

Appendix A: RWQMN site information

Table 9: Percentage of different land use types and total catchment area (hectares) for each RWQMN site, including new sites added to the network in 2006 and 2007.

| Site | Site No. | X (NZTM) | Y (NZTM) | Indig | Forestry | Harvest | Exotic | H prod past | L prod past | Crops | Water | Other | Total (ha) |
|--------------------------------|----------|----------|----------|-------|----------|---------|--------|-------------|-------------|-------|-------|-------|------------|
| Awanui at FNDC pumpstation | 100363 | 1625095 | 6113439 | 36.0 | 5.5 | 0.1 | 1.2 | 56.9 | 0.2 | 0.0 | 0.1 | 0.0 | 21701.5 |
| Awanui u/s of Waihue Channel | 100370 | 1620713 | 6114952 | 31.1 | 4.2 | 0.1 | 1.4 | 61.2 | 0.1 | 0.3 | 0.5 | 1.2 | 31361.6 |
| Hakaru at Topuni Creek farm | 109021 | 1734330 | 5992416 | 21.8 | 6.7 | 0.1 | 0.2 | 69.5 | 0.0 | 1.3 | 0.4 | 0.0 | 8311.5 |
| Kaeo at Dip Rd bridge | 102674 | 1670326 | 6115833 | 55.6 | 13.5 | 2.1 | 0.2 | 24.4 | 3.9 | 0.1 | 0.1 | 0.3 | 9933.6 |
| Kaihu at gorge | 102256 | 1661946 | 6042161 | 27.6 | 15.3 | 0.9 | 0.4 | 55.5 | 0.2 | 0.0 | 0.0 | 0.0 | 11507.4 |
| Kerikeri at Stone Store bridge | 101530 | 1687631 | 6102447 | 14.8 | 3.8 | 1.0 | 0.7 | 63.0 | 0.1 | 14.5 | 0.6 | 1.5 | 9777.2 |
| Mangahahuru at Apotu Rd | 100281 | 1714117 | 6057720 | 14.6 | 23.4 | 26.3 | 0.5 | 31.7 | 0.4 | 1.1 | 0.2 | 2.0 | 4554.9 |
| Mangahahuru at Main Rd | 100237 | 1718886 | 6055192 | 12.9 | 42.7 | 39.3 | 0.9 | 3.8 | 0.2 | 0.0 | 0.0 | 0.0 | 2103.1 |
| Mangakahia at Titoki bridge | 101038 | 1694999 | 6045028 | 33.3 | 24.7 | 4.4 | 0.3 | 33.3 | 3.6 | 0.1 | 0.1 | 0.0 | 80685.9 |
| Mangakahia d/s of Twin Bridges | 109096 | 1677333 | 6056762 | 34.5 | 20.3 | 9.2 | 0.0 | 35.6 | 0.1 | 0.0 | 0.3 | 0.0 | 24313.5 |
| Mangamuka at Iwiatua Rd | 108978 | 1649247 | 6103622 | 93.0 | 0.1 | 0.0 | 0.0 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 3661.7 |
| Manganui at Mititai Rd | 102257 | 1700359 | 6019751 | 17.0 | 5.5 | 0.6 | 0.5 | 75.8 | 0.1 | 0.0 | 0.3 | 0.1 | 40866.0 |
| Mangere at Knight Rd | 101625 | 1703586 | 6048948 | 21.9 | 0.3 | 0.3 | 0.8 | 75.4 | 0.4 | 0.6 | 0.1 | 0.2 | 7586.1 |
| Ngunguru at Waipoka Rd | 109100 | 1729072 | 6054775 | 37.0 | 21.8 | 1.2 | 0.3 | 38.7 | 0.2 | 0.8 | 0.0 | 0.0 | 5060.5 |
| Opouteke at suspension bridge | 102258 | 1678503 | 6049460 | 35.5 | 58.4 | 0.0 | 0.0 | 5.5 | 0.5 | 0.0 | 0.0 | 0.0 | 10806.2 |
| Oruru near bowling club | 108979 | 1644740 | 6122563 | 47.5 | 9.9 | 0.3 | 3.2 | 35.3 | 3.7 | 0.1 | 0.0 | 0.0 | 9062.3 |
