

Notes for track changes: This is the final recommendation for wording of One Plan provisions made by Regional Council officers at the conclusion of the Water Hearing. It uses the Proposed One Plan provisions as notified as the base document and consolidates recommendations from the Planning Evidence and Recommendations Report (August 2009), Supplementary Report (November 2009) and End of Hearing Report (April 2010).

Words recommended to be added are shown in underline, words recommended to be removed are shown in ~~strike through~~.

Terms defined within the Proposed One Plan glossary are *italicised* and marked with an asterisk (\*) symbol. Terms defined in the Resource Management Act 1991 are *italicised* and marked with a caret (^) symbol.

A detailed analysis of scope for recommendations to amend this schedule is presented in a separate report entitled “*Report on Scope for Water Chapter Recommendations*” (Barry Gilliland, 9 April 2010).

## Schedule B: Surface Water<sup>^</sup> Quantity

For the purpose of clarity this is a schedule to Part II – the Regional Plan.

### USER GUIDE: How to use the contents of this schedule

Step 1: Identify which *Water Management Sub-zone*<sup>\*</sup> your proposed abstraction lies in (go to Part 1 of Schedule Ba)

Step 2: Refer to Table B1 to identify which cumulative core allocation limits and minimum flows apply to your *Water Management Sub-zone*<sup>\*</sup>

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone*<sup>\*</sup>

<u>Management Zone code</u>	<u>Management Sub-zone</u> <sup>*</sup>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
<u>Upper Manawatu (Mana_1)</u>	<u>Upper Manawatu (Mana_1a)</u>	<u>Mana_1a</u>	1.600	Manawatu at Weber Rd	<u>U23:751-027</u> <u>U23:751-027</u>	0.204 <u>17,712</u>
	<u>Mangatewainui (Mana_1b)</u>	<u>Mana_1b</u>	1.600	Manawatu at Weber Rd	<u>U23:751-027</u> <u>U23:751-027</u>	0.063 <u>5,616</u>
	<u>Mangatoro (Mana_1c)</u>	<u>Mana_1c</u>	<u>0.702-0.700</u>	Mangatoro at Mangahei Rd	<u>U23:813-019</u> <u>U23:813-019</u>	0.204 <u>10,368</u>
<u>Whole zZone (Mana_1)</u>						0.204 <u>17,172</u>
<u>Weber-Tamaki (Mana_2)</u>	<u>Weber-Tamaki (Mana_2a)</u>	<u>Mana_2a</u>	1.600	Manawatu at Weber Rd	<u>U23:751-027</u> <u>U23:751-027</u>	0.251 <u>21,600</u>

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

<u>Management Zone code</u>	<u>Management Sub-zone*</u>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
	Mangatera (Mana_2b)	Mana_2b	1.600	Manawatu at Weber Rd	U23: 751-027 U23:751-027	0.047 3,888
<i>Catchment cumulative allocable volume (Mana_1 + Mana_2)</i>						<i>0.251 21,600</i>
<u>Upper Tamaki (Mana_3)</u>	<u>Upper Tamaki (Mana_3)</u>	Mana_3	0.238-0.240	Tamaki at Water Supply Weir	U23: 709-111 U23:709-111	0.078 6,912
<u>Upper Kumeti (Mana_4)</u>	<u>Upper Kumeti (Mana_4)</u>	Mana_4	0.055	Kumeti at Te Rehunga	T23: 663-052 T24:616-899	0.005 864
<u>Tamaki-Hopelands (Mana_5)</u>	<u>Tamaki-Hopelands (Mana_5a)</u>	Mana_5a	2.980	Manawatu at Hopelands	T24: 616-899 T24:616-899	0.971 83,808
	<u>Lower Tamaki (Mana_5b)</u>	Mana_5b	0.360	Tamaki at Stephensons	U23: 707-022 U23:707-022	0.138 12,096
	<u>Cumulative allocable volume (Mana_3 + Mana_5b)</u>					<u>12,096</u>
	<u>Lower Kumeti (Mana_5c)</u>	Mana_5c	0.055-2.980	<u>Kumeti at Te Rehunga Manawatu at Hopelands</u>	T23: 663-052 T24:616-899	0.059 5,184
	<u>Cumulative allocable volume (Mana_4 + Mana_5c)</u>					<u>5,184</u>
	<u>Oruakeretaki (Mana_5d)</u>	Mana_5d	0.293-0.208	Oruakeretaki at S.H.2 Napier	T23: 679-014 T23:679-014	0.105 13,651
	<u>Raparapawai (Mana_5e)</u>	Mana_5e	0.074-0.035	Raparapawai at Jacksons Rd	T24: 645-938 T24:645-938	0.024 1,296
<i>Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5)</i>						<i>0.971 83,808</i>
<u>Hopelands-Tiraumea (Mana_6)</u>	<u>Hopelands-Tiraumea (Mana_6)</u>	Mana_6	2.980	Manawatu at Hopelands	T24: 616-899 T24:616-899	1.049 90,720
<i>Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6)</i>						<i>1.049 90,720</i>
<u>Tiraumea (Mana_7)</u>	<u>Upper Tiraumea (Mana_7a)</u>	Mana_7a	2.140-2.040	Tiraumea at Ngaturi	T24: 578-780 T24:578-780	0.475 3,456
	<u>Lower Tiraumea (Mana_7b)</u>	Mana_7b	2.140-2.040	Tiraumea at Ngaturi	T24: 578-780 T24:578-780	0.550 23,328

