No; that is washed out. He is willing to sell the land for the best price he can get for it with the understanding it immediately begins to assume the full irrigation charges. If the land had a value equivalent to the old arrears of charges, then it would have been sold by the district or by the former owner. If it has a value in excess of the arrears of charges the owner has an equity; for instance, if he sells out to somebody for $10 and they assume the accumulation of old charges. If it has not a value of the accumulation of old charges, but let us assume it has a value of half, then the Superintendent takes the half and it is credited to the fund; but supposing it has no value at all in the face of these old accumulated charges, then the highest bid he gets would be nothing. Then he would be well advised to let it go for nothing in order that the Government and the district can get the irrigation rates for it in the future. Supposing we go a step farther and suppose it is worth nothing if a man has to begin at once and pay the full irrigation

rate on it. We have a lot of land at Grand Forks in that position which is worth nothing at all to-day if a man has to pay the irrigation charges, but if that land in two or three years with low water rates could be built up to good production, and this is going a step farther in the arrangement, the newcomer would get a reduced water rate at the expense of the Government until he built it up to bearing.

Mr. Wollaston: Up to bearing? A.—Up to bearing the irrigation rate. Some of this land has been dry-farmed for forty years and could be possibly brought back by growing proper crops and lots of water, but it has petered out right now. This is a case where lower rates might be offered until the land is raised in fertility; in that way the Government would get a little bit for two or three years and thereafter get the full return of taxes from the land. There are the various steps as we go down the scale.

Q.—How would the lower rate with the new buyer be arranged? A.—It would have to be arranged by a bargain with the Superintendent of Lands.

Q.—Who stands the balance? A.—The Government.

Q.—Why should not the present occupier or owner of the same property be given the same accommodation? A.—For the simple reason it is not practical, Mr. Crease, in my mind. If you start doing that, then you give relief to the top men who can pay right through. It would be far better to let all this land revert at one time and come on the shoulders of the Government than to keep on granting relief in that way in a district. The only way you can tell whether that land can pay or not is to put it through the acid test. You have to wipe out the accumulated charges against it. There is no equity at all in it to any person if it will not sell for the amount of the accumulated charges. The former owner has no equity.

Captain Bull: What would happen if the former owner made a bid for it? A.—If it was considered to be a *bona-fide* case of the land not having the value of the accumulated charges, then the former owner would be considered; his bid would be considered on the same basis as any other bids.

Q.—If a man allowed his property to go into tax sale and wanted to buy it again at the best possible price or on a low rate, he would be able to do so? A.—It might be done. It might be found advisable that everything should be cleared away from the land and the old settler be allowed to take it. On the other hand, it might be possible, of course, those people would put in their bids along with other bids which might be better. I am not saying this is the way it is going to be worked out, but it is the logical conclusion at the present moment.

Mr. Wollaston: If it reverts it is going to become waste land, whereas if it was allowed to remain on a lower rate it could be used as pasture and kept in the district. Supposing this land is going to tax sale and some fellow comes along to buy it, the first thing is you have to have water before he can use it. Who is going to build the works, the district or the Government? A.—I don't think lands of that sort are likely to be sold against the advice of the district, and if the district is advised it is going to cost considerable to put water on that land, it is going to be left out, and, furthermore, there should be good co-operation between the district and the Superintendent of Lands. As far as I can see, if this thing goes on to its present logical conclusion it will be necessary for us to have some person in touch with the district at all times to inspect each individual parcel of land and advise the Superintendent whether it should be offered for sale or not. I might say that I advised the Superintendent a few days ago to withdraw a parcel from sale because I thought it was going to be detrimental to the district to have it sold to the proposed purchaser.

Q.—You see, land might be sold for nothing with water on. A man might say, "I can afford to pay the taxes," and he goes ahead and takes off a crop for a couple of years and then goes off and has not paid a bit of taxes? A.—That might be overcome by making him put up a couple of years' taxes.

Q.—That would be quite a lot of money? A.—If the land is not worth it, it is not worth putting it up. I am getting down to the various grades of land we have. I believe in Grand Forks we have land which comes in that last category which could not be given away to-day or five years from now if it had to bear the full irrigation charge, but in two or three years, with a reduced irrigation charge at the expense of the Government, not at the expense of the district, it might then begin to bear full irrigation charges. From a strictly business standpoint it would be good business on the part of the Government to give that reduction on lands for settlement purposes. That would come on a par with what is done under the United States

Reclamation Service; that is, to give new settlers an opportunity to bring new land to fertility and bearing.

Q.—I cannot see why the Government should let stuff go out for three or four years and then start over again with a low rate instead of keeping it always under production. When the Government takes this land over, do they pay the municipal taxes too? A.—No, not supposed to.

Q.—If it reverts to the Crown, then it is going to grow weeds and will raise the municipal rate for the others? A.—The municipality has always the power of taking it over.

Q.—The Crown's claim comes first? A.—That can always be met by paying the Crown's charges and taking it over.

Q.—But the municipalities would not pay the municipal taxes for the rest—that would have to be borne by the other taxpayers in the municipality? A.—It is a complication.

Q.—As you know, we are very much complicated at Vernon by the Coldstream Municipality. We have very high taxes on lands which are described as orchard lands which are not orchard lands. I think the orchardists should be prepared to pay more taxes to keep the hay-land fellows from going more into orchards—and keep the orchards as small as possible? A.—I think you will find the Land Department officials—anyway, those present here—are very anxious to co-operate with the districts in working this proposition out to the best advantage of the districts. I have had no difficulty at all in getting the Superintendent of Lands to withhold sales on my recommendation, and I don't expect there will be any difficulty.

Q.—Major MacDonald, I was just looking over the amount of actual cash we paid the district since its incorporation in 1920. The Coldstream Ranch has paid—it comes to $76,000, and I understand there is $40,000 still piled up under the moratorium, and this year's taxes about $18,000 to pay. It comes to a large amount? A.—It is a big place.

Q.—But it doesn't get water on all of the "A" land. Thirty per cent. of our land doesn't get water, but it pays taxes.

Captain Bull: Under this scheme would the owner be allowed to live on this property after he had been sold out for taxes? A.—That all depends on the circumstances. When the land reverts it comes to the Superintendent of Lands, but I would not imagine there would be any eviction unless the land was offered for sale.

Q.—As far as the district is concerned we would have no power to evict the man? A.—It belongs to you in the interval. I cannot conceive of eviction unless some person bid on the land and wanted to go and live on it; but I would not expect any settler of that sort would get off.

Mr. Wollaston: Major MacDonald, in regard to the municipal taxes on the Coldstream, there are one or two places which are gully or hills, foot-hills, which need serious rebate for taxes. We pay about $12,000 a year in addition to the water rates. Any increase in taxes by reason of the lands reverting to the Crown is going to increase that burden, because we will have those extra municipal taxes to bear? A.—I have enough troubles of my own without taking on the troubles of these municipalities.

Q.—It all reacts on this. One thing leads to another? A.—I cannot see how a reduction of $2 per acre in the water rates is going to make any material difference in those few cases.

Q.—It made a difference to us of $3,800 last year and $1,800 this year.

Mr. Clarke: Just to show the difference to a district where there is not an ample supply of water, if the lands are allowed to revert to the Glenmore District we should get 2 acre-feet of registered water; that is storage and flood. In the report of Major Clark it states: "It has been shown that the users decided on 1½ acre-feet at the formation of the district. The abnormally low run-off in recent years has usually permitted approximately only 1 acre-foot supply of storage-water, with consequent adverse results to crops, trees, and soil. The unanimous experience of the growers is now, that the district requirement varies from 1½ to 2½ acre-feet of storage-water delivered on the land, a general requirement of 2 acre-feet." That is storage-water. After carefully considering the matter the trustees have decided on getting more available water in the district, and all that can be supplied to this district even with a further storage of 500 acre-feet which we expect to have this coming year, all we will have is roughly 2 acre-feet for 1,500 acres. At present we are supplying water to 1,800 acres and to give 2 acre-feet to that 300 acres. It is going to run out. They will not be able to give it to them, and they will have to go out of the valley. There is no possibility of keeping these lands in.

The Commissioner: Why do you insist on 2 acre-feet?

Mr. Clarke: We insist on 2 acre-feet because we feel to produce economically and carry on we require that amount of water in the valley.

The Commissioner: Have you not been getting on with less than 2 acre-feet in Glenmore?

Mr. Clarke: We have been existing in past years with as low as three-quarters of an acre-foot of storage.

The Commissioner: Glenmore, I should judge, is in a fairly healthy position, comparatively.

Mr. Clarke: Our water-supply is small.

The Commissioner: Yes, but Glenmore is in a fairly healthy position, comparatively.

Mr. Clarke: Yes, but we feel our valley with 2 acre-feet we could produce much heavier tonnage on the average and enable us to pay our borrowings.

Major MacDonald: If I may be permitted, I would say you could better afford to pay that money from the 1,500 acres if you have 2 acre-feet than you could if you spread it over the 1,800 acres.

Mr. Clarke: Yes.

Major MacDonald: That is the point which arises in many districts. They have low-grade land and in my opinion, if the districts are to survive, it would be better for that land to revert.

Mr. Clarke: With our present supply it only gives us 1,400 acre-feet, but with the storage-reservoir increased, which we intend to get next year, it will enable us to give 1,500 acres 2 acre-feet; that is, it takes out the 300 acres which are not at present taking water, but which are classified as grade "A" lands.

The Commissioner: I think that is the point. Major MacDonald has laid the greatest stress on the fact the reversion of the poorer class of land would put the balance of the land in a much better position to make a success of the irrigation industry as a whole.

Mr. DeWolfe: I would like to give you some comparative figures in regard to storage. In 1922 we had 1.02 acre-feet per acre.

The Commissioner: Storage-water?

Mr. DeWolfe: Storage-water. In 1923 it was .49; in 1924 we had only .2 acre-feet of storage.

The Commissioner: What flood-water did you get, do you recall; a foot, I suppose?

Mr. DeWolfe: In 1924 we had .4 acre-feet of flood.

Mr. Reed: We had .2.

Mr. DeWolfe: In 1925, .55 acre-feet storage; in 1926, .45. We have never had more than 1.02 acre-feet of storage and that was in 1922. Since then we have been never over an acre-foot.

The Commissioner: Your total storage to-day is 4,500 in Aberdeen, is it not?

Mr. DeWolfe: What we have right now?

The Commissioner: Yes.

Mr. DeWolfe: Yes.

Major MacDonald: You mean capacity?

The Commissioner: Yes.

Major MacDonald: Nearly 8,000.

The Commissioner: In Aberdeen?

Major MacDonald: Yes, but it doesn't fill.

Mr. DeWolfe: Our storage-reservoirs to-day are about 50 per cent. full.

The Commissioner: Of course, the question of storage—your idea is to give you security of being able to carry on from year to year?

Mr. DeWolfe: That is the idea:

Mr. Crease: Mr. DeWolfe, in the Vernon Irrigation District, that part lying in the Coldstream Municipality, how do you deal with the case where a large area of land would revert and the municipal taxes would have to be raised on the unreverted lands?

Mr. DeWolfe: The municipal taxes?

Mr. Crease: Yes.

Mr. DeWolfe: We would have nothing to do with that.

Mr. Crease: Your district would not, but you are familiar with the district. You know what would happen. How would the owners stand the extra taxes?

Mr. DeWolfe: I don't think they could.

Mr. Crease: The result would be, according to your opinion, that if the lower-grade lands revert in that municipality, causing a heavy increase in municipal taxes on the unreverted lands——

Mr. DeWolfe: It would knock them all out.

Mr. Crease: It would knock them all out?

Mr. DeWolfe: In time, yes.

Mr. Crease: That is a proposition I would like to draw to your attention.

Major MacDonald: What acreage of land paying irrigation rates is likely to revert?

Mr. Crease: Quite a big stretch.

Mr. DeWolfe: Mr. French's lands, his bottom lands are in the same area.

Major MacDonald: What area roughly?

Mr. DeWolfe: I would say, roughly, 1,500 acres.

The Commissioner: Out of a total of about 3,500 or 4,000.

Mr. DeWolfe: Yes.

Major MacDonald: What does it pay in municipal rates to-day?

Mr. Crease: About $3 an acre.

Major MacDonald: That is a tax of $4,500 for the municipality. What proportion of that land could be kept in by, say, a $3 or $4 reduction in the irrigation rates?

Mr. French: I think probably all of it would be kept in. I think there is 3,000 acres altogether which can be kept in by a lower rate.

The Commissioner: Not that much, Mr. French, is there?

Mr. French: I think so.

The Commissioner: Mr. DeWolfe estimated it at 1,500.

Mr. French: You can soon get up to 3,000.

