[Chairman: Mr. Oldring]

[10:01 a.m.]

MR. CHAIRMAN: Welcome to another meeting of the Alberta Heritage Savings Trust Fund Select Standing Committee. With us this morning we have the Minister of Environment, the Hon. Ken Kowalski.

There are four programs under the capital projects division for which the Minister of Environment is responsible. They are the irrigation headworks and main irrigation systems improvements, the Paddle River basin development, the Lesser Slave Lake outlet, and land reclamation. They're all found on page 19 of the annual report.

Last year, Mr. Minister, you were kind enough to bring us right up to date on what was happening in those four particular areas. I think that the committee in particular appreciated that you went beyond the March 31 cutoff of the report itself, and we would certainly extend an invitation to you, Mr. Minister, to once again bring the committee up to date with some opening comments. We'd also appreciate it if you'd be so kind as to introduce the gentlemen from the department that are with you this morning. On that note, I'll be happy to turn the floor over to you, sir.

MR. KOWALSKI: Thank you very much, Mr. Chairman, and good morning ladies and gentlemen. Might I say at the outset Merry Christmas and a Happy New Year. Depending on what ethnic origin you are, some celebrated Christmas several weeks ago, and some did it last evening, so perhaps the euphoria of the moment might be a bit different, depending on where one sits and one's own heritage. The best in 1988 to all of you.

Mr. Chairman, I would like to reiterate what I started off by saying last year how pleased I am to be in a position to be able to come and now report to my colleagues in the Alberta Legislative Assembly with respect to certain matters that have been funded under the Alberta Heritage Savings Trust Fund. I had the distinct pleasure and honour for a number of years of being in the same chair that you are in now, and I always viewed that of all of the committees that are associated with the Legislative Assembly of the province of Alberta, the Alberta Heritage Savings Trust Fund Committee was, without doubt, the most important in terms of its trust provided to it by the people of Alberta and the responsibilities that it had to address itself with.

At the outset you indicated that there were four programs that have been funded under the Alberta Heritage Savings Trust Fund as reported in the annual report for 1986-87. On page 43 of the report under schedule 7, the capital projects division investments, you will note the figures of expenditure to March 31, 1987, of these four particular programs: the irrigation headworks and main irrigation systems improvement program, an expenditure of \$315,255,000; the land reclamation program, an expenditure to March 31, 1987, of \$29,133,000; Paddle River basin development project, an expenditure to March 31, 1987, of \$41,781,000. These three particular programs are ones that also had expenditures out of the Heritage Savings Trust Fund during the fiscal year 1986-87, which falls under the review mandate of this particular committee. The fourth project, the Lesser Slave Lake outlet project, was completed in an earlier fiscal year with expenditures to that point in time of \$2,889,000; there were no expenditures on the Lesser Slave Lake outlet project in the fiscal year 1986-87.

Sir, what I would like to do is to follow through on the pattern that I established, I guess, in my appearance before this committee last year. I do it at your invitation here now, this morning, as well with your kind words to basically say that the members of the committee appreciated the information that brought them as much up to date as possible with respect to these expenditure levels. I noted some very complimentary remarks with respect to the presentation that I made that did come from members of the committee last year. So I would like to bring you up to date as much as possible with the expenditure levels of these three, and I would like to circulate to you three visuals.

The first is a balance sheet for the irrigation headworks and main irrigation systems improvement program that takes the expenditure level to March 31, 1987; that would cover the figure of \$315,255,000. The second graph that I would like to provide to you takes that same program to October 31, 1987, so brings it as current as two months ago in terms of what its basic expenditure level is. The third document that I would like to circulate to you is a visual that shows the location, the areas included, and the work that has been conducted under each of the specifics under the irrigation headworks and main irrigation systems improvement. In other words, it's a map that covers the whole area and shows in great deal what has transpired to this point in time under this very important program and where we will go to take the program through to completion. I might point out as well that the map covers an area that is roughly equivalent in size to the area of the federal republic of West Germany, and oftentimes when we sit here in the province of Alberta, we forget the areas of geography that we're really talking about. West Germany, of course, has a population of 61 million. The whole population of the area that you would find described in this map, of course, would be less than one million, water and water management being extremely important.

So perhaps what I'd like to do at the outset is to give you the overview with respect to the first program. Before I do that, I would like to introduce the gentlemen who are with me. To my immediate left is Mr. Vance MacNichol. Mr. MacNichol joined Alberta Environment as the deputy minister of the Environment on January 1, 1987, so has now been my faithful servant for one year and one week and is the man who had distinguished himself in the public service employ of both the federal government of Canada and the province of Alberta in a variety of capacities prior to the one that he's assumed. I'm very pleased to have him on board. To my right is Mr. Jake Thiessen, the director of development and operations division of water resources management services. Mr. Thiessen has grown up with the irrigation headworks, the main irrigation systems improvement program, and in many ways could probably take us down every one of the canals and the slipways, walk through every one of the headworks, and point out every brick and nook and cranny and bolt that would have to go with it. So I'm pleased that he's with me this morning as well. To Mr. MacNichol's left is Mr. John King who's the chairman of the Land Conservation and Reclamation Council and a director of the land reclamation division and, of course, one of the programs that we would want to talk about this morning and bring you up to date on. It deals with the reclamation program, a program which I think is just incredibly important, and John is so enthusiastic about this that he consistently tells me that we have to reclaim more and more and more and more. Of course, I have to tell him we're reclaiming more and more and more and more, and there's still a limit. And at the end of the line is Mr. Jay Litke who works with me as the executive assistant to the Minister of the Environment. I might point out that Mr. Litke is a former student of mine in my previous career when I was an educator. I had the distinct pleasure of attempting to provide knowledge to him, and you'll have to be the judge as to whether or not we were successful in that regard.

But perhaps at the outset, to bring you up to date in the irrigation headworks and main irrigation systems improvement program, Mr. Chairman, we've circulated these three documents to you. If there are surplus documents -- and there are members of the media that I think we would want to do everything possible to make sure that our colleagues and friends who report would have all the information that's currently up to date. So if there are additional copies, I sincerely hope they've been provided to them, because I would certainly hope there would not be the possibility of erroneous reporting. It wouldn't be intentional, of course, but one doesn't have the specifics in front of them; sometimes these things do happen.

Okay. The irrigation headworks and the main irrigation systems improvement program. You recall that basically I indicated a year ago, when I had the privilege of the first report, that the purpose of the program is to ensure that adequately sized, efficient, and reliable water supply delivery systems are provided to all 13 irrigation districts and to the Berry Creek region in the special areas to meet their existing and expanded demands for irrigation and water uses. You'll recall that the program to initiate the headworks systems -- and by headworks we're basically talking about dams or reservoirs or holding tanks for water -- was initiated in 1975, and then it was significantly expanded in scope following a decision of the cabinet in 1980. Work began on the components of this particular program in 1980, and the total expenditures to October 31, 1987, on the second graph that I've given you, amounts to approximately \$345.7 million, including the \$9.5 million that was spent prior to 1980. The total expenditure for the 1987-88 fiscal year, the one we're in now, that would go beyond the mandate of the particular committee to October 31, 1987, is approximately \$30.5 million.

Rehabilitation and improvement work on the Lethbridge Northern Irrigation District -- and you can see in the visual that's in front of you where the location of that particular district is in proximity to the city of Lethbridge -- and the St. Mary River Irrigation District main canal systems is progressing well. The construction of the Forty Mile Coulee reservoir, which was initiated in 1985-86, is coming along very well again. You can see where it's located on the eastern section of the map or the right-hand side of the map. It's scheduled for completion by 1988-89. An implementation of the rehabilitation of the Eastern Irrigation District main canal and any major reconstruction work on other provincial headworks systems are scheduled for initiation during the 1988-89 fiscal year, subject, of course, to finalization of agreements with the districts. All components -and I want to repeat, all components -- of the program are scheduled for completion by 1995, in accordance with the announcement that was made a number of years ago and following the schedule that we've outlined for you and provided to you today and, of course, which is an update of the schedule that I gave to you sometime ago.

One of the main questions that was raised last year when I had the privilege of being before this committee was: okay, fine, over and above the cost of the headworks and the main systems, what is the cost to operate the provincial infrastructure and systems that we have under this major program? I indicated last year that that aspect of it is funded under the General Revenue Fund found in the estimates of Alberta Environment, and the approximate cost on an annual basis is \$2.5 million per year. Now, that's for the operation of the system that we're talking

about that's funded on the headworks side.

I'd now like to make some specific comments with respect to each of these projects that are located in here. The first one I'd like to talk about is the Lethbridge Northern Irrigation District headworks system. On the table and in front of you are seven pictures or visuals. Perhaps, Jake, we might just lift them up and show them to the committee members as I go through this particular discussion. First of all, you can see its location, and if you take a look on this particular graph, it's been colour coded. The areas and the lines and the lakes and the rivers and the spots that are identified in green indicate that construction has been completed on those projects. Those identified in red are either under construction now in this fiscal year or are presently going to be initiated in this fiscal year or are going to be part of what will be done between now and 1995. You can follow that colour coding in the same way.

Under the Lethbridge Northern Irrigation District headworks system, this project involves the rehabilitation and expansion of about 81 kilometres, or 50 miles, of the Lethbridge Northern Irrigation District main canal and associated structures and improvements of the diversion headworks and the raising of Keho Lake. You can see the location of Keho Lake, which is just north of Picture Butte on the particular map. Now, Mr. Thiessen basically will show you some visuals that point out some of these projects and the type of work that's included. You'll recall that the construction work on this project was initiated in 1978-79, and by March 31, 1987, the rehabilitation and reconstruction of approximately 67 kilometres, or approximately 82 percent, of the canal has been completed. You have an idea by looking at the visual of the size of the canal, the width of it, and the like. The rehabilitation of the diversion headworks, replacement of the Oldman River crossing, the Willow Creek crossing, and the two siphons at Rocky and Keenex Coulees have also been completed now. The contract for the last remaining reach of canal was awarded to Richardson Brothers of Olds, Alberta, in September of this year. You can see from the picture what we are talking about in terms of this last reach, and construction work on this contract is progressing very well.

