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State of Environment – Lakes Dudding Paori Wiritoa





Organise boat and check the weather the day before

There is a private gate, you will need the key.

Field Site Location Guide

SoE Lake Dudding Lake Paori Lake Wiritoa



(Monthly Sampling)

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SITE INFORMATION

[Contact details can be found here.](#)

Source	Name	GPS	Comments
Lake Dudding	Site 1	NZMG: Easting: 2704251.44 / Northing: 6120239.55 NZTM: Easting: 1794227.83 / Northing: 5558537.47 WGS84 Latitude: -40.101060 Longitude: 175.278664 WGS84: Latitude: -40° 6' 3.82" Longitude: 175° 16'	Approx 12.5 m deep. Collect near bottom sample with Van Dorn sampler. Also sample top 5 meters for bulk composite.
	Site 2	NZMG: Easting: 2704360.90 / Northing: 6120350.00 NZTM: Easting: 1794337.29 / Northing: 5558647.96 WGS84: Latitude: -40.100040 Longitude: 175.279914 WGS84: Latitude: -40° 6' 0.14" Longitude: 175° 16' 47.69"	Approx 8.5 m deep.
	Site 3	NZMG: Easting: 2704518.01 / Northing: 6120259.25 NZTM: Easting: 1794494.45 / Northing: 5558557.24 WGS84: Latitude: -40.100821 Longitude: 175.281783 WGS84: Latitude: -40° 6' 2.96" Longitude: 175° 16' 54.42"	Approx 5.5 m deep.
Lake Pauri	Site 1	NZMG: Easting: 2689082.90 / Northing: 6134364.08 NZMG: Easting: 1779053 / Northing: 5572659 WGS84: -39.977270, 175.096845 WGS84: -39° 58' 38.17", 175° 5' 48.64"	Approx 12 m deep. Collect near bottom sample with Van Dorn sampler. Also sample top 5 meters for bulk composite.
	Site 2	NZMG: Easting: 2689456.80 / Northing: 6134256.97 NZTM: Easting: 1779427 / Northing: 5572552 WGS84: -39.978154, 175.101252 WGS84: -39° 58' 41.35", 175° 6' 4.51"	Approx 9 m deep.
	Site 3	NZMG: Easting: 2689686.74 / Northing: 6134157.85 NZTM: Easting: 1779657 / Northing: 5572454 WGS84: -39.978997, 175.103971 WGS84: -39° 58' 44.39", 175° 6' 14.30"	Approx 8 m deep.
Lake Wairitoa	Site 1	NZMG: Easting: 2688405.10 / Northing: 6134671.26 NZTM: Easting: 1778375 / Northing: 5572966 WGS84: -39.974649, 175.088826 WGS84: -39° 58' 28.74", 175° 5' 19.77"	Approx 16 m deep. Collect near bottom sample with Van Dorn sampler. Also sample top 5 meters for bulk composite.
	Site 2	NZMG: Easting: 2688507.11 / Northing: 6134747.15 NZTM: Easting: 1778477 / Northing: 5573043 WGS84: -39.973944, 175.089999 WGS84: -39° 58' 26.20", 175° 5' 24.00"	Approx 15.5 m deep.
	Site 3	NZMG: Easting: 2688888.12 / Northing: 6134978.05 NZTM: Easting: 1778858 / Northing: 5573273 WGS84: -39.971783, 175.094394 WGS84: -39° 58' 18.42", 175° 5' 39.82"	Approx 9 m deep.

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SPECIAL INSTRUCTIONS

To help minimise the risk of introducing new aquatic weed and or algae species to the lakes the following conditions must be adhered to:

- Lake Dudding is to be sampled first, followed by Lake Pauri, then Lake Wiritoa.
- The boat must be cleaned before heading out to the lake.
- Weed must be removed from the trailer at each site.

Cleaning procedure:

Prior to leaving the yard:

- The boat must be cleaned before heading out to the lakes.
- Rinse boat with clean fresh water.
- Scrub boat with a detergent / water mix. (minimum of 5% solution)
- Thoroughly rinse off detergent
- **Please take a photo of the boat being cleaned.**



After leaving the water at each lake, remove all weed from the trailer, propeller and boat, at the ramp.