Mr. DeWolfe: I am not counting any of the Coldstream Ranch stuff in.

Mr. Crease: After all, the Coldstream Ranch while a large property should, after all, I submit, be treated as if it was an aggregation of small properties in the hands of small owners. It is not in the hands of a company. It is in the hands of an individual who is trying to make that property pay as an agricultural proposition.

The Commissioner: I think that is quite fair.

Mr. French: I think you could easily find 3,000 acres which would be saved.

The Commissioner: 3,000 acres within the Coldstream Municipality?

Mr. French: Within the Coldstream Municipality and outside the municipality.

The Commissioner: Do you mean 3,000 acres under the Vernon Irrigation District?

Mr. French: Yes.

The Commissioner: Oh, yes, I agree with you.

Colonel Edgett: That is land at present supplied with water?

Mr. French: Yes.

The Commissioner: Yes, I am inclined to agree with that.

Mr. French: If they paid a lesser rate they would keep in, I think.

The Commissioner: Well, gentlemen, I think that case has been pretty fully put on the record.

Mr. Wollaston: When we joined the district the assumption was the Vernon Irrigation District was better off for water-supply than any other. I know I have stated and the speech of Major MacDonald at the Court-house at Vernon at the time rather sounded as if we could all get the water, that it was very easily available. He was so optimistic.

Major MacDonald: I admit I was much more optimistic at that time than I am now.

Mr. Wollaston: Don't you remember, Major MacDonald, at the time of the incorporation there was no suggestion really there would not be lots of water for the whole district?

Major MacDonald: No; I think if there had been an idea that water was as scarce as it has since turned out, I question very much if we would have been justified in recommending the advances.

Mr. Wollaston: I might read this, Mr. Commissioner.

The Commissioner: What is it? Has it to do with this?

Mr. Wollaston: It is old history to a certain extent, but it refreshes one's memory. I don't know the date of the meeting.

The Commissioner: Is it Major MacDonald's reference?

Mr. Wollaston: September 16th, 1920. Major MacDonald——

The Commissioner: He agrees, I think, that he expected you would have ample water, judging from the vague records which were available.

Major MacDonald: The only records we had were records kept by the old company.

The Commissioner: What is the nature of it, Mr. Wollaston?

Mr. Wollaston: It was generally on the subject of possible water-supply.

The Commissioner: Well, we know very well if the storage-reservoirs were filled Vernon would have water sufficient——

Mr. Kidston: Would it?

The Commissioner: Yes.

Mr. Kidston: If our storage-reservoirs were filled we would have 2 acre-feet?

The Commissioner: Yes.

Mr. Wollaston: I will not read it.

The Commissioner: I do not want to limit you, but why take time when we have that.

Major MacDonald: Following that, I may say the record flow of Gold Creek which was proposed to divert at that time, those records were not available until the end of that year or were not taken until the following year; I am not sure which, but were not available at that time. The records of flow in Gold Creek were horribly disappointing.

Mr. Crease: You were optimistic, Major—I am not saying this—there is no catch about it—I am referring to your evidence at page 119 of the McDonald Commission? A.—Yes.

Q.—"If you organize the whole into one district the rates would be, in my opinion, lower in the Vernon District than in other sections of the Okanagan Valley"? A.—Yes. When you get down to the ultimate basis, they will be.

Mr. DeWolfe: Major Swan, you just made the statement to Mr. Kidston we would have 2 acre-feet.

The Commissioner: You have 1¼ of storage.

Mr. DeWolfe: Our total capacity is 13,000 acre-feet.

The Commissioner: That is about 1¼ acre-feet per acre for all the land taking water.

Mr. Wollaston: There is a lot of land which went into the district which has been shut out from getting water.

The Commissioner: We are only speaking of the condition as it is to-day.

Mr. Wollaston: There is land which has been paying taxes for "B" lands—I am not talking of "C" lands, but lots of "B" lands which went into the district on the assumption there was plenty of water for us and paid full taxes too.

The Commissioner: What reason has it not been receiving water, because it is not available?

Mr. Wollaston: Not available for it.

Major MacDonald: It has not been paying taxes.

Mr. Wollaston: It paid taxes for two years in full, Major MacDonald, and it went into the district on the understanding there would be water for it the same as the "C" land, which has been paying one-tenth of the taxes all the time; it paid $1 an acre, and are paying another 70 cents this year and has no water whatever. That money seems to be thrown away, as far as I can see, without showing any consideration for it. In fact, 13,000 acre-feet of storage-water is only about 1 acre-foot for the "A" lands and the "B" lands if it was brought in.

Major MacDonald: My recollection is the water in Jones Creek had been running an average of 18,000 acre-feet. That didn't take into consideration the diversion from Goldstream at all and the further supply possibilities at some outside points which we were investigating at that time. The investigation of those watersheds was not completed until 1920 and the reports were not available until 1921, but the old records of the flow of Jones Creek, to my recollection, were 18,000 acre-feet.

Mr. DeWolfe: Something like that.

Major MacDonald: But you see there is the difficulty. The record flow was for a very short duration and there was nothing else to work on. There was nothing else available.

The Commissioner: What has your average been the last few years; would it run half a foot?

Mr. DeWolfe: No, the average is about three-tenths.

Major MacDonald: Including the Coldstream and "B.X."

Mr. DeWolfe: Yes.

Major MacDonald: What is your recollection of the total flow of Jones Creek over the past two or three years?

Mr. DeWolfe: Just what you mentioned, 18,000 acre-feet.

The Commissioner: It is shown it runs over and is lost for a certain duration of time. That is Mr. DeWolfe's evidence.

Major MacDonald: Then you cannot hold that.

Mr. DeWolfe: We can't hold it. It goes to waste.

Major MacDonald: You have got 8,000 in Aberdeen, which only holds in these years about 4,500.

Mr. DeWolfe: We can hold now with the new supply, say, 9,500.

Major MacDonald: But you had only 4,500 the last few years and then a few other lakes, small lakes.

The Commissioner: 600 in Fish Lake.

Major MacDonald: You are only able to hold about 5,000, all told?

Mr. DeWolfe: Yes.

Mr. Wollaston: Only about a quarter comes from Jones Creek to Aberdeen.

Mr. DeWolfe: About 25 to 30 per cent. comes in to Aberdeen.

The Commissioner: Is there any further discussion on this matter you have just had in hand?

Captain Bull: In regard to the present irrigation charge of $15, I think, roughly speaking, we use about 1,000 acre-feet, possibly more, 1,200. We have in our district a portion who are paying a drainage charge, and personally I hope we will be able to give relief to the portion who are paying a drainage charge by distributing those costs over the whole district. We have not really come to any decision, but it would appear to me that any special relief to the district on that score could not possibly be given by the Government.

Major MacDonald: I am very sorry the Minister is not here, because he should be hearing this discussion. It is not for me to be talking of these policies. It is not for me to express what I would like to see, but I have been outlining the present relief and the present policy, not what I want in the matter at all. I have been outlining the policy to some extent and certain aspects of it as the Executive might look at it.

Mr. Crease: Might I just add to wind up this subject only a word or two. With regard to the possibility of the Coldstream Ranch being driven to reversion, you suggest the Coldstream Ranch was not taken into calculation. The remarks from the owner perhaps would give you a side-light on that. Why should he continue to run the Coldstream Ranch for the purpose of giving steady employment to forty or fifty people—the wages paid on the Coldstream Ranch in the ten-year period we have been discussing amount to over half a million dollars in wages alone. The inference from that is the ranch is burdened with taxes, both municipal and water. The burden is very heavy and therefore the possibility of reversion in the case of the Coldstream Ranch is not as remote as some people might imagine.

The Commissioner: Well, it is a matter not approached lightly, Mr. Crease, and I am sure it has been put up in such a way that I can very well call attention to it in my report, and I feel equally certain that the Department of Lands, the Minister, and Major MacDonald will give it every consideration.

Mr. Crease: I am quite satisfied that is the case, Major Swan; I only referred to it because it is important you should have these material facts before you.

Mr. French: The way I feel about it, Mr. Commissioner, is I feel I would rather have the 400 acres dropped on which I have been paying $10 an acre a year all these years. If this year's taxes were to be paid it would mean $5,700 taxes. I cannot get the money to do it with. I will just have to let it drop, and try and hold on to the place where I am living, and start in at something else; go out to work by the day for what I can get to do, and let the rest of the land go, because I don't see any hope for anything else.

The Commissioner: How much of the land in the Vernon Irrigation District in the 3,000 acres would be available for dry-farming, do you think? Are you sufficiently familiar with it, Mr. French?

Mr. French: There is quite a lot of it would be all right for dry-farming. There have been one or two places close to the home place reverted to the Government, 30 acres; if the taxes

were paid on it it would be about $400, and the man is renting it from the Government for $135 to dry-farm.

Mr. Wollaston: How many acres?

Mr. French: 30 acres.

Mr. Wollaston: $4 an acre is a high rate to pay for that land for dry-farming. It is the worst kind of a gamble.

Mr. French: If the Government could cut the rate for dry-farming—they are getting very little revenue from having it revert and then renting it out—but if they could lower the rates they might get $2,000 instead of the $5,000 they are asking now. It seems to me it is rather poor business to throw it out of cultivation when there is a chance to get a certain amount.

The Commissioner: Well, I don't know what latitude the Department would have in dealing with that matter. I think you may rest assured it is only the difficulty of its practicability and being able to satisfy Parliament that would drive the Department to adopting a harsher measure. I think I am sufficiently familiar with the attitude of the Department to say that without fear of contradiction.

Mr. Wollaston: If it were to become dry-farming land it might as well stay in the original owner's hands, but apparently it cannot until it goes through the process of a tax sale and goes to some outsider.

The Commissioner: You can understand that.

Mr. Wollaston: It seems rather difficult for a man to pay up to date and then from now on he will try dry-farming, but if he does that the taxes have to be borne by his neighbours.

Major MacDonald: You are speaking of the general taxes or the irrigation tax?

Mr. Wollaston: The irrigation tax.

Major MacDonald: If it become dry-farming land there is no more irrigation tax.

Mr. Wollaston: There would not be if it goes through the tax-sale process, the Government is paying; but if it does not go through the tax-sale process and the owner says to the Assessor, "I don't want any more water in future because I am going to dry-farm," the amount due to the irrigation fund is not reduced proportionately. It seems to me that is an unnecessary hardship. If a man is satisfied to cut it down to "B" land and keep it in his own hands he should be allowed to do so with reduced rates, but he can't do that until it reverts and is sold. The Doukhobor comes in to dry-farm, but in the meantime the municipal and other taxes are lost.

Major MacDonald: I realize that and I would like to have you outline for me some way in which it could be handled.

Mr. Wollaston: That is what I took up with you before, and you agreed with me it was difficult for the owner and that there should be a reduction, but you couldn't see——

Major MacDonald: Have you found the solution since?

Mr. Wollaston: No.

Major MacDonald: There is the difficulty.

Mr. Wollaston: Unless the Government bears the tax, or if it will reduce it to "B" land, then we can still bear it.

Major MacDonald: There are some difficulties in the way of that and if you can eliminate them for me I will be very glad to have you do so.

Mr. French: I can afford to work the 200 acres and pay the water tax and I can dry-farm the other 400 and not pay the tax.

(Inquiry adjourned at 4.50 p.m. until October 12th, 1927, at 9.30 a.m.)

OCTOBER 12TH, 1927, 9.30 A.M.

(Commission resumed pursuant to adjournment.)

Major J. C. MACDONALD resumed the stand.

The Commissioner: I questioned Mr. Cleveland yesterday, Major MacDonald, on the Oliver project. I wish you would refer to that again from your own experience, more particularly as it has been mentioned by comparison in its operating costs and the charges which the users have to pay compared with the other districts in the Province; and I would like also, if you have the information available, since the reference has also frequently been made during this inquiry, to make a comparison with some of the United States Reclamation Service and State projects? A.—Well, I think Mr. Cleveland pretty well covered the inception of the Oliver project.

Q.—Yes, I think so? A.—And I can bear him out, too, in that, because I was just shortly returned from overseas myself when the Oliver project was started and I have a very vivid recollection of the agitation which was stirred up at the time insisting that the Provincial Government provide some employment for the returned men, and provide some means of settling them in community settlements. I don't think as a scheme it needs any further word. As far as the irrigation rate is concerned, that was set, as the irrigation rates have been set in all these irrigation projects, on the estimated cost of operating and maintaining the system. It certainly would not appear any more logical to increase the Oliver rate because the rate at Vernon and Kelowna is higher than it would to increase the rate at Girouard District because the rate at Vernon is high, or on the Mission Creek land around Kelowna because the Belgo is high. The rate is naturally that required by the project itself.

