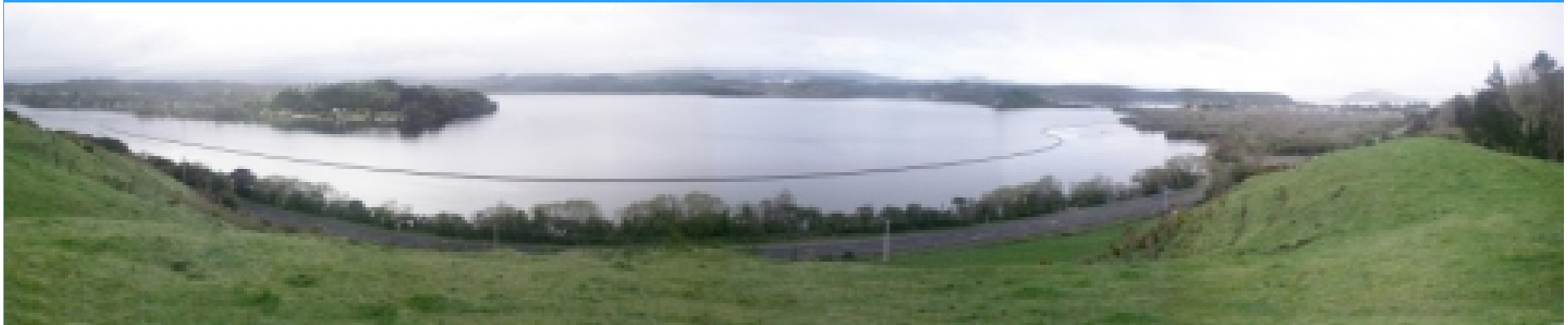


Ohau Channel Diversion Wall



John McIntosh
Te Waiti Marae
22 November 2013



Ohau Channel Diversion Wall

The wall was completed in August 2008

Water Quality issues

Lake Rotoiti had deteriorated due to the poor quality of Lake Rotorua water flowing into it.

People living downstream said the wall will send the problem to the Kaituna and Maketu.



Ohau Channel Diversion Wall

Monitoring

Has the wall improved the quality of Lake Rotoiti?

Yes – it took 5 years.

Any adverse effects on the quality of the Kaituna River and Maketu Estuary?

No – the outflow to the Kaituna has improved.



Ohau Channel Diversion Wall

The Problem

Huge algal bloom in Rotoiti in 2002 – worst state of a large lake in NZ since Rotorua in 1970s.

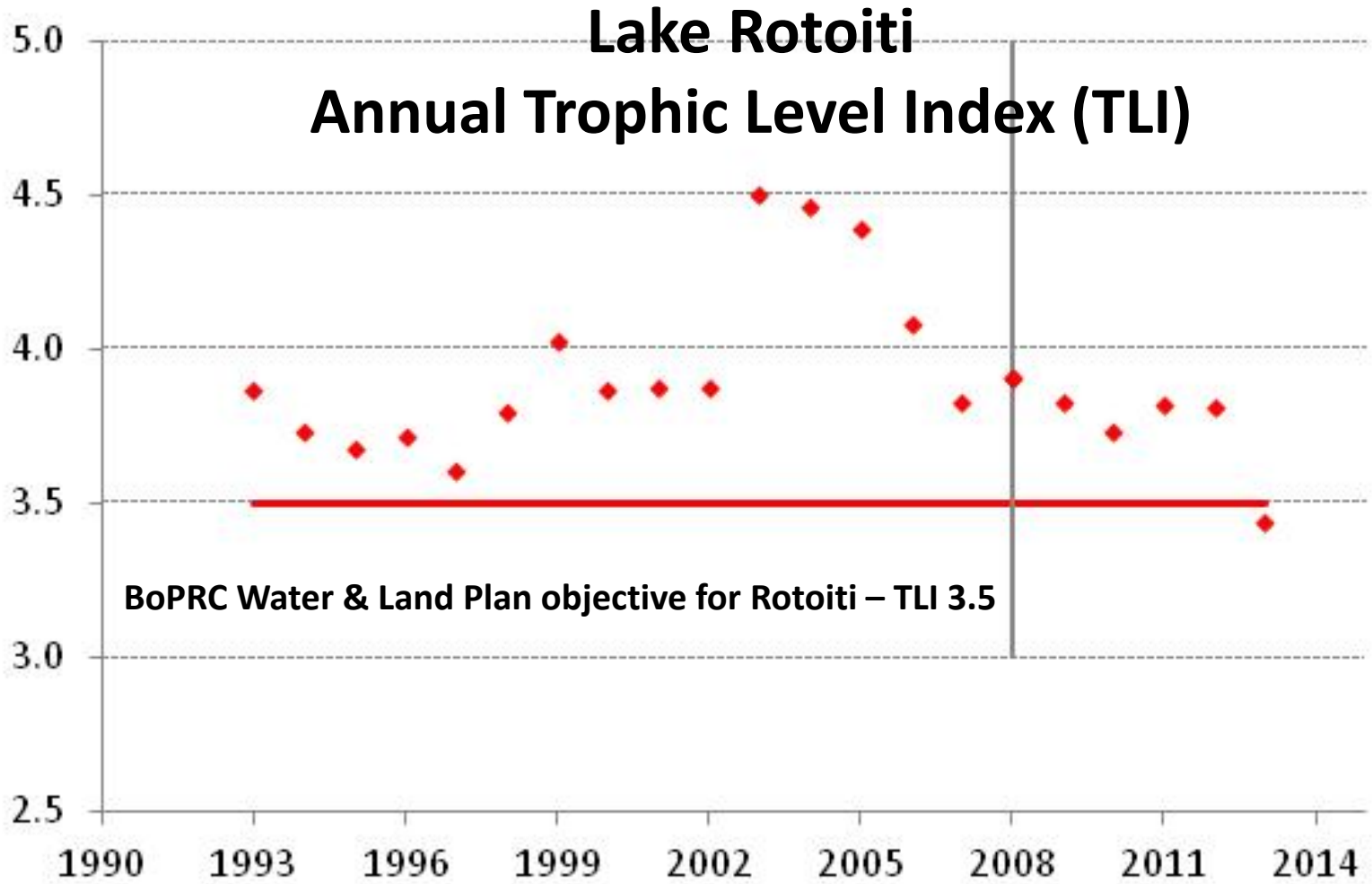
The wall directed problems in Lake Rotorua into the Okere Arm and Kaituna but out of Rotoiti.