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

Management Zone code	Management Sub-zone*	Sub-zone code	Minimum flow (m <sup>3</sup> /s)	Flow monitoring site	Flow monitoring site map reference location	Cumulative core allocation limit <sup>12</sup> (m <sup>3</sup> /s) (m <sup>3</sup> /day)
	Mangaone River (Mana_7c)	Mana_7c	MALF_2.040	Tiraumea at Ngaturi	T24:578-780	MALF_1,728
	Makuri (Mana_7d)	Mana_7d	2.160-1.700	Makuri at Tuscan Hills	T24: 583-717 T24:583-717	0.108-8,640
	Cumulative allocable volume (Mana_7a + Mana_7c + Mana_7d)					8,640
	Mangaramarama (Mana_7e)		2.040	Tiraumea at Ngaturi	T24:578-780	0.025-2,160
Whole zZone (Mana_7)						0.550-23,328
Mangatainoka (Mana_8)	Upper Mangatainoka (Mana_8a)	Mana_8a	0.400-0.370	Mangatainoka at Larsons Road	T25: 308-596 T25:308-596	0.060-1,728
	Middle Mangatainoka (Mana_8b)	Mana_8b	1.580-1.305	Mangatainoka at Pahiatua Town Bridge	T24: 501-802 T24:501-802	0.105-5,184
	Lower Mangatainoka (Mana_8c)	Mana_8c	1.580-1.305	Mangatainoka at Pahiatua Town Bridge	T24: 501-802 T24:501-802	0.289-27,913
	Makakahi (Mana_8d)	Mana_8d	0.345-0.320	Makakahi at Hamua	T25: 424-676 T25:424-676	0.052-2,694
	Cumulative allocable volume (Mana_8a + Mana_8b + Mana_8d)					5,184
Mangaramarama	Mana_8e	1.580	Mangatainoka at Pahiatua Town Bridge	T24: 501-802	0.009	
Whole zZone (Mana_8)						0.289-27,913
Catchment cumulative allocable volume (Mana_7 + Mana_8) Mangatainoka and Tiraumea (Mana_7 + Mana_8)						0.839-51,241
Upper Gorge (Mana_9)	Upper Gorge (Mana_9a)	Mana_9a	10.530-9.175	Manawatu at Upper Gorge	T24: 494-933 T24:494-933	2.340-198,288
	Mangapapa (Mana_9b)	Mana_9b	0.023-0.035	Mangapapa at Troup Road	T24: 520-922 T24:520-922	0.010-1,296
	Mangaatua (Mana_9c)	Mana_9c	MALF_0.070	Mangaatua at Hutchinsons	T24:581-932	20% of MALF_432
	Upper Mangahao (Mana_9d)	Mana_9d	MALF_1.415	Mangahao at Ballance	T24:468-818	20% of MALF_7,344