Q.—Is it not a little more than that? Do you consider it will be self-carrying? A.—At Oliver?

Q.—Yes? A.—Oh, yes. The rate was carefully calculated as sufficient to operate and maintain the system, providing for the replacement of all the temporary structures. Any increase in the irrigation rate would immediately react on the sales price of the land, and that is the one organization where the Provincial Government is both selling the land and operating the irrigation system, so there would be no ultimate effect.

The Commissioner: Does any one want to question that?

Captain Bull: That is for all lands under irrigation. The whole thing is under irrigation? A.—Yes. The Government is doing as the old companies should have done. The Government is carrying the charges on the vacant lands. The difficulty in the old company was the company did not carry the charges on the vacant lands, and that was why there was no fund for the replacement of temporary structures, and that is why the other districts have got into difficulties. The Oliver people are fortunately in the position of dealing with a reliable and permanent concern, whereas the other districts were dealing with companies which had not substantial backing to go on. The irrigation rate might be raised and the price of land might be lowered, or the irrigation rate lowered and the sales price of land raised, with exactly the same effect as we now have with the organization in control. It would appear that the combined irrigation rate and sales price of the land is not too low or the sales would be much more rapid than they are at present. The project is there, whether it was well advised or necessary in the first place is now beside the question; the only thing which can now be done is to make the best possible out of it in the interest of the Province at large. I cannot see that references thereto have any value or logic and they must necessarily appeal to almost any one as primarily vexatious, and as such they are much more likely to be a hindrance than a help to the users in the other districts in their efforts to secure some form of relief. The district is not on a par with the other districts at all, and possibly to bring out that point I might go over the various types of districts they have south of the line. There are, first, the irrigation districts under the Federal Reclamation Act. The operation of those districts has been referred to very freely too, and I might as well clear this up. The Federal Reclamation Fund is supplied from the proceeds of the sale of public lands and of oil lands. The idea behind it in the first place was that the proceeds from the sale of these public properties should be used particularly on the public lands, should be used to make those lands available for settlement; that the money should not be used for the ordinary purposes of the State at all, but should be set aside in order that in future other lands might be developed and made ready for settlement. The money is not borrowed. The State is not paying interest on it; consequently as it is a development scheme the money is put out without interest and is supposed to be returned by the settlers on the project when they are fully established, and used again for the same purpose later on. The original scheme went a little farther than was first intended. It was extended, quite naturally I suppose, to include privately owned lands. The reason for that is fairly obvious. There were large blocks of privately owned lands adjacent to the public lands being brought under development, and it was natural that representations should be made by owners of those lands to the Government to extend the system to include their lands which were adjacent and which should logically come under the one scheme. That was the first thing which began to get the Reclamation Service into difficulties, and from that time on it is freely admitted the whole scheme has been kicked about as a political football until all the virtue has been kicked out of it, and now it is not

really a development scheme any more. But in the first instance it was a scheme on a par with the Oliver scheme in this respect: that the idea was the development of public lands for settlement; and it is unlike the Oliver scheme in that the moneys were secured from the sale of other public lands, whereas the moneys for the Oliver scheme were borrowed. Apart from the Federal reclamation scheme there are the State reclamation schemes, and I will refer to those in the State of Washington, which are a good example of the lot. The State of Washington set up a reclamation fund secured by a levy of one mill on the lands generally throughout the State. The object of that fund was primarily the development of further lands for settlement, in this case privately owned lands, and Grand Forks and the Robson schemes are on a par with their original intention. The reclamation fund was further used to purchase the bonds temporarily of existing developed districts, the idea being there that the funds should be a revolving fund again. An irrigation district that found it difficult to float its bonds in the ordinary market could come to the State, sell its bonds, 6-per-cent. bonds at 90, and the idea was that the State should sell those bonds to the general public. The State in this case was merely acting as a broker. The fund in this respect for quite a time had a bad case of indigestion and they got more bonds than they could dispose of, and the State at the present time is the holder of a considerable number of irrigation district bonds which it has not got rid of. But its handling of those bonds is exactly the same as any private bondholder. The other schemes, the raw-land schemes have had some measure of relief from the State of Washington in one or two instances. There were one or two cases which were undoubtedly ill-advised. As a matter of fact, I can think of one right now, an irrigation district organized of that sort in Washington which makes the Oliver thing look like a gold-mine; but where the State financed through the purchase of bonds of old organized districts there has been no concession granted at all other than is provided under the Reclamation Act, and that applies to all districts. The States are permitted under the State Reclamation Act to issue bonds on which they pay interest only for the first number of years, a varying number of years, generally ten, and during the remaining years of the life of the bonds they repay the entire principal. That sounds like a bit of a concession to the old-established districts, but it has not been used, as one would anticipate, to get a low rate for the districts in the early years of reconstruction, because what the districts have generally done has been to borrow below their entire requirements for replacements and levy a considerable betterment charge, as they call it, during the years in which they are paying interest only. As a matter of fact, the better-established districts or the better-run districts have been setting their total rates to equal about what they will be when they have to begin repayment of their bonds. If they anticipate the repayment on the bonds will run to about $3 or $4 an acre they set in the intervening ten years before they begin the repayment a betterment charge of about that amount, so that in the interval they are doing quite a bit of capital work out of revenue.

Captain Bull: Do they just pay the interest during the first few years? A.—Yes.

Q.—And out of the balance of the charges levied they pay the repayment? A.—Yes.

Q.—And no interest at all? A.—Yes, interest throughout. The fixed time set for the bonds were five and twenty or ten and twenty and during the first ten years they pay interest only.

Mr. DeWolfe: What is the interest? A.—6 per cent. is the rate provided, but where the State purchases those bonds they only purchase them at 90, so the rate is equivalent to 7 per cent., and where the bonds are taken up by private parties outside they are not allowed to sell below 90, but in effect they are getting considerably lower than that or paying a considerably higher rate, because they have this scheme of getting around this price of 90. While an irrigation district cannot sell its bonds below 90, and whereas in a number of cases the State refuses to approve these bonds for purchase from the reclamation fund, the contractor on the works accepts payment in debentures, but he sets his price to include the additional discount over 90, so while the debentures nominally go to the contractor at 90 cents on the dollar they may only get 75 cents' worth of work out of them, so that it really works out at about 8, 9, or 10 per cent.

Mr. Reed: Does the State guarantee the interest? A.—No, the State does not. They only act as brokers. They buy the bonds at 90 and endeavour to put them out again.

Mr. Crease: When they sell them, do they not sell them subject to the State's guarantee? A.—I don't think so.

The Commissioner: No.

Major MacDonald: There is a State approval, Mr. Crease. No bonds are bought from the reclamation fund until the State makes a very full investigation of the works which are proposed to be constructed, so that the issue really has the approval of the State, but there is no guarantee.

Mr. Crease: That is where the State's action comes in? A.—That is where the State's action comes in. They merely act as a bond-house in the matter, just as a bond-house would send out its own engineer to investigate the works, and at times it takes a very active hand in the construction of works in those districts which have been financed by the State.

The Commissioner: They underwrite the bonds, do they not? A.—They underwrite the bonds; that is what it amounts to. That is their method of handling the type of district we have at Vernon, Black Mountain, Glenmore, South-east Kelowna, and so on. They have done nothing more than that in any case of an established district and they have gotten into difficulties where they have started new districts—that is, the development of raw lands—and there are one or two districts over there, as I say, which make the Oliver District look like a gold-mine.

Mr. Crease: Does the State take any part in the construction-work, in clearing the land, and so on? A.—In some cases, in newly formed districts they took over construction, did the construction, but charged it up against the lands, against the district. In the other districts where the bonds are purchased by the State every piece of work done within the district has to be approved by the State engineer. I am reasonably familiar with that because I know some of the contracting concerns which have operated under these irrigation districts. To go on a little farther in comparison with those down there, Mr. Wollaston was suggesting yesterday the Government might operate the ditches and main canals and allow small local organizations to take water from those main reservoirs and canals. That is practically what is done in the Wenatchee District and in a number of other districts there, except the Government does not operate the reservoirs and main canals; the district operates the reservoirs and main canals. You could get exactly the same effect in any of your districts here by having the district confine its operations to the reservoirs and main canals and have the users individually or in small aggregations go to the ditch and from there construct their own irrigation-works. The Wenatchee Irrigation District, which is right on a par with many of ours on this side of the line, merely operates the main canal; the user must take his water from the main canal—in some cases they combine in little local organizations. There is provision in the reclamation scheme for small districts.

Mr. Wollaston: Like our old "Water Communities Act"? A.—Yes, like the "Water Communities Act." They make their own terms with the district and the districts are collecting it and making the charge against the land, but the Government does not take any part in that. It is an organization between the people themselves. It might be of interest to note what some of the lands in some of those cases are paying. In Wenatchee, when I was down there a few years ago, the rate for water in the main canal was $10.50. To-day the total rate is $8 per acre. That does not include any repayment of their bonds as yet. They have their works in such shape they figure they can afford to drop the rate for the time being, but that old $10.50 rate was really based on what they will have to pay when they begin to pay on their bonds. Now, they have their works in such shape that for a year or so they can drop that rate. That is, for water in the main canal, and in some cases the water has to be conveyed from 2 to 3 miles from the canal to the land.

Mr. Reed: What point does that cover? A.—It covers the Wenatchee District particularly, and they get 3 and 3½ acre-feet and there is no limit in the water available except in the size of the canal. Under the same system there is quite a lot of pumping. They are pumping as high in one extreme case as 300 feet. Quite a lot of pumping is done to an elevation of 200 feet. That pumping charge comes directly on the user himself, and they pay $31.50 per horse-power for the five-months' pumping period, so that their pumping is expensive.

Mr. Crease: For a twelve-months' period.

The Commissioner: Five months.

Mr. Crease: $31.50? A.—$31.50 per horse-power for a five-months' period.

Q.—What would the horse-power be? A.—It requires a little calculation. I can tell you if you want to know.

Q.—It requires working out? A.—Yes.

Mr. DeWolfe: What does it work out per hour, Major? A.—It is hard to tell—it is impossible to say, because it depends how steadily they pump. If a man pumps continuously the

kilowatt rate would be lower than if he only pumps ten hours a day; then the kilowatt rate would be up 2.4 times what it would be if he pumped continuously.

The Commissioner: He is entitled to make as much use as he wishes? A.—The idea of setting a rate like that is to reduce the load factor.

Mr. Wollaston: It is not economical to irrigate with a small head? A.—No.

Q.—You don't want to keep your land 1½ feet deep all the time. You wouldn't want to keep the pump going all the time? A.—It depends on the landholder. If he has a large holding whereby he can rotate within his own boundaries he can, but if he has a small holding he has to pump for a shorter period and it is practically impossible to determine what a man's pumping costs would be on that basis. The State and county taxes run as high as $30 an acre.

Q.—On what, orchards? A.—Yes; naturally around Wenatchee practically everything is orchard land.

Mr. Crease: What is the average? A.—I couldn't tell you the average.

Q.—That is the maximum? A.—That would be the maximum, yes.

The Commissioner: What would be the rate? A.—The water from the canal runs from 4½ to 5 acre-feet per acre.

Q.—No; but what would be the return from an orchard? A.—It averages 550 boxes.

Mr. Kidston: Major MacDonald, in getting that average did you take the number of acres planted in the district? A.—No.

Q.—Or the output? A.—No. We got these figures from the manager of the district, who had them reduced for us. These figures were given to us by Mr. Williams, who has been there for quite a number of years as manager of the district, and I think are quite reliable in that respect.

The Commissioner: Why did you ask that question, Mr. Kidston?

Mr. Kidston: It is rather damaging at sight and I simply want to say I don't believe the average is anything like that.

Major MacDonald: We can only give you what they gave us.

Mr. Kidston: I think, if you took the number of acres planted to trees 7 years old and take the total production over the whole of Washington or the whole of Wenatchee, as the case may be——

The Commissioner: The whole of Wenatchee he is now speaking of, I take it, at this moment.

Major MacDonald: We have the figures for Yakima.

The Commissioner: It takes the full-bearing orchards, does it not, Major?

Major MacDonald: Yes.

Mr. Kidston: I am talking of 7-year-old or 8-year-old, or whatever you like; but if you take the whole amount planted, good, bad, and indifferent, you will not get anything like that average.

The Commissioner: Have you considered this, Mr. Kidston? The Department of Agriculture here give a 253-box average for the whole district of the Okanagan. Is that too high?

Mr. Kidston: I don't know.

The Commissioner: That is quoted in the Agricultural Department's records for the Okanagan Valley. If that is possible with 1½ acre-feet, you can see with unlimited water where they grow heavy cover-crop the figures Major MacDonald suggests would look to be not unreasonable, would they?

