Checklist of New Zealand Lakes

by

J. IRWIN



New Zealand Oceanographic Institute Memoir 74



NEW ZEALAND

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

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FOREWORD

With increasing interest in the utilisation and preservation of our water resources there comes an immediate need for information that helps in the assessment of the potential of these resources.

Over the last five years studies of New Zealand lakes have increased greatly, both in scope and number. In the present memoir, a listing of all significant lakes enables existing and future work to be seen in perspective and facilitates a broad statistical assessment of the potential of our lakewater resources.

J.W. BRODIE, Director, New Zealand Oceanographic Institute.



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J. Irwin

ABSTRACT

The location, area, dimensions, altitude, direction of major axis and lake type have been listed for all New Zealand lakes with a major dimension of 0.5 km or more. The source of information has been the 1:63,360 Lands and Survey Department NZMS 1 Topographical Series Maps supplemented by the 1:250,000 NZMS 18 Series Sheets where the former were not available.

Analyses of the frequency distribution with respect to altitude, area and relative area, for each lake type are presented and discussed. Distributions of area with respect to altitude are tabulated.

References comprise a selected bibliography of papers dealing with lake origin, morphology or other physical properties. An index to these by way of lake names is appended.

INTRODUCTION

The lakes of both North and South Islands exhibit a strong correlation between geographical distribution and lake type. It is only necessary to draw brief tention to this fact, but nevertheless the topographical and geological control of our lake water resources has a significant bearing on their availability for use with respect to population distributions.

A marginal belt of lakes, formed through the

damming of pre-existing drainage by wind-blown sand occurs along the west coast of New Zealand: most such lakes are in the North Island. Volcanic lakes are confined to the two North Island volcanic areas of Northland and the Rotorua. Taupo district.

Glacial lakes, potentially our most important natural source of hydro-electric power, are confined to the South Island.



METHODS AND PROCEDURES

The lakes of New Zealand have been listed from Lands and Survey Department NZMS 1 series, a topographical series of maps on the scale of one mile to an inch (1:63,360) (Figs 1-29). In a few areas not covered by this series, particularly in the southwest of the South Island, lakes have been listed from prints of smaller scale compilation sheets and from the larger scale topographical maps NZMS 18 series (1:250,000). Editions available up to May 1971 have been used.

Lakes with a maximum dimension of at least 0.5 km have been listed, and smaller lakes have been noted. All lakes are referred to by the sheet number which shows the largest portion of the lake if it falls on two or more sheets.

On each sheet the lakes have been listed in order from north to south and west to east (i.e., top to bottom and left to right).

The order of listing is sheet number, sheet name, edition, and date of publication. The lake name is given if shown on the NZMS 1 or NZMS 18 series sheet, plus the national grid reference. Geographical position is given as distance and direction from the nearest town, city, or well-defined object; distance and direction are taken from the centre of the reference point to the lake centre. The altitude of the lake surface is given in metres, and where this was not on the map, the altitude range within which the lake lies is taken from the land contours. The maximum altitude shown on each sheet is noted in feet and metres.

Lake types are noted by the symbols:

 $T = tectonic \ basins$, formed by earth movement

V = associated with volcanic activity (Figs 30, 31);

L = formed by landslides (Fig. 32);

S = associated with swamps (Fig. 33);

R = formed by or associated with rivers;

W =formed by wind (Fig. 34);

B = associated with shorelines (Fig. 35);

D = man-made dams (Fig. 36);

G = formed by glacial activity (Figs 37-39).

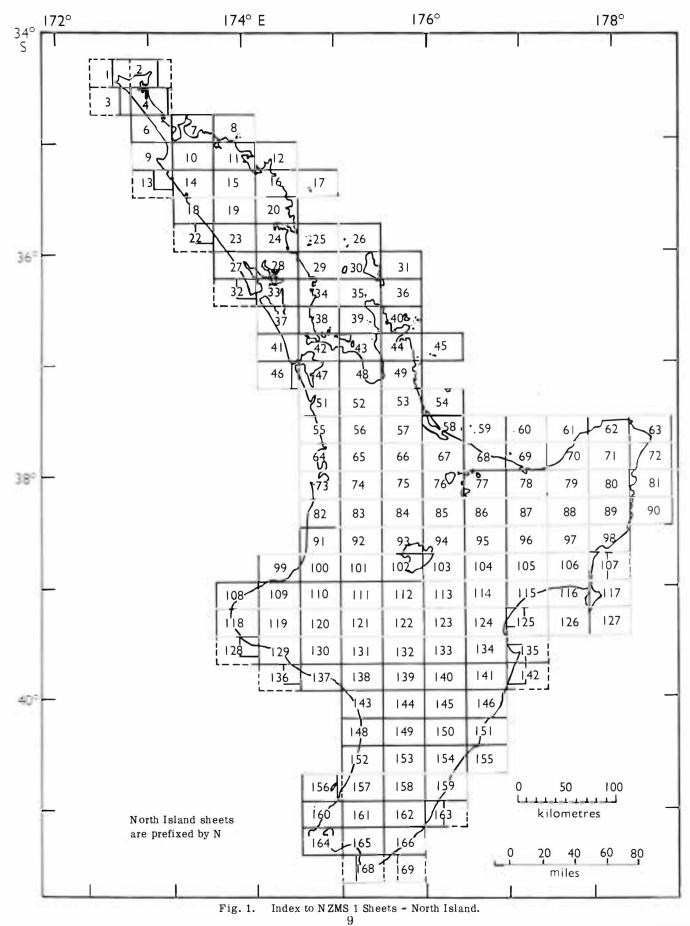
A critical evaluation of lake type by inspection on the ground was obviously outside the terms of reference of the present project. Where two types are noted, the lake is associated with both, e.g., R and S, formed by rivers and swamp. A question mark indicates that this is the probable type, and symbols are absent where the lake type could not be determined by inspection of aerial photographs or topographic maps.

Areas, given in sq.km, were measured by planimeter. The areas of lakes listed from NZMS 18 series (1:250,000) are only given if the maximum dimension is 1.0 km or more, as it is difficult to obtain accurate planimeter readings from small lakes on this scale map. Areas of islands have been included in the areas of lakes. Maximum length denotes the length of a line connecting the two remotest extremities of the lake. The line may be straight or curved and is generally along the lake's major axis. Maximum width is the length of a straight line which connects the most remote transverse extremities, crossing no land other than islands. This line is approximately at right angles to the maximum length axis. The direction of the major axis is expressed in compass directions using 8 points from west through north to east.

It is important to note that the measurements taken from this series are only as accurate as the scale and the accuracy of the map used. Recently published sheets plotted by photogrammetry generally show more detailed lake outlines and it can be assumed that these are more accurate.

Features of each lake are also given, e.g., maximum depth (if known), and number of islands. With the exception of Lake Onoke (sheet N168) and three lagoons east of Wairoa (sheet N116), bodies of water called lagoons or lakes shown as having direct access to the sea have not been listed.





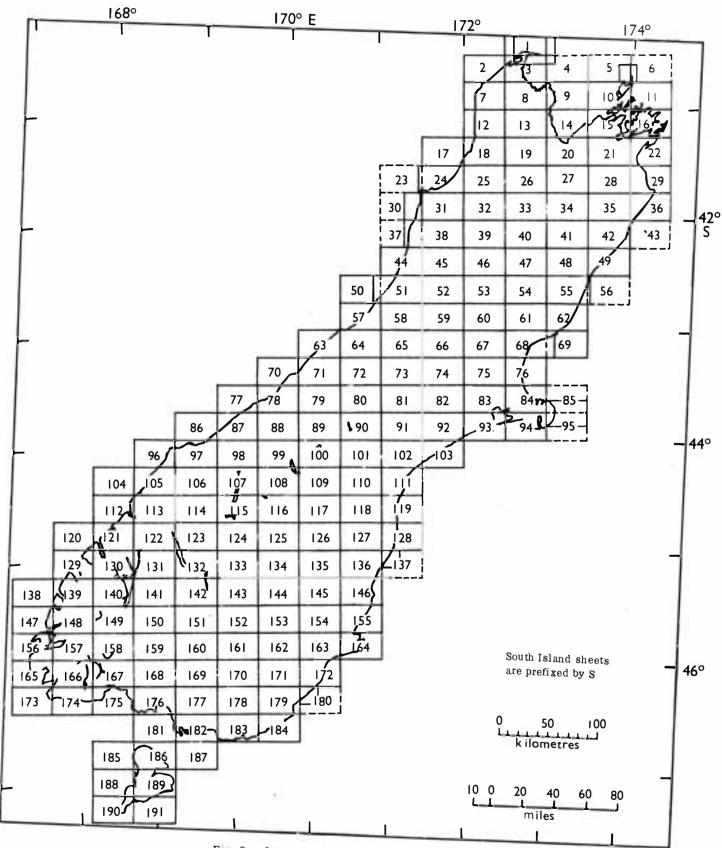


Fig. 2. Index to NZMS 1 Sheets - South Island.

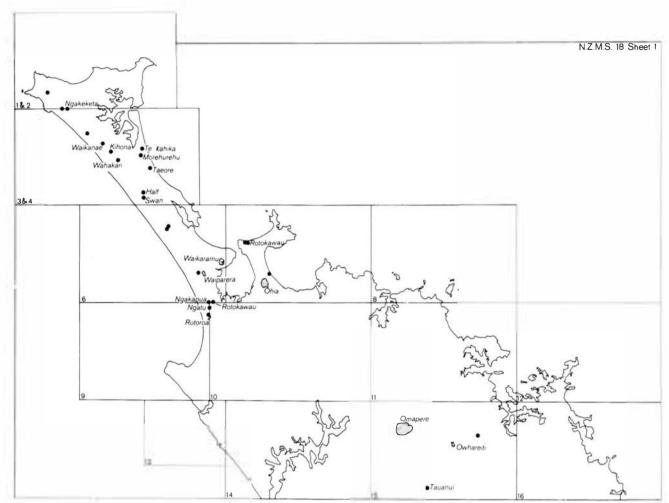


Fig. 3. NZMS 1 Sheets N1.16 showing locations of listed lakes.

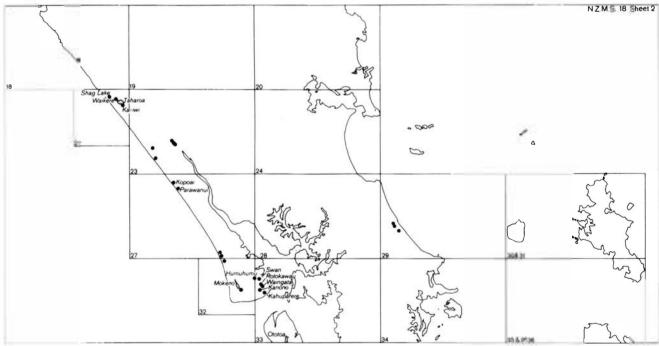
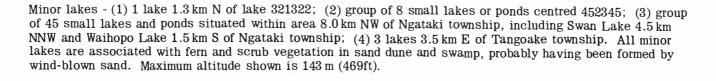


Fig. 4. NZMS 1 Sheets N18-36 showing locations of listed lakes.

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max.	Max.	Major	Notes
						km	km	dir.	
Sheet N1 & N2 - No 1st Ed. 1 Janua									
	198449	6.8 km SE of Cape Reinga.	52	W	0.15	0.9	0.5	NNE	Landward side of coastal sand dunes
	245404	12.7 km SE of Cape Reinga.	0.00	W	0.20	1.1	0.7	NNW	Landward side of coastal sand dunes
Ngakeketa	259400	13.8 km SE of Cape Reinga.	100	W	0.18	1.1	0.4	WNW	Landward side of coastal sand dunes
Ma	aximum altit	ude shown is 310.6 m (1019 ft).							
Sheet N3 & N4 - Pa 2nd Ed. Septemb									
25	321322	13.0 km NW of Tangoake ship.	30-61	W	0.02	0.6	0.4	EW	Landward side of coastal sand dunes
Waikanae	367302	8.5 km NW of Tangoake ship.	0-30	W	0.03	0.8	0.2	ENE	Landward side of coastal sand dunes Head of Waikanae Stream.
Kihona	395271	5.6 km W of Tangoake township.	30-61	W	0.06	0.6	0.3	EW	Landward side of coastal sand dunes
Wahakari	417242	4.3 km WNW of Te Kao town-ship.	30-61	W	0.84	1.6	0.8	WNW	Landward side of coastal sand dunes Maximum depth 12.0m.
Morehurehu	489256	3.4 km SE of Tangoake township.	0-30	W	0.34	1.5	0.5	EW	Landward side of coastal sand dunes
Te Kahika	493278	3.3 km ENE of Tangoake township.	0-30	W	0.23	1.3	0.2	NE	Landward side of coastal sand dunes Kahika Stream flows out of lake.
lalf	496144	4.3 km WNW of Ngataki township.	. 30-61	W	0.19	1.2	0.4	NE	Landward side of coastal sand dunes in swampland.
łw:เท	498127	4.0 km WSW of Ngataki township.	61-91	W	0.38	1.2	0.6	EW	Landward side of coastal sand dunes in swampland.
Гаеоге	515215	8.0 km NNW of Ngataki township	. 0-30	W	0.19	0.9	0.2	NNW	Landward side of coastal sand dunes in predominantly swampland.





Sheet N6 - Houhora

2nd Ed. 1 January 1965

	569031	7.2 km W of Houhora Harbour entrance.	0-30	W	0.06	0.55	0.1	NE	Landward side of coastal sand dunes in predominantly scrub-covered swampland.
	572035	6.7 km W of Houhora Harbour entrance.	0-30	W	0.08	0.8	0.2	NE	Landward side of coastal sand dunes in scrub-covered swampland.
	665894	2.3 km NW of Waiharara.	0-30	W	0.11	0.9	0.2	NE	Landward side of coastal sand dunes in scrub-covered country.
Waiparera	682894	1.0 km NNW of Waiharara.	0-30	W	1.25	1.4	1.0	NNW	Between coastal sand dunes and scrub- covered swampland. Maximum depth 6.0 m.
Ngakapua	698802	7.6 km S of Waiharara.	30-61	W	0.18	8.0	0.4	NE	Between coastal sand dunes and scrub- covered swampland. Small island at W end.
Rotokawau	710803	7.6 km SSE of Waiharara.	30-61	W	0.16	0.6	0.5	EW	Between coastal sand dunes and scrub- covered swampland. Small island in lake E end.
Waikaramu	735930	6.0 km NE of Waiharara.	0-30	W? S?	1.91	2.0	1.5	N	On low eastern head at entrance to Rangaunu Harbour. Surrounded by swampland described as partly drained ponding area intersected with hard sandstone ridges.

Minor lakes - (1) small lake 506090 surrounded by sand dunes; (2) 2 small lakes centred 545062 surrounded by sand dunes; (3) 7 small lakes approximately 3.5 km SW from Pukenui township and between coastal sand dunes and swampland; (4) number of very small lakes in scrub-covered land on E peninsula of Houhora Harbour; (5) 15 small lakes situated in a rough NW-SE direction between coastal sand hills and swampland including Swan Lake 6.2 km NW of Waiharara township. Maximum altitude shown is 235.9 m (774 ft).

Sheet N7 - Doubtless Bay

2nd Ed. 1 September 1964

Rotokawau	810986	12.7 km SW of Cape Karikari.	Approx. level 3.9	W	0.74	1.1	0.7	EW	In a low swampy area close to sand dunes.
Rotokawau	820985	12.2 km SW of Cape Karikari.	3.9	W	0.25	0.6	0.5	*	In a low swampy area close to sand dunes. Maximum depth 1.5 m.
Ohia	870865	1.5 km NW of Lake Ohia township.	0-30	W	3.74	2.6	2.0	N	In a low swampy area close to sand dunes. Lake dries out, bed full of stumps and gum holes. Shore line ill-defined.



Minor lakes - (1) group of 5 small lakes or ponds, centred 825970; (2) 2 small lakes including Lake Waiporohita (10.7 m) centred 855950; (3) 1 small lake and 1 pond centred 892875; (4) group of 3 small lakes and several small ponds centred 898035. All listed lakes, minor lakes, and ponds lie on Karikari Peninsula which is a flat area with consolidating wind-blown sand ridges. Land is swampy, particularly adjacent to lakes, and covered with scrub, manuka, wiwi, ake ake, gorse and hakea. Maximum altitude shown is 376.7 m (1236 ft).

Sheet N8 - Whangaroa Provisional

1942

No lakes or ponds shown on this sheet. Maximum altitude shown is 340 m (1115 ft).

Sheet N9 - Ahipara Provisional

1949									
	700767	3.8 km SW of Waipapakauri township.		W	0.19	0.9	0.2	NNE	Landward side of coastal sand dunes.
Rotoroa	702759	4.4km SW of Waipapakauri township.	10.51	W	0.53	1.5	0.5	NNE	Landward side of coastal sand dunes. SW end of lake swampy. Maximum depth 8.0m.
Ngatu	705790	2.2 km WSW of Waipapakarui township.	36	W	0.61	1.4	0.6	N	Landward side of coastal sand dunes, surrounding land inclined to be swampy. Maximum depth 6.5 m.

Minor lakes - small lake 590612 1.8 km SSE of Reef Point. Maximum altitude shown is 541.3 m (1775 ft).

Sheet N10 - Kaitaia: Interim 2nd Ed. 1 August 1965

No lakes or ponds shown on this sheet. Maximum altitude shown is $750.7\,\mathrm{m}$ (2463 ft).

Sheet N11 - Kerikeri

2nd Ed. 1 April 1963

Minor lakes - (1) Lake Pihoe 515580 adjacent to Kerikeri Inlet; (2) small lake 533530 5.2 km W of Waitangi Treaty House. Maximum altitude shown is $518\,\mathrm{m}$ (1700 ft).



2nd Ed. 170.

No lakes or ponds shown on this sheet. Maximum altitude shown is 388 m (1281 ft).

Sheet N13 - Herekino Provisional

March 1964

No lakes or ponds shown on this sheet. Maximum altitude shown is 351 m (1150ft).

Sheet N14 - Hokianga Provisional

September 1944

Minor lakes - (1) small lake 757349 4.5 km along coast NW from Mitimiti; (2) small lake 833287 4.7 km SE of Mitimiti; (3) 3 small lakes Rotomata 881266, Puhau 880253, Tairutu 893238 on landward side N head Hokianga Harbour; (4) 12 small lakes centred 870230 on coast NW of N head Hokianga Harbour. All unlisted lakes are situated on the landward side of coastal sand dunes or in coastal sand dunes. Maximum altitude shown is 764 m (2505 ft), Ngapukehaua 065222.

Sheet N15 - Kaikohe: Interim 2nd Ed. 1 October 1965

Omapere	303415	4.5 km SE of Okaihau township.	237.7	V	11.62	4.6	3.5	EW	Described by Cotton (1944) as being dammed by a basaltic lava flow. NZMS 1 N15 gives depth as 2.44 m (8 ft) and area 2982 acres. Maximum depth 1.9 m.
Tauanui	371234	11.5 km SE of Kaikohe.	243-274	V?	0.8	0.55	0.2	NNE	Surrounded by bush and open grassland.
Owhareiti	452370	6.5 km W of Moerewa town-ship.	97.5	V	0.76	1.8	0.7	NNW	Surrounded by open grassland and some scrub. Dammed by lava flow. Maximum depth 16.0m.
	535393	2.6 km NE of Moerewa township.	91-122	12	0.08	0.65	0.3	NNE	Completely surrounded by a little bush but mainly scrub-covered country.

Minor lakes - (1) 1 small lake 331322 on the Wairoro Stream $2.6\,\mathrm{km}$ SE of Kaikohe; (2) 2 small lakes centred $360360~5.5\,\mathrm{km}$ ENE of Kaikohe; (3) Lake Kaiwai 440325 on Terewatoa Stream. Maximum altitude shown is $466.3\,\mathrm{m}$ ($1530\,\mathrm{ft}$).

Sheet N16 - Whangaruru

2nd Ed. 1970

No lakes shown on this sheet. Maximum altitude shown is 461 m (1512 ft) at 823311.



					Max.	Max.	Major	
Name	National	Geographical Position	Altitude T	ype Area	lgth	wdth		Notes
Name	Grid Ref.	8	(m)	Sq Kill	km	km	dir.	

Sheet N17 - Poor Knights

Unpublished. Maximum altitude from NZ 521 chart is 215 m (705 ft).

Sheet N18 - Waipoua: Interim

2nd Ed. June 1967

019010 3.5 km S of Waipoua Settlement.

0-30 W 0.09 0.6 0.2 N

Landward side of coastal sand dunes.

· Maximum altitude shown is 726 m (2380 ft).

Sheet N19 - Mangakahia: Interim

1943

Minor lakes - (1) 2 very small lakes centred 620975 adjacent to the Wairua River 4.5 km NE Titoki township. Maximum altitude shown is 704.1 m (2310 ft).

Sheet N20 - Whangarei

3rd Ed. 1 June 1964

Minor lakes - (1) very small lake 655048 3.4 km WNW of Ruatangata West settlement, lake formed by meander cut off from Wairua River; (2) small lake 796001 2.1 km SW of Kamo township surrounded by scrub and bushed grassland. Type R. Maximum altitude shown is 396.8 m (1301 ft).

No Sheet N21 in series

Sheet N22 - Taharoa Provisional

1943

Shag Lake	130877	5.0 km NW of Kaiiwi Stream mouth.	75.0	W	0.20	0.9	0.3	NW	Landward side of coastal sand dunes adjacent to swamp.
Waikere	152868	3.7 km NNW of Kaiiwi Stream mouth.	79.0	W	0.35	0.8	0.7	EW	Landward side of consolidated coastal sand dunes adjacent to swampland. Maximum depth 30.0m (Irwin 1971a).



