

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

Schedule B is a component of Part II - the Regional Plan.

Schedule B only applies to *rivers*<sup>^</sup>.

### 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 Schedule AA).

**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>.

### Advice Note:

In accordance with Policy 6-16(b), the taking of *water*<sup>^</sup> for hydroelectricity generation that was lawfully established as at 31 May 2007 falls outside the cumulative core allocation limits and minimum flows in this Schedule.

The cumulative core allocation in any *Water Management Sub-zone*<sup>\*</sup> is only available where:

- (a) the point of take is downstream of the locations described in Table B.2 which identifies the location of infrastructure related to existing hydroelectricity generation schemes, or
- (b) the point of take is upstream of the locations described in the Table B.2 and the quantity of *water*<sup>^</sup> to be taken is no more than was lawfully allocated to be taken upstream of those locations as at 31 May 2007.

**Table B.1: Cumulative Core Allocation Limits and Minimum Flows by *Water Management Sub-zone*<sup>\*</sup>**

<i>Water Management Zone</i> <sup>*</sup> code	<i>Sub-zone</i> <sup>*</sup>	<i>Sub-zone</i> code	Minimum flow (m <sup>3</sup> /s)	Flow monitoring site	Flow monitoring site map reference location	Cumulative core allocation limit (m <sup>3</sup> /s) (m <sup>3</sup> /day)
Upper Manawatu (Mana_1)	Upper Manawatu (Mana_1a)	Mana_1a	1.600	Manawatu at Weber Rd	U23:751-027 U23:751-027	0.204 17,712
	Mangatewainui (Mana_1b)	Mana_1b	1.600	Manawatu at Weber Rd	U23:751-027 U23:751-027	0.063 5,616

<b>Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*</b>						
<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
	Mangatoro (Mana_1c)	Mana-1c	0.702 <u>0.700</u>	Mangatoro at Mangahei Rd	U23: 813 019 U23:813-019	0.204 <u>10,368</u>
<b>Whole Zone (Mana_1)</b>						<b>0.204 <u>17,172</u></b>
Weber-Tamaki (Mana_2)	Weber-Tamaki (Mana_2a)	Mana-2a	1.600	Manawatu at Weber Rd	U23: 751 027 U23:751-027	0.251 <u>21,600</u>
	Mangatera (Mana_2b)	Mana-2b	1.600	Manawatu at Weber Rd	U23: 751 027 U23:751-027	0.047 <u>3,888</u>
<b>Catchment cumulative allocable volume (Mana_1 + Mana_2)</b>						<b>0.251 <u>21,600</u></b>
Upper Tamaki (Mana_3)	Upper Tamaki (Mana_3)	Mana-3	0.238 <u>0.240</u>	Tamaki at Water Supply Weir	U23: 709 111 U23:709-111	0.078 <u>6,912</u>
Upper Kumeti (Mana_4)	Upper Kumeti (Mana_4)	Mana-4	0.055	Kumeti at Te Rehunga	T23: 663 052 T24:616-899	0.005 <u>864</u>
Tamaki-Hopelands (Mana_5)	Tamaki-Hopelands (Mana_5a)	Mana-5a	2.980	Manawatu at Hopelands	T24: 616 899 T24:616-899	0.974 <u>83,808</u>
	Lower Tamaki (Mana_5b)	Mana-5b	0.360	Tamaki at Stephensons	U23: 707 022 U23:707-022	0.138 <u>12,096</u>
	<b>Cumulative allocable volume (Mana_3 + Mana_5b)</b>					<b>12,096</b>
	Lower Kumeti (Mana_5c)	Mana-5c	0.055 <u>2.980</u>	Kumeti at Te Rehunga Manawatu at Hopelands	T23: 663 052 T24:616-899	0.059 <u>5,184</u>
	<b>Cumulative allocable volume (Mana_4 + Mana_5c)</b>					<b>5,184</b>
	Oruakeretaki (Mana_5d)	Mana-5d	0.293 <u>0.208</u>	Oruakeretaki at SH2 Napier	T23: 679 014 T23:679-014	0.105 <u>13,651</u>
Raparapawai (Mana_5e)	Mana-5e	0.074 <u>0.035</u>	Raparapawai at Jacksons Rd	T24: 645 938 T24:645-938	0.024 <u>1,296</u>	
<b>Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5)</b>						<b>0.974 <u>83,808</u></b>
Hopelands-Tiraumea (Mana_6)	Hopelands-Tiraumea (Mana_6)	Mana-6	2.980	Manawatu at Hopelands	T24: 616 899 T24:616-899	4.049 <u>90,720</u>
<b>Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6)</b>						<b>4.049 <u>90,720</u></b>