Mr. Kidston: I know the average down there is very much higher and in the good orchards particularly they keep up their average. We have never been able to get anywhere near it. I am not disputing it is higher and we can get higher ourselves with more water. It is only a matter of interest, and I say any information I can get does not lead me to believe the average is anything like five to six hundred boxes down there.

The Commissioner: Mr. Kidston, there are certain orchards in the Naramata District I know of that will run over 950 boxes per acre. Is it not possible, having that as a target to shoot at—is it not possible, in your opinion, to much improve the output from the orchards in the Okanagan?

Mr. Kidston: Oh, I think we must, yes. I am not disputing that in the least, only I am rather anxious to get at the figures; and as a matter of fact, in as far as our Provincial

figures are concerned, I don't know how they calculate those, whether it is the total of the pack or what.

The Commissioner: I presume you will agree that if you could produce double what we produce now you would have to sell that on the Prairie for much less than you do now, and you could afford to do so. At certain times, when money is difficult to obtain on the Prairie, apples are looked upon as more or less of a luxury. If those prices were lower because of an increased crop there would be an equal chance of disposing of your crop.

Mr. Kidston: Yes, there is no question if you can increase your production per acre you can reduce your cost.

The Commissioner: And it would improve your market on the Prairie?

Mr. Kidston: I don't know.

The Commissioner: You would be afraid of overproduction, would you?

Mr. Kidston: Yes.

The Commissioner: Would you be afraid of overproduction if you got up to 400 boxes per acre?

Mr. Kidston: Yes, certainly. The Prairies are looked on as the best market, and our home market. There is far more fruit produced in British Columbia, in Canada, than the Prairies will consume in an ordinary year at profitable prices.

Mr. Crease: What do you mean by the home market?

Major MacDonald: The Prairie is what we term as the home market.

Mr. Wollaston: On that line, Major Swan, the Wealthy crop, only 80 per cent. was allowed to be sold in Canada and 20 per cent. had to be exported, which means red ink, so my idea is if all the orchards in the Okanagan were averaging 500 boxes per acre it would mean a lot more red ink.

The Commissioner: We are agreed the market would not absorb them to-day. I am thinking of gradually working up, improving the land in the Okanagan, so as to get a better return; but I think that will take place in comparison with what is taking place elsewhere. It ought to increase something like what is taking place across the line and the market will develop in the meantime.

Mr. Wollaston: The market is not developing as fast as the orchards are improving.

The Commissioner: The orchards have not gone up in their production for some time. There has been no increase in the returns to the Department in seven years.

Mr. Wollaston: There has been the average increase.

The Commissioner: No.

Mr. Wollaston: The people have not had the money or the water to improve their land. If they had had the money to put on more fertilizer and more water they would have had a better return.

Mr. Clarke: Major Swan, supposing we increase our production to around 400 boxes an acre and the Prairie can only consume our present production, then the difference between the present production and the increase to 400 boxes would have to be exported. We can control the prices to-day in the domestic market, but the export market is beyond our control, and therefore we cannot guarantee by increasing the tonnage that we will increase the returns.

The Commissioner: It naturally worries me somewhat to think we are getting such a low return where in many districts on the other side of the line they are getting much better. I am not suggesting it would be a good thing for your industry if you were to jump up next year to 500 boxes an acre, but I think there is some object to be obtained by the growers in the irrigation district to increase their output.

Mr. Clarke: Take the figures set by the Government, 253 boxes, and then take the instance you mentioned at Naramata of 950 boxes—what is his water-supply?

The Commissioner: About the same as yours, about 2 acre-feet, 1¾ to 2 acre-feet. This year they have had ample water.

Mr. Clarke: Take the production in the Glenmore Valley; I do not believe for a moment the production at Glenmore is an average of 253. I think the average in Glenmore is more like 175 boxes per acre. Of course, there are certain orchards which have gone as high as 800.

The Commissioner: I think we have to take it, Mr. Clarke, as 253 as the average, and I would think that Glemnore is quite up to the average from what I have seen of Glenmore in the several years I have been through that district. If that is the Government average I would

think you are well up to the Government average. However, I don't know that that is particularly relevant, but I do think it is up to the fruit-growers to get an improvement in their output. I think it is shockingly low.

Major MacDonald: On the question of average production, I have the figures from Mr. Lytel, the project manager of the Yakima River Basin Projects. He gave the fruit land average as 500 boxes per acre from full-bearing orchards, and Mr. Zeidacker, engineer and manager of the Icicle District, adjoining Cashmere, gave the average production in his district as 500 boxes per acre. The former manager of one of the districts over there, Lake Chelan District, at Manson, on the side of Lake Chelan, gave the average production as 600 boxes per acre in his district.

The Commissioner: They have only about 2 acre-feet of water in the Chelan District? A.—Yes, the water average is 2 to 3 acre-feet per acre. That is a hill district very similar to these of ours here. They have to get their water from up above the main storage-basin and sometimes the water is short—I will give you more particulars of that later, but I am just dealing with production at the moment. The secretary of the Tanasket District gave the production of the full-bearing orchards as 500 boxes per acre. There are a number of other places, and here is something which may be enlightening: Mr. Barnes (I think his title is Director of State Reclamation Service for the State of Washington) says that the capital charge for State reclaimed lands—that is, of this new project, somewhat similar to the Oliver project—will average $150 per acre. He says that many lands will revert to the districts before they are fully developed. His information was not particularly valuable because he mixed up the Federal and State reclamation projects to such an extent we could not really distinguish between them. Mr. Lytel, the project manager of the Yakima project under the Federal Reclamation Service—I will just pick out the points I have not already covered. He says that all charges on their various projects of all kinds of mixed produce, from orchards and from low-lying land, hay, and so on, under the Federal Reclamation Service vary from $1 to $10 per acre; that is, under these projects which were investigated by the Fact Finders' Committee and which had had continuous relief from Congress, the old original Federal reclamation, Federal money. We have none of it here unfortunately. He further went on to talk of the recommendation made by these Fact Finders of charges based on 5 per cent. of the gross profits which had been recommended by Widstoe, Mead, and the other four who were on that committee. It had only been attempted by the Reclamation Service in Washington in the Kittitas project, where the reclamation is not fully completed, and they were satisfied it was not going to work out, and in the Reclamation Service generally they thought it was absolutely impractical to put it into effect, and he told us if we referred the question to—I have forgotten his name for the moment, some economist to the Reclamation Service—he would knock it much harder than Mr. Lytel himself.

Mr. Wollaston: That is based on the whole crop production? A.—Yes.

Q.—Taking a three-year average? A.—Ten-year average. It gave no relief on any crop-failure or anything of that sort at all; and then, too, he agreed it was only feasible where new lands were being brought under development; that it could never be applied to existing developed districts where the lands were privately held.

Q.—At the same time the same committee emphasized the inability of all lands to pay the same rate? A.—The Fact Finders' Committee did, yes.

Q.—That is what I mean? A.—As a matter of fact, the report of that committee and the things it recommended were impracticable, according to the idea across the line imbibed from discussions with different people. They recommended a number of things that would be very nice if they could be done, but a number of recommendations were quite impractical. You may remember, too, their report was rather completely torn to pieces by Garet Garrett, the man who writes on economic questions on the other side of the line.

Q.—At the same time it was recognized as impossible for people on the land to pay for mistakes which had been made in the past? A.—Yes.

Q.—As regards location of works and things of that kind, original mistakes in construction, and they recommended quite a considerable amount of relief on that line? A.—What I would like to bring out right now is the fact that a comparison of those Federal reclamation projects with our projects here gets us nowhere. They were conceived on an entirely different principle and are no more comparable to our irrigation projects in the Interior than the dyking projects in the Fraser Valley are.

Q.—The projects, no, but the results are exactly identical. The people on the land cannot pay the interest charges, whatever it comes from.

The Commissioner: They are in the fortunate position, I think, Mr. Wollaston, of having Federal aid which we have not got.

Mr. Wollaston: But the results are the same in the end. A lot of their projects are in bad locations? A.—The general idea of a lot of those people familiar with those projects and the district is they are not so unable to pay as unwilling to pay, and they have got a lot of unjustified relief through political channels. That is the point this man Garet Garrett brings out so forcibly, and I found that was the general consensus of opinion among irrigation-men on the other side of the line who have made a study of this; for instance, men who are now out of the Federal Reclamation Service and operating at other places, and men who are now in the Federal Reclamation Service. A lot of relief which has been extended has not been justified and the people were well able to pay for it themselves where relief has been granted.

The Commissioner: Major MacDonald, you spoke of the Yakima project and of the charges varying from $1 to $10. I presume the lands were classified within the project? A.—No.

Q.—Were these all separate projects? A.—All separate projects.

Q.—And some of those projects have a $1 rate? A.—Yes. I do not remember a single case of a classification of lands within a project except one.

Q.—How did they get by with the $1 charge? A.—In some of the very large districts, Sunnyside, for instance, where they take water out of the Yakima River and run it around in ditches, and also they have 40-acre parcels, and in most cases this low rate is obtained because in connection with the irrigation project they develop power and sell power. In most of the districts where you find low rates you will find they have power development in conjunction with the irrigation development.

Captain Bull: What was the exception, Major MacDonald? A.—This Kittitas project which I mentioned a little while ago.

Mr. Clarke: You mentioned the rate varied from $1 to $10 per acre in these various projects, and also mentioned some of the projects as not willing to pay or making no effort to pay a rate like that. Are these projects producing on the average as high as 500 boxes? A.—No, these are not orchard districts at all.

The Commissioner: That is, the $1 districts are not? A.—No.

Mr. Clarke: The $10 districts are? A.—No, they are not, nothing to speak of. Take the Sunnyside project, I don't imagine 10 per cent. of the land is in orchard.

Q.—Where do you get the capital charge of $150? Is that money owing? A.—The cost of the construction of the system.

Mr. Kidston: Major MacDonald, in the Yakima District some years ago there were a number of orchards got free water for giving a free right-of-way for the ditch. Is that continued now? A.—I couldn't tell you.

Q.—I met one old man very pleased with himself because he had given a free right-of-way and was getting free water? A.—There are so many complications on the other side of the line it is rather difficult for us to understand. Their water rights do not operate as ours do. They transfer and sell water rights and frequently, in many cases, the water rights were old riparian rights which went with the land. A man had a water right which allowed him to develop and take power from that and in operating a large acreage he could develop his own power and sell water, too, to these adjoining lands. There are all sorts of complications of that sort. I did hear of a case similar to what you spoke of where either a right-of-way or use of an old ditch or use of water rights have resulted in some of the users getting their water practically for nothing.

Mr. Wollaston: And also, Major MacDonald, in Idaho? A.—Yes.

Q.—But that is more in farming? A.—Yes.

Q.—Do you know what they pay? A.—No, I do not. I have never gone to Idaho.

Q.—They are more like our farming sections. This Sunnyside project which you say pays $1 for alfalfa and vetch, and so on, do you know what their taxes are there? A.—Not on the Sunnyside project particularly.

Q.—I mean these non-orchard projects you mentioned? A.—No, I can't quote that.

Q.—You mentioned the county tax, too. I was wondering what those taxes were on farming lands in addition to the water rate? A.—I wouldn't state for one moment they would pay $10 on alfalfa land. As a matter of fact, in those large districts where they have mixed farming,

particularly those under the reclamation projects, the rates would be below that. The Sunnyside project for several years had run about around $2 and $3.

The Commissioner: Is that the county or State tax? A.—No.

Q.—Mr. Wollaston is asking about the county and State taxes? A.—I don't know anything about that.

Mr. Wollaston: On farm land it would be $2.50 to $3 for water? A.—Yes.

Q.—And they have a considerable supply of water, too? A.—Yes.

The Commissioner: You say that from the information obtained in Washington the county and State taxes are notoriously high? A.—Yes, in general. They do not give any weight to the irrigation rates at all.

Mr. Crease: Is Mr. Garet Garrett a financial critic of very high standing? A.—He writes very frequently in the *Saturday Evening Post* and is a very cold-blooded individual. He calls a spade a spade.

Q.—Did you analyse his criticism of these figures? A.—I think I pretty generally approved of his criticism of this Fact Finders' Report. I should think it is just about right, very ably argued.

Q.—He has not as good a standing as Elwood Mead, who is recognized as an authority throughout the world? A.—Elwood Mead is in the same position as some of those around here. He is a departmental employee. Well, that appeared to be Garet Garrett's opinion of the Fact Finders' Report, that the Fact Finders generally were catering to the politicians, who wanted to be good fellows by giving away the country's money, and that would seem to be the view over there, certainly.

Mr. Kidston: Was there any suggestion of any good, any suggestions of merit? A.—I think you might get a lot of genuine information by a careful perusal of the Fact Finders' Report.

