

Environmental Science October

Air Quality

Rainfall

River Flows

**Groundwater
Levels**

Air Quality Report October 2008

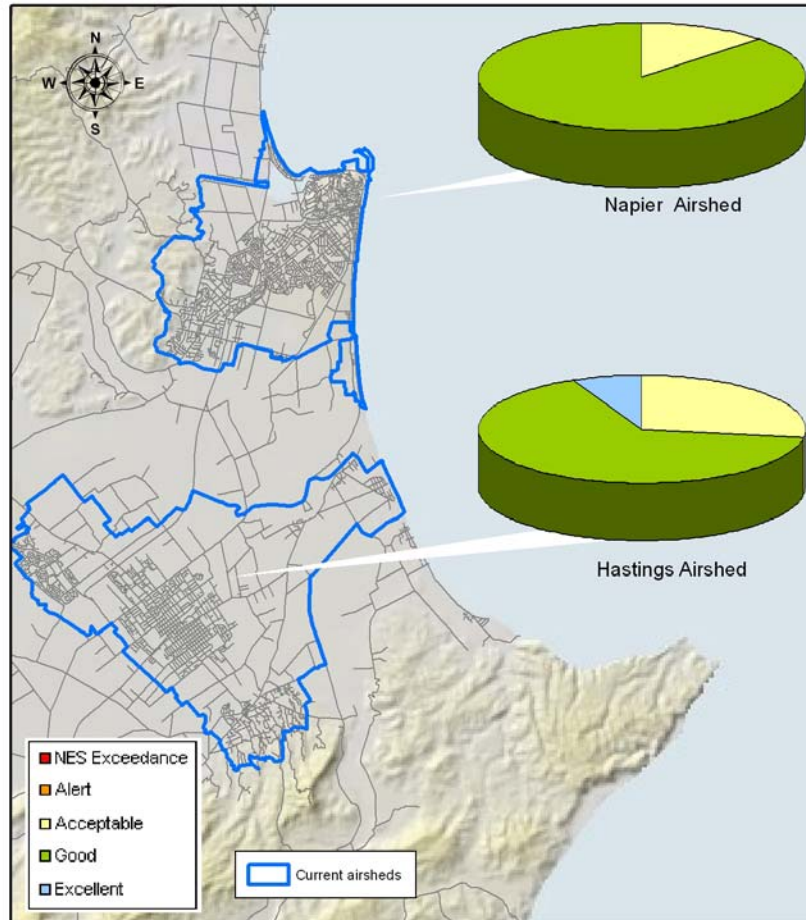


Figure 1: PM₁₀ levels in the Napier and Hastings airsheds during October 2008.

PM₁₀ exceedances:

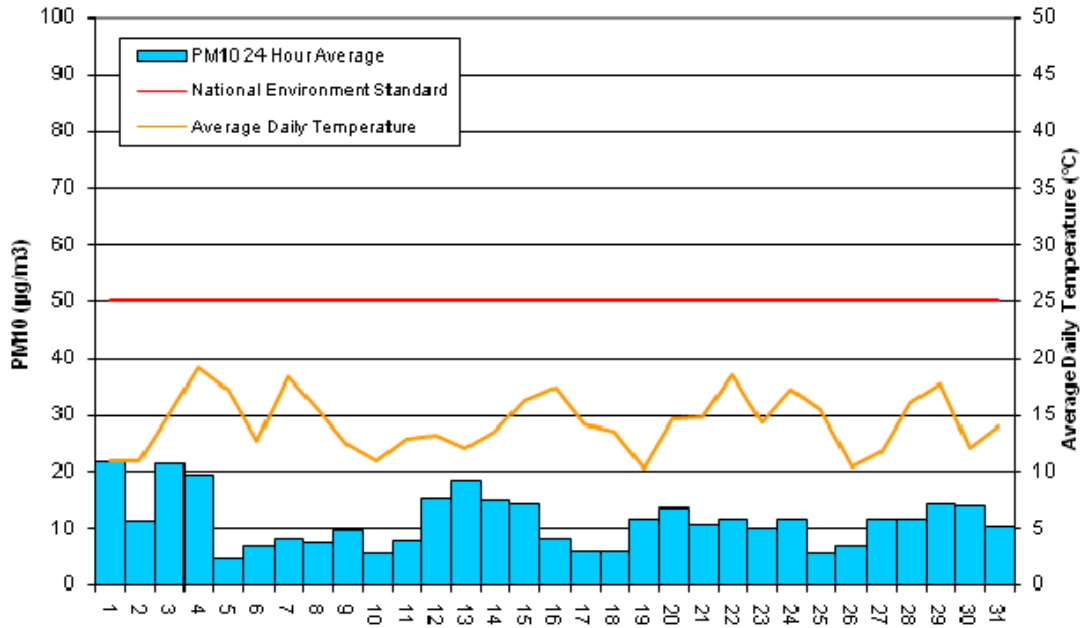
The National Environmental Standard (NES) for particulate matter (PM₁₀) of 50 µg/m³ (24 hour average) was not exceeded in the Hastings or Napier airsheds during the month of October.

