

# Te Waikai Otaota: Te Mahere Nui

## Spray Plan for Te Arawa Lakes Aquatic Weed Management

Koheri ra! Kohera e!  
Tutapa mai nuku, tutapa mai whiti  
Kia rongo te pō, kia rongo te ao  
Kia pā tata mai tō hau manawa  
Ki tōku aronga manawa  
Hai puta ki te whai ao, ki te ao mārama  
Tihē Mauri Ora!  
*Toitū te wai,  
toitū te whenua,  
toitū Te Arawa*

### Ngā Tono Whakarite | *Resource consents*

- **68367-AP** (Bay of Plenty Regional Council, Land Information New Zealand)
- **RM16-0520-AP** (Bay of Plenty Regional Council)

### Te Waikai Otaota | *Te Arawa Lakes Treatment Areas*

**Te Tukunga Waikai Otaota** Aquatic weed control operations will be taking place intermittently between the 14<sup>th</sup> of November and the 2<sup>nd</sup> of December 2022 in Lake Rotorua, Lake Rotoiti, Lake Tarawera, Lake Ōkātina, Lake Rotomā and Lake Ōkāreka using the herbicide Diquat Dibromide.

**Anō Pea Te Tukunga Waikai Otaota:** Follow up treatment may be applied following this period depending on the results of the initial treatment.

**Ka Rāhui Tēnei Takiwā o Te Moana:** A rāhui on the area of control prohibiting swimming, taking food, and collecting drinking water will be in place for 24 hours following control operations.

**Ka Whakatūria Ngā Pou Whakamōhio:** Signage will be erected during this time to ensure all lake users are aware of this rāhui. See Appendix 1 for control sites.

**Table 1.** Treatment areas and proposed dates of control for each lake.

Lake	Treatment area (ha)	Treatment area as a percentage of lake area (%)	Application method	Proposed date range
Ōkāreka	6.78	1.99	Boat	14 November – 2 December
Ōkātina	7.23	0.67	Boat	14 November – 2 December
Rotorua	19.7	0.24	Boat	14 November – 2 December
Rotoiti	38.3	1.12	Boat	14 November – 2 December



Rotomā	4.92	0.44	Boat	14 November – 2 December
Tarawera	2.91	0.02	Boat	14 November – 2 December

## Ngā Herenga | Consent conditions

### Ngā Tikiwai | Water takes:

Consented water takes will be notified prior to control works. All landowners adjacent to control sites and within a 200 metre buffer zone around each site will be notified prior to control works to ensure those with permitted water takes can take appropriate action.

### Ngā Wharau a Ngā Manu Taketake | Areas of native nesting bird roosting or breeding: (Waiting on confirmation from Department of Conservation)

### Ngā Wāhi Tapu | Sites of significance to tangata whenua:

No new culturally significant sites were identified during this period. Tau kōura monitoring sites were included in the pre-spray monitoring survey and were found to be unimpeded by current weed growth, aside from one in Lake Rotoiti which will receive treatment.

### Ngā Karere | Notification:

All practical steps will be taken to ensure that the community, including the Rotorua Lakes Council, the Medical Officer of Health, iwi with mana whenua, landowners and occupiers adjoining or adjacent to areas to be sprayed, and the public are aware of control operations and subsequent rāhui and provided with contact information to discuss any queries or concerns.

### Ngā Herenga Otaota | Current weed conditions:

A pre-spray monitoring survey was undertaken throughout the month of October. At the time of survey, weed and water conditions were suitable for Diquat application in the lakes listed in Table 1. above. Lake Rotoehu was surveyed however water quality was not suitable for Diquat application. Lake Rerewhakaaitu has not been included due to successful results from previous aquatic weed control operations.

### Ngā Pou Ārahi | Cultural Monitoring Plan:

Alongside these control works a cultural monitoring plan will be implemented to evaluate the impact of operations on taonga species. See Te Arawa Lakes Trust website for Cultural Monitoring Implementation Plan.

# Te Āpiti 1 | Appendix 1: Control sites for each lake

## Ōkāreka



0.4km

Maxar

Site name	Treatment Area (Hectares)	Application Method	Preferred Date Range
Boyes Beach	0.47	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
DOC campsite/eastern face	5.87	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Southern Outlet	0.44	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December



## Tarawera



Earthstar Geographics

Site name	Treatment Area (Hectares)	Application Method	Preferred Date Range
Boat Shed Bay	0.11	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Kotukutuku Bay/The Landing	0.1	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Stoney Point	0.52	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Otumutu Lagoon/Humphries Bay	1.21	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Rata Bay/Hot Water Beach	0.23	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Karamea Bay	0.21	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Wairua Stream Mouth	0.53	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December



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# Rotomā



0.6km  
Maxar

Site name	Treatment Area (Hectares)	Application Method	Preferred Date Range for spray
Matahi Spit	0.3	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Merge lodge boat ramp	0.28	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Whangaroa Inlet	4.34	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December