Mr. Crease: The departmental report might be a more impartial one, too? A.—It all depends on the man himself and the administration he is working for. If a man is working for an administration which is going to fire him for expressing an opinion contrary to the ideas of the politicians——

Q.—Mead would not be included by that, would he? A.—No, he is president of a State university. I don't know how many of you have read that report and read Garet Garrett's criticism of it, but if you have not you will find the two extremely interesting. Now, here is a project for mixed farming in the Yakima District, the Tieton project, one which I know very well and which is directly under Mr. Lytel. Apparently at the present time they are paying $9 per acre—$9.15 per acre without any repayment on debentures or municipal taxes.

Mr. Wollaston: That is just interest and operations? A.—Yes. The municipal taxes run as high as $28 per acre.

The Commissioner: Do they pay interest on the State reclamation loan? I thought they repaid the principal only? A.—On the State reclamation?

Q.—I mean Federal? A.—No, they don't pay interest; but this Tieton thing is under the old original Federal Reclamation Act before they ceased these discounts and gave so much relief in the matter. I can't say just definitely how those rates are made up. They are in the repayment stage; that explains that—repayment $6 per acre plus operation charges of about $3 per acre and 15 cents to some irrigation association. He says—this is rather interesting, too: "On this project cover-crop growing has raised a demand for irrigation-water from 1½ acre-feet to a minimum recognized requirement of 3 acre-feet per acre, and this is the reason why the system appears to be faultily built in some cases," Their system is built——

Mr. Wollaston: It is an orchard project? A.—The Tieton is about 50 per cent. orchard, I should think. Another thing they have down there under some of these projects now is to discourage land speculation by requiring either the total amount over an assessed value of the raw land to be paid back to the fund or else 50 per cent. in some cases of the excess over a certain basic value. They classify the lands generally and the private-owned lands throughout the district and put a price on that at which rate any man is required to sell his holdings in excess of a certain basic acreage, 20 or 40, as the case may be. If he does sell in excess of that rate he has to pay into the fund either the total sum in excess or in some cases 50 per cent. of the sum in excess of that rate. That was to get away to some extent from the agitation for these projects over private lands, in order that the holder might reap a big benefit from the improvements put on from Federal funds.

The Commissioner: The question I wanted to ask you was, in that project you are speaking of does the Reclamation Service make the distribution or is that taken from the main ditch? A.—In that case they distribute to 40-acre parcels.

Mr. Clarke: Major MacDonald, as well as the municipal taxes and the rates for water did you get the production in that district? A.—500 boxes. I think we have pretty well covered the Wenatchee District. Here is another little district which is on a par with our districts, the Icicle District in the neighbourhood of Cashmere, really lying between Cashmere and Wenatchee. It is quite a small one and was put on by private parties in the first place, who controlled the water rights and sold water to the owners of adjoining land. The system was built by an assessment or a levy in the first place on the various land-owners, and has been one which gave a lot of trouble through slides and things of this sort and had to go into expensive improvements recently, canal-lining and those things. They issued $340,000 worth of bonds which were sold to the State at 90. Those bonds bore 6 per cent. To show you the effect of that State financing, the manager was unable to tell us whether the bonds were still held by the State or sold out to private parties. He said it didn't make a particle of difference to them whether the bonds were held by private individuals or by the State. In that case the repayment period began at the eleventh year and runs to the twenty-fifth year. The present water rate is $12.50 per acre, made up of $6 interest, $3.50 for betterments, and $3 for operation and maintenance. You see, there they did not float a bond issue for their total requirements. They worked out the immediate requirements, but left the other things to be done from revenue in the first ten years before the replacement period began. There are about 3,400 acres, so they borrowed about $100 per acre, and during the repayment period they will pay from $14,000 to $31,000 per year, so on the basis of 3,400 acres their repayments in the last years will run to about $8.50; the interest, of course, will have been reduced because these bonds are a serial issue. That interest rate will at that time have practically disappeared, so their total interest and repayment rate at the end will be about $8.50.

The Commissioner: What other charges have they besides that repayment? A.—Their present rate is made up of: Operations and maintenance, $3; betterments, $3.50; interest, $6. Their latter rate at the end of the twenty-five-year period will probably be: Operation and maintenance, $3; repayment, $8.50; the interest will have disappeared and the betterments will probably not be assessed at that time.

Captain Bull: What would be the repayments in the twelfth year? A.—The repayments in the twelfth year about $15,000 over 3,400 acres.

The Commissioner: About $3.75 an acre? A.—Yes; and the interest rate will practically be the same, $6.

Q.—But they will have a maintenance charge on top of that, will they not? A.—Yes, operation and maintenance of $3; so you will see that they are keeping their rates fairly consistent throughout the entire period from the present day; later on the repayments will take the place of interest and betterments.

Captain Bull: That is a very low capital charge for putting in the system? A.—This did not put in the system. This was just for improvements to the system. They levied on all the property-owners at the time of the original construction, but it was built improperly or in an inferior way, and this bond issue—before they made this bond issue the money required for necessary repairs had to be raised by special levies, and their special levies ran to $25 one year, $18 another year, $14 another. They had a total levy of $57 per acre for this proposition in three consecutive years.

Q.—At the same time that seems an unusually low rate, $9 an acre?

The Commissioner: $13, is it not?

Captain Bull: But the taxes for repayments will run about $9 per year during the twenty-five years at $100 capitalization. It is extremely low. Our repayments are very much above that on the same capitalization of $100, considerably higher. A.—No; your repayments on $100 to-day are about the same, $8.70 interest and repayments.

The Commissioner: Which includes replacements.

Captain Bull: This does not include replacements.

The Commissioner: Yes; they have a maintenance charge instead of replacement which apparently allows for the refunding over a greater period of time. They are running to twenty-five years, presumably for their temporary works—the whole thing has been lumped into one.

Major MacDonald: Our repayments here on a twenty-five-year basis would be below that; interest and repayments would be 7.8 per cent.; that is, $7.80 on $100.

Captain Bull: We have $11 here on $115 per acre.

The Commissioner: Is not the moratorium in that?

Captain Bull: The total is $115 per acre.

Major MacDonald: And is the $11 your total rate?

Captain Bull: Yes? A.—That does not cover only your interest and repayments.

Q.—No? A.—It is hard to say what else you have in that.

Q.—That includes everything. That includes the moratorium, too? A.—You have included something else in your tax rate.

Q.—Is it not true this is on a ten-year basis? A.—No, it is a straight twenty-five-year proposition.

Q.—How can they get away with that on these figures? A.—Because they are right now levying a betterment charge. Here is what they do in this case: they will require—suppose they require later on a replacement, they will have by that time written off or paid off a considerable amount of the bonds they are now paying on and they can then levy a new bond issue. What they do there is lump the whole proposition instead of putting their loans on the basis we do here of ten, fifteen, twenty, and thirty years at the present time. They just put the whole thing on a twenty-five-year basis. As they approach the end of that twenty-five-year term with a serial debenture issue a lot of their debentures will be paid off and they can afford to put out a new issue.

The Commissioner: Would you not think that was rather dangerous, Major MacDonald, and would leave themselves open to a possible capital levy? A.—It will, undoubtedly. It will depend entirely on the business ability and aggressiveness of their officials. On this basis here they can very well let themselves in for serious difficulties later by not keeping up their system. This system over there is just another way of arriving at the same thing, except here your loans are definitely put out for the life of your structure and you are more or less compelled to pay for those structures within their lives. Some of these people in some of the districts down there are playing for a lower future rate; others are paying no attention to that; they don't care what the future rate is going to be as long as they can keep it down at the present time.

Mr. Clarke: We are liable to get a better production and will be able to pay the Government? A.—If you do not require to replace; if not, you will be just where you are. That is the idea of making these loans the way they are made. If the lifetime of the structures have been put conservatively your rates will reduce, otherwise they will go up.

The Commissioner: Of course, on the permanent works there will be a saving? A.—At the end of the thirty-year period there will be a substantial reduction.

Mr. Clarke: The fact that they are able to pay $12 now and a high tax rate to the State which is so much higher than ours their production in that case must be around 500 boxes per acre, too? A.—Yes.

Q.—That is the only way they are doing it, by getting the production? A.—Certainly. They all say this water rate is nothing; the production and prices is the whole factor, and that is well borne out by figures we were given and it might be well to put them on record here.

Q.—If we could get our production up to 400 boxes per acre with 2 acre-feet per acre, perhaps the expenditure of a little more to get that 2 acre-feet would be well justified? A.—We can go over the figures and see what the effect is, by taking 60 cents—$15 water rate is equivalent to twenty-five boxes and all you have to do is increase your production twenty-five boxes on a 60-cent rate to wipe out the $15 charge. Now, take it on a 300-box production, which is higher than you are getting, a $15 water rate is 5 cents a box. All you have to do is get 5 cents more a box; if you could get 5 cents more a box you could forget your water rate.

Q.—Take, for instance, at the hearing at Glenmore the case was brought up of Mr. Thompson's orchard. Do you remember the figures he gave; they were around 500 boxes?

The Commissioner: I have it here, I think.

Mr. Clarke: He proved by figures his investment was $20,000, and he paid 8 per cent. on that investment plus $2,000 salary, and that he produced on an average 500 boxes and his net profit was a cent a box.

Major MacDonald: Generally, these people down there say: "Why all the fuss about the water rates, the price and production is the whole factor."

Mr. Wollaston: We have been growing apples much longer in the Okanagan than they have at Wenatchee; why the difference in production? Is it because on this side of the line we are fools and they are geniuses, or is it climatic conditions over which we have no control? I can hardly concede that we on this side are not as good orchardists as they are in Wenatchee? A.—I think it is a combination of several things. To begin with, they have probably geographical advantages, climatic advantages.

Mr. Crease: I think they have, all right. A.—In a number of these cases they have a very much better water-supply and it is possible, as compared with some of our districts, they have an advantage in the type of people who went in, who were originally farmers and accustomed to making a living entirely from their agricultural operations. I think one of the reasons for the average low production in the Okanagan is we have a good many people who have not had to build their orchards up to a proper production to get their living out of them. That affects the average. We have many men on this side who are as good growers and as hard workers as on the other side of the line, but I don't think we have as high a percentage of men who started out in the initial instance as farmers.

Mr. Wollaston: Some of the most successful Prairie grain-growers started life as mechanics and butchers. A.—It doesn't matter how a man starts, but I think, taking it all in all, the type of people who came into the area over there were probably better suited.

Q.—Were not a lot of those places settled by land-sales, through advertisements just like ours? A.—I couldn't say.

Mr. Clarke: I think during the years the orchards were coming in the average price per box was greater on that side and they could reinvest the money in their orchards to build them up and keep them up, whereas in the Okanagan the poor returns from fruit has not permitted it.

The Commissioner: Is there any reason to suppose they got more for their fruit at that time than we have been getting?

Major MacDonald: A lot of those orchards are just the same age as ours.

Captain Bull: That is so.

The Commissioner: What is the principal factor of their success, or is there any particular factor? A.—The outstanding factor in my opinion is water-supply.

Q.—Is it not a fact you can pretty well gauge the return from those lands down there by the water they are getting? A.—Not entirely; but, generally speaking, you will find a bigger production where the water-supply is ample. It is probably the most prominent feature. We can go on to another little district—namely, Lake Chelan, at Manson, which compares probably more closely to ours than any other. They have to get their water from hill streams and get it at high cost. They get more early water than they do late water and have to carry it a long way with expensive works as well. That project has 4,000 acres, which compares with ours again. It was originally a private project; now it is under the control of the State to the extent it is an irrigation district under the Reclamation Act and the State took up some of their bonds. The original company sold the raw land at $200 per acre and the land set out in fruit at $300. The orchards were planted in 1912 and 1913 and the water is delivered in detail as it is with us. It is about the most parallel case we can find anywhere. I remember going into this one a number of years ago because of its close relationship to ours. They have issued $400,000 worth of bonds and they have authority to issue a second $400,000. The $400,000 they have already issued were 6-per-cent. bonds and were sold at 90, practically 7-per-cent. money. The repayment is made up the same as the Icicle, which was 10 and 25, I think. They have no payment for the first ten years of the repayment; all the repayment is during the latter fifteen years during the life of the bonds. The 1927 charges were $18 per acre, made up of: Interest, $8; operation and maintenance, $5; and improvements, $5. You see, even in a district with as high a rate as that they are endeavouring to keep the rates uniform over the years by levying a high betterment charge before the time of repayment of the bonds begin. The water available averages 2 to 3 acre-feet per acre. The average production is 600 boxes per acre. In 1926 they were so short of water they had to resort to pumping from the lake at a low level, paying $11 per horse-power for four months' service. In order to get that water they had to pump from the lake to the higher storage-basin and distribute it from the higher level by gravity.