Taharoa	170860	3.2 km NNE of Kartwi Mroam mouth.	70,0	W	2.10	2.6	1.3	ĿW	In consolidated sand dunes near coast adjacent to swampland. Maximum depth 37.0m (Irwin 1971a).
Kai-lwi	176850	2.8 km NE of Kaiiwi Stream mouth.	70.0	W	0.31	0.9	0.5	ENE	In consolidated sand dunes near coast adjacent to swampland. Maximum depth 16.0m (Irwin 1971a).

Minor lakes - (1) small lake 146873 4.1 km NNW Kai iwi Stream mouth, adjacent to Waikere Lake. Maximum altitude shown is 254 m (832 ft).

Sheet N23 - Dargaville 2nd Ed. 1 May 1964

283697	2.1 km NE of Bayly's Beach.	75.0	W	0.09	0.6	0.2	ENE	Open ground adjacent to coastline.
291656	3.0km S of Bayly's Beach.	30-61	W	0.05	0.5	0.1	NW	Adjacent to coastline.
364706	2.6 km WNW of Dargaville.	0-30	R	0.25	1.8	0.1	NNW	Ox-bow lake adjacent to Kaihu River.
356715	3.3 km WNW of Dargaville.	0-30	R	0.01	0.7	0.1	NW	Ox-bow lake adjacent to Kaihu River.
350732	4.7 km NW of Dargaville.	0-30	R	0.10	0.7	0.1	NW	Ox-bow lake adjacent to Kaihu River.

Minor lakes - (1) 12 small lakes centred 230760 in scrub and swampland adjacent to coastline; (2) 11 small lakes centred 260720 in scrub and swampland adjacent to coastline; (3) 1 small lake 333611 altitude 59.5 m in scrub and swampland adjacent to coastline; (4) 1 small 410801 4.5 km SSW of Avoca; (5) 1 small lake 415869 2.0 km NNW of Avoca; (6) 1 small lake 432856 1.2 km NE of Avoca; (7) 1 small lake 542712 7.1 km SW of Omana township; (8) small lake 551894 4.6 km NNW of Tangiteroria township adjacent to Mangakahia River. Type R. Maximum altitude shown is 629 m (2063 ft), Tangihua 607801.

Sheet N24 - Waipu: Interim

3rd Ed. 1968.

No lakes shown on this sheet. Maximum altitude shown is $490\,\mathrm{m}$ ($1610\,\mathrm{ft}$).

Sheet N25 - Hen & Chickens

Unpublished. Maximum altitude from NZ 521 chart is $433\,\mathrm{m}$ ($1420\,\mathrm{ft}$).

Sheet N26 - Mokohinau

Unpublished. Maximum altitude from BA 3565 chart is 134 m (440 ft).



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes	_
------	-----------------------	-----------------------	-----------------	------	---------------	--------------------	--------------------	-----------------------	-------	---

Sheet N27 - Ruawai Provisional

April 1943

Kopoai		358574	8km WSW of Te Kopuru township.	30-61	W	0.05	0.6	0.1	NNW	Landward side coastal sand dunes.
Parawanui		376552	7.1 km SW of Te Kopuru township.	30-61	W	0.13	0.7	0.2	NW	In coastal sand dunes.
		523325	16.8 km NNW of North Head, Kaipara Harbour.	0-91	W	0.06	0.8	0.1	NNW	In coastal sand dunes.
	+1-	531315	15.6 km NNW of North Head, Kaipara Harbour.	0-91	W	0.25	1.6	0.3	NNW	In coastal sand dunes.

Minor lakes - (1) 2 small lakes centred 355575 8.2 km WSW of Te Kopuru township; (2) 2 small and 7 very small lakes centred 400520 7.5 km SW of Te Kopuru township; (3) small lake centred 519335 17.8 km NNW of North Head, Kaipara Harbour; (4) 2 lakes centred 570322 Rototuna and Lower Rototuna 16.5 km NNW of North Head, Kaipara Harbour. All minor lakes are situated adjacent to or in coastal sand dunes covered with scrub, lupin and marram grass. Maximum altitude shown is 183 m (600 ft).

Sheet N28 - Maungaturoto: Interim

2nd Ed. 1 August 1965

No lakes shown on this sheet. Maximum altitude shown is 415 m (1360 ft).

Sheet N29 - Pakiri Provisional

1942

146429	1.0 km E of Arai Point.	0-30	W	0.10	0.7	0.3	NE	Landward side of coastal sand dunes.
149419	1.2 km SSE of Arai Point.	9.1	W	0.53	1.5	0.7	NNW	Landward side of coastal sand dunes. Partly surrounded by swampland.
165403	3.2 km SE of Arai Point.	12.0	W	0.14	0.6	0.4	NW	Landward side of coastal sand dun s. Surrounded by scrub and swampland.

Minor lakes - (1) very small lake $168401~3.5\,\mathrm{km}$ SE of Arai Point in coastal sand dunes. Maximum altitude shown is $296\,\mathrm{m}$ ($970\,\mathrm{ft}$).



Sheet N30 & N31 - Barrier

1st Ed. 1 October 1953

No lakes shown on this sheet. Maximum altitude shown is 722.4 m (2370 ft).

Sheet N32 - North Head Provisional

1943

	540298	14.2 km NW of North Head, Kaipara Harbour.	0-91	W	0.25	1.7	0.3	NNW	Coastal lake situated in sand dunes and swampy country.
Mokeno Lake	587215	5.5km N of North Head, Kaipara Harbour.	0-61	W	1.65	3.9	0.9	NNW	Coastal lake situated in sand dunes and consolidated sand. Swampy land.
	601194	4.8 km NNE of North Head, Kaipara Harbour.	0.61	W	0.05	0.5	0.1	NNW	Coastal lake situated in consolidated sand dunes.
Humuhumu	650235	7.0 km N of Kaipara Head.	50.4	W	0.70	1.6	1.1	EW	Coastal lake in sand hills in swampy land. Contains 2 small and 1 large islands covered in bush. Maximum depth 16.0m.

Minor lakes - (1) 2 small lakes centred 552275 12.0 km NNW of North Head, Kaipara Harbour, situated in sand dunes and swamp; (2) 4 small lakes including Karakahake centred 572245 9.0 km NNW of North Head situated in sand dunes and swamp; (3) small lake 590185 3.5 km NNE of North Head in swamp; (4) small lake 610157 3.5 km ENE of North Head situated in sand dunes and swamp; (5) 2 small lakes centred 610265 11.0 km NNE of North Head situated in consolidated sand hills in country covered in rushes and part scrub; (6) 1 small lake 635246 10.5 km NE of North Head adjacent to Humuhumu Lake situated in swampland. Maximum altitude shown is 221.0 m (724 ft).

Sheet N33 - Kaipara: Interim

2nd Ed. 1 August 1965

Swan Lake	665228	5.0 km NW of Pouto township.	34.0	W	0.32	0.9	0.5	N	In sand dunes and swampland. Coastal.
Kanono	668190	3.0km WSW of Pouto township.	30-61	W	0.84	1.5	0.8	NW	Adjacent to bare sand hills in sand and swampland. Coastal.
Rotokawau	672210	3.3 km NW of Pouto township.	30-61	W	0.29	1.0	0.6	N	In sand hills and swampland. Coastal.
Waingata	675204	2.8 km NW of Pouto township.	30-61	W	0.12	0.6	0.2	NE	In sand and swampland. Coastal.
Kahuparere	682183	2.1 km SW of Pouto township.	30-61	W	0.13	0.5	0.3	NNW	Adjacent to bare sand hills and swampland. Coastal.
Ototoa	763012	9.0 km S of South Head Light.	64.0	W	1.39	2.5	1.0	N	Landward side of shifting sand hills. Coastal. Maximum depth 27.5 m.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
						IXIII	IXIII	uii.	

Sheet N33 continued

Minor lakes - (1) 1 small lake 659222 4.5 km NW of Poutu township S of Swan Lake in sand dunes; (2) small lake 780183 4.5 km SW of Tapora township in swampland, outline temporary; (3) small lake 792169 4.5 km SW of Tapora township in swamp; (4) small lake 832211 0.7 km NNE of Tapora township. Maximum altitude shown is 304 m (1000 ft).

Sheet N34 - Warkworth: Interim

3rd Ed. September 1967

·No lakes shown on this sheet. Maximum altitude shown is 437 m (1433 ft).

Sheet N35 & N36 - Colville

2nd Ed. 1968.

No lakes shown on this sheet. Maximum altitude shown is 860 m (2821 ft).

Sheet N37 - Helensville

2nd Ed. 1 March 1964

Kuwakatai	766991	5.1 km NW of Waioneke settlement.	30-61	W	0.45	2.1	0.2	NW	Landward side of coastal sand dunes.
Kareta	805915	$5.5\mathrm{km}$ SSW of Waioneke settlement.	0-30	W	0.61	2.6	0.5	NNW	Adjacent to coastal sand dunes.
	814932	4.0km SSW of Waioneke settlement.	122-152	W?	0.08	0.5	0.4	N	Associated with coastal sand dunes.
Karaka	820895	$7.3\;\mathrm{km}$ S of Waioneke settlement.	0-30	W	0.16	0.8	0.3	NNW	Associated with coastal sand dunes.
Poutoa	842860	13.0km NW of Helensville.	0-30	W	0.13	0.7	0.1	NNW	Associated with coastal sand dunes,
Ngakaru	850840	11.2 km WNW of Helensville.	0-30	W	0.11	0.9	0.1	NNW	Associated with coastal sand dunes.



Minor lakes - Between 795928 and 875810 in a NW line, series of coastal lakes amongst those listed above (Kerata, Karaka, Poutoa, Ngakaru) numbering 26 and associated with the larger lakes, and included in the 26, a small lake, Lake Piripoua 861830. The 26 minor lakes are all coastal dune lakes and situated in land depressions surrounded by scrub and sand hills. Maximum altitude shown is 142 m (630 ft).

Sheet N38 - Silverdale 3rd Ed. 1 August 1965

Oxidation Pond 235730 4.0km W of Campbell Bay. 30-61 D 0.25 NW Oxidation Pond 242732 3.3 km W of Campbell Bay. 30-61 D 0.10 1.0 0.2 E

Maximum altitude shown is 203 m (688ft).

Sheet N39 - Moehau: Interim 2nd Ed. 1 March 1966

No lakes shown on this sheet. Maximum altitude shown is 892 m (2926 ft) Mt Moehau.

Sheet N40 - Coromandel : Interim

2nd Ed. 1 June 1965

No lakes shown on this sheet. Maximum altitude shown is 583 m (1915ft) Kaipawa.

Sheet N41 & Part N46 - Waitakere

3rd Ed. 1 May 1964

Kawaupaku	986549	8.9 km SW of Waitakere.	70	W	0.09	0.6	0.4	NW	Associated with coastal sand dunes.
Wainamu	995556	8 km SW of Waitakere.	22	W	0.16	1.1	0.2	WNW	Drains into Waitakere River via Waiti Stream. Coastal lake.
	025365	1.2 km W of North Head, Manukau Harbour Light	0-30	W	0.34	1.30	0.7	NW	At Whatipu, North Head, Manukau Harbour. Coastal lake surrounded by shifting sand.
Waitakere Reservoir	049540	6.2 km SSW of Waitakere.	210	D	0.34	1.5	0.4	NNE	Source of Waitakere River.
Huia Reservoir	064465	5.5 km NW of Huia settlement.	165	D	0.25	1.2	0.3	N	Discharges via dam into Huia Bay, Manukau Harbour, N side.
Nihotupu Reservoir	087484	6.2km NNW of Huia settlement.	276	D	0.17	1.0	0.2	NW	

Minor lakes - (1) Lake Paekawau 960672 4.2 km N of Muriwai Beach; (2) Lake Okaihau 966652 2.8 km NNE of Muriwai Beach; (3) 2 very small dams 1 km SE of Lake Kawaupaku centred 988542; (4) Nihotupu Auxiliary Reservoir 2 km NNW of Nihotupu Reservoir 080506; (5) 3 small lakes and 4 very small associated lakes centred 018388 2km NNW of Lagoon on North Head, Manukau Harbour all surrounded by shifting sand. Coastal dune lakes. Maximum altitude shown is 415 m (1360 ft).

Sheet N42 - Auckland

2nd Ed. 1 August 1966

Outlet over dam flows into Manukau Parau Reservoir 135474 6.5 km SW of Glen Eden, 0-30 D 0.87 1.6 0.4 NW Harbour via Big Muddy Creek. Auckland.



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Name National Geograms Grid Ref.	raphical Position Altitude (m)	פתעיוי	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Pupuke

284690 7.2 km N of Auckland City.

0-30 V 1.63 1.3 1.0 NE

Formed by volcanic explosion. Nearly circular lake 0.2 km from sea. Maar-like depression surrounded by tuff rings. Maximum depth 55 m (Barker 1970).

Maximum altitude shown is 260 m (854 ft), Mt Rangitoto.

Sheet N43 - Ponui

2nd Ed. 1 October 1963

No lakes shown on this sheet. Maximum altitude shown is 538 m (1762 ft), Hauturu.

Sheet N44 - Whitianga

3rd Ed. January 1966

Minor lakes - (1) very small dam 192406 marked "old dam". Maximum altitude shown is 819 m (2688 ft), Mt Camels Back.

Sheet N45 Unpublished. Maximum altitude shown is 186 m (610 ft) from BA 3797 chart.

Sheet N47 & Part N46 - Pukekohe

2nd Ed. 1 February 1964

Pokorua

157188 1.7 km W of Kohekohe township.

0-30 W 0.26 0.7 EW 0.4

Adjacent to coastal sand dunes.

Minor lakes - (1) Pehiakura lakes, 2 small lakes 1.8 km NW of Lake Pokorua 140198. Coastal type lakes. Maximum altitude shown is 369 m (1210ft), Mt William 538172.

Sheet N48 - Mangatawhiri

3rd Ed. 1 July 1954

	564131	7.0 km SW of Mangatawhiri township.	0-30	S	0.42	1.2	0.5	NNW	Lake completely surrounded by swamp.
Casey's Dam (Reservoir)	616363	18.0km NNW of Mangatawhiri township.	152-183	D	1.53	3.7	1.5	NNW	Dammed by Casey's Dam; lake outflow over dam via Casey's Creek.



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Maximum altitude shown is 688 m (2256 ft), Kopukohunui No.2, 726379.

Sheet N49 - Thames : Interim

3rd Ed. January 1967

Minor lakes - (1) 7 very small old dams centred 300390. Maximum altitude shown is 836 m (2745ft) 156375.

No Sheet N50 in series

Sheet N51 - Onewhero

2nd Ed. 1 April 1964

Minor lakes - (1) Lake Whatihua 194089 0.9 km WSW from Karioitahi township; (2) Lake Rotoiti 199086 0.8 km SSW from Karioitahi township; (3) Lake Puketi 201084 0.8 km SSW from Karioitahi township; (4) Lake Otamatearoa 210065 0.8 km SSW of Whiriwhiri township. All are situated landward of coastal sand dunes. Lake Otamatearoa is surrounded by scrub. A portion of Lake Whangape appears on this sheet. Maximum altitude shown is 355 m (1162 ft) Putataha 294934.

Sheet N52 - Te Kauwhata: Interim

3rd Ed. September 1967

Whangape	565855	11.5 km SW of Te Kauwhata town.	0-30	R	11.97	8.1	4.5	NE	Motukaurere Island 1.3 km long situated E side of lake. Maximum depth 2.7 m (Lucas 1904).
	620845	9.0km SW of Te Kauwhata town.	0-30	RS	0.53	1.3	0.5	NE	Adjacent to and joined by stream to Lake Rotongara 4km W of Waikato River.
	627912	3.5 km SW of Te Kauwhata town.	0-30	RS	0.04	0.8	0.1	ENE	Adjacent to and $0.3\mathrm{km}\ \mathrm{N}$ of Waikato River.
Rotongaro	630835	9.5 km SSW of Te Kauwhata town.	0-30	RS	3.32	2.5	2.0	NNE	3 km W of Waikato River.
Rangiriri	650910	2.4 km SSW of Te Kauwhata town.	0-30	RS	0.46	1.0	0.8	WNW	1.3 km NE of Waikato River.
	681807	11.8 km SSE of Te Kauwhata town.	0-30	R	0.12	0.6	0.2	WNW	0.5 km E of Waikato River.
Ohinewai	684826	10km SSE of Te Kauwhata town.	0-30	R	0.24	0.8	0.4	ENE	1.5 km E of Waikato River.
	698842	9.4 km SSE of Te Kauwhata town.	0-30	R	0.32	1.1	0.3	ENE	3.5 km E of Waikato River and 0.4 km from shore of Lake Waikare. Stream connecting to Lake Waikare.

Waikare

700895 5.5 km SE of Te Kauwhata town.

0-30 RS 34.42 10.0 6.0 NW

At its closest point lake is 1.6 km from Waikato River and lies adjacent to it. One island, Motunaia, tree-covered, 0.3 km long. Maximum depth 2.7 m (Lucas 1904).

Minor lakes - (1) 2 small lakes 558920 in swampland draining into Waikato River 1.5 km away; (2) 2 small lakes 576897 in bush-covered swampland adjacent to Opuatia Stream flowing into Waikato River; (3) Lake Tekaha and Lake Waiwhata both in swampland 1.5 km E of Lake Whangape; (4) small lake 632916 in swampland 0.8 km from Waikato River; (5) 2 small lakes NE of Lake Rotongaro 1.5 km from Waikato River in swampland; (6) small lake 671896 in swampland close to Onetea Stream 0.3 km from shore line Lake Waikare; (7) 2 small lakes in scrub-covered swamp 677828 0.3 km NW of Lake Ohinewai. Maximum altitude shown is 534 m (1755 ft). Maungakawa 899923.

Sheet N53 & Part N54 - Paeroa: Interim

3rd Ed. 1 July 1965

Minor lakes - (1) 15 small ponds centred 096934 6.5 km SW of Paeroa in a soft peat swamp with raupo rushes, willows and titree. Adjacent to Elstow Canal 2.5 km W of Waihou River. Maximum altitude shown is 585 m (1920 ft), 258818.

Sheet N55 - Te Akau: Interim

2nd Ed. 1967

Minor lakes - (1) 2 small lakes 321687, one is swampland and both on landward side coastal sand dunes; (2) 1 small lake 362658 in country dotted with limestone holes, very small and formed by solution; (3) 2 small lakes, formed by solution in limestone country adjacent to airstrip 417679. Maximum altitude shown is 353 m (1160 ft), 545502.

Sheet N56 - Ngaruawahia: Interim

3rd Ed. 1 January 1965

Wahi Lake	638748	3.5 km WSW of Huntly.	9.0	R	5.37	4.2	2.6	NW	Adjacent to Waikato River 1.4 km to nearest shore.
Okowhao	652785	3.5 km NNW of Huntly.	15.0	*	0.17	0.6	0.3	N	Adjacent to Waikato River 1.0 km to nearest shore.



Паканов	679754	0.7 km E of Huntly.	7.0	R	0.56	7.9	0.7	NNW	Adjacent to Waikato River 0.5 km to nearest shore.
Kimihia	684785	3.0 and 4.0 km NE of Huntly.	0-30	R	West e. 0.16	ond 0.6	0.5	NE	Two bodies of water within a larger basin (maximum length 2.2 km, maximum width 1.2 km ENE major axis) separated
Kimihia	701786		0-30	R	East e. 0.55	end 1.4	0.6	NNW	by sand and mud. Adjacent to Waikato River 1.1 km to nearest shore.
Hotoananga	695627	3.4 km NE of Ngaruawahia.	18.0	-	0.17	0.6	0.4	N	Adjacent to Waikato River 2.5 km to nearest shore.
Areare	711614	4.5 km E of Ngaruawahia.	21.0	7	0.34	0.9	0.6	E	Adjacent to Waikato River 2.2 km to nearest shore.
Lake D	742603	7.3 km ESE of Ngaruawahia.	27.0	S	0.32	0.9	0.5	NNE	Adjacent to Waikato River 2.7 km to nearest shore.
Lake B	755600	8.6 km ESE of Ngaruawahia.	24.0	S	0.21	1.0	0.4	NE	Adjacent to Waikato River 3.1 km to nearest shore.
Lake E	778573	11.5 km SE of Ngaruawahia	33.0	S	0.08	0.6	0.2	E	Adjacent to Waikato River 4.1 km to nearest shore.

Minor lakes - (1) 1 small lake 699631 0.6 km NW of Lake Hotoananga; (2) Lake Pikopiko 701620 0.8 km SW of Lake Hotoananga; (3) Lake C 24 m altitude, 753603 0.5 km NNW of Lake B; (4) Lake A, 29 m altitude, 766589 1.4 km SE of Lake B; Maximum altitude shown is 373 m (1226 ft), Hakarimata 637621.

Sheet N57 - Te Aroha: Interim

3rd Ed. August 1965

Minor lakes - (1) 2 small ponds 315682 13.0 km SE of Te Aroha. Maximum altitude shown is 849 m (2787 ft), Ngatamahinerua 337622.

Sheet N58 - Tauranga: Interim

3rd Ed. 1 June 1965

No lakes shown on this sheet. Maximum altitude shown is 348 m (1140 ft), 452542.

Sheet N59 - shown on N68

Sheet N60 - White Island

NZMS 18 Topographical Sheet 5, Rotorua 1st Ed. 1965 showing White Island.

No lakes shown on this sheet. Maximum altitude shown is 321 m (1053 ft), Mt Gisborne 620780.



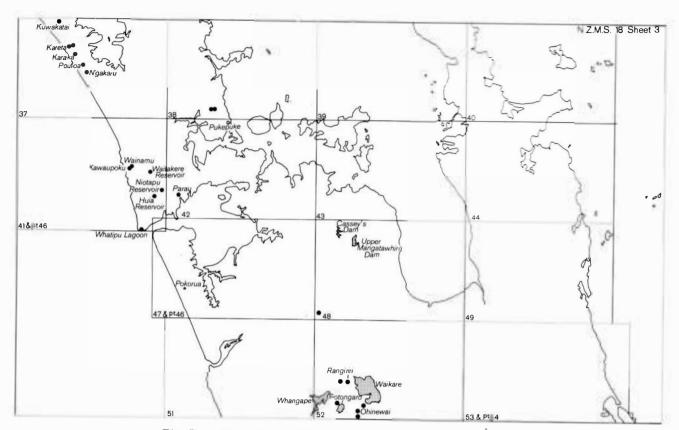


Fig. 5. NZMS 1 Sheets N37-54 showing locations of listed lakes.

