# 5. Appendix 5: Site data summary 2012

Awahul 1 at FNDC take - Site No. 100363	
Habitat quality score	70 (marginal)
Pfankuch stability index score	80 (fair)
MCI score	90.0
Surrounding land-use	lifestyle/pasture/urban
Livestock access	
Channel shading	50%
Macrophyte cover	common
Periphyton cover	common
Flow type	riffle/run
Inorganic substrate	boulder/cobble
Organic substrate	algae/bryophytes
Bank type	earth/mixed
Bank stability	stable
Riparian canopy cover	exotic/none/mature native
Riparian understorey cover	thin exotic

## Awanui 1 at FNDC take - site No. 100363

Awanui 2 at Waihoe Channel - site No. 100370

Habitat quality score	44 (marginal)
Pfankuch stability index	102 (fair)
score	
MCI score	64.4
Surrounding land-use	pasture
Livestock access	
Channel shading	50%
Macrophyte cover	common
Periphyton cover	rare
Flow type	run
Inorganic substrate	gravel/silt/sand
Organic substrate	algae/macrophytes
Bank type	earth
Bank stability	93% stable
Riparian canopy cover	exotic/none/mature native
Riparian understorey cover	thin exotic

Habitat quality score	77 (sub-optimal)
Pfankuch stability index	62 (good)
score	02 (9000)
MCI score	81.9
	native scrub/planted
Surrounding land-use	forest/pasture
Livestock access	
Channel shading	35%
Macrophyte cover	common
Periphyton cover	common
Flow type	run/riffle
Inorganic substrate	silt/sand/cobble/boulder/bedrock
Organic substrate	algae/bryophytes
Bank type	earth/mixed
Bank stability	50% stable
Riparian canopy cover	none/exotic/mature native
Riparian understorey cover	thin exotic/thin native

#### Hakaru at Topuni Creek Farm - site No. 109021

#### Hatea at Mair Park - site No. 101194

Habitat quality score	77 (sub-optimal)
Pfankuch stability index score	45 (good)
	02.5
MCI score	92.5
Surrounding land-use	native forest/scrub
Livestock access	
Channel shading	75%
Macrophyte cover	rare
Periphyton cover	common
Flow type	run
Inorganic substrate	boulder/cobble/gravel/bedrock
Organic substrate	algae/woody debris/detritus
Bank type	earth
Bank stability	stable
Riparian canopy cover	mature native/young native/none
Riparian understorey cover	dense native/thin native/ thin exotic

Habitat quality score	37 (poor)
Pfankuch stability index score	109 (fair)
MCI score	103.3
Surrounding land-use	lifestyle/pasture/urban
Livestock access	
Channel shading	5%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run
Inorganic substrate	gravel/silt/sand/cobble
Organic substrate	algae/macrophytes
Bank type	earth
Bank stability	stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic

# Kaihu at Gorge - site No. 102256

Habitat quality score	100 (sub-optimal)
Pfankuch stability index	37 (excellent)
score	
MCI score	97.0
Surrounding land-use	native/planted forest
Livestock access	
Channel shading	40%
Macrophyte cover	rare
Periphyton cover	common
Flow type	run/riffle
Inorganic substrate	boulder/cobble/bedrock
Organic substrate	algae/woody debris
Bank type	mixed
Bank stability	stable
Riparian canopy cover	mature/young native/exotic
	dense native/thin native/thin
Riparian understorey cover	exotic

Habitat quality score	75 (sub-optimal)
Pfankuch stability index score	50 (good)
MCI score	87.5
	native
Surrounding land-use	forest/scrub/lifestyle/urban
Livestock access	
Channel shading	20%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run/pool
Inorganic substrate	boulder/cobble/bedrock
Organic substrate	algae/woody debris
Bank type	earth/mixed
Bank stability	stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic/thin native

## Kerikeri at Stone Store - site No. 101530

Mangahahuru 1 at Main Rd - site No. 100237

Habitat quality score	89 (sub-optimal)
Pfankuch stability index score	55 (good)
MCI score	112.1
Surrounding land-use	native scrub/pasture
Livestock access	
Channel shading	80%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	riffle/run
Inorganic substrate	gravel/silt/sand/cobble
Organic substrate	algae/none/macrophytes
Bank type	earth/rock
Bank stability	stable
Riparian canopy cover	mature native/none/young native
Riparian understorey cover	thin exotic/thin native

# Mangahahuru 2 at Apotu Rd - site No. 100281

Habitat quality score	37 (poor)
Pfankuch stability index	102 (fair)
score	
MCI score	75.1
Surrounding land-use	pasture
Livestock access	
Channel shading	5%
Macrophyte cover	common
Periphyton cover	rare
Flow type	run/pool
Inorganic substrate	gravel/silt/sand
Organic substrate	macrophytes/algae
Bank type	earth
Bank stability	75% stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic/none