Captain Bull: Is that entirely orchard land, or is it mixed farming? A.—I should think it would be very much, from my recollection of it, like our Kelowna District, mainly in orchard, but a certain amount of other land.

Q.—How did you find out about the mixed-farming land or agricultural land, as to how they are managing to pay their rates? A.—I can tell you something about that in the Oroville-Tanasket District just what they told us there. We are getting nearer home now. Now, the Oroville-Tanasket District is a very long-drawn-out narrow district running along the Okanagan River from the International Boundary to Tanasket, which is over 15 miles south of Oroville, about 20 miles long. It is similar in its topographical and geographical condition to the Oliver project. It was begun as a private project in 1911, but was very quickly organized into a district. The water-supply is practically unlimited from the Similkameen River. They have a system whereby they take the water from the Similkameen and impound it back into their canal. The outstanding indebtedness is $865,000. These are bonds at 90 bearing 6 per cent. interest, which is really costing them about 7 per cent. again. They have no repayment during the first ten years and those bonds are all to be repaid within the following twenty years, what they call the ten-twenty bonds. The water delivered in 1927 averaged 3½ acre-feet per acre. The assessment in 1927 was $13.50, made up as follows: Operation and maintenance, $2.50; betterments, $3, which seems low; interest, $7.50. There again, you see, before the repayment period begins they are levying for a betterment charge. The crop returns—now, this was a little misleading until we analysed the thing—average 500 boxes per acre on the orchard lands, but then we found out they had in their district 10,000 acres, I think they had, and there was only some 350 or 400 acres in orchard.

The Commissioner: In full-bearing orchard? A.—In full-bearing orchard, and it is on that acreage they get this 500-box rate, so he said: "The water rate is nothing to those fellows, they don't think of it at all." But I said that is only the three or four hundred acres, what about the other fellows, and he said: "They have to scratch for it."

Mr. French: I guess they have.

Mr. DeWolfe: 350 to 400 acres in orchard? A.—Yes. That is the way he put it. "They have to scratch for it." They had a very great deal of young orchard. They are planting heavily and getting into the game as rapidly as they can, but if you drive down through there you will see the character of the land.

Mr. Wollaston: Where is it? A.—Right at the International Boundary starting at Oroville.

The Commissioner: It used to be known as the West Okanogan? A.—It used to be known as the West Okanogan and is now known as the Oroville-Tanasket project, and is one which corresponds to ours.

Mr. Clarke: How many acres in the district altogether? A.—About 10,000.

Captain Bull: Is that under young trees mostly? A.—There is a lot of mixed farming, but there are a lot of young orchards. What they are doing down there is this: A man is carrying on a mixed-farming proposition and bringing along young trees on part of his place. Then next year he will plant some more trees and will carry on with perhaps half his holding as mixed farming until his fruit-trees come into bearing. It is the intention as the fruit-trees begin to bear to put more into fruit. There is a lot of that land which never will carry fruit.

Mr. Crease: What do they do mostly? A.—Quite a little bit of truck-farming, as far as I can see driving along the road; but I never knew the extent of the project until I went through it this time. They grow quite a bit of small fruit, quite a bit of hay, quite a bit of dairying. It is generally a mixed-farming proposition.

Q.—How do they charge on the average for the land which grows small fruit? A.—Exactly the same as the rest as far as water is concerned. They said at first they had a classification, but when I followed it up it really amounted to our grading of lands for assessment; but they do not carry that down to as fine a point as we do. If a man has some bottom land which is too wet, they just say: "We will give him a 75-per-cent. assessment and charge him 75 per cent. of the rate on his total acreage." It is not classified to the possibility of production, but is really a lowering of the rate because a portion of the land is not as good as the other.

Q.—They recognized the principal it is lower productive land? A.—No, it is not a recognition of that at all. It is a recognition that certain of the man's lands cannot be irrigated and produce under irrigation; but instead of saying to a man: "You have 20 acres here of which, say, 12 is going to take water and produce for you; the remainder is bottom land." They are not doing as we do, grading it as 12 acres irrigable and 8 acres non-irrigable, but they say we will call it 75 per cent. of the assessment. That 75 per cent. may cover a large amount of the district.

The Commissioner: It does not look like a logical proposition? A.—No, it is a makeshift proposition. All their land is security over there for the advances, and I imagine that is the reason for doing it.

Mr. Wollaston: Yet with our "B" land it has no liability for taxes, and yet can be sold for taxes.

Mr. Crease: Does it not look as though those fellows are riding for a fall there? A.—No, I think they are going to come out very nicely. The tone in the district is very good, and if they keep up their betterment charges until their repayment period, I think they will come out very nicely.

Q.—They put the charges on the orchards and not on the non-productive land? A.—That I can't say.

Captain Bull: How do you find the general conditions down there? How are these fellows keeping up their payments?

The Commissioner: I think you have the amount of the reverted lands there? A.—Not in the Oroville-Tenasket.

Q.—518 acres? A.—Yes, that is right.

Q.—On a 10,000-acre project, or thereabouts, is it not? A.—Yes.

Captain Bull: About how long do they give them before the lands go to tax sale? A.—Their tax-sale proceedings are pretty hopeless, speaking generally, in the State of Washington. All these taxes in Washington are paid in to the County Treasurer. The irrigation district makes its assessment roll and turns that over to the County Collector and he adds those on to the general county taxes. He does not return the money to the district, but pays the district's bills with the money. He is the general treasurer for all the county's activities of this sort and the tax sale in Washington has a three-year period for redemption, and the tax-sale papers are rather hopeless; there are so many little technical flaws that a tax-sale title does not amount to much. They are in the position we were in before the statutory relief which we now operate under was made effective.

Mr. Wollaston: We are just as liable now. It doesn't say the Lieutenant-Governor has to do this, but that the Lieutenant-Governor may? A.—It is not very often they back up very far in these things. Once you get a thing you can reasonably assume it will continue.

Mr. Crease: Are there many small holdings there or about the same as with us? A.—About the same variety of holdings.

Q.—Large and small? A.—Yes.

Mr. Crease: Then the basis they are going on, I understand, is the capacity of the owner of the land to pay from the source from which he derives his income.

The Commissioner: What is that again?

Mr. Crease: They proceed on the basis of the capacity of the owner to pay from whatever source he derives his income.

The Commissioner: Apparently they take their total load and divide it over the total acreage regardless? A.—Yes; but you appreciate, Mr. Crease, is that not what it comes to in practically every case?

The Commissioner: As much as the traffic will bear.

Mr. Crease: No, because land may be so constituted a man may have a small amount of fruit and a good deal from his farming land and his fruit-crop is not sufficient to help him out of his difficulties. A man may be willing to work for the rest of time, but that is not sufficient to fill his purse if he has a piece of land such as I have described, a small-fruit area, and a large pasture, for instance. He could not stay on the land. There are many men who came into the district and were here before these irrigation districts were formed. They have not the opportunity of picking up the class of land which would pay them best to maintain themselves under the conditions of the new irrigation schemes. A newcomer going into the district looks around and sees a piece of land which will produce sufficient to give him a competence without trouble. Many of the older settlers have found the irrigation system has brought up a condition for which their lands were not suited. That is where the hardship comes in many cases, including the Coldstream Ranch? A.—That applies to the present irrigation organization.

Q.—Yes? A.—But it does not apply to very many settlers to-day. There are very few settlers to-day who were there before irrigation was started.

Q.—In which district? A.—In any district. There are very few people in any of these irrigation belts to-day who were there before irrigation was started.

Q.—Oh, not irrigation. I am referring only to the irrigation districts? A.—Is not the district at the present time a continuation of the original scheme, and, in the opinion of the users themselves generally, the best possible condition and an improvement over the original scheme.

Q.—I should say that the irrigation districts were a brave attempt to find a way out? A.—Of the conditions into which the users put themselves.

Q.—In which the people found themselves placed? A.—Or into which they put themselves.

Q.—When they went into that district certainly they ran into the lion's mouth.

The Commissioner: Inasmuch as they did it voluntarily you mean, Major MacDonald? A.—Yes.

Mr. Crease: We are all trying to work a way out.

The Commissioner: What Mr. Crease says is, you might say they have made their own bed, let them lie in it. He does not quite like it being so termed.

Mr. Kidston: I might interject and say they find themselves in a position in which they were placed by the company who sold the land and agreed to supply water and by the Government which passed the regulations.

The Commissioner: In any event we find them in the position in which they do find themselves to-day, and that is what we are working on.

Mr. Kidston: But you suggest it was the position in which we placed ourselves, and we did not.

Mr. Wollaston: At Sunnyside do they sell the water wholesale and let the people do their own distributing? I think it was Sunnyside where you said they delivered at the main canal? A.—No; in the great majority of these projects they deliver to nothing less than 40-acre tracts. The one I spoke of particularly where they delivered water only in the main canal was in Wenatchee.

Mr. Wollaston: Wenatchee? A.—Yes.

Q.—All right. Do they charge as much to the man near the canal as they do to the man at the extreme end? A.—They charge as much to the man who pumps his water 300 feet from the ditch.

Q.—They do not regard the length of haul? A.—No.

Q.—In some European countries they realize that if you have to bring it a longer distance you ought to get consideration.

Mr. Everard: The farther away you are the more the charge is. The longer the haul the more expensive it becomes and they should pay for it. That is not my idea, but it is the European idea long before we ever heard of irrigation.

Mr. Wollaston: I have always thought Lavington should pay the same as the others, the rest of the district which is 5 miles away.

The Commissioner: Supposing it was put on that basis, what would happen?

Mr. Wollaston: The other fellows would go out.

The Commissioner: Do you think it possible for the district to vote on such an arrangement and put it into effect?

Mr. Kidston: This particular scheme was in effect by the company. That was the system in 1917 in the Coldstream. It was divided into three areas and they increased the charges as you got farther away.

The Commissioner: I know. I have on record as to how the charges are based, and I think you may consider there is no likelihood of the other scheme ever being put into effect.

Mr. Wollaston: Not now, but it should have been.

The Commissioner: Oh, possibly. You might have done a lot of things.

Mr. French: At the present time our best supply is at the tail end.

Mr. Wollaston: That was only because of that other thing that was put in, that extra diversion.

Mr. Crease: Have you received any evidence of any scheme where low-productive land could be excluded from the irrigation district except that one of reversion?

The Commissioner: No, I don't know of any more effective one, Mr. Crease. It seems to me, on the basis of the survival of the fittest, that certainly will clear out of the way those lands which are unable to carry the charges.

Major MacDonald: I would like to ask Mr. Crease if he has any scheme to suggest which would take care of that.

Mr. Crease: Yes; the simple one of a survey of the property and a readjustment of the lines of the irrigation districts? A.—The survey to be made by whom?

Q.—It would have to be made by either the Department or a commissioner to ascertain what part of that land could be beneficially excluded from the district without detriment to the whole? A.—The owner would have practically no opinion.

Q.—He would have a voice, no doubt? A.—The difficulty about that, as far as I can see, is this: the personal factor is a big item which you can never get away from. The commission might draw the line at a certain piece of land which I could not make a living on with all the assistance of free water and all the assistance which would be given; but, on the other hand, a good practical farmer might go on that same piece of land and make it go to such an extent he could bear all the necessary charges.

The Commissioner: Let me understand for a moment. If you make that exclusion, what do you propose to do with the existing charges? Are they going to be saddled on the balance of the land in the district?

Mr. Crease: No, those would have to be borne by the Province? A.—What would happen to the land, Mr. Crease?

Q.—What would happen? A.—Yes; it would just become wild land or be used for dry-farming just the same as would happen under the reversion scheme.

Q.—Yes; it would be another way of dealing with the same subject.

The Commissioner: Then why exclude those lands from the district? A.—What value would it be to the owner when it was excluded?

Mr. Crease: It would save the owner the burden of bearing the charges on it and he could utilize that land for whatever it was usable for? A.—What use can you conceive it would have?

Q.—It would depend on the nature of the land.

Mr. Wollaston: I could answer that question. We had a piece of so-called "A" land; we had no water on it; no one would try to raise a crop or try to raise hay. We have it seeded down to rye-grass and it will develop into good pasture. It is not irrigable. In one sense it is under the ditch, but it is not irrigable to put water on? A.—Not economically irrigable.

Q.—Not economically irrigable and it would not sell? A.—You say it would not sell?

Q.—No? A.—Then the owner has very little equity left in it.

Q.—But it is of some use to the adjacent owner for pasture? A.—It would come back to range land if it reverted to the Crown.

Q.—But if it reverts it cannot come back to hay land, because you would get nothing but weeds, whereas if you sow Western rye-grass you would get it back to pasture, but you have to spend some money. Don't think that it is going back into range land, because when you stop irrigating it is going back to thistles and weeds? A.—What do you think is going to happen?