Clean up Rotorua imperative.



Ohau Channel Diversion Wall

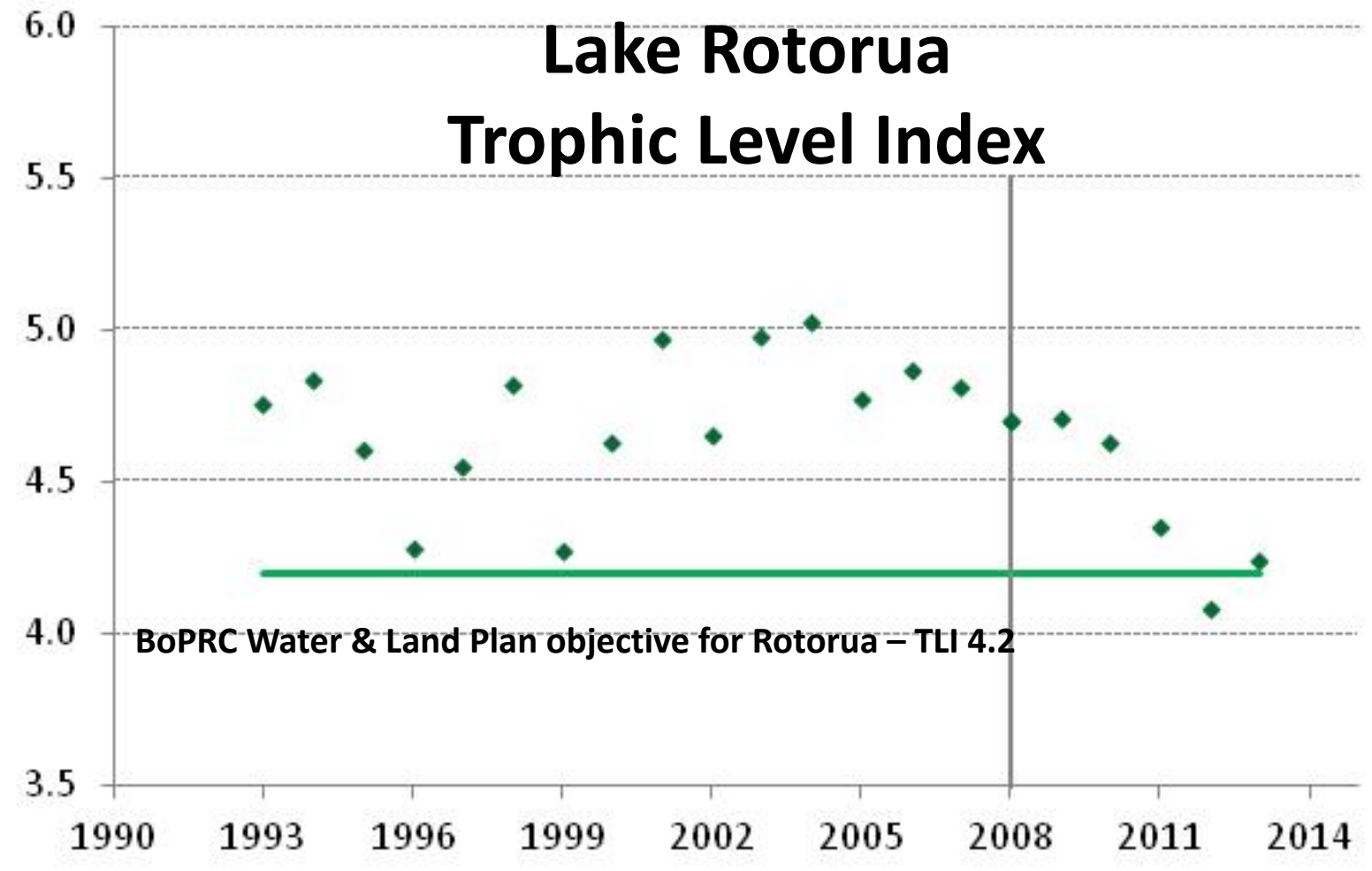
Trophic Level Index (TLI)





