

Environmental Science December

Air Quality

Rainfall

River Flows

**Groundwater
Levels**

**Recreational
Water Quality**

Air Quality Report

December 2008

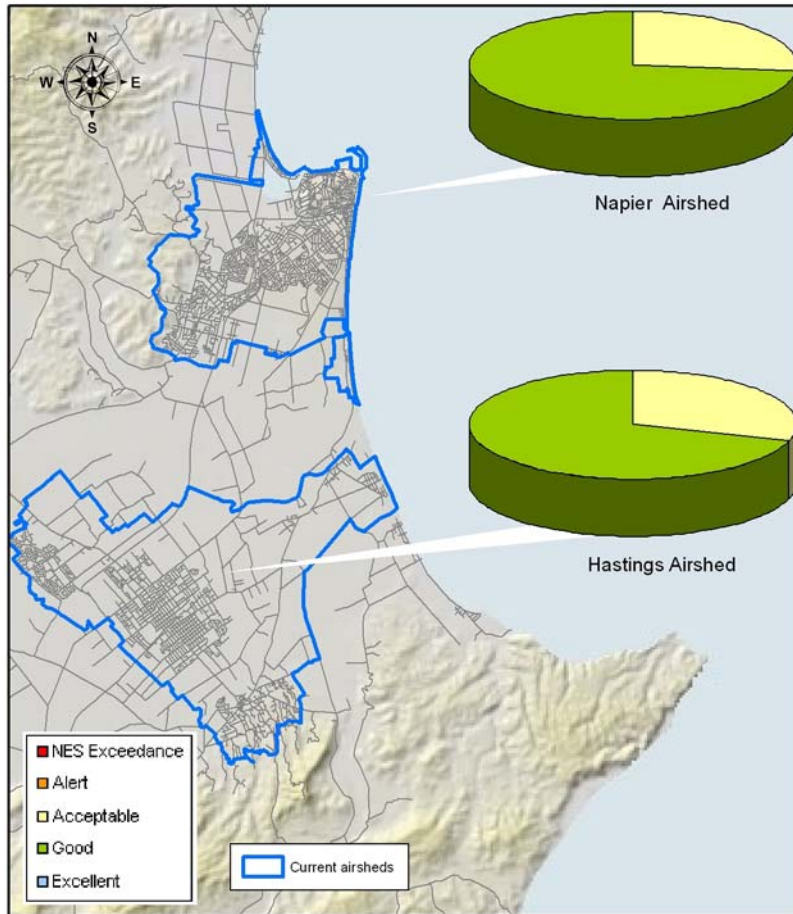


Figure 1: PM₁₀ levels in the Napier and Hastings airsheds during December 2008.

PM₁₀ exceedances:

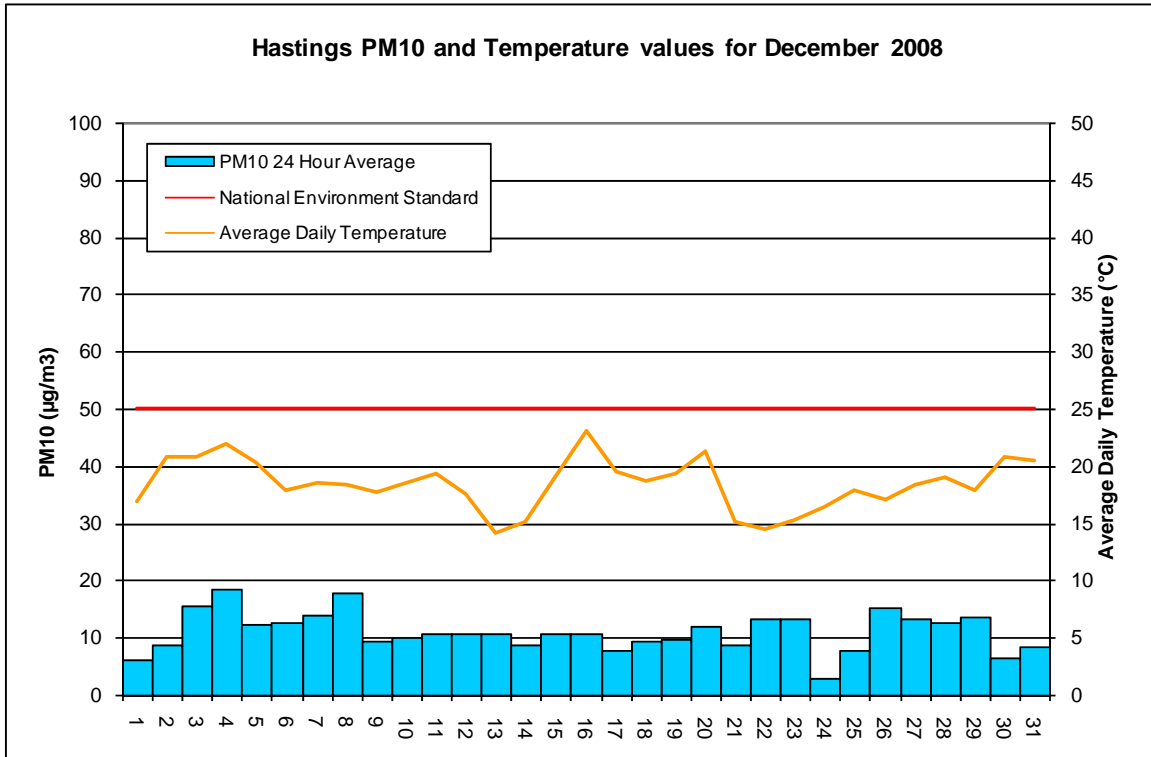
The National Environmental Standard (NES) for particulate matter (PM₁₀) of 50 µg/m³ (24 hour average) was not exceeded in the Hastings or Napier airsheds during the month of December.

The monitoring sites are located at:

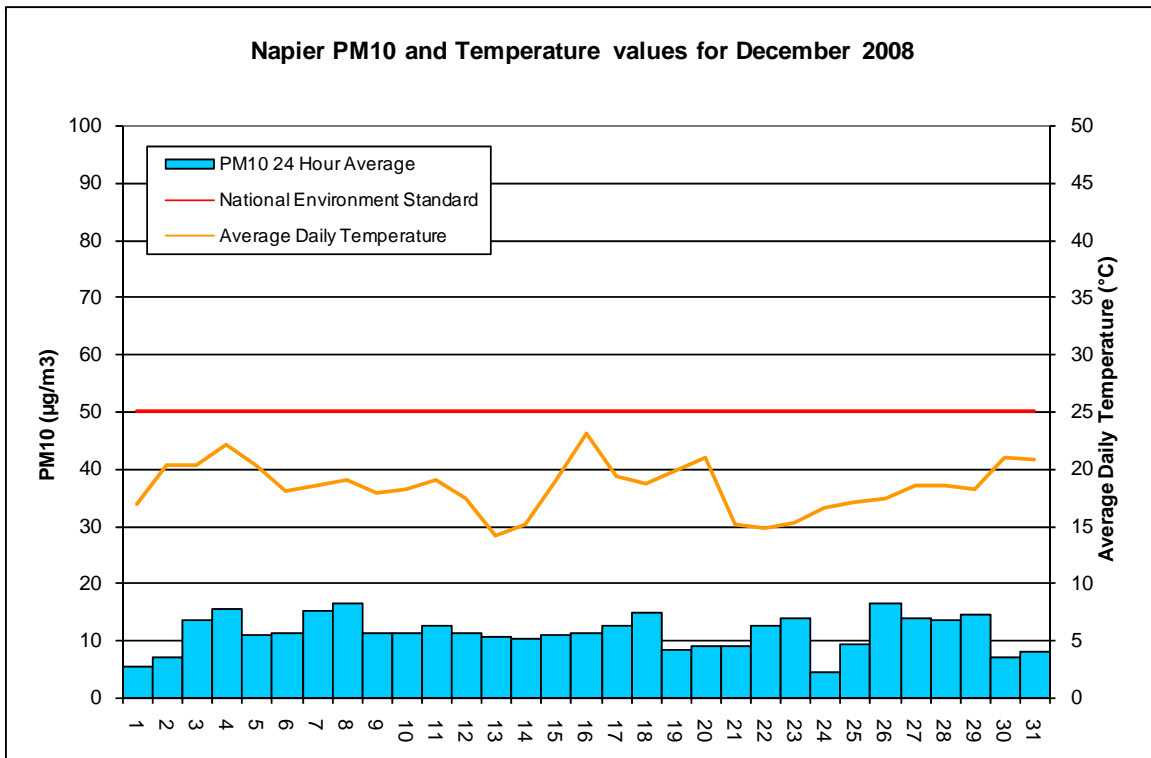
- Marewa Park in the Napier airshed.
- St Johns College in the Hastings airshed.