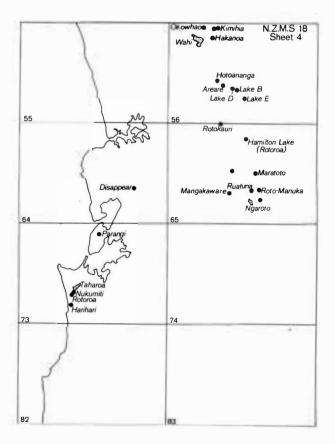


Fig. 6. NZMS 1 Sheets N55, 56, 64, 65, 73, 74, 82, 83 showing locations of listed lakes.

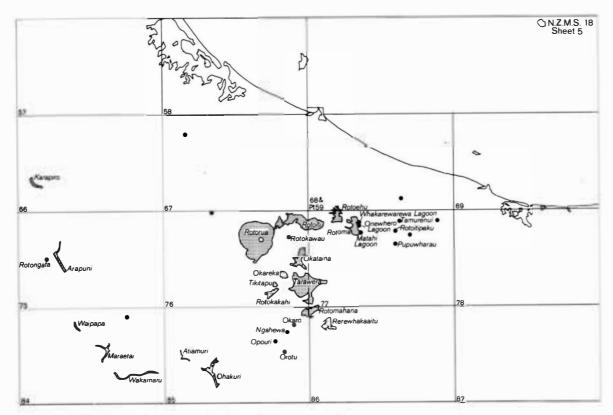


Fig. 7. NZMS 1 Sheets N57, 58, 66-69, $75 \cdot 78$, 84-87 showing locations of listed lakes.

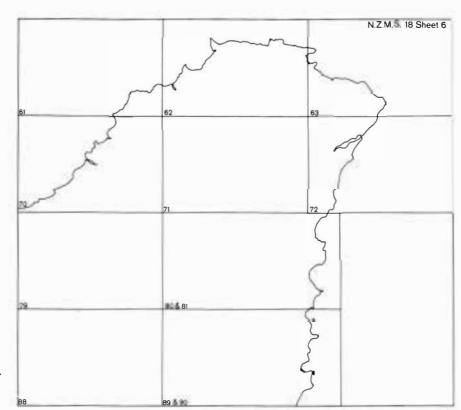


Fig. 8. NZMS 1 Sheets N61-63, 70-72, 79-81, 88-90 showing locations of listed lakes.



Altitude Type Max. Max. Major National Geographical Position wdth axis Name lgth Notes (m) sakm Grid Ref. dir. km km

Sheet N61 - Te Kaha: Interim

1st Ed. November 1967

No lakes shown on this sheet. Maximum altitude shown is 655 m (2149ft), Hereheretaunga 226508.

Sheet N62 - Runaway: Interim

1st Ed. February 1967

Minor lakes - (1) small lake "mud lake" 549642 9.0km SSW of Lottin Point. Maximum altitude shown is 992 m (3254ft), Pukeamaru 647591.

Sheet N63 - East Cape: Interim

1st Ed. September 1967

No lakes shown on this sheet. Maximum altitude shown is 394 m (1292 ft), Ngatohuahira 772519.

Sheet N64 - Raglan: Interim

1st Ed. October 1947

Disappear 444307 6.5 km SE of Te Mata township. 183-213 V 0.25 1.2 0.2

Lake outline shown as a dashed line.

Minor lakes - (1) small lake North Head, Raglan Harbour 367468 Lake Waitamoumou 2.8 km NW of Raglan; (2) very small lake North Head, Aotea Harbour 341228 7.5 km W of Moerangi in coastal sand dunes. Maximum altitude shown is 756 m (2480 ft), Karioi Mountain 329377.

Sheet N65 - Hamilton: Interim

3rd Ed. 1 December 1965

Rotokauri	707499	7.5 km NW of Hamilton.	24.0		0.55	12.0	0.7	NNW	4.0km nearest shore to Waikato River. Also shown on N56.
	738359	12.0km SSW of Hamilton	0-30	S	0.14	0.6	0.4	NW	On edge of Rukuhia swamp.
Mangakaware	731292	7.5 km WSW of Ohaupo.	33		0.12	8.0	0.3	NNW	
Hamilton Lake (Rotoroa)	782457	1.5 km S of Hamilton.	30-61	RD?	0.54	1.3	0.5	NNW	0.7 km nearest shore to Waikato River.
Ngaroto	797267	6.5 km NNW of Te Awamutu.	35		1.29	2.0	1.2	NW	



Ruatuna	799299	8.1 km NNW of Te Awamutu.	40		0.17	0.6	0.4	NW	
Maratoto	812350	3.5 km N of Ohaupo township.	55	S	0.18	0.8	0.3	N	In swampland.
Roto-Manuka	822301	1.3 km SSE of Ohaupo township.	30-61	S	0.17	0.7	0.4	NNE	Adjacent to Moanatuatua swamp.
	825273	3.8 km SSE of Ohaupo township.	55	S	0.07	0.7	0.1	NNE	Adjacent to Moanatuatua swamp.

Minor lakes - (1) Koromatua Lake altitude 44 m 735398 and 2 small lakes Pataka and an unnamed lake centred 730395 1 km SW of Koromatua. All 3 on edge of Rukuhia swamp; (2) small lake 736491 2.5 km SE of Rotokauri; (3) small lake 759351 6.3 km NW of Ohaupo township; (4) small lake 783344 4.0 km NW of Ohaupo township; (5) very small lake 803414 6.0 km SSE of Hamilton adjacent to Rukuhia swamp; (6) lake 804279 1.3 km NE of Lake Ngaroto; (7) lake 810388 Cameron Lake 0.5 km from Rukuhia township adjacent to Rukuhia swamp; (8) lake 862297 0.5 km SSE of Lake Roto-Manuka; (9) Serpentine Lake 826282 1.7 km SSE of Roto-Manuka; (10) lake 827271 1.0 km S of Serpentine Lake; (11) small lake 833253 4.8 km N of Te Awamutu. All lakes on Sheet N65 are situated close to Rukuhia or Moanatuatua swamp. Maximum altitude shown is 962 m (3156 ft), Pirongia 613219.

Sheet N66 - Matamata

3rd Ed. 1 November 1963

Karapiro 050285 4.9 km from Cambridge on Waikato 30-61 D 5.37 11.0 0.9 NW Waikato River dammed for hydro-River. electric station.

Minor lakes - (1) lake 280312 altitude 79 m 7.2 km NNE of Tirau. Maximum altitude shown is 691 m (2270 ft), Hiwiroa 449231 (Kaimai range).

Sheet N67 - Te Puke: Interim

2nd Ed. 1 May 1965

552440 1.0 km S of Lower Kaimai. 61-91 D 0.16 1.1 0.3 NNE Opuiaki and Mangapapa Rivers dammed 1.5 km N of their junction near McLaren Falls.

Minor lakes - (1) 482214 very small 18.0km SSW of Omanawa Falls; (2) 2 dams or lakes centred 740225 Rotongata 3.5km ENE Kaharoa township. Maximum altitude shown is 625m (2050ft), 461221.

Sheet N68 & Part N59 - Matata

2nd Ed. 1967

187237 8.2 km W of Edgecumbe. RS 0.38 1.0 0.6 NNE Lagoon situated in swampland adjacent to Tarawera River.

Minor lakes - (1) 7 small lagoons centred 188220 situated in swampland adjacent to Tarawera River 7.8 km WSW of Edgecumbe; (2) 5 small lagoons centred 240315 in swamp and scrub adjacent to Tarawera River 8.5 km NNW of Edgecumbe; (3) 5 small lagoons centred 261300 in swamp and scrub adjacent to Awaiti Stream and canal 7.0 km NNW of Edgecumbe. Maximum altitude shown is 412 m (1351 ft), Trig PM 058212.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet N69 - Whakatane

1st Ed. 1969

Minor lakes - (1) small body of water 500217 cut off from Ohiwa Harbour off Whakatane Kuturere Road by embankment. Maximum altitude shown is 210m (690ft), 454220.

Sheet N70 - Omaio

1st Ed. 1970

No lakes shown on this sheet. Maximum altitude shown is 1120 m (3675 ft).

Sheet N71 - Hikurangi

1st Ed. 1970

Minor lakes - (1) small lakes 306314 and 695337. Many small lakes or ponds in SE corner of map. Maximum altitude shown is 1469 m (4819 ft), Kapau 322205.

Sheet N72 - Waiapu

From NZMS 18 Sheet 6, East Cape 1971 Print.

No lakes shown on this sheet. Maximum altitude shown is 508m (1668ft), Otauri 740230.

Sheet N73 - Kawhia

1st Ed. 1 May 1953

Harihari	256955	12.0 km SSE of Albatross Point.	0-30	W	0.18	1.0	0.3	NW	1 km inland from coast.
Rotoroa	257986	9.2km SSE of Albatross Point.	0-30	W	0.23	0.9	0.4	N	Has one island. Lake flows to Lake Nukumiti and thence to Taharoa.
Nukumiti	262993	9.0 km SSE of Albatross Point.	0-30	W	0.13	0.6	0.3	NNW	Adjacent to sand hills. Lakes Rotoroa and Taharoa connected by streams.
Taharoa	272008	8.2 km SE of Albatross Point.	0-30	W	2.05	2.8	1.2	NE	Adjacent to coastal sand dunes. Rotoroa and Nukumiti drain into this lake and Mangatangi Stream flows into eastern side. Wainui Stream flows out W side to sea.



Paringi 339165 3 Pkm NNW of Kawhia town,

48 W 0.12 1.0 0.2 NE

Horseshoe-shaped lake in a depression, landward side coastal sand dunes.

Minor lakes - (1) 3 small lakes, Lakes Rototapui, Piopio, Rotokahari on landward side coastal sand dunes between Lakes Harihari and Rotoroa lying in a NNE direction centred 252975. Maximum altitude shown is 576 m (1690 ft), Omarama 539012.

Sheet N74 - Otorohanga: Interim

2nd Ed. March 1968

Minor lakes - (1) Pokomuia Lake formed by fluviatile action adjacent to Waipa River 705152 1.5 km N of Te Kopua; (2) 8 small lakes, fluviatile adjacent to Waipa River 2-6 km N of Otorohanga centred 720040; (3) 1 dam 723029 4.0 km N of Otorohanga draining into Waipa River; (4) 1 small lake 724983 0.5 km E of Otorohanga; (5) 1 small horseshoe lake 718934, fluviatile type adjacent to Mangapu River; (6) 3 small lakes (2 lagoons) centred 691972 adjacent to Waitomo River; (7) 3 small lakes, fluviatile type 800175 adjacent to Puniu River, 3.5 km SW of Te Awamutu; (8) 1 small lake 831156 3.5 km S of Te Awamutu adjacent to Puniu River; (9) 3 small lakes, 1 dam centred 830040 6.0 km WSW of Waikeria; (10) 1 reservoir (dam) 831901 13.0 km SE of Otorohanga. Maximum altitude shown is 763 m (2500 ft), Te Ake o Hikopiro 608197.

Sheet N75 - Arapuni: Interim

1st Ed. March 1947

Rotongata	091051	8.0 km SW of Arapuni township.	S	0.05	0.6	0.2	N	In swampland 1 km W of Mangare Stream.
Arapuni	132046	7.0 km SSW of Arapuni township.	D	4.95	6.5	0.9	NNW	Waikato River hydro-electric dam used for power generation.

Minor lakes - (1) Hamareha lakes centred 367177, 3 small lakes on Waimakariri Stream. Maximum altitude shown is 830 m (2616 ft), Maungatautari 073192.

Sheet N76 - Rotorua

2nd Ed. 1 August 1964

	601195	10.5 km NW of Ngongotaha township.	518-549		0.15	0.7	0.4	NE	
Rotorua	745110	Centre 6.5 km NNE of Rotorua city.	280	V	7 9.7 8	12.1	9.7	N	Maximum depth 44.5 m (Irwin 1969b). One island, Mokoia.
Rotokakahi (Green)	788945	Centre 10.0 km SSE of Rotorua city.	397	V	4.48	4.3	1.7	NE	Maximum depth 32 m (Irwin 1970b). Two islands, Motutawa and Punaruku.
Tikitapu (Blue)	796971	Centre 9.0 km SSE of Rotorua city.	418	V	1.40	1.6	1.3	N	Maximum depth 27.5 m (Irwin 1967c).
Okareka	825500	10.5 km SE of Rotorua city.	355	V	3.50	2.8	1.9	NW	Maximum depth 33.5 m (Irwin 1968).



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Rotokawau	842120	14.3km NE of Rotorua city.	335	V	0.50	1.0	0.7	WNW	Maximum depth 74.5 m.
Okataina	874055	14.5 km ENE of Rotorua city.	311	V	10.83	6.2	5.0	NNE	Maximum depth 78.5 m (Irwin 1967a).
Rotoiti	880170	20.0 km NE of Rotorua city.	279	V	34.34	15.0	3.6	WNW	Maximum depth 93.5 m (Irwin 1969a). Three islands, Motuahiwa, Motumauri and Pateko.
Tarawera	892972	Centre 17.5 km from Rotorua city.	299	V	41.02	11.4	9.0	ENE	Maximum depth 87.5 m (Irwin 1969c). Wairoa Stream flows in W side. Tarawera River out E side.

Minor lakes - (1) Rotokawa 786073 adjacent to Rotorua airport; (2) 8 very small lakes or lagoons centred 830975; (3) Te Whekau lagoon 845505 between Lakes Okareka and Tarawera; (4) Rotongata Mirror Lake 885118 adjacent to Okataina Scenic Drive; (5) Rotoatua 892118 adjacent to Okataina Scenic Drive; (6) Te Hapua 898178 adjacent to N side of Lake Rotoiti. Maximum altitude shown is 757 m (2484 ft), Ngongotaha 659065.

Sheet N77 - Tarawera

2nd Ed. December 1965

Rotoehu	990815	17.0 km NW of Kawerau.	295	V	8.11	4.6	4.0	N	Maximum depth 13.5 m (Irwin 1968).
Rotoma	045155	11.5 km NW of Kawerau.	313	V	11.16	5.2	4.7	N	Maximum depth 83 m (Irwin 1967b).
Whakarewarewa Lagoon	054164	10.5 km NW of Kawerau.	305-335	В	0.11	0.9	0.5	EW	East shore of Rotoma. Separated by narrow shingle and and spit.
Onewhero Lagoon	056156	10.0km NW of Kawerau.	305-335	В	0.16	0.7	0.5	NNE	East shore of Rotoma. Separated by narrow shingle and sand spit.
Matahi Lagoon	061131	9.0 km NW of Kawerau.	305-335	В	0.13	0.7	0.2	NNE	East shore of Rotoma. Separated by narrow shingle and sand spit.
Pupuwharau	167097	1.0km E of Kawerau.	0-30	R	0.29	0.7	0.5	NNE	In low swampland adjacent to Tarawera River.
Rotoitipaku	168138	4.0 km NNE of Kawerau.	0-30	R	0.07	0.6	0.3	NNE	In swampland adjacent to Tarawera River.
Tamurenui	179170	6.8 km NNE of Kawerau	0-30	R	0.13	0.6	0.3	NE	Adjacent to Tarawera River.
	213125	5.8 km NE of Kawerau	0-30	S	0.13	0.5	0.4	E	In swampland.
	279169	14.5 km NE of Kawerau	0-30	S	0.05	0.6	0.3	NE	In low country <100ft 2.5 km from Rangitaiki River.



Matahina

265035 4.0 km S of Te Mahoe town-ship.

61-91 D 2.55 7.2 1.1 N

Man-made dam on Rangitaiki River used for hydro-electric power generation. One island.

Minor lakes - (1) Rotokohu 980110 5.0km S of Lake Rotoehu; (2) lake 133115 2.5km NW of Kawerau; (3) Lake Rotoroa and 3 others centred 170150 5.2km NNE of Kawerau between Lake Rotoitipaku and Tamurenui adjacent to Tarawera River; (4) 2 small lakes and 5 very small lakes including Hot Lake and Lake Tahuna (swamp) centred 189110 3 km ENE of Kawerau in swampland; (5) 2 small lakes 219133 and 225140 centred 7.0km NE of Kawerau; (6) 4 lakes including Lake Otumahi 295165 centred 3.0km E of Rangitaiki River; (7) Green Lake adjacent to Lake Rotomahana 930901. Maximum altitude shown is 1110m (3644 ft), Mt Tarawera 964931.

Sheet N78 - Ruatoki

1st Ed. 1 August 1962

Minor lakes - (1) small lake 418516 4.0km NNW of Taneatua and adjacent to Whakatane River; (2) small lake 440989 1 km N of Waikirikiri and adjacent to Whakatane River; (3) approximately 20 small lakes centred 710115 near Waioeka township and adjacent to Waioeka River; (4) 4 small lakes centred 758135 6.0km SE of Opotiki near Otara and adjacent to Otara River. Maximum altitude shown is 816 m (2675 ft), Maungawhiorangi 671985.

Sheet N79 - Motu

From NZMS1 Sheets N79/1-N79/9. Compilation 1:15,840. Date of photography 29-1-60, 27-1-60, 13-5-68, 23-3-62.

No lakes shown on this sheet. Maximum altitude shown is 1463 m (4800 ft), 215107.

Sheet N80 - Tokomaru

From NZMS1 Sheets N80/1-N80/9. Compilation 1:15,840. Photography 1960 and 1962.

No lakes shown on this sheet. Maximum altitude shown is 1439m (4724ft), Arowhana 264041.

Sheet N81 - Tokomaru

From NZMS 1 Sheets N81/1, N81/4, N81/7. Compilation 1:15,840. Photography 1960 and 1962.

No lakes shown on this sheet. Maximum altitude shown is 465 m (1525 ft), 710066.

Sheet N82 - Marakopa

From NZMS 1 series. Compilation 1:47,520. Photography 2-6-67 and 10-5-68.

No lakes shown on this sheet. Maximum altitude shown is 806 m (2643 ft), Maungamangero.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet N83 - Te Kuiti

From compilations 1:25,000 and 1:15,840 Sheets N83/1, N83/4, N83/5, N83/7, N83/8W. NZMS 18 Sheet 4, 1:250,000. 1964. Sheets N83/3, N83/6, N83/9, N83/8E.

No lakes shown on this sheet. Maximum altitude shown is 980m (3215ft), Ranginui 980770.

Sheet N84 - Whakamaru

1st Ed. 1 September 1964

Waipapa	40	174850	11.0km NNW of Mangakino.	122-152 D	1.21	5.5	0.3	NNW	Man-made dam on Waikato River. Used for hydro-electric power generation.
Maraetai		272770	1.0 km NE of Mangakino.	18. 3 -213 D	4.21	7.2	1.2	WNW and NNE	Man-made dam on Waikato River. Used for hydro-electric power generation. One island.
Whakamaru		320682	9.0km SSE of Mangakino.	213-243 D	7.21	15.0	1.0	WNW, ENE and E	Man-made dam on Waikato River. Used for hydro-electric power generation.
		336872	3.2 km W of Kinleith.	335-366 D	0.11	0.7	0.2	NE	Settling pond.

Minor lakes - (1) 3 small lakes centred 331865 (settling ponds) 3.7 km WSW of Kinleith; (2) small lake 332643 6.0 km SE of Whakamaru; (3) 2 small lakes 354831 (settling ponds) 4.0 km SSW of Kinleith. Maximum altitude shown is 865 m (2838 ft), 023722.

Sheet N85 - Waiotapu: Interim

2nd Ed. November 1967

Atiamuri	500744	1.0 km N of Atiamuri.	243-374	D	1.68	4.7	0.4	W	Man-made dam on Waikato River, 4 islands. Maximum depth 28.5 m. Used for hydro-electric power generation.
Ohakuri	595705	3.5 km ESE of Ohakuri.	274-305	D	7.21	7.5	2.0	NW	Man-made dam on Waikato River, 6 islands. Maximum depth 37.5 m. Used for hydro-electric power generation.
Opouri	797797	2.4 km W of Waiotapu.	477	V	0.26	0.7	0.5	W	Maximum depth 25.0m (Irwin 1968). Also known as Ngapouri.
Orotu	825756	3.4 km S of Wajotapu	305-335	V	0.05	0.5	0.2	NNE	



35

Minor lakes - (1) small lake 643764 adjacent to Whirinaki Stream, Lake Ohakuri 9.0 km NE of Ohakuri township; (2) very small lake 683831 2.5 km NE of Ngakuru township; (3) 2 very small lakes centred 712862 6.5 km NE of Ngakuru township; (4) Lake Tutaenanga 786805 3.5 km NW of Waiotapu; (5) approximately 15 very small lakes including Ngakora (Green Lake) and Whangiaterangi centred 830765 and Waiotapu thermal area 3.0 km S of Waiotapu; (6) approximately 15 very small lakes centred 830790 1 km SE of Waiotapu in thermal area; (7) Rotowhero (Green Lake) 835818 2.2 km NNE of Waiotapu; (8) Opal Lake 849830 4.0 km NNE of Waiotapu; (9) 3 lakes in Waimangu geyser valley centred 855863 including Emerald Lake, Waimangu Cauldron and Inferno Crater. Maximum altitude shown is 979 m (3211 ft), Paeroa 723747 in Paeroa range.