Ohau Channel Diversion Wall

Trophic Level Index (TLI)

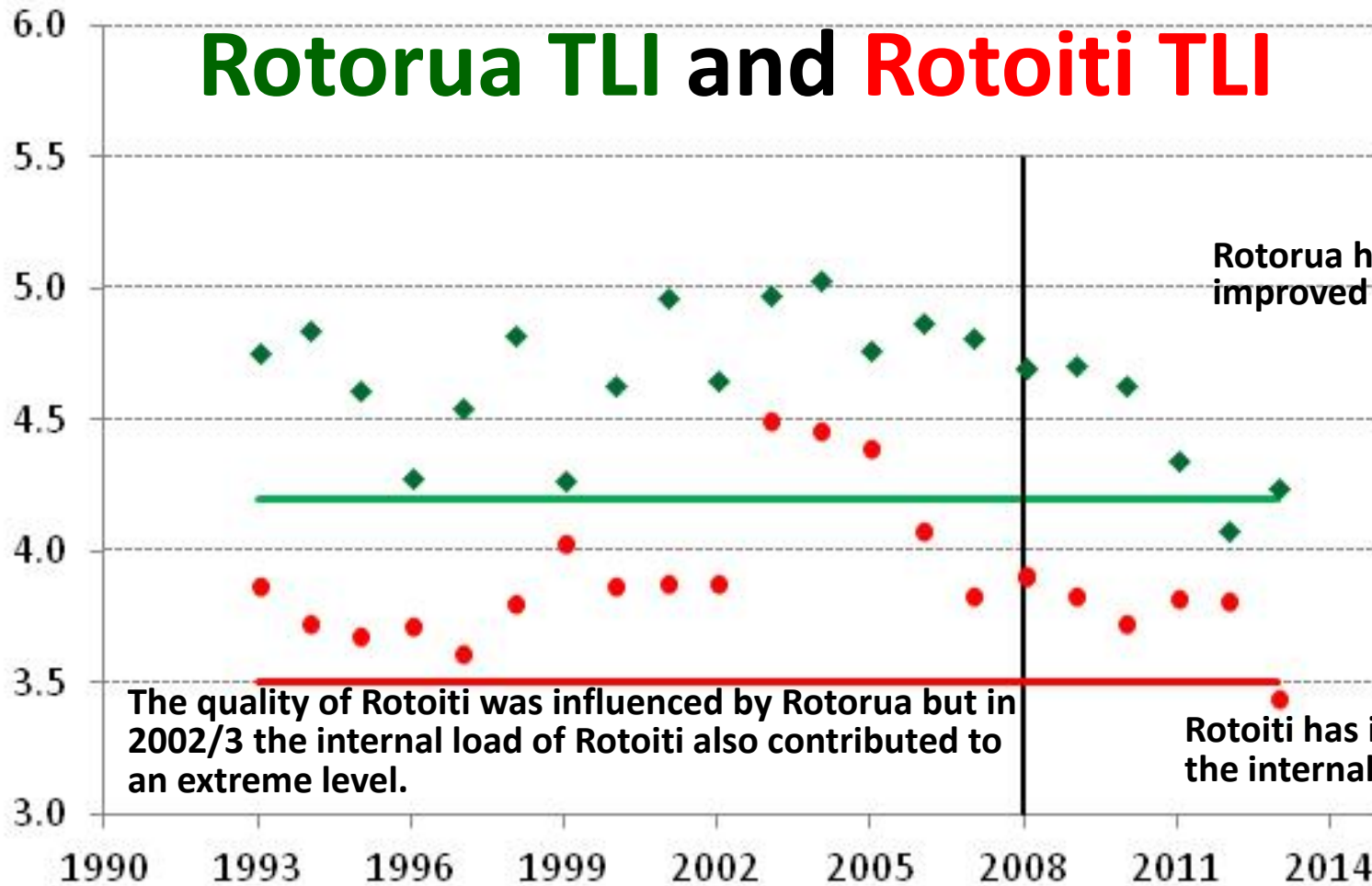




Ohau Channel Diversion Wall

Trophic Level Index (TLI)

Rotorua TLI and Rotoiti TLI



Rotorua has improved markedly

The quality of Rotoiti was influenced by Rotorua but in 2002/3 the internal