

Recreational Fishing and Spawning Values in the
Manawatu-Wanganui Region :
Technical Report to Support Policy Development



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May 2007

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EXECUTIVE SUMMARY

Native fishery, trout fishery and trout spawning values have been designated for water management zones and river reaches in the Manawatu-Wanganui Region as part of the development of a water management framework underpinning the new combined Regional Plan and Policy Statement – the One Plan. Maintenance of the physical habitat requirements to support these values is integral to enabling these recreational/cultural activities to continue within the Region.

This report outlines the critical habitat requirements for native fisheries (whitebaiting), trout fisheries and trout spawning (for both brown and rainbow trout) and makes specific recommendations to protect these values under the One Plan. Policy outcomes from these recommendations are designed to ensure that activities which can disturb physical habitat are managed in a way which provides for and maintains the values within the waterways of the Manawatu-Wanganui Region.

This report sits alongside similarly prepared reports that specify the critical habitat requirements for native fish (McArthur *et al.*, 2007b) and the critical water quality requirements for these three (and other) values (Ausseil & Clark, 2007b).

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1. Introduction

1.1 Planning context

This technical report outlines the critical habitat requirements for the recreational fishery and trout spawning values identified for the Manawatu-Wanganui Region. The values identified are native fishery (whitebaiting), trout spawning, and trout fishery.

This document is part of a series of water-resource focused technical reports prepared to support the development of a new water management framework which underpins the second generation combined Regional Plan and Policy Statement – the One Plan (Figure 1).

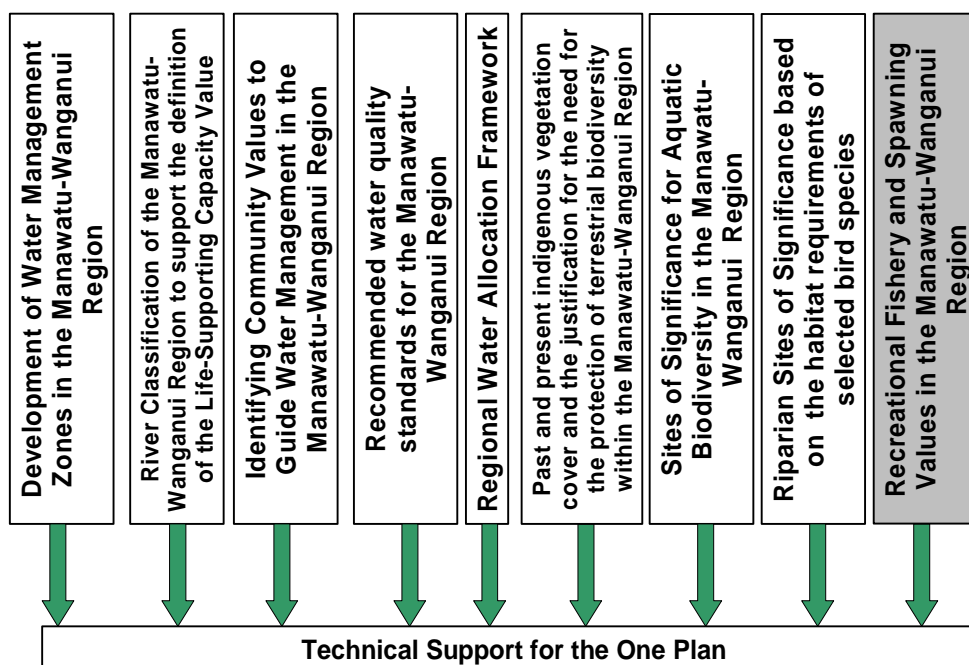


Figure 1. Context of the Recreation Fishery and Spawning Values report in relation to other technical support for the One Plan

1.2 Objectives and scope

The objective of this report is to inform policy developers and decision makers of the physical habitat requirements that must be met to sustain the Region's recreational fishery and spawning values. The values, and their justification for inclusion within the One Plan framework, are identified in Ausseil & Clark (2007a).

The values are:

- Native fishery – NF (Recreational and Cultural Value)
- Trout spawning – TS (Recreational and Cultural Value)
- Trout fishery – TF (Recreational and Cultural Value)

The scope of this report is limited to defining the physical habitat requirements which support the values above, and making recommendations on their inclusion in the One Plan.

Water quality standards to support trout fishery and spawning values have been developed for all water management zones (McArthur *et al.*, 2007a) and are defined within Ausseil & Clark (2007b).

As an ecosystem value, information on the critical habitat requirements for adult inanga and inanga spawning (to support and sustain the native [whitebait] fishery value) can be found in McArthur *et al.* (2007b).

The general management of the physical habitat and water quality of lakes, rivers and streams is focussed on maintaining the minimum requirements to support life in the Region's waterways through an environmental bottom line approach. This approach applies to all waterways in the Region through the definition of the Life-Supporting Capacity (LSC) value (Ausseil & Clark, 2007a).

2. Critical Habitat Requirements

2.1 Native (whitebait) fishery



Photo: Stephen Moore, Landcare Research

The annual instream migration of whitebait from the sea in the spring provides an important recreational and cultural fishery throughout many of New Zealand's rivers with coastal reaches. The juveniles of five species of galaxiid fish and common smelt make up the whitebait catch. In most whitebait runs inanga comprise approximately 95% of the catch, thus the native (whitebait) fishery value is intrinsically linked to the sustainability of inanga populations and in particular inanga spawning success. Loss of lowland and spawning habitat for adult inanga has contributed to the decline in size of whitebait runs nationally (McDowall, 1990).

Whitebait runs occur during spring freshes after the turbidity (discolouration) of the first major fresh has declined, generally on the rising tide during the day. Further runs occur after each rise in river flow. Upstream access is essential for successful migration of juveniles into upstream habitats for development and recruitment into adult populations.

The Department of Conservation (DOC) are the statutory managers of the whitebait fishery. Control is exerted over the length of the season, time of day, and the size and type of fishing gear under the Whitebait Fishing Regulations (1994 and 1995 amendments) and there are penalties under law for non-compliance with these regulations.

In defining a whitebait fishery value for the Manawatu-Wanganui Region (Map 1), Horizons acknowledges that reaches of rivers are valued for this purpose during the whitebaiting season, and that activities that may adversely impact the whitebait fishery value should be appropriately managed.

Native fish (inanga) spawning

The aim of including a native fish spawning value in the One Plan is to protect the suitability of native fish spawning habitat and egg development (Ausseil & Clark, 2007a). The known spawning habitat of many of the Region's rare and threatened native fish is adjacent to adult habitat and as such is protected by the designation of Sites of Significance – Aquatic (SOS-A) (McArthur *et al.*, 2007b).

Inanga do not necessarily spawn within their adult habitat and therefore require specific spawning habitat protection to ensure the sustainability of the species within the Region, for both aquatic biodiversity and native fishery purposes. Critical habitat requirements and recommendations for the One Plan regarding the protection of inanga spawning habitat can be found in McArthur *et al.* (2007b).

2.2 Trout fishery



Photo: Adult brown trout – Stephen Moore, Landcare Research

The trout fishery value can be split into two distinct aspects: trout habitat, and recreational fishing amenity. Without diminishing the recreational and heritage aspects of the trout fishery, the scope of this report is limited to the critical habitat requirements of adult and juvenile brown (*Salmo trutta*) and rainbow trout (*Oncorhynchus mykiss*).

Large adult trout generally inhabit pools and margins of deep water and often require cover (both instream and riparian) when resting. Adults feed primarily on aquatic invertebrate drift but are also surface feeders, taking large aquatic and terrestrial insects when available. Large trout are also known to consume larger prey in their diets, including small fish, mice and frogs.

Small trout often inhabit runs and large riffles, feeding on benthic invertebrates; they also require abundant instream and riparian cover and cool water temperatures (below 20°C, although optimum water temperature is 13°C), particularly in summer when sunshine hours are longer, and avian and aquatic predators are more active.