Sheet N86 - Galatea

2nd Ed. 1968

Rotomahana	902887	7.5 km NW of Rerewhakaaitu township.	335	V	7.95	6.2	2.8	NW	Maximum depth 125 m (Irwin 1968). One island, Patiti or Banded I.
Rerewhakaaitu	959850	2.8 km N of Rerewhakaaitu township.	438	V	7.47	3.8	3.7	N	Maximum depth 31 m, Awaatua Basin (Irwin 1970a), (15 m main lake). Three small islands.

No minor lakes on this sheet. Maximum altitude shown is 902 m (2960 ft), 315701.

Sheet N87 - Waimana

1st Ed. 1 June 1957

No lakes shown on this sheet except minor pond 758859. Maximum altitude shown is 1143 m (3750 ft), 626724 in Kahikatia range.

Sheet N88 - Matawai

From NZMS 1 Sheets N88/1 - N88/9. Compilation 1.15,840. Date of Photography 11-10-69, 27-1-60, 31-3-60.

No lakes shown on these sheets. Maximum altitude shown is 1213 m (3979ft), Maungahaumi 070823.

Sheets N89 & N90 - Tolaga Bay

1st Ed. 1 April 1965

No lakes shown on these sheets. Many minor ponds and dams centred in following areas 280850, 320610, 360710, 580650, 640740. Maximum altitude shown is 615 m (2020 ft), 440878.



Max. Max. Major National Altitude Area Name Geographical Position Туре wdth lgth axis Notes Grid Ref. sq km km km dir.

Sheet N91 - Mokau

1st Ed. 1 November 1957

No lakes shown on this sheet. Minor ponds 441595, 461597. Maximum altitude shown is 739 m (2423 ft), Herangi 316555.

Sheet N92 - Ongarue

1st Ed. 1 November 1956

No lakes shown on this sheet. Maximum altitude shown is 720 m (2363 ft), Tangitu 753428.

Sheet N93 - Waihaha: Interim

2nd Ed. 1968

Minor lakes - (1) 2 very small lakes centred 234335 at mouth of Waihaha River near Waihaha township west shore of Lake Taupo; (2) thermal pools 386599 and 410591 3.0 km N of Mokai township. Maximum altitude shown is 1165 m (3823 ft), Pureora Mountain 122543.

Sheet N94 - Taupo

1st Ed. 1969

Aratiatia	599462	8.7 km NNE of Taupo.	355-366 D	0.34	2.2	0.2	WNW	Man-made hydro-electric dam on Waikato River.
Rotokawa	654443	10.7 km NE of Taupo.	335-366 V	0.53	1.3	0.7	EW	
Pukuriri Lagoon	750315	9 km E of State Highway No.5.	640-671	0.04	0.5	0.2	NNE	Noted as drying.
Hardcastle Lagoon	790588	1.6 km NE of Ohaki.	274-305 R	0.08	0.9	0.1	NNW	Ox-bow lake.

Minor lakes - (1) Alum Lake 534460; (2) Rotopapa Lagoon 886459; (3) 3 lakes N of Lake Rotokawa and a few others. Maximum altitude shown is 897 m (2943ft), Maroanui 496582.

Sheet N95 - Te Whaiti: Interim

2nd Ed. 1970

Minor lake - (1) lake 105379 7.5 km SW of Minginui township. Maximum altitude shown is 1185 m (3889 ft), Mapouriki N 256363.



Sheet ND6 - Maungapohatu : Interim

2nd Ed. November 1967

Waikareiti

590335 10.5 km from N head of Lake Waikaremoana.

881-914

3.36 3.3 2.1 NE

Six islands including Rahui and Te Kahaatuwai Islands. Lake surrounded by bush.

Minor lakes - (1) Arawa tarns 530335, 3 very small lakes 5.5 km W of Waikareiti; (2) small lake 545325 4.0 km WSW of Waikareiti; (3) Lake Ruapuni 546311 4.4 km SW of Waikareiti; (4) 2 very small tarns and Te Kokau tarn 552491 centred 4.0 km SE of Maungapohatu; (5) 2 ponds centred 588330 3.0 km W of Lake Waikareiti; (6) small lake 591332 on Rahui Island in Lake Waikareiti; (7) small lake 605358 3.0 km NE of Lake Waikareiti; (8) 3 pools 790395 3.0 km ESE of Gisborne Tramping Club hut; (9) tarn 546400. Note: Silted lake bed 610375 U-shaped, maximum length 2.8 km, maximum width 0.6 km. Maximum altitude shown is 1403 m (4602 ft), Manuoha 544401.

Sheet N97 - Ngatapa

1st Ed. 1 June 1959

Minor lakes - (1) small tarn 946325 7.0 km SW of Hangaroa; (2) 2 small tarns 982312 5.0 km SW of Hangaroa; (3) 4 ponds centred 150550 7.5 km NNW of Ngatapa township; (4) pond 115542 5.8 km NW of Ngatapa. Maximum altitude shown is 1036 m (3400 ft), R11 866580.

Sheet N98 - Gisborne

3rd Ed. 1 April 1965

Repongaere

262458 14.0 km NW of Gisborne.

0-30

0.54 1.1 0.6 N

3.0 km W of Waipaoa River.

Minor lakes - (1) small lake 275346 12.0 km ESE of Gisborne; (2) very small lake 424486 10.0 km N of Gisborne; (3) small lake 426329 5.5 km S of Gisborne; (4) many very small lakes or dams centred 500430 in area 8 x 5 km, 10.0 km NE of Gisborne; (5) small lake 512587. Maximum altitude shown is 505 m (1655ft), Kaiwinika 114 385598.

Sheet N99 - Mimi

March 1944

No lakes shown on this sheet. Maximum altitude shown is 278 m (911 ft), 070011.

Sheet N100 - Ohura

1st Ed. 1 December 1953

No lakes shown on this sheet. Maximum altitude shown is 516 m (1974 ft), Tatu 437109.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet N101 - Taumarunui

From NZMS 1 Sheet N101/1 -N101/9. Compilation 1:15,840. Date of Photography 21-11-58.

No lakes shown on these sheets. Maximum altitude shown is 1042 m (3420 ft), 947260.

Sheet N102 - Tokaanu

1st Ed. 1 February 1964

Taupo	420260	Taupo town situated at NE end.	357	V	622.63	40.5	29.5	NE	One island, Motutaiko. Maximum depth 162.8m (Lucas 1904). Controlled for hydro-electric power generation.
Kuratau	192154	2.7 km NE of Kuratau.	427-458	S	1.4	3.4	0.7	WNW	Adjacent to Kuratau shown as swamp.

Note: Lake Kuratau 192154 shown as swamp 3.4 km long, 0.7 km wide, 2.7 km NE Kuratau adjacent to Kuratau River.

Minor lakes - (1) 3 small lakes centred 205015 5.0 km SW of Waihi village; (2) small lake 218449 on Kuratau River 5.0 km E of Kuratau. Maximum altitude shown is 1300 m (4266 ft), Kakaramea No.2, 185207.

Sheet N103 - Rangitaiki

1st Ed. 1 July 1964

Rotongaio	529230	14.5 km S of Taupo.	366-396	V	0.32	1.1	0.4	E	Adjacent to Lake Taupo ½km land at narrowest point between two lakes.
Hinemaiaia	565125	8.5 km SE of Hatepe township on shores of Lake Taupo.	518-549	D	0.29	1.2	0.2	NNW	Used for hydro-electric power generation. On Hinemaiaia Stream.
Pouarua	847038	9.7 km SSE of Rangitaiki township.	702-732	S	1.15	2.1	8.0	E	Shown as swamp on NZMS 1 series and as a lake on NZMS 18 series.

Minor lakes - (1) lagoon 799258 11.0 km NNW of Rangitaiki township; (2) very small lake 510069 10.0 km SSE of Hatepe township. Maximum altitude shown is 1242 m (4073 ft), Te Iringa 674006.

Sheet N104 - Maungataniwha: Interim

1st Ed. July 1967

No lakes shown on this sheet. Maximum altitude shown is 1383 m (4536 ft), Pohokura A 150060.



Sheet N105 - Waikaremoana

1st Ed. June 1967

Rotongaio	432054	3.8 km SW of Mangaone.	366-396		0.12	0.6	0.2	NW	1.8 km from Waiau River.
Rotoroa	449049	3.0 km SW of Mangaone.	300		0.17	0.6	0.4	NNW	1.7 km from Waiau River.
Rotonuiaha	458050	2.5 km SSW of Mangaone.	280		0.47	1.2	0.7	NNW	Rere Stream flows out of lake into Waiau River.
Waikaremoana	502275	7.5 km NW of Tuai village.	585	L	55.74	16.0	11.1	ENE	Two islands in SW arm. Maximum depth 248 m. Controlled for hydro-electric power generation.
Kiriopakae	531220	3.0km WNW of Tuai village.	579-610	L	0.13	0.5	0.4	NNW	0.4 km from Lake Waikaremoana.
Whakamarino	568215	0.5km E of Tuai village.	247	D	0.29	0.9	0.6	NNW	Hydro-electric power station Tuai dam.

Minor lakes - (1) Umuontahu 528202 3.4 km WSW of Tuai; (2) Rakaitu 539202 2.5 km WSW of Tuai; (3) Mauriahea 541199 2.3 km SW of Tuai; (4) Potaka 548199 2.0 km SW of Tuai; (5) Wherowhero 548220 1.5 km NW of Tuai; (6) Kaitawa 552222 1.5 km NNW of Tuai; (7) small lake 533211 2.6 km W of Tuai; (8) very small lake 557197 1.7 km SSW of Tuai; (9) 3 very small lakes centred 690035; (10) 4 very small lakes centred 720100. Maximum altitude shown is 1044 m (3425 ft), 621278.

Sheet N106 - Tiniroto

1st Ed. 1 July 1953

Tiniroto	940258	2.3 km WNW of Tiniroto.		0.04	0.5	0.1	EW
Tiniroto	941253	2.0 km WNW of Tiniroto.		0.12	0.8	0.2	\mathbf{EW}
Gisborne Borough Waterworks	164135	9.0 km S of Waingake School.	D	0.08	0.5	0.3	NW

Minor lakes - (1) 3 small lakes centred 932280 4.1 km NW of Tiniroto; (2) small lake 948274 2.6 km NNW of Tiniroto; (3) small lake 951274 2.1 km NNW of Tiniroto; (4) small lake 956249 0.6 km WSW of Tiniroto; (5) 3 small lakes centred 962265 1.5 km N of Tiniroto. Maximum altitude shown is 741 m (2429 ft), Pukaroronui 87A, 100143.

Sheet N107 - Wharereata

January 1944

No lakes shown on this sheet. Maximum altitude shown is 482 m (1580ft), 261062.

Sheet N108 - New Plymouth

2nd Ed. 1 October 1962

Minor lakes - (1) Barrett Lagoon 619876 3.5 km SSW of New Plymouth city; (2) small lake 641878 3.0 km SSE of New Plymouth city. Maximum altitude shown is 1344 m (4410 ft), 595705.



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	National		Altitude		Area	Max.	Max.	Major	
Name	Grid Ref.	Geographical Position	(m)	Type	sq km	lgth	wdth	axis	Notes
	dira itel.		()		04	km	km	dir.	

Sheet N109 - Inglewood

2nd Ed. 1 October 1965

Mangamahoe	699840	8.0km NW of Inglewood.	122-152 D	0.25	1.2	0.3	N	Surrounded by plantation.
Ratapiko	896742	12.0 km SE of Inglewood.	183-213	0.37	2.3	0.7	E	Two islands. Lake fed by drain from Manganui River.

Minor lakes - (1) Waipu lagoons : 2 centred 706951 1 km NW of Bell Block; (2) dam 847726 9.0 km SE of Inglewood. Maximum altitude shown is $392\,\mathrm{m}$ (1285 ft), Pouiatoa No.2, 076895.

Sheet N110 - Whangamomona

1st Ed. November 1967

Minor lakes - (1) pond 111996; (2) dam 131789 16 km SW of Whangamomona; (3) dam 163771 12 km SW of Whangamomona; (4) dam 313985 3.6 km NW of Tahora; (5) tarns 320801 4.0 km SE of Whangamomona; (6) pond 343825 6.0 km E of Whangamomona. Maximum altitude shown is 544 m (1786 ft), Mangarewa West 265715.

Sheet N111 - Waimarino

1st Ed. 1971

No lakes shown on this sheet. Maximum altitude shown is 1075 m (3530 ft), Taurewa 947919.

Sheet N112 - Ngauruhoe

1st Ed. 1968

Lower Tama	100752	5.5 km SSE of Mt Ngauruhoe.	1220-1250	V	0.25	0.6	0.5	N	
Upper Tama	113772	3.3 km SSE of Mt Ngauruhoe.	1310	V	0.32	0.9	0.5	E	
Rotoaira	205930	4.8 km SW of Mt Pihanga.	564	V	15.32	6.3	3.6	WNW	Formed by lava flows from Mts Pihanga and Tongariro. One island. Maximum depth 14.6 m (Lucas 1904).
Rotopounamu	225965	3.2 km NW of Mt Pihanga.	710	V	0.89	1.4	1.0	E	Maximum depth 7.9 m. Explosion crater on side of Mt Pihanga.



Minor lakes - (1) 2 small lakes 036003 adjacent to Makahikatoa Stream; (2) small lake 119777 0.5 km NW of Upper Tama lake; (3) Lake Rotonaho 141985 3.0 km N of Otukou in swampland; (4) Emerald Lakes 146834, 2 small lakes 3.0 km NE of Mt Ngauruhoe; (5) Blue Lake 152847 4.4 km NE of Mt Ngauruhoe; (6) small lake 152983 adjacent to swampland 2.8 km NNE of Otukou; (7) small lake 153958 1.2 km NE of Otukou; (8) Sulphur Lagoon 162872 in thermal area 6.8 km NE of Mt Ngauruhoe; (9) very small lake 175952 in swampland 3.2 km E of Otukou; (10) dam 286896 1.9 km SSW of Rangipo; (11) small lake in swampland 316956 6.9 km NNE of Rangipo. Maximum altitude shown is 1959 m (6248 ft), Mt Tongariro 129841.

Sheet N113 - Kaweka: Interim

2nd Ed. 1970.

No lakes shown on this sheet. Maximum altitude shown is 1641 m (5384ft), Whetu 832701.

Sheet N114 - Tutira: Interim

2nd Ed. June 1967

Tutira

315715 2.5 km SSE of Tutira township.

150

1.47 2.5 1.2 N

Bird sanctuary. One island.

Minor lakes - (1) 5 small lakes centred 112792 3.0 km NE of Glenfalls settlement; (2) 1 small lake 134815 at head of Waitara Stream 6.0 km NE of Glenfalls; (3) Lake Opouahi 262810 7.5 km NW of Tutira, altitude 485 m; (4) Lake Orakai 311701 3.7 km S of Tutira; (5) Lake Waikapiro 317702 3.7 km S of Tutira. Maximum altitude shown is 1288 m (4225 ft), Tunurangi No. 2, 940933.

Sheet N115 - Mohaka: Interim 2nd Ed. 1 October 1967

Minor lakes - (1) small lake 453751 4.5 km SW of Waikari River mouth; (2) 2 small ponds 553872 5.0 km NW of Mohaka; (3) Awamate Lagoons (2) centred 795995 6.0 km NW of Wairoa and adjacent to Wairoa River. Maximum altitude shown is 534 m (1753 ft), Rongomaipapa 411929.

Sheet N116 - Wairoa: Interim

2nd Ed. 1969

Whakamahi Lagoon	800905	4.0km SW of Wairoa.	0-30	В	0.23	0.8	0.2	ENE	Near mouth of Wairoa River.
Ohuia Lagoon	870920	5.6 km ESE of Wairoa.	0-30	В	0.50	1.7	0.4	NE	
Wairau Lagoon	893915	6.5 km ESE of Wairoa.	0-30	В	0.30	1.0	0.4	N	
Te Paeroa Lagoon	910920	8.0 km ESE of Wairoa.	0-30	В	0.35	0.8	0.6	N	
Whakaki Lagoon	942920	10.7 km ESE of Wairoa.	0-30	В	4.60	4.1	1.7	WNW	

Minor lakes - (1) bar-type lake 806904 adjacent to Wairoa River; (2) 4 small lakes centred 975905 in sandhills adjacent to Whakaki Lagoon; (3) small lake 082910 in sandhills; (4) group of 13 small lakes 1 km N of Opoutamu township. Maximum altitude shown is 461 m (1510 ft), 065994.



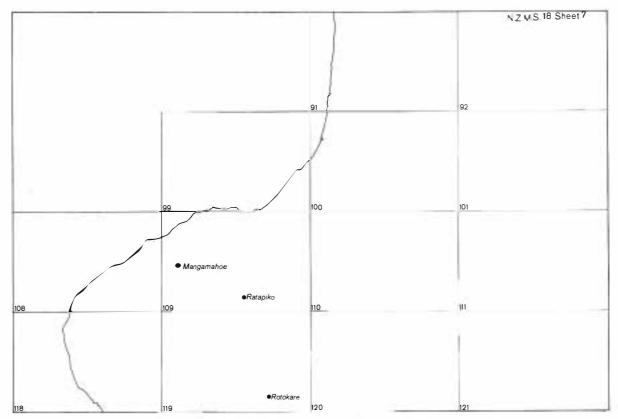


Fig. 9. NZMS 1 Sheets N91, 92, 99-101, 108-111, 118-121 showing locations of listed lakes.

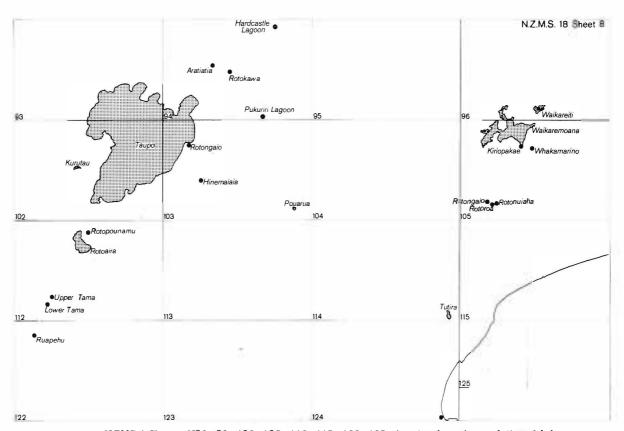


Fig. 10. NZMS 1 Sheets N93-96, 102-105, 112-115, 122-125 showing locations of listed lakes.

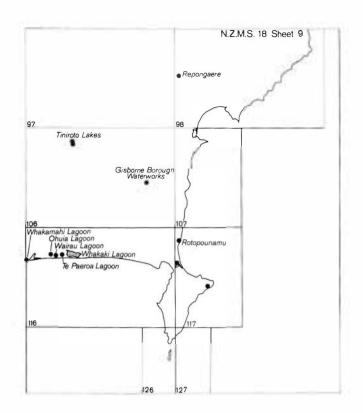


Fig. 11. NZMS 1 Sheets N97, 98, 106, 107, 116, 117, 126, 127 showing locations of listed lakes.

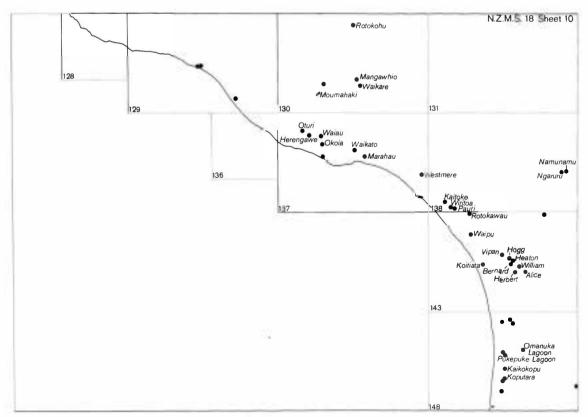


Fig. 12. NZMS 1 Sheets N128-131, 136-138, 143, 148 showing locations of listed lakes.



Geographical Position

Altitude (m)

 $\begin{array}{cc} \mathtt{Type} & \mathtt{Area} \\ \mathtt{sq} \ \mathtt{km} \end{array}$

Max.

lgth

km

Max. Major wdth axis km dir.

Notes

Sheet N117 - Mahia

See Sheets N126 & N127.

Sheet N118 - Egmont: Interim

2nd Ed. 1 February 1965

Minor lakes - (1) Lake Dive 641580 situated 4.4 km S of summit Mt Egmont at altitude approximately 914 m (3000 ft). Maximum altitude shown is 2517 m (8260 ft), Mt Egmont 644628.

Sheet N119 - Stratford

3rd Ed. 1 April 1964

Rotokare

973444 10.0 km ESE of Eltham.

181

0.09 0.8 0.6 NNE

Maximum altitude shown is 2133m (7000 ft), 650628.

Sheet N120 - Matemateaonga: Interim

1st Ed. September 1967

No lakes shown on this sheet. Maximum altitude shown is 713 m (2339 ft), Matemateaonga 227529.

Sheet N121 - Ohakune

1st Ed. 1968

Minor lakes - (1) small lake 790547 wildlife refuge; (2) 2 small lakes centred 889469 in Ohakune lakes scenic reserve; (3) number of very small lakes in SE corner of sheet. Maximum altitude shown is 1432 m (4700 ft), 999672.

Sheet N122 - Ruapehu

1st Ed. September 1966

Ruapehu

060657 Near summit of Mt Ruapehu

2743-2774 V

 $0.17 \quad 0.5$

0.4

N

Crater lake. Maximum depth 80.0 m. (24.1.70).

Minor lakes - (1) Rotokuru 018478 14 km WNW of Waiouru. Note: Centred 240520 and 280535 two dams manmade on Mowhanga River, Tongariro Power Scheme, show proposed lake levels. Maximum altitude shown is 2797 m (9175ft), Tahurangi 059648 on Mt Ruapehu.



5

Sheet N123 - Ngamatea: Interim

1st Ed. 1 June 1965

Minor lakes - (1) 2 lakes centred 815055 in Kaweka State Forest 5.0 km NNE of Kuripapango settlement. Maximum altitude shown is 1577 m (5175ft), Tauwheketewhango 557662.