| Paparoa in Paparoa Reserve | 108977 | 1711218 | 6004190 | 14.6 | 3.6 | 0.1 | 0.9 | 79.9 | 0.1 | 0.2 | 0.1 | 0.5 | 3573.0 |
| Punakitere Punakitere Loop Rd | 105231 | 1660001 | 6075453 | 24.7 | 15.0 | 1.7 | 1.4 | 51.7 | 2.9 | 0.3 | 1.1 | 1.1 | 30268.3 |
| Ruakaka at Flyger Rd | 105008 | 1726626 | 6029623 | 26.3 | 1.3 | 0.3 | 0.4 | 71.5 | 0.0 | 0.0 | 0.0 | 0.1 | 4749.8 |
| Utakura near 1711 Horeke Rd | 109020 | 1656910 | 6089081 | 22.9 | 9.9 | 0.2 | 0.6 | 54.4 | 0.0 | 0.5 | 11.2 | 0.3 | 11697.7 |
| Victoria at Victoria Valley Rd | 105532 | 1637132 | 6110554 | 82.0 | 5.2 | 0.0 | 0.2 | 12.5 | 0.1 | 0.0 | 0.0 | 0.0 | 2669.5 |
| Waiarohia at Second Ave | 108359 | 1719097 | 6045830 | 55.1 | 1.4 | 0.0 | 0.0 | 18.4 | 0.3 | 1.4 | 1.5 | 21.9 | 1849.7 |
| Waiarohia at Whau valley | 107773 | 1717568 | 6048671 | 70.7 | 1.6 | 0.0 | 0.0 | 23.0 | 0.0 | 1.0 | 2.6 | 1.1 | 1038.3 |
| Waiharakeke at Stringer Rd | 100007 | 1692604 | 6082806 | 28.9 | 21.4 | 2.2 | 1.1 | 32.8 | 12.0 | 0.0 | 1.5 | 0.2 | 23040.5 |
| Waimamaku at SH12 | 109098 | 1640666 | 6064914 | 61.0 | 2.3 | 2.2 | 0.4 | 21.8 | 12.4 | 0.0 | 0.1 | 0.0 | 10329.8 |
| Waiotu at SH1 | 102248 | 1711381 | 6067240 | 30.5 | 4.4 | 0.1 | 0.7 | 63.9 | 0.3 | 0.0 | 0.0 | 0.1 | 12045.2 |
| Waipao at Draffin Rd | 108941 | 1701772 | 6045796 | 8.8 | 0.8 | 0.6 | 0.3 | 74.0 | 0.6 | 14.8 | 0.1 | 0.1 | 3511.1 |
| Waipapa at Puketū Forest | 101751 | 1662582 | 6096421 | 86.6 | 8.8 | 1.1 | 0.0 | 3.4 | 0.1 | 0.0 | 0.0 | 0.0 | 12046.5 |
| Waipapa at Waipapa Landing | 101524 | 1688150 | 6103986 | 14.0 | 4.3 | 0.0 | 1.0 | 46.7 | 0.5 | 28.7 | 3.8 | 1.0 | 3410.0 |
| Waipoua at SH12 | 103304 | 1651633 | 6054443 | 90.9 | 0.4 | 0.2 | 0.0 | 8.2 | 0.3 | 0.0 | 0.0 | 0.0 | 6446.9 |
| Wairua at Purua | 101753 | 1704273 | 6053948 | 23.5 | 6.3 | 3.7 | 0.6 | 63.6 | 0.7 | 0.4 | 0.8 | 0.4 | 54301.2 |
| Waitangi at Watea | 101752 | 1695269 | 6095708 | 19.5 | 6.6 | 1.4 | 0.9 | 68.9 | 0.3 | 0.6 | 1.3 | 0.5 | 29887.2 |
| Waitangi at Waimate Rd | 103178 | 1681894 | 6093741 | 29.4 | 8.1 | 0.0 | 0.4 | 61.2 | 0.5 | 0.0 | 0.1 | 0.4 | 5043.7 |
| Whakapara at cableway | 102249 | 1715259 | 6066116 | 35.2 | 7.1 | 4.0 | 0.7 | 51.7 | 1.0 | 0.0 | 0.1 | 0.2 | 16380.2 |

Table 10: RWQMN site information including Land use and potential impacts on water quality, River Environment Classification (REC), and whether there is a flow record. The REC includes river source (low or hill elevation or lake), geology (SS=soft sedimentary, VA=volcanic acidic and HS=hard sedimentary) land cover (Pasture, exotic forestry or indigenous forest), river order (High=order>4, Middle=3 or 4 order) and river gradient (Low or medium).