The construction work necessary to raise the Keho Lake project has been completed. I had an opportunity to drive in the Nobleford area in the fall of this year, and I saw the water levels at Keho Lake and the amount of water that there was for people. The reservoir is now presently operating at the full new supply level. I would also like to point out that Keho Lake Park golf course and clubhouse are complete. You'll recall that there was a requirement there to do some relocation and some moving part of the land acquisition with respect to this project, and of course those facilities were turned over to the Keho golf club in July 1987. The total expenditure to October 31, 1987, on the Lethbridge Northern Irrigation District main canal work is \$101.3 million. The total expenditure to October 31, 1987, on the Keho Lake reservoir project is \$11.3 million, and we expect to completely finish this project in this district in the 1989-90 fiscal year.

Now, the second one I would like to talk about is the St. Mary River Irrigation District main canal rehabilitation and enlargement program. You'll find it located in white letters south of the city of Lethbridge. The rehabilitation and enlargement program for the St. Mary River Irrigation District main canal extends from Ridge reservoir, which you'll find right beneath the letters you'll find located just a bit to the east of Magrath, to Murray reservoir, which is located south of Medicine Hat. We're talking here of a total length of 283 kilometres for a

canal. Two hundred and eighty-three kilometres. We're not talking about water diversion of 50 feet or 50 metres; we're talking about a canal of 283 kilometres.

The construction work on this project was initiated in 1981-82, and the rehabilitation of approximately 203 kilometres has been completed by March 31, 1987. The main canal from the Stafford reservoir to Sauder reservoir is functional for the new and enlarged capacity. The contract for an 11-kilometre reach of canal from Ridge reservoir to Chin reservoir was awarded to El-San Industries of Medicine Hat, and construction is under way in that sector. Construction work has also been initiated for the installation of seepage control measures on three earlier completed reaches, the ones you'll find from Forty Mile to Sauder and from Sauder to Murray. The design work on the other remaining reaches from Ridge reservoir to Chin reservoir has been initiated, and construction work on these reaches is scheduled for the 1988-89 and the 1989-90 fiscal years, as is outlined on the graph I provided to you.

The replacement of the Forty Mile Coulee siphon was completed during the fiscal year 1984-85, and the total expenditure to October 31, 1987, on this project amounts to approximately \$120 million. Final completion of the project, which was initially scheduled for the 1989-90 fiscal year, will now be delayed one or two years due to the need to reorganize the existing annual funding level that has been awarded to me by the Legislative Assembly under this particular headworks project. You'll recall the dollars I gave you in each of the fiscal years last year, and you'll see that there's been a slight adjustment downwards in terms of their annual expenditures for the current fiscal year and for the projected fiscal year we'll be going into starting April 1, 1988.

The third one is the Forty Mile Coulee reservoir. It's identified in green a bit south and west of Medicine Hat. The Forty Mile Coulee reservoir is a 70,000 acre-feet off-stream storage reservoir for the St. Mary River Irrigation District. I repeat, off-stream storage. The engineering design and the land assembly for this project was completed by 1983-84, and construction of the west and east dam is now complete. We have a picture we'd like to show you of construction on this particular project to 1986, but I want to point out to you that one year later this project is now complete. And we're not talking here about just a few little bricks and mortar that we put up; we're talking about a major reservoir for water storage and management.

Construction of the pump station, the recreation dam, and the boat launch is essentially complete. Perhaps, Mr. Thiessen, you might point out where the recreation area and the boat launch would fall in perspective to all of this. The design of the fish pond is in progress with local people in the area, and overall the project is about 98 percent complete. The total expenditure to October 31, 1987, is \$52 million.

Another project is the Badger Lake reservoir. You can see its location as well, just north of the St. Mary River Irrigation District canal, almost in the centre of the map. It's in green letters. This internal storage reservoir project with a capacity of 42,000 acre-feet within the Bow River Irrigation District was completed in 1984-85, and the total expenditure on that project, including the cost of engineering and land acquisition, amounted to approximately \$13.2 million.

Another project is the Crawling Valley reservoir project. The construction of this 90,000 acre-feet internal storage reservoir project within the Eastern Irrigation District has been completed, and the total expenditure on that project was \$6.4 million. We've got a number of projects that follow under this pro-

gram that have been identified as special areas projects. So if you look to the northern part of the map, you'll see the Deadfish diversion project, which consists of a pump house, pipeline, and a canal to divert water -- and yes, the words I'm using are "to divert water" -- from the Red Deer River to Deadfish Creek, was completed in 1983-84. The total expenditure to October 31, 1987, for the project was approximately \$7.6 million, and some outstanding land settlements, not major, are scheduled for completion in this current fiscal year, 1987-88.

The Sheerness water supply project was completed in 1984-85, and you'll recall our former colleague the late hon. Henry Kroeger oftentimes referred to that as an important project in the area he had the privilege of representing. The pipeline from the Red Deer River to the Sheerness power plant was constructed by Alberta Power and TransAlta Utilities. Alberta Environment paid for increasing the size of the pipeline to ensure an increase in guaranteed water supply. The construction of the 14-mile-long, concrete-lined canal to the Carolside reservoir blowdown canal was completed in the 1984-85 fiscal year. The total project expenditure to October 31, 1987, was approximately \$9.7 million, and construction work and outstanding work on Carolside reservoir carried over from the previous fiscal year, '86-87, because of some delays in land settlements was initiated this fall and essentially completed in the fall of '87.

Now, we have other headworks projects in addition to the ones I've already identified, and major work on the rehabilitation of other headworks systems is generally scheduled, as you see on the two graphs I've given you, for the latter years of the program implementation period. These will include, first of all, the Bow River headworks from the Carseland weir to Travers and the Little Bow reservoirs; secondly, the St. Mary headworks from Waterton reservoir to Milk River Ridge reservoir, which you'll see going from the extreme west to the extreme east; thirdly, the Western Irrigation District headworks from the weir in Calgary to Chestermere Lake, and you can see that located in an orange colour on a line that would take it through. The fourth one, in the extreme southern part of the visual, is the Mountain View-Leavitt-Aetna headworks from the Belly River diversion to Paine Lake.

Of course, we've always got minor but urgently needed upgrading and rehabilitation that would go on as the need arises. On the St. Mary headworks system the contract for the Pinepound Coulee siphon replacement structure was awarded to Cana Management Ltd. of Calgary in September of 1987, and construction is under way. On the Carseland-Bow system the construction on the replacement of the West Arrowhead siphon is scheduled for fiscal 1988-89, subject, of course, to finalization of an agreement with the Blackfoot Band. I'm very pleased to report that we've made very excellent progress in negotiating with the people of the Blackfoot Nation. On the Western Irrigation District main canal work initiated in 1985, and 1986 has been ongoing for the replacement of some existing road bridges, and the implementation of minor remedial works has already been completed. Major rehabilitation work on this canal is scheduled for initiation during the 1988-89 fiscal year, as you see outlined. The total expenditure to October 31, 1987, on what we've identified as other provincial headworks systems is approximately \$13.7 million.

Now, if I take you to another sector of the map and if you can find the United Irrigation District headworks system, which is also located, the UID main conveyance system extends from the diversion structure on the Belly River to Cochrane Lake.

The preliminary report outlining the scope of the rehabilitation works and the associated costs for this project has essentially been completed and has been accepted by the district and has been approved by Alberta Environment, and an agreement with the district is under negotiation prior to proceeding with rehabilitation work that will begin in 1988-89.

Ross Creek Irrigation District headworks system is another that has been identified as well, and this irrigation main canal system extends from the diversion structure on Gros Venture Creek to Cavan Lake. The district has secured all the land except for one parcel at this point in time, and the scope of rehabilitation work required is yet to be finalized by agreement between the district and Alberta Environment.

And the last one that I'd just simply like to bring you up to date on deals with the Eastern Irrigation District main canal. You'll find the Eastern Irrigation District main canal located almost in the centre of the map, in the Bassano area, and extending to a considerable degree towards the Saskatchewan border. The proposed rehabilitation program here includes the upgrading of the east branch, north branch, and Rosemary canals. An agreement outlining the scope of the work, administering of the program, and funding levels is currently under review, and we're almost down to complete, final negotiation with the Eastern Irrigation District with respect to this matter. It's my intent to see work initiated on this project to begin in fiscal 1988-89 and to follow the funding program that I've outlined for you in the visual to take it through to completion by 1992-93.

And that basically brings you up to date on the specifics. There's one other item that's identified on both of the graphs that you have, the fiscal graphs, and, of course, deals with fiberglass lining research. That was a project that was initiated a couple of years ago. We didn't do any of that in the fiscal year under review or the current fiscal year, but we do have a visual which gives you a really good idea of what fiberglass lining is all about. Perhaps, Mr. Thiessen, you might just point that out as well, in terms of best possible management in retention of water.

Mr. Chairman, I'd like to now make a few comments — there will be fewer comments, not because it's of lesser importance, but simply because it's of lesser dollar amounts — with respect to the land reclamation program. When the Alberta Heritage Savings Trust Fund committee and the government allocated moneys to the land reclamation program in 1976-77 for the first time, I really don't believe that everybody who was involved had a complete understanding of what a tremendous amount of really positive work could occur under a small-dollar program, but administered in such a way that you could literally put \$3,000, \$4,000, \$5,000, \$6,000 in a small parcel of land to reclaim it and really turn it from a negative scar on the land-scape to something that is really positive.

And of all the programs that I really, really like -- I like them all, but the one that you can really see the immediate return to... It's almost like going to a store and buying a loaf of bread. You pay a buck or whatever the heck it is for a loaf of bread. You carry it home, and you know you've got it. You can taste it immediately; you can see it. The returns on this particular program are very quick. Some of this reclamation work can be done in a matter of weeks, some in a matter of a couple of months. You can see in your own mind what is happening, unlike perhaps getting involved in a project that might take three or four or five years to see the end result; it takes a little longer.

But basically, the Alberta Heritage Savings Trust Fund land reclamation program had three objectives. The first was, of course, the physical reclamation of lands throughout Alberta whose surface had been disturbed and to change it into a biophysically productive state, not only to just reclaim it but in essence to improve it. Second, of course, is to conduct research into improved reclamation techniques and techniques for minimizing the impact on the environment of surface land disturbances. The third one -- and when the drafters of the program outlined this program in 1976-77, they threw in another objective called employment of Albertans. I think, Mr. Chairman, that was very, very visionary, to also throw in job creation. And if you can do it with an environmental improvement, then I think you've got a real winner.