# Ōkātaina



2km

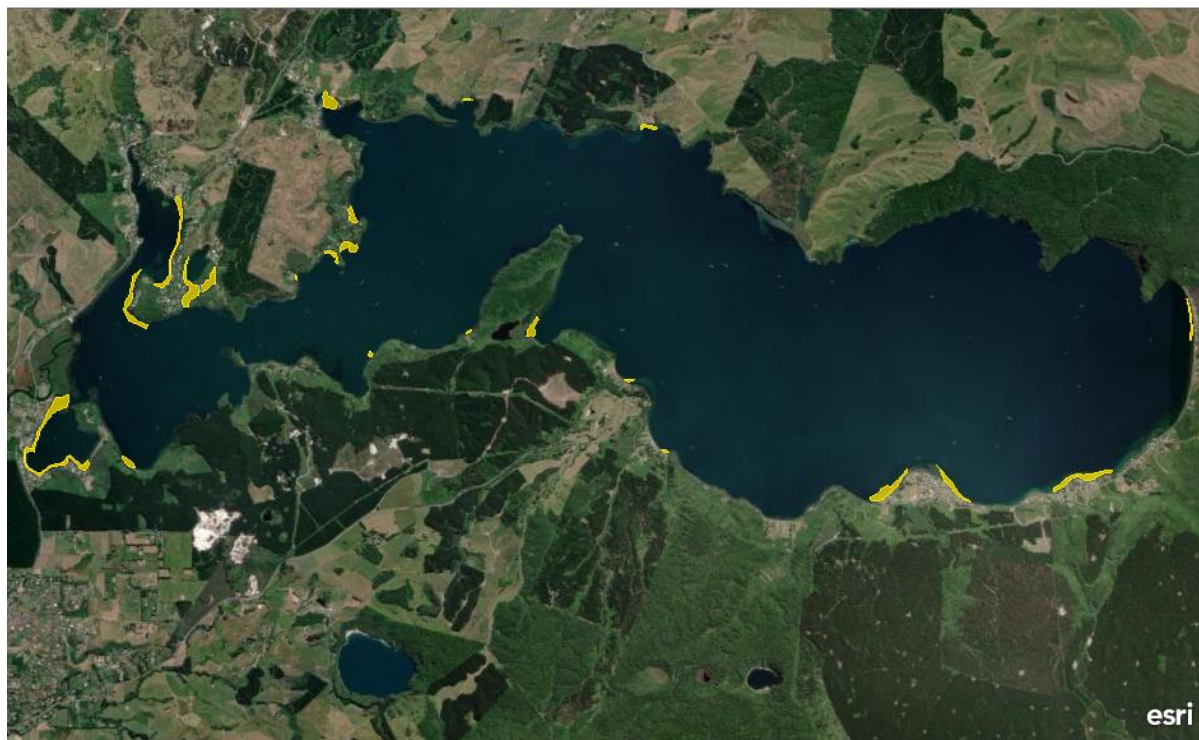
Earthstar Geographics

Site name	Treatment Area (Hectares)	Application Method	Preferred Date Range for spray
Oruroa bay and Point Beach	4.57	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Turanganui/Boat Ramp	0.18	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
South West Corner	0.53	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Haumingi Bay	0.36	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Ngahaua Bay	0.49	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Southern weed cordon	1.1	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December



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## Rotoiti



Earthstar Geographics

Site name	Treatment Area (Hectares)	Application Method	Preferred Date Range for spray
Gisborne Point	1.75	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Puna Whakareia Bay	3.43	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Hauparu Bay	0.16	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Okahuturoa/Cherry Bay	1.35	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Okawa Bay	7.47	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Weta Bay 1	3.51	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Weta Bay 2	2.36	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Ti Bay	1.1	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Otaramarae	2.28	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Okere Inlet	2.98	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Kakaho Bay	1.65	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Whangamoa Drive	0.1	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December



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Tapuaekura bay	0.2	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Waiiti Point	3.38	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Tokerau Bay	0.63	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Teal Bay	0.7	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Wairau Bay	0.89	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Te Akau Bay	3.37	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Manupirua Bay	0.32	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December
Hinehopu	0.68	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December





# Rotorua



2km

Earthstar Geographics

Site name	Treatment Area (Hectares)	Application Method	Preferred Date Range for spray
Kawaha Point	19.7	Boat	14 <sup>th</sup> November – 2 <sup>nd</sup> December



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# Te Āpiti 2 | Appendix 2: Pou Whakamōhio | Signage locations

**Table 1.** Locations of signage for each lake

Lake name	Signage locations
Rotorua	<ul style="list-style-type: none"> <li>• Lakefront boat ramp</li> <li>• Hannahs Bay boat ramp</li> <li>• Hamurana boat ramp</li> <li>• Ngongotahā boat ramp</li> <li>• Manahi Ave Reserve</li> <li>• Haumoana St Reserve</li> <li>• Hei matau paddlers reserve</li> </ul>
Rotoiti	<ul style="list-style-type: none"> <li>• Otaramarae boat ramp</li> <li>• Delta boat ramp</li> <li>• Gisborne Point boat ramp</li> <li>• Okawa Bay boat ramp</li> <li>• Hinehopu boat ramp</li> <li>• Rotoiti Holiday Park boat ramp</li> <li>• Te Takinga Marae</li> <li>• Taheke Marae</li> <li>• Te Akau Reserve</li> <li>• Okere Rd</li> <li>• Te Weta Bay walkway</li> </ul>
Tarawera	<ul style="list-style-type: none"> <li>• The Landing</li> <li>• Boatshed Bay</li> <li>• Stoney Point boat ramp</li> <li>• Stoney Point Reserve</li> <li>• Otumutu lagoon boat ramp</li> <li>• Hot water beach campsite</li> </ul>
Rotomā	<ul style="list-style-type: none"> <li>• Merge boat ramp</li> <li>• Matahi spit boat ramp</li> <li>• Rest stops around inlet (2)</li> <li>• Otangiwao Point</li> </ul>
Ōkātina	<ul style="list-style-type: none"> <li>• Lodge boat ramp</li> <li>• Main beach in front of lodge</li> </ul>
Ōkāreka	<ul style="list-style-type: none"> <li>• Acacia Bay boat ramp</li> <li>• Boyes Beach</li> <li>• DOC campsite</li> <li>• Southern Outlet (Ski land beach)</li> <li>• Jumping rocks</li> <li>• South-west walkway</li> </ul>