during the flood of 1953; cleaning out the Seven Persons Creek and Ross Creek channels at Medicine Hat; preparing an aerial survey map of the Blairmore and Coleman district to correct the flooding of the Crowsnest River; constructing protection works to prevent the Oldman River from by-passing the diversion works of the Lethbridge Northern Irrigation District. Expenditure on these projects amounted to \$233,245 in the year ended Mar. 31, 1954.

Peace River Dugout Program.—The Provincial Department of Agriculture extends assistance for the construction of dugouts in the Peace River area because of a serious lack of underground water. Assistance is on the basis of six cents per cu. yard up to a maximum of \$120 per dugout (2,000 cu. yards). During 1953, 115 dugouts were constructed making a total of 2,163 dugouts to Mar. 31, 1954. Expenditure in 1953-54 amounted to \$12,463. The program, which is of incalculable benefit to the Peace River area, is administered by District Agriculturists.

Ground Water Control Act.—This Act, passed in 1953, is designed to prevent the wastage of underground water and water pressure in the acquafers. Regulations were drafted and are now officially adopted requiring the registration of all those who drill for water on lands not necessarily their own. It is now proposed to register all water-boring operators and to require proper control of water flows obtained from underground sources.

British Columbia.*—About 17 p.c. of the arable land in British Columbia is under cultivation and nearly all the grazing area is being utilized. The 1,100,000 acres developed give a ratio of approximately one acre per person. Within this arable area there exist an estimated 163,777 acres of irrigated land, and the total acreage of irrigable land in British Columbia is estimated at 181,974 acres.

About two-thirds of the irrigated area is made up of individual projects and the other third is served by the larger irrigation projects listed in Table 5.

[•] Prepared by E. H. Tredcroft, Comptroller of Water Rights, Department of Lands and Forests,

Project	Water Supply	Irri- gable Area	Irri- gated Area	Average Irrigation Charge	Locality
		acres	acres	\$	
Provincial Irrigation System— Southern Okanagan Lands				-	
Project	Okanagan River	5,000	4,200	12.50	Okanagan Valley
Municipal Irrigation Systems— Penticton Municipality	Penticton and Ellis Creeks.	2,500	2,200	18.00	Okanagan Valley
Summerland Municipality.	Trout and Eneas Creeks	3,452	3,407	13.42	" valley
Irrigation Districts— Balfour Irrigation District. Bankhead. Barriere.	Laird Creek Kelowna and Mission Creeks Barriere River	240 85 182	150 85 80		Kootenay Valley Okanagan Valley North Thompson Valley
B.C. Fruitlands	Jameson and North Thomp-				
Black Wountsin	son Rivers	2,657 4,174	2,218	13.50 11.00	or " ""
Blueberry Creek	Blueberry Creek	140	4,174		Okanagan Valley Columbia Valley
Boundary Line	Osoyoos Lake	95	95		Okanagan Valley
Brent Davis	Mission Creek	480	405	6.00	-"
	Similkameen River	643	481	14.00	· ·
	Chase Creek	639	625		South Thompson Valley
Covert	4th of July Creek	278	278	4.50	Near Grand Forks

5.-Major Irrigation Projects in British Columbia, circa 1954