The monitoring sites are located at:

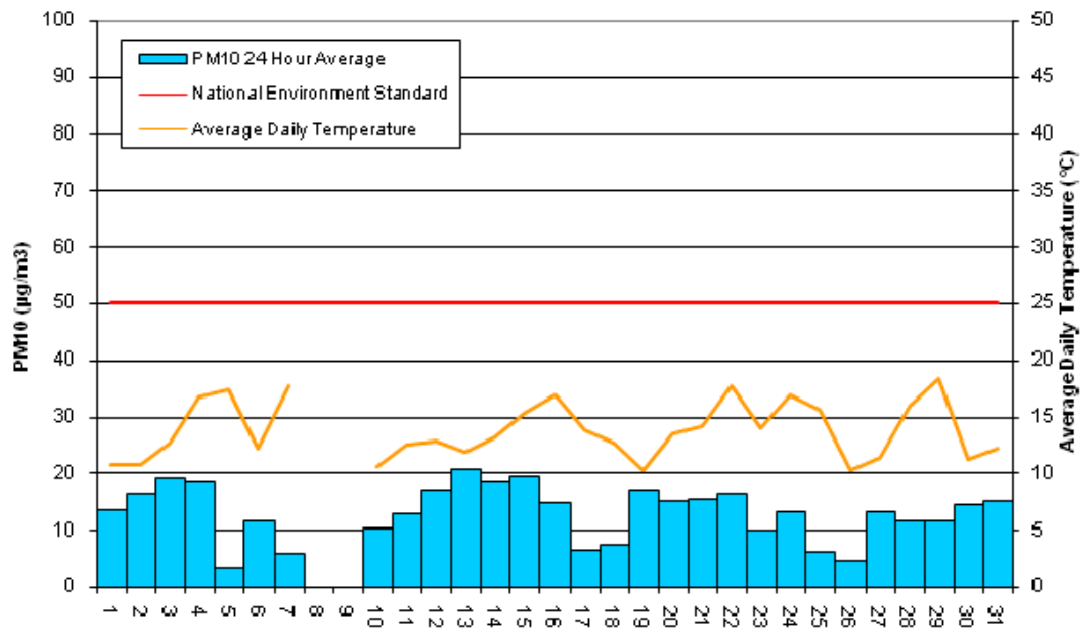
- Marewa Park in the Napier airshed.
- St Johns College in the Hastings airshed.

Further information is available at www.hbrc.govt.nz

Napier PM10 and Temperature values for October 2008



Hastings PM10 and Temperature values for October 2008



PM10 monitoring in Wairoa (2007/2008):

Screening monitoring has now been completed in Wairoa using Council's MicroVol monitoring equipment. The purpose of screening monitoring is to target new monitoring locations in Hawke's Bay where no data exists, to assess whether PM₁₀ is likely to be a problem or not.

Where screening monitoring shows there is a problem, an assessment process will be undertaken to determine whether the site should be adopted as a longer term Regional SoE monitoring site and/or an NES Compliance site.

Sampling occurred on every third day, from September 2007 until September 2008, at Tiaho School, Clyde Road, Wairoa. The results of the monitoring programme are shown below.