| Site | Site no. | Land use/potential impacts | Source | Geology | Cover | Order | Gradient | Flow |
|----------------------------------|----------|---|-----------|---------|---------|--------|----------|--------|
| Awanui at FNDC pumpstation | 100363 | Agriculture | Low elvn | SS | Pasture | High | Low | Y |
| Awanui U/S of Waihue Channel | 100370 | Agriculture, Kaitaia oxidation pond discharge | Low elvn | SS | Pasture | High | Low | Y |
| Hakaru at Topuni Creek farm | 109021 | Pasture and exotic forestry | Low elvn | SS | Pasture | High | Low | Future |
| Kaeo at Dip Rd bridge | 102674 | Pasture, town, OP discharge, effect on harbour & marine farms | Low elvn | SS | Pasture | High | Low | Future |
| Kaihu at gorge | 102256 | Pastoral Agriculture | Low elvn | VA | Pasture | High | Medium | Y |
| Kerikeri at stone store bridge | 101530 | Pasture, horticultural and lifestyle blocks | Low elvn | VA | Pasture | High | Medium | Future |
| Mangahuru at Apotu Rd | 100281 | Agriculture, Kauri Dairy factory, Hikurangi OP discharge | Low elvn | HS | Pasture | Middle | Low | Y |
| Mangahuru at Main Rd | 100237 | Exotic forestry | Low elvn | HS | Exotic | Middle | Low | Y |
| Mangakahia at Titoki bridge | 101038 | Pastoral Agriculture | Low elvn | VA | Pasture | High | Low | y |
| Mangakahia d/s of Twin Bridges | 109096 | Agriculture, some exotic forestry | Low elvn | VA | Pasture | High | Low | Y |
| Mangamuka at Iwiatua Rd | 108978 | Pasture, indigenous forest, outstanding river in RWSP | Low elvn | VA | Indig | Middle | Low | N |
| Manganui at Mitaitai Rd | 102257 | Pastoral Agriculture | Low elvn | SS | Pasture | High | Low | Y |
| Mangere at Knight Rd | 101625 | Intensive dairying, cumulative effect FDE discharges | Low elvn | SS | Pasture | High | Low | Y |
| Ngunguru at Waipoka Rd | 109100 | Pasture, exotic and indigenous forest | Low elvn | HS | Pasture | Middle | Low | Y |
| Opouteke at suspension bridge | 102258 | Exotic forest, some native forest | Low elvn | VA | Exotic | High | Low | y |
| Oruru near bowling club | 108979 | Pasture | Low elvn | VA | Pasture | High | Low | Y |
| Paparoa in Paparoa Reserve | 108977 | Pasture, effect of WQ on harbour WQ & marine farms | Low elvn | SS | Pasture | High | Low | N |
| Punakitere at Punakitere Loop Rd | 105231 | Agriculture, urban (Kaikohe township) | Low elvn | SS | Pasture | High | Low | Y |