The total amount of money that has been invested to date in the estimates that you see in the document show \$29,298 million to the end of fiscal 1987, and of course there's additional dollars that are an expenditure under the current fiscal year. I would like to point out, again in a very, very general way because I've already conveyed to all Members of the Legislative Assembly in a letter to each and every member who has a project in his or her constituency that's funded under this program -- I've already sent you that information. I sent that to you during the early fall of 1987, so you all know exactly what it is that you've had. But under the very modest amount of money that's included in the \$2.35 million item for 1987-88 -- a very, very small amount of money -- and the \$2.835 million that was included under fiscal 1986-87, I'm pleased to report that in total we've been able to deal with 123 little land reclamation projects.

These land reclamation projects cover everything from an improvement of an old log hauling road, an abandoned road called Pigeon Mountain road in the constituency of Banff-Cochrane to, in Calgary, work on Nose Hill gravel pits number 1 and number 2, in association with the municipality there expenditures of \$35,848 in Calgary with respect to Nose Hill gravel pit. We've got these projects all over the province. Some is of minor -- Scapa is an example in east-central Alberta. We helped reclaim the Scapa garbage dump at a total cost of \$840.80. That's what was needed; that's what was required; that's what was invested; that's what was done. In essence, it's very positive. We're not talking about hundreds of millions of dollars; we're talking about \$840.80, and you solve an environmental concern that had been just simply there for years and years and years.

I, of course, can go on. Heck, in the constituency of Lacombe I see that we worked at Aspen Beach sewage lagoon: \$2,232.45. We also worked on the Lacombe garbage dump: \$4.735.80.

Of course, I've invited all of you as well, all members of the Assembly, irrespective of what particular political party you belong to and irrespective of whether you're a member of the government or a member of the opposition, to give me ideas and give me suggestions. We would welcome and attempt to assist and improve, because the objective of all of this, of course, is to improve the quality of life in Alberta.

In Westlock-Sturgeon we worked on the Legal garbage dump number 2; they have two of them there, number 1 and number 2: total expenditure, \$2,726.50. I can go on and on with the list of 123, which are all very important, but you already have that information as Members of the Legislative Assembly.

In addition to that, under this expenditure level for 1986-87 to cover these reclamation projects, we also have the research aspect of it. There are four major categories of research that were conducted. The first deals with the plains coal reclamation

research program; there were three major research projects undertaken in this particular area. Under the plains coal reclamation research program, on the three projects we had an expenditure level of \$951,000 on research as to how to improve, how to return land from an unproductive state to a productive state in the coalbearing region of the plains of Alberta.

We've also had a special item dealing with the mountains and foothills reclamation research program and looked at four specific research projects -- public-sector and private-sector research. When I say public-sector research, we have at Vegreville, as an example, the environmental research facility. That is part of the public involvement. Private would be consultants here, there, and everywhere.

A third major category was oil sands reclamation research, and we have \$108,000 invested in that particular one and also the oil and gas reclamation research program. There were two research projects, one dealing with drilling-mud disposal, a very practical concern and problem, and the other one dealing with soil compaction: a total expenditure there of \$80,000. It's a project and a program that, of course, was due to expire and is due to expire. I've really appreciated, and I would appreciate once again, the endorsation of this particular committee to in fact encourage the government that I'm a member of to continue allocating funding for this particular program. We don't need hundreds of millions of dollars. A couple of million a year really gives us, I think, a very, very important penetration in improvement for the environment of Alberta.

The last item, just to make a few brief comments, is, of course, one of the most favourite projects I've ever had the good fortune of being involved in. It has to deal with a dam, but in this case it has to deal with one of a number of dams that I've had the privilege of being involved in in the past, and this is the Paddle River dam. All members, of course, can remember the large number of words that were expended in this Assembly by a number of members with respect to the pros and cons, the importance of the Paddle River dam. But you'll note in here that you had provided to me a certain amount of money for fiscal 1986-87 to expend for the final year in expenditures for the Paddle River dam. You'll also note that the amount of dollars you had provided to us was not expended. There was a significant return. In fact, the amount of dollars that was allocated to me was \$1,050,000. The actual expenditure was \$469,000. So we returned to the people of Alberta \$581,000.

Now, you now probably want to ask the question why. Well, I think I'll give you the reason why before you ask the question why, because I think it's very important. The purpose of building a dam is to manage and control water. That's the purpose of a dam: manage and control and preserve and conserve water. So we built the dam at Paddle River called the Paddle River dam. It flows, really, through the constituency that I have the privilege and good fortune of representing. We had a whole series of floods in the Paddle River. Well, in fiscal 1986-87 what we had planned to do was to upgrade a railroad trestle located to the east of Barrhead called the Manola trestle. We had budgeted nearly \$1 million for that particular -- well, it wasn't quite a million; it was about half a million dollars for the upgrading of that trestle, for the protection of it.

Lo and behold, in July 1986 Alberta had the worst flooding in the history of the province of Alberta. The Paddle River dam worked; there was no, no, no flooding anywhere along the Paddle River. As a result, in August 1986 I went and took another look at this trestle that everybody had told me would probably go out if we ever had worse flooding. But because we had

the Paddle River dam built, functioning, it controlled, regulated, conserved the flow of the water in the Paddle, so we didn't have to replace the Manola trestle. We didn't have to spend that half a million dollars, so I canceled the project, and the dollars have been returned. So within less than a couple of months of the completion of this dam and the \$41 million expenditure of public money, we'd already had a positive return of at least a half a million dollars' savings as a result of the construction of the dam.

You also know that a report that I did make public and tabled indicated that the Paddle River dam had in fact worked so well that if the Paddle River had flooded without the dam -- as it would have flooded without the dam -- and we had applied the same program, we would have probably been looking at over \$20 million of assistance to hard-pressed agricultural producers and towns and villages and others located along the Paddle River. There was an enormous benefit that was realized very, very quickly and, from a cost-benefit point of view, heck, just loads and loads of positives with respect to that.

The only reason I raise that is because I think it's important to bring it to an end. There will be no more expenditure in the Paddle River basin development scheduled for fiscal '87-88 and none planned in the future. The dam is working, very functional. Heck, it's become a tourist attraction as well, and needless to say, my constituents are extremely pleased. I've also had the opportunity, of course, to allow them to know who's in favour and who's opposed to the Paddle River dam in the past; they're also appreciative of that as well. So it's been a good, important project in terms of water management, water conservation. In fact, they've been so enthusiastic about the Paddle River dam that they consistently want to talk to me about building a dam on the Pembina River. But that would not come under the irrigation headworks and main irrigation systems improvement program nor land reclamation. Should we have to do that, we would probably have to come back and get approval from this committee and this Legislature to initiate construction on the Pembina River, an extremely important river located to the west of the city of Edmonton and flowing basically right into the constituency that is currently represented by the member on this committee who represents Athabasca-Lac La Biche. Of course, he knows all about the Pembina River and the importance of it and the importance of assisting people and helping people.

So, ladies and gentlemen, I appreciate very much the opportunity to have provided these brief comments to you. I am at your complete disposal. This is positive, good-news business, and I sincerely hope that all members of the Assembly, when they want to talk about improving -- because it was in 1987 that we said we would change the mandate of Alberta Environment from simply protecting the environment in Alberta to improving and enhancing the environment of Alberta. These are positive developments for the protection of life. I repeat: life. And that's what this is all about anyway, is life, whether it be for human beings or for animals or for plants. We must preserve, conserve, control, and manage our water.

Thank you.

MR. CHAIRMAN: Thanks very much, Mr. Minister, for a very comprehensive and up-to-the-minute overview of the four areas that fall under the trust fund report. You might have anticipated after an intensive overview like that that all the questions perhaps would be answered already. I can only say to you, Mr. Minister, that there are 13 members of the committee that are

present, plus myself, and there are 13 members on the question list.

The Chair would begin by recognizing the Member for Lloydminster.

MR. CHERRY: Thank you, Mr. Chairman, and good morning, gentlemen. I guess I wanted to target in on reclamation. My question would be: how well are the municipalities and the MDs and counties receiving the reclamation program itself?

MR. KOWALSKI: Very, very well received. I indicated that in the current fiscal year it was 123 research projects. I gave you the figure that we were using last year. In fact, it's become so popular that we don't even advertise its existence anymore. I don't send out letters to municipalities advising them that the program exists. We don't advertise in the paper. We have large-scale requests coming to us -- large in number, not large in size or dollars or what have you.

When we initiated the help eliminate landfill pollution program a year ago and asked the people of Alberta to call as well, a whole bunch of them said: "Hey, well, I remember this little garbage dump that we used to have in our area 40 years ago. Somehow it's there. We checked it out. If we can help the municipality . . . " A lot of these projects are only -- I was going to say one hectare; I better say two and a half acres or something - between two and three and four acres in size, for the most part; there've been a few bigger ones. Over the years, of course, they've used local contractors - single man, single woman, Cat kind of operator -- and attempted for the most part to improve the quality of the land. In some cases they've built little parks on them. In some cases they've built fish ponds out of old, scarred gravel pits. In some cases the land has been reclaimed and turned back into agricultural production. There's a whole variety of those things.

So it has been extremely well received. We don't have to advertise. They all know about it. In the annual document that's put out by Alberta Municipal Affairs, which covers a listing of all the government programs -- of course, this is the one of the minute, and every time I meet with municipal councillors here, there, and everywhere throughout the province, it's very positively received and, I think, very well known.

MR. CHERRY: Thank you. Is that a cost-shared project?

MR. KOWALSKI: No it isn't, but it can be. For the most part, because of the dollar figures, essentially we're prepared to come in, recognizing that -- remember that we're basically looking at reclamation projects for things that occurred in Alberta prior to the new laws that the government I'm a member of initiated after we formed the government in 1971, the land conservation laws. If you want to do, as an example, coal mining in Alberta today, you must set aside so many pennies per tonne of the amount of coal you extract from the ground, and it's put into a land reclamation fund administered by the Provincial Treasurer, which now has over some \$51 million, \$52 million, or \$53 million in place.

The projects we're talking about here would go back into the history of Alberta to a time when certain scars occurred in the landscape and there was no government law, regulation, or program to cause certain things to happen. So these are all past, past, past projects. But if a municipality, as an example, had a dump and said that it wanted to turn it into, well, who knows what -- let's say they want to turn it into an artificial swimming

pool, which is an absurd example, but say they wanted to do that. We would come in and probably assist them on the side that we could in reclaiming it for environmental protection, but if they wanted to enhance it beyond that, they could certainly use their own dollars to do it.