In order to provide habitat for different trout age classes, aquatic macroinvertebrate production (which is greatest in riffles) and variation in velocity, flow and depth, instream habitat heterogeneity and morphological diversity of river channels needs to be maintained. Most of the gravel bed rivers in the Manawatu-Wanganui Region are defined as having a wandering planform (Fuller & Smart, 2007). This form of river naturally has high morphological diversity and thus a high degree of instream habitat variation.

Trout mainly inhabit gravel streams, rivers and lakes and are not often found in mudstone or siltstone catchments. They require cool waters (below 20°C) and have high oxygen requirements, especially when water temperatures increase. They also require low suspended sediment as turbidity significantly reduces visual feeding. High deposited sediment loads can negatively affect spawning and the aquatic invertebrate community structure and abundance.

As water quality declines and dissolved nutrient concentrations increase, nuisance periphyton growths can proliferate (especially in summer) and cause shifts in the aquatic invertebrate communities from high energy, good quality insect larvae to lower energy small midge larvae and snails. These shifts in invertebrate community can cause reductions in the quality and quantity of trout available for anglers.

Excessive periphyton growth can also entrain sediment, further reducing the availability of benthic invertebrates for food and significantly reducing the spawning potential of gravel substrates.

2.3 Trout spawning



Photo: Juvenile brown trout – Stephen Moore, Landcare Research

Trout spawn in gravel-bottomed, upland rivers and tributaries from late autumn to midwinter. Timing of spawning differs between brown and rainbow trout and also between geographical locations, and can be highly dependent on water temperature and flow regime. Adult fish migrate upstream into stable gravel streams where suitable velocity, depth and substrate size is critical. Spawning occurs during early winter freshes when water temperatures are low.

Spawning trout excavate nests known as redds by digging depressions in river gravels; eggs are deposited into these depressions and then covered with gravel by further upstream excavation. Elevated river flows assist the fish in moving gravels for digging and covering phases as well as their migrations to and from spawning grounds.

Timing of egg development depends on water temperature (generally development is slower in colder waters) and eggs can take between one and several months to develop into fry. Trout eggs are particularly susceptible to high temperatures with mortality rates increasing significantly beyond 11°C for brown trout. The maintenance of low winter and spring water temperatures through upstream riparian cover is important for juvenile trout recruitment. Fry remain within the redd gravels for several weeks where some feeding takes place, before emerging as alevins into the flowing water environment.

Development of eggs and fry within redds is the most critical aspect of successful spawning and juvenile recruitment of trout into adult populations. During this time redds must remain physically undisturbed with low suspended and deposited sediment loads to allow the flow of highly oxygenated, good quality water through the redd gravels to the developing juveniles.

Flood events during these developmental phases can be disastrous to successful recruitment. Likewise mechanical disturbance within or upstream of spawning grounds can directly disturb redds, or adversely impact fry development through sediment release and lack of oxygen flow through gravels.

3. Recommendations for the One Plan

Activities undertaken within and alongside the beds of rivers and lakes have the potential to adversely affect recreational and cultural values. Permitted activity thresholds within the One Plan acknowledge and provide for the maintenance of life-supporting capacity and the critical habitat requirements of the recreational and cultural values. Thus many of the adverse effects of activities on native fisheries, trout fisheries and trout spawning can be appropriately managed.

Table 1 identifies the critical habitat requirements for the species which support those values covered by this report. Additionally, a strategy outlining possible non-regulatory methods for the enhancement of native fish (inanga) spawning and trout spawning habitats is recommended.

Table 1. Critical habitat requirements for native (whitebait) fishery, trout fishery and trout spawning values in the Manawatu-Wanganui Region

Value	Critical habitat requirements	Specific threats to habitat	Specific threats to spawning	Critical timing
Native (whitebait) fishery (value)	Sustainable adult galaxiid and smelt populations – particularly inanga (McArthur <i>et al.</i> , 2007b)	Coastal fish barriers and flood gates Channelisation of streams and removal of instream cover	See inanga spawning value (McArthur <i>et al.</i> , 2007b)	15 August – 30 November (inclusive)
trout spawning (value)	Accessible spawning habitat Cool water temp. High dissolved oxygen Stable cobble/gravel substrate Natural flow variation Low suspended and deposited sediment	Sedimentation of spawning gravels Barriers to upstream adult migration Channelisation of rivers Increased water velocities	Physical disturbance of spawning habitat and release of sediment upstream or within spawning grounds High water temperatures	1 May – 30 September (inclusive) Juvenile development July – December
trout fishery (value)	High degree of habitat heterogeneity (pool/riffle complex) Overhanging shade High quality terrestrial and aquatic macroinvertebrate food sources Instream cover Low suspended sediment for sight feeding High dissolved oxygen Low to moderate water temperature Good water quality	Loss of habitat heterogeneity (pool/riffle complex) Loss of instream and riparian cover Loss of high quality aquatic and terrestrial invertebrates Water quality degradation High water temperature Low dissolved oxygen High suspended and deposited sediment	See trout spawning value	Effects of suspended sediment can be critical to adult persistence and juvenile survival during low flows

3.1 Life-supporting capacity

The life-supporting capacity value provides environmental bottom lines for all waterways in the Region. These thresholds are designed to maintain the general habitat requirements of waterways to support life and are based on managing:

- discharges of contaminants;
- reducing sediment discharges;
- providing safe fish passage; and
- reducing channelisation/habitat modification.

3.2 Native fishery (whitebaiting)

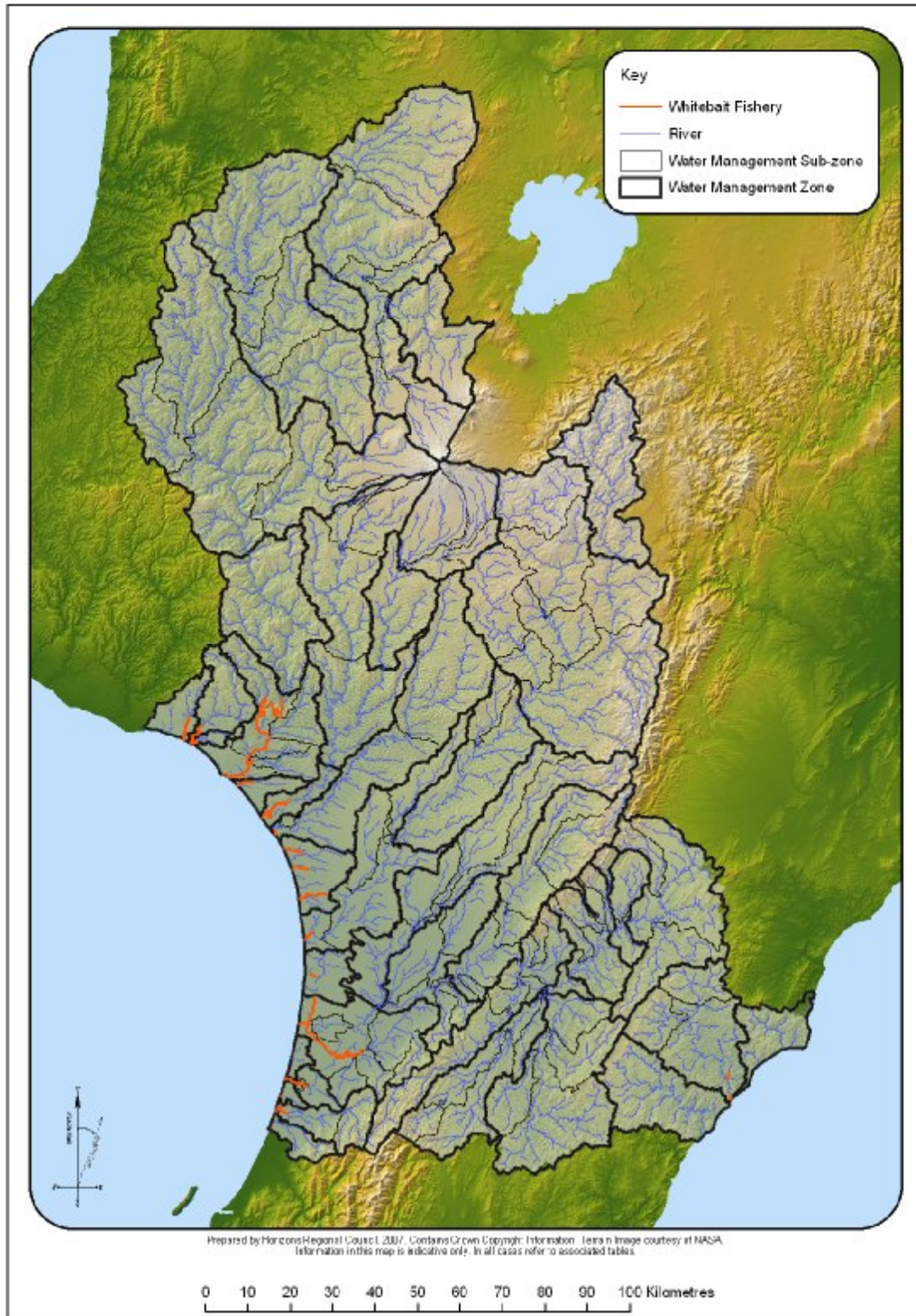
In addition to the LSC value, it is recommended that in areas recognised for native fisheries (whitebaiting): direct disturbance (ie. mechanical disturbance or the use of mobile machinery) within the migratory path of whitebait (Map 1), and blockages to fish passage, should be avoided between 15 August and 30 November (inclusive).