Back at the yard:

- Scrub boat with a detergent / water mix. (minimum of 5% solution)
- Thoroughly rinse off detergent
- After cleaning store the boat in the shed and allow to dry.
- **Please take a photo of the boat being cleaned.**

Follow the use of boats procedure summarized below:



- Before going out on the lake, phone and organise a safety watch back at the office.
- Contact the safety watch and inform them before leaving the beach. Tell them the time you expect to be off the water (approx. 1 hours on the water per lake).
- After getting back to shore, contact the safety watch and tell them you are safely back at shore.
- Keep the Get Home Safe app up-to-date also.

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EQUIPMENT REQUIRED

- Sample numbers (Hilltop Sampler and CADDIS)
- Sample bottles
- Ice packs and chilly bins
- Calibrated multi-meter (Aquatroll) with long cable
- Field book
- IPad
- Secchi disc with tape measure
- 5m integrated depth tube sampler
- Van Dorn sampler
- Boat

Refer to the [Bottle Guide](#) for correct bottle numbers and types.

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SAMPLING DETAILS

Record on the lake sampling field sheet:

- SECCHI DISK
Measures clarity in lakes.
- LAKE DEPTH
- DO, TEMPERATURE, COND, BAROMETER, pH & ORP
Use a hand held meter to collect a surface reading (approx. 200mm below surface) and a depth profile (use the logging function, slowly lower the sonde recording the depth at the same time.)
- OBSERVATIONS
Weed & Algae growth density & depth from surface. Plus anything else of interest.



GRAB SAMPLES

There are three sites at each lake; Site 1, Site 2, Site 3.

Site 1 is the deepest location and where the near bottom, composite samples and depth profiles are taken from. A surface grab sample is taken from each location. Below outlines the specifics.

Near bottom ('Bed') samples for each lake:

Lake Dudding	<p>From Site 1 take a near bottom sample with the Van Dorn sampler (approx. 1 meter above lake bed).</p> <p>Note: it takes 2 deployments to fill the required bottles.</p>
Lake Pauri	<p>From Site 1 take a near bottom sample with the Van Dorn sampler (approx. 1 meter above lake bed).</p> <p>Note: it takes 2 deployments to fill the required bottles.</p>
Lake Wiritoa	<p>From Site 1 take a near bottom sample with the Van Dorn sampler (approx. 1 meter above lake bed).</p> <p>Note: it takes 2 deployments to fill the required bottles.</p>



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Top 5 meters ('Composite') samples for each lake:

Lake Dudding	<p>From Site 1 take an integrated sample from the top 5m of the water column. Rinse the tube sampler three times prior to collecting samples.</p> <p>Note: it takes 2 deployments to fill the required bottles.</p> <p>Note: It is from this sample that the brown glass bottle and the iodine preserved bottle are filled back in the water quality lab and sent to Cawthron with the CADDIS numbers.</p>
Lake Pauri	<p>From Site 1 take an integrated sample from the top 5m of the water column. Rinse the tube sampler three times prior to collecting samples.</p> <p>Note: it takes 2 deployments to fill the required bottles.</p> <p>Note: It is from this sample that the brown glass bottle and the iodine preserved bottle are filled back in the water quality lab and sent to Cawthron with the CADDIS numbers.</p>
Lake Wiritoa	<p>From Site 1 take an integrated sample from the top 5m of the water column. Rinse the tube sampler three times prior to collecting samples.</p> <p>Note: it takes 2 deployments to fill the required bottles.</p> <p>Note: It is from this sample that the brown glass bottle and the iodine preserved bottle are filled back in the water quality lab and sent to Cawthron with the CADDIS numbers.</p>

Chlorophyll a samples for each lake:

Lake Dudding	From Site 1, 2 & 3 collect a 1 litre surface sample for Chlorophyll a analysis.
Lake Pauri	From Site 1, 2 & 3 collect a 1 litre surface sample for Chlorophyll a analysis.
Lake Wiritoa	From Site 1, 2 & 3 collect a 1 litre surface sample for Chlorophyll a analysis.

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LOCATIONS

Lake Dudding





DIRECTIONS

From Kairanga depot travel towards Wanganui.

