

*Assiniboine River Project.*—Along the Assiniboine River between Portage la Prairie and Headingly in Manitoba, the problem of flooding has faced farmers and communities over the years, often resulting in considerable damage to land, buildings and other property. Responsibility for flood protection work carried out in the area by the federal Department of Public Works was, in 1950, transferred to the Canada Department of Agriculture under PFRA and activities have, since then, involved mainly construction of dykes and channel improvement. However, as a result of recent surveys, an agreement was signed between the Federal and Manitoba Governments during 1962 for the construction of a major flood control and water conservation dam on the Assiniboine River near its confluence with the Shell River. This dam will be 75 feet high and will create a reservoir 40 miles long with a storage capacity of 430,000 acre-feet of water.

*Buffalo Pound Water Supply Project.*—Buffalo Pound Lake in Saskatchewan was developed to supply water for agricultural purposes downstream in the Qu'Appelle Valley and also to supply urban water for the cities of Regina and Moose Jaw. Local water supplies in the Lake, however, are not always adequate to meet these needs and must be supplemented with water drawn from the South Saskatchewan River. For this purpose, the Government of Canada constructed a pumping system on the river near Elbow to raise water over a height of land into the Qu'Appelle Valley where it may be carried through a series of canals and improved river channel to Buffalo Pound Lake, a distance of 55 miles. Construction of these works was completed in 1960 and more than 50,000 acre-feet of water have been delivered to the reservoir since pumping operations commenced.

*British Columbia Projects.*—The PFRA has been carrying out irrigation development and land reclamation and providing engineering services in British Columbia since 1944; this work has been undertaken for and in connection with the Veterans' Land Act, the Experimental Farms Service, and at the request of the Province of British Columbia.

Nine irrigation projects have been developed or rehabilitated in the arid central interior of the province. The irrigable land on these projects totals approximately 5,300 acres and provides direct or supplemental living for some 1,400 families engaged mainly in the growing of small fruits and vegetables and in dairying. Seven of the projects were constructed for the Veterans' Land Act following the Second World War and benefit approximately 500 veterans. The Johnson Western Canada Ranching Projects, Nos. 1 and 2 (Todd Hill Irrigation District), and the Chase Irrigation Project are located in the South Thompson Valley. The Cawston Benches Project, Westbank Project, Penticton West Bench Project and Bankhead Project are all located in the southern Okanagan Valley and form some of the largest individual developments for veteran settlement in Canada.

The other two developments are located in the Thompson Valley near Kamloops and were constructed in co-operation with the Province of British Columbia. The B.C. Fruitlands Irrigation District includes some 2,000 acres of irrigable land and also about 700 small holdings. This district had been served by a gravity water system from Jamieson Creek for over 40 years but the system deteriorated to such an extent that the district could no longer guarantee water to its users. Rehabilitation of the project was undertaken by agreement with the province and the irrigation district concerned, and completed by PFRA in 1958. A pressure irrigation system was also installed by PFRA for the irrigation of 290 acres of the Provincial Sanatorium farm lands at Tranquille.

A major reclamation project was undertaken in the Lillooet Valley upon agreement between the Federal Government, the Government of British Columbia, and the Pemberton Valley Dyking District. This involved the reclamation of the lower 20 miles of the Lillooet River Valley through dyking, drainage and channel improvement to reclaim some 12,000 acres of agricultural land and to protect an additional 2,000 acres already under cultivation.

Engineering services have been provided by PFRA to the Experimental Farms and to other government agencies as requested. Some of these services have included surveys in the Fraser River Basin for the federal-provincial Fraser River Board, reports on proposed