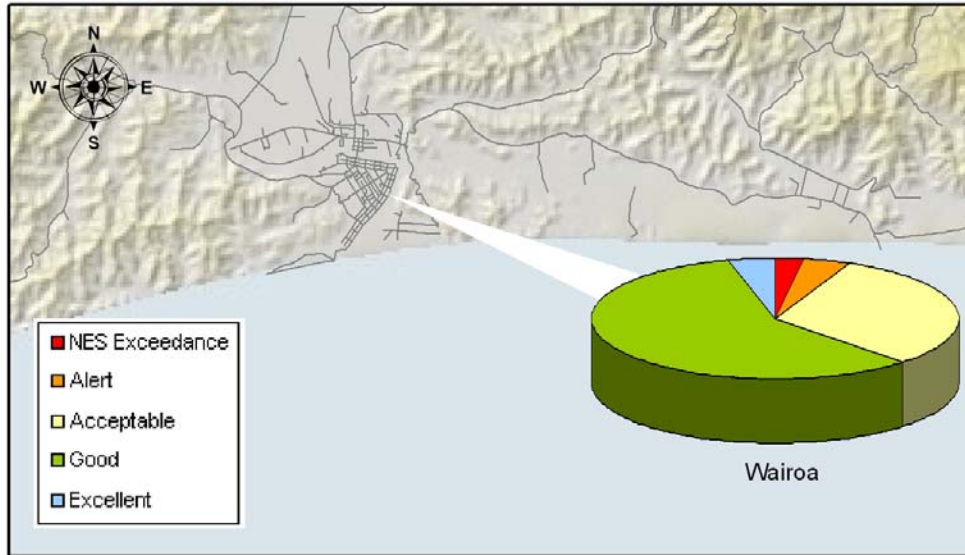


Figure 2: PM10 levels in Wairoa from September 2007 to September 2008.