| Ruakaka at Flyger Rd | 105008 | Pasture, u/s of major watertake | Low elvn | SS | Pasture | Middle | Low | Future |
| Utakura near 1711 Horeke Rd | 109020 | Pasture, source: Lake Omapere (highly enriched/algal blooms) | Lake | SS | Pasture | Middle | Low | N |
| Victoria at Victoria Valley Rd | 105532 | Native forest, some agriculture | Low elvn | VA | Indig | Middle | Low | Y |
| Waiarohia at Second Ave | 108359 | Urban, stormwater, road run off | Low elvn | HS | Urban | Middle | Low | Y |
| Waiarohia at Whau valley | 107773 | Pasture, indigenous, exotic forestry, lifestyle blcks, water supply dam | Low elvn | HS | Pasture | Middle | Low | Y |
| Waiharakeke at Stinger Rd | 100007 | Wetland system u/s, pasture, exotic forestry, indigenous | Low elvn | SS | Pasture | High | Low | Y |
| Waimamaku at SH12 | 109098 | Pasture | Low elvn | VA | Pasture | High | Low | N |
| Waiotu at SH1 | 102248 | Agriculture (dairying) | Low elvn | HS | Pasture | High | Low | Y |
| Waipao at Draffin Rd | 108941 | Pasture, Main source: springs from Whatitiri aquifer | Low elvn | VA | Pasture | Middle | Low | Y |
| Waipapa at Puketi Forest | 101751 | Native forest, outstanding river in RWSP | Low elvn | SS | Indig | High | Low | Y |
| Waipapa at Waipapa Landing | 101524 | Pasture, horticultural & lifestyle blocks, Lake Manuwai (water supply) | Lake | VA | Pasture | Middle | Medium | Future |
| Waipoua at SH12 | 103304 | Native forest, outstanding river in RWSP | Hill elvn | VA | Indig | High | Medium | Y |
| Wairua at Purua | 101753 | Pastoral Agriculture | Low elvn | HS | Pasture | High | Low | Y |
| Waitangi at Waimate Rd | 103178 | Native forest, moderate agriculture | Low elvn | VA | Pasture | Middle | Low | Y |
| Waitangi at Watea | 101752 | Agriculture, some native forest | Low elvn | HS | Pasture | High | Medium | Y |
| Whakapara at cableway | 102249 | Agriculture (dairying) | Low elvn | HS | Pasture | High | Low | Y |

Appendix B: Median water quality data for RWQMN sites for 2006 and all years

Table 11: Medians for 2006

| Site | Temp. (deg. C) | DO (% sat.) | DO (mg/L) | Cond. (mSm/cm) | pH | Turb. (ntu) | Water clarity (m) | Dissolved colour (340 nm/cm) | Dissolved colour (440 nm/cm) | DRP (g/m3) | TP (g/m3) | NNN/NO3 (g/m3) | NH4 (g/m3) | TKN (g/m3) | TN (g/m3) | Ecoli (n/100ml) |