Sheet N124 - Esk

2nd Ed. 1 March 1962

299410 0.5 km W of Westshore Beach.

0.21 1.2 0.3 NNE In Ahuriri Lagoon scheme development.

Minor lakes - (1) very small lake 957562 8.2 km S of Puketitiri; (2) 4 small lakes centred 040460 9.5 km WSW of Rissington; (3) lake 120687 0.6 km E of Te Pohue; (4) very small lake 104449 4.0 km SW of Rissington; (5) lake 142425 4.5 km S of Rissington; (6) lake 185594 9.5 km NW of Eskdale; (7) 7 small lakes centred 420500 5.5 km SW of Eskdale; (8) lake 284413 1.5 km W of Westshore; (9) 3 small lakes centred 545317 near Whirinaki Bluff. Maximum altitude shown is 942 m (3091 ft), Don Juan 910585.

Sheet N125 - Tongoio: Provisional

June 1944

No lakes shown on this sheet. Maximum altitude shown is 390 m (1280 ft), 355686.

Sheets N126 & N127 & Part N117 - Mahia

1st Ed. 1969

Rotopounamu	264958	9.4 km NNE of Mahia.	(0-30	W	0.04	0.5	0.1	NE	Coastal lake.
	256895	4.2 km NE of Mahia.	C	0-30	W	0.12	0.6	0.3	NE	Coastal lake.
	344823	6.2 km SE of Mahia	91	-122		0.4	0.5	0.1	NE	

Minor lakes - (1) 2 small lakes 265967 0.5 km N of Lake Rotopounamu; (2) 2 very small lakes 263955 0.2 km S of Lake Rotopounamu; (3) 5 small lakes 255916 5.9 km NW of Mahia; (4) 6 very small lakes 267772, 259785, 292809, 292815, 307827, 281837. Maximum altitude shown is 405 m (1329 ft), Rahuimokairoa 251741.

Sheet N128 - Oeo: Interim 2nd Ed. 1 April 1965

Minor lakes - (1) lake 489389 3.8 km WNW of Pihama township adjacent to coast. Maximum altitude shown is 121 m (395 ft), 592397.

Sheet N129 - Hawera

2nd Ed. 1 April 1963

出

Minor lakes - (1) 1 small lake 898216 adjacent to coast 6.8 km SE of Hawera; (2) 2 small lakes 929188 adjacent to coast 3.3 km W of Manutahi; (3) lake 941170 adjacent to coast 2.2 km SW of Manutahi; (4) 3 very small lakes 952167 adjacent to coast 2.5 km SSW of Manutahi; (5) 2 lakes centred 965157 3.1 km S of Manutahi; (6) 4 small lakes centred 995125, 1.7 km SW of Kakaramea. Note: all coastal dune lakes. Maximum altitude shown is 406 m (1331 ft), Patete 061352.

Sheet N130 - Waitotara 1st Ed. 1 July 1962

	3							
Moumahaki	222159	6.5km NE of Kohi township.	61-91	0.34	1.5	0.2	NE	On Moumahaki Stream.
	240188	9.0km NE of Kohi township.	152-183	0.12	0.6	0.2	N	
Rotokohu	326364	3.0 km NNW of Taumatatahi.	91-122	0.13	0.5	0.2	N	
Mangawhio	336205	6.1 km NW of Orangimea.	122-152	0.11	0.8	0.3	NNW	
Waikare	348183	4.3 km WNW of Orangimea.	122-152	0.13	0.5	0.3	W	

Minor lakes - (1) very small lake 122172 5.5 km NW of Kohi; (2) 3 very small lakes centred 126153 4.0 km NW of Kohi; (3) 1 very small lake 130192 7.0 km NNW of Kohi; (4) 4 very small lakes centred 140180 close to Whenuakura River 5.3 km NNW of Kohi; (5) 2 very small lakes centred 161175 4.5 km N of Kohi; (6) 1 very small lake 148152 2.5 km N of Kohi; (7) 1 very small lake 155164 3.5 km WNW of Kohi; (8) 1 very small lake 160197 6.0 km W of Kohi; (9) 1 very small lagoon 162205 7.0 km N of Kohi; (10) group of 5 very small lakes centred 220250 13.0 km NNE of Kohi; (11) group of 4 lakes centred 238180 8.8 km NE of Kohi near Lake Moumahaki; (12) 1 very small lake 244258 3.0 km SSW of Kapara Station; (13) 6 very small lakes centred 252190 10.0 km NE of Kohi; (14) 1 lake 265299 1.5 km NE of Kapara Station; (15) group of 3 lakes 282285 2.3 km E of Kapara Station; (16) 2 lakes 327361 adjacent to Rotokohu 3.0 km NNW of Taumatatahi; (17) Lake Rototuna 329317 1.4 km S of Taumatatahi; (18) lake 340295 3.4 km SSE of Taumatatahi; (19) 4 very small lakes centred 339212 1.0 km NW and NE of Lake Mangawhio; (20) 3 very small lakes 340180 adjacent to Lake Waikare 4.5 km WNW of Orangimea. Maximum altitude shown is 743 m (2438 ft), Mataimoana 523346.



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Sheet N132 - Taihape

1st Ed. 1970

Minor lakes - numerous ponds and dams. Maximum altitude shown is 1116 m (3663 ft), Hihitahi 221340.

Sheet N133 - Whakarara

From NZMS 1 series. Compilation 1:47,520. Date of photography 6-12-65, 15-12-66, 26-1-66.

No lakes shown on this sheet. Maximum altitude shown is 1288 m (4225 ft), Old Ohutu 591271.

Sheet N134 - Napier & Hastings

5th Ed. 1 November 1964

Runanga	135285 14.0km NE of Hastings.	37 R	1.74 3.4	0.6 N	Adjacent to Ngaruroro River in swampland.
Oinga	173307 12.0 km NNW of Hastings.	20 R	0.95 2.1	0.5 NNW	Adjacent to Ngaruroro River in swampland.
Te Roto Kare	218307 5.8 km SW of Taradale.	13 R	0.18 0.7	0.3 E	Close to Tutaekuri and Ngaruroro River in swampland.

Minor lakes - (1) very small lagoons 935206 11.0km W of Maraekakaho; (2) 1 very small lake 055178 2.3 km S of Maraekakaho; (3) lake in swampland 158168 3.5 km SW of Bridge Pa; (4) Potaka lake 171289 2.0km NW of Fernhill. Note: a large number of very small dams and lakes shown all over this sheet. Maximum altitude shown is 475 m (1558ft), 914960.

Sheet N135 - Kidnappers

2nd Ed. 1970

Minor lakes - (1) 2 small lakes 362253 at Haumoana; (2) 11 lakes (7 very small, 3 small, 1 medium) centred 372205 2.2km SW of Te Awanga; (3) 3 very small lakes centred 365410 7.5km SSW of Te Awanga; (4) 1 very small lake 425130 9.5km SW of Cape Kidnappers. Maximum altitude shown is 335m (1100ft), 369124.

Sheet N136 - Patea: Provisional

January 1943

No lakes shown on this sheet. Maximum altitude shown is 79 m (260ft), 070095.



Westmere

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet N137 - Wav 2nd Ed. 1 Dec		1							
Oturi	175048	2.3 km SSW of Waverley.	55	W	0.13	0.8	0.2	N	5.0km from coast behind sand dunes.
Herengawe	195032	3.7 km SSE of Waverley.	40	W	0.13	1.2	0.6	ENE	4.5 km from coast.
Waiau	230031	5.5km SE of Waverley.	55	W	0.29	1.3	0.3	NNW	5.3 km from coast, source of Waiau Stream. Partly surrounded by swamp.
	230973	6.0km SW of Waitotara.	30-61	W	0.16	1.0	0.2	WNW	0.5 km from coast. Surrounded by sandhills.
Okoia	235004	4.0km WSW of Waitotara.	37	W	0.17	1.0	0.2	NNW	On Waiau Stream, draining from Lake Waiau, 3.2 km from coast.
Waikato	312993	3.5 km SE of Waitotara.	30-61	L W	0.08	0.8	0.1	E	Landward side of sand dunes 4.0km from coast.
Marahau	361792	4.0 km SW of Maxwell.	30-61	W	0.11	1.5	0.3	NW	Now consists of 2 separate parts. Coastal lake 1.8 km from coast.

Minor lakes - (1) 2 lagoons centred 182036 3.0 km S of Waverley between Lake Oturi and Lake Herengawe; (2) 2 small lakes centred 200025 4.0 km SSE of Waverley; (3) lake 241018 1.5 km SSE of Lake Waiau known as Brewers Lake; (4) lake 331989 (coastal lake) 5.3 km SE of Waitotara. Note: in sand dune area centred 260960 SE of mouth of Waitotara River 17 lakes are shown amongst sandhills all with pecked boundaries - transient lakes. Maximum altitude shown is 490 m (1610 ft), 546097.

0.04 1.0 0.2

NNW

4.5 km from coast.

93

Sheet N138 - Wanganui: Interim

532908 5.2 km NNE of Castlecliff.

2nd Ed. 1 June 1967

Kaitoke	601828	3.0 km SSE of Durie Hill.	22	W	0.25	1.1	0.2	E	Coastal lake.
Wiritoa	615813	4.5 km SE of Durie Hill.	44	W	0.26	1.6	0.7	NE	Coastal lake.
Pauri	627809	5.5km SE of Durie Hill.	46	W	0.23	1.1	0.3	WNW	Coastal lake.
Ngaruru	953918	5.5 km SW of Otairi School.	150		0.08	0.6	0.4	NW	
Namunamu	967921	4.7 km SW of Otairi School.	190		0.17	0.7	0.4	N	Horseshoe-shaped.



Minor lakes - (1) Virginia Lake 564887 0.5 km N of St John's Hill; (2) 5 lakes including Mudhole, Coe's Hole, Round Hole, Lake Kohata, centred 605820 4.0 km S of Durie Hill, coastal dune type; (3) 5 small lakes centred 675940 4.0 km E of Upokongaro; (4) 2 very small lakes 915865 bush-surrounded; (5) 1 very small lake 897879; (6) 1 very small lake 915922. Maximum altitude shown is 485 m (1590ft), 582090.

From NZMS 1 original compilation 1:47,520. Date of photography 26-1-66.

No lakes shown on this sheet. Maximum altitude shown is 777 m (2550 ft), 250070.

Sheet N140 - Ongaonga

1st Ed. September 1964

No lakes shown on this sheet. Maximum altitude shown is 1734m (5687ft), Mangaweka 550000.

Sheet N141 - Waipawa

2nd Ed. 1 March 1962

Te Roto o Kiwa	087995	9.0 km NNE of Otane.	30 -6 1	S	0.32	1.0	0.3	N	Railway track traverses lake.
Poukawa	12 7 040	14.5 km NNE of Otane.	21	TS	1.63	1.7	1.3	NE	Adjacent to main highway to Hastings, No.2 S.H.
Horseshoe	180870	14.5km ESE of Waipawa.	152-183	3 T?	0.29	1.3	0.3	NW	Horseshoe-shaped lake.

Minor lakes - (1) lake 956999 12.5 km NW of Otane; (2) 5 small lakes 055870 4.0 km E of Waipawa; (3) 2 very small lakes centred 180859 4.5 km W of Elsthorpe near Horseshoe Lake; (4) 2 very small lakes centred 212868 2.0 km SW of Elsthorpe; (5) lake 240920 4.0 km NNE of Elsthorpe; (6) Lake Hapua 249990 10.5 km NNE of Elsthorpe; (7) 2 small lakes centred 252960 8.5 km NNE of Elsthorpe. Maximum altitude shown is 635 m (2081 ft), 304929.

Sheet N142 - Waimarama: Provisional

March 1943

No lakes shown on this sheet. Maximum altitude shown is 395 m (1296 ft), 372061.

Sheet N143 - Marton

2nd Ed. 1 February 1959

Rotokauwau	676794	2.3 km NW of Whangaehu.	30-61	W	0.08	0.8	0.2	NW	Landward side of coastal sand dunes.
Waipu	679731	4.1 km SSE of Whangaehu.	21	W	0.12	8.0	0.4	N	Landward side of coastal sand dunes.
Koitiata	716642	12.0 km WNW of Lake Alice.	20	W	0.23	1.0	0.4	WNW	Landward side of coastal sand dunes.
Vipan	772671	8.3 km NW of Lake Alice.	30-61	W	0.05	0.5	0.1	NW	Landward side of coastal sand dunes.
Hogg (Guddops) (Duddings)	793662	6.0km NW of Lake Alice.	86	W	0.13	0.6	0.2	E	Landward side of coastal sand dunes and exotic plantation.

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes

Bernard		767644	5.0 km WNW of Lake Alice.	79	w	0.12	0.8	0.4	NW	Landward side of coastal sand dunes and exotic plantation.
Heaton		803652	4.6 km NW of Lake Alice.	91-122	W	0.20	1.0	0.4	NW	Landward side of coastal sand dunes and exotic plantation.
Herbert		803618	3.7 km WSW of Lake Alice.	84	W	0.07	0.5	0.15	WNW	Landward side of coastal sand dunes and exotic plantation.
William		823633	2.6 km WNW of Lake Alice.	97	W	0.08	0.8	0.1	WNW	Landward side of coastal sand dunes and exotic plantation.
Alice	* :	842620	1.0 km SW of Lake Alice.	102	W	0.16	0.8	0.2	NW	Landward side of coastal sand dunes and exotic plantation.
		899782	9.0 km NNE of Marton.	213-243	D	0.26	0.8	0.3	NNE	Reservoir.

Minor lakes - (1) 6 lakes centred 630780 (small) SW of Lake Rotokauwau and N of Whangaehu River. Coastal sand dune types; (2) 5 small lakes centred 690710 adjacent to Turakina River, fluviatile type, 4.0 km SW of Turakina; (3) 1 small lake 727724 1.1 km SSW of Turakina; (4) 4 lakes centred 730610 11.5 km W of Lake Alice in sand dunes; (5) 1 pond 752651 9.0 km WNW of Lake Alice; (6) 3 lakelets centred 770650 7.7 km WNW of Lake Alice; (7) 1 small lake 776669 SE of Lake Vipan; (8) 1 small lake 790662 NW of Lake Hogg; (9) 1 pond 818611 1.0 km SE of Lake Herbert; (10) 1 small lake 848616 SE of Lake Alice; (11) 2 ponds centred 765525 12.0 km SW of Bulls; (12) 2 small lakes centred 885735 4.0 km N of Marton. Maximum altitude shown is 315 m (1030 ft), 950798.

Sheet N144 - Feilding

2nd Ed. 1 September 1965

Minor lakes - (1) 1 small lake 139641 adjacent to Kiwitea Stream 2.5 km NNW of Cheltenham; (2) 1 small lake 342695 7.5 km E of Kimbolton. Maximum altitude shown is 1096 m (3594 ft), Maharahara (M) 390572.

Sheet N145 - Dannevirke

2nd Ed. 1 March 1962

619525	5.3 km E of Dannevirke.	183-213 R	0.53	0.7	0.1	N	Shown on N145 and Aerial Photographs 1942, Dores Stream dammed by land slip. Aerial Photograph 1963 shows no lake.
643504	8.0km SE of Dannevirke.	152-183 R	0.04	0.8	0.1	NNE	Horseshoe-shaped lake cut off from stream.



Minor lakes - (1) 1 small lake 656357 9.0 km ENE of Dannevirke; (2) 1 small lake 812596 10.0 km SE of Ormondville; (3) dam (small) 859689 8.0 km SE of Takapau. Maximum altitude shown is 1258 m (4130 ft), Takapari 512692.

Purimu	916609	4.5 km W of Wanstead.	61-91		0.24	1.0	0.4	NNW	Contains one island. Several streams flowing in and out.
Hatuma	957753	3.5 km SSW of Waipukurau.	130	S	2.00	2.4	1.1	NNW	In swampland.
	954737	5.0 km SSW of Waipukurau.	122-152	S	0.04	0.6	0.1	NE	0.5 km S of Lake Hatuma in swampland.
	015523	0.5 km S of Wallingford.	30-61		0.04	0.6	0.1	NE	Lagoon in wet weather.
Long Range	188612	8.5 km N of Black Head Point.	152-183		0.08	0.5	0.2	NE	Surrounded almost completely by plantation.
	217727	9.0km NW of Paoanui Point.	152-183		0.16	0.9	0.2	NE	One island.

Minor lakes - (1) 3 lagoons 935705 4.0 km SSW of Hatuma Lake. Note: Many small lakes and dams shown on this sheet. Maximum altitude shown is 501 m (1643 ft), Omakere.

No Sheet N147 in series

Sheet N148 - Tangimoana

2nd Ed. 1 September 1953

	772261	4.5 km NNE of Foxton Beach.	W	0.13	0.6	0.3	N	Adjacent to sandhills 2.8 km from coast. Has small lake north of it.
	772470	4.0 km NNE of Tangimoana.	W	0.03	0.6	0.1	NW	Adjacent to sandhills in part swamp, 3.0km from coast.
Koputara	778297	8.0 km NNE of Foxton Beach.	W	0.28	1.0	0.5	NNE	Sand dunes on seaward side, 3.2 km from coast.
Kaikokopu	781327	2.5 km ESE of Himatangi Beach.	W	0.16	0.6	0.4	NW	Adjacent to sandhills 3.0 km from coast.
	777291	7.0 km NNE of Foxton Beach.	W	0.08	0.5	0.2	WNW	0.5 km S of and joined by stream to Lake Koputara.
	779375	4.5 km NNE of Himatangi Beach.	W	0.05	0.6	0.1	WNW	0.5 km N of Pukepuke Lagoon stream to sea 3.0 km away.
Pukepuke Lagoon	782368	4.2 km NNE of Himatangi Beach.	W	0.17	0.7	0.4	NW	Adjacent to sandhills 3.0 km from coast.
	798478	5.7 km NE of Tangimoana.	W	0.03	1.2	0.05	W	Ox-bow lake 5.5 km from coast. Swampland.
	801465	5.0 km NE of Tangimoana.	W	0.03	0.9	0.05	NNW	Long narrow lake 5.5 km from coast.

National Altitude Area Max. May	Name		Geographical Position	Altitude (m) Typ					Notes
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Omanuka Lagoon	836385	9.0 km NE of Himatangi.	W	0.17	1.1	0.2	NW	8.5 km from coast in farm land, low sandhills.
	995282	4.1 km NE of Opiki.	R	0.03	0.8	0.1	NE	Ox-bow lake adjacent to Manawatu River.

Minor lakes - (1) 8 other small lakes shown on this sheet, all coastal type W lakes. Maximum altitude shown is 132 m (431 ft), Mt Stewart 989491.

Sheet N149 - Palmerston North

3rd Ed. 1 February 1959. Reprint November 1961.

Karere Lagoon	026294	9.0 km SW of Palmerston North square.	0-30	R	0.07	1.0	0.1	NNW	Ox-bow lake adjacent to Manawatu River.
Hokowhitu	119336	2.0 km SE of Palmerston North square.	30-61	R	0.04	0.6	0.05	N	Ox-bow lake adjacent to Manawatu River.
Tiritea Dam	163255	10.5 km SE of Palmerston North square.	130	D	0.13	0.9	0.2	NNE	Palmerston North water supply. Tiritea Stream flows into it. Surrounded by plantation in water conservation reserve.
	187380	8.1 km ENE of Palmerston North square.	30-61	R	0.07	0.7	0.1	N	Adjacent to river.

Minor lakes - (1) number of fluviatile lakes (associated with rivers) shown on this sheet, all close by the rivers Oroua, Manawatu, Mangahao, Mangatainoka and Tiraumea which run NE-SW across this sheet. Maximum altitude shown is $910 \, \text{m}$ ($3020 \, \text{ft}$), Wharite 333474.

Sheet N150 - Weber

1st Ed. 1 November 1955

Minor lakes - (1) small lake Rotoataha 629362 and several others very small. Maximum altitude shown is 803 m (2534 ft), Summit Puketoi range 575223.

Sheet N151 - Porangahau

1st Ed. 1 May 19655

No lakes shown on this sheet. Maximum altitude shown is 306 m (1006 ft), 971257.



Sheet N152 - Levin: Interim

3rd Ed. 1 December 1965

Waiorongomai	670919	6.3 km W of Manakau.	W	0.11	0.5	0.4	NNE	Surrounded by scrub and swamp, 1.0km from coast. Waiorongomai Stream flows to sea.
Waitawa	696903	4.0 km WSW of Manakau.	W	0.32	1.1	0.2	ENE	4.0 km from coast. Two arms off main body of lake.
Kopureherehere	699909	4.0 km WSW of Manakau.	W	0.11	0.6	0.1	WNW	4.0km from coast. Irregular shape.
Papaitonga	745000	5.5 km SW of Levin	W	0.55	1.2	0.7	NW	5.0 km from coast. Two islands. Half perimeter surrounded by bush.
Horowhenua	775042	3.0 km WNW of Levin.	W	3.89	3.3	2.0	NE	
	915163	1.5 km SE of Moutoa.	R	0.03	0.5	0.1	E	Adjacent to Manawatu River. Ox-bow lake.
Mangahao Upper No.1 Reservoir	980020	6.5 km SSE of Mangaore.	D	0.32	1.1	0.7	NE	Man-made dam fed by Mangahao River. Used for hydro-electric power generation.
Mangahao Lower No.2 Reservoir	990045	5.0 km SSE of Mangaore.	D	0.34	3.3	0.1	NNE	Man-made dam fed by Mangahao River below No.1 Reservoir. Used for hydro- electric power generation.
Tokomaru No.3 Reservoir	984073	3.0km SE of Mangaore.	D	0.04	0.6	0.1	NE	Fed via tunnel from No.2 Mangahao Reservoir and Arapeti Stream. Horseshoe- shaped. Used for hydro-electric power generation.