MR. CHERRY: Okay. My last question would be: with the oil and gas disturbing some areas — I go back to my own area where I think many years ago there was a pit, and then it was filled in, and it wasn't properly done. Would that qualify on the reclamation?

MR. KOWALSKI: We would expect that the development company in place would in fact pay for that. That would be part of the rule and a part of their responsibility. Now, all of those well sites basically come under the jurisdiction not of Alberta Environment, but it's my understanding they come under the jurisdiction basically of the Energy Resources Conservation Board, the licensing agency with it. We're doing research, however, into several aspects, the aspects I talked about, in terms of contaminants in drilling wastes and for the safe disposal of certain wastes. I would also like to point out that we're considered a world leader in this regard, and there's going to be in the city of Calgary in the post-Olympic time frame, in April of 1988, an international drilling waste conference on this subject matter.

Perhaps, Mr. King, you might want to add a few additional comments with the specifics of this type of research that we're doing.

MR. KING: Yes, thank you, Mr. Kowalski. One of the studies that we've got going right now is a drilling-mud disposal study, and that is a study to try and determine the best method of disposing of the muds out of the sumps that are associated with the wells you referred to. That will be tied in, as Mr. Kowalski said, to the conference that's going to be held here in Alberta in the spring of '88.

Another one that we got under way last year and are continuing with this year is a soil compaction study on well sites. The objectives there are to measure the soil compaction that is in fact actually occurring, to then try and determine the trafficability or prevent the soil compaction on oil and gas leases, and, thirdly, to try and determine the most effective and cost-efficient method of alleviating soil compaction on those leases.

MR. CHAIRMAN: Member for Cypress-Redcliff.

MR. HYLAND: Thank you, Mr. Chairman. My first question to the minister is: though I know it's not funded out of the trust fund, but most other irrigation upgrading projects are funded out of the trust fund in one form or another, why was the money for the Oldman dam pulled out of general revenue rather than the trust fund?

MR. KOWALSKI: Mr. Chairman, I have to be governed by your direction as to whether or not you want to expand the scope of the committee this morning to talk about the Oldman River dam as well. Or is it the type of question that just had to do with why funding was not under the irrigation headworks and main irrigations systems project?

MR. CHAIRMAN: I think that in this situation -- again, I want to keep the members on topic, if we can today, in dealing with

the report as much as possible -- perhaps a short response on this. If the minister is willing, we can maybe come back to the Oldman River dam at the end of the session if there's time available to us, but I would like to deal with the four items that are on page 19 of the report first.

MR. KOWALSKI: So I have your permission to make a comment with respect . . .

MR. CHAIRMAN: A short comment.

MR. KOWALSKI: Well, under the Heritage Savings Trust Fund, as all members know, the fund has an allocation of so many dollars, a percentage of dollars, to each of the various divisions within it. What have you got? The Alberta investment division, the Canada investment division, the commercial investment division, the energy investment division, and the capital projects division. The capital projects division, which is the one that covers the four projects I've talked about this morning, has a limit of 20 percent of the fund's assets to certain things. Recognizing where that fund had already arrived at in terms of the total amount of dollars within the Heritage Savings Trust Fund allocated to the capital projects division, there was no flexibility to fund it under the irrigation headworks and main irrigation systems. So it's funded under the General Revenue Fund of the province.

MR. CHAIRMAN: Thank you.

A supplementary that's back on topic.

MR. HYLAND: The supplementary question is related to the canal linings and the research you mentioned in your response. I should just first say that I didn't think they would ever change yourself and Mr. Thiessen to thinking in hectares and kilometres. I thought you were both convinced that miles and cubic feet were the real numbers, but I notice most of the stuff is in hectares and cubic metres.

Nevertheless, I wonder if the minister can give us any examples on the research on canal liners and the exporting of that research. Is it creating any jobs in supplying material to other parts of the world?

MR. KOWALSKI: I'll avoid comment with respect to the usage of the second language, other than to say that when I had the fortunate ability to be the Deputy Minister of Transportation, my minister of the day phoned one morning and said, "We're going to change all these signs to this new system called metric." I said. "With due respect, Mr. Minister, do you have any idea how many signs that is?" He said, "Yeah, you told me once there were 200,000 signs in the province of Alberta." I said, "Well, you're the boss, sir, and we'll do whatever we're supposed to do." He said, "Well, could you start September 1 of a certain year and have it done within a week?" I said, "You're the boss, so if that's the direction, we'll have it done," and it was done -at a great cost to the people of Alberta, I might add. But we've all learned to speak in the other one -- in metric and imperial, Mr. Piquette, with all due respect. So we're talking about hectares or acres.

When we entered 1980 and the beginning of this particular program, there was a knowledge base in Alberta in terms of how to improve and protect the water that would flow. The area that you're talking about basically then went into the area of new methods and new materials for canal construction, and there has

been developed in Alberta over the last decade a really sophisticated group of engineers and engineering ability and chemists and biologists who have done a fair degree of work. There's been a tremendous amount of research that's been done with the Alberta Research Council, with Alberta Environment, in terms of the liner: testing what kind of liners you could use, what type of membrane you could use, and of course there's a variety of different types and a variety of different thicknesses. It's my understanding that we are now exporting a pretty considerable amount of expertise out of our province to other countries of the world that basically are involved in irrigation improvement and irrigation development. Most of this expertise, of course, would go via the Canadian International Development Agency, which would be a federal wing providing assistance to Third World countries by way of their requirements in terms of water improvement. So our scientists, researchers, would in fact have a lot to do with that.

But in addition to that, there is a fair amount of private-sector work going on. I've had the opportunity to meet on several occasions a number of engineers in our province who have done a considerable amount of work in the United States, recognizing that half of the irrigation land of Canada is located in Alberta. Most people don't seem to appreciate that, but half of the irrigation land of Canada is located in Alberta, and we've developed an expertise in our province, not only to manage this resource of water but also to export the engineering capacity around the world. I'm sure, Mr. Thiessen, that you could probably rattle off a few specific examples of the type of research that's under way and the type of membrane that we're using, to clarify what I've just finished saying.

MR. THIESSEN: Yes, Mr. Minister. Just to add to what you've said, it's sometimes difficult to identify research separate and apart from the development and construction. For example, a contractor from Lethbridge did the concrete lining of the Sheemess blowdown canal, one of the projects that was outlined. He developed a machine that would put reinforced steel within the three-inch thick slip form concrete. That was a brand-new development that had never been done anywhere. Subsequent to finishing the project funded by this program, he has exported and actually done work in the United States. A similar contractor worked on the PVC membrane liner and developed a machine that straddled a main canal and applied the granular material protecting the PVC liner and does this on an automatic basis. Again, this contractor has bid work in the United States and has looked at other countries as well. Similarly, engineering firms have exported technology basically that they've experienced and developed here in Alberta.

MR. HYLAND: A final supplementary, then, would be: is there any way we could find out or even guess at the amount of technical information? Because I know of a couple of engineering firms that have done extensive work in other parts of the world. What I'm getting at is the benefit to those other than those involved in water management that this has created with the development of knowledge and technology. Is there any way we can get an idea of how much of that technology, in man-years or whatever, is exported to other parts of the world?

MR. KOWALSKI: Mr. Hyland, it's my understanding that Alberta has more engineers per capita than any other province in Canada. One of the reasons we've got so many engineers is because of the innovation in a whole variety of areas that has been

under way in our province, and this is just one example of it. Of course, the Alberta Research Council is involved in a whole variety of things and in extension, I know, in terms of the visitors from other countries -- from Egypt, Israel, and many equatorial countries -- that seem to come to southern Alberta to visit to see what is there, is a reflection really of that. I don't know, Mr. Thiessen, if you could say that there's so many thousands of man-years or so many millions of additional dollars. If we could do that -- I'm not sure we couldn't; I'm just not sure we can do it this morning.

MR. CHAIRMAN: The Member for Lacombe,

MR. R. MOORE: Thanks, Mr. Chairman. I always appreciate the minister's overview in these areas. He doesn't leave too much for us to question sometimes.

I'd like to go back to the Paddle River dam situation, seeing that dams seem to be the subject and the concern of so many in Alberta today. First of all, I understood from your overview that's it's been a tremendous success and it's paying dividends back to the citizens of Alberta. But there were some major concerns right after construction about the dam shifting, the engineering, and so on. What are we doing there? Is the dam a solid structure there to serve Albertans for a few years, or what is happening?

MR. KOWALSKI: With due respect, Mr. Member, there were no major concerns. There were some concerns that would be roughly equivalent to you going out and building yourself a home, say, a 1,300 or 1,400 square foot home. You put the gyproc on, and you paint it, and you move all your furniture in, and you have everybody home for Christmas four or five months after you've finished the house. The house settles a bit, and everybody says: "Gee, you got a faulty construction job in your house. Look at the cracks in the wall, the little cracks." Now, we've all been through that, so what we basically do is get a little putty, put a little touch of paint on it, and it's gone; it's finished. That is typical; the settling aspect is typical of any construction project. But needless to say, those who were opposed to the Paddle River dam then blew that totally out of proportion, in my humble opinion, and basically said that the whole dam is going to crack open and fall. There is no perceptible movement at all in the Paddle River dam, but all dams, all reservoirs, in the province of Alberta, of course, are monitored as part of the dam safety program -- yes, that's the correct name of it -- on an ongoing basis. But to say there's major concern ... I guess one has to be imaginative too.

MR. R. MOORE: Mr. Chairman, a supplementary. I guess that was one time I read the media. I shouldn't do that; I do make that mistake the odd time.

However, on these dams, we've had in the last year a lot of concern from environmentalists and outdoors people, and I have a lot of my own constituents that are concerned about the damage to the environment or to the fishing aspect of it, the recreation aspect of it, the loss of it when you build these dams. These reservoirs do change the structure or the flow of these rivers for the time being. I'd like to know, getting back to the Paddle River, now that it's been in place: have we as Albertans lost recreation use there and potential fishing for fishermen? Has that been restored, or has it been lost completely?

