

administers the licensing of water power projects and the construction work in several irrigation projects. Irrigation projects are also licensed and water allocated for domestic and irrigation purposes. Other work includes administration of drainage districts, co-operation on the Peace River Dug-out Project and on river protection projects where flooding occurs. In more recent years much of this work has been carried out by the Federal Government in co-operation with the Government of Alberta.

Stream measurement is being done by the Hydrometric Service of the federal Department of Northern Affairs and National Resources, and irrigation surveys are carried out largely by the water development organization under the PFRA (see p. 408).

In 1958 the Province of Alberta completed the construction of the distribution system for the Western Block of the Bow River Development; the irrigable area is approximately 45,000 acres.

The figures given in Table 5 of land actually irrigated in Alberta in 1957 are only approximate because, while there are increases resulting from the creation of new pump irrigated areas, there are also decreases caused by soil re-classification and less water use, depending on natural precipitation. Seepage and alkali problems also have an effect on acreage quoted as irrigable. Figures for small private irrigation projects have been omitted because of their uncertain water supply.

Gross cash returns from the irrigable area are estimated at \$30,000,000 though this figure does not take into account the value of stockwater supplied through irrigation works. Nor does it include many other credit items that are difficult to evaluate such as the recreational use of water which, to these one-time semi-arid areas, is particularly important, and the value of fish taken from irrigation reservoirs which is known to be quite significant. Several communities receive their entire domestic water supply via irrigation canals.

5.—Major Irrigation Districts in Alberta, 1957

District	Classified	Area Actually
	Irrigable Area	Irrigated in 1957
	acres	acres
St. Mary and Milk Rivers Development.....	259,861	{ 78,665 <sup>1</sup> 39,000 <sup>2</sup>
Magrath Irrigation District.....	7,885	7,039
Raymond Irrigation District.....	19,058	15,009
Taber Irrigation District.....	32,100	21,579
Western Irrigation District.....	50,000	7,000 <sup>3</sup>
Eastern Irrigation District.....	250,000	189,793
Bow River Development—		
Federal.....	94,783	55,364
Provincial.....	35,217	2,200
Mountain View Irrigation District.....	3,600	2,773
Leavitt Irrigation District.....	4,631	2,779
Aetna Irrigation District.....	8,303	—
United Irrigation District.....	34,005	15,886
Lethbridge Northern Irrigation District.....	96,135	51,809
Ross Creek Irrigation District.....	2,069	1,685
Macleod Irrigation District.....	3,000	—
<b>Totals.....</b>	<b>990,647</b>	<b>490,581</b>

<sup>1</sup> Old lands.      <sup>2</sup> New lands.      <sup>3</sup> Estimate.

**British Columbia.**—About 20 p.c. of the arable land in British Columbia is under cultivation and nearly all the grazing area is being utilized. The 1,300,000 acres developed give a ratio of approximately one acre per person. Within this arable area there exists an estimated 211,000 acres of irrigated land and the total area of irrigable land in British Columbia is estimated at 400,000 acres.

About 75 p.c. of the irrigated area is made up of individual projects and the remainder is served by the larger irrigation projects listed in Table 6.