3.3 Trout fishery

Trout fisheries have been defined within the Horizons water management framework (Map 2). In addition to the LSC permitted activity thresholds and the water quality standards described in Ausseil & Clark (2007b), the retention of instream woody cover is recommended for the maintenance of trout habitat.

3.4 Trout spawning

Rivers valued for trout spawning have been identified within the Region (Map 3). It is recommended that no disturbance of the bed of these rivers occurs between 1 May and 30 September (inclusive) to provide for successful egg deposition, egg and fry development, and alevin emergence for both brown and rainbow trout.

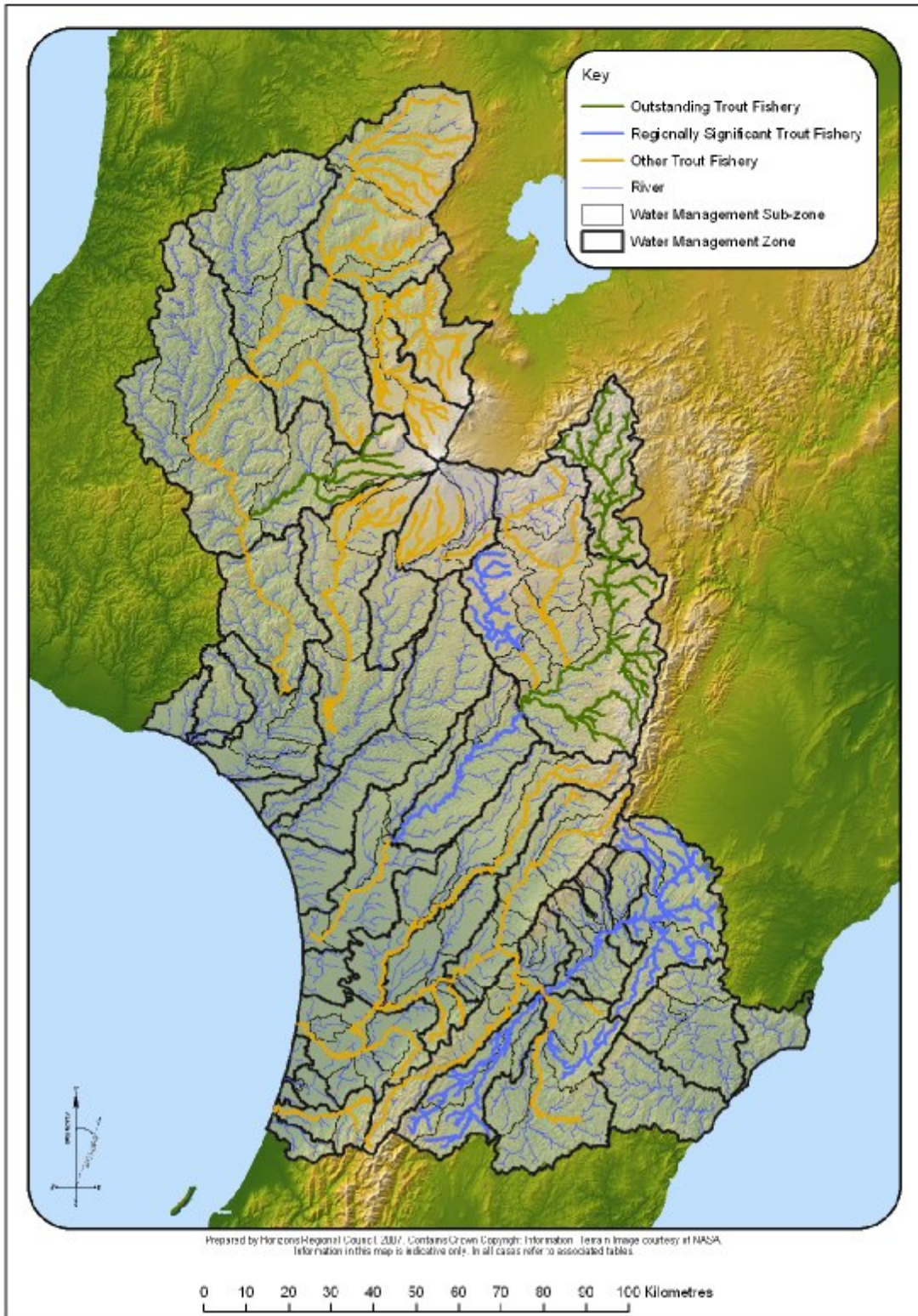


Map 1. River reaches recommended for the native (whitebait) fishery value in the Manawatu-Wanganui Region

Table 2. River reaches recommended for the native (whitebait) fishery value in the Manawatu-Wanganui Region

Management Zone	Sub-zone	River/Stream Name	Reference
Coastal Manawatu	Coastal Manawatu	Manawatu River	From the river mouth to the Foxton-Shannon Road bridge at approx NZMS 260 S24:133-727
		Holben Parade Creek	From the confluence with the Manawatu River at approx NZMS 260 S24:981-789 to the intersection with Seabury Avenue at approx S24:986-800
		Whitebait Creek	From the confluence with the Manawatu River at approx 982-791 to source
Coastal Rangitikei	Tidal Rangitikei	Rangitikei River	From the river mouth to a point 100 m upstream of the CMA boundary located at the seaward edge of the boat ramp on the true left bank of the river located at approx NZMS 260 S24:009-000
Lower Whanganui	Lower Whanganui	Kauarapaoa Stream	From the confluence with the Whanganui River at approx NZMS 260 R22:886-537 to the intersection with McNab's Access Road at approx S22:900-559
		Mateongaonga Stream	From the confluence with the Whanganui River at approx NZMS 260 R22:876-434 to the intersection with Riverbank Road at approx R22:877-433
	Lower/Coastal Whanganui	Whanganui River	From the river mouth to Parikino at approx NZMS 260 S22:936-551
	Coastal Whanganui	Stream opposite Corliss Island	From the confluence with the Whanganui River at approx NZMS 260 R22:835-374 to the intersection with Wikitoria Road at approx R22:849-371
		Omapu Stream	From the stream mouth to a point 1 km upstream at NZMS 260 R22: 750-441
	Matarawa	Matarawa Stream	From the confluence with the Whanganui River at approx NZMS 260 R22:858-398 to the intersection with Ikitara Road at approx R22:869-409
Coastal Whangaehu	Coastal Whangaehu	Whangaehu River	From the river mouth to the SH3 bridge at approx NZMS 260 S22:950-310
Turakina	Lower Turakina	Turakina River	From the river mouth to a point 100 m upstream of the CMA boundary located at the continuation of the fence line at approx NZMS 260 S23:918-246
Ohau	Lower Ohau	Ohau River	From the river mouth to a point 5 km upstream at approx NZMS 260 948-579
		Lake Waitaha Drain	From the confluence with the Ohau River at approx NZMS 260 S25:946-580 to the Lake Waitaha Outlet at approx S25:954-605
Akitio	Lower Akitio	Akitio River	From the river mouth to 100 m upstream of the CMA boundary located at the seaward edge of the bridge that crosses the river at approx NZMS 260 U25:996-619