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

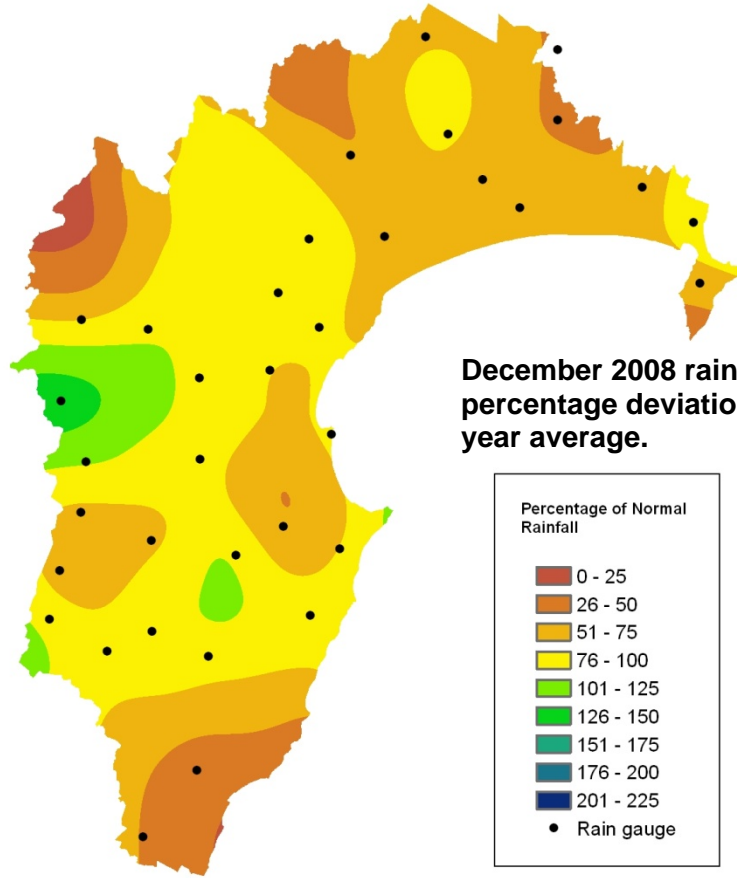
Hastings PM10 and Temperature values for December 2008



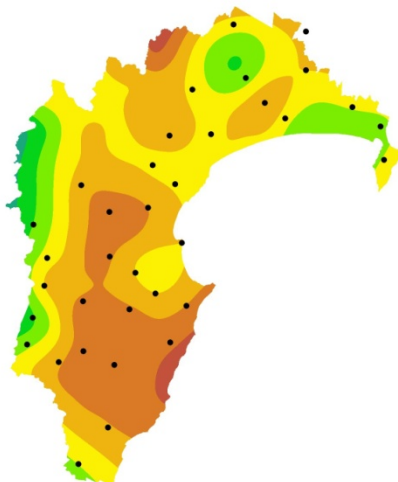
Napier PM10 and Temperature values for December 2008



