

The Conservation Authorities Act which was passed by the Ontario Legislature in the Spring of 1946 was explained to the Committee in a brief submitted. This Act enables all municipalities in a watershed to form a Conservation Authority which is a corporate body. The prime concern of the Conservation Authorities has been with the control of flooding and the increase of summer flow of their particular watercourses. Because of the need for protection of source areas of stream and rivers, the related aspects of land use have also concerned the Conservation Authorities.

When a Conservation Authority is incorporated, the provincial government of Ontario undertakes to appraise the conservation needs of the watershed. This appraisal is submitted to the Authority in the form of a detailed report. The report is written under six general headings: History, Land Use, Forestry, Water, Wildlife and Recreation. The findings are reported related to the major needs to be solved. When a scheme is undertaken by an Authority, it receives assistance both technically and financially from federal and the provincial departments of government. The brief outlined the assistance available in detail.

The enthusiasm with which the Act was received is indicated by the number of Authorities which have been formed. There have been 29 Authorities incorporated since 1946. The present area covered is 19,671 square miles; the number of municipalities, 434; and the total membership, 695. The total cost of engineering projects completed to date has been about 19 million dollars.

(f) *Water Conservation in the Prairie Provinces*

A brief was received by the Committee which discussed water conservation in the Prairies based upon 20 years of soil moisture research at Swift Current, Saskatchewan. The results it was pointed out are applicable to the wheat growing areas of the West. Water conservation in the context of the brief referred to storage in the soil of water from rainfall and snowfall and its subsequent use by crops.

In the brief various losses in water conservation were discussed. The greatest loss of water was through evaporation and the next most important loss of water was runoff before the frost leaves the soil. Other losses of water occur through deep percolation and through weed growth.

This brief discussed differing cultural practices which affect water conservation. It also pointed out the value of field shelterbelts especially in controlling erosion caused by wind.

The Committee received a brief which discussed the soil and water conservation activities of the administration of the Prairie Farm Rehabilitation Act.

As with the other briefs, it is not possible in this report to discuss all that was covered in this submission. It discussed the setting up of additional District Substations, land reclamation projects, regrassing and grazing research. It also reported on the work of the Prairie Farm Rehabilitation Act has carried out in tree planting, soil survey work, soil and economic research.

The brief also outlined the work carried on in pasture development, water conservation, community water storage projects, large multipurpose community projects, rehabilitation and resettlement of prairie lands.

Not attempting to indicate the overall value of the P.F.R.A. program some idea of the magnitude of their work may be had by a few examples. In the first ten years of their regrassing program from 1935 to 1945, it is estimated that 3,000,000 acres of farm land were influenced. At the present time P.F.R.A., in co-operation with the provinces of Saskatchewan and Mani-