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

Management Zone code	Management Sub-zone*	Sub-zone code	Minimum flow (m <sup>3</sup> /s)	Flow monitoring site	Flow monitoring site map reference location	Cumulative core allocation limit <sup>12</sup> (m <sup>3</sup> /s) (m <sup>3</sup> /day)
	Lower Mangahao (Mana_9e)	Mana_9e	MALF 1.415	Mangahao at Ballance	T24:468-818	20% of MALF 7,344
	Cumulative allocable volume (Mana_9d + Mana_9e)					7,344
Whole Zone (Mana_9)						198,288
Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9)						2,340 198,288
Middle Manawatu (Mana_10)	Middle Manawatu (Mana_10a)	Mana_10a	14.160 12.240	Manawatu at Teachers College	T24: 331-892 T24:331-892	3.150 264,384
	Upper Pohangina (Mana_10b)	Mana_10b	MALF 1.960	Pohangina at Mais Reach	T23: 467-053 T23:467-053	20% of MALF 9,936
	Middle Pohangina (Mana_10c)	Mana_10c	1.960	Pohangina at Mais Reach	T23: 467-053 T23:467-053	0.460 39,312
	Cumulative allocable volume (Mana_10b + Mana_10c)					39,312
	Lower Pohangina (Mana_10d)	Mana_10d	1.960	Pohangina at Mais Reach	T23: 467-053 T23:467-053	0.525 39,312
	Cumulative allocable volume (Mana_10b + Mana_10c + Mana_10d)					39,312
	Aokautere (Mana_10e)	Mana_10e	MALF 12.240	Manawatu at Teachers College	T24:331-892	20% of MALF 432
Whole Zone (Mana_10)						3,060 264,384
Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9 + Mana_10)						3,150 264,384
Lower Manawatu (Mana_11)	Lower Manawatu (Mana_11a)	Mana_11a	14.160 12.240	Manawatu at Teachers College	T24: 331-892 T24:331-892	3.180 336,096
	Turitea (Mana_11b)	Mana_11b	0.050-0.041	Turitea at Ngahere Park	T24: 354-852 T24:354-852	0.264 37,100
	Kahuterawa (Mana_11c)	Mana_11c	MALF 0.180	Kahuterawa at Johnsons Rata	T24:323-808	20% of MALF 864
	Upper Mangaone Stream (Mana_11d)	Mana_11d	MALF 0.035	Mangaone at Milson Line	T24:311-953	20% of MALF 432

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Management Zone code	Management Sub-zone*	Sub-zone code	Minimum flow (m <sup>3</sup> /s)	Flow monitoring site	Flow monitoring site map reference location	Cumulative core allocation limit <sup>12</sup> (m <sup>3</sup> /s) (m <sup>3</sup> /day)
	Lower Mangaone Stream (Mana_11e)	Mana_11e	MALF 0.035	Mangaone at Milson Line	T24:311-953	20% of MALF 864
	Cumulative allocable volume (Mana_11d + Mana_11e)					1,296
	Main Drain (Mana_11f)	Mana_11f	MALF 12.240	Manawatu at Teachers College		20% of MALF*
Whole Zone (Mana_11)						336,096
Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9 + Mana_10 + Mana_11)						3,180 336,096
Oroua (Mana_12)	Upper Oroua (Mana_12a)	Mana_12a	1.050 1.005	Oroua at Kawa Wool Oroua at Almadale	S23: 287 038 T23:365-113	0.405 34,128
	Middle Oroua (Mana_12b)	Mana_12b	1.050 1.030	Oroua at Kawa Wool	S23: 287 038 S23:287-038	0.429 34,992
	Lower Oroua (Mana_12c)	Mana_12c	1.050 1.085	Oroua at Kawa Wool Oroua at Awahuri Bridge	S23: 287 038 S23:243-002	0.530 37,152
	Cumulative allocable volume (Mana_12a + Mana_12b + Mana_12c)					37,152
	Kiwitea (Mana_12d)	Mana_12d	0.145 0.150	Kiwitea at Haynes Line	T23: 366 207 T23:366-207	0.048 1,296
	Makino (Mana_12e)	Mana_12e	0.080 0.075	Makino at Boness Road	S23: 254 023 S23:254-023	0.025 1,296
Cumulative allocable volume Whole Zone (Mana_12)						0.530 37,152
Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9 + Mana_10 + Mana_11 + Mana_12)						3,710 373,248
Coastal Manawatu (Mana_13)	Coastal Manawatu (Mana_13a)	Mana_13a	12.588 12.240	Manawatu at Teachers College	T24: 331 892 T24:331-892	5.300 598,752
	Upper Tokomaru (Mana_13b)	Mana_13b	0.220 0.240	Tokomaru at Horseshoe Bend Tokomaru at Riverland Farm	S24: 241 768 S24:218-772	0.050 1,296
	Lower Tokomaru (Mana_13c)	Mana_13c	MALF 0.240	Tokomaru at Riverland Farm	S24:218-772	20% of MALF 14,688
	Cumulative allocable volume (Mana_13b + Mana_13c)					14,688