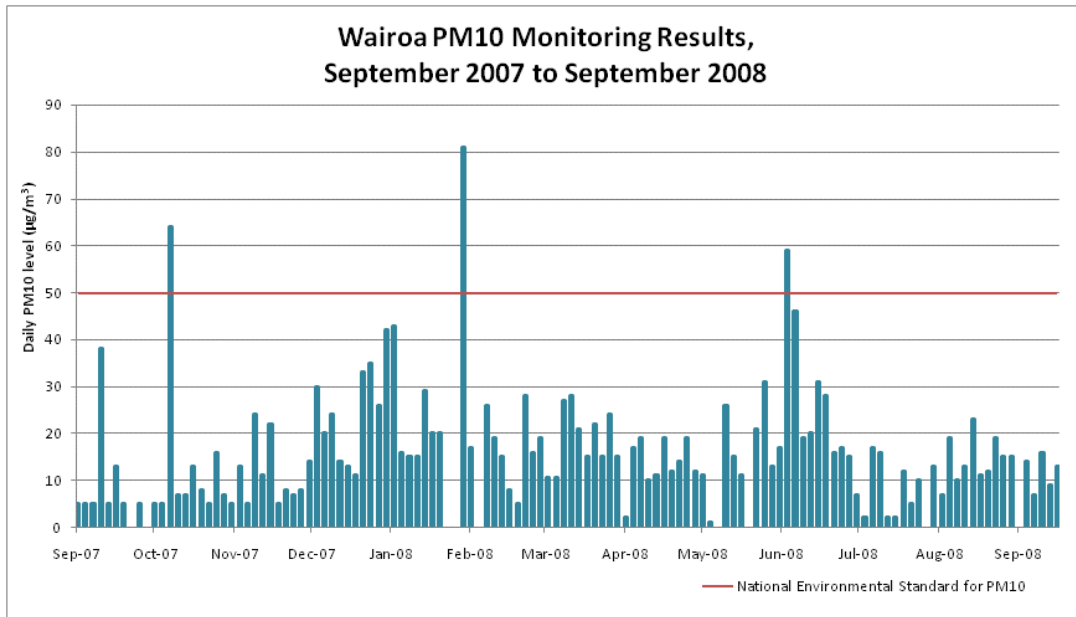
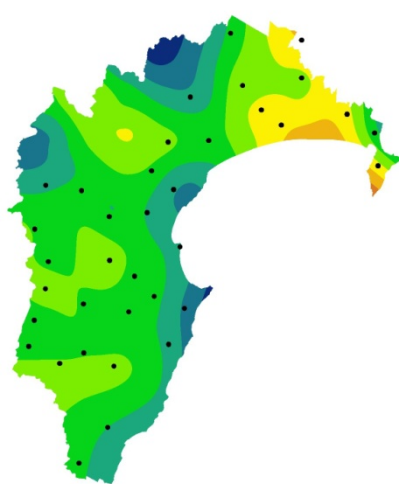
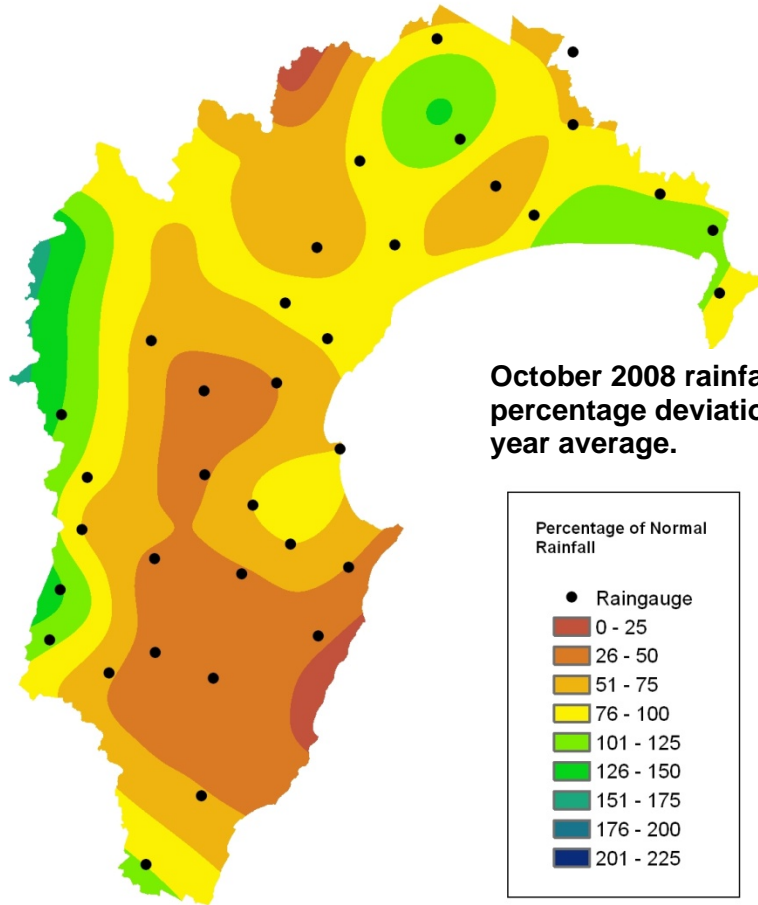