# Mangakahia 1 at Titoki - site No. 101038

Habitat quality score	45 (marginal)
Pfankuch stability index	87 (fair)
score	
MCI score	102.5
Surrounding land-use	pasture
Livestock access	
Channel shading	20%
Macrophyte cover	common
Periphyton cover	common
Flow type	run
Inorganic substrate	silt/sand/cobble/gravel
Organic substrate	algae/macrophytes/woody debris
Bank type	earth
Bank stability	64% stable
Riparian canopy cover	exotic/young native/none
Riparian understorey cover	thin exotic/dense exotic

Habitat quality score	78 (sub-optimal)
Pfankuch stability index score	50 (good)
MCI score	90.8
Surrounding land-use	native/planted forest
Livestock access	
Channel shading	35%
Macrophyte cover	rare
Periphyton cover	common
Flow type	run/riffle
Inorganic substrate	boulder/cobble/gravel/silt/sand
Organic substrate	algae/macrophytes
Bank type	earth
Bank stability	79% stable
Riparian canopy cover	none/mature native/exotic/young native
Riparian understorey cover	thin exotic/thin native

#### Mangakahia 2 at Gorge - site No. 109096

## Mangamuka at Iwiatua Rd - site No. 108978

Habitat quality score	66 (marginal)
Pfankuch stability index score	66 (good)
MCI score	114.2
Surrounding land-use	pasture
Livestock access	
Channel shading	10%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run
Inorganic substrate	gravel/cobble/silt/sand
Organic substrate	algae/none/woody debris/detritus
Bank type	earth
Bank stability	71% stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic

Habitat quality score	46 (marginal)
Pfankuch stability index score	100 (fair)
MCI score	55.4
Surrounding land-use	native scrub/pasture
Livestock access	
Channel shading	15%
Macrophyte cover	common
Periphyton cover	common
Flow type	run
Inorganic substrate	gravel/silt/sand
	algae/macrophytes/woody
Organic substrate	debris
Bank type	earth
Bank stability	29% stable
Riparian canopy cover	none/young native
Riparian understorey cover	thin exotic/thin native

## Manganui at Mititai Rd - site no. 102257

## Mangere at Knight Rd - site No. 101625

Habitat quality score	42 (marginal)
Pfankuch stability index score	117 (poor)
MCI score	81.8
Surrounding land-use	pasture
Livestock access	
Channel shading	30%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run
Inorganic substrate	gravel/silt/sand/hard clays
Organic substrate	algae/tree roots
Bank type	earth/mixed
Bank stability	93% stable
Riparian canopy cover	none/mature native/young native
Riparian understorey cover	thin exotic/thin native

Habitat quality score	63 (marginal)
Pfankuch stability index score	<b>79 (fair)</b>
MCI score	94.6
Surrounding land-use	native forest/scrub/pasture
Livestock access	
Channel shading	20%
Macrophyte cover	rare
Periphyton cover	common
Flow type	riffle/run
Inorganic substrate	cobble/gravel/silt/sand
	algae/woody
Organic substrate	debris/macrophytes
Bank type	earth/mixed
Bank stability	50% stable
Riparian canopy cover	none/mature native/young native
Riparian understorey cover	thin exotic/thin native

#### Ngunguru at Coalhill Lane - site No. 110603

# Opouteke at Suspension Bridge - site No. 102258

Habitat quality score	66 (marginal)
Pfankuch stability index score	56 (good)
MCI score	98.8
Surrounding land-use	native forest/scrub/pasture
Livestock access	
Channel shading	10%
Macrophyte cover	rare
Periphyton cover	common
Flow type	run/riffle
Inorganic substrate	cobble/silt/sand/boulder/gravel
Organic substrate	algae
Bank type	earth/mixed
Bank stability	stable
Riparian canopy cover	none/young native/mature
	native/exotic
Riparian understorey cover	thin exotic/thin native

## Oruru at Oruru Rd - site No. 108979

Habitat quality score	54 (marginal)
Pfankuch stability index score	104 (fair)
MCI score	69.9
Surrounding land-use	pasture
Livestock access	
Channel shading	5%
Macrophyte cover	common
Periphyton cover	rare
Flow type	run/riffle
Inorganic substrate	gravel/silt/sand/hard clays
Organic substrate	marcophytes/algae
Bank type	earth
Bank stability	57% stable
Riparian canopy cover	none
Riparian understorey cover	thin exotic

# Paparoa at Walking bridge - site No. 108977

Habitat quality score	38 (poor)
Pfankuch stability index score	107 (fair)
MCI score	NS
Surrounding land-use	lifestyle/pasture/urban
Livestock access	
Channel shading	10%
Macrophyte cover	abundant
Periphyton cover	rare
Flow type	pool
Inorganic substrate	silt/sand
Organic substrate	marcophytes/algae
Bank type	earth
Bank stability	86% stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic/thin native