MR. KOWALSKI: Once again, Mr. Member, with due respect,

I am an environmentalist, and so are you, and so are 2.35 million citizens of this province. I grew up in this province, in northeastern Alberta. I essentially grew up on a lake called Moose Lake, and I had the opportunity to hunt, fish, be outdoors with my parents, my friends, all the time. I didn't know that because I believed in protecting the air and the water and the sky, there was a word I could call myself called "environmentalist." I just assumed that that was part of the heritage in the blood and part of the emotion of everybody who was an Albertan. I don't know of anybody in Alberta who's opposed to the protection of the environment; I don't know of anybody who is. There are some who are opposed to certain kinds of projects, and that's fair game; that's part of the democratic process. But I am an environmentalist. When it comes to managing and preserving life in this province -- and you talk about human life, animal life and plant life -- one of the important things we have to do is conserve and preserve our water. Less than 1 percent of the landmass of this province has water on it. Look at a map of Alberta. Less than 1 percent of the landmass of this province has water in it. People have a mythology that basically says we have an enormous surplus of water in Alberta. That is totally incorrect; we are in an absolute deficit position with respect to water. We've got to manage, we've got to conserve, we've got to control, we've got to preserve life. I'm the environmentalist. I am the environmentalist. I'm the one who believes in protecting and conserving life. When somebody uses the phraseology, "Well, I'm an environmentalist because I'm opposed to something," I think that's an absolutely disrespectful use of the word "environmentalist." It shouldn't be, and I don't know why people continue to do that. My mother and father were environmentalists and I'm an environmentalist and so are you. We're going to protect and conserve the life in this province.

Fishing has been expanded on the Paddle River. In the past the Paddle River flooded, destroyed, affected, impacted by erosion, by new channelization. If you look at a map of the old Paddle River you'll see hundreds of oxbows in a matter of 20, 30, or 40 miles. You would have flood and you would have erosion, because we're talking about soft soils. We're not talking about mountain streams, with rock that has water flowing through it, where channels have evolved through hundreds and thousands of years. In the Paddle River fish would die, spawning areas would be destroyed. It was a natural phenomenon, true, and one shouldn't really interfere with nature. But you've got to protect life too.

With the Paddle River dam, we now have protected that. There's a constant flow. The reservoir has been stocked with a variety of fish: perch, pickerel, trout. You can go there and fish today if you want. You can leave your car, and you can go. We've created there a trout pond that has been stocked. There's a campground, picnic tables, washrooms, boat launch, a complete recreation facility for grandfathers, grandmothers, grandchildren, and parents to go to -- lots of life around it.

There's animal life and wild game that comes in water and washes itself at the reservoir. There's an absolute increase in the number of game animals we have in northwestern Alberta. In fact, my constituents are now mad because of all the hunters that come out of Edmonton and want to kill Bambi and the moose and the elk. But they wouldn't come unless we had an increase, and we have that when we have water conservation and preservation.

I'm sorry, Mr. Member, about the little bit of emotion with respect to the word "environmentalist," but I am an environmentalist.

MR. R. MOORE: Mr. Chairman, I appreciate the explanation the minister has given, and I concur wholeheartedly with his explanation of an environmentalist.

There is another area that we in two-thirds of Alberta find hard to understand when we look at southern Alberta and their irrigation projects. You explained it very well, and when we look on the map they're very extensive. They include a lot of dams and a lot of reservoirs throughout the area. But two-thirds of Alberta seem to have got the idea -- some of them in that two-thirds that don't understand the need of the water in southern Alberta -- that somehow, every time we build a reservoir for irrigation or a dam, this is just part of a long-term goal of this government for inner transfer of water and export of water to the U.S. Now, I have a lot of constituents that keep writing me and saying this. I don't believe it; it isn't one of ours. But I'd like to hear it from you, Mr. Minister, to explain that this water is managed for Albertans, it's needed for Albertans, and that this myth promoted by some groups -- and I must bring the media in again; our media friends should be informed of the facts on this. Could you explain this area of myth that seems to circulate?

MR. KOWALSKI: Thank you very much, Mr. Member, for the opportunity. In November of 1987, I gave a speech to a major water management conference that was sponsored by the Northern Alberta Development Council in Grande Prairie. I repeated what I had repeated on numerous occasions, what my predecessor had repeated on numerous occasions and what his predecessor had repeated on numerous occasions. I've taken now to the task of getting my speeches all printed and being made available, and even handing them out to people as soon as I give the speech.

Then in the first week of December -- and you'll recall me inviting all members of the Assembly to come and join with me when I gave a major overview on the environment to the Environment Council of Alberta in Edmonton. I particularly asked, I think, the Member for Calgary-Buffalo to come. He didn't come that day. And when I gave a speech to the Environment Council of Alberta -- it was a 55-minute speech -- we went even beyond getting the speech printed; we had it taped. So I can now provide the tape to anybody in Alberta who wants to talk about it.

I made it very, very clear that in the province of Alberta we have six water basins. We have basically the Peace River basin, we have the Athabasca River basin, we have the North Saskatchewan River basin, we have the Red Deer basin, and then sometimes people call the South Saskatchewan and the Oldman River as one basin together or just identify the South Saskatchewan basin and the Oldman River basin as two separate basins. So you either have five or six, depending on your definition.

It's been the policy of our government, the government I am a member of, the Progressive Conservative government of Alberta, that we will manage, control, preserve, and protect the most precious of all resources we have, called water. Secondly, we said that nothing would happen in terms of interbasin transfer. Nothing would happen in terms of interbasin transfer, period. Now, individual members of the Assembly may advocate interbasin transfer as they wish, and in the past the late Member for Chinook found that to be extremely important to him. I've recently heard a magnificent speech by the Member for Little Bow who strongly advocates that particular thing. That's the right of an elected person in our province: to advocate positions that they believe are very important to them. The

position of the government is that we do not advocate interbasin transfer. We have no plan, we have no agenda -- public, hidden, or still to be manufactured or fantasized -- that would see the export of water from one basin to another basin, ultimately to the American border, and crossing into the United States of America.

Recently the federal Minister of the Environment, Mr. McMillan, made it very clear that Canada -- Canada -- is not in a position to export water other than that water which could be exported by tankers, because British Columbia has said they want to send tanker loads of water from certain parts of British Columbia to certain parts of the United States. I worked with the federal Minister of the Environment as the former president one year ago of the Canadian Council of Resource and Environment Ministers in terms of the development of a water policy for Canada, and of course, as the Minister of the Environment, will work with the federal Minister of the Environment with respect to this matter.

Now, irrespective of all of that -- gee, I'm delighted you asked this question -- when I gave my 55-minute speech to the Environment Council of Alberta, which is in writing -- which is in writing; every word was put down, capitals, commas, periods; had it taped to boot -- we then had two newspaper reporters giving you two entirely different versions of my speech. When I said we are not . . . The Calgary Herald staff writer: "MLA vows Alberta won't sell its water." Headline, Calgary Herald.

If you live in Edmonton, you get a slightly different version of that same speech; in fact, it's 180 degrees different: "Province 'could' consider water diversion -- Kowalski."

So, Mr. Member, if you want copies of my speech, I'll have it available to any one of your constituents or anyone else. If you'd like a copy of the tape, I'll make it available for you. They told the public meeting, for anybody in your constituency, that you can show them exactly what I said, what the position of this government is, what the position of the people of Alberta is with respect to this. We're not talking about fantasyland here; we're talking about reality.

MR. CHAIRMAN: Thank you, Mr. Minister. We appreciate the enthusiasm in your answers, but perhaps we could shorten them just a little bit. I know these are important subjects, but there are 10 members still wanting to ask questions.

I recognize the Member for Ponoka-Rimbey, followed by the Member for Calgary-Mountain View.

MR. JONSON: Yes, Mr. Chairman. Still talking about the irrigation headworks and irrigation systems, this very significant amount of money was necessary because the system had been allowed to deteriorate over a period of years.

My initial question would be: what is going to be the life span of the current projects as far as these irrigation systems are concerned? Maybe it could be a little bit more clear: how much in the way of maintenance is involved here? What can we look for in terms of the lasting effect of this major effort that's been made?

MR. KOWALSKI: The infrastructure that's currently being designed is being designed for a usage of a minimum 50-year time frame. Some of the infrastructure -- the canals -- have been in effect for nearly 75 years, and we would anticipate that it would probably be upwards of 50-plus years minimum before any major kind of rehabilitation would have to go into it.

MR. JONSON: A supplementary, Mr. Chairman. One of the reasons that has been given for the massive effort that was needed here was that there was a lack of an ongoing maintenance program for the system. I wish to ask the minister what provisions are now in place to see that the headworks, and particularly the canals and so on, are going to be adequately maintained for the next, I think he said, 50 years or whatever. What is the system in place now?

MR. KOWALSKI: The system is a very simple one. Alberta Environment owns the headworks and the main canals, so it's the responsibility of the provincial government to deal with it. It's an ongoing responsibility that we have as a provincial government, the same way that we have responsibility for the maintenance of roads -- primary highways.

MR. JONSON: One other question, then, given that answer, Mr. Chairman. I would just want to be clear here because I'm not quite convinced that it's exactly the same as roadways. Is there any effort at cost recovery for those maintenance costs now in place?

MR. KOWALSKI: Yes, there is. Within each district, of course, the districts operate themselves. I'm not sure if you've had the Minister of Agriculture before you yet, but the Minister of Agriculture is responsible for the other program that deals with the irrigation program, and that's the internal program dealing with districts. Within each district, of course, each user has a responsibility by way of a tariff, et cetera, to support the local district.

But, Mr. Member, the province of Alberta doesn't charge the users of highways every time they put their automobile on the highway, other than a very modest tariff called a licence, which is so infinitesimally small that there's nothing in relationship in terms of the cost of maintenance. Users of water in southern Alberta, of course, have a personal investment of their own. An irrigation pivot might be as high as \$50,000, \$60,000, or \$75,000, in fact, for an investiture on one particular quarter of land. There are operating costs for that sprinkler typically in the area of perhaps \$25 or \$30 per acre to cover district water rates, taxes, fertilizer, and cultivation costs. There is, of course, a feeling always that one should always move towards a complete cost recovery of the usage of that, but we don't do that, by way of principle. For anybody who lives in the city of Edmonton and drinks the city of Edmonton's water, it's not the city of Edmonton's water; it's the people of Alberta's water that flows down the North Saskatchewan River. It just so happens that at this particular geographic spot, this municipality intercepts some of that water, changes the quality of the water, shuffles it back to individual homes at an administrative cost for that. But they do not pay; nobody in Edmonton pays for the cost of that water that's extracted from the North Saskatchewan River. That's a principle that's very important. Now, there are people who basically continue to advocate that there should be full cost recovery of this. There is not full cost recovery in the road maintenance program, nor in the usage of water.