Management Zone	Sub-zone	River/Stream Name	Reference
		Whakawahine Stream	From the confluence with the Akitio River at approx NZMS 260 U25:985-657 to a point approx 2 km upstream at approx U25:989-670
Northern Coastal	Northern Coastal	Okehu Stream	From the stream mouth to intersection with SH3 at approx NZMS 260 R22:717-510
Kai Iwi	Kai Iwi	Kai Iwi Stream	From the stream mouth to the intersection with SH3 at approx NZMS 260 R22:749-492
Mowhanau	Mowhanau	Mowhanau Stream	From the stream mouth to a point 1km upstream at approx NZMS 260 R22:736-452
Kaitoke Lakes	Kaitoke Lakes	Kaitoke Stream	From the stream mouth to Kaitoke Lake at approx NZMS 260: R22:869-358
Southern Whanganui Lakes	Southern Whanganui Lakes	Koitiata Stream	From the stream mouth to a point 5 km upstream at approx NZMS 260 S23:987-191
		Waimahora Stream	From the stream mouth to intersection with Santoft Rd at approx NZMS 260 S23:001-154
		Raumai Range Stream	From the stream mouth at approx NZMS 260:S23:979-081 to source
Northern Manawatu Lakes	Northern Manawatu Lakes	Kaikokopu Stream	From the stream mouth to Lake Kaikokopu at NZMS 260 S24:019-899
		4 Mile Creek	From the stream mouth to a point 100 m upstream at NZMS 260 S24:024-937
Lake Papaitonga	Lake Papaitonga	Waiwiri Stream	No location defined, assume from the stream mouth to a point 500 m upstream at NZMS 260 S25:939-618
Lake Horowhenua	Hokio	Hokio Stream	From the stream mouth to Lake Horowhenua



Map 2. River reaches recommended for the trout fishery value in the Manawatu-Wanganui Region

Table 3. River reaches recommended for the trout fishery value in the Manawatu-Wanganui Region

Management Zone	Sub-zone	River/Stream Name	Classification	Reference
Upper Manawatu, Weber Rd–Tamaki, Tamaki–Hopelands and Hopelands–Tiraumea	Upper Manawatu, Mangatewainui and Mangatoro, Weber Rd–Tamaki, Tamaki–Hopelands and Hopelands–Tiraumea	Manawatu River	Regionally Significant	From the confluence with the Tiraumea River at approx NZMS 260 T24:553-871 to source including all tributaries from the Weber Road Recorder at approx U23:747-027 to source
Tiraumea	Upper and Lower Tiraumea	Tiraumea River	Other Trout Fishery	From the confluence with the Manawatu River at approx NZMS 260 T24:553-871 to source
	Lower Tiraumea	Makairo Stream	Other Trout Fishery	From approx NZMS 260 T24:653-834 to source
	Makuri	Makuri River and tributaries	Regionally Significant	From the confluence with the Tiraumea River at approx NZMS 260 T24:568-771 to source
Mangatainoka	Upper, Middle and Lower Mangatainoka and Makakahi	Mangatainoka River and tributaries excluding Mangaramarama Creek and tributaries	Regionally Significant	From the confluence with the Tiraumea River at approx NZMS 260 T24:556-854 to source
Upper Gorge	Upper Gorge	Manawatu River	Other Trout Fishery	From approx NZMS 260 T24:495-938 to the confluence with the Tiraumea River at approx T24:553-871
	Upper and Lower Mangahao	Mangahao River	Other Trout Fishery	From the confluence with the Manawatu River at approx NZMS 260 T24:496-892 to source
Middle Manawatu	Middle Manawatu	Manawatu River	Other Trout Fishery	From approx NZMS 260 T24:332-890 to approx T24:495-938
	Upper, Middle and Lower Pohangina	Pohangina River	Other Trout Fishery	From the confluence with the Manawatu River at approx NZMS 260 T24:449-966 to source
	Middle Pohangina	Makiekie (Coal) Creek	Other Trout Fishery	From the confluence with the Pohangina River at approx NZMS 260 T23:528-166 to source
Lower Manawatu	Lower Manawatu	Manawatu River	Other Trout Fishery	From approx NZMS 260 T24:332-890 to Oroua Confluence at approx S24:164-825

Management Zone	Sub-zone	River/Stream Name	Classification	Reference
	Turitea	Turitea Stream	Other Trout Fishery	From approx 800 m downstream of the Old West Road Bridge at approx NZMS 260 T24:331-875 to approx T24:365-790
	Kahuterawa	Kahuterawa stream	Other Trout Fishery	From the confluence with the Manawatu River at approx NZMS 260 S24:293-871 to source
Oroua	Upper, Middle and Lower Oroua	Oroua River	Other Trout Fishery	From the confluence with the Manawatu River at approx NZMS 260 S24:164-826 to approx U22:729-400
	Upper Oroua	Mangiora Stream	Other Trout Fishery	From the confluence with the Oroua River at approx NZMS 260 T22:577-379 to source
	Makino	Makino Stream	Other Trout Fishery	From the confluence with the Oroua River at approx NZMS 260 S23:243-005 to approx S23:260-037
Coastal Manawatu	Coastal Manawatu	Manawatu River	Other Trout Fishery	From 100 m upstream of the CMA Boundary located at the seaward edge of Foxton Loop at approx NZMS 260 S24:010-767 to the confluence with the Oroua River at approx S24:164-825
	Upper and Lower Tokomaru	Tokomaru River	Other Trout Fishery	From the confluence with the Manawatu River at approx NZMS 260 S24:132-727 to source
Upper Rangitikei	Upper Rangitikei	Rangitikei River and tributaries	Outstanding	From the Makahikatoa Stream Confluence at approx NZMS 260 U21:725-887 to source
Middle Rangitikei	Middle Rangitikei	Rangitikei River	Outstanding	From approx NZMS 260 U21:713-707 to the confluence with the Makahikatoa Stream at approx U21:725-887
		Porotaiana Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:714-878 to source
		Mangaururoa Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:710-852 to source
		Whangaipotiki Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:700-819 to source
		Mangaohane Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:707-818 to source