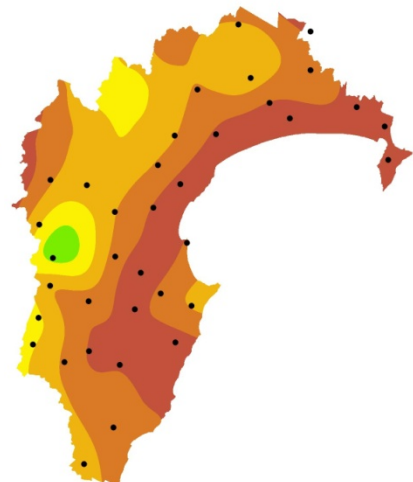
Rainfall Report December 2008



SEPTEMBER 2008



OCTOBER 2008



NOVEMBER 2008

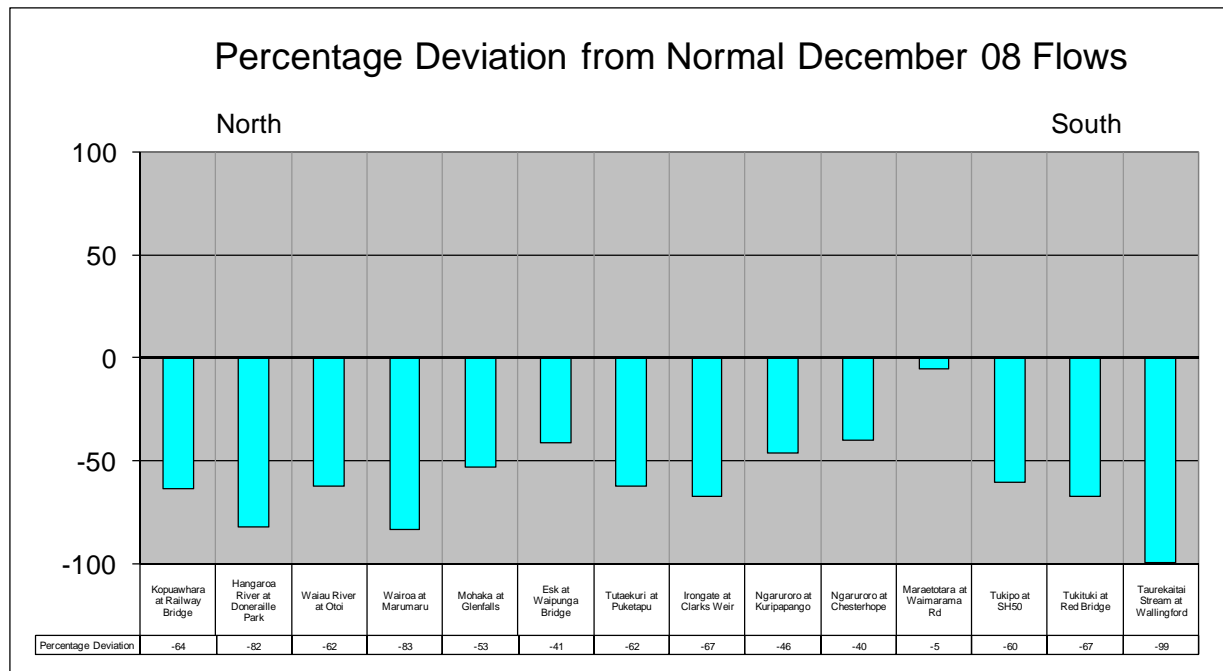
RAINFALL REPORT FOR DECEMBER 2008

Area	Station	Months Total (mm)	Historic Mean (mm)	%Average
Waikaremoana	Terapatiki	76	97	78
	Mt Manuoha	167.5	234	71
	Bushy Knoll	54	115	47
	Upper Waiau	62	118	53
	Waikaremoana %			62
Northern Hawkes Bay	Kopuawhara	91	103	88
	Ruakituri	51.5	109	47
	Pukeorapa	131.5	209	63
	Ardkeen	60	98	61
	Wairoa	69.5	103	67
	Kotemaori	79.5	134	59
	Northern Hawkes Bay %			64
Tangoio	Kaiwaka	78.4	99	79
	TE Rangī	103.5	109	95
	Maunganui	123	136	90
	Waihau	88.4	95	93
	Glengarry	59	78	76
	Tangoio %			87
Kaweka	Ngahere	178	189	94
	Otutu	100	134	75
	Te Koau	146.5	144	102
	Ngamatea	100.6	74	135
	Kaweka %			102
Ruahine	Parks Peak	148.5	211	70
	Glenwood	107.5	162	67
	Moorcock	172.5	191	90
	Ruahine %			76
Heretaunga Plains	Crownthorpe	77.8	93	84
	Awanui	28	51	54
	Fred	39	49	80
	Keirunga	60.5	63	96
	Heretaunga Plains %			78
Ruataniwha Plains	Tapairu Road	34.5	40	87
	Tukipo	70	83	84
	Ongaonga	63.8	68	94
	Gwavas	69.4	96	72
	Ruataniwha Plains %			84
Southern Hawkes Bay	Mangaorapa	27	56	49
	Waipoapoa	104.5	121	86
	Wallingford	21	54	39
	Maraetotara	41.5	55	76
	Southern Hawkes Bay %			62
Hawkes Bay Region				77