Habitat quality score	75 (sub-optimal)
Pfankuch stability index score	58 (good)
MCI score	89.5
Surrounding land-use	native scrub/pasture
Livestock access	
Channel shading	20%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run/riffle
Inorganic substrate	bedrock/silt/sand
Organic substrate	algae/woody debris
Bank type	earth
Bank stability	stable
Riparian canopy cover	none/mature native/young native
Riparian understorey cover	thin exotic/thin native

## Punakitere at Loop Rd bridge - site No. 105231

## Ruakaka at Flyger Rd - site No. 105008

Habitat quality score	75 (sub-optimal)
Pfankuch stability index score	78 (fair)
MCI score	106.4
Surrounding land-use	native forest/scrub
Livestock access	
Channel shading	80%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run/riffle
Inorganic substrate	silt/sand/gravel/cobble
Organic substrate	algae/woody debris/macrophytes
Bank type	earth/mixed
Bank stability	93% stable
Riparian canopy cover	mature native/young
	native/exotic/none
Riparian understorey cover	thin exotic/thin native

## Utakura at 177 Horeke Rd - site No. 109020

Habitat quality score	53 (marginal)
Pfankuch stability index score	95 (fair)
MCI score	65.3
Surrounding land-use	lifestyle/pasture
Livestock access	
Channel shading	70%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run
Inorganic substrate	gravel/silt/sand
Organic substrate	algae/woody debris/detritus
Bank type	earth
Bank stability	stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic/thin native

# Victoria at Thompson's Bridge - site No. 105532

Habitat quality score	87 (sub-optimal)
Pfankuch stability index	53 (good)
score	
MCI score	111.1
Surrounding land-use	lifestyle
Livestock access	
Channel shading	40%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	riffle/run
Inorganic substrate	cobble/silt/sand/gravel
Organic substrate	algae/detritus/woody debris
Bank type	earth/mixed
Bank stability	97% stable
	exotic/none/mature native/young
Riparian canopy cover	native
Riparian understorey cover	thin exotic/dense exotic/thin native

Habitat quality score	61 (marginal)
Pfankuch stability index score	71 (good)
MCI score	75.0
Surrounding land-use	lifestyle/urban
Livestock access	
Channel shading	40%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	riffle/run
Inorganic substrate	gravel/cobble/boulder
Organic substrate	algae/detritus/none
Bank type	mixed/earth/manmade
Bank stability	79% stable
Riparian canopy cover	young native/none/mature native
Riparian understorey cover	thin exotic/thin native

#### Waiarohia 1 at 2nd Avenue - site No. 108359

# Waiarohia 2 at Whau Valley - site No. 107773

Habitat quality score	79 (sub-optimal)
Pfankuch stability index	82 (fair)
score	
MCI score	98.9
Surrounding land-use	native scrub/lifestyle/pasture/urban
Livestock access	
Channel shading	75%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run/riffle/pool
Inorganic substrate	silt/sand/gravel/cobble
Organic substrate	algae/detritus/macrophytes/woody
Organic substrate	debris
Bank type	mixed/earth
Bank stability	29% stable
	young native/mature
Riparian canopy cover	native/none/exotic
Riparian understorey cover	thin exotic/thin native

Wainarakeke at Stringer Kd - Site No. 100007	
Habitat quality score	65 (marginal)
Pfankuch stability index score	99 (fair)
MCI score	91.9
Surrounding land-use	native scrub/lifestyle/pasture
Livestock access	
Channel shading	70%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run/riffle
Inorganic substrate	gravel/silt/sand/cobble
Organic substrate	algae/woody debris/detritus
Bank type	earth
Bank stability	71% stable
Riparian canopy cover	mature native/none/exotic/young native
Riparian understorey cover	thin exotic/thin native

## Waiharakeke at Stringer Rd - site No. 100007

#### Waimamaku at SH12 - site No. 109098

Habitat quality score	76 (sub-optimal)
Pfankuch stability index score	68 (good)
MCI score	99.6
Surrounding land-use	planted forest/lifestyle/pasture
Livestock access	
Channel shading	30%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run
Inorganic substrate	silt/sand/gravel/cobble/boulder
Organic substrate	algae/macrophytes/woody debris
Bank type	earth/mixed
Bank stability	63% stable
Riparian canopy cover	none/exotic
Riparian understorey cover	thin exotic

## Waiotu at SH1 - site No. 102248

Habitat quality score	42 (marginal)
Pfankuch stability index score	83 (fair)
MCI score	77.6
Surrounding land-use	pasture
Livestock access	
Channel shading	5%
Macrophyte cover	common
Periphyton cover	common
Flow type	run
Inorganic substrate	silt/sand/gravel
Organic substrate	algae/macrophytes/woody debris
Bank type	earth
Bank stability	93% stable
Riparian canopy cover	none
Riparian understorey cover	thin exotic