Q.—If the owner could get it classified as "D" it reduces the "A" area of the whole district and therefore the taxes go up, but if it reverts to the Crown it will produce nothing but weeds and it is no commercial benefit to anybody. The taxes will be borne by the Crown and it could not be sold to anybody because no one could bring it back into range land. I think it certainly would be beneficial in the end to keep it in the original owner's hands? A.—I want to bring that out.

Q.—It reverts to the Crown and the Crown does not pay municipal taxes, so that those are an additional burden on the rest of the lands in the district. It is true if it reverts to the Crown the irrigation tax is not raised for the whole district, but the municipal taxes are raised; therefore I claim it is better to leave it in the original owner's hands. The original owner would not let it go back into weeds. We have so much land when we went into the district that we expected to irrigate and pay taxes on, but there is no possibility of getting water on it and we have paid the taxes in full ever since the day it was incorporated.

Mr. French: A man might have 200 acres and only get water and irrigate 75 and yet have to pay taxes on the whole? A.—That is because of a shortage of water?

Q.—Yes. A.—But to follow Mr. Wollaston's line of thought, is it of necessity any benefit to the country to let that land remain in the original owner's hands? Is it necessarily of more benefit to the country at large that that land remain in the original owner's hands? Under the reversion scheme it reverts to the Crown, and the Crown can sell it to be seeded down in rye-

grass and to be used as pasture. Is it more likely the original owner is going to do that than some other owner? It may be that you can pick it up at a price better than the price of range land from the Crown.

Mr. Wollaston: Have you finished? A.—I think so.

Q.—The land that I have specific reference to is of no use to anybody else except the adjacent owner, because there is no water to start to grow anything on it? A.—This is a parcel contained in a larger holding.

Q.—It is a subdivision that I am referring to and we could use it for pasture, but if it did go to tax sale, after you have had two or three years of Government ownership, it has been growing nothing but brush and thistles and it would be no use to any man for pasture because he could not get water to start it, but we can use it because we are adjacent and it would be to our advantage to put a little water on it and in the meantime we are paying the municipal taxes, whereas once it goes to the Crown those additional taxes have to be borne by the rest of the municipality.

Mr. DeWolfe: Probably you get tail-water there.

Mr. Wollaston: No, we do not.

The Commissioner: Are there other holders in your district which are similarly situated?

Major MacDonald: Or is it a very special case?

Mr. Wollaston: No; you see, in our district we have nearly as much land as some of these districts have altogether. In our holdings we have pretty near as much as Glenmore.

The Commissioner: I am speaking of the Vernon Irrigation District.

Mr. Wollaston: I would say in the Vernon Irrigation District there are other people who have the same kind of land.

Major MacDonald: You are in a very special condition because you have a large holding. Let us go away from that and take a similar kind of land in other parts of the district where the holdings are smaller and the present owner has a parcel like that which cannot pay the irrigation rates. If it is struck off the list and left in his hands he may do what you suggest with it, but is he more likely to do that than his neighbour on the other side who could secure that land after it reverted?

Q.—If he does not want it left in his hands to improve it, all right, he need not keep it, but I think he should be given some consideration if he wants to keep it? A.—He can always get it back after it reverts.

Captain Bull: How can he get it back? A.—By buying it.

Q.—What is the price of that? A.—It depends on the value of the land. Mr. Wollaston says this land would not sell. In his case it would not, perhaps, because it is held in a large holding of the Coldstream Estate; but take land outside of that, take a small parcel in other parts of the district.

The Commissioner: Go to the Rutland District.

Captain Bull: Take McIvor's place? A.—Don't take any particular place, but simply take the general conditions. If we try to fit the rates to fit the individual owners we are going to have a fine job. What does the owner lose when it does revert? You say the land has little or no value, so you do not take anything away from the owner.

Mr. Wollaston: You have the fences around it? A.—The fences around it would give it value to the new owner.

Q.—And then the original owner has to build a fence on the inside, at the edge of his remaining land.

The Commissioner: When you say it has no value do you not assume it has prospective value for the future?

Major MacDonald: As range land.

The Commissioner: Or going beyond that it has a sale value, a future prospective value.

Mr. Wollaston: We are trying to get away from speculation.

The Commissioner: Quite so, but he has purchased that land in the past, and while perhaps it may be unsaleable to-day, it does not follow the owner is ready to let it go.

Major MacDonald: The fact that land may have a value in the future does not add to its value to-day.

The Commissioner: There may be a sentimental value.

Major MacDonald: If the land has a possible future value, some person will buy it up and wait for that.

Captain Bull: But when it is bought up it goes back into the water district? A.—No, not if it reverts.

Q.—If it reverts it goes to the Government and they will not sell it as range land; they will sell it according to its present description? A.—Yes; but the position is it may have no value if it goes through the process of tax sale to go back into the district and pay the irrigation rate, and the Superintendent of Lands might not be able to sell it; but if you can sell it for even $1, if you like, on condition it does not go back into the district——

Q.—Right there, we had a piece of land revert; this fellow could not pay the irrigation tax. It was absolutely dud land. He had a little bit of pasture and he wanted to know when the land reverted if he could purchase it back from the Government. If it could be classed as "D" land, so as to save his place for that portion of the pasture land? A.—I don't think it would be possible without putting it up to the district. You would have every conceivable piece of land reverting.

The Commissioner: You see the result of that.

Mr. Wollaston: When it was sold it would still be within the irrigation district? A.—It would be within the boundaries of the district, but not necessarily assessed for irrigation rates in future.

Q.—Unless there is a change in the Statute? A.—No, no. The trustees have that completely in their hands. They can assess it as non-irrigable.

Q.—It would have to be assessed according to the regulations as irrigable land? A.—If it is economically irrigable.

Q.—Not necessarily? A.—Can you say timber lands or wet lands——

Q.—No, timber lands go in "C"? A.—How about lands that are too wet?

Q.—They come under "D"; but I do not think any assessor is going to take lands which have originally been assessed as "A" and put them in "D"? A.—I think he could if it is definitely shown it could not pay the irrigation rate and was not economically irrigable.

Mr. Clarke: Take, for instance, lands in the Glenmore District; lands which were originally orchard but which have reached the stage where it is not commercially profitable to keep them in orchard. In the case where those lands could be handed over to individuals for pasture, why should you not be allowed to keep them in? If that land goes back to the Province the possibility is the Province can tie these lands up so that they could not be used as pasture by the individuals who own them. We had a case where a parcel of land was put up for tax sale and advertised as orchard. If that is turned back to the Province it would be an advantage to the district to settle the taxes and keep it in the district and clear the orchard off so as to make a better supply of water for the remaining district. You cannot have abandoned orchards in a district, because it would be a big loss to the district. We are finding now that we will have to find a lot of money in order to continue. We cannot let these lands go back to the Province and lie that way. It would pay the district to take these lands and clear them before turning them back to the Province? A.—That is exactly the same as a parcel of land where the former owner takes no interest in it and does not want to clear it.

Captain Bull: Major MacDonald, in the event of the Government acquiring land and then selling it as unirrigable, who is going to assume the taxes on that? A.—Which taxes, the original taxes?

Q.—Yes? A.—The man who buys it naturally will always pay the taxes.

Q.—I mean the irrigation taxes? A.—If sold to the Crown all the old irrigation taxes are wiped out. If the Province sells that as non-irrigable the Province will continue the relief. I think what would happen in the case of this reverted land is this: The Superintendent of Lands or some one in his branch acting with me would consult with the district as to whether that should be brought back or sold for non-irrigable land, and that would depend on the quality of the land. If, in the opinion of the Superintendent of Lands and those representing the district, it should not be again irrigated, then it will be sold by the Superintendent of Lands on the distinct understanding it is unirrigable land. Then the owner can have no claim against the district at all to have it included as irrigable land and it would then be classified as unirrigable. While it is in the hands of private individuals it cannot be called irrigable lands within the district and the Crown will continue bearing the irrigation.

Mr. Wollaston: We have some land in the Scotty Creek Irrigation District which was acquired under mortgage and which is assessed as irrigable land. We have asked to have it cut to "D" and they have refused to do it; therefore that land instead of paying the Provincial taxes and being able to be sold to the adjoining man for pasture will have to revert to the Crown.

Mr. Everard: The reason for that is the ditch runs right through the property. It is able to irrigate it.

Mr. Wollaston: I don't say it cannot be irrigated, but it was wished on us and we don't want it. A lot of it was covered with heavy timber.

Mr. Everard: If they reduce the grading of that land it is going to throw it on somebody else and they will get their taxes raised, and considering that the ditch runs right through it and it is capable of being irrigated it should remain under that classification.

Mr. Wollaston: That is just the point; if it reverts to the Crown they will get that much taken off. That is the basis on which they work.

The Commissioner: Is that not a matter for the Department?

Mr. Wollaston: I know; but I was just answering his last suggestion. He said it would keep things down? A.—I would like to go back to another point. You said you cannot grade land as non-irrigable if it is impracticable to irrigate it.

Q.—I say they do not? A.—What about the grade 2 lands?

Q.—It is "B"? A.—It is "B-2" to-day, is it not?

Q.—Yes, because it is under the letters patent? A.—Your letters patent only cover your first assessment; after the first assessment is made the letters patent do not control the thing at all except there are special clauses, but after the first assessment the grading of the land is entirely in the hands of the trustees.

Q.—The letters patent are wiped out then, are they? A.—No, they are not wiped out; but if you read your letters patent you will find the grades for the first assessment are such and such; after that the classification of lands is entirely in the hands of the district because the assessor takes his instructions from the trustees.

The Commissioner: That answers your question.

Mr. Kidston: I would like to clear up this thing that Major MacDonald touched on, land which water can be put on economically, or words to that effect. We have always looked on that as being the relative cost of putting the water on and not the relative returns of having put the water on. If I understand you correctly, I would understand your definition is you must be able to make a profit out of having the water to call it an economic condition, is that it? A.—Yes, I think so.

Q.—Then we can all say that we cannot put water on the land economically, so under that definition you could take the whole of the land from under the ditch? A.—I wouldn't agree with you.

Mr. Crease: Before we leave this subject I do wish to point out it appears to be desirable to arrive at a constructive method other than the reversion system, because it is in the interest of the original owners to do so. The subject is too large, and referring to this particular case the low productive land which cannot bear the irrigation charge, something should be substituted to relieve that land from the charge which has been imposed upon it. There must be some other method than putting that land up for tax sale. Is there any just reason why the original owner should not be allowed the same relief as any stranger? He is the owner and operator of that piece of land. If it goes up to tax sale and he wishes to save himself, he has either got to buy it in himself or employ somebody else to buy it in in their name in order to evade the operations of the Act. If he does that, then he comes in competition with the public and may have to buy back his own land and pay a premium on it. If it goes to a stranger he may have to pay that stranger to recover his land a still further price which may be valuable to him and to nobody else. If it goes to a stranger and he cannot recover it, he may be put to the burden of changing the course of his trenches, further drainage, constructing roads, and he may have to change his fences or to build new fences. I think you ought to devise some means of avoiding all that? A.—If we have the means.

Q.—Yes, surely you have the means? A.—That is what I want to get at.

Q.—Go to some authority which can declare that piece of land falls within that certain class? A.—Will you supply the authority?

Q.—Your authority might be the Water Board? A.—They are unpopular enough as it is.

Q.—The Water Board is very efficient?

The Commissioner: Gentlemen, it seems to me we have this matter covered pretty fully, and I think that you must leave it or that I must leave it in this position when I dwell on this point; first point out the provision which is made in section 272 of the Act for these lands being taken over by the Government and the carrying charges taken care of, and then state further the result of that transaction so far as the carrying charges are a loss to the Provincial revenue and that the reverted lands are a loss to the municipality, and so on; and, on the other hand, the necessity or the possibility of doing something along the lines which we now suggest to keep the present owner on the land, and I think it would have to be, if the Government looks favourably upon it, between the districts and the Government as to how that would work out. I see many, many angles to it, and I am quite sure we can sit down here for a month and probably not come to a solution which would be workable. For that reason I am sure we cannot get further. We have had evidence from every conceivable angle and I do not see how we can get any further by sitting around the board and discussing it further.

Major MacDonald: Mr. Commissioner, I would like to have any suggestions there are on that score.

The Commissioner: Just listening to the discussion yesterday afternoon and this morning I have come to the conclusion that we have come back to the same point we were at. A.—Mr. Crease has stated the he could suggest something and I would like him either now or when he has had more time to think it over to follow along his lines and submit his evidence.

The Commissioner: I think it would be an admirable suggestion to have the representatives of the districts and the owners who have this thing fully in their mind, if they would communicate with the Department on this subject and suggest ways and means.