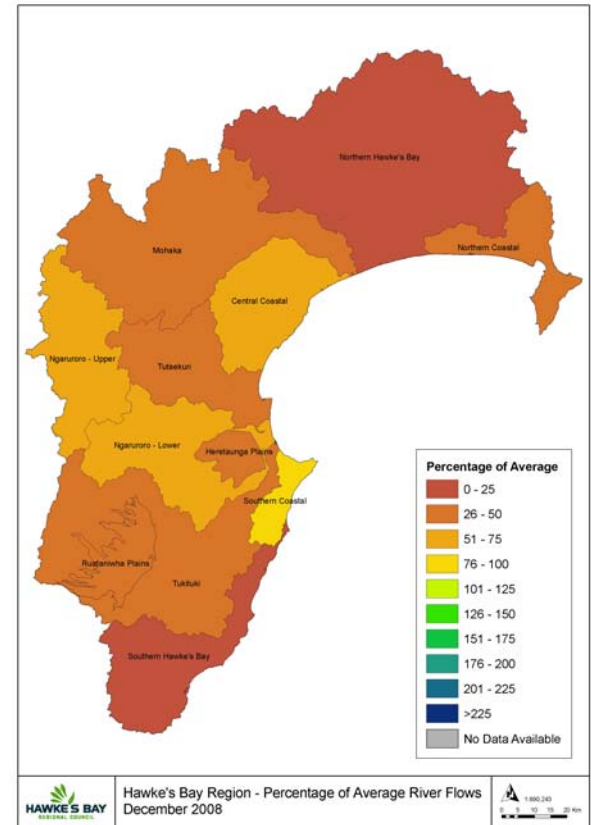
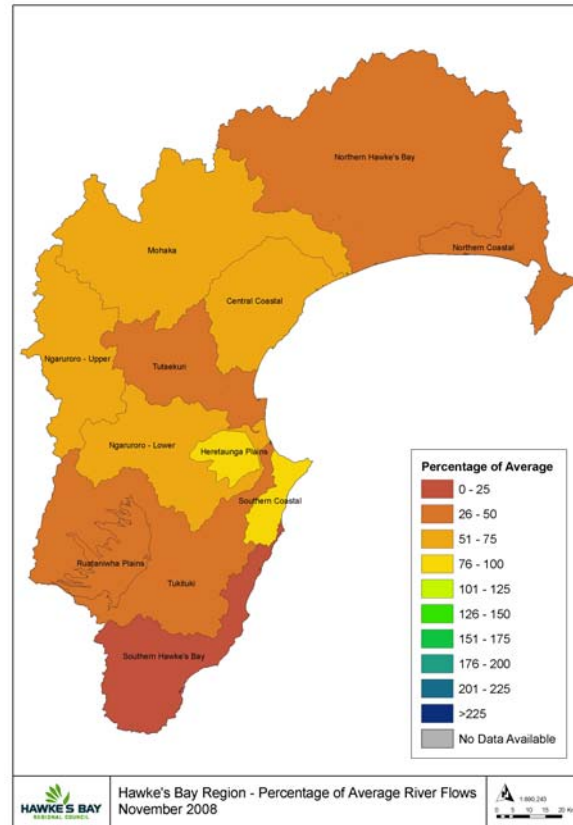
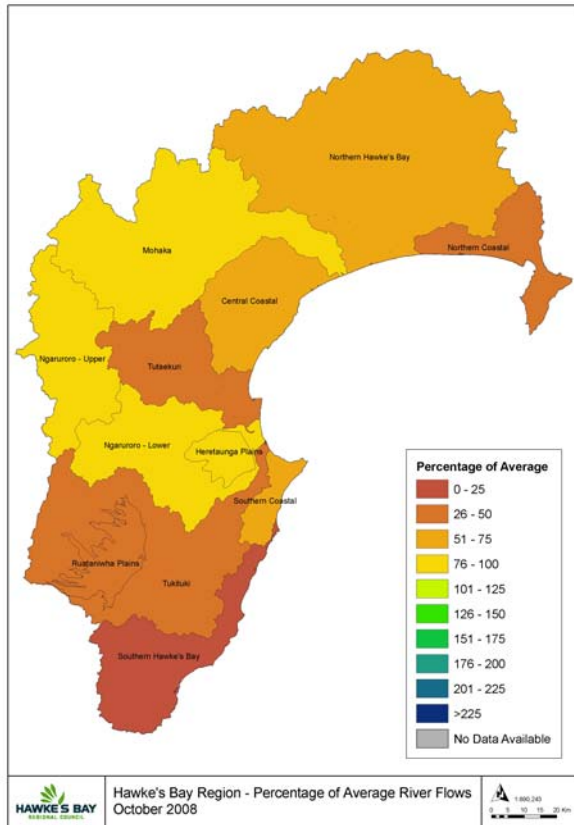
Regional River Flow Pattern December 2008