MR. CHAIRMAN: Member for Calgary-Mountain View, followed by the Member for Stony Plain.

MR. HAWKESWORTH: Thank you, Mr. Chairman. Again I'd like to commend the minister on the volume of information he's given the committee regarding these programs under his respon-

sibility and tell that him that as one member of this committee, I very much appreciate the amount of information he has brought with him, not only this year but last year as well.

I guess one of the questions I'll ask him is similar to one I asked a year ago, in that since last year there has been a further cap on the money available to the Heritage Savings Trust Fund. There's no growth in the capital of that fund. There's no non-renewable resource revenue coming into it. All earnings of the fund are now being diverted to the General Revenue Fund, and in addition there is a 20 percent cap on the total assets of the fund that can go into the capital projects division, under which these programs are being funded.

So my question to the minister is in this sense. The funding for these programs under his department is going on as well as general revenue funded projects within his department, and I'd like to know whether these programs have a very high priority in comparison to the other funding in his department, so that if there is some possibility that the funding under the capital projects division has to be capped in some way because of legislation and policy decision and so on, can any of this funding be moved under the General Revenue Fund supported spending in his department? I guess maybe I'm asking him to take a few minutes to talk about what impact capping the fund is having on his department and the relationship it has to the other spending going on in his department.

MR. KOWALSKI: I think that by way of the two visuals I've given you, the cost dollars to March 31, 1987, and then comparing them to October 31, 1987, you'll note that the sheet that shows you to March 31, 1987, has a forecast expenditure for '88-89 of \$45 million. That's the upcoming fiscal year. But by the time we had had discussions of the type the hon. member has just raised, you will note that I have projected for fiscal '88-89 under the budget an expenditure level of \$41.4 million, a reduction of 10 percent. So there's been a very direct impact. I have also indicated that we would still meet the target and the program outlined by the year 1995.

So what it simply means is that we will make our contribution to fiscal management in the province of Alberta, recognizing the realities, by reducing the draws that we would want to make on the Alberta Heritage Savings Trust Fund by 10 percent beginning in fiscal '88-89, but you'll also note that the comparative figures for succeeding years have been increased as compared to the graph you see as of March 31, 1987. What I've basically done is reorganize the expenditure program and have not put any impact at all on the general revenue programs I have under Alberta Environment, because in that area I am determined that we are going to make pollution control enforcement, enhancement the major item.

MR. HAWKESWORTH: Okay. I guess we have to make some recommendations perhaps as to what the capping of this fund means in terms of funding for the capital projects division.

The minister, in his opening comments, made some reference to rehabilitating reaches, I believe it was between the Stafford dam and Sauder reservoir, which is being undertaken to correct leakage problems. As I look at this map, this appears to me to be an area that has previously been rehabilitated. Perhaps I didn't understand the minister's opening comments in reference to this, why we would be rehabilitating various reaches that had already been constructed or reconstructed in order to deal with leakage. I presume that's what rehabilitation had done in the first place. So I wonder if he could clarify his comments or ex-

plain those further.

MR. KOWALSKI: That was dealing with the St. Mary River Irrigation District main canal rehabilitation and enlargement section. I think what I said was construction work has also been initiated for the installation of seepage control measures on three earlier completed reaches, from Forty Mile to Sauder and from Sauder to Murray. The explanation of that is that the work was done in two phases. First of all, you build the canal, and then you go back and put in the seepage control infrastructure, which is essentially tile. So it's not that there was anything that was wrong with it. It was just the two-phase, the same way you build a road: build the grade and then go back and put the hardtop on top of it later.

MR. HAWKESWORTH: I appreciate that clarification, because, as it was originally explained, it seemed to me we were going back to redo work that had previously been done.

In his opening comments the minister also asked the committee to take up with the government this land reclamation program and ensure that ongoing funding is provided to it. He said that this is a good program and that there's lots of work to be done. He indicated, I guess from that, that there are lots of sites all over Alberta that require this land reclamation program. I would ask him if he could give us an overview as to what sites are required and if the quality of our environment protection is so low that we seem to be creating a lot of land disturbance problems that maybe couldn't otherwise be . . . Is there not another more effective mechanism that could be put in place rather than using the Heritage Savings Trust Fund program? That is, could we not just have maybe a better enforcement program so that those who do disturb the sites -- the cost and expense is placed on them, rather than bringing it out of the fund to reclaim?

MR. KOWALSKI: The reason is exactly the opposite of the words used by the hon. member. And I know he didn't mean to really say it the way he did. The projects that we would deal under this land reclamation one would deal with events that occurred in our province prior to several things in history that have happened. First of all, Alberta was the first jurisdiction anywhere to have created a Department of the Environment. The previous provincial government, the Social Credit government, in 1971 brought forward legislation that was impacted by the new government, the Progressive Conservative government, and Alberta became the first province anywhere to have a Department of the Environment. Secondly, after that phase in time, a whole series of new environmental laws were implemented during the early '70s, including land reclamation laws and the like.

So what we are dealing with under the land reclamation program are events that happened prior to those days that no one had any responsibility for, because it just wasn't a feature of life to say: "Okay, you have a gravel pit? Then you should reclaim it." Under all of the laws since then, we're covered with that. You've heard me say repeatedly that the polluter should pay. Those who have licences to do some things on the events of our current laws are responsible. In terms of events that happened before, we've accepted a feeling among the people of Alberta that there should be a responsibility, that we should all want to deal with them. And please don't misunderstand me. These are not significant environmental hazards. What they are is environmental scars. If you have an acre gravel pit -- and people drive down the road and say, "Gee whiz, why don't we do

something about doing that?" -- you can reclaim it by planting trees, by providing soil in it, allowing wildlife to move in it, or putting some water into it and allowing fish to grow through it. In essence, it's an environmental enhancement program. But the reason basically is that we're not covering things that people are responsible for today; we're covering where there was no element of responsibility before.

MR. CHAIRMAN: Member for . . .

MR. HAWKESWORTH: I have a second supplementary.

MR. CHAIRMAN: Sorry.

MR. HAWKESWORTH: I think the other part of the question was: where are those sites, or what sites are they that you are asking this program to be continued? What's left to be done?

MR. KOWALSKI: Well, there can be everything from a small, little gravel pit here or it could be... You know, in the city of Edmonton they had an old garbage dump and they made a golf course, a recreation area, in northwest Edmonton. In the town of Westlock, they had an old...

MR. McEACHERN: We're not caught up yet. How much is left?

MR. HAWKESWORTH: We're just asking: what's the inventory that's left to be done? Have you any estimate of that?

MR. KOWALSKI: No. I can't give you that number, simply because we basically tell people: "Look, if you have ideas, just forward them in to us. If we can cover it, we'll do it up to the level of the funding for it." But I would imagine that there would probably be several hundred or more of the minor type.

MR. CHAIRMAN: Member for Stony Plain.

MR. HERON: Thank you, Mr. Chairman. Mr. Minister, you have been applauded today for the detail and the information that you've presented. I suppose I'd be remiss if I didn't mention your enthusiasm, the same kind of enthusiasm that got you into trouble last year when you attempted to be the Wayne Gretzky of Barrhead and thundered into the boards and suffered your unfortunate accident. It gave me the opportunity, and I'd like to thank you at this time, for being able to stand in for you on the national task force and the Canadian Council of Resource and Environment Ministers. There -- I bring this back to you -- they also applauded your enthusiasm, commented on how well prepared you were and that you are not dissuaded by detail or hard work. You set a very fine standard for Alberta in the years to come.

I also gained an appreciation of just how far Alberta was in terms of its environmental control with the rest of Canada. Many of these controls are made possible through the investments of the heritage fund.

You have, in some detail today, talked about what they called the second wave of environmental control, beyond the container Act, beyond garbage reclamation and cleaning up. We're into soil conservation, reforestation, and many of the policies that they're trying to advocate in terms of designing a conservation strategy which Alberta has had for some time.

So, Mr. Minister, I'd like, just for a moment, to zero in on

the reclamation project with my first question, and that is -- just last evening I spoke with the mayor of the summer village of West Cove, Jim Chorley, who said to bring accolades for your reclamation projects to their small community, which has a tax base of probably some \$50,000; to reclaim a 30-year dump of three acres and turn it into a hay meadow was next to impossible. He said that he applauds expenditures of this type and, if there's any way, to keep them up. Do you see, working with these reclamation projects, any cutback in the regional waste management systems?

MR. KOWALSKI: Well, the waste management program that you're talking about is one that comes under the General Revenue Fund of the province. As I recall here, in our current fiscal year, I think we've got some \$5 million allocated in that area. Basically, what it is a program that was created a number of years ago as an incentive carrot program to do one thing, and that is to reduce the number of landfills in our province. What we said at that time was that if two or more municipalities came together to create a regional system and reduce the number of landfills, we would provide dollar assistance from the province for a new, better, innovative, futuristic system. Some 20 or more systems now exist in Alberta. I think nearly 300,000 people have come under them, and we've invested, as I recall, something like \$30 million or \$40 million in that regard as well. So it's not impacted by this particular program.

But there is one thing that I have talked about. What I basically said is that what we do right now is the province provides 100 percent of the funding, and I think that's too rich. I've talked to a lot of municipal systems, and they said they think that's too rich too. They think they should be able to contribute. So what I'd like to do — and it may very well come about during 1988 — is to see a reduction in terms of that program but take the dollars and then put it into recycling initiatives. I want to really expand the whole concept of recycling in our province. I can't really go to the Provincial Treasurer and say, "Look, this is more important than providing health care facility services or education services." But this is something I want to do. So basically, I would like to deflect some of that money and put it into recycling, because I think that's the next wave; that we've really got to get with it.

MR. CHAIRMAN: Succinct supplementary, Member for Stony Plain.

MR. HERON: Mr. Chairman, I've noticed that in the past two days, in the interests of fairness, I've been called upon to be succinct and that, but I notice the hon. Member for Calgary-Mountain View, or Her Majesty's Loyal Opposition, was granted from 11:16 to 11:23, or a seven-minute preamble, without comment. I know your desire to be as fair as possible. For that reason, I started my preamble at 11:28; it's now stopped and the answer was well under way at 11:31, a full three minutes. As you know, we try to accomplish twice as much in half the time. I ask for your sense of fairness in dealing with my further supplementaries.