Minor lakes - (1) some small lakes are shown which are associated with the Manawatu River at the top of this sheet; (2) some small lakes associated with coastal sand dunes are grouped to the NW of Lake Horowhenua about 4.0 km from the coast. Maximum altitude shown is 1500 m (4920 ft), Mt Dundas 951903 Tararua ranges.

Sheet N153 - Eketahuna: Interim

2nd Ed. 1 December 1965

No lakes shown on this sheet. Maximum altitude shown is 1279 m (4195 ft), Mr Ruapae (L) 001947.

Sheets N154 & N155 - Pongaroa & Turnagain

1st Ed. 1 December 1967

No lakes shown on this sheet. Maximum altitude shown is 780 m (2560 ft), Mt Butters 498102.

Sheets N157 & Part N156 - Otaki

2nd Ed. 1 July 1964

681893 3.0 km NNE of Otaki township.

0-31

0.080.7 0.2

NW

Horseshoe-shaped lake 2.5 km from coast.



Sheets N157 & Part N156 continued

Minor lakes - (1) a few small lakes and lagoons shown in swampland in sandhills close to coast, Waikanae, Te Horo area, and tarns are shown near Mt Hector and at north boundary of sheet including Lake Hollow. Maximum altitude shown is 1530 m (5016 ft), Mt Hector 799629.

Sheet N158 - Masterton: Interim

2nd Ed. September 1967

Minor lakes - (1) 2 very small lakes 129782. Maximum altitude shown is 1105 m (3623 ft), Te Mara 012810.

Sheet N159 - Tinui : Interim

2nd Ed. 1 September 1965

No lakes shown on this sheet. Maximum altitude shown is 475 m (1557 ft), Mt Percy 688800.

Sheet N160 - Hutt

3rd Ed. August 1965

No lakes shown on this sheet. Maximum altitude shown is 804 m (2637 ft), Wainui 520552.

Sheet N161 - Rimutaka: Interim

2nd Ed. 1968

803386	5.0 km SW of Featherston.	0-15	S	0.03	0.8	0.4	NNW	In swampland close to shores of Lake Wairarapa.
823315	10.5 km S of Featherston.	0-15	R	0.11	0.7	0.2	NNE	In swampland and scattered scrub.
829365	6.0 km S of Featherston.	0-15	S	0.16	0.6	0.3	NW	In swampland close to shores of Lake Wairarapa.
834339	8.0 km S of Featherston.	0-15	R	0.08	0.5	0.2	NNE	In swamp and scrub.
836338	8.0 km S of Featherston.	0-15	R	0.07	0.5	0.1	NNE	In swamp and scrub.
836356	6.3 km S of Featherston.	0-15	S	0.09	0.6	0.3	NNE	In swamp and scrub.

Minor lakes - (1) other smaller lakes scattered amongst those above all in an area adjacent to Lake Wairarapa shores east side plus one small lake, Rototawai 4.0 km from the lake shore. Maximum altitude shown is 1191 m (3905 ft), 762566.

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Sheet N162 - Wairarapa: Interim

2nd Ed. 1 May 1966

 $018457 \quad 7.5 \text{ km S of Carterton.} \qquad \qquad 30\text{-}61 \quad \text{R} \qquad 0.01 \quad 0.8 \quad 0.1 \quad \text{NW} \qquad \text{Ox-bow lake cut off from Ruamahanga River.}$ Kourarau Dam $186455 \quad 5.0 \text{ km ESE of Gladstone.} \qquad 305\text{-}335 \quad D \quad 0.15 \quad 0.8 \quad 0.4 \quad \text{NNE}$

Minor lakes - (1) a few very small lakes shown. Maximum altitude shown is 579 m (1898 ft), Rewa 442499.

Sheet N163 - Whareama: Interim

2nd Ed. 1 August 1966

No lakes shown on this sheet. Maximum altitude shown is 484m (1587 ft), Flagstaff No.3 452576.

Sheet N164 - Wellington

3rd Ed. June 1967

Kohangapiripiri	412128 0.8 km ESE of Pencarrow Head.	0-30 B	0.18 0.6	0.2 NNE	Cameron Creek flows into N end. Lake drains to sea. Swampland sur- rounding.
Kohangatera	420120 1.8 km SE of Pencarrow Head.	0-30 B	0.16 0.8	0.3 N	Gollans Stream flows into N end. Drains to sea. Swampland surrounding.
	441290 1.5 km E of Petone.	0-30 R	0.04 1.1	0.1 NNW	Ox-bow lake adjacent to Hutt River.
Morton Dam	540248 4.0 km E of Wainuiomata.	122-152 D	0.05 0.8	0.4 NE	On Wainuiomata River (Wellington City water supply).

Minor lakes - (1) small lake $314211\ 3.0\,\mathrm{km}\ W$ of Oriental Bay. Maximum altitude shown on this sheet is $858\,\mathrm{m}$ (2815 ft), The Peak 504092.

Sheet N165 - Onoke: Interim

2nd Ed. 1 May 1966

Pounui	645150	6.0km NE of Lake Ferry.	0-15	T?	0.47	1.4	0.6	E	Scrub surrounded.
Kiriwai Lagoon	636103	3.5km WNW of Lake Ferry.	0-15	В	0.04	0.5	0.2	WNW	Bar lake associated with shoreline situated at base of gravel bar of Lake Onoke.
Onoke	660106	1.8 km NW of Lake Ferry.	0-15	В	7.1	3.3	2.8	NW	Separated from sea by gravel bar.
	685154	5.5 km NNE of Lake Ferry.	0-15	R	0.03	0.6	0.1	NE	On Battery Island, in swamp adjacent to Ruamahanga River.
	686152	5.4 km NNE of Lake Ferry.	0-15	R	0.09	0.5	0.3	NNE	On Battery Island, in swamp adjacent to Ruamahanga River.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
	690155	5.8 km NNE of Lake Ferry.	0-15	R	0.11	0.6	0.3	N	On Battery Island, in swamp adjacent to Ruamahanga River.
	726186	2.2 km NW of Kohunui Maori settlement.	0-15	R	0.11	1.0	0.1	NE	Adjacent to Ruamahanga River. Swampy
Pouawha Lagoon	745200	2.7 km N of Kohunui Maori settlement.	0-15	R	0.76	1.4	0.7	NE	Adjacent to Ruamahanga River. Swampy
	749192	2.0km N of Kohunui Maori settlement.	0-15	R	0.24	0.8	0.5	NNW	Adjacent to Ruamahanga River. Swampy
Rangatea Lagoon	757200	2.8 km NNE of Kohunui Maori settlement.	0-15	R	1.05	1.3	1.1	NE	Adjacent to Ruamahanga River. Swampy
40	757215	4.1 km NNE of Kohunui Maori settlement.	0-15	R	0.29	0.8	0.6	NW	Adjacent to Ruamahanga River. Swampy
	758248	6.4 km NNE of Kohunui Maori settlement.	0-15	R	0.03	0.7	0.1	NNW	In Wairio Farm settlement.
Wairarapa	760295	14.0 km SSW of Featherston.	0-15	TR	80.68	18.2	9.6	NE	
	762216	4.5km NNE of Kohunui Maori settlement.	0-15	R	0.18	0.8	0.3	WNW	In Wairio Farm settlement.
	766254	7.6 km NNE of Kohunui Maori settlement.	0-15	R	0.26	1.1	0.3	NW	In Wairio Farm settlement.
	766242	6.8 km NNE of Kohunui Maori settlement.	0-15	R	0.13	0.9	0.2	NNW	In Wairio Farm settlement.
	769260	8.3 km NNE of Kohunui Maori settlement.	0-15	R	0.16	0.9	0.3	NW	In Wairio Farm settlement.
Te Opai Lagoon	775225	5.6 km NNE of Kohunui Maori settlement.	0-15	R	2.79	2.4	1.5	NNE	Adjacent to Ruamahanga River. Swampy
	786251	8.3 km NNE of Kohunui Maori settlement.	0-15	R	0.95	2.0	1.0	NNE	Adjacent to Ruamahanga River and Lake Wairarapa.
Boggy Pond Lagoon	788266	9.8 km NNE of Kohunui Maori settlement.	0-15	R	0.68	1.7	0.7	NNE	Adjacent to Ruamahanga River and Lake Wairarapa.
	799265	9.6 km NNE of Kohunui Maori settlement.	0-15	R	0.18	2.1	0.2	N	Adjacent to Ruamahanga River and Lake Wairarapa.
	801281	11.5 km NNE of Kohunui Maori settlement.	0-15	R	0.02	0.6	0.2	NNE	Adjacent to Ruamahanga River and Roto Farm settlement.

819292	13.0 km NNE of Kohunui Maori settlement.	0-15	R	0.05	0.8	0.1	NNW	Adjacent to Lake Wairarapa. Swampy.
825227	9.1 km NE of Kohunui Maori settlement.	0-15	R	0.05	0.9	0.1	NNE	Ox-bow lake adjacent to Ruamahanga River.
830259	11.3 km NE of Kohunui Maori settlement.	0-15	R	0.04	0.5	0.2	NNE	Adjacent to Ruamahanga River.
856256	13.1 km NE of Kohunui Maori settlement.	0-15	R	0.05	1.0	0.1	N	Adjacent to Ruamahanga River. Ox-bow.

Minor lakes - Number of small lakes shown close to Lake Wairarapa and Ruamahanga River in swampland. Maximum altitude shown is 984 m (3226 ft), Mt Ross 862013.

Note: Since publication of this sheet the Ruamahanga River has been diverted and no longer flows into Lake Wairarapa. The new river course is approximately from near Te Hopai (755208) to Long Point Island (715180). Lakes and lagoons on Battery Island and east of the new river course have been drained.

Listed lakes on Battery Island 685154, 686152, and 690155, Pouawha Lagoon 745200, Rangatea Lagoon 757200, 726186, 749192 and associated minor lakes no longer exist. Some lagoons W of the river diversion are at present being drained (December 1973).

Sheet N166 - Pahaoa

1st Ed. 1 December 1957

No lakes shown on this sheet. Maximum altitude shown is 667 m (2176 ft), Mt Adams 244184.

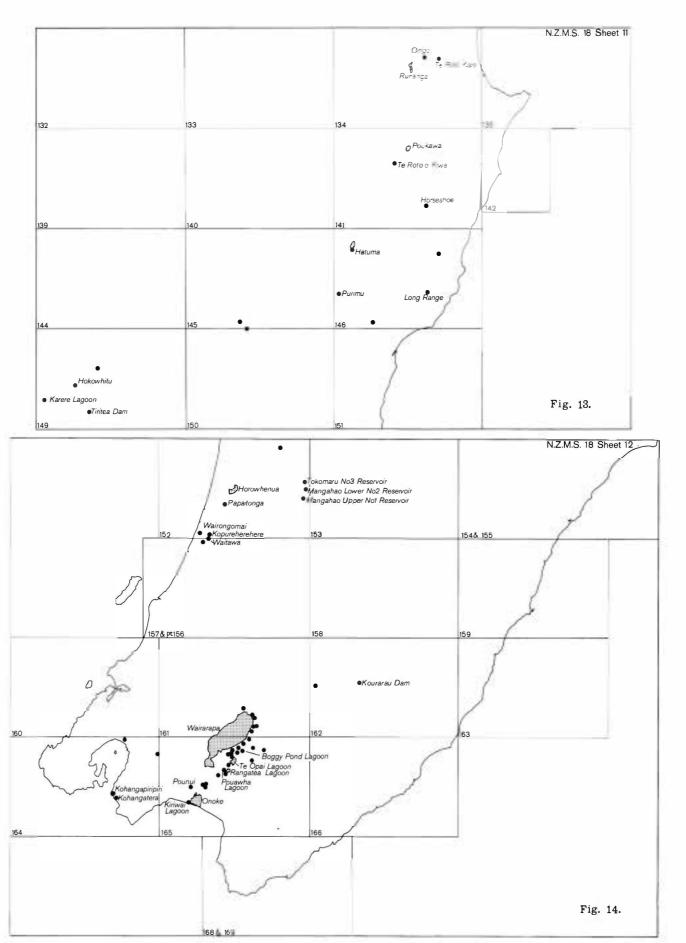
No Sheet N167 in series

Sheets N168 & N169 - Palliser

1st Ed. 1 June 1953

No lakes shown on this sheet. Maximum altitude shown is 796 m (2809 ft), Mangatoetoe 818866.





- Fig. 13. NZMS 1 Sheets N132-135, 139-142, 144-146, 149-151 showing locations of listed lakes.
- Fig. 14. NZMS 1 Sheets N152-169 showing locations of listed lakes.

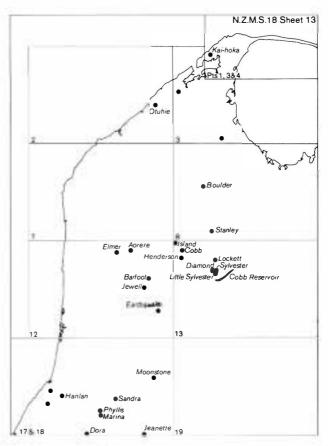


Fig. 15. NZMS 1 Sheets S1-4, 7, 8, 12, 13, 17-19 showing locations of listed lakes.

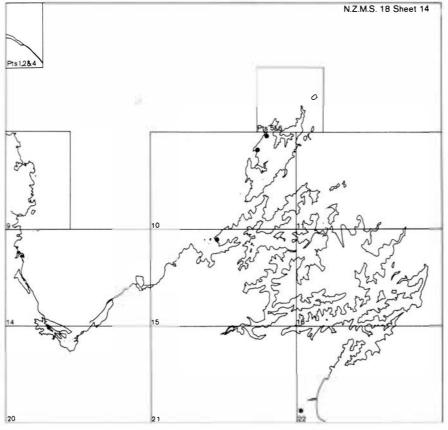


Fig. 16. NZMS 1 Sheets S5, 6, 9-11, 14-16, 20-22 showing locations of listed lakes.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Type Area	Max.	M	Major axis dir.	Notes	
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Sheets Parts S1, S3 & S4 - Farewell: Provisional

August 1945

Kaihoka Lakes 018178 9.8 km SW of Cape Farewell, 30-61 0.03 0.6 0.2 NW 1.0 km from coastline partly surrounded by bush.

Minor lakes - (1) 7 small lakes adjacent to coast centred 060230; (2) 1 Lake Kaihoka 022178. All probably coastal lakes. Maximum altitude shown on this sheet 455 m (1494 ft) 076106.

Sheet S2 - Kahurangi

1st Ed. 1 May 1963

150 Za. 1 May 100

Otuhie

850020 4.2 km S of Paturau River entrance.

L? 0.80 2.5 0.6 NW

Drains via Sandhills Creek to sea 1.3 km away.

Minor lakes - (1) 10 small lakes 0-0.8 km from coastline centred 875085, 832040, 765970, 665908. All probably coastal lakes. Maximum altitude shown on this sheet 497 m (1629 ft) Macpherson Knob 874973.

Sheet S3 - Collingwood: Interim

2nd Ed. September 1967

Kaihoka Lakes - See Sheets Parts S1, S3 & S4

912063 16.9 km WNW of Collingwood. S 0.13 0.8 0.3 NE In swampland 3.0 km from S arm of Wanganui inlet.

052917 10.8 km SSW of Collingwood. D 0.15 0.7 0.4 NW In an old gold-working area, sluicing dam.

Minor lakes - (1) 4 small lakes centred 910070 in swamp 3.0 km from S arm of Wanganui inlet; (2) 4 very small dams in gold-working area SSW of Collingwood centred 065940; (3) very small dam 053017. Maximum altitude shown on this sheet 905 m (2972 ft) Mt Higgins 943943.

Sheets Parts S5 & S6 - Stephens : Provisional

September 1944

No lakes shown on this sheet. Maximum altitude shown on this sheet 384 m (1259 ft) Tower 177915.



Shoot 87 - Heaphy: Interim

1st Ed. 1 May 1965

No lakes shown on this sheet. Maximum altitude shown on this sheet 1469 m (4816 ft) Mt Gouland 816700.

Sheet S8 - Takaka: Interim

2nd Ed. 1968

Boulder Lake	994765	19.9 km ESE of Takaka (central).	G?	0.50	1.2	0.5	NNW	Formed by glacial activity.
Lake Stanley	020631	23.3km SW of Takaka.	 L	0.70	2.1	0.4	WNW	Formed by landslide blocking Stanley River: caused by earthquake.

Minor lakes - (1) 3 small lakes near Boulder Lake including Lake Clara and Darby Pond, glacial type;

- (2) 8 small lakes in Douglas Range centred 970670 including Adelaide Tarn. Probably all of glacial origin;
- (3) 15 small lakes in Anatoki and Devil Range centred 050680. Some probably of glacial origin, others formed by slips caused by earthquakes, e.g., lake centred 058637 on Lindsay Creek. Maximum altitude shown on this sheet 1768 m (5804 ft) Kakapo peak 974613.

Sheet S9 - Adele

1st Ed. 1 April 1948

No lakes shown on this sheet. Maximum altitude shown on this sheet 746 m (2449 ft) 355713.

Sheet S10 - D'Urville: Provisional

February 1945

132846	1.8 km NE of entrance to Greville Harbour.	0-30	В	0.50	1.5	0.5	N	Bar-type lake formed behind sandbank in low land between two points. South end of lake is swampy.
162892	7.1 km NNE of entrance to Greville Harbour.	0-30	В	0.10	0.6	0.1	NNW	Small lagoon at head of Otu Bay formed in low land behind beach. S end of lake swampy.

Minor lakes - (1) small lagoon 100692 close to coastline. Maximum altitude shown on this sheet 777 m (2550 ft) Mt Shewell 163610.

Sheet S11 - Chetwode: Provisional

July 1944

No lakes shown on this sheet. Maximum altitude shown on this sheet 551 m (1806 ft) 296606.



Name Grid Ref. Geographical Position (m) Type sq km lgth wdth axis Notes km km dir.	Name	National Grid Ref.	Geographical Position	Altitude (m)	'WDA	7111	h wdth		Notes
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Sheet S12 - Karamea: Interim 1st Ed. 1 December 1965

Elmer	725566	5.9 km ESE of Gunner Downs.	2	G?	0.25	1.0	0.3	NNE	In Tasman Mountains.
Aorere	766570	9.3 km ESE of Gunner Downs.	27	G?	0.15	0.5	0.2	NW	In Tasman Mountains.
Jewell	812455	25.1 km NE of Karamea.	-	G?	0.25	1.0	0.4	WNW	
Barfoot	824481	27.3 km NE of Karamea.	-	G?	0.09	0.6	0.3	NNW	
Earthquake Lakes	854390	27.6 km ENE of Karamea.	4.1	L	0.55	3.3	0.2	ENE	Karamea River dammed by earthquake slips.
*	552350	0.3 km W of golf course.		W	0.05	0.6	0.1	N	

Minor lakes - (1) 1 small lake, Rotopai 797478; (2) 1 small lake adjacent to Karamea River at coast 552350; (3) 2 small lakes centred 813428. Maximum altitude shown on this sheet 1615 m (5300 ft) Mt Domett 746565.

Sheet S13 - Cobb

2nd Ed. 1 November 1963

Island Lake	910587	2.9 km NNW of Mt Cobb.		G	0.10	0.6	0.2	NNW	
Henderson	926547	1.1 km SSE of Mt Cobb.	1280-1311	G	0.20	1.0	0.3	NW	
Cobb	932572	1.5 km NNE of Mt Cobb.	1037-1066	G	0.25	1.0	0.3	W-E	
Diamond Lake	023532	9.5 km ESE of Mt Cobb.	1189-1220	G?	0.05	0.5	0.1	WNW	In group of lakes known as Diamond lakes.
Little Sylvester	034502	11.6 km SE of Mt Cobb.	1311-1341	G?	0.05	0.5	0.2	WNW	In group of lakes known as Diamond lakes.
Lockett	035540	10.5 km E of Mt Cobb.	1289	G?	0.10	0.5	0.5	NNW	In group of lakes known as Diamond lakes.
Sylvester	037506	11.7 km ESE of Mt Cobb.	1321	GD	0.30	0.8	0.4	NW	In group of lakes known as Diamond lakes.
Cobb Reservoir	063490	14.5 km ESE of Mt Cobb.	808	D	1.55	5.9	0.3	NE	Man-made dam for hydro-electric power generation. Fed by Cobb River from Lake Cobb. Drains by Cobb River to Takaka River.



Sheet S14 - Motueka

2nd Ed. June 1967

No lakes shown on this sheet. Maximum altitude shown on this sheet 657 m (2154 ft) 741400.

Sheet S15 - Rai

2nd Ed. 1 December 1964

005566 4.2 km ENE of Croiselles 0-30 B 0.40 0.9 0.9 NNW Separated from the sea by a shingle bar. Harbour entrance.

Maximum altitude shown on this sheet 1134 m (3717 ft) Mt Duppa 832357.

Sheet S16 - Queen Charlotte

2nd Ed. 1 December 1964

No lakes shown on this sheet. Maximum altitude shown on this sheet is 1205 m (3951 ft) Mt Stokes 391497.

Sheets S17 & S18 - Little Wanganui: Interim

1st Ed. 1 November 1965

	508098	8.0 km S of Little Wanganui.		L	0.25	1.7	0.3	NNW	Formed by landslides in Falls Creek.
	518137	4.3 km S of Little Wanganui.			0.10	0.8	0.2	NNE	Formed in Glasseye Creek.
Hanlan	554124	6.3 km SE of Little Wanganui.	*	(4)	0.10	1.1	0.4	NW	
Dora	626000	19.4 km SSE of Little Wanganui.	91 m	*	0.15	0.9	0.2	NNE	Drains into Mokihinui River.
Phyllis	677077	172 km SE of Little Wanganui.	•	L	0.10	0.5	0.3	N-NNE	Formed by landslide in Hemphill River. Drains to Lake Marina. In rough country with numerous earthquake-caused slips.
Marina	676065	18 km SSW of Little Wanganui.	*	L	0.10	0.7	0.3	NNW	Formed by landslide in Hemphill River. In rough country with numerous earthquake- caused slips.
Sandra	726111	20.4 km ESE of Little Wanganui.	121	L	0.05	0.5	0.2	NNW	In Left Branch of Allen River, formed by landslide. Situated in rough country with numerous earthquake-caused slips.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes	
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Drains to Matiri River, Sheet S25. 30.5 km SE of Little Wanganui. 0.3 NNW Jeanette 806008 0.20 0.2 NE In Karamea River. Situated in rough broken 842172 29.1 km E of Little Wanganui. 1.5 Moonstone Lake country with numerous earthquake-caused slips.