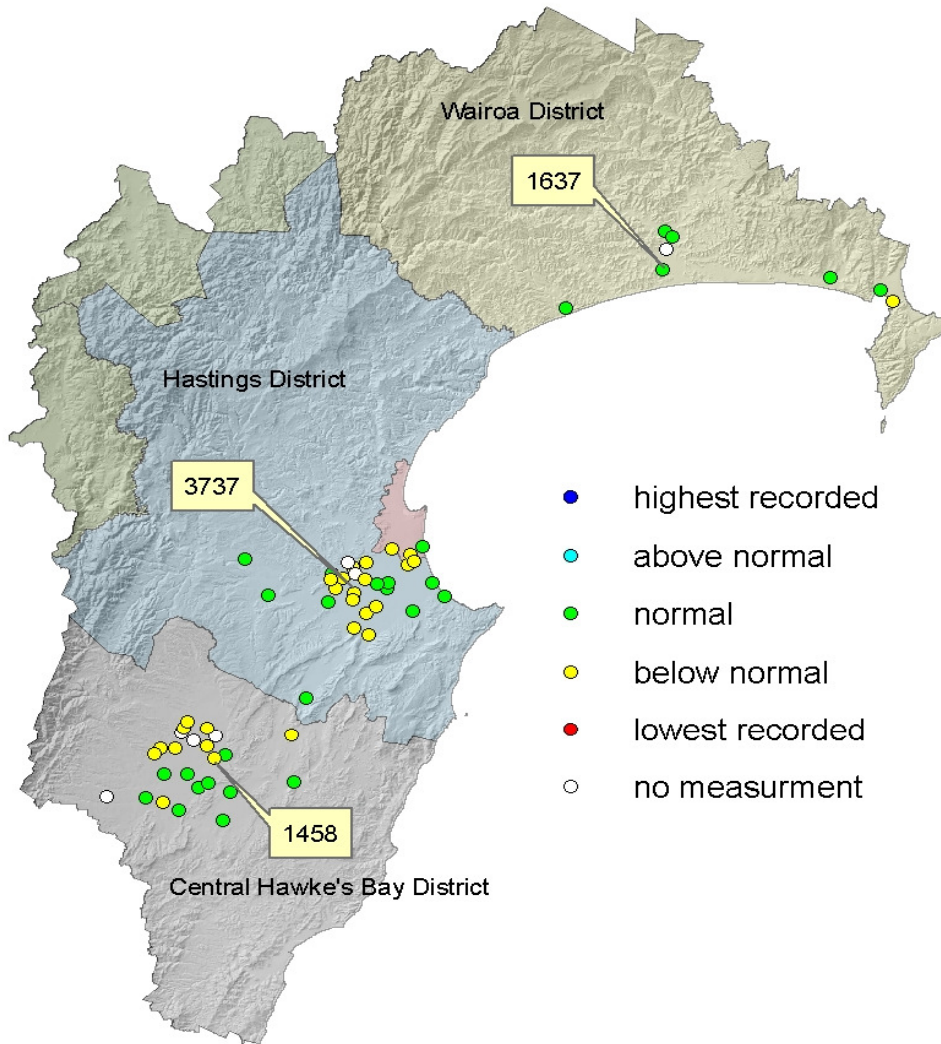
Area	Site	Flows % of Longterm Mean	Dec Min (m3/s)	Dec Max (m3/s)	Dec Mean (m3/s)	Percentage Deviation
Northern Coastal	Kopuawhara at Railway Bridge	36	0.2	2.8	0.4	-64
Northern Hawke's Bay	Hangaroa River at Doneraille Park	18	0.8	10.9	1.5	-82
Northern Hawke's Bay	Waiau River at Otoi	38	3.5	15.1	5.5	-62
Northern Hawke's Bay	Wairoa at Marumaru	17	3.0	34.0	5.7	-83
Mohaka	Mohaka at Glenfalls	47	11.7	28.4	14.6	-53
Central Coastal	Esk at Waipunga Bridge	59	1.9	6.6	2.3	-41
Tutaekuri	Tutaekuri at Puketapu	38	2.9	10.1	4.1	-62
Heretaunga Plains	Irongate at Clarks Weir	33	0.1	1.0	0.1	-67
Ngaruroro - Upper	Ngaruroro at Kuripapango	54	5.0	13.7	7.2	-46
Ngaruroro - Lower	Ngaruroro at Chesterhope	60	15.7	31.7	16.3	-40
Southern Coastal	Maraetotara at Waimarama Rd	95	0.5	1.6	0.6	-5
Ruataniwha Plains	Tukipo at SH50	40	0.1	7.4	0.4	-60
Tukituki	Tukituki at Red Bridge	33	5.2	18.5	8.0	-67
Southern Hawke's Bay	Taurekaitai Stream at Wallingford	1	0.0	0.1	0.01	-99