MR. CHAIRMAN: We appreciate having an in-house timekeeper, but I would appreciate the succinct supplementary as well.

MR. HERON: Thank you, Mr. Chairman. Mr. Minister, as you recall, back in history the Brazeau dam was accomplished with

great opposition, as was the Paddle River dam. I recall very vividly the Hon. Dave Russell being burned in effigy over the Dickson dam, and you spoke at some length about the Paddle River dam and the great attributes of it. Is it characteristic of these developments that you go through a period of great opposition and then, as the reforestation and fish-stocking is completed, you go through a period of appreciation?

MR. KOWALSKI: Well, I don't think you go through a period of great opposition. What you do is go through a period of sensationalized opposition brought forward by perhaps small numbers of people and festered because, hey, it's good play. If I were a member of the print media and it was a poor day, I'd probably create something and get on with it. It's also a kind of emotional issue for some people. But all in all it seems to be part of the history of the whole development. So I recognize that it will be a part of it. I also recognize that for 50 bucks anybody can go and make an application before a Court of Queen's Bench, and the taxpayers and others spend thousands and thousands and thousands of dollars. But for 50 bucks it's your democratic right. So that's part of the democratic process. It's part of the give and take; it's part of the ebb and flow; it's part of the weave and the bob and the move. Most of all, we have to remember what the reason is, and that of course is to protect and enhance our environment and conserve our precious resources.

MR. HERON: Thank you, Mr. Minister. One very succinct final supplementary. Not that I want to have the present minister burned in effigy, but you did mention the great attributes of the Paddle River dam and you introduced the Pembina. As you know as a recreational flyer, there's nothing more obvious than unsightly dumps or uncontrolled water, and I think of the Pembina. Of course, you just move right into the Sturgeon River system. Our most valuable environmental attractions to tourism, of course, are our lakes. I think of Lake Isle, Lac Ste. Anne, Big Lake, all the way down, and you see the most unsightly river -that is, the Sturgeon River -- spoiling fish spawning grounds in high water, wasted cropland, and the rest of it. Would the minister consider, rather than, say, turning back money such as he did for the Magnolia project, an expansion of the control of, say, the Pembina-Sturgeon system and perhaps enhance three lakes in doing so?

MR. KOWALSKI: It was the Manola project. Manola is a little place just east of Barrhead that believes it's the geographic centre of Alberta. So we should call it Manola rather than Magnolia.

MR. HERON: Thank you.

MR. KOWALSKI: In fact, I like the people there very much, and they seem to like me too, so it's kind of important that I say that.

I'll certainly consider what the hon, member said,

MR. CHAIRMAN: The Member for Calgary-McCall.

MR. NELSON: Thank you, Mr. Chairman. I'd like to also thank the minister for his dissertation this morning. It's been interesting and, I hope, full of facts.

Water, of course, is certainly a very important resource to Alberta, and I think we all recognize that. Unlike the Member for Lacombe, I'm not going to take a shot at all the media.

There might be some that you could, but certainly there are very responsible people in the media, I think mostly in Calgary.

In any event, there is another area that's certainly very important to Alberta, and that's our forests. Under the minister's operation here, we have the area of the Reforestation Nursery. I would certainly recommend that all members go and have a look at it. In my opinion, it's probably one of the best investments this province has ever made in the area of maintaining our forests. I'd like to know if the reforestation program of the province of Alberta today is continuing with the replacement of 100 percent of all the trees -- and I guess I should talk about coniferous trees -- the replacement of these coniferous trees either by the private sector by logging them off, by fires or other damages, by removing them for public needs such as roads, et cetera. And if not, why not? If so, do we have moneys available in our budgets from the fund, continuing to avail ourselves to completely replace these trees that are being removed?

MR. KOWALSKI: Mr. Chairman, I'd be delighted to make some comments, because trees are very important. They really protect and enhance our environment, the air and part of the environment.

MR. CHAIRMAN: Could you save a little for the minister of forestry?

MR. KOWALSKI: Yes. I was just going to point out that the two items identified in the report under Alberta Reforestation Nursery and maintaining our forest projects come under another minister's responsibility rather than my own, although they are part of the environment.

MR. NELSON: Well, how about that.

Thank you, Mr. Chairman. That was my main interest in this particular area. Everybody else was dealing with water, and I thought it was certainly an environmental concern.

MR. CHAIRMAN: Thank you. Member for Calgary-Buffalo.

MR. CHUMIR: [Inaudible] questions about the magnolias.

Thank you. I'd like to welcome the minister here as well. I'd like to deal with the issue of the land reclamation program. The minister asked for ideas and suggestions at an earlier stage of his comments. I think my neighbours would probably suggest that you might start with my yard.

Now, we're dealing here with the heritage fund estimates, and I understand we have limited funds. I note in respect of this program that in last year's comments, the minister stated he had such a degree of enthusiasm for this program that he could "be drawn into deals with the General Revenue Fund." In the realm of ideas and suggestions, I'd like to raise a question which is of current concern in Calgary relating to the costs of cleaning up the site of the former Imperial Oil refinery. It's presently called the Beaver Dam Flats Park. A recent study has been released which indicated that this would cost between \$2 million and \$4.5 million. This is a matter of great concern to the residents of the city of Calgary, and I'd like to suggest it appears reasonable that some provincial contribution be made in respect of that cleanup. I know the Department of the Environment has been involved in the philosophy of what form the cleanup will take, and I'm wondering whether the minister might advise whether or not there has been a request from the city of Calgary with respect to sharing the cost of that cleanup and what the government's position is with respect to that issue.

MR. KOWALSKI: Sure. For the first time, I guess, really in the last number of days we've now got a pretty good idea basically of what the cost of reclamation of this particular site might be. When the event that happened a year ago sort of brought it to a head, one was not really sure at that point in time. The difficulty I have with the type of question raised by the member is that in the parameters I've already outlined under this land reclamation project, essentially we're talking about reclaiming land that had been somehow scarred before we had certain laws and rules in our province. I've also said repeatedly that it is the philosophy of moi and the government of Alberta that the polluter should pay.

Now, in this case we have this difficult situation where a private-sector firm, Imperial-Esso, had owned land. The municipality then undertook to purchase the land and presumably purchase the land either with liability or without liability. I've said repeatedly that this is a responsibility that falls to the owner of the land. This is not abandoned land. This is not something that's happened without rules. We've had rules. We've got regulations in our province. But I also recognize the impact of this on the municipality of Calgary. So it's a kind of dilemma. I've had requests going back to a year from the mayor, who basically said, "Give us the money, specific dollars, to do the consultant study." I very politely wrote back and said, "Gee, you can't do that" — I think the mayor got mad at me—"because of the principles I've already outlined."

Now that we have a better idea as to where we're at, I'd be happy to look at it to see what could be done. I'm not sure that we could do anything under this program because of the magnitude of it. If we're looking at 123 projects around the province with a \$2.1 million program and we're asked to look at something that's happened in the city of Calgary where a duly elected municipal council knowingly purchased a parcel of land that had a former refinery on, is it the responsibility of the citizens of Alberta to deal with that matter? There's a difficult principle here that I have to be faced with. On the other hand, I'd really like to help as much as we could. So I appreciate the petition made by the member, but if we were to provide those dollars, we'd wipe out this program completely.

MR. CHUMIR: I'm not clear whether the minister has stated that the principle that concerns him is whether it's ownership of the land by the city of Calgary that is inhibiting him or whether it's the concept of potential legal liability on behalf of the polluter. If it's ownership, is he saying then that none of the projects for which assistance has been given under the land reclamation program are owned by anybody or a municipality? I don't see that as being the case, and I can't understand why that would be a philosophy that would have to pertain in this instance and not in respect of this program in general.

MR. KOWALSKI: No. What I'm saying again is that this program, the land reclamation program, essentially deals with scars on the environment that occurred prior to several events happening: one, the creation of a Department of the Environment of our province; two, the creation of the new laws, land reclamation laws that were brought into effect in the early 1970s. That's what the purpose of this program is. The request the hon, member is making now deals with an event that transpired in the late 1970s — in fact, 1977, as I recall correctly—when a duly elected council, city of Calgary, purchased a par-

cel of land from Imperial-Esso. That happened after we had the laws to clean up stuff that happened before. So the difficulty I have is that if you've got two knowing partners, surely in the law environment there must be a way of allocating who might be responsible. Quite frankly, the bottom line in all of this is that I think Imperial-Esso should be a model citizen and reclaim it, period. What I've been attempting to do in the last year is to bring everybody to that realization, and I've said it publicly for the first time. I think it would be great corporate practice, and I would probably even send a letter to the president of Imperial-Esso of Canada Limited saying what a wonderful corporation it is for doing that.

MR. CHUMIR: I'm sure they're awaiting the letter with anxiety, Mr. Minister.

The minister has recently set in motion a program of identifying waste dump sites throughout the province. I understand there are in the range of 1,100 or 1,200 of those that have been identified, if I recall my numbers correctly. I'm wondering what the government plans are with respect to proceeding with the cleanup of those particular sites and the role the government envisages for itself in funding those cleanups, whether through the heritage fund or through other budget sources.

MR. KOWALSKI: Sure. The member is dealing with the response to the help eliminate landfill pollution program, the one that we created in the summer of 1986. I reported publicly in July of 1987 that we had identified, as a result of all the input from people, companies, firms, and what have you, some 600-odd sites, not 1,100. And we identified in that a small number of sites that would have to go for further evaluation. I also indicated that by the end of 1987 I hope to be in a position to publicly make some statements with respect to these additional four or five sites we looked at, and in a matter of a few days from now I'll basically report -- but I guess I'll tell you now and report this way -- that we found nothing. So basically there is no draw on the public revenue of the province under that program.

What we've got now is a good base of information with respect to that, but I want to reserve the right, the need, in the event that we do uncover, because the program's an ongoing one, an abandoned site that no one seems to — it may be in somebody's name, but if they died and it's been willed to the Salvation Army, I can't go after the Salvation Army to reclaim a two-acre parcel of land that somebody willed to them 43 years ago. In the event that we would have to go in and do something in a hazardous situation, it wouldn't cost very much, for the most part, to exercise an option under this program, but we have not had to do that yet.