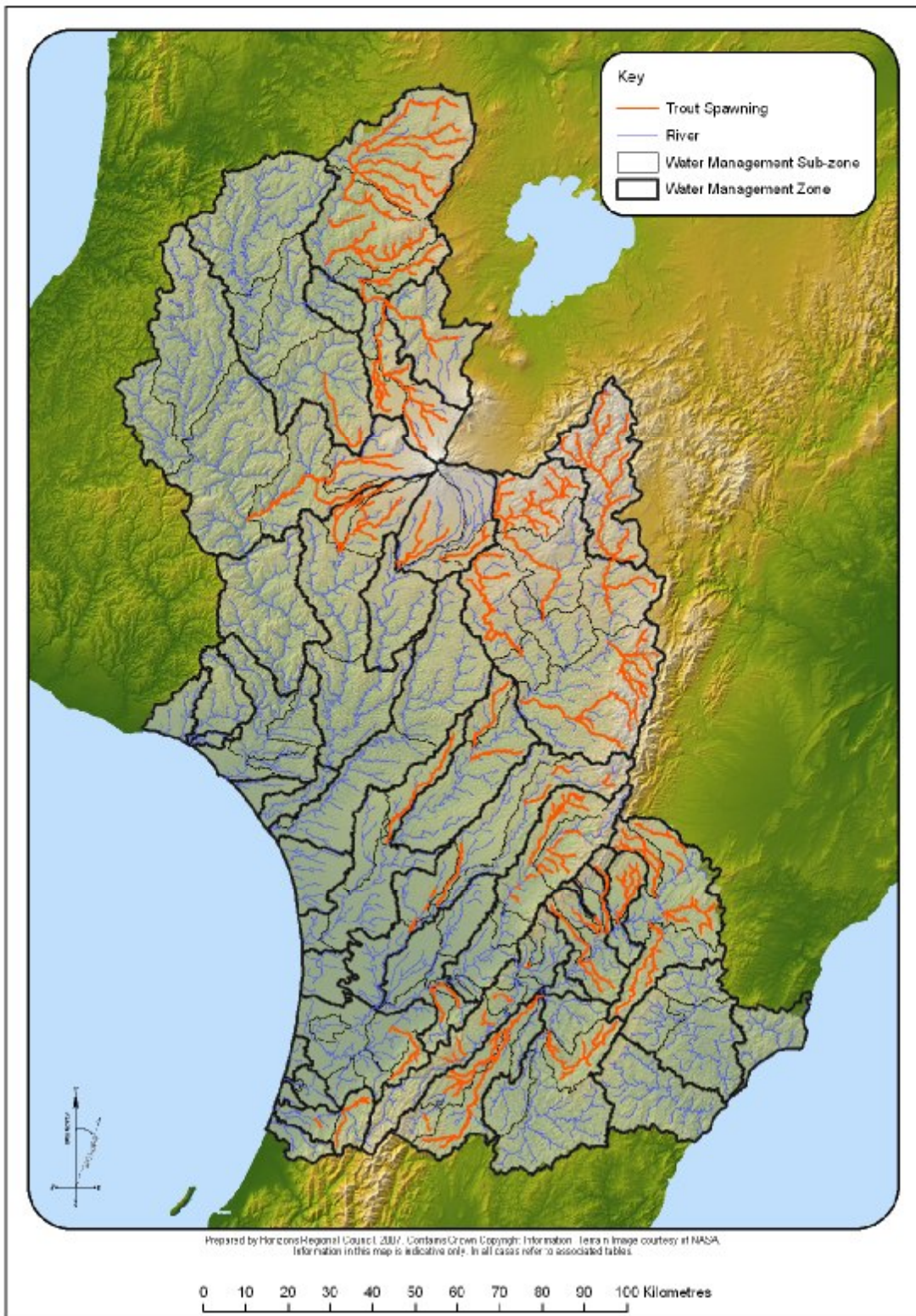
Management Zone	Sub-zone	River/Stream Name	Classification	Reference
		Makomiko East Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:709-792 to source
		Tamatipama Stream	Outstanding	From the confluence with the Makomiko East Stream at approx NZMS 260 U21:681-802 to source
		Waiakaha Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:707-785 to source
		Pokopoko Stream	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:722-758 to source
	Pukeokahu – Mangaweka	Rangitikei River	Outstanding	From approx NZMS 260 the confluence with the Mangawharariki River approx NZMS 260 T22:504-519 to approx U21:713-707
		Whakaurekou River and tributaries	Outstanding	From the confluence with the Rangitikei River at approx NZMS 260 U21:712-690 to source
		Kawhatau River and tributaries	Outstanding	From confluence with the Rangitikei River at approx T22:504-551 to source
	Upper, Middle and Lower Moawhango	Moawhango River	Other Trout Fishery	From the confluence with the Rangitikei River at approx NZMS 260 T21:609-623 to source
	Middle Moawhango	Aorangi Stream	Other Trout Fishery	From the confluence with the Moawhango River at approx NZMS 260 T21:595-858 to source
	Lower Moawhango	Tikirere Stream	Other Trout Fishery	From the confluence with the Moawhango River at approx T21:559-741 to source
	Upper Hautapu	Hautapu River and tributaries	Regionally Significant	From the confluence with the Oraukura Stream at approx NZMS 260 T21:509-670 to source
	Lower Hautapu	Hautapu River	Other Trout Fishery	From the confluence with the Rangitikei River at approx NZMS 260 T22:528-573 to the Oraukura Stream confluence at approx T22:509-670
	Lower Rangitikei	Lower Rangitikei	Rangitikei River	Regionally Significant

Management Zone	Sub-zone	River/Stream Name	Classification	Reference
Coastal Rangitikei	Coastal/Tidal Rangitikei	Rangitikei River	Other Trout Fishery	From 100 m upstream of the CMA Boundary located at the seaward edge of the boat ramp at approx NZMS 260 S24:009-000
Upper Whanganui	Upper Whanganui	Whanganui River	Other Trout Fishery	From the confluence with the Ongarue River at approx NZMS 260 S18:054-544 to source
		Otamangakau Dam	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 T19:367-409 to T19:375-414
		Otamangakau Canal	Other Trout Fishery	From the confluence with the Whanganui River at NZMS 260 T19:367-409 to source
		Okupata Stream	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S19:289-406 to source
		Mangatepopo Stream	Other Trout Fishery	From the confluence with the Okupata Stream at approx NZMS 260 S19:287-397 to source
		Waione Stream	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S19:276-427 to source
		Waipari Stream	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S19:269-455 to source
		Waione Stream	Other Trout Fishery	From the confluence with the Waipari Stream at approx NZMS 260 S18:282-516 to source
		Waipungapunga Stream	Other Trout Fishery	From the confluence with the Waipari Stream at approx NZMS 260 S19:287-490 to source
		Waiionenui Stream	Other Trout Fishery	From the confluence with the Waipari Stream at approx NZMS 260 S19:288-475 to source
		Waione Stream	Other Trout Fishery	From the confluence with the Waipari Stream at approx NZMS 260 S19:282-464 to source
		Mako Stream	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S19:231-455 to source
		Taringapupu Stream	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S19:205-477 to source
		Herungaweka Stream	Other Trout Fishery	From the confluence with the Taringapupu Stream at approx NZMS 260 S18:229-511 to source

Management Zone	Sub-zone	River/Stream Name	Classification	Reference
		Paewaru Stream	Other Trout Fishery	From the confluence with the Taringapupu Stream at approx NZMS 260 S19:216-488 to source
		Papanui Stream	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S19:192-485 to source
Cherry Grove	Cherry Grove	Kakahi Stream	Other Trout Fisher	From the confluence with the Whanganui River at approx NZMS 260 S19:151-497 to source
	Upper Whakapapa	Whakapapa River	Other Trout Fishery	From approx NMZS 260 S19:226-295 to the confluence with the Whakapapaiti and Whakapapanui Streams at approx NZMS 260 S19:243-268
		Whakapapiti Stream	Other Trout Fishery	From the confluence with the Whakapapa River at approx NZMS 260 S19:243-268 to source
		Whakapapanui Stream	Other Trout Fishery	From the confluence with the Whakapapa River at approx NZMS 260 S19:243-268 to source
		Makahikatoa Stream	Other Trout Fishery	From the confluence with the Whakapapanui Stream at approx NZMS 260 S19:273-244 to source
		Taranaki Stream	Other Trout Fishery	From the confluence with the Makahikatoa Stream at approx NZMS 260 S19:296-235 to source
		Pukeonaki Stream	Other Trout Fishery	From the confluence with the Whakapapanui Stream at approx NZMS 260 S19:269-255 to source
		Tawahi Stream	Other Trout Fishery	From the confluence with the Whakapapaiti Stream at approx NZMS 260 S19:242-265 to approx S19:242-256
		Papamanuka Stream	Other Trout Fishery	From the confluence with the Whakapapa Stream at NZMS 260 S19:234-288 to NZMS 260 S19:277-281
		Lower Whakapapa	Whakapapa River	Other Trout Fishery
	Unnamed tributary of the Whakapapa River		Other Trout Fishery	From the confluence with the Whakapapa River at approx NZMS 260 S19:174-416 to source
	Otamawairua Stream		Other Trout Fishery	From the confluence with the Whakapapa River at approx NZMS 260 S19:193-324 to source