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Management Zone code	Management Sub-zone*	Sub-zone code	Minimum flow (m <sup>3</sup> /s)	Flow monitoring site	Flow monitoring site map reference location	Cumulative core allocation limit <sup>12</sup> (m <sup>3</sup> /s) (m <sup>3</sup> /day)	
	Mangaore (Mana_13d)	Mana_13d	MALF*	Mangaore at d/s Mangahao Power Station	S25:173-670	2010% of MALF*	
	Koputaroa (Mana_13e)	Mana_13e	MALF 12.240	Manawatu at Teachers College	T24:331-892	20% of MALF_432	
	Foxton Loop (Mana_13f)	Mana_13f	MALF*			210% of MALF*	
<b>Whole Zone (Mana_13)</b>						<b>598,752</b>	
<b>Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9 + Mana_10 + Mana_11 + Mana_12 + Mana_13)</b>						<b>5,300 598,752</b>	
Upper Rangitikei (Rang_1)	Upper Rangitikei (Rang_1)	Rang_1	n/a			0.000 0	
Middle Rangitikei (Rang_2)	Middle Rangitikei (Rang_2a)	Rang_2a	5.250 5.000	Rangitikei at Pukeokahu	U21: 713-708 U21:713-708	0.260 21,600	
	Pukeokahu-Pukeokahu-Mangaweka (Rang_2b)	Rang_2b	12.790 12.250	Rangitikei at Mangaweka	T22: 504-513 T22:504-513	0.670 52,704	
	<b>Cumulative allocable volume (Rang_2a + Rang_2b)</b>						<b>52,704</b>
	Upper Moawhango (Rang_2c)	Rang_2c	n/a		T21:557-745	0.000 0	
	Middle Moawhango (Rang_2d)	Rang_2d	n/a		T21:557-745	0.000 0	
	Lower Moawhango (Rang_2e)	Rang_2e	MALF-n/a	Moawhango at Moawhango	T21:557-745	5% of MALF_ 0	
	Upper Hautapu (Rang_2f)	Rang_2f	0.745 0.640	Hautapu at Alabasters	T21: 486-683 T21:486-683	0.112 9,936	
	Lower Hautapu (Rang_2g)	Rang_2g	0.670 0.640	Hautapu at Alabasters	T21: 486-683 T21:486-683	0.150 12,960	
	<b>Cumulative allocable volume (Rang_2f+ Rang_2g)</b>						<b>12,960</b>
<b>Whole Zone (Rang_2)</b>						<b>52,704</b>	