Minor lakes - (1) small lake centred 485036; (2) sinkhole 501131; (3) Swampy Tarn 595246; (4) Shag Tarn 620233; (5) 7 small lakes and tarns situated in Radiant Range centred 660130, including Lake William and Fiddle Lake; (6) 2 small lakes named Black Lakes centred 735186 near Mt Brilliant; (7) 5 tarns centred 758258 in area called Twenty-four Tarn Basin; (8) Bellbird Lake 775246; (9) 8 tarns centred 725160 in Allen Range; (10) small lake 799235 flows to Mercury Creek; (11) 1 tarn 796138 at head of Lost Valley Creek; (12) small lake 806013 joins listed lake 806008; (13) small lake 858156 on Meteor Creek; (14) Luna Lake 882139, source of Luna Stream to North Branch Wangapeka River; (15) Kinzett Tarn 883164 flows to Kinzett Stream; (16) 1 tarn on Meteor Creek 858154. Note: All the listed and minor lakes on this sheet lie in rough broken country with heavy bush, parts of which have numerous earthquake-caused slips. Maximum altitude shown on this sheet is 1752 m (5750 ft) Mt Kendall 822193.

Sheet S19 - Tadmor

2nd Ed. 1 June 1963

No lakes shown on this sheet. Maximum altitude shown on this sheet 1752 m (5750 ft) 953018.

Sheet S20 - Nelson

3rd Ed. 1 June 1964

Minor lakes - (1) small reservoir 641244 4.0 km SSE of Nelson City; (2) dam shown 616194 on Roding River. Water-pipe-line tunnel leads from dam northwards towards Nelson. Maximum altitude shown on this sheet is 1761 m (5777 ft) Mt Richmond 732047.

Sheet S21 - Kaituna: Interim

3rd Ed. 1 June 1965

Minor lakes - (1) 5 very small lakes shown 995278 adjacent to and connected to Pelorus River, R-Type. Maximum altitude shown on this sheet 1642 m (5390 ft) Mt Fishtail 823079.



Sheet S22 - Picton

2nd Ed. 1 November 1962

261038 1.3 km NE of Grovetown. 0-30 R $0.15 \quad 2.2$ 0.1 NE Ox-bow lake, cut off from Wairau River. Closest point 0.1 km from river.

Minor lakes - (1) very small lake 214019 adjacent to Wairau River. Maximum altitude shown on this sheet is 1037 m (3401 ft) Mt Robertson 308186.

Sheets S23 & S24 - Westport : Interim

2nd Ed. July 1967

	991717	9.5 km W of Westport.	0-30	D?	0.15	1.1	0.4	NNW	In an old gold-working area, probably man-made dam.
	055702	4.0 km SW of Westport.	30-61	D	0.50	1.5	0.5	NE	In an old gold-working area. Man-made dam.
Gillows Dam	070702	3.0 km SSW of Westport.	30-61	D	0.10	0.5	0.3	NW	In an old gold-working area. Man-made dam.

Minor lakes - (1) Lake Rochfort 205714 10.3 km E of Westport; (2) very small dam 445952; (3) lake 064690. Maximum altitude shown on this sheet 1103 m (3620 ft) Mt Frederick 315786. Note: A large expanse of water shown as swamp exists centred 030715.

Sheet S25 - Matiri: Provisional

March 1943

Perrine	608178	14.9 km ENE of Seddonville.	75.0	8	0.35	1.2	0.5	NE	On the Mokihinui River, near junction of N and S branches of river. Shown as part of main river course. Bush-surrounded.
Matiri	757844	10.2 km WNW of Owen River at the Buller River junction.	298		0.70	1.3	0.6	N	On Matiri River. Shown as part of main river course. Bush-surrounded.

Minor lakes - (1) small lake 880831 adjacent to Owen River. Maximum altitude shown on this sheet is 1458 m (4780 ft) 512900.

Sheet S26 - Hope: Interim

2nd Ed. 1 November 1965

Minor lakes - (1) numerous tarns and sinkholes noted in mountainous country N of Mt Owen 952978 in NW corner of sheet. Maximum altitude shown on this sheet 1876 m (6153 ft) Mt Owen 949967.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	мах. lgth km	wdth km	major axis dir.	Notes

Sheet S27 - Wairau: Interim 2nd Ed. 1 November 1965

Chalice 650934 10.9 km WNW of Hillersden.

. 0.50 2.3 0.5 NE

In rough mountainous country 5.5 km from Wairau River; surrounded by bush and scrub. A source of the Goulter River which flows to the Wairau River.

Minor lakes - (1) 7 tarns centred 400850 in rough mountainous country in catchment of Motueka River Right Branch; (2) tarns centred 377755 The Plateau; (3) tarn 474789 in scattered-scrub country; (4) tarn 521958 in mountainous country. Maximum altitude shown on this sheet 1787 m (5859ft) 665706.

Sheet S28 - Blenheim

2nd Ed. 1 December 1963

Minor lakes - (1) small lake 216916 adjacent to Taylor River 7.0 km SSW of Blenheim, R-type lake; (2) Lake Alexander 967708 36 km SW of Blenheim, bush-surrounded. Maximum altitude shown for this sheet 1694 m (5553 ft) Altimarlock 071701.

Sheet S29 - Seddon

2nd Ed. 1 October 1962

Grassmere 425725 9.2 km SE of Seddon.

-30 B 13.40 5.5 3.6 NW

Separated from the sea by sand dunes.

452728 11.4 km SE of Seddon.

0-30 W 0.02 0.5 0.2 NW

In sand dunes. Coastal lake.

Minor lakes - (1) 22 small lakes centred 330960 around Upper and Big Lagoon 12km SE of Blenheim, situated in low-lying swampland, B- and W-type lakes; (2) Lake Jasper 255806 8.0km W of Seddon; (3) lagoon 368692; (4) tarn 510694. Maximum altitude shown on this sheet 558 m (1830 ft) 252699.

Sheet S30 - Charleston: Provisional

December 1943

945496 4.4 km SSE of Charleston Point. 161

0.40 1.0 0.6 NW

In an area of old gold workings with dams, water races and shafts.

Minor lakes - (1) 5 small dams centred 932510 in area of old gold workings, 3.0 km S of Charleston Point; (2) 4 small lakes or dams including a lagoon centred 965560 3.5 km NW of Charleston Point. Maximum altitude shown on this sheet 397 m (1300 ft) 930443.



Rahui

335650 7.9 km NW of Buller.

122-152 - 0.20 1.3 0.3 NE

Drains by Rahui Creek to Orikaka or Mackley River thence to Buller River.

Minor lakes - (1) 6 small lakes or dams in abandoned gold-working area centred 050650; (2) reservoir 153692 Westport water supply from Orowaiti River. Maximum altitude shown on this sheet 1501 m (4925 ft) Mt Uriah 128407. Note: Gillows Dam 071696 shown at NW corner of sheet is not listed. Shown on Sheet S24 which is of later date and from aerial photography.

Sheet S32 - Murchison: Provisional

June 1943

Mud Lake

67

743597 4.4 km S of Murchison.

152-183 L? 0.75 2.5 0.6 N

Probably formed by slip on Matakitaki River which flows in and out of the lake.

Minor lakes - (1) lake 528414; (2) Lake Caslani 692550; (3) small lake 759538 on Eight Mile Creek (possibly Eight Mile Lake - referred to by Fyfe 1968). Maximum altitude shown on this sheet 1600 m (5250 ft) Mt Mantell 709452.

Sheet S33 - St Arnaud

2nd Ed. 1 February 1963

Rotoroa	037600	18.0 km SW of St Arnaud.	444	G	21.40	14.4	2.9	NNW	D'Urville and Sabine rivers flow in S end, drained by Gowan River at N end. In Nelson Lakes National Park.
Hinapouri Tarn	127542	13.7 km SW of St Arnaud.	1523	G	0.05	0.5	0.1	NE	Lies between Lakes Rotoroa and Rotoiti in Nelson Lakes National Park.
Angelus	131555	12.5 km SW of St Arnaud.	1523	G	0.19	0.8	0.4	NW	Lies between Lakes Rotoroa and Rotoiti in Nelson Lakes National Park.
Rotoiti	218625	3.0 km from St Arnaud on N shore of Lake.	609	G	9.20	8.5	2.6	N	Travers River flows in S end, drained by Buller River at N end. In Nelson Lakes National Park.

Minor lakes - (1) group 8 tarns in circle 1.5 km radius centred 985449; (2) small tarn 066467 in area S of Mt Misery; (3) 2 tarns centred 136482; (4) 9 small lakes/tarns centred 140560 near Lake Angelus and Hinapouri Tarn; (5) 6 tarns centred 167589; (6) 20 tarns centred 220540 in St Arnaud Range; (7) 1 small tarn 204666 0.4 km from N shore of Lake Rotoiti. Maximum altitude shown on this sheet 2326 m (7631ft) Mt Travers 119424. Note: Areas from 1st Ed. 1943.

Sheet S34 - Saxton: Interim

2nd Ed. May 1967

Minor lakes - (1) 6 tarns centred 375560; (2) 1 tarn 372638; (3) 6 tarns centred 400440; (4) 5 tarns centred 515460;

RY NO NO

ype Area

Max. Max. Major lgth wdth axis km km dir.

Notes

Sheet S34 continued

(5) 2 tams centred 577580. All tams are in high country, 1500-1700 m. Maximum altitude shown on this sheet 2143 m (7030 ft) Scotts Knob 407604.

Sheet S35 - Awatere: Provisional

1943

No lakes shown on this sheet. Maximum altitude shown on this sheet 2886 m (9465 ft) Tapuaenuku 959410.

Sheet S36 - Ward: Provisional

1942

Elterwater

410637 3.3 km NNE of Ward.

0-30 R 0.60 2.2 0.5

NNW In low land 0.8 km from Flaxbourne River.

Maximum altitude shown on this sheet 1243 m (4081 ft) Ben More 273498.

Sheet S37 - Punakaiki: Provisional

1944

Minor lakes - (1) 5 small coastal lakes centred 825105; (2) 2 small coastal lakes centred 832145; (3) 2 small coastal lakes centred 835162. All minor lakes are close to coast in swampland within 3.0 km of Barrytown. Maximum altitude shown on this sheet 1266 m (4150 ft) White Knight 990205.

Sheet S38 - Reefton: Provisional

1945

Minor lakes - (1) small dam 363113 16.8 km SSE of Reefton; (2) small tarn 358114; (3) small dam 361342; (4) Waitahu Dam 371338 6.0 km NE of Reefton. Maximum altitude shown on this sheet 1516 m (4974 ft) Mt Ross 441136.

Sheet S39 - Maruia: Provisional

1943

Minor lakes - (1) small lake 516215; (2) small lake 561156; (3) small lake 567126; (4) tarm 572166; (5) 17 small tarms centred 575225; (6) tarm 581323; (7) lagoon 699220. Maximum altitude shown on this sheet 2225 m (7264 ft) Gloriana Peak 891102. Note: Minor lakes (1)-(5) are all situated in high country (up to 1737 m) in the Victoria Range.



Sheet S40 - Spenser

2nd Ed. 1 February 1965

Constance	052330	7.2 km E of Mt Ella.	(.e/s	G	0.65	1.8	0.6	N	Drains into W branch of Sabine River via underground river and through small Blue Lake 1 km N.
Tennyson	110180	17.4 km W of Tarndale.	1066-1097	G	2.40	3.1	1.2	NNW	On Clarence River.
Sedgemere	281257	6.2 km NNW of Tarndale.	975-1006	G	0.10	0.5	0.2	ENE	In valley between Wairau and Alma Rivers.
Island Lake	295234	4 km N of Tarndale.	975-1006	G	0.13	0.8	0.2	N	In valley between Wairau and Alma Rivers. 1 small island.
Bowscale Tarn	313260	6.5 km NNE of Tarndale.	1006-1037	G	0.25	0.8	0.4	W	In valley between Wairau and Alma Rivers.

Minor lakes - (1) 2 small lakes centred 975377 Tarndale; (2) small lake 986305 drains to D'Urville River; (3) Lake Thompson 032268 1 island; (4) Blue Lake 050345; (5) small lake 057308 drains to Lake Constance; (6) 2 small tarns centred 075228; (7) Princess Bath 077196; (8) small lake 077372 drains to E branch Sabine River; (9) 2 small tarns centred 078268; (10) small lake 103310; (11) 4 small lakes centred 300265 in valley between Wairau and Alma Rivers including Fish Lake. Maximum altitude shown on this sheet 2328 m (7636 ft) Mt Franklin 075358.

Sheet S41 - Molesworth : Provisional

1944

McRae 654190 11.6 km SSE of Molesworth. 887 G? 1.05 1.4 1.0 NE No outlet shown. Swampland to SW of lake.

Minor lakes - (1) lake 370272 adjacent to Severn River. Maximum altitude shown on this sheet $2279\,\mathrm{m}$ (7476 ft) Mt Major 797278.

Sheets S42 & S43 - Clarence: Interim

2nd Ed. 1968

198195 2.4 km SE of Clarence.

R 0.07 0.6 0.1 NW In shingle on Clarence River delta.

Minor lakes - (1) small lake on Clarence River delta, R-type. Maximum altitude shown on this sheet 2866 m $(9400\,\mathrm{ft})$ Mt Alarm 937393.

Sheet S44 - Greymouth

3rd Ed. 1 March 1964

702815 6.0 km SSW of Greymouth. B 0.05 0.9 0.1 NNE Close to coastline behind and parallel to shingle beach.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S44 continued

Minor lakes - (1) very small lake 742946; (2) 2 small lakes including Lake Ryan 1.0 km N of Cobden Point centred 734910; (3) small lake 730894 near Grey River mouth; (4) 3 very small lakes centred 715850; (5) Lake Margaret 909078. Maximum altitude shown on this sheet 1202 m (3940ft) Croesus Knob 889075. Note: All lakes shown on this sheet are adjacent to shoreline behind a shingle beach; probably B-type with the exception of the small lake at Grey River mouth which probably is an R-type lake.

Sheet S45 - Ahaura: Provisional

1945

Hochstetter 144890 14.4 km SE of Ahaura.

256

4.9 3.0 NE

6.60

Bush-surrounded. Dam at SE end. Left branch Nelson Creek flows out of lake.

Minor lakes - (1) 2 lakes 156096 near Mawheraiti River; (2) small lake 218870; (3) Lake Nivalis 406992 adjacent to Grey River. Maximum altitude shown on this sheet 1597 m (5237 ft) Conical Hill 444975.

Sheet S46 - Lewis 2nd Ed. 1 April 1963

Source of Clear Grey River which flows 9.9 km SE of Springs Junction. 2.40 3.7 1.0 WNW 667927 640 G Christabel into Upper Grey River. Three islands. bush-surrounded. 0.531.70.7NNE Source of Frazer Stream which flows to 712064 9.7 km ENE of Springs Junction. 580-609 G Daniells Alfred River and thence to Maruia River, Bush-surrounded.

Minor lakes - (1) very small lake 519974; (2) 2 small lakes centred 590970; (3) tarn 695870 near Mt Hatless; (4) tarn 732912; (5) very small lake 756932; (6) very small lake 784954; (7) 3 tarns centred 843965; (8) tarn 852003; (9) tarn 865095. Maximum altitude shown on this sheet 2213 m (7258ft) 888097. Note: Minor lakes and tarns are in high country and probably are of glacial origin.

Sheet S47 - Jollies : Interim

2nd Ed. 1968

Guyon 034070

0.55 2.1 0.5 NW

Drains to Waiau River. Swampland at SE end.



Minor lakes - (1) Lake Paget 942092; (2) "Little Lake" 001014; (3) 4 very small lakes centred 085014 at about 1370 m; (4) 5 small lakes centred 152930 in swampland near Clarence River. Maximum altitude shown on this sheet 1946 m (6381ft) Mt Clara (N) 080018.

Sheet S48 - Charwell : Provisional

1943

No lakes shown on this sheet. Maximum altitude shown on this sheet 2174 m (7132 ft) Dillon Cone 555083.

Sheet S49 - Kaikoura: Interim

2nd Ed. 1 May 1966

Rotorua 874913 8.3 km W of Kaikoura.

0-30 R 0.55 1.8 0.7 N

Held by Kahutara River and situated between two rivers, Kowhai and Kahutara; 2.0 km from coast.

Minor lakes - (1) Lake Rotoiti (885922) 1.3 km from Lake Rotorua; (2) small lake 890905 1.6 km from Lake Rotorua. Maximum altitude shown on this sheet 2151 m (7058 ft) Mt Saunders 873094.

Sheets S50 & S51 - Hokitika: Interim

2nd Ed. 1 February 1965

Mudgie	714548	17.4 km E of Hokitika.	122-152	S	0.35	1.1	0.4	N	In low-lying land close to Arahura River bed. Surrounded by scrub and swamp.
Kumara Reservoir	722575	18.3 km ENE of Hokitika.	122-152	D	1.30	1.8	1.1	N	Bush-surrounded, in low-lying swampland.
	753659	3.0 km E of Kumara.	122-152	D	0.05	0.7	0.2	W	Bush-surrounded. Water race leads in and out of dam.
Bell Dam	755572	8.8 km SE of Kumara.	152-183	D	0.15	1.0	0.2	N	Bush-surrounded; two creeks. Bell Creek flows N from dam to Taramakau River.
	757537	11.8 km SSE of Kumara.	122-152	٠.	0.01	0.5	0.2	NE	Between Arahura and Taramakau Rivers.
	852668	12.1 km E of Kumara.	152-183	D	0.02	0.6	0.1	NE	Surrounded by bush.
Brunner	950675	21.2 km E of Kumara.	86	GT	36.10	9.4	6.8	NNE	Mostly surrounded by bush. One island (Refuge I.). Main inflow, eastern Hohonu River and Crooked River; outflow Arnold River to the N. Partly on Sheet S52. Maximum depth shown as 109 m. Glacial origin (Morgan 1911).
Poerua	995570	2 km NE of Inchbonnie.	124	R	2.15	4.2	1.0	NE	Bush at each side, also on Sheet S52.

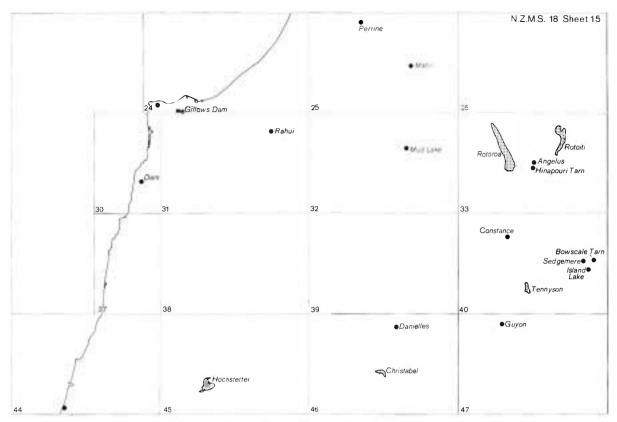


Fig. 17. N ZMS 1 Sheets S24 - 26, 30 - 33, 37 - 40, 44 - 47 showing locations of listed lakes.

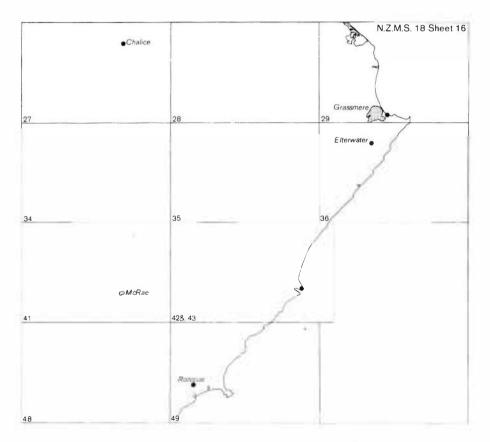


Fig. 18. N ZMS 1 Sheets S27-29, 34-36, 41-43, 48, 49, showing locations of listed lakes.



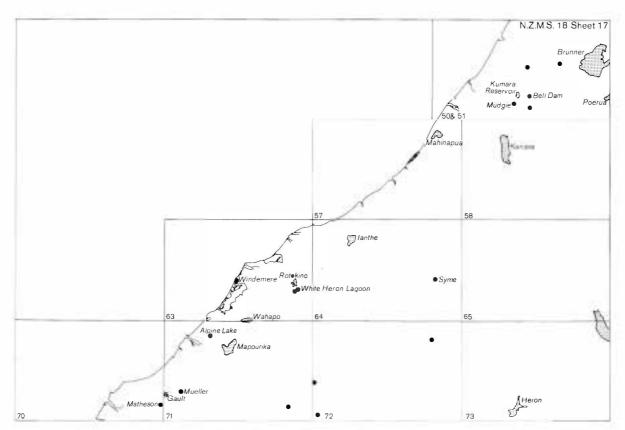
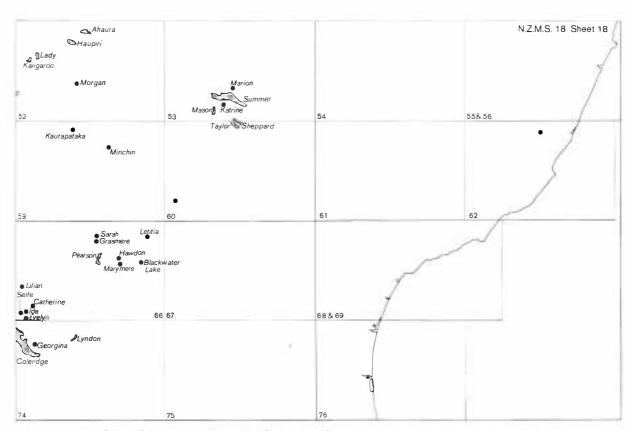


Fig. 19. NZMS 1 Sheets S50, 51, 57, 58, 63-65, 70-73 showing locations of listed lakes.