Management Zone	Sub-zone	River/Stream Name	Classification	Reference
	Piopiotea Stream	Piopiotea Stream and Tributaries	Other Trout Fishery	From the confluence with the Whakapapa River at approx NZMS 260 S19:174-356 to source
	Pungapunga	Pungapunga River	Other Trout Fishery	From approx NZMS 260 S18:124-544 to approx S18:266-577
	Upper and Lower Ongarue	Ongarue River	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 S18:055-544 to source
	Upper Ongarue	Waimiha Stream	Other Trout Fishery	From the confluence with the Ongarue River approx NZMS 260 S17:132-862 to source
		Okauaka Stream	Other Trout Fishery	From the confluence with the Ongarue River at approx NZMS 260 S17:188-864 to source
		Matramataha River	Other Trout Fishery	From the confluence with the Ongarue River at approx NZMS 260 S17:116-806 to source
	Lower Ongarue	Mangakahu Stream	Other Trout Fishery	From the confluence with the Ongarue River at approx NZMS 260 S18:087-736 to source
		Taringamotu River and tributaries	Other Trout Fishery	From the confluence with the Ongarue River at approx NZMS 260 S18:046-582 to source
Middle Whanganui	Retaruke	Retaruke River	Other Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 R19:889-309 to source
Pipiriki	Upper Manganui o te Ao	Manganui o Te Ao River	Outstanding Trout Fishery	From the confluence with the Hoihenga Stream at approx NZMS 260 S20:046-078 to source
		Mangaturuturu River	Outstanding Trout Fishery	From the confluence with the Manganui o te Ao River at approx NZMS 260 S20:056-067 to source
		Makatote River	Outstanding Trout Fishery	From the confluence with the Manganui o te Ao River at approx NZMS 260 S20*128-119 to source
		Waimarino Stream	Outstanding Trout Fishery	From the confluence with the Manganui o te Ao River at approx NZMS 260 S20*128-119 to source
	Lower Manganui o te Ao	Manganui o te Ao River	Outstanding Trout Fishery	From the confluence with the Whanganui River at approx NZMS 260 R20:860-979 to the Hoihenga Stream confluence at approx S20:056-067
		Orautoha Stream	Outstanding Trout Fishery	From the confluence with the Manganui o te Ao River at approx NZMS 260 S20:026-067 to source

Management Zone	Sub-zone	River/Stream Name	Classification	Reference
Pipiriki and Paetawa	Pipiriki and Paetawa	Whanganui River	Other Trout Fishery	From approx NZMS 260 S22:937-563 to confluence with the Retaruke at approx R19:889-309
Upper Whangaehu	Waitangi	Waitangi Stream	Other Trout Fishery	From the confluence with the Whangaehu River at approx NZMS 260 T21:315-888 to source
	Tokiahuru	Tokiahuru Stream and tributaries	Other Trout Fishery	From the confluence with the Whangaehu River at approx NZMS 260 S21:218-865 to source
Lower Whangaehu	Upper Mangawhero	Mangawhero River including the Taonui Stream and all tributaries upstream of the Taonui Stream	Other Trout Fishery	From the confluence with the Makotuku River at approx NZMS 260 S20:079-902 to source
	Upper and Lower Makotuku	Makotuku River and tributaries	Other Trout Fishery	From the confluence with the Mangawhero River at approx NZMS 260 S20:079-902 to source
	Lower Mangawhero and Lower Whangaehu	Mangawhero River	Other Trout Fishery	From the confluence with the Whangaehu River at approx NZMS 260 S22:065-470 to confluence with the Makotuku River at approx NZMS 260 S20:079-902
Ohau	Upper and Lower Ohau	Ohau River	Other Trout Fishery	From mouth to source including the Makahika Stream and tributaries and an unnamed tributary at approx NZMS 260 S25:974-585



Map 3. River reaches recommended for the trout spawning value in the Manawatu-Wanganui Region

Table 4. River reaches recommended for the trout spawning value in the Manawatu-Wanganui Region

Management Zone	Sub-zone	River/Stream Name	Reference
Upper Manawatu	Upper Manawatu	Manawatu River	From the confluence with the Kahututaeatua Stream at approx NZMS 260 U23:891-194 to source
		Mangarangiora Stream and tributaries	From the confluence with the Manawatu River at approx NZMS 260 U23:879-145 to source
		Mahurauiti Stream	From the confluence with the Manawatu River at approx NZMS 260 U23:853-235 to the confluence with the Mahurunui Stream (Stoney Creek) at approx U23:850-244
		Mangapuaka Stream and tributaries	From the confluence with the Manawatu River at approx NZMS 260 U23:841-044 to source
	Mangatewainui	Mangatewainui River and tributaries	From the confluence with the Manawatu River at approx NZMS 260 U23:829-085 to source
	Mangatoro	Mangatoro River	From the confluence with the Manawatu River at approx NZMS 260 U23:807-026 to the confluence with the Mangamarie Stream at approx U24:838-991
		Mangatoro River and tributaries	From the confluence with the Mangamarie Stream at approx NZMS 260 U24:838-991 to source
Weber–Tamaki	Mangatera	Mangatera Stream	From confluence with the Manawatu River at approx NZMS 260 U23:736-025 to approx U23:756-079
		Mangatera Stream and tributaries	From approx NZMS 260 U23:756-079 to source
		Tapuata Stream	From the confluence with the Mangatera Stream at approx NZMS 260 U23:738-044 to approx U23:732-052
Upper Tamaki	Upper Tamaki	Tamaki River and tributaries	From approx NZMS 260 U23:706-100 to source
Tamaki–Hopelands	Tamaki–Hopelands	Otawaho Stream and tributaries	From the confluence with the Manawatu River at approx NZMS 260 T24:651-935 to source
		Totara Stream and tributaries	From the confluence with the Manawatu River at approx NZMS 260 T24:647-929 to source
	Lower Tamaki	Tamaki River	From the confluence with the Manawatu River at approx U23:708-002 NZMS 260 to approx U23:706-100
	Lower Kumeti	Kumeti Stream	From the confluence with the Manawatu River at approx NZMS 260 T23:697-005 to approx T23:681-041

	Oruakeretaki	Oruakeretaki Stream	From the confluence with the Manawatu River at approx NZMS 260 T24:690-999 to the confluence with the Mangapukakakahu Stream at approx T23:628-058
	Raparapawai	Raparapawai Stream	From the confluence with the Manawatu River at approx NZMS 260 T24:641-931 to source
Tiraumea	Makuri	Makuri River at tributaries	From the confluence with the Tiraumea River at approx NZMS 260 T24:568-771 to source
Mangatainoka	Upper Mangatainoka	Makotukutuku Stream	From the confluence with the Mangatainoka River at approx NZMS 260 S25:279-576 to source
	Middle/Lower Mangatainoka	Mangatainoka River	From approx NZMS 260 T24:558-857 to the confluence with the Mangaroa Stream at approx T25:324-627
	Middle Mangatainoka	Mangaraupiu Stream	From the confluence with the Mangatainoka River at approx NZMS 260 T25:366-655 to approx T25:322-665
		Unnamed tributary of the Mangatainoka River and tributaries	From the confluence with the Mangatainoka River at approx NZMS 260 T25:369-654 to source
		Hukanui Stream	From the confluence with the Mangatainoka River at approx NZMS 260 T25:396-680 to approx T25:341-676
		Mangamarie Stream	From the confluence with the Mangatainoka River at approx NZMS 260 T24:451-762 to approx T24:433-742
	Makakahi	Makakahi River	From the confluence with the Mangatainoka River at approx NZMS 260 T24:475-775 to source
		Bruce Stream	From the confluence with the Makakahi River at approx NZMS 260 T25:346-524 to source
Upper Gorge	Mangapapa	Mangapapa Stream	From the confluence with the Mangaatua Stream at approx NZMS 260 T24:514-922 to approx T24:527-931
	Upper Mangahao	Unnamed tributary	From the confluence with the Mangahao River at approx NZMS 260 T24:348-700 to source
		Unnamed tributary	From the confluence with the Mangahao River at approx NZMS 260 T24:364-704 to source
		Orangane Stream	From the confluence with the Mangahao River at approx NZMS 260 T24:377-716 to source
		Matarua Creek	From the confluence with the Mangahao River at approx NZMS 260 T24:445-788 to source
		Unnamed tributary	From the confluence with the Matarua Creek at approx NZMS 260 T24:422-793 to source
	Lower Mangahao	Makaretu Creek	From the confluence with the Mangahao River at approx NZMS 260 T24:484-844 to source