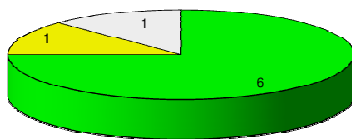
Percentage of Average River Flows for the Hawke's Bay Region - October, November & December 2008:



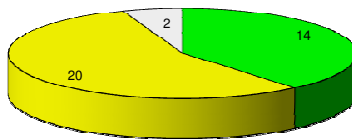
Groundwater Level Report December 2008



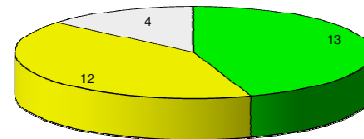
Wairoa



Hastings-Napier



Central Hawke's Bay



% highest recorded	0	0	0
% above normal	0	0	0
% normal	75	39	45
% below normal	13	56	41
% lowest recorded	0	0	0
% measured	88	94	86
number of wells	8	34	29

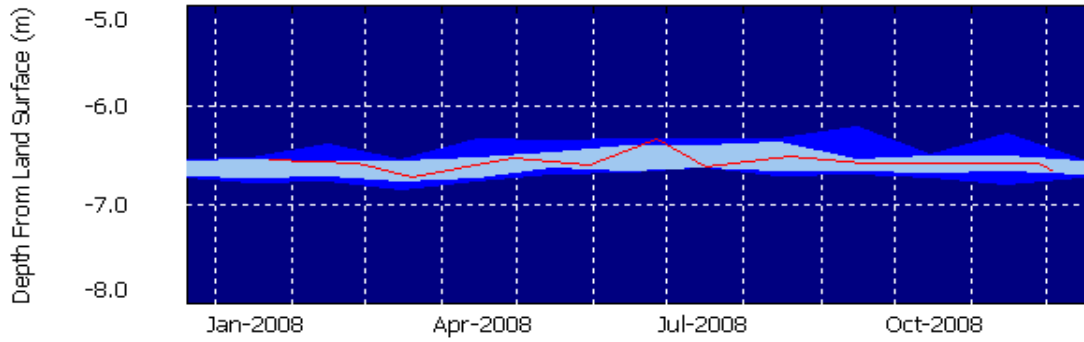
NOTES:

Wairoa District: Normal water levels.