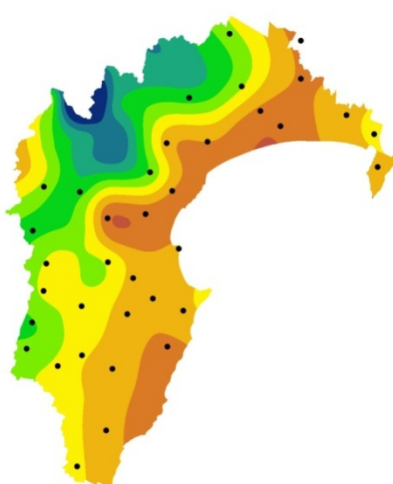
Figure 3: PM10 levels in Wairoa from September 2007 to September 2008.

Further information is available at www.hbrc.govt.nz

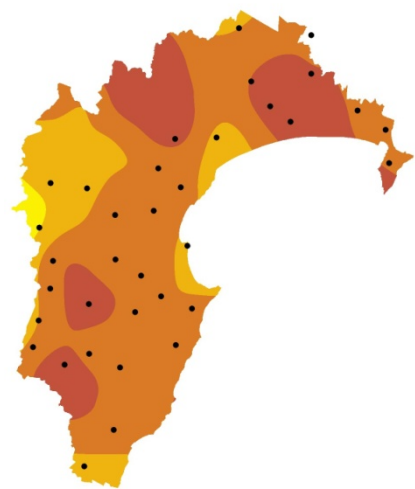
Rainfall Report October 2008



JULY 2008



AUGUST 2008



SEPTEMBER 2008

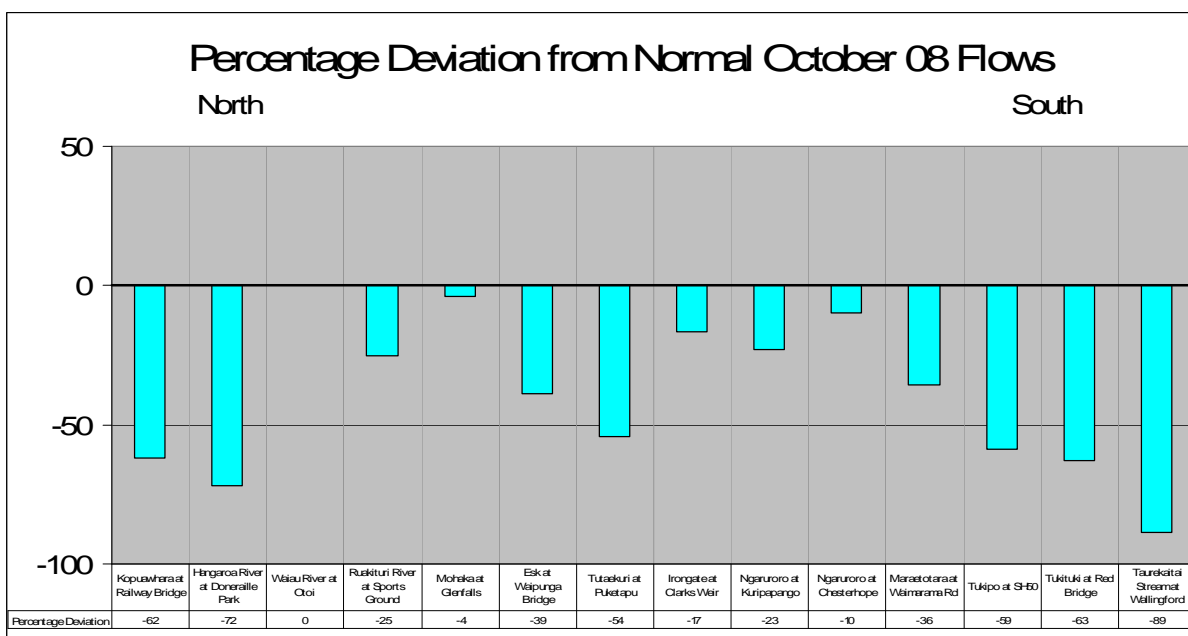
RAINFALL REPORT FOR OCTOBER 2008				
Area	Station	Months Total (mm)	Historic Mean (mm)	%Average
Waikaremoana	Terapatiki	68	61	111
	Mt Manuoha	235	270	87
	Bushy Knoll	70	109	64
	Upper Waiiau	89.5	110	81
	Waikaremoana %			86
Northern Hawkes Bay	Kopuawhara	95.5	91	105
	Ruakituri	78.5	105	75
	Pukeorapa	156.5	160	98
	Ardkeen	45.5	82	55
	Wairoa	76	86	88
	Kotemaori	72.5	91	80
	Northern Hawkes Bay %			83
Tangoio	Kaiwaka	51.4	65	79
	Te Rangi	73	110	66
	Maunganui	100	126	79
	Waihau	37.2	95	39
	Glengarry	33.5	67	50
	Tangoio %			63
Kaweka	Ngahere	118	189	62
	Otutu	116	141	82
	Te Koau	128.5	145	88
	Ngamatea	70	57	124
	Kaweka %			89
Ruahine	Parks Peak	163	216	76
	Glenwood	227	178	128
	Moorcock	226	211	107
	Ruahine %			103
Heretaunga Plains	Crownthorpe	39.4	83	47
	Awanui	27	36	74
	Fred	36.5	49	75
	Ohiti	42	56	75
	Keirunga	24.5	53	47
	Heretaunga Plains %			64
Ruataniwha Plains	Tapairu Road	16	46	35
	Tukipo	36.5	67	54
	Ongaonga	20	56	36
	Gwavas	40.2	86	47
	Ruataniwha Plains %			43
Southern Hawkes Bay	Mangaorapa	67.5	68	99
	Waipoapoa	32	108	30
	Wallingford	29	55	53
	Maraetotara	24.5	50	49
	Southern Hawkes Bay %			58
Hawkes Bay Region				74