Management Zone	Sub-zone	River/Stream Name	Reference
	Upper Pohangina	Pohangina River	From confluence with the Whangapuna Stream at approx NZMS 260 T23:605-240 to approx T23:647-236
		Konewa Stream and tributaries	From the confluence with the Pohangina River at approx NZMS 260 T23:575-203 to source
		Makewekaweka Stream and tributaries	From the confluence with the Pohangina River at approx NZMS 260 T23:568-199 to source
		Te Ekaou Stream	From the confluence with the Pohangina River at approx NZMS 260 T23:562-180 to approx T23:594-150
		Porewa Stream	From the confluence with the Pohangina River at approx NZMS 260 T23:549-163 to approx T23:579-147
		Opawe Stream	From the confluence with the Pohangina River at approx NZMS 260 T23:544-161 approx T23:556-144
	Middle Pohangina	Makiekie (Coal) Creek and tributaries	From the confluence with the Pohangina River at approx NZMS 260 T23:528-165 to source
		Ohinetapu Stream and Tributaries	From the confluence with the Pohangina River at approx NZMS 260 T23:517-131 to source
		Maranganui Stream	From the confluence with the Pohangina River at approx NZMS 260 T23:492-112 to approx T23:504-107
		Te Awaoteatua Stream	From the confluence with the Pohangina River at approx NZMS 260 T23:480-090 to approx T23:499-077
		Makohine Stream	From the confluence with the Pohangina River at approx NZMS 260 T23:469-058 to source
Lower Manawatu	Turitea	Tiritea Stream	From the confluence with the Manawatu River at approx NZMS 260 T24:302-879 to approx T24:357-827
	Kahuterawa	Kahuterawa Stream	From the confluence with the Manawatu River at approx NZMS 260 S24:293-870 to approx T24:317-796
Oroua	Upper Oroua	Oroua River	From the confluence with the Tunupo Creek at approx NZMS 260 T22:699-356 to approx U22:715-378
		Tunupo Creek	From the confluence with the Oroua River at approx NZMS 260 T22:699-356 to source
		Mangiora Stream	From the confluence with the Oroua River at approx NZMS 260 T22:577-378 to the confluence with Scandlyn creek at approx T22:621-384
		Mangapikopiko Stream	From the confluence with the Oroua River at approx NZMS 260 T22:515-307 to source

Management Zone	Sub-zone	River/Stream Name	Reference
	Kiwitea	Kiwitea Stream	From the confluence with the Oroua River at approx NZMS 260 T23:308-066 to approx T23:363-215
	Makino	Makino Stream	From approx NZMS 260 S23:294-088 to approx T23:307-111
			From approx NZMS 260 S23:279-058 to approx S23:286-069
			From confluence with the Oroua River at approx NZMS 260 S23:243-005 to approx S23:259-037
Coastal Manawatu	Upper and Lower Tokomaru	Tokomaru River and tributaries	From the confluence with the Linton Drain at approx NZMS 260 S24:196-774 to source
Upper Rangitikei	Upper Rangitikei	Ecology Stream	From the confluence with the Rangitikei River at approx NZMS 260 T20:691-176 to source
		Otamatenui Stream	From the confluence with the Rangitikei River at approx NZMS 260 T20:672-107 to source
		Makomiko Stream	From the confluence with the Otamatenui Stream at approx NZMS 260 T20:650-120 to source
		Mangamarie River	From the confluence with the Rangitikei River at approx NZMS 260 T20:691-090 to source
		Waingakia Stream	From the confluence with the Rangitikei River and approx NZMS 260 U20:715-053 to source
		Otutua Stream	From the confluence with the Rangitikei River at approx NZMS 260 U20:716-014 to source
		Otarere Stream and tributaries	From the confluence with the Okorotehehe Stream at approx NZMS 260 T20:684-988 to source
		Mangamarahia Stream	From the confluence with the Rangitikei River at approx NZMS 260 U21:723-889 to approx U20:756-954
		Makahikatoa Stream including all tributaries	From the confluence with the Rangitikei River at approx NZMS 260 U21:725-887 to source
Middle/Upper Rangitikei	Middle/Upper Rangitikei	Rangitikei River	From the confluence with the Pokopoko Stream at approx NZMS 260 U24:721-758 to source
Middle Rangitikei	Middle Rangitikei	Mangaohane Stream	From the confluence with the Rangitikei River at approx NZMS 260 707-818 to source
	Pukeokahu–Mangaweka	Whakaurekou River	From the confluence with the Rangitikei River at approx NZMS 260 U21:712-690 to the confluence with the Mangatera River and Maropea River at approx NZMS 260 U21:749-655
		Mangatera River and Maropea River and tributaries	From the confluence with the Whakaurekou River at approx NZMS 260 U21:749-655 to source

Management Zone	Sub-zone	River/Stream Name	Reference
		Kawhatau River	From the confluence with the Rangitikei River at approx NZMS 260 T22:504-551 to source
		Porangaki River	From the confluence with the Mangakukeke Stream at approx NZMS 260 T22:635-507 to source
		Mangakukeke Stream	From the confluence with the Kawhatau River at approx NZMS 260 T22:634-508 to approx T22:677-486
	Upper Moawhango	Moawhango River and tributaries	From approx NZMS 260 T20:468-948 to source
	Middle Moawhango	Moawhango River	From the confluence with the Tikirere Stream at approx NZMS 260 T21:559-741 to approx T20:468-948
	Upper Hautapu	Waiouru Stream and tributaries	From the confluence with the Hautapu River at approx NZMS 260 T21:410-838 to source
		Irirangi	From the confluence with the Hautapu River at approx NZMS 260 T21:407-810 to source
	Upper and Lower Hautapu	Hautapu River	From the confluence with the Otaihape Stream at approx NZMS 260 T21:506-656 to source
Lower Rangitikei	Lower Rangitikei	Mangamako Stream	From confluence with the Rangitikei River at NZMS 260 T22:389-415 to source
	Makohine	Makohine Stream	From confluence with the Rangitikei River at NZMS 260 T22:390-440 to source
Coastal Rangitikei	Porewa	Porewa Stream	From the confluence with the Rangitikei River at approx NZMS 260 S23:191-215 to source
Upper Whanganui	Upper Whanganui	Whanganui River	From the confluence with the Whakapapa River at approx NZMS 260 S19:188-495 to approx T19:358-411
		Mangatepopo Stream	From the confluence with the Whanganui River at approx NZMS 260 S19:289-405 to approx T19:308-360
Cherry Grove	Cherry Grove	Whanganui River	From the confluence with the Pungapunga River at approx NZMS 260 S18:124-544 to the confluence with the Whakapapa River at approx NZMS 260 S19:188-495
	Upper and Lower Whakapapa	Whakapapa River	From the confluence with the Whanganui River at approx NZMS 260 S19:188-495 to the confluence with the Whakapapanui Stream and the Whakapapaiti Stream at approx NZMS 260 S19:243-268
	Upper Whakapapa	Whakapapanui Stream	From the confluence with the Whakapapa River and the Whakapapaiti Stream at approx NZMS 260 S19:243-268 to source
		Whakapapaiti Stream	From the confluence with the Whakapapa River and the Whakapapanui Stream at approx NZMS 260 S19:243-268 to source