<b>Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*</b>							
<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>	
<u>Tiraumea (Mana_7)</u>	Upper Tiraumea (Mana_7a)	Mana_7a	2.140 <u>2.040</u>	Tiraumea at Ngaturi	T24: 578-780 T24:578-780	0.475 <u>3,456</u>	
	Lower Tiraumea (Mana_7b)	Mana_7b	2.140 <u>2.040</u>	Tiraumea at Ngaturi	T24: 578-780 T24:578-780	0.550 <u>23,328</u>	
	Mangaone River (Mana_7c)	Mana_7c	MALE <u>2.040</u>	Tiraumea at Ngaturi	T24:578-780	MALE <u>1,728</u>	
	Makuri (Mana_7d)	Mana_7d	2.160 <u>1.700</u>	Makuri at Tuscan Hills	T24: 583-717 T24:583-717	0.408 <u>8,640</u>	
	<b>Cumulative allocable volume (Mana_7a + Mana_7c + Mana_7d)</b>						<b>8,640</b>
	Mangaramarama (Mana_7e)		2.040	Tiraumea at Ngaturi	T24:578-780	2,160	
<b>Whole Zone (Mana_7)</b>						<b>0.550 23,328</b>	
<u>Mangatainoka (Mana_8)</u>	Upper Mangatainoka (Mana_8a)	Mana_8a	0.400 <u>0.370</u>	Mangatainoka at Larsons Road	T25: 308-596 T25:308-596	0.060 <u>1,728</u>	
	Middle Mangatainoka (Mana_8b)	Mana_8b	1.580 <u>1.305</u>	Mangatainoka at Pahiatua Town Bridge	T24: 501-802 T24:501-802	0.405 <u>5,184</u>	
	Lower Mangatainoka (Mana_8c)	Mana_8c	1.580 <u>1.305</u>	Mangatainoka at Pahiatua Town Bridge	T24: 501-802 T24:501-802	0.289 <u>27,913</u>	
	Makakahi (Mana_8d)	Mana_8d	0.345 <u>0.320</u>	Makakahi at Hamua	T25: 424-676 T25:424-676	0.052 <u>2,694</u>	
	<b>Cumulative allocable volume (Mana_8a + Mana_8b + Mana_8d)</b>						<b>5,184</b>
	Mangaramarama	Mana_8e	1.580	Mangatainoka at Pahiatua Town Bridge	T24: 501-802	0.009	
<b>Whole Zone (Mana_8)</b>						<b>0.289 27,913</b>	
<b>Catchment cumulative allocable volume (Mana_7 + Mana_8) Mangatainoka and Tiraumea (Mana_7 + Mana_8)</b>						<b>0.839 51,241</b>	
<u>Upper Gorge (Mana_9)</u>	Upper Gorge (Mana_9a)	Mana_9a	10.530 <u>9.175</u>	Manawatu at Upper Gorge	T24: 494-933 T24:494-933	2.340 <u>198,288</u>	
	Mangapapa (Mana_9b)	Mana_9b	0.023 <u>0.035</u>	Mangapapa at Troup Road	T24: 520-922 T24:520-922	0.040 <u>1,296</u>	

<b>Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*</b>							
<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>	
	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	
	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
<b>Whole Zone (Mana_9)</b>						<b>198,288</b>	
<b>Catchment cumulative allocable volume (Mana_1 + Mana_2 + Mana_3 + Mana_4 + Mana_5 + Mana_6 + Mana_7 + Mana_8 + Mana_9)</b>						<b>2,340 198,288</b>	
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	
<b>Whole Zone (Mana_10)</b>						<b>264,384</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)</b>						<b>3,150 264,384</b>	
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	

<b>Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*</b>							
<b>Water Management Zone* code</b>	<b>Sub-zone*</b>	<b>Sub-zone code</b>	<b>Minimum flow (m<sup>3</sup>/s)</b>	<b>Flow monitoring site</b>	<b>Flow monitoring site map reference location</b>	<b>Cumulative core allocation limit (m<sup>3</sup>/s) (m<sup>3</sup>/day)</b>	
	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	
	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*	
<b>Whole Zone (Mana 11)</b>						<b>336,096</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)</b>						<b>3,180 336,096</b>	
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	
<b>Cumulative allocable volume Whole Zone (Mana 12)</b>						<b>0.530 37,152</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)</b>						<b>3,710 373,248</b>	
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	

**Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone\***

<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>	
	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	
	Mangaore (Mana 13d)	Mana 13d	MALF*	Mangaore at d/s Mangahao Power Station	S25:173-670	20% 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*			20% 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	
	Cumulative allocable volume (Rang_2a + Rang_2b)						52,704
	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	
Cumulative allocable volume (Rang_2f + Rang_2g)						12,960	

<b>Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*</b>						
<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
<b>Whole Zone (Rang_2)</b>						<b><u>52,704</u></b>
<b><u>Catchment cumulative allocable volume (Rang_1 + Rang_2)</u></b>						<b><u>0.670 52,704</u></b>
<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>1.510 141,696</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>
<b>Whole Zone (Rang_3)</b>						<b><u>141,696</u></b>
<b><u>Catchment cumulative allocable volume (Rang_1 + Rang_2 + Rang_3)</u></b>						<b><u>1.510 141,696</u></b>
<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>
<b>Whole Zone (Rang_4)</b>						<b><u>285,120</u></b>
<b><u>Catchment cumulative allocable volume (Rang_1 + Rang_2 + Rang_3 + Rang_4)</u></b>						<b><u>6.410 285,120</u></b>
<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>
<b><u>Cumulative allocable volume Whole Zone (Whai_1)</u></b>						<b><u>20% of MALF of Whai_1 518</u></b>
<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 B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone\***

<u>Water Management Zone* code</u>	<u>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 (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 0
	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
<b>Whole Zone (Whai 2)</b>						<b>15,121</b>
<b>Catchment cumulative allocable volume (Whai 1 + Whai 2)</b>						<b>20% of MALF of the point just downstream of the Ongarue-Whanganui confluence 15,121</b>
<u>Te Maire (Whai 3)</u>	<u>Te Maire (Whai 3)</u>	<u>Whai 3</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<b>Catchment cumulative allocable volume (Whai 1 + Whai 2 + Whai 3)</b>						<b>20% of MALF*</b>
<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>
<b>Whole Zone (Whai 4)</b>						<b>20% of MALF*</b>



**Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone\***

<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
<b>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4)</b>						<b>20% of MALF of the point just downstream of the Whanganui-Retaruke confluence</b> <b>10% of MALF*</b>
Pipiriki (Whai_5)	Pipiriki (Whai_5a)	Whai-5a	MALF*			20% of MALF*
	Tangarakau (Whai_5b)	Whai-5b	MALF*			20% of MALF*
	Whangamomona (Whai_5c)	Whai-5c	MALF*			20% of MALF*
	Upper Manganui o te Ao (Whai_5d)	Whai-5d	n/a			0.000 0
	Makatote (Whai_5e)		n/a			0
	Waimarino (Whai_5f)		7 day MALF*			5% of 7 day MALF*
	Middle Manganui o te Ao (Whai_5g)		7 day MALF*			5% of 7 day MALF*
	Mangaturuturu (Whai_5h)		n/a			0
	Lower Manganui o te Ao (Whai_5i)	Whai-5e	7 day MALF*			0.000 5% of 7 day MALF*
	Orautoha (Whai_5j)		7 day MALF*			5% of 7 day MALF*
<b>Whole Zone (Whai_5)</b>						<b>10% of MALF*</b>
<b>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5)</b>						<b>20% of MALF of Whai 5a</b> <b>10% of MALF*</b>
Paetawa (Whai_6)	Paetawa (Whai_6)	Whai-6	MALF*			20% of MALF*
<b>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5 + Whai_6)</b>						<b>20% of MALF of Whai 6</b> <b>10% of MALF*</b>

**Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone\***

<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
Lower Whanganui (Whai_7)	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*
<b>Whole Zone (Whai_7)</b>						<b>10% of MALF*</b>
<b>Catchment cumulative allocable volume (Whai_1 + Whai_2 + Whai_3 + Whai_4 + Whai_5 + Whai_6 + Whai_7)</b>						<b>20% of MALF of Whai_7b 10% of MALF*</b>
Upper Whangaehu (Whau_1)	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
<b>Whole Zone (Whau_1)</b>						<b>47,520</b>
<b>Cumulative allocable volume (Whau_1)</b>						<b>2.175</b>
Middle Whangaehu (Whau_2)	Middle Whangaehu	Whau_2	MALF 9.650	Whangaehu at Aranui	S21:175-627	20% of MALF 52,272
<b>Catchment cumulative allocable volume (Whau_1 + Whau_2)</b>						<b>20% of MALF of Whau_2 52,272</b>
Lower Whangaehu (Whau_3)	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
	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