Regional River Flow Pattern October 2008

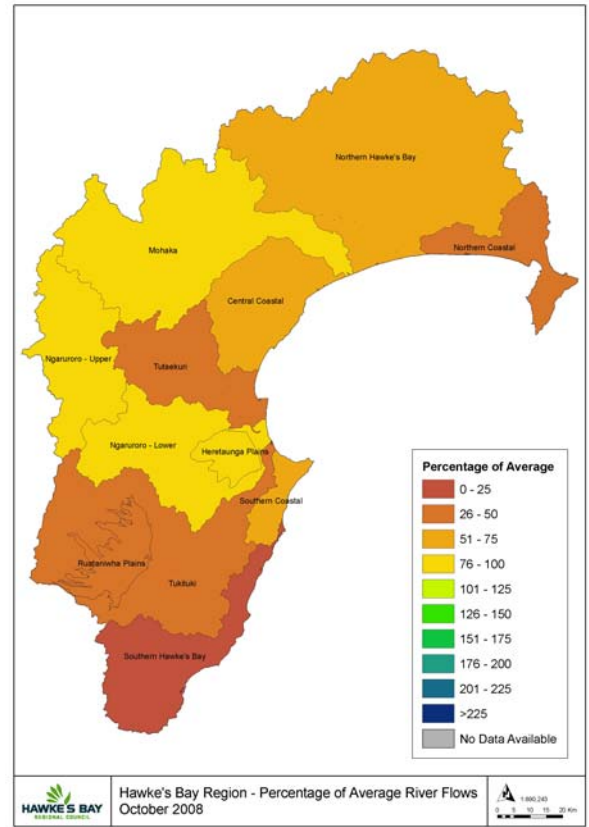
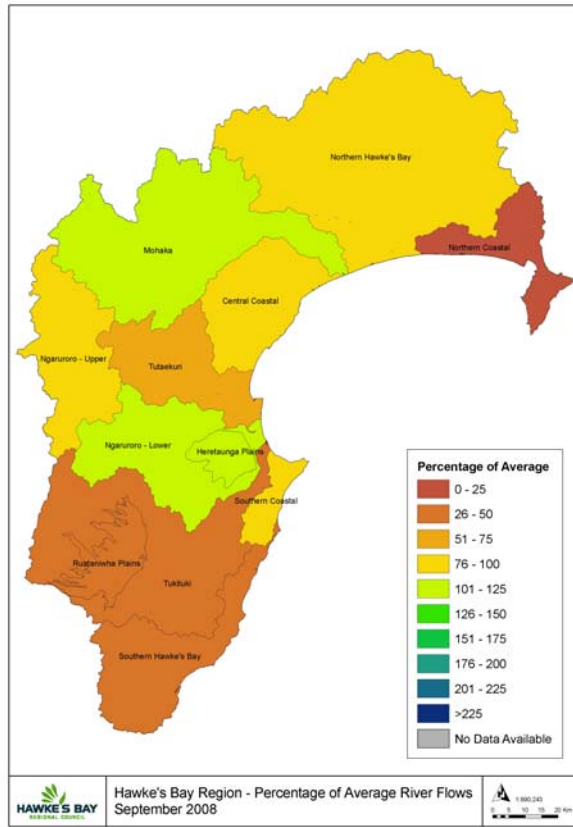
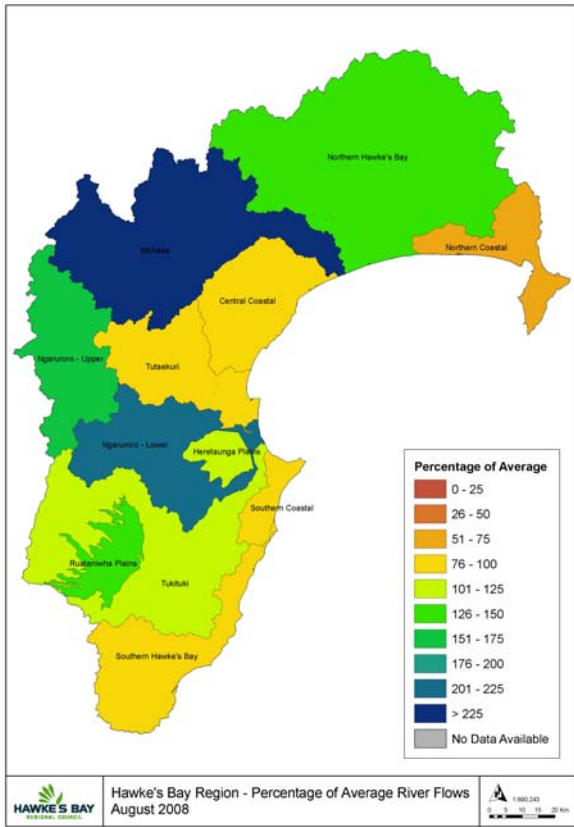