Management Zone	Sub-zone	River/Stream Name	Reference
		Mahikatoa Stream	From the confluence with the Whakapapanui Stream at approx NZMS 260 S19:273-245 to confluence with Taranaki Stream approx NZMS 260 S19:295-236
		Taranaki Stream	From the confluence with the Mahikatoa Stream at approx NZMS 260 S19:295-236 to source
		Pukeonaki Stream	From the confluence with the Whakapapanui Stream at approx NZMS 260 S19:269-255 to source
		Papamanuka Stream	From the confluence with the Whakapapa River at approx NZMS 260 S19:233-288 to approx S19:258-283
	Lower Whakapapa	Otamawairua Stream	From the confluence with the Whakapapa River at approx NZMS 260 S19:195-324 to source
	Piopotea	Piopotea Stream	From the confluence with the Whakapapa River at approx NZMS 260 S19:174-356 to source
		Makaretu Stream	From the confluence with the Piopotea Stream at approx NZMS 260 S19:172-284 to source
		Pukerimu Stream	From the confluence with the Piopotea Stream at approx NZMS 260 S19:168-285 to source
		Tepure Stream	From the confluence with the Piopotea Stream at approx NZMS 260 S19:159-327 to approx S19:198-270
		Unnamed tributary of the Tepure Stream	From the confluence with the Tepure Stream at approx NZMS 260 S19:181-299 to source
	Pungapunga	Pungapunga River	From the confluence with the Whanganui River at approx NZMS 260 S18:124-544 to source
		Waituhi Stream	From the confluence with the Pungapunga River at approx NZMS 260 S18:278-592 to approx T18:301-587
		Pungapunga River tributary	From the confluence with the Pungapunga River at approx NZMS 260 S18:261-580 to source
		Hauwai Stream	From the confluence with the Pungapunga River at approx NZMS 260 S18:239-573 to source
		Whangapuoto Stream	From the confluence with the Pungapunga River at approx NZMS 260 S18:165-542 to source
	Upper Ongarue	Unnamed tributary of the Ongarue River	From the confluence with the Ongarue River at approx NZMS 260 S17:286-880 to source
		Okauaka Stream	From the confluence with the Ongarue River at approx NZMS 260 S17:187-865 to source
		Kahoho Stream	From the confluence with the Waimiha Stream at approx NZMS 260 T17:310-965 to source

Management Zone	Sub-zone	River/Stream Name	Reference
		Waimiha Stream	From the confluence with the Ongarue River at approx NZMS 260 S17:132-862 to source
		Mataramataha River	From the confluence with the Ongarue River at approx NZMS 260 S17:116-806 to source
		Unnamed tributary of the Matramataha River	From the confluence with the Mataramataha River at approx NZMS 260 S18:273-793 to source
		Piropiro Stream	From the confluence with the Mataramataha River at approx NZMS 260 S17:251-804 to source
		Te Rerengaohoro Stream	From the confluence with the Mataramataha River at approx NZMS 260 S18:238-807 to approx S18:239-802
		Waione Stream	From the confluence with the Ongarue River at approx NZMS 260 S18:118-799 to source
		Mangatukutuku Stream	From the confluence with the Waione Stream at approx NZMS 260 S18:127-796 to source
		Waikoura Stream	From the confluence with the Mangatukutuku Stream at approx NZMS 260 S18:174-761 to source
	Upper and Lower Ongarue	Ongarue River	From the confluence with the Mangakahu Stream at approx NZMS 260 S18:087-736 to source
	Lower Ongarue	Mangakahu Stream	From the confluence with the Ongarue River at approx NZMS 260 S18:087-736 to source
		Otataka Stream	From the confluence with the Mangakahu Stream at approx NZMS 260 S18:182-701 to source
		Unnamed tributary	From the confluence with the Mangakahu Stream at approx NZMS 260 S18143:729 to source
		Kakimotu Stream	From the confluence with the Mangakahu Stream at approx NZMS 260 S18:140-729 to source
		Uepango Stream	From the confluence with the Ongarue River at approx NZMS 260 S18:053-683 to source
		Taringamotu River	From the confluence with the Ongarue River at approx NZMS 260 S18:047-582 to source
		Unnamed tributary of the Taringamotu River	From the confluence with the Taringamotu River at approx NZMS 260 S18:243-631 to source
		Unnamed tributary of the Taringamotu River	From the confluence with the Taringamotu River at approx NZMS 260 S18:229-618 to source
		Tutaeti Stream	From the confluence with the Taringamotu River at approx NZMS 260 S18:205-598 to source

Management Zone	Sub-zone	River/Stream Name	Reference
		Maraetohu Stream	From the confluence with the Taringamotu River at approx NZMS 260 S18:190-593
		Unnamed tributary of the Taringamotu River	From the confluence with the Taringamotu River at approx NZMS 260 S18:154-611 to source
		Wharariki Stream	From the confluence with the Taringamotu River at approx NZMS 260 S18:143-613 to source
		Upokomatu Stream	From the confluence with the Taringamotu River at approx NZMS 260 S18:110-626 to source
		Te Tomo Stream	From the confluence of the Upokomatu Stream at approx NZMS 260 S18:157-664 to source
		Piawa Stream	From the confluence of the Upokomatu Stream at approx NZMS 260 S18:115-635 to source
		Ngakonui Stream	From the confluence with the Taringamotu River at approx NZMS 260 S18:101-622
Middle Whanganui	Retaruke	Retaruke River	From the confluence with the Kaitieke Stream at approx NZMS 260 S19:041-326 to source
Pipiriki	Upper/Lower Manganui o te Ao	Manganui o te Ao River	From the confluence with the Whanganui River at approx NZMS 260 R20:860-979 to source
	Upper Manganui o te Ao	Makatote River	From the confluence with the Manganui O te Ao River at approx NZMS 260 S20:128-119 to S20:201-129
	Lower Manganui o te Ao	Orautoha Stream	From the confluence with the Manganui O te Ao River at approx NZMS 260 S20:026-067 to approx S20:156-063
Upper Whangaehu	Waitangi	Waitangi Stream and tributaries	From the confluence with the Whangaehu River at approx NZMS 260 T21:315-888 to source
	Tokiahuru	Omarae Stream	From confluence with the Waitaiki Stream at approx NZMS 260 S20:265-921 to source
		Waitaiki Stream	From confluence with the Tokiahuru Stream at approx NZMS 260 S21:235-880 to approx S20:273-929
		Tokiahuru Stream	From the confluence with the Whangaehu River at approx NZMS 260 S21:218-865 to approx T20:334-956
Lower Whangaehu	Upper and Lower Makotuku	Makotuku River and tributaries	From the confluence with the Mangawhero River at approx NZMS 260 S20:079-902 to source
	Upper Mangawhero	Mangawhero River	From the confluence with the Makotuku River at approx NZMS 260 S20:079-902 to source
		Mangateitei Stream	From the confluence with the Mangawhero River at approx NZMS 260 S20:158-961 to source

Management Zone	Sub-zone	River/Stream Name	Reference
		Taonui Stream	From the confluence with the Mangawhero River at approx NZMS 260 S20:121-956 to approx S20:159-020
		Makaranui Stream	From the confluence with the Mangawhero River at approx NZMS 260 S20:116-953 to approx S20:165-932
Ohau River	Upper Ohau	Makahika Stream and tributaries	From the confluence with the Ohau River at approx NZMS 260 S25:090-585 to source
		Makaretu Stream and tributaries	From the confluence with the Ohau River at approx NZMS 260 S25:083-579 to source
	Lower Ohau	Makorokio Stream and tributaries	From the confluence with Ohau River at approx NZMS 260 S25:018-563 to source

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