|----------------------------|----------------|-------------|-----------|----------------|-----|-------------|-------------------|------------------------------|------------------------------|------------|-----------|----------------|------------|------------|-----------|-----------------|
| Awanui at FNDC take | 15.55 | 85.4 | 8.8 | 4.5 | 7.3 | 4.5 | 0.75 | 13.04 | 2.56 | 0.016 | 0.039 | 0.028 | 0.005 | 0.3 | 0.260 | 276 |
| Awanui u/s of Waihue | 16.80 | 85.0 | 8.7 | 7.0 | 7.4 | 5.0 | 0.55 | 13.53 | 3.34 | 0.060 | 0.107 | 0.073 | 0.005 | 0.5 | 0.573 | 323 |
| Kaihu | 14.20 | 105.3 | 10.7 | 3.0 | 7.3 | 3.4 | 1.76 | 7.76 | 2.43 | 0.011 | 0.027 | 0.265 | 0.005 | 0.1 | 0.435 | 128 |
| Mangahahuru at Apotu Rd | 15.20 | 103.7 | 10.5 | 4.5 | 7.2 | 4.7 | 1.55 | 14.64 | 3.36 | 0.038 | 0.086 | 0.386 | 0.030 | 0.2 | 0.694 | 419 |
| Mangahahuru at Main Rd | 13.75 | 97.6 | 10.2 | 3.4 | 7.2 | 3.5 | 2.13 | 11.41 | 2.68 | 0.005 | 0.018 | 0.028 | 0.005 | 0.1 | 0.124 | 161 |
| Mangakahia at Titoki | 16.40 | 96.6 | 9.6 | 5.9 | 7.4 | 6.9 | 0.68 | 9.91 | 1.92 | 0.007 | 0.029 | 0.209 | 0.012 | 0.2 | 0.282 | 120 |
| Mangakahia at Twin Bridges | 15.80 | 108.5 | NA | 2.7 | 7.5 | 3.0 | 1.54 | 7.90 | 1.90 | 0.015 | 0.027 | 0.017 | 0.005 | 0.1 | 0.167 | 148 |
| Manganui River | 15.85 | 85.6 | 8.7 | 6.8 | 7.1 | 8.6 | 0.96 | 20.05 | 3.66 | 0.056 | 0.108 | 0.167 | 0.005 | 0.5 | 0.590 | 91 |
| Mangere River | 14.75 | 86.2 | 8.8 | 5.3 | 7.2 | 5.5 | 1.20 | 16.83 | 3.77 | 0.110 | 0.163 | 0.591 | 0.050 | 0.5 | 1.083 | 821 |
| Opouteke River | 15.85 | 109.9 | NA | 3.3 | 7.5 | 3.7 | 1.25 | 7.90 | 2.02 | 0.009 | 0.021 | 0.012 | 0.005 | 0.1 | 0.162 | 179 |
| Punakitere River | 14.70 | 97.4 | 10.2 | 5.0 | 7.3 | 4.6 | 1.67 | 16.51 | 3.55 | 0.028 | 0.057 | 0.420 | 0.020 | 0.3 | 0.842 | 389 |
| Victoria River | 13.85 | 97.7 | 10.5 | 1.1 | 7.3 | 1.1 | 1.95 | 3.17 | 0.55 | 0.014 | 0.021 | 0.004 | 0.005 | 0.1 | 0.055 | 179 |
| Waiarohia at Second Ave | 17.05 | 111.2 | 11.1 | 2.6 | 7.5 | 3.5 | 1.50 | 8.51 | 1.87 | 0.022 | 0.048 | 0.397 | 0.008 | 0.2 | 0.628 | 453 |
| Waiarohia at Whau Valley | 16.00 | 97.9 | 9.9 | 7.6 | 7.2 | 8.0 | 0.90 | 12.29 | 2.84 | 0.004 | 0.083 | 0.162 | 0.005 | 0.6 | 0.741 | 812 |
| Waiotu River at SH1 | 14.85 | 94.2 | 10.2 | 5.4 | 7.3 | 7.3 | 1.40 | 15.31 | 3.48 | 0.018 | 0.051 | 0.263 | 0.015 | 0.2 | 0.430 | 251 |