Area	Site	Flows % of Longterm Mean	Oct Min (m3/s)	Oct Max (m3/s)	Oct Mean (m3/s)	Percentage Deviation
Northern Coastal	Kopuawhara at Railway Bridge	38	0.4	3.1	0.7	-62
Northern Hawke's Bay	Hangaroa River at Doneraille Park	28	2.2	40.0	4.5	-72
Northern Hawke's Bay	Waiau River at Otoi	NA	NA	NA	NA	NA
Northern Hawke's Bay	Ruakituri River at Sports Ground	75	7.9	119.6	16.3	-25
Mohaka	Mohaka at Glenfalls	96	20.2	278.7	42.0	-4
Central Coastal	Esk at Waipunga Bridge	61	2.7	9.9	3.2	-39
Tutaekuri	Tutaekuri at Puketapu	46	4.7	13.0	6.7	-54
Heretaunga Plains	Irongate at Clarks Weir	83	0.3	3.3	0.4	-17
Ngaruroro - Upper	Ngaruroro at Kuripapango	77	7.8	188.0	14.5	-23
Ngaruroro - Lower	Ngaruroro at Chesterhope	90	24.4	187.4	35.0	-10
Southern Coastal	Maratotara at Waimarama Rd	64	0.6	1.3	0.8	-36
Ruataniwha Plains	Tukipo at SH50	41	0.3	2.1	0.6	-59
Tukituki	Tukituki at Red Bridge	37	9.6	56.3	16.9	-63
Southern Hawke's Bay	Taurekaitai Stream at Wallingford	11	0.1	0.4	0.2	-89

*No data available

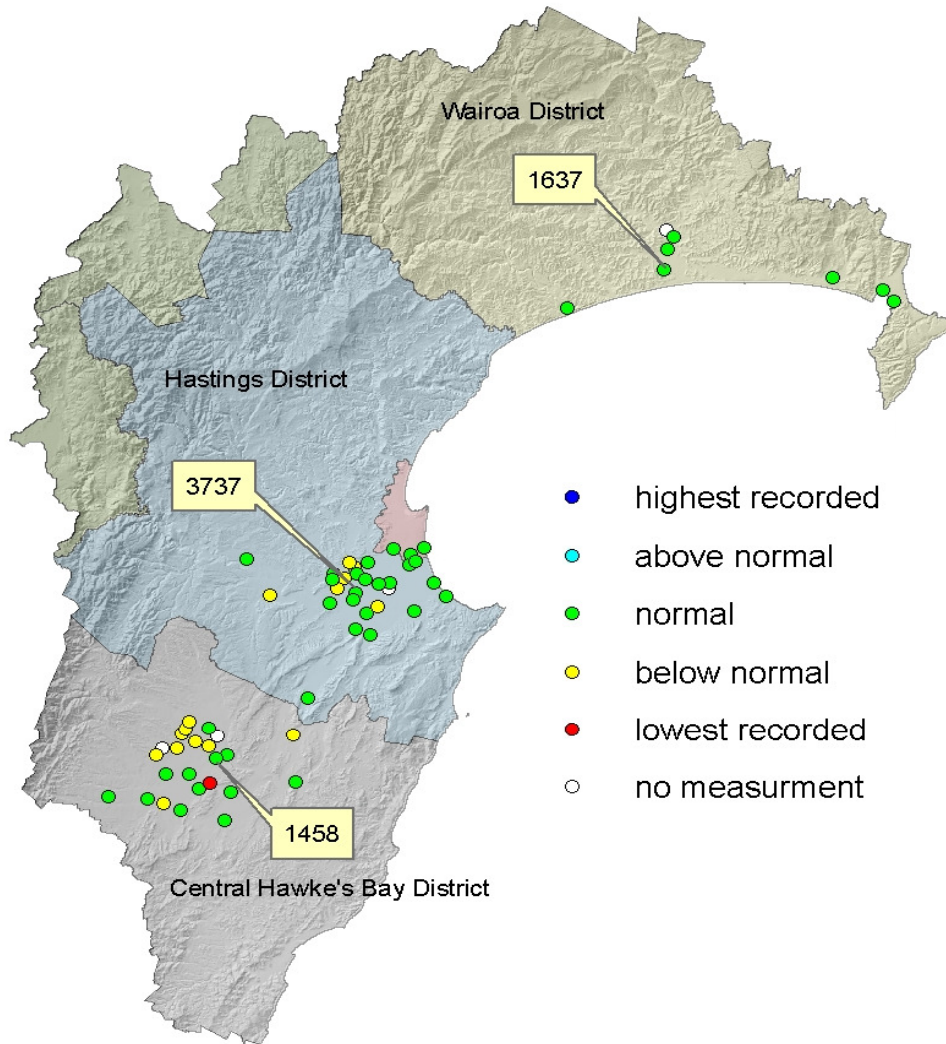


Percentage of Average River Flows for the Hawke's Bay Region - August, September & October 2008:

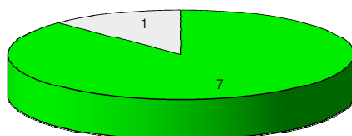


Groundwater Level Report

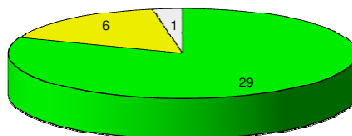
October 2008



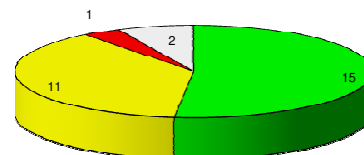
Wairoa



Hastings-Napier



Central Hawke's Bay



% highest recorded	0	0	0
% above normal	0	0	0
% normal	88	81	52
% below normal	0	17	38
% lowest recorded	0	0	3
% measured	88	97	93
number of wells	8	35	29

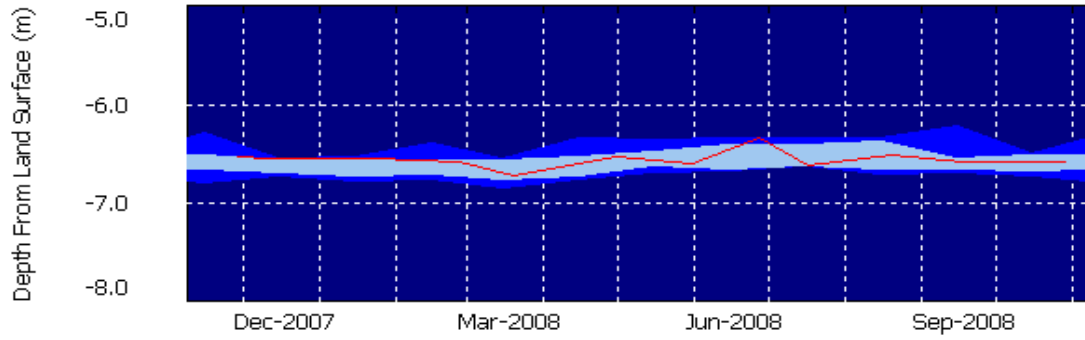
NOTES:

Wairoa District: Normal water levels.

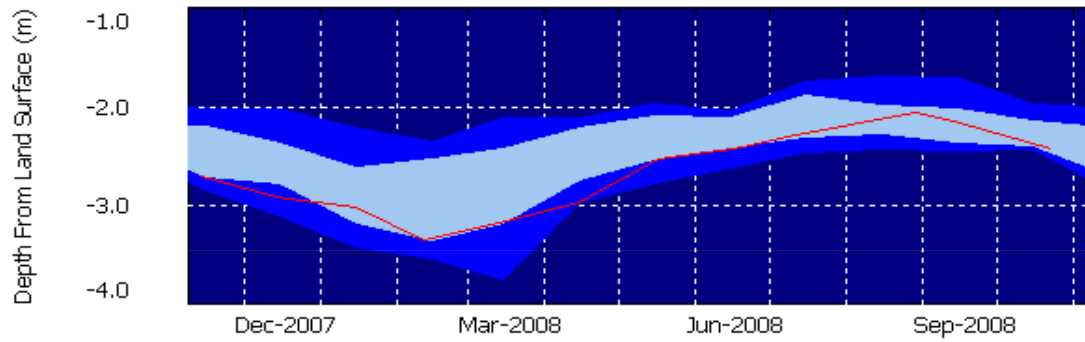
Hastings-Napier District: Mostly normal water levels.

Central Hawke's Bay District: Mostly normal water levels with some below normal.

Wairoa District - Well 1637



Hastings/Napier District - Well 3737



Central Hawke's Bay District - Well 1458

