xxiv $D_{1}-1$.

The reason for the enormous damage in the flooded areas can be seen from a study of some of the rainfall records in the Hawke's Bay District.

The rainfall at the places mentioned below on various days in April and the

total for the month were as follows:—

	Rainfall (Inches), April, 1938.				
Locality.	23rd.	24th.	25th.	Total for Three Days.	Total for Month.
Puketitiri	9.14	15.39	14.87	39.40	55.70
Tarewa, Morere	$2 \cdot 22$	6.50	$11 \cdot 42$	20.14	$41 \cdot 10$
Putorino	4.00	16.50	11.60	$32 \cdot 10$	$36 \cdot 85$
Mangaone Valley, Nuhaka	$7 \cdot 25$	4.50	$5 \cdot 35$	17.10	$31 \cdot 57$
Maraetotara	1.84	10.88	10.74	$23 \cdot 46$	$31 \cdot 43$
Hawke's Bay Forests, Waikoau	4.00	11.76	8.50	$24 \cdot 26$	
Onepoto, Waikaremoana	$2 \cdot 03$	$7 \cdot 16$	6.04	$15 \cdot 23$	$25 \cdot 27$
Kotemaori	1.95	$9 \cdot 03$	7.80	18.78	$24 \cdot 39$
Maungaharuru Range	$2 \cdot 03$	10.68	$6 \cdot 21$	$18 \cdot 92$	$26 \cdot 29$
Wharerata	4.71	$11 \cdot 22$	$2 \cdot 11$	18.04	

IRRIGATION AND WATER-SUPPLY.

Accelerated progress is being made with this important developmental work, especially in Canterbury, where irrigation projects over a large area situated between the Rangitata and Rakaia Rivers are now under construction.

During the past season the central and eastern portions of the South Island has experienced a drought of exceptional severity, and the sales of water have

exceeded previous records.

In Central Otago the existing irrigation schemes undoubtedly saved the district from extreme hardship and loss of production, even though rationing of the watersupply had to be resorted to for a short period on some small areas dependent on

In Canterbury the drought conditions did not extend beyond the middle of December, and since then the weather has been abnormally wet and the demand for irrigation dropped to zero.

On the Redcliff Scheme the demand was above expectations during the early portion of the season, and the area watered amounted to 50 per cent. of the irrigated

The response was very satisfactory and, notwithstanding the relatively short season, the revenue obtained was treble that of the previous year.

The farmers express general satisfaction at the results, and further areas are being prepared for irrigating next season.

The Levels Scheme was completed by the construction of No. 7 lateral, having a total length of 3 miles 34 chains.

As in the case of the Redcliff Scheme, the dry spring and early summer resulted in a demand for water and assistance in farm reticulation that taxed the Department's organization to deal with it.

Thirty-one farmers used water for 1,100 acres, or approximately 8 per cent. of the irrigable area.

One farmer who keeps an accurate account showed that his stock-carrying capacity was increased fourfold for the whole season.

In consequence of the unprecedented drought conditions obtaining last summer the demand for irrigation investigation was very insistent in various portions of New Zealand, but this work had necessarily to be deferred on account of the available staff being fully employed on active current construction work representing the most favourable schemes to be proceeded with.

The question of further investigation work will again engage my attention

when the additional staff is available.