Mr. French: Excuse me, Mr. Commissioner. Supposing a man has, say, 300 acres. If he cannot pay his whole taxes the 300 acres will be put up at tax sale?

Major MacDonald: Not necessarily. It is a simple enough matter to divide it.

Mr. French: If there is a portion of his land sold up at tax sale the owner might probably buy it in, but if it was put up for sale and his bid is perhaps a few dollars less than the next bidder, then he loses out. If it could be worked out so as to give the present owner a chance to redeem at the price of the other bid or let it go as he saw fit—would he have a chance to do that?

Major MacDonald: That would be laying the whole proposition open.

The Commissioner: You know that at the ordinary tax sale the ordinary procedure is the owner must take his chances of other bidders.

Mr. French: In the irrigation districts now there is no opportunity of redemption.

Mr. Clarke: I would like to say a word before we adjourn regarding relief. Glenmore feels on the question of relief you should take into consideration that our repayments are based on a different basis to the other districts. We find ourselves in perhaps a little better position because our repayments have been worked out on a different basis than the other districts, and whatever relief is given we feel that that should be considered.

The Commissioner: Mr. Clarke, this is the situation which you placed before me at the inquiry.

Mr. Clarke: Yes, but I thought I would present it to Major MacDonald.

The Commissioner: I would ask Major MacDonald if he is prepared to discuss that here, and, secondly, I would point out that any recommendations to be brought up should be only those which have not been made before me already. This is a matter which you have brought up and you can discuss it with Major MacDonald afterward if you wish.

Mr. Clarke: I intend to, but I thought I would mention it here.

The Commissioner: I have it on record and I would ask Major MacDonald if he is in a position to discuss it.

Major MacDonald: It depends on the views which Mr. Clarke intends to put forward.

Mr. Clarke: Some one mentioned a few days ago about changing the repayment basis after five years of operations. Different districts might be in different positions; one district might be in a more favourable position than another district, and so they might not be given the same relief as the other; but that condition might have been brought about by having undertaken a heavier repayment than the other districts. In the case of Glenmore, where the repayments were placed on a different scheme under the Conservation Fund than the other districts—our

rate to-day is higher, that is, for taxes than any other district, $11.18, and then coming down to Vernon, $7.52. We have reduced our capital expenditure from $89 an acre down to $59 an acre; that is, including the $25,000 loan which comes into the Bulman part of it. If that loan is not considered, then it reduces it down to $47 per acre. In other words, we have reduced our loans 50 per cent., and in order to do that we have had to have a high rate and as a consequence have put ourselves in a better position, and we feel, if relief should be given, the fact that we have drained ourselves should be recognized.

The Commissioner: Was not your heavy repayment because of the nature of your temporary structures?

Mr. Clarke: When the district was formed, I think Major MacDonald will bear me out, our repayments were based on expected borrowings and not on actual borrowings. Take the present year, if our repayment was based on actual borrowings our repayment would be $6.50 per acre instead of $13. We are not asking that the repayments be reduced, but are asking that if relief takes place or some further change is made, that we be placed in the same position as the other districts.

The Commissioner: I think that is a fair request.

Major MacDonald: There is a point on that I might speak on. Glenmore's rate is set on their anticipated future borrowings rather than on their actual borrowings. Naramata was done in the same way, and there were reasons behind that. It was expected at the time this scheme was put into effect that those estimated borrowings could be reviewed at the end of a five-year period, and if the estimates made at the end of the five-year period varied from the original estimates these rates could be changed. In Glenmore's case we did look at those estimates about five years after the scheme started and it was decided that because of their possible requests it was not advisable to make a change at that time. I don't know but what if we looked over those estimates of future borrowings of the Glenmore District we might find that we could reduce that rate, and we are quite prepared to do that at any time. Of course, on the other hand, if the estimated borrowings at this stage of the game justify a higher rate it might be necessary to set a higher rate. At the time the other review was made it was decided it was better to leave well enough alone. If Glenmore wishes to ask for a definite review of those rates and will abide by what the present estimated future requirements would indicate, I am quite sure the Department would be ready to do it.

Mr. Clarke: The whole point was this: that by the repayment rate and by reduction of our borrowings we have put ourselves in that favourable position, and in case of relief coming to-day on actual conditions we feel that making that effort, making those repayments on capital account at a faster rate than other districts, that should be recognized, and if there is any form of relief granted, that should be taken into account.

The Commissioner: I think what Mr. Clarke is afraid of is I shall recommend the cancellation of the moratorium interest, and if the Government should accede to that, that Glenmore will not get its share of it.

Mr. Clarke: No, I was not thinking of that; but taking the conditions as we find them to-day and as it happened in the past, the fact that we have put ourselves in a better position through paying a much higher rate should be taken into account in fixing future rates, to give us the benefit of our payments in the past.

The Commissioner: I think that is fair.

Major MacDonald: I think I can safely say that neither Glenmore nor Naramata will lose anything by the fact they paid on estimated future borrowings rather than actual borrowings.

Mr. Reed: Our position will not be jeopardized in any relief that is given.

Major MacDonald: No.

Colonel Edgett: On the question of reclassification as pointed out by Mr. Wollaston, if lands are erased from the list or caused to be abandoned—if a man's lands are taken away from him on a reclassification scheme or an adjustment scheme, Major MacDonald made the statement the value of that land is the value as put up to-day. I might say we had a case in the Supreme Court regarding assessments and the owner tried to get the assessment on the basis of the productive value of that land to-day. He was ruled out, and the decision was the value was not the value to-day, it was the value of its past, present, and future, taking into account what it can produce.

Major MacDonald: I think that is axiomatic.

Mr. DeWolfe: Mr. Commissioner, you mentioned there was a possibility of a reduction in taxes when the permanent works are completed.

The Commissioner: Yes.

Mr. DeWolfe: Does that not seem unfair that the present generation should pay the whole amount and the coming generation get off?

The Commissioner: You have asked me for an extension of the repayment period and I told you I could see nothing unfair in the request. You asked for an extension from thirty to sixty years, and I told you that would reduce your interest by 1 per cent.

Mr. DeWolfe: That doesn't seem much benefit.

The Commissioner: You couldn't hope to wipe it out altogether.

Mr. DeWolfe: No, but could not the interest be spread over a longer period?

The Commissioner: The interest?

Mr. DeWolfe: Reduce the rate of interest.

The Commissioner: What is your reason for making that suggestion?

Mr. DeWolfe: To put some of the load on the next generation.

The Commissioner: The interest?

Mr. DeWolfe: Yes.

Mr. Wollaston: What has posterity done for us?

Mr. DeWolfe: It means that at the present rate of taxes the man who will be able to hold on are the Orientals and the Ukranians. It will not be the present farmers' sons who will get it.

Major MacDonald: Would this not be the effect of Mr. DeWolfe's suggestion: that a certain portion of the present interest now being paid would be deferred until after the permanent structures are paid for?

Mr. DeWolfe: Something along that line.

Major MacDonald: I can see the idea, but the effect would be very, very small.

Mr. Wollaston: Major MacDonald, supposing you pay off the capital in fifty years and then let the following fifty years take care of the accumulated interest.

The Commissioner: You would have a much greater interest to pay.

Major MacDonald: God help posterity if they have to pay that.

Mr. Wollaston: They would have the bearing orchards.

Major MacDonald: I think if interest were deferred for fifty years the interest rate——

The Commissioner: Would be very high.

Major MacDonald: It would be out of sight.

The Commissioner: The original capital would be about three times.

Major MacDonald: In fifty years you might find all those works wiped out and something different——

The Commissioner: I think if the works are amortized over fifty years, that is a very reasonable term indeed to allow for repayment. Of course, the interest charge is reduced as you go along.

Mr. DeWolfe: Take the case of the main dam. That structure will last more than fifty years.

The Commissioner: A generation is only twenty-five years, so the next generation will be carrying half of it.

Major MacDonald: And then it may be found possible to bring in other water and do away with Aberdeen altogether.

The Commissioner: I don't think it likely. I think it is looking for a needle in a haystack.

Mr. DeWolfe: Mr. Commissioner, I am thinking of the mineral claims. I know of those much to my sorrow. A hole in the ground was bonused to the extent of $7,000 for a drill to put a hole in the ground, and when they got it drilled they found there was nothing there.

Major MacDonald: What do you want to be paid for, the work on the Aberdeen Road?

Mr. DeWolfe: No, but there was the necessity of the expenditure.

The Commissioner: Do you suggest the industries should be bonused?

Mr. DeWolfe: If it is in one case, why not in another?

The Commissioner: I think our experience has been the bonusing of industries has been a very unwise move generally, either municipally, provincially, or federally.

Mr. DeWolfe: After all, the Mines Department of the Province is carrying out that same scheme.

The Commissioner: You are speaking now of the construction of roads, really.

Mr. DeWolfe: You might call the main canal a road.

Mr. Wollaston: It helps to develop the land.

The Commissioner: Your taxes already go for ordinary road. You cannot expect your taxes to go to pay for your irrigation systems as well.

Mr. Kidston: Did I understand you to say the bonusing of industry has been found to be very poor business?

The Commissioner: Yes.

Mr Kidston: I differ with you there.

The Commissioner: Would you care to state where it has been a success?

Mr. Kidston: In Germany they are building up——

The Commissioner: I was speaking of Canada. I said municipally, provincially, and federally. I will bring it home to you by mentioning the bonusing which has been done by the Soldier Settlement Board in the Province.

Mr. Kidston: I know.

The Commissioner: And I could show you at least ten weak industries which have been bonused by the Province.

Mr. Kidston: I thought you were making a general world-wide statement, that is all.

Colonel Edgett: There is the bonusing of the tobacco production.

Mr. Wollaston: And they are likewise bonusing copper in the mineral industry.

Mr. Kidston: It has been found elsewhere most effective. There is no question about it.

The Commissioner: Well, gentlemen, you have already suggested a form of relief. You cannot expect to get that form of relief and get bonusing as well. I suggest you keep within reason.

Mr. Clarke: After hearing the discussion to-day and going into all these figures, we feel that by increasing the water-supply, that is the biggest relief we could get. If we could get our tonnage around 400 boxes per acre the situation would be relieved. Wherever possible the Government should increase the water-supply, and the relief to the districts in that way would put them in a position where they could pay the Government back.

The Commissioner: I think you can rest assured that where the Government can satisfy itself an increase in water is necessary and is going to build up the production, not only in the interest of the industry but also in the interest of its investment in the industry, they are going to give you consideration on that.

Major MacDonald: There has been a certain amount of bonusing in the Vernon District. For instance, the surveys which were made on the Aberdeen watershed and about the valley generally. A lot of money has been spent on investigations and has never been charged to the district.

Mr. Wollaston: But, after all, we pay taxes to the Province to keep up this machinery.

Major MacDonald: The idea behind this bonusing is to increase the production—take lead, for instance. The producers of lead are paying heavy taxes and the idea behind that bonusing is if we can get production of lead we will get back from the taxation what the bonusing has cost, and more too; and if you heard what the Consolidated has to say about the taxes they are paying——

The Commissioner: I think you have already made it quite clear, gentlemen, that you believe, and I have agreed with you, that the industry, the farming industry, in the irrigation districts is of Provincial interest, and I propose to go on from there, so you may take it as read, I think.

Major MacDonald: I think there is another point. I think we are not going to get ourselves very far ahead, and will only confuse the issue, by suggesting too many lines of future relief, and just now I admit I am confused as a result of this inquiry as to what is wanted—so many different schemes have been put forward. If we can settle on something definite and show the practicability of it I think we will get farther ahead.

Mr. Kidston: I claim my solution has been presented clearly and logically and there is no difficulty about putting it into effect.

The Commissioner: Is it the one which you suggested at Vernon?

Mr. Kidston: Yes. I have seen nothing put up against it to disprove the logical soundness of what I put up.

The Commissioner: Well, I have got it very clear on the records, Mr. Kidston. I don't think we will get into a discussion of it now. Are there any other points you wish to bring up now, gentlemen, before me adjourn.

Captain Bull: When will your report be out?

The Commissioner: In about two weeks, and I was going to suggest, if you have any communications to send them to me, that you let me have them within the next ten days at my Vancouver address. I think you all have that address in your offices. I have written you on my stationery once or twice lately.

Mr. Crease: I would like to thank you, and have it put on record, for your patient and attentive hearing and for the frank remarks you have made.

Mr. Kidston: I second that.

The Commissioner: Thank you very much indeed, and thank you all for coming down, and you, Major MacDonald, for your interest.

(Inquiry concluded.)

VICTORIA, B.C.:
Printed by CHARLES F. BANFIELD, Printer to the King's Most Excellent Majesty.
1928.

250-128-466