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<u>Management Zone code</u>	<u>Management Sub-zone*</u>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
<i>Catchment cumulative allocable volume (Rang_1 + Rang_2)</i>						<i>0.670 52,704</i>
<u>Lower Rangitikei (Rang_3)</u>	<u>Lower Rangitikei (Rang_3a)</u>	<u>Rang_3a</u>	<u>14.550</u> <u>12.100</u>	<u>Rangitikei at Onepuhi</u>	<u>S23: 201 222</u> <u>S23:201-222</u>	<u>1.540 141,696</u>
	<u>Makohine (Rang_3b)</u>	<u>Rang_3b</u>	<u>0.036 0.040</u>	<u>Makohine at Viaduct</u>	<u>T22: 395 450</u> <u>T22:395-450</u>	<u>0.008 864</u>
<u>Whole Zone (Rang_3)</u>						<u>141,696</u>
<i>Catchment cumulative allocable volume (Rang_1 + Rang_2 + Rang_3)</i>						<i>1.540 141,696</i>
<u>Coastal Rangitikei (Rang_4)</u>	<u>Coastal Rangitikei (Rang_4a)</u>	<u>Rang_4a</u>	<u>10.230</u>	<u>Rangitikei at McKelvies</u>	<u>S24: 033 985</u> <u>S24:033-985</u>	<u>6.410 213,840</u>
	<u>Tidal Rangitikei (Rang_4b)</u>	<u>Rang_4b</u>	<u>10.230</u>	<u>Rangitikei at McKelvies</u>	<u>S24: 033 985</u> <u>S24:033-985</u>	<u>6.410 285,120</u>
	<u>Porewa (Rang_4c)</u>	<u>Rang_4c</u>	<u>MALF</u> <u>12.100</u>	<u>Rangitikei at Onepuhi</u>	<u>S23:201-222</u>	<u>20% of MALF 0</u>
	<u>Tutaenui (Rang_4d)</u>	<u>Rang_4d</u>	<u>MALF</u> <u>10.230</u>	<u>Rangitikei at McKelvies</u>	<u>S24:033-985</u>	<u>20% of MALF 6,653</u>
<u>Whole Zone (Rang_4)</u>						<u>285,120</u>
<i>Catchment cumulative allocable volume (Rang_1 + Rang_2 + Rang_3 + Rang_4)</i>						<i>6.410 285,120</i>
<u>Upper Whanganui (Whai_1)</u>	<u>Upper Whanganui (Whai_1)</u>	<u>Whai_1</u>	<u>MALF 26.6</u>	<u>Whanganui at Te Maire</u>		<u>20% of MALF 518</u>
<i>Cumulative allocable volume-Whole Zone (Whai_1)</i>						<i>20% of MALF of Whai_1 518</i>
<u>Cherry Grove (Whai_2)</u>	<u>Cherry Grove (Whai_2a)</u>	<u>Whai_2a</u>	<u>MALF 26.6</u>	<u>Whanganui at Te Maire</u>		<u>20% of MALF 15,121</u>
	<u>Upper Whakapapa (Whai_2b)</u>	<u>Whai_2b</u>	<u>MALF 26.6</u>	<u>Whanganui at Te Maire</u>		<u>20% of MALF 3,937</u>
	<u>Lower Whakapapa (Whai_2c)</u>	<u>Whai_2c</u>	<u>MALF 26.6</u>	<u>Whanganui at Te Maire</u>		<u>20% of MALF 5,517</u>

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

<u>Management Zone code</u>	<u>Management Sub-zone*</u>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
	Piopioteea (Whai_2d)	Whai_2d	MALF_26.6	Whanganui at Te Maire		20% of MALF_80
	Pungapunga (Whai_2e)	Whai_2e	MALF_26.6	Whanganui at Te Maire		20% of MALF_80
	Upper Ongarue (Whai_2f)	Whai_2f	MALF_26.6	Whanganui at Te Maire		20% of MALF_1,270
	Lower Ongarue (Whai_2g)	Whai_2g	MALF_26.6	Whanganui at Te Maire		20% of MALF_1,422
<u>Whole Zone (Whai_2)</u>						<u>15,121</u>
<u>Catchment cumulative allocable volume (Whai_1 + Whai_2)</u>						<i>20% of MALF of the point just downstream of the Ongarue Whanganui confluence</i> <u>15,121</u>
<u>Te Maire (Whai_3)</u>	<u>Te Maire (Whai_3)</u>	<u>Whai_3</u>	<u>MALF_</u>			<u>20% of MALF_</u>
<u>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3)</u>						<u>20% of MALF_</u>
<u>Middle Whanganui (Whai_4)</u>	<u>Middle Whanganui (Whai_4a)</u>	<u>Whai_4a</u>	<u>MALF_</u>			<u>20% of MALF_</u>
	<u>Upper Ohura (Whai_4b)</u>	<u>Whai_4b</u>	<u>MALF_</u>			<u>20% of MALF_</u>
	<u>Lower Ohura (Whai_4c)</u>	<u>Whai_4c</u>	<u>MALF_</u>			<u>20% of MALF_</u>
	<u>Retaruke (Whai_4d)</u>	<u>Whai_4d</u>	<u>MALF_</u>			<u>20% of MALF_</u>
<u>Whole Zone (Whai_4)</u>						<u>20% of MALF_</u>