# Waipao at Draffin Rd Bridge - site No. 108941

Habitat quality score	70 (marginal)
Pfankuch stability index score	65 (good)
MCI score	104.2
Surrounding land-use	pasture
Livestock access	
Channel shading	20%
Macrophyte cover	abundant
Periphyton cover	rare
Flow type	run/riffle
Inorganic substrate	silt/sand/gravel/cobble
Organic substrate	macrophytes/algae
Bank type	earth/rock/mixed
Bank stability	stable
Riparian canopy cover	none/mature native/exotic
Riparian understorey cover	thin exotic/thin native

Habitat quality score	77 (sub-optimal)
Pfankuch stability index score	52 (good)
MCI score	68.1
Surrounding land-use	native scrub/lifestyle/urban
Livestock access	
Channel shading	40%
Macrophyte cover	common
Periphyton cover	common
Flow type	pool/run
Inorganic substrate	bedrock/boulder/cobble
Organic substrate	algae/macrophytes/detritus/woody debris
Bank type	earth
Bank stability	stable
Riparian canopy cover	none/exotic/young native
Riparian understorey cover	thin exotic/dense native

#### Waipapa 1 at Waipapa Landing - site No. 101524

Waipapa 2 at Forest Ranger - site No. 101751

Habitat quality score	109 (optimal)
Pfankuch stability index score	33 (excellent)
MCI score	118.0
Surrounding land-use	native forest
Livestock access	
Channel shading	40%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	riffle/run
Inorganic substrate	cobble/gravel
Organic substrate	algae/woody debris
Bank type	mixed/earth
Bank stability	64% stable
Riparian canopy cover	mature native/young native
Riparian understorey cover	dense native/thin exotic

## Waipoua at SH12 - site no. 103304

Habitat quality score	115 (optimal)
Pfankuch stability index score	32 (excellent)
MCI score	129.1
Surrounding land-use	native forest
Livestock access	
Channel shading	60%
Macrophyte cover	common
Periphyton cover	common
Flow type	riffle/run
Inorganic substrate	cobble/boulder/gravel/silt/sand
Organic substrate	algae/woody debris/detritus
Bank type	mixed/rock
Bank stability	stable
Riparian canopy cover	mature native/young native
Riparian understorey cover	dense native/none

#### Wairua at Purua - site No. 101753

Habitat quality score	58 (marginal)
Pfankuch stability index	111 (fair)
score	
MCI score	59.5
Surrounding land-use	pasture
Livestock access	
Channel shading	10%
Macrophyte cover	common
Periphyton cover	common
Flow type	run
Inorganic substrate	silt/sand/gravel/manmade
	algae/macrophytes/woody
Organic substrate	debris
Bank type	earth/mixed
Bank stability	71% stable
Riparian canopy cover	none/young native/mature native
Riparian understorey cover	thin exotic/thin native

Waitangi 1 at Watea - site No. 101752	
quality score	73 (marginal)
h stability index	

Habitat quality score	73 (marginal)
Pfankuch stability index score	64 (good)
MCI score	65.2
Surrounding land-use	native scrub/lifestyle
Livestock access	
Channel shading	20%
Macrophyte cover	rare
Periphyton cover	common
Flow type	run
Inorganic substrate	cobble/silt/sand/boulder/bedrock
	algae/macrophytes/woody
Organic substrate	debris
Bank type	earth/mixed
Bank stability	stable
Riparian canopy cover	young native/none/mature native
Riparian understorey cover	thin exotic/thin native

#### Waitangi 2 at Waimate - site No. 103178

Habitat quality score	46 (marginal)
Pfankuch stability index	115 (poor)
score	
MCI score	113.8
Surrounding land-use	pasture
Livestock access	
Channel shading	30%
Macrophyte cover	rare
Periphyton cover	rare
Flow type	run
Inorganic substrate	gravel/silt/sand
	algae/detritus/woody
Organic substrate	debris/macrophytes
Bank type	earth
Bank stability	43% stable
Riparian canopy cover	none/young native
Riparian understorey cover	thin exotic

Whakapara at	t Cablewa	y - site No.	102249
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Habitat quality score	42 (marginal)	
Pfankuch stability index	84 (fair)	
score		
MCI score	82.2	
Surrounding land-use	pasture/native scrub	
Livestock access		
Channel shading	5%	
Macrophyte cover	abundant	
Periphyton cover	rare	
Flow type	run	
Inorganic substrate	silt/sand/gravel/hard clays	
Organic substrate	macrophytes/none	
Bank type	earth	
Bank stability	stable	
Riparian canopy cover	none	
Riparian understorey cover	thin exotic	