| Waipapa at Puketū Forest | 13.30 | 97.8 | 10.5 | 1.6 | 7.6 | 1.6 | 2.05 | 7.30 | 1.53 | 0.005 | 0.010 | 0.024 | 0.003 | 0.1 | 0.121 | 78 |
| Waipoua River | 13.15 | 102.0 | 10.9 | 2.0 | 7.4 | 2.1 | 2.13 | 7.22 | 1.78 | 0.021 | 0.029 | 0.016 | 0.005 | 0.1 | 0.078 | 20 |
| Wairua River at Purua | 17.10 | 94.2 | 9.7 | 7.6 | 7.1 | 7.6 | 0.76 | 15.63 | 2.99 | 0.024 | 0.062 | 0.532 | 0.039 | 0.4 | 0.759 | 78 |
| Waitangi at Waimate | 13.85 | 97.8 | 10.7 | 2.6 | 7.2 | 2.8 | 1.89 | 8.74 | 1.92 | 0.002 | 0.019 | 0.379 | 0.010 | 0.2 | 0.560 | 386 |
| Waitangi at watea | 15.30 | 99.7 | 10.3 | 2.6 | 7.5 | 4.0 | 1.69 | 8.71 | 1.69 | 0.006 | 0.023 | 0.357 | 0.006 | 0.2 | 0.479 | 167 |
| Whakapara River | 15.35 | 102.5 | 10.4 | 4.4 | 7.3 | 4.5 | 1.72 | 12.10 | 2.83 | 0.027 | 0.044 | 0.215 | 0.015 | 0.2 | 0.309 | 135 |

Table 12: Medians for all years

| Site | Temp. (deg. C) | DO (% sat.) | DO (mg/L) | Cond. (mSm/cm) | pH | Turb. (ntu) | Water clarity (m) | Dissolved colour (340 nm/cm) | Dissolved colour (440 nm/cm) | DRP (g/m3) | TP (g/m3) | NNN/ NO3 (g/m3) | NH4 (g/m3) | TKN (g/m3) | TN (g/m3) | Ecoli (n/100ml) |
|-------------------------------|----------------------|----------------|--------------|-------------------|-----|----------------|-------------------------|---------------------------------------|---------------------------------------|---------------|--------------|-----------------------|---------------|---------------|--------------|--------------------|
| Awanui at FNDC take | 16.5 | 86.0 | 8.6 | 7.1 | 7.4 | 7.1 | 0.82 | 12.92 | 2.90 | 0.020 | 0.046 | 0.044 | 0.020 | 0.2 | 0.299 | 306 |
| Awanui u/s of Waihue | 17.1 | 89.2 | 8.7 | 9.4 | 7.5 | 9.4 | 0.55 | 13.67 | 3.18 | 0.167 | 0.150 | 0.073 | 0.040 | 0.5 | 0.583 | 410 |
| Kaihu | 14.4 | 104.6 | 10.8 | 3.5 | 7.5 | 3.5 | 1.70 | 8.90 | 2.11 | 0.008 | 0.020 | 0.275 | 0.005 | 0.2 | 0.435 | 146 |
| Mangahahuru at Apotu Rd | 16.1 | 95.6 | 9.8 | 7.5 | 6.8 | 7.5 | 0.75 | 14.89 | 3.43 | 0.040 | 0.098 | 0.426 | 0.040 | 0.3 | 0.730 | 494 |
| Mangahahuru at Main Rd | 13.9 | 97.6 | 10.1 | 3.5 | 7.2 | 3.5 | 2.10 | 12.27 | 2.94 | 0.005 | 0.018 | 0.037 | 0.005 | 0.1 | 0.137 | 181 |
| Mangakahia at Titoki | 17.1 | 96.6 | 9.4 | 13.5 | 7.4 | 6.8 | 0.65 | 9.69 | 1.90 | 0.008 | 0.028 | 0.106 | 0.015 | 0.2 | 0.320 | 182 |