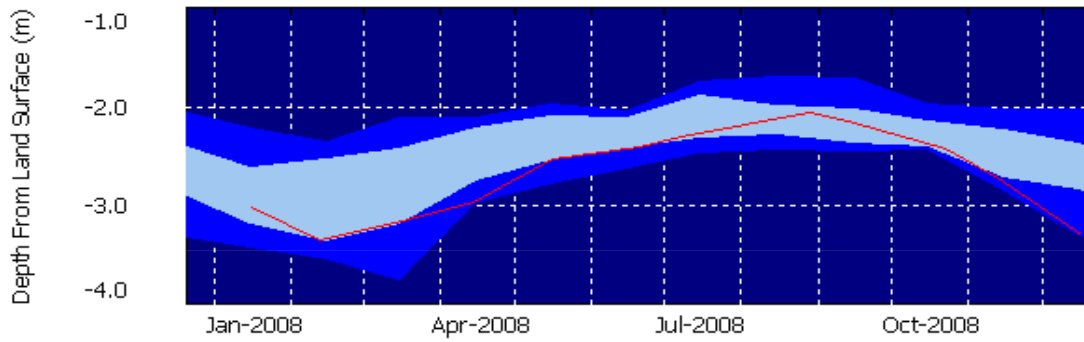
Hastings-Napier District: Water levels mostly below normal.

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

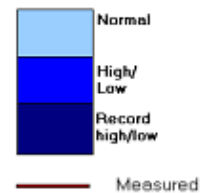
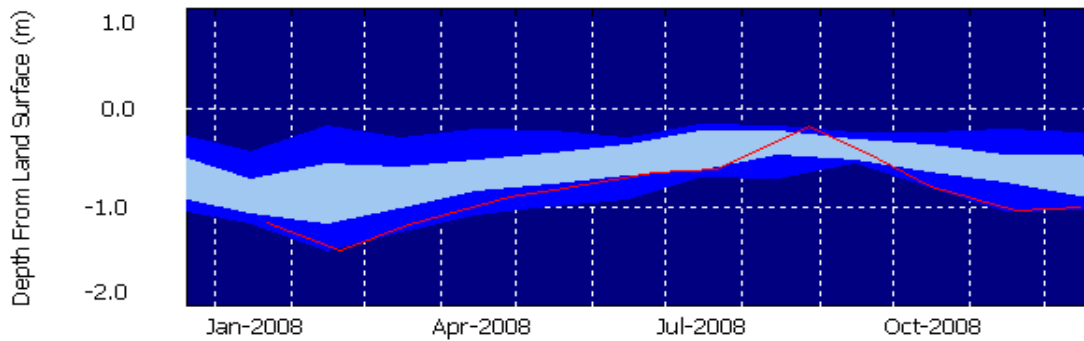
Wairoa District - Well 1637



Hastings/Napier District - Well 3737



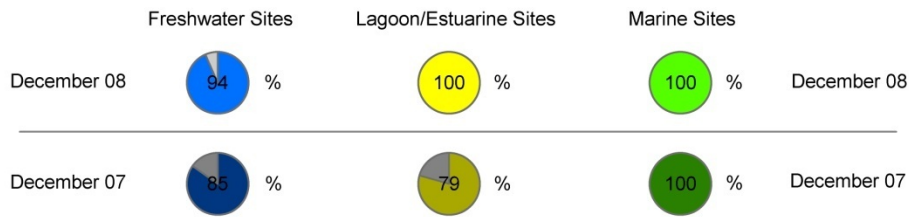
Central Hawke's Bay District - Well 1458



2008-2009 Recreational Water Quality Monitoring Programme

Alert Mode* - Average Percent Compliance for Freshwater, Lagoon/Estuarine and Marine Sites

December 07/08 Comparison



Alert Mode - Average Percent Compliance

*Alert mode is activated when samples show Enterococci >140cfu/100mls or E.coli >260cfu/100mls. This indicates the health risk for recreational activities involving contact with the water may have increased and acts as a trigger for councils to collect more frequent samples.

For more information go to:

www.hbrc.govt.nz/Water/RecreationalWaterQuality/tabid/105/Default.aspx