load of Rotoiti also contributed to an extreme level.

Rotoiti has improved as the internal load subsides

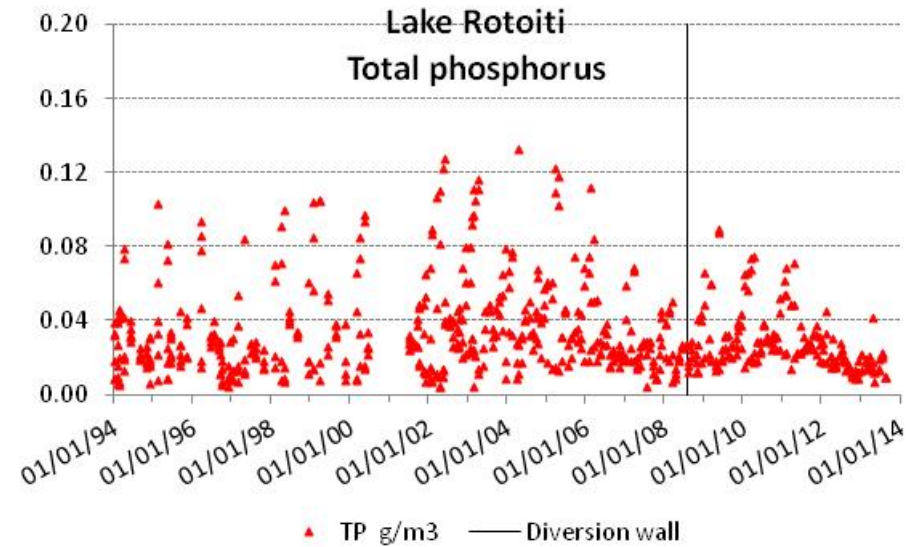
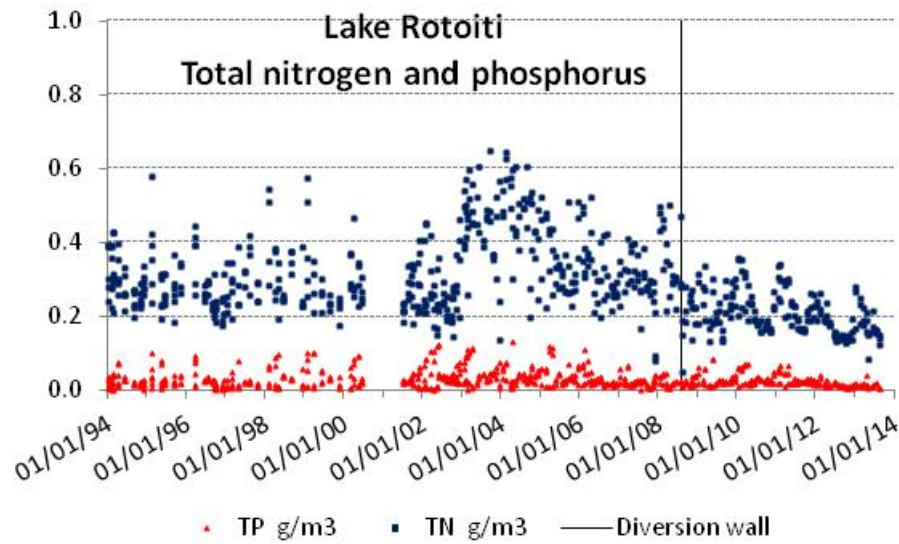
**Lake Rotorua - improved quality
due to sewage reticulation,
alum dosing and some land-
use change.**