| Mangakahia at Twin Bridges | 16.8 | 106.5 | NA | 3.6 | 7.4 | 3.6 | 1.38 | 8.09 | 1.99 | 0.044 | 0.072 | 0.064 | 0.010 | 0.1 | 0.261 | 180 |
| Manganui River | 15.8 | 85.3 | 8.2 | 8.6 | 7.2 | 8.6 | 0.73 | 18.54 | 4.01 | 0.035 | 0.092 | 0.250 | 0.020 | 0.5 | 0.712 | 122 |
| Mangere River | 15.3 | 83.2 | 8.5 | 7.2 | 6.9 | 7.2 | 0.81 | 17.72 | 4.05 | 0.110 | 0.175 | 0.720 | 0.100 | 0.5 | 1.341 | 561 |
| Opouteke River | 16.8 | 106.9 | NA | 2.6 | 7.5 | 2.6 | 1.58 | 5.96 | 1.56 | 0.036 | 0.078 | 0.043 | 0.020 | 0.1 | 0.215 | 121 |
| Punakitere River | 15.5 | 98.3 | 9.9 | 6.2 | 7.4 | 6.2 | 0.95 | 16.03 | 3.70 | 0.027 | 0.058 | 0.466 | 0.020 | 0.3 | 0.866 | 388 |
| Victoria River | 14.9 | 96.8 | 9.9 | 1.3 | 7.4 | 1.3 | 2.03 | 2.95 | 0.61 | 0.019 | 0.022 | 0.008 | 0.020 | 0.1 | 0.087 | 166 |
| Waiarohia at Second Ave | 16.4 | 111.2 | 10.9 | 3.0 | 7.4 | 3.0 | 1.49 | 8.51 | 2.09 | 0.022 | 0.051 | 0.397 | 0.005 | 0.2 | 0.643 | 465 |
| Waiarohia at Whau Valley | 15.8 | 97.5 | 9.6 | 7.3 | 7.2 | 7.3 | 0.90 | 12.03 | 2.95 | 0.007 | 0.076 | 0.235 | 0.005 | 0.5 | 0.784 | 726 |
| Waiotu River at SH1 | 15.5 | 92.3 | 9.3 | 8.9 | 6.9 | 5.4 | 0.82 | 15.22 | 3.81 | 0.015 | 0.068 | 0.344 | 0.020 | 0.3 | 0.667 | 323 |
| Waipapa at Puketū Forest | 14.7 | 97.0 | 9.8 | 11.6 | 7.5 | 2.2 | 1.85 | 6.55 | 1.28 | 0.005 | 0.010 | 0.020 | 0.003 | 0.1 | 0.107 | 71 |
| Waipoua River | 12.9 | 103.4 | 10.9 | 2.1 | 7.5 | 2.1 | 2.34 | 6.98 | 1.69 | 0.005 | 0.008 | 0.016 | 0.005 | 0.1 | 0.088 | 63 |
| Wairua River at Purua | 17.0 | 89.4 | 8.7 | 11.9 | 6.8 | 8.8 | 0.56 | 17.13 | 3.22 | 0.023 | 0.075 | 0.470 | 0.041 | 0.3 | 0.828 | 111 |
| Waitangi at Waimate | 14.9 | 97.3 | 10.0 | 3.8 | 6.9 | 3.8 | 1.07 | 8.79 | 1.93 | 0.007 | 0.027 | 0.364 | 0.020 | 0.2 | 0.570 | 488 |
| Waitangi at watea | 16.7 | 100.7 | 9.8 | 11.2 | 7.5 | 3.7 | 1.16 | 9.82 | 1.86 | 0.006 | 0.022 | 0.294 | 0.008 | 0.2 | 0.504 | 164 |
| Whakapara River | 15.9 | 96.5 | 9.8 | 6.0 | 6.9 | 6.0 | 1.01 | 13.27 | 3.06 | 0.025 | 0.057 | 0.308 | 0.020 | 0.2 | 0.504 | 177 |

Appendix C: Macroinvertebrate and habitat quality assessments

Table 13: Macroinvertebrate and habitat quality assessment data for all RWQMN in 2007

| Site | Macroinvertebrate data | | | | Habitat quality assessment data | | | | | | | |