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<u>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4)</u>						<i>20% of MALF of the point just downstream of the Whanganui-Retaruke confluence</i> <u>10% of MALF*</u>
Pipiriki (Whai_5)	Pipiriki (Whai_5a)	<del>Whai_5a</del>	MALF <sub>-</sub>			<del>20</del> 10% of MALF <sub>-</sub>
	Tangarakau (Whai_5b)	<del>Whai_5b</del>	MALF <sub>-</sub>			<del>20</del> 10% of MALF <sub>-</sub>
	Whangamomona (Whai_5c)	<del>Whai_5c</del>	MALF <sub>-</sub>			<del>20</del> 10% of MALF <sub>-</sub>
	Upper Manganui o te Ao (Whai_5d)	<del>Whai_5d</del>	n/a			<del>0.000</del> 0
	Makatote (Whai_5e)		n/a			<del>0.000</del> 0
	Waimarino (Whai_5f)		<u>7 day MALF*</u>			<u>5% of 7 day MALF*</u>
	Middle Manganui o te Ao (Whai_5g)		<u>7 day MALF*</u>			<u>5% of 7 day MALF*</u>
	Mangaturuturu (Whai_5h)		n/a			<u>0</u>
	Lower Manganui o te Ao (Whai_5i)	<del>Whai_5e</del>	<u>7 day MALF*</u>			<del>0.000</del> <u>5% of 7 day MALF*</u>
	Orautoha (Whai_5i)		<u>7 day MALF*</u>			<u>5% of 7 day MALF*</u>
<u>Whole Zone (Whai_5)</u>						<u>10% of MALF</u>
<u>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5)</u>						<i>20% of MALF of Whai_5a</i> <u>10% of MALF*</u>
Paetawa (Whai_6)	Paetawa (Whai_6)	<del>Whai_6</del>	MALF <sub>-</sub>			<del>20</del> 10% of MALF <sub>-</sub>

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

<u>Management Zone code</u>	<u>Management Sub-zone*</u>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
<i>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5 + Whai_6)</i>						<i>20% of MALF of Whai 6 10% of MALF*</i>
<u>Lower Whanganui (Whai_7)</u>	Lower Whanganui (Whai_7a)	Whai_7a	MALF*			20% of MALF*
	Coastal Whanganui (Whai_7b)	Whai_7b	MALF*			20% of MALF*
	Upokongaro (Whai_7c)	Whai_7c	MALF*			20% of MALF*
	Matarawa (Whai_7d)	Whai_7d	MALF*			20% of MALF*
<u>Whole Zone (Whai_7)</u>						<u>10% of MALF*</u>
<i>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5 + Whai_6 + Whai_7)</i>						<i>20% of MALF of Whai 7b 10% of MALF*</i>
<u>Upper Whangaehu (Whau_1)</u>	Upper Whangaehu (Whau_1a)	Whau_1a	9.790 8.700	Whangaehu at Karioi	S21:218-864 S21:218-864	2.175 47,520
	Waitangi (Whau_1b)	Whau_1b	0.475 0.470	Waitangi at Tangiwai	T21:316-886 T21:316-886	0.105 9,504
	Tokiahuru (Whau_1c)	Whau_1c	4.340 3.840	Tokiahuru at Whangaehu Junction	S21:217-870 S21:217-870	0.960 41,472
<u>Whole Zone (Whau_1)</u>						<u>47,520</u>
<i>Cumulative allocable volume (Whau_1)</i>						<i>2.175</i>
<u>Middle Whangaehu (Whau_2)</u>	Middle Whangaehu	Whau_2	MALF-9.650	Whangaehu at Aranui	S21:175-627	20% of MALF 52,272
<i>Catchment cumulative allocable volume (Whau_1 + Whau_2)</i>						<i>20% of MALF of Whau 2 52,272</i>
<u>Lower Whangaehu (Whau_3)</u>	Lower Whangaehu (Whau_3a)	Whau_3a	13.240 11.770	Whangaehu at Kauangaroa	S22:045-397 S22:045-397	2.940 127,008
	Upper Makotuku (Whau_3b)	Whau_3b	0.100 0.095	Makotuku at SH49a Bridge Makotuku at Below Race Intake	S20:103-011 S20:091-002	0.023 2,506