**Lake Rotoiti improved by
restricting Lake Rotorua water**

The End

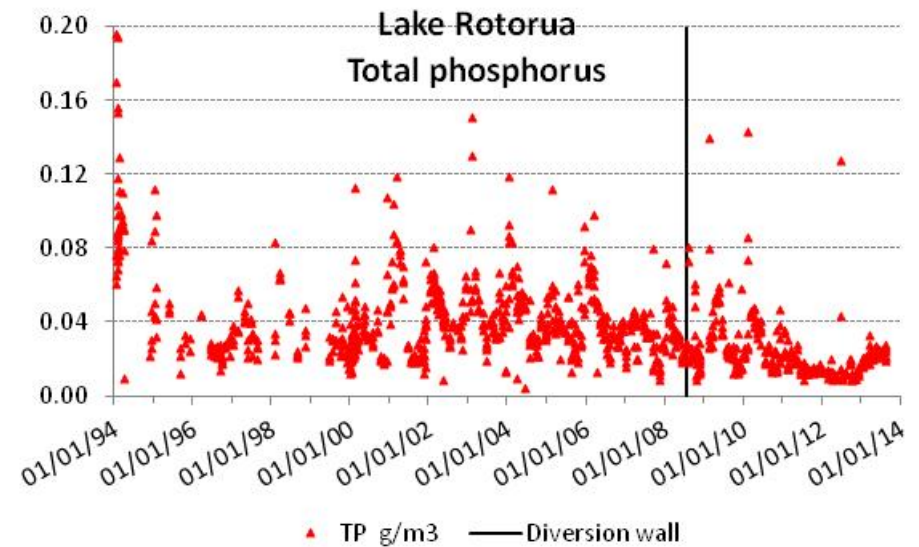
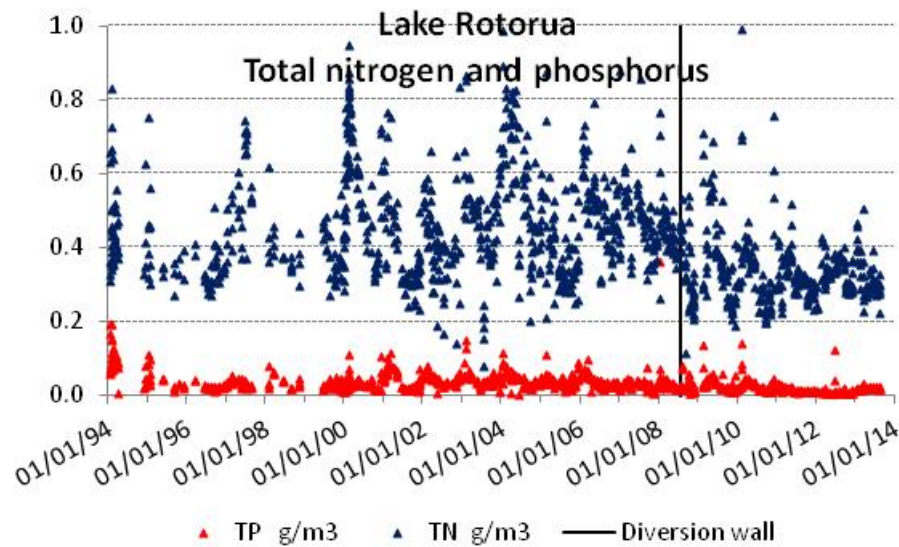
Lake Rotoiti

1994 - 2013



Lake Rotorua

1994 - 2013



Algal bloom warnings

LAKE	SITE	7/01/13	14/01/13	21/01/13	28/01/13	5/02/13	23/02/13	4/03/13	11/03/13	18/03/13	25/03/13	2/04/13	8/04/13	15/04/13	23/04/13	29/04/13
Rotoiti	Hinehopu	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotoiti	Gisborne Pt	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotoiti	Okawa Bay	Green	Green	Green	Green	Near threshold	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotoiti	Okere Arm	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotoiti	Te Weta Bay	Green	Near threshold	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotoiti	Otara Marae	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotorua	Ohau Channel	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotorua	Holdens Bay	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotorua	Ngongotaha	Green	Green	Near threshold	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Rotorua	Hamurana	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Kaituna	Trout Pool	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Kaituna	Maungarangi	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Kaituna	Waitangi	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Kaituna	Te Tumu	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green

Colour Key	
Green	Below threshold
Near threshold	Near threshold
Above threshold	Above threshold