2

An analysis of the dairy-factory returns shows a steadily increasing volume of winter production, and this is a satisfactory indication that the initial difficulties inseparable from the development of reclaimed swamp lands are being reduced each year. Production for April, May, and June of 1934 was outstandingly high, but summer production was below the average owing to the detrimental effect of the dry weather on the grass-growth. Beneficial rainfall and warmth in the autumn of 1935 helped to maintain the milk-yield, however, and a plentiful supply of winter feed is assured. The rainfall in 1934 was about the average for the district. There were no severe flood-producing storms, and winter drainage conditions were excellent. Daily rainfall records for Kerepeehi since 1916 are as follows:—

RECORDS OF DAILY PRECIPITATION, KEREPEEHI, HAURAKI PLAINS.

Year.		Number of Days, with given Daily Precipitation in Inches.																		
		0.00 to 0.49.	0.50 to 0.74.	0.75 to 0.99.	1.00 to 1.24.	1.25 to 1.49.	1.50 to 1.74.	1.75 to 1.99.	2.00 to 2.49.	2.50 to 2.99.	3.00 to 3.99.	4.00 to 4.99.	5.00 to 5.99.	6.00 to 7.00.	Total Days.	Total Fall.	Wettest Month,		Driest Month,	
1916		109	12	9	7	$\begin{bmatrix} 2 \end{bmatrix}$	3		1			1			144	$52 \cdot 19$	Nov.	$6 \cdot 65$	Feb.	1.05
1917		131	11	4	4	3		1	1	1					156	$45 \cdot 61$	Feb.	$6 \cdot 26$	Jan.	0.65
1918		145	14	6	4		1			1					171	44.06	Oct.	$7 \cdot 47$	May	$2 \cdot 24$
1919		122	9	ľ	3	2									137	$27 \cdot 36$	July	$4 \cdot 52$	Dec.	0.89
1920		85	7	10	3	1	1	3	2						112	43.16	Feb.	$6 \cdot 10$	July	$1 \cdot 73$
1921		93	12	5	3	2			1						116	$34 \cdot 41$	Oct.	$5 \cdot 89$	Feb.	$0 \cdot 72$
1922		101	17	9	3	, .	1	1		1					133	$42 \cdot 81$	Feb.	$6 \cdot 62$	April	$1 \cdot 73$
1923		151	6	5	4		1	1						1	169	$47 \cdot 04$	April	$9 \cdot 76$	Mar.	$1 \cdot 72$
1924		132	8	10	5	2	5	1	1	١	2				166	$60 \cdot 37$	April	$8 \cdot 55$	July	1.87
1925		142	15	4	2				1		١				164	$37 \cdot 64$	June	$6 \cdot 67$	April	0.84
1926		149	15	6	4	5	2	2					,.		183	$55 \cdot 53$	May	$8 \cdot 86$	Feb.	$1 \cdot 79$
1927		159	10	6	5		4				١				184	$45 \cdot 33$	July	$6 \cdot 29$	April	$2 \cdot 01$
1928		125	7	9	2	3	2	2	1	١					151	$47 \cdot 30$	May	$7 \cdot 52$	Jan.	0.01
1929		124	19	8	3	1				١		١			155	41.05	April	$5 \cdot 09$	Feb.	0.74
1930		131	4	2	2	3		2	2		٠.			١	146	$37 \cdot 72$	Jan.	$6 \cdot 87$	Dec.	0.80
1931		144	10	7	٠.	4				l	2				167	$43 \cdot 23$	July	$7 \cdot 80$	Mar.	0.98
1932		126	7	5	4		1							١	143	$32 \cdot 05$	Feb.	$4 \cdot 95$	Nov.	0.93
1933		152	13	1	4	3			1				١	١	174	$38 \cdot 93$	Feb.	$6 \cdot 54$	Mar.	$1 \cdot 20$
1934		138	11	6	5	$\tilde{2}$	2		1		1		١.,	١.,	166	$43 \cdot 23$	June	$6 \cdot 15$	Oct.	$2 \cdot 05$
1935*		24	$\frac{1}{2}$	2		l	1		1				١.,		30	11.11	Feb.	$5 \cdot 83$	Jan.	0.93

* First three months of year only.

Average annual rainfall over nineteen years is 43.11 in.

Daily records of stream-flow in the Piako and Waitoa Rivers have been kept for several winters, but as there have been no severe storms for some years, during which time a considerable amount of river-improvement work has been carried out, there has been little opportunity of showing by the aid of these records the actual effect of the works under severe flood-conditions. Because of the storage effect of the natural flood-expansion basin along the middle reaches of the Piako River the channel of the lower reaches is not required to discharge the maximum run-off produced by a storm, and this introduces a complicating time-factor which must be taken into consideration when comparing the effect produced on the river by dissimilar storms. However, hydrographs of the river-discharge produced by two minor storms which occurred in September and October, 1928, show practically identical characteristics to those of two similar storms in June and July of 1934. Comparison shows the effect of the river-improvement works in a very satisfactory light. Improved tidal propagation is the most significant test of the improved regimen of a river, and, with practically the same discharge, the high-tide river-stage at Kaihere in 1934 was 2 ft. lower than 1928, and the low-tide river-stage at the same point was 3 ft. lower in 1934.

The exceptionally hot summer was to some extent responsible for the large number of troublesome fires, but the principal cause has been non-observance of the fire district regulations. During the period of six months from 1st November to 30th April permission must be obtained from the Commissioner of Crown Lands before lighting any fires within a defined area of peat land, and before permission is granted reasonable precautions must be taken to control the fire. A large number of fire permits have been issued during the past three years, and it is a significant fact that there has not been one instance where an authorized fire has got beyond control. The fire regulations are for the protection of the settlers, and, under control and regulation, the fire-menace has to some extent been reduced. If these factors are given the consideration they deserve there will be more effective cooperation between the settlers and officers of the Department, and the loss and labour caused by fires will certainly be reduced.

Relief-of-unemployment measures have been one of the predominating influences in directing the construction activities on Hauraki Plains for some years past. Eight camps have been maintained throughout this year for the accommodation of workers drawn principally from the ranks of the city unemployed. Because of the seasonal character of some of the work, and other causes, the numbers employed has varied between 171 in October and 230 in February. The average number employed during the year was 190. These figures include all the men engaged on constructional and development works, but do not include the workers engaged on seasonal maintenance operations.