

Boat electrofishing in the Ohau Channel on 5 December 2011

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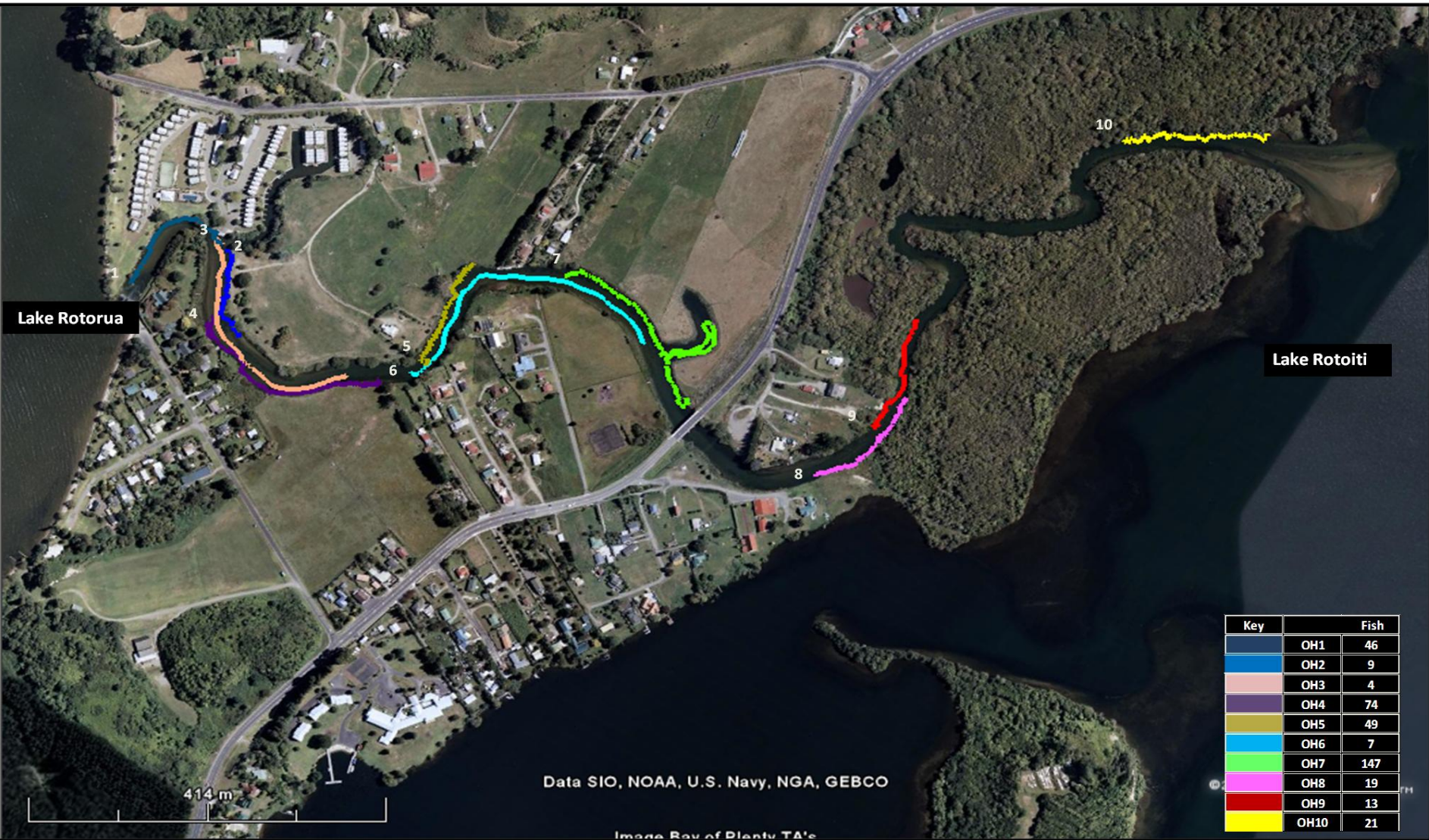
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Objectives and results summary