<b>Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone*</b>							
<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>	
	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
<b>Whole Zone (Whau_3)</b>						<b>127,008</b>	
<b>Catchment cumulative allocable volume (Whau_1 + Whau_2 + Whau_3)</b>						<b>2,940 127,008</b>	
Coastal Whangaeahu (Whau_4)	Coastal Whangaeahu (Whau_4)	Whau_4	MALE 11.770	Whangaeahu at Kauangaroa	S22:045-397	20% of MALE 127,008	
<b>Catchment cumulative allocable volume (Whau_1 + Whau_2 + Whau_3 + Whau_4)</b>						<b>20% of MALE of Whau_4 127,008</b>	
Turakina (Tura_1)	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	MALE 0.805	Turakina at O'Neills Bridge	S23:006-287	20% of MALE	
<b>Whole Zone (Tura_1)</b>						<b>12,528</b>	
<b>Catchment cumulative allocable volume (Tura_1) Upper and Lower Turakina</b>						<b>0.185 12,528</b>	
Ohau (Ohau_1)	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	
<b>Whole Zone (Ohau_1)</b>						<b>24,192</b>	
<b>Catchment cumulative allocable volume (Ohau_1)</b>						<b>0.280 24,192</b>	

**Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone\***

<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</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 SH52</u>	<u>U24:892-804</u>	<u>20% of MALF 1,296</u>
<b><u>Catchment cumulative allocable volume (Akit_1)</u></b>						<b><u>20% of MALF of Akit_1b 2,592</u></b>
<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>0.405 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>
<u>Lake Papaitonga (West_8)</u>	<u>Lake Papaitonga (West_8)</u>	<u>West_8</u>	<u>MALF*</u>			<u>20% of MALF*</u>
<u>Waikawa (West_9)</u>	<u>Waikawa (West_9a)</u>	<u>West_9</u>	<u>MALF 0.220</u>	<u>Waikawa at North Manakau Road</u>	<u>S25:987-530</u>	<u>20% of MALF 6,048</u>

**Table B.1: Cumulative Core Allocation Limits and Minimum Flows by Water Management Sub-zone\***

<u>Water Management Zone* code</u>	<u>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 (m<sup>3</sup>/s) (m<sup>3</sup>/day)</u>
	<u>Manakau (West 9b)</u>		0.040	<u>Manakau at SH1 Bridge</u>	<u>S25:968-512</u>	<u>432</u>
<b>Whole zone (West 9)</b>						<b>6,048</b>
<u>Lake Horowhenua (Hoki_1)</u>	<u>Lake Horowhenua (Hoki_1a)</u>	<u>Hoki_1a</u>	<u>MALF*</u>			<u>2010% of MALF*</u>
	<u>Hokio (Hoki_1b)</u>	<u>Hoki_1b</u>	<u>MALF*</u>			<u>2010% of MALF*</u>

**Table B.2: Location of Existing Hydroelectricity Generation Scheme Infrastructure**

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

<b>Table B.2: Location of Existing Hydroelectricity Generation Scheme Infrastructure</b>			
<u>Water Management Zone*</u>	<u>Sub-zone*</u>	<u>Intake/Dam Name</u>	<u>Locality Descriptions</u>
<u>Te Maire</u> <u>(Whai 3)</u>	<u>Te Maire</u> <u>(Whai 3)</u>	<u>Whanganui River at Te Maire</u>	<u>S19:998-490</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Makahikatoa</u>	<u>T20:401-984</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:404-984</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:407-985</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:409-985</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:419-985</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:424-985</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:393-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:393-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:394-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:394-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:397-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:397-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:413-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:416-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Whangaehu River</u>	<u>T20:417-986</u>
<u>Upper Whangaehu</u> <u>(Whau 1)</u>	<u>Upper Whangaehu</u> <u>(Whau 1a)</u>	<u>Unnamed tributary of the Wahianoa River</u>	<u>T20:387-987</u>

**Table B.2: Location of Existing Hydroelectricity Generation Scheme Infrastructure**

<u>Water Management Zone*</u>	<u>Sub-zone*</u>	<u>Intake/Dam Name</u>	<u>Locality Descriptions</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>