MR. CHAIRMAN: Member for Lethbridge-West, followed by the Member for Little Bow.

MR. GOGO: Thank you, Mr. Chairman. Mr. Minister, like the fellow who married the widow with eight kids said, it's really all been done.

I have a couple of questions. Many of us in the south are well aware, Mr. Minister, of the history of the lack of water in southern Alberta. Anyone who has read the trails and memoirs of Captain Palliser is very familiar that what's been done in Alberta has astounded, I think, the rest of the world in terms of the irrigation system.

I have a couple of technical questions I want to put, however. I don't argue for one minute the expenditures of your depart-

ment in the headworks and providing the availability of water for those who want to use it. However, a matter came to my attention not long ago regarding Pinepound coulee. I wanted to raise it with you and get reaction. Surely you would agree, as I'm sure most members would agree, that not only is the expenditure of the money important but the efficient expenditure of the dollar's important. I'm informed that you've set a requirement that they must have a cement-mixing plant on-site in the Pinepound coulee area, and yet my information is that Lethbridge Northern has carried out projects up to 75 miles away being able to transport the concrete, for example, from Lethbridge, because they use ready-mix and, to my knowledge, the only requirement is that it can't be mixed for longer than two hours.

So, Mr. Minister, the first question. I'm informed there's an extra cost of some \$750,000 involved in establishing that plant in the Pinepound coulee area as opposed to moving it from Lethbridge. I wonder if you could explain to the committee if it's for safety or other reasons why this can't be carried out by a mixing plant transporting it from Lethbridge.

MR. KOWALSKI: Thank you very much. The Pinepound coulee project is one that's under construction right now, and of course the subject matter of the one the hon. member has raised is one I think I will defer to one of the people we have administering the specifics of the program, Mr. Thiessen. Mr. Thiessen, can you add some information to this?

MR. THIESSEN: Well, specifically with regard to the importance of the structure at Pinepound coulee, I would say that the water of the main canal below the St. Mary reservoir is carried across a natural depression area called Pinepound coulee. The reason for this structure is to convey the water across that coulee, doing it in a closed pipe. The pressure at the bottom of that pipe is something in the order of probably 30 pounds per square inch, using the old measurements. The structure is being built during the winter months, so when the specifications were prepared, the engineer specified that concrete should be mixed on-site. The main reason for it was quality control, as opposed to some other structures such as routine checks or turnouts that do not have the same water pressures exerted against them. So quality control was the main reason. I know there are structures on the Lethbridge Northern system, such as the diversion headworks and the flume, which are shown here, where concrete was either mixed on-site or hauled from Fort Macleod, which is considerably closer.

MR. GOGO: Thank you, Mr. Minister. Although the distribution system is under the Minister of Agriculture, I'm sure most Albertans would equate not only environmental issues but irrigation issues with you as Minister of the Environment. I wanted to raise a question to see if I could get your opinion with regard to private irrigation systems. I understand there are about 150 of them in southern Alberta, people who have put irrigation systems in at their own expense, yet in no way do they participate in terms of funding from either the Department of Agriculture or your department. Would it be your view, Mr. Minister, that with the great importance of diversification in southern Alberta and the growing of specialty crops, there should be some program in place, either from you or from the government, with regard to assisting these private irrigation systems, particularly in the area of the Waterton-St. Mary headworks system?

MR. KOWALSKI: I don't think there's any doubt at all, Mr. Gogo, that over the years, as this program has allowed increasing numbers of people from an agricultural point of view to access it, there are still, of course, those distances away who basically have found their own source of water on their own initiative and basically manage and operate their own farm system. So on the one point they would make the very legitimate argument, "Look, on the one hand you're doing this, and on the other hand you haven't done it for us." I guess really from a point of principle it's no different from a person saying, "Well, I've lived in this area for a great period of time, and I want a paved road coming past my home." Then somebody seven miles away says, "Yeah, but I want it past my home too." You can't cover them all at this point in time. Hopefully history will allow us to preserve, at least to a greater degree than we are being able to today, that we'll be able to deal with those people.

Frankly, I've thought about the very specific question: what do you do about people who are involved in their own system? I simply have not in my own mind found a satisfactory answer. I know the hon. member has raised it on previous occasions as well. I simply don't know if we have the fiscal capacity right now to provide those individuals with something somebody else might be getting. I guess the only way I can really say it is that if you live within half a mile of a primary highway, the wear and tear on your car to get into that primary highway is going to be a lot less than if you lived 20 miles away. There is a choice factor here, I guess, if the individual is to be involved in it. But I will continue to struggle with the question as posed by the member.

MR. GOGO: Thank you, Mr. Minister. Your support would indeed be greatly appreciated by those farmers in the south. I look at the hour, Mr. Chairman, and I want to put a question. The minister or you may choose to rule it out of order, but I've had many constituents in Lethbridge raise with me the following question. It concerns the Oldman dam and its use. The question is: in that the long-term requirement of Alberta in terms of electricity is clearly delineated in all the studies we see — the only difference is the time — have we considered, and will we consider, the implementation of hydro capacity on the Oldman dam? Is there a time frame as to if it is possible, and when might it be possible?

MR. CHAIRMAN: It's really not a relevant question to this committee. But again, if the minister wants to give a quick response, we can then move on to the Member for Little Bow.

MR. KOWALSKI: Mr. Chairman, I'd be delighted to answer that question, but I'm alerted to media reports -- again, media reports, and maybe one shouldn't be allergic to them -- that a certain group is going to be making an application to the Court of Queen's Bench to interfere once again, or stop, or halt the construction of the Oldman River dam. The argument they will be making is the fact of something to do with hydroelectrical power. I think, in terms of my responsibility to protect the interests of the people of Alberta, that I should defer comment at this time.

MR. CHAIRMAN: Thank you.

MR. GOGO: Mr. Chairman, just for clarification, the minister said he was either alerted to the media or allergic to the media. I'd like him to clarify that.

MR. CHAIRMAN: The Chair appreciates the efforts that are being put on media liaison this morning, but perhaps we can move on to the Member for Little Bow.

MR. McEACHERN: Mr. Chairman, I wonder if we could just ask the minister to come back another time. Three out of the four opposition members did not get in today, so rather than rush in one question with three minutes left, why don't we ask the minister to come back another time?

MR. CHAIRMAN: The Chair recognizes the Member for Little Bow.

MR. R. SPEAKER: Mr. Chairman, I'd like to welcome the David Letterman of Alberta to our committee meeting, and I appreciate all the good information. I appreciate all the excellent information. To be short, my question is with regard to the Lethbridge Northern Irrigation District, the diversion into the Keho Lake reservoir project. What I want to ask is: over the years I've traveled that diversion a number of times and have noted with the assistance of farmers the spread of alkali and land out of production. Have you a formal study or a follow-up study taking place at the present time that will observe the receding line of alkali, or is it just going to be a general observation that the land is improving? Are we going to do something formal that would actually substantiate one of our earlier claims, as persons supporting this kind of rehabilitation works, that we will be able to reclaim land and alkali will recede?

MR. KOWALSKI: It's my understanding, Mr. Member, that once the excess amount of water has been taken away from the land, in essence the land will reclaim itself very quickly, in a time frame of three to five years.

MR. R. SPEAKER: There are no formal studies. There is just going to be a general... I asked if there was going to be any...

MR. KOWALSKI: That would be available, on salinity and soil salinity and the like.

MR. THIESSEN: There's ongoing monitoring.

MR. KOWALSKI: And ongoing monitoring as well, Mr. Thiessen indicates. But I just answered in a very general way that once the excess water seems to be removed from it, the land will reclaim itself in a period of generally three to five years.

MR. R. SPEAKER: The other question I raise in the last 30 seconds with regard to that is with regard to one of the earlier reports that in terms of the Oldman River basin indicated that just this diversion into the Keho area would be adequate to supply irrigation water for Lethbridge Northern Irrigation District. However, there could be -- I think the report said -- the possibility of a two-year shortage of water at some time, where there may be rationing. That was the purpose of supplementing our diversion with the dam on the Oldman River. Could the minister comment on that at the present time? Would that observation still hold even with the rehabilitation that's gone forward and the creation of a larger Keho Lake?

MR. KOWALSKI: I think the possibility of water rationing remains. The difficulty, of course, is that we have no idea as to

what the snowfall in the Rocky Mountains is going to be. When that runoff comes in the main in June of each year, the difficulty I seem to have every latter part of June is adjudicating what water will be allocated under the irrigation systems to a number of farmers who want it. You take too much water out, of course—you have no way of knowing what the weather's going to be like in July either. The weather gets warmer, the oxygen level in the water goes down, and we have fish-kill. We have to be very careful of that.

I can't tell the hon, member specifically what will happen other than in the last four months in our province we've had no moisture. From September through the end of December in Alberta, we've literally had no moisture at all. Information released very shortly in the next number of days will indicate that the snow cover in the Rocky Mountains area is at a very low level, a critically low level. We don't know what'll happen the next four months, but if we go through a period of minimal amount of snowfall in the Rocky Mountains and we don't have the kind of rains we normally have, we may be facing very severe shortages of water through the latter part of 1988 in a large part of southern Alberta. Of course, that's the reason why we're building the Oldman River dam.

MR. R. SPEAKER: So there's no new information that's been made available since that earlier report which would have changed that recommendation?

MR. CHAIRMAN: On behalf of the committee, Mr. Minister, I want to take this opportunity to say thank you, and thank you to Mr. MacNichol, Mr. Thiessen, Mr. King, and Mr. Litke for being with us this morning. We appreciated the information you shared with us. There are, unfortunately, a number of members that are still on the list of questioners, and perhaps after you've caught your breath, we could arrange for a short return to the heritage trust select committee.

MR. KOWALSKI: Would you mean, Mr. Chairman, today?

MR. CHAIRMAN: No. We've got a meeting scheduled this afternoon, but perhaps Mrs. Quinn can get in touch with your office and see if we can arrange it. I don't think it would be a lengthy thing -- perhaps 15 or 20 minutes, half an hour at the most.

MR. KOWALSKI: Mr. Chairman, I'm of course the servant. Thank you very much for this morning.

MR. CHAIRMAN: Thanks again. The committee stands adjourned until 2 p.m., when we'll be hearing from Community and Occupational Health.

[The committee adjourned at 12:02 p.m.]