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

<u>Management Zone code</u>	<u>Management Sub-zone*</u>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
	Lower Makotuku (Whau_3c)	Whau_3c	MALF 0.165	Makotuku at Raetihi	S20:065-955	20% of MALF 3,802
	Upper Mangawhero (Whau_3d)	Whau_3d	MALF 1.020	Mangawhero at Pakihi Road	S20:100-945	20% of MALF 20,736
	Lower Mangawhero (Whau_3e)	Whau_3e	2.520 2.405	Mangawhero at Ore Ore	S21:045-794 S21:045-794	0.560 24,624
	Makara (Whau_3f)		0.045	Makara at d/s Airstrip		0
	Cumulative allocable volume (Whau_3b + Whau_3f)					2,506
	Cumulative allocable volume (Whau_3b + Whau_3c + Whau_3f)					3,802
<u>Whole Zone (Whau_3)</u>						127,008
<u>Catchment cumulative allocable volume (Whau_1 + Whau_2 + Whau_3)</u>						2,940 127,008
<u>Coastal Whangaehu (Whau_4)</u>	Coastal Whangaehu (Whau_4)	Whau_4	MALF 11.770	Whangaehu at Kauangaroa	S22:045-397	20% of MALF 127,008
<u>Catchment cumulative allocable volume (Whau_1 + Whau_2 + Whau_3 + Whau_4)</u>						20% of MALF of Whau_4 127,008
<u>Turakina (Tura_1)</u>	Upper Turakina (Tura_1a)	Tura_1a	0.345 0.340	Turakina at Otairi Rd	S22:236-471 S22:236-471	0.075 3,024
	Lower Turakina (Tura_1b)	Tura_1b	0.830 0.805	Turakina at O'Neills Bridge	S23:006-287 S23:006-287	0.185 12,528
	Ratana (Tura_1c)	Tura_1c	MALF 0.805	Turakina at O'Neills Bridge	S23:006-287	20% of MALF
<u>Whole Zone (Tura_1)</u>						12,528
<u>Catchment cumulative allocable volume (Tura_1) Upper and Lower Turakina</u>						0.185 12,528
<u>Ohau (Ohau_1)</u>	Upper Ohau (Ohau_1a)	Ohau_1a	0.820	Ohau at Rongomatane	S25:072-577 S25:072-577	0.280 24,192
	Lower Ohau (Ohau_1b)	Ohau_1b	0.820	Ohau at Rongomatane	S25:072-577 S25:072-577	0.280 24,192

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

<u>Management Zone code</u>	<u>Management Sub-zone*</u>	<u>Sub-zone code</u>	<u>Minimum flow (m<sup>3</sup>/s)</u>	<u>Flow monitoring site</u>	<u>Flow monitoring site map reference location</u>	<u>Cumulative core allocation limit <sup>12</sup> (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
<u>Whole Zone (Ohau_1)</u>						<u>24,192</u>
<u>Catchment cumulative allocable volume (Ohau_1)</u>						<u>0.280 24,192</u>
<u>Owahanga (Owha_1)</u>	<u>Owahanga (Owha_1)</u>	<u>Owha_1</u>	<u>0.040 0.030</u>	<u>Owahanga at Branscombe Bridge</u>	<u>U25:893-587</u> <u>U25:893-587</u>	<u>0.010 432</u>
<u>East Coast (East_1)</u>	<u>East Coast (East_1)</u>	<u>East_1</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Akitio (Akit_1)</u>	<u>Upper Akitio (Akit_1a)</u>	<u>Akit_1a</u>	<u>MALF 0.045</u>	<u>Akitio at Weber</u>	<u>U24:919-832</u>	<u>20% of MALF 864</u>
	<u>Lower Akitio (Akit_1b)</u>	<u>Akit_1b</u>	<u>MALF 0.145</u>	<u>Akitio at Mouth</u>	<u>U25:988-655</u>	<u>20% of MALF 2,592</u>
	<u>Waihi (Akit_1c)</u>	<u>Akit_1c</u>	<u>MALF 0.050</u>	<u>Waihi at S.H.52</u>	<u>U24:892-804</u>	<u>20% of MALF 1,296</u>
<u>Catchment cumulative allocable volume (Akit_1)</u>						<u>20% of MALF of Akit_1b 2,592</u>
<u>Northern Coastal (West_1)</u>	<u>Northern Coastal (West_1)</u>	<u>West_1</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Kai Iwi (West_2)</u>	<u>Kai Iwi (West_2)</u>	<u>West_2</u>	<u>0.470 0.445</u>	<u>Kai Iwi at Handley Road</u>	<u>R22:726-455</u> <u>R22:726-455</u>	<u>0.105 3,888</u>
<u>Mowhanau (West_3)</u>	<u>Mowhanau (West_3)</u>	<u>West_3</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Kaitoke Lakes (West_4)</u>	<u>Kaitoke Lakes (West_4)</u>	<u>West_4</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Southern Whanganui Lakes (West_5)</u>	<u>Southern Whanganui Lakes (West_5)</u>	<u>West_5</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Northern Manawatu Lakes (West_6)</u>	<u>Northern Manawatu Lakes (West_6)</u>	<u>West_6</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Waitarere (West_7)</u>	<u>Waitarere (West_7)</u>	<u>West_7</u>	<u>MALF*</u>			<u>20% of MALF*</u>