1. Head northeast on Kairanga Bunnythorpe Rd, turning left onto Rongotea Rd <1 km
2. Turn right onto Green Rd 5.6 km
3. Turn left onto SH 3 4.9 km
4. Turn left into Lake Dudding Domain 29.7 km

ACCESS

- Launch from the beach on the far side of the lake, opposite the public launching ramp.
- If the gate is locked, launch from the public launching ramp.
- Park trailer away from the ramp as the lake is frequently used by the public.

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Lake Pauri





DIRECTIONS

From Lake Dudding travel towards Wanganui.

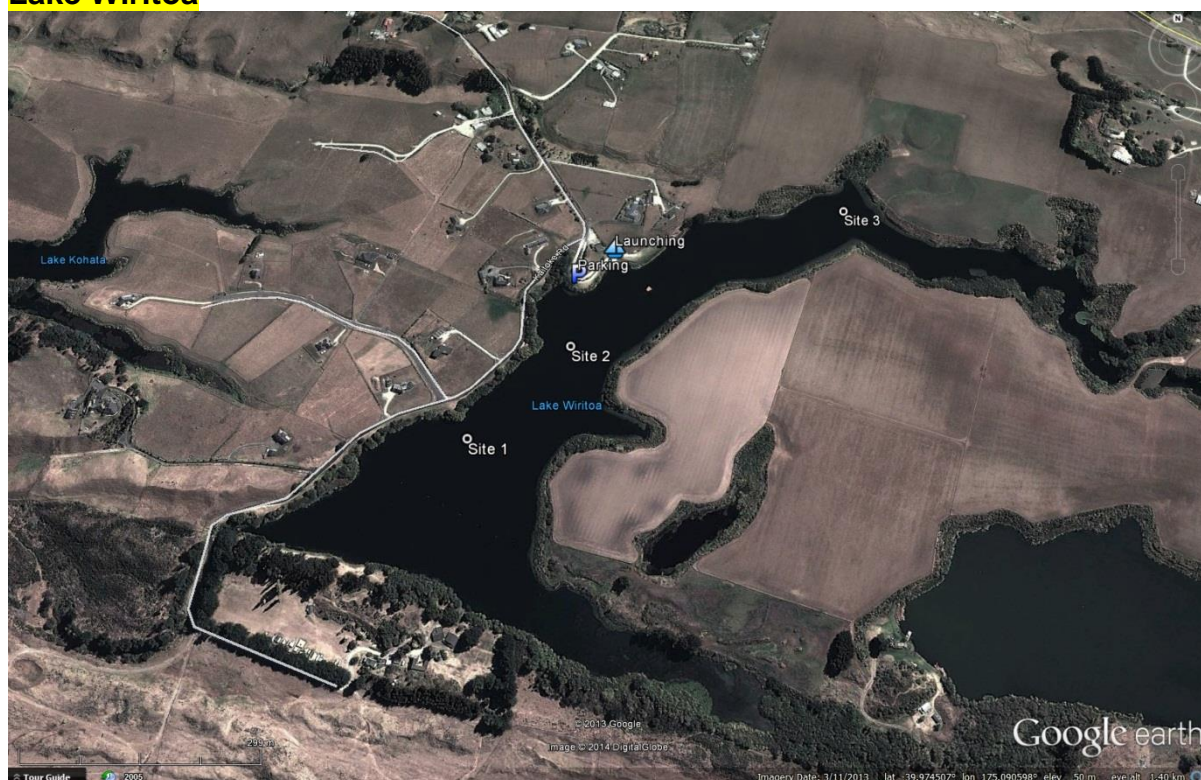
1. Turn left onto SH 3
2. Turn left onto Pauri Rd 22 km
3. Follow the Pauri Rd around past the front of the prison 2.3 km
(turns into Pauri Domain Rd)
4. Gate is on the right

ACCESS

- Access beside the prison entrance.
- Gate is generally locked. Take key and lock behind you.
- Launch from grass beside jetty.

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Lake Wiritoa



LOCATION

From Pauri travel towards Wanganui.

- | | |
|---|--------|
| 1. Head east on Pauri Domain Rd toward Pauri Rd | 0.6 km |
| 2. Turn left onto Pauri Rd | 1.6 km |
| 3. Turn left onto SH 3 | 3.5 km |
| 4. Turn left onto Kaitoke Rd | 2.2 km |

ACCESS

- Launch from public launching ramp
- Park trailer in parking area as the lake is frequently used by the public.