

referred a moment ago, marks a beginning in this area, but we need to go much further than they are able to go.

In digging into this subject I was reminded that in the late twenties, when I was a student taking geology at the University of Alberta under a very distinguished geologist, Dr. Ralph Rutherford, he said at that time, which was 37 years ago, that water conservation was the single most serious problem Canada would have to face in the years to come. He referred to the very serious lowering of the water table from one end of the country to the other. As evidence of that he referred specifically to the Peace River country at that time; but now every time we have a dry spell in Ontario the wells in the Ottawa Valley go dry. It is just one more piece of evidence of the fact that the water table is going down literally before our eyes.

To the westerner, who has seen the tumbleweed and wild mustard in Alberta, Saskatchewan and British Columbia, three inches of rain is the biggest fact of life, and what we do with that moisture, how we conserve it, is the most important issue in that country, because three inches of rain spells the difference between 40 bushels of wheat to the acre and 5 or 6 bushels. It spells the difference between fat cattle on the range lands and thin, scrawny cattle getting a bare living on Russian thistle. So, we in the west are particularly concerned with the matter of water conservation.

As evidence of what water conservation and control can do I would refer to the Lethbridge Northern Irrigation District as one of the pioneer schemes. This whole area of southern Alberta between Lethbridge and Medicine Hat in the twenties was almost a desert, and we had an exodus of people which was one of the saddest sights in this country. When that irrigation district was put on a sound economic basis the country began to prosper and develop. One can go around the area of Raymond, Taber and Lethbridge in the fall and see that it is literally a land of milk and honey, a very productive land, with many healthy and prosperous communities.

Also one can go down, as some honourable senators may have done, to the Grande Coulee Dam. I remember that in the thirties we used to drive across a desert from Spokane to Seattle, and we had to take extra water for the car because if the radiator boiled dry there was no place at which to get water. That whole area of the Grande Coulee

in Washington was literally a desert. After the dam was built irrigation was started and the whole country blossomed like a rose, and it is now one of the most productive agricultural areas of the United States. That area has gone from a desert to a garden in ten years.

I spent some time in Arizona in the winter of 1954-55, and I was interested to find that that small state of some three and a half million people had spent \$36 million in making concrete runways for their irrigation canals, and putting concrete covers over the canals so that they would not lose as much water by evaporation. Those who have heard the story of the wetbacks crossing the Rio Grande to get into the United States find it rather amusing to see the Rio Grande today. When I was there, there was not enough water at El Paso to wet your feet, let alone wet your back. What rivers there are in that part of the country are empty. The water is in the irrigation canals and is being radically conserved.

If honourable senators were to drive from Calgary to New Orleans, a distance of 2,700 miles, as I have done on more than one occasion, they will find that 2,200 of those 2,700 miles is mostly desert land. A tremendous proportion of the American country is dry.

There was some criticism a few years ago when the Government of the day initiated the South Saskatchewan Dam project. I was one of those who supported it from the very beginning. While it is a costly project, it is something that will pay for itself ten times over in the years to come. It will completely convert the life of that country from an unstable, one-shot economy to a healthy diversified and prosperous economy. If you go into my own Province of Alberta and visit the Milk River Dam you will see the same results.

People are concerned today about the proper use and conservation of this resource, and it is high time. Programs like the P.F.R.A. in modest form have changed the basic livelihood of dry area communities. The Special Areas Board, which operated in some areas of Alberta south of Hanna in the twenties, made a start with these first dams. People dammed up coulees and runways in order to grow feed. That was the start of the P.F.R.A. program, although it had no such name at