Table B1: Allocation Limits and Minimum Flows by *Water Management Sub-zone\**

Management Zone code	Management Sub-zone*	Sub-zone code	Minimum flow (m <sup>3</sup> /s)	Flow monitoring site	Flow monitoring site map reference location	Cumulative core allocation limit <sup>12</sup> (m <sup>3</sup> /s) (m <sup>3</sup> /day)
Lake Papaitonga (West_8)	Lake Papaitonga (West_8)	West_8	MALF <sub>-</sub>			2010% of MALF <sub>-</sub>
Waikawa (West_9)	Waikawa (West_9a)	West_9	MALF 0.220	Waikawa at North Manakau Road	S25:987-530	20% of MALF 6,048
	Manakau (West_9b)		0.040	Manakau at S.H.1 Bridge	S25:968-512	432
<b>Whole zone (West_9)</b>						<b>6,048</b>
Lake Horowhenua (Hoki_1)	Lake Horowhenua (Hoki_1a)	Hoki_1a	MALF <sub>-</sub>			2010% of MALF <sub>-</sub>
	Hokio (Hoki_1b)	Hoki_1b	MALF <sub>-</sub>			2010% of MALF <sub>-</sub>

<sup>1</sup> In accordance with Policy 6-16, the taking or diversion of *water* for hydro electricity generation that was lawfully established as at 31 May 2007 falls outside the core allocations specified under Policy 6-16.

<sup>2</sup> **Further restrictions on the cumulative core allocation limit.** The core allocation in the identified *water management sub-zones\** is only available in circumstances where a) the point of take is downstream of the locations described in the table below (which identifies the location of infrastructure related to existing hydro electricity generation schemes), or b) the point of take is upstream of the locations described in the table below and the quantity of *water* is no more than that lawfully allocated to be taken upstream of those locations as at 31 May 2007.

Table B2: Location of Existing Hydro Electricity Generation Infrastructure

Management Zone	Management Sub-Zone	Intake/Dam Name	Locality Descriptions
Middle Rangitikei (Rang_2)	Upper Moawhango (Rang_2)	Moawhango Dam	T20:472-962
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Okupata Intake	S19:287-351
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Taurewa Intake	T19:305-356
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Tawhitikuri Intake	T19:311-359
Upper Whanganui (Whai_1)	Upper Whanganui (Whai_1)	Mangatepopo Intake	T19:313-361

Table B2: Location of Existing Hydro Electricity Generation Infrastructure			
Management Zone	Management Sub-Zone	Intake/Dam Name	Locality Descriptions
<u>Upper Whanganui (Whai 1)</u>	<u>Upper Whanganui (Whai 1)</u>	<u>Whanganui Intake</u>	<u>T19:353-386</u>
<u>Upper Whanganui (Whai 1)</u>	<u>Upper Whanganui (Whai 1)</u>	<u>Te Whaiu Dam</u>	<u>T19:357-398</u>
<u>Upper Whanganui (Whai 1)</u>	<u>Upper Whanganui (Whai 1)</u>	<u>Otamangakau Dam</u>	<u>T19:367-410</u>
<u>Cherry Grove (Whai 2)</u>	<u>Upper Whakapapa (Whai 2b)</u>	<u>Whakapapa Intake minimum flow site (footbridge)</u>	<u>S19:226-295</u>
<u>Te Maire (Whai 3)</u>	<u>Te Maire (Whai 3)</u>	<u>Whanganui River at Te Maire</u>	<u>S19:998-490</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Makahikatoa</u>	<u>T20:401-984</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:404-984</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:407-985</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:409-985</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:419-985</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:424-985</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:393-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:393-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:394-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:394-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:397-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:397-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:413-986</u>

Table B2: Location of Existing Hydro Electricity Generation Infrastructure			
Management Zone	Management Sub-Zone	Intake/Dam Name	Locality Descriptions
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:416-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:417-986</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:387-987</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:387-987</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Tomowai</u>	<u>T20:414-987</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:378-988</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:378-988</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:383-988</u>
<u>Upper Whangaehu (Whau 1)</u>	<u>Upper Whangaehu (Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:383-988</u>