- To investigate the fish community and relative abundance in the Ohau Channel
- Length fished 2.42 km at a total of 10 sites, 10-20 min shots
- Assuming 1-m radius around anodes, width fished was 4 m
- Area fished 9,680 m² (0.97 ha)
- Caught 391 fish (921 in 2010)
- Three native fish species - common bully, common smelt, longfin eel
- Four introduced species - rainbow trout, brown trout, goldfish, gambusia
- Very few smelt in 2011 but more eels, 2 koura caught

Fishing sites



Fish numbers 2011

Site	Time fished (min)	Distance fished (m)	Area fished (m ²)	Number of fish								Total
				Common bully	Common smelt	Goldfish	Longfin eel	Rainbow trout	Juvenile trout	Brown trout	Koura	
Ohau 1	10	330	1320	37	2	0	2	1	4	0	0	46
Ohau 2	10	150	600	4	0	0	0	2	1	1	1	9
Ohau 3	10	190	760	0	0	0	0	2	1	1	0	4
Ohau 4	10	260	1040	57	15	0	1	0	1	0	0	74
Ohau 5	10	160	640	49	0	0	0	0	0	0	0	49
Ohau 6	10	380	1520	0	0	0	0	7	0	0	0	7
Ohau 7	12	430	1720	127	19	0	1	0	0	0	1	148
Ohau 8	15	150	600	11	2	2	1	2	1	0	0	19
Ohau 9	20	180	720	9	1	0	0	3	0	0	0	13
Ohau 10	10	190	760	4	0	17	0	0	0	0	0	21
Total	117	2420	9680	298	39	19	5	17	8	2	2	390

Fish density 2011

Site	Time fished (min)	Distance fished (m)	Area fished (m ²)	Fish density (fish 100 m ⁻²)								Total
				Common bully	Common smelt	Goldfish	Longfin eel	Rainbow trout	Juvenile trout	Brown trout	Koura	
Ohau 1	10	330	1320	2.80	0.15	0.00	0.15	0.08	0.30	0.00	0.00	3.48
Ohau 2	10	150	600	0.67	0.00	0.00	0.00	0.33	0.17	0.17	0.17	1.50
Ohau 3	10	190	760	0.00	0.00	0.00	0.00	0.26	0.13	0.13	0.00	0.53
Ohau 4	10	260	1040	5.48	1.44	0.00	0.10	0.00	0.10	0.00	0.00	7.12
Ohau 5	10	160	640	7.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.66
Ohau 6	10	380	1520	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.46
Ohau 7	12	430	1720	7.38	1.10	0.00	0.06	0.00	0.00	0.00	0.06	8.60
Ohau 8	15	150	600	1.83	0.33	0.33	0.17	0.33	0.17	0.00	0.00	3.17
Ohau 9	20	180	720	1.25	0.14	0.00	0.00	0.42	0.00	0.00	0.00	1.81
Ohau 10	10	190	760	0.53	0.00	2.24	0.00	0.00	0.00	0.00	0.00	2.76
Total	117	2420	9680									
Average				2.76	0.32	0.26	0.05	0.19	0.09	0.03	0.02	3.71

All fishing years

Site	Fish density (fish 100 m ⁻²)									Time fished (min)	Distance fished (m)	Area fished (m ²)
	Common bully	Common smelt	Goldfish	Longfin eel	Rainbow trout	Juvenile trout	Brown trout	Koura	Total			
2007	22.28	3.30	0.14	0.03	0.30	0.11			26.15	82	1,582	6,328
2008	6.14	4.12	0.03	0.01	0.04	0.18			10.52	100	2,033	8,133
2009	1.45	1.46	0.07	0.01	0.36				3.34	101	2,721	10,884
2010	4.34	1.65	0.16	0.01	0.53			0.10	5.88	99	3,488	13,952
2011	2.76	0.32	0.26	0.05	0.19	0.09	0.03	0.02	3.71	101	2,721	10,884

Conclusions

- Bullies usually most abundant fish species
- Reduced smelt numbers since 2009
- Longfin eels a consistent feature
- More goldfish in 2011

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