|------------------------------|------------------------|-----|-------|-------|---------------------------------|-------------------|--------------------------|--------------------|----------------|---------------|---------------------|-------|
| | No. of taxa | MCI | SQMCI | % EPT | Habitat abundance | Habitat diversity | Hydrologic heterogeneity | Channel alteration | Bank stability | Channel shade | Riparian vegetation | Total |
| Awanui at FNDC watertake | 10 | 100 | 5.3 | 50.0 | 11 | 14 | 15 | 7 | 6 | 2 | 2 | 57 |
| Awanui u/s of Waihue channel | 7 | 107 | 4.2 | 42.9 | 16 | 15 | 15 | 13 | 13 | 6 | 2 | 80 |
| Kaeo River | 4 | 100 | 4.2 | 25.0 | 6 | 11 | 12 | 12 | 16 | 8 | 4 | 69 |
| Kaihu at gorge | 17 | 79 | 3.6 | 29.4 | 19 | 16 | 15 | 15 | 19 | 3 | 8 | 95 |
| Mangahuru at Apotu Rd | 17 | 76 | 3.8 | 11.8 | 19 | 9 | 11 | 8 | 18 | 1 | 2 | 68 |
| Mangahuru at Main Rd | 24 | 103 | 5.5 | 41.7 | 14 | 18 | 15 | 13 | 16 | 4 | 6 | 86 |
| Mangakahia at Titoki | 8 | 105 | 4.3 | 37.5 | 12 | 16 | 12 | 11 | 8 | 1 | 3 | 63 |
| Mangakahia at Twin Bridges | 15 | 103 | 4.0 | 40.0 | 17 | 15 | 20 | 19 | 18 | 3 | 11 | 103 |
| Manganui River | 7 | 97 | 4.5 | 28.6 | 16 | 12 | 7 | 12 | 11 | 4 | 3 | 65 |
| Mangere River | 24 | 79 | 4.2 | 12.5 | 12 | 15 | 12 | 11 | 14 | 6 | 5 | 75 |
| Opouteke River | 15 | 88 | 3.3 | 26.7 | 17 | 13 | 17 | 11 | 17 | 0 | 2 | 77 |
| Punakitere River | 19 | 101 | 4.6 | 36.8 | 16 | 14 | 15 | 15 | 16 | 7 | 8 | 91 |
| Ruakaka River | 13 | 99 | 4.8 | 38.5 | 11 | 11 | 12 | 11 | 16 | 9 | 11 | 81 |
| Victoria River | 19 | 111 | 6.0 | 57.9 | 10 | 15 | 13 | 13 | 11 | 9 | 7 | 78 |
| Waiarohia at Second Ave | 18 | 85 | 4.3 | 27.8 | 12 | 15 | 14 | 11 | 10 | 4 | 5 | 71 |
| Waiarohia at Whau Valley | 28 | 91 | 4.1 | 32.1 | 14 | 13 | 12 | 3 | 14 | 3 | 9 | 68 |
| Waiharakeke Stream | 11 | 96 | 5.2 | 45.5 | 15 | 15 | 14 | 15 | 14 | 11 | 11 | 95 |
| Waiotu River at SH1 | 12 | 73 | 3.4 | 25.0 | 10 | 13 | 14 | 12 | 13 | 4 | 4 | 70 |
| Waipapa at Puketia Forest | 27 | 127 | 7.1 | 55.6 | 20 | 18 | 19 | 20 | 20 | 6 | 19 | 122 |
| Waipoua River | 21 | 130 | 7.2 | 66.7 | 20 | 17 | 20 | 14 | 18 | 6 | 18 | 113 |
| Wairua River at Purua | 13 | 80 | 4.8 | 30.8 | 17 | 13 | 11 | 10 | 9 | 1 | 2 | 63 |
| Waitangi at Waimate | 10 | 78 | 3.2 | 0.0 | 10 | 15 | 16 | 13 | 15 | 3 | 9 | 81 |
| Waitangi at watea | 15 | 99 | 6.4 | 33.3 | 14 | 13 | 14 | 15 | 4 | 1 | 2 | 63 |
| Whakapara River | 12 | 91 | 4.2 | 50.0 | 17 | 13 | 11 | 9 | 8 | 1 | 2 | 61 |