NZMS 1 Sheets S52-56, 59-62, 66-69, 74-76 showing locations of listed lakes. Fig. 20.

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheets S50 & S51 continued

Minor lakes - (1) 3 small dams centred 578528; (2) lagoon 592628; (3) dam 618617; (4) 2 small dams centred 639521; (5) small lake 683588; (6) 709641 small dam; (7) small lake close to Lake Mudgie 710549; (8) small dam 726552; (9) dam 731683; (10) 3 dams centred 752695; (11) dam 793632; (12) dam 809660; (13) dam 811732; (14) 2 small lakes centred 997697 adjacent to Crooked River, R-type; (15) Lakes Ruby 877571, Julia 883554, Ida 895562 and 1 small tarn 876547 which are in the Hohonu Range and are glacial lakes. The many small dams shown on this sheet could be associated with old gold workings. Maximum altitude shown on this sheet 1366 m (4482 ft) Turiwhate 811501.

Sheet S52 - Harpers Pass

1st Ed. 1971

Kangaroo Lake		044685	$3.9\mathrm{km}$ NNW of Rotomanu township.	91-122		1.10	2.0	0.7	NE	Shoreline 0.8 km from Crooked River. No outlet shown.
Lady Lake		066695	4.9 km N of Rotomanu township.	91-122	*	1.25	1.8	1.0	N	Bush on W side, open country on E side, flows via Lady Lake Creek into Crooked River from S end.
Haupiri		170737	13.1 km NW of Rotomanu township.	152-183	R	2.10	2.6	1.2	NW	Swamp S and W sides; bush on shoreline. Outlet at SE end to Haupiri River.
Morgan		185613	$11.6\mathrm{km}$ ESE of Rotomanu township.	1220-1250	G	0.10	0.5	0.3	N	Small lake situated in high mountainous country.
Ahaura	90	212769	6.3 km WNW of Haupiri township.	243-274	-	1.80	2.7	1.0	WNW	Lake bush-surrounded except for smaller E end which is scrub-surrounded. In Hochstetter State Forest.

Minor lakes - (1) very small lake 025762; (2) small Lake Whitestone 027657 3.3 km WNW of Rotomanu; (3) small lake (Lake Swan) 027634 3.3 km WSW of Rotomanu; (4) 2 small lakes centred 053554 in Alexander Range; (5) 3 small lakes centred 080577 in Alexander Range; (6) 2 small lakes centred 174539 in Kaimata Range; (7) very small lake 190623 1.1 km NNE of Lake Morgan; (8) small lake 232789 in Hochstetter State Forest; (9) 3 small lakes centred 253679 Mt Mason; (10) 2 lakes 278563; (11) group 3 small lakes centred 285685; (12) 3 lakes centred 313503; (13) 2 lakes centred 331633; (14) group of 4 lakes centred 345675; (15) very small lake 357522; (16) group of 3 small lakes centred 382612; (17) group of 9 lakes centred 392645; (18) small lake 392533; (19) 2 lakes centred 399614; (20) small lake 411657; (21) lake 416599; (22) small lake 449655. Maximum altitude shown on this sheet 1957 m (6425 ft) Mt Alexander 095548. Note: The many small minor lakes shown on this sheet are situated in high country and are probably tarns of glacial origin.



Sheet S53 - Lake Sumner 3rd Ed. 1968

Sumner	643575	18.5 km SW of State Highway 7, Lewis Pass Road.	488-518	-	11.80	9.8	2.1	WNW	Much of lake bush-surrounded. Hurunui River flows into W end and out at E end of lake.
Mason	600530	5.7km SW of Lake Sumner	617-700	G	1.00	2.2	0.7	N	Lake nearly divided into two by spits from W and E shores.
Katrine	626552	2.7km SW of Lake Sumner.	518-549	G	0.75	2.1	0.5	NW	Drains to Lake Sumner 0.5km away via stream through swamp.
Marion	645601	2.3 km NE of Lake Sumner.	640-671		0.15	0.7	0.3	NNE	Bush-surrounded lake 1.0 km N of Lake Sumner; drains to Lake Sumner via Marion Stream.

Minor lakes - (1) Lake Avernus 512708 2 valleys W of main divide, a small lake close to Mt Ajax 6010 ft; (2) Lake Man 639763 (4930 ft); (3) Lake Mary 668508 0.4 km from shore of Lake Sheppard; (4) small lake 670670 0.4 km W of Hope River, 12.2 km W of Hope Pass. Maximum altitude shown on this sheet 1898 m (6227 ft) Mt Longfellow 708583.

Sheet S54 - Hanmer

2nd Ed. 1 November 1962

Minor lakes - (1) Horseshoe Lake 916698 adjacent to Hope River; (2) tarn 312766. Maximum altitude shown on this sheet 1704 m (5593 ft) Mt Skedaddle 904596.

Sheets S55 & S56 - Parnassus

2nd Ed. 1 April 1967

No lakes shown on this sheet. Maximum altitude shown on this sheet 989m (3247 ft) Mt Peter 559782.

Sheet S57 - Ross

1st Ed. 1 August 1958

Mahinapua 460480 14 km NE of Ross.

G 3.40 3.8 1.6 NE

Of glacial origin, W shore is an old sea beach, (Bell and Fraser 1906) 1.0km from coastline; bush-surrounded.

Minor lakes - (1) reservoir 390330 0.5 km from Ross; (2) 2 small lakes centred 461455 close to shore, Lake Mahinapua, between lake and coast; (3) Ogilvie Lagoon 470398; (4) Lake Tarleton 489499 of glacial origin (Bell and Fraser 1906); (5) Zalas Pond 486326; (6) 4 small lakes including Tukes Lagoons in area called Groves Swamp and Harman Swamp in swampland close to Hokitika River centred 495410; (7) 4 small lakes centred 518300; (8) Gaylor Dam 542475; (9) 2 small lakes centred 549489. Maximum altitude shown on this sheet 1165 m (3821 ft) Fraser Peak 474216.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Type Are	loth		Major axis dir.	Notes
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Sheet S58 - Kaniere 1st Ed. 1970

Kaniere

385412 9.2 km E of Kokatahi township. 133

G 13.30 8.6 2.6 NNW

Bush-surrounded. One island (Hans I.). Source of Kaniere River at N end. Sunny, Kent and Hooker Creeks flow into W side. Rose, Camp, Dorothy, Geologist and one unnamed flow into E side. Glacial origin (Bell and Fraser 1906).

Minor lakes - (1) small lake 552463; (2) small lake 559437; (3) lake 562450; (4) small lake 619481; (5) group 7 small lakes including Lake Arthur centred 635332; (6) Manks Tarn 669369; (7) small lake 678350; (8) 2 tarns centred 801310; (9) tarn 822437; (10) group 4 tarns centred 828365; (11) 2 tarns 833281; (12) Lake Browning 862278 approx. 1370 m (4500 ft); (13) small tarn 863249; (14) group 6 tarns centred 875465; (15) lake 882273; (16) group 8 tarns centred 905360; (17) tarn 913479; (18) 2 tarns centred 915453; (19) Ariels Tarns, 2, 928284; (20) tarn 934337; (21) group 5 tarns centred 940295; (22) lake shown 975338 in Gorgy Creek; (23) Lake Florence 998358. Maximum altitude shown on this sheet 2400 m (7875 ft) Mt Murchison 889208.

Sheet S59 - Otira

1st Ed. 1 April 1965

Kaurapataka	174473	11.7 km ENE of Otira.	413		0.30	1.6	0.4	WNW	Bush-surrounded, drains via Lake Creek to Pfeifer Creek.
Minchin	282422	20.5 km E of Otira.	761	R?	0.10	0.6	0.4	N	Fed by Minchin Stream. Drains to Poulter River.

Minor lakes - (1) small lake 000284; (2) small lake 005432; (3) small tarn 031351; (4) Margarets Tarn 046355; (5) Lake Misery and another 052334; (6) 2 small lakes 078323; (7) small lake near Mt O'Malley 082282; (8) Lake Mavis 128332; (9) 3 small tarns centred 123282; (10) 2 small lakes 133363; (11) small lake 147366; (12) very small lake 168347 Tarn Col; (13) very small lake 167367; (14) very small lake 193339 Walker Pass; (15) small lake 287369 "Green Hill" area; (16) small tarn 306275; (17) small lake 306419; (18) 2 small lakes 315476; (19) small tarn 335315; (20) small lake 389237; (21) small lake 406301 R-type; (22) group 6 small lakes centred 440310. Maximum altitude shown on this sheet 2271 m (7450 ft) Mt Rolleston 012322.

Sheet S60 - Dampier

1st Ed. 1 December 1965

463247 W of Nigger Hill and 12 km W 838-914 - 0.05 0.5 0.1 NE Close to Camp Stream. of Puketeraki Range.



Taylor	657490	3.9 km WSW of The Sisters.	534-609	G	1.85	3.1	0.9	NW	Drains to Raupo Pond thence by Sisters Stream to Hurunui River.
Sheppard	673500	2.3 km W of The Sisters.	534-609	G	1.15	2.3	0.9	NW	Drains to Raupo Pond thence by Sisters Stream to Hurunui River.

Minor lakes - (1) 3 small lakes centred 463247 near listed lake; (2) 2 small lakes centred 462242; (3) 2 small ponds centred 482455; (4) 5 small lakes centred 505270; (5) 2 small lakes centred 498387 between 1525 m and 1830 m (5000 ft and 6000 ft); (6) small pond 503493; (7) small lake 497427; (8) Raupo Pond 681487 0.6 km away from Lake Sheppard and Lake Taylor, partly surrounded by swamp. Maximum altitude shown on this sheet 1864 m (6116 ft) Esk Head 661376.

Sheet S61 - Culverden

2nd Ed. 1 November 1963

No lakes shown on this sheet. Maximum altitude shown on this sheet 935 m (3063 ft) Hurunui Peak 974482.

Sheet S62 - Cheviot : Interim 2nd Ed. 1 April 1966

582464 3.6 km N of Cheviot. 30-61 - 0.07 0.8 0.4 NW In open country, tree-surrounded. In Rentoul Park adjacent to main highway.

Maximum altitude shown on this sheet 869 m (2847 ft) Devils Hill 365461.

Sheet S63 - Okarito

1st Ed. 1 June 1959

Windemere	874018	12.4 km WNW of Rotokino.		В	0.30	1.4	0.4	W	Cut off from Okarito Lagoon 0.5 km from coast. Low-lying country.
Wahapo	904901	11.3 km SW of Rotokino.	+	~	2.25	3.2	1.1	E	Held up by a prominent moraine ridge. Bush-surrounded.
Rotokino	045015	5.7 km NE of Rotokino.		RS	1.35	2.6	1.1	N	Held up by a prominent moraine ridge. Swamp-land at S end. Rotokino River flows out to Whataroa River.
	045986	4.8 km ENE of Rotokino.	533	RS	0.03	0.6	0.1	NW	In swampland adjacent to Whataroa River.
White Heron Lagoon	056994	5.9 km ENE of Rotokino.	*	RS	0.13	0.8	0.5	WNW	Drains to Lake Rotokino 1.0 km away. Bush on N shore; swamp on S shore.



Minor lakes - (1) small B-type lake on Okarito Lagoon Spit 832960; (2) small lake 910069 in swamp; (3) small lake 942045; (4) 4 small lakes centred 950015 swamp; (5) 1 small lake 959926; (6) group 3

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S63 continued

lakes centred 988062 in Saltwater State Forest; (7) Lake Joan and 1 small lake centred 019008 close to Whataroa River; (8) Lake Darby and 1 small lake centred 023008 close to Whataroa River; (9) small lake 075058 close to Poerua River. Maximum altitude shown on this sheet 347 m (1142 ft) Mt Hercules 079004. Note: Many isolated bodies of water shown in the river beds on this sheet. These may be temporary subject to changes in the river. Okarito Lagoon as mapped is open to the sea and has not been listed.

Sheet S64 - Ianthe

1st Ed. 1970

Ianthe	220140	11.5 km NNE of Harihari.	30	R	4.42	3.4	2.3	NE	Southern boundary of lake 1.5 km from Wanganui River bed. Mostly swamp between river and lake. Ianthe Creek drains to Wanganui River. Three creeks, Camerons, Benford and Dam, flow into lake. Surrounded by bush (Morgan 1908).
Syme	476023	27.5 km E of Harihari.	7.	G	0.05	0.7	0.1	NW	In the Blomfield Range, drains to Reid Creek at headwaters of Waitaha River.

Minor lakes - (1) small Ballance Lake situated 478042 in Lange Range, drains to Stag Creek thence to headwaters of Waitaha River. Maximum altitude shown on this sheet 2644 m (8675 ft) Mt Whitcombe 477950.

Sheet S65 - Wilberforce

1st Ed. 1971

Minor lakes - (1) very small lake 582081; (2) Lake Lyes 593127; (3) very small lake 612916; (4) 2 small lakes centred 623927; (5) very small lake 634007; (6) very small lake 660940; (7) small lake 710000; (8) 2 small lakes centred 721975 near Mistake Hill; (9) very small lake 781070; (10) group 7 very small lakes centred 809149; (11) group 18 very small lakes centred 825158 in shingle Wilberforce River bed (R-type); (12) 3 small lakes centred 830993; (13) group 3 very small lakes centred 832053; (14) group 4 very small lakes centred 845162 near Sebastapol; (15) very small lake 914143; (16) very small lake 912967 Wilberforce River bed; (17) very small lake 923082; (18) group 5 lakes centred 948068, 3 of which feed to Hanging Basin Creek thence to Avoca River; (19) small lake 977003; (20) group 6 very small lakes centred 993178; (21) very small lake 997160. Maximum altitude shown on this sheet is 2308 m (7575 ft) Bonds Peak 590009. Note: Most of the small lakes associated with rivers.



Sheet S66 - Broken River 2nd Ed. 1969

Selfe	017923	18.2 km SW of Craigieburn Forest.	579-610	-	0.33	2.1	0.5	NW	Maximum depth 30 m (Stout 1969a). Drains to Lake Henrietta. Bush on NW shore.
Lilian	018000	14.5 km WSW of Craigieburn Forest.	671-700	*	0.03	0.6	0.2	WNW	Fed by Lilian Creek, drains to Avoca River.
Evelyn	034906	17.8 km SW of Craigieburn Forest.	579-610	-	0.15	1.1	0.2	NW	Maximum depth 3 m (Stout 1969a).
Ida	035927	17.1 km SW of Craigieburn Forest.	671-700	-	0.10	1.2	0.2	WNW	Maximum depth 9 m (Stout 1969a). Drains via Ida Burn to Ryton River to Lake Coleridge.
Catherine	053945	13.8 km SW of Craigieburn Forest.	700-731	*	0.15	0.9	0.3	N	Catherine Stream flows into N end. Drains via S end through swampland to Ryton River and to Lake Coleridge; also called Lake Monk.
Grasmere	244136	8.2 km NW of Craigieburn.	583	÷	0.63	1.5	0.6	NW	Maximum depth 15.0m (Irwin 1969). NW shore partly bush-covered. Grasmere Stream flows from N end to Cass River (<i>cf.</i> Stout 1969).
Sarah	245155	9.0 km NW of Craigieburn.	549-579	-	0.20	0.7	0.4	N	Maximum depth 6.7 m (Stout 1969a). Drains to Grasmere Stream.
Pearson	250090	6.5 km W of Craigieburn.	607		1.79	3.7	1.2	NNE	Maximum depth 17.0m (Irwin 1970d; <i>cf.</i> Stout 1969a). Lake divided into two basins by large talus fan.
Hawdon	312087	1.0 km W of Craigieburn.	576	*	0.30	1.0	0.5	NNW	Maximum depth $4.0\mathrm{m}$ (Stout 1969). Swampland and stream at N end.
Marymere	314072	1.8 km WSW of Craigieburn.	616		0.23	0.7	0.6	E	Maximum depth 2.0 m (Stout 1969a).
Blackwater Lake	378072	5.5 km ESE of Craigieburn.	579-610	G?	0.15	0.6	0.3	NE	Surrounded by small lakes; 1 stream enters on SE side.
Letitia	402146	9.0 km NE of Craigieburn.	589	•	0.28	1.5	0.3	WNW	Bush on NW side. Letitia Stream flows from NW end.

Minor lakes - (1) small Lake Henrietta 001934 also on sheet S65; (2) small lake 051907 1.5 km E of Lake Evelyn; (3) group of 5 small lakes centred 065950 E of Lake Catherine; (4) small tarn 068051; (5) 2 small lakes centred 068085 in Grey Range; (6) small tarn 072037; (7) small lake 085152 (lagoon saddle); (8) small lake 095984 Mt Olympus; (9) small lake 112060; (10) small lake 129998; (11) small tarn 137997; (12) 2 small lakes centred 165000, one an ice-skating rink; (13) ice-skating rink 186013; (14) small lake 225132; (15) tarn very small 018302; (16) 2 small lakes near Lakes Hawdon and Marymere centred 310080; (17) Vagabonds Inn 317044 4.0 km S of Craigieburn; (18) small lake 323043; (19) small lake 327135; (20) lake 342034; (21) 14 small lakes around Blackwater Lake 378072 including lake 379074 immediately N of Blackwater Lake; (22) 2 small lakes centred 410130 S of Lake Letitia. Maximum altitude shown on this sheet 2195 m (7200 ft) Mt Enys 120929.



Name National Geographical Po	tion Altitude Type Area sqkm	leth with axis Notes
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Sheet S67 - Ashley

2nd Ed. 1970

No lakes shown on this sheet. Maximum altitude shown on this sheet 1935 m (6347 ft) Chest Peak 463087.

Sheets S68 & S69 - Amberley & Motunau

3rd Ed. 1 October 1964

Minor lakes - (1) small lake (part of river?) 142182; (2) small lake 146057 6.0 km NE of Amberley; (3) tarn 261091 0.5 km from coast; (4) tarn 322152. Maximum altitude shown on this sheet 931 m (3055 ft) Mt Grey 933064.

Sheet S70 - Gillespies: Interim

1st Ed. 1 June 1965

641667 14.5 km SE of Cook River R 0.30.70.2 NW Surrounded by bush in Westland National Matheson mouth. Park. Drains to Clearwater River then to Cook River.

> Minor lakes - (1) group 3 small lakes centred 506686, B-type, in scrub; (2) Lake Lyttle 632689 bush-surrounded in Westland National Park 11.8 km ESE of Gillespies Point. Maximum altitude shown on this sheet 196 m (641ft) Trig JG 526614.

Sheet S71 - Waiho

1st Ed. 1971

Gault	659678	4.7 km NW of Fox Glacier township.	305-355	2	0.30	1.0	0.5	WNW	In bush country; swampland to N, 1.0 km N of Clearwater River. Dam at NW corner of lake; SW corner, pipeline to power station to Clearwater River.
Mueller	703690	5.1 km NNE of Fox Glacier township.	427-458	-	0.50	1.1	0.7	N	Bush-surrounded; dry lake beds N of lake.
Alpine Lake	791855	12 km NNW of Franz Josef Glacier township.	91-122	-	0.55	1.4	0.5	NNE	Bush-surrounded, 4.0 km from sea. Drains by Five Mile Creek to sea.
Mapourika	847820	8.7 km N of Franz Josef Glacier township.	61-91	R	8.30	5.3	3.6	NNE	Bush-surrounded lake in Westland National Park. Macdonald's Creek flows into N end, Potter's Creek into S end. Okarito River flows out N end.



029638 20 km SE of Franz Josef Glacier township.

1138-1168 G 0.090.70.2 NNW Situated in Southern Alps.

Minor lakes - (1) small pond 660682 0.5 km N of Lake Gault; (2) Lake Gibbs 68.700 1.8 km NW of Lake Mueller; (3) small lake 695692 0.6 km W of Lake Mueller; (4) 4 small lakes centred 743869 B-type?; (5) Lake Miro 790892 3.5 km N of Alpine Lake; (6) Lake Wombat 820714 2.0 km SW of Franz Josef Glacier township; (7) Lake Pratt 821776 4.3 km NNW of Franz Josef Glacier township: (8) small lake 828774 0.6 km ESE of Lake Pratt: (9) lake 888653 8.5 km SE of Franz Josef Glacier township: (10) 2 tarns 979733: (11) tarn 004802: (12) tarn 006658: (13) small tarn 045770 12.0 km SSE of Whataroa township; (14) tarn 052667; (15) very small tarn 055711 18.0 km SSE of Whataroa township: (16) very small tarn 070826 9.3 km SE of Whataroa township. Maximum altitude shown on this sheet 3116 m (10.225 ft) Mt Elie de Beaumont 962621.

Sheet S72 - Godlev

1st Ed. 1970

101717	In Butlers Range Main Divide.	883-913	G	0.30	1.6	0.2	ENE	Fed by Shackleton Glacier at E end. Lake drains via Butler River westwards to Whataroa River. Also part on Sheet S71.
115620	At terminal of Godley Glacier.	1037-1067	R	0.65	1.3	0.7	NNW	At terminal face of Godley and Maud Glaciers. Lake shown between terminal face and start of Godley River.
452842	At terminal of Lyell Glacier.	945-975	R	0.40	1.0	0.4	E	At terminal face of Lyell Glacier. Lake shown between glacier terminal face and start of Rakaia River.

Minor lakes - (1) lake 108848; (2) very small lake 115846; (3) group 3 small tarns 189820; (4) tarn 193856; (5) lake 236798 fed by Abel Glacier, drains to Perth River; (6) small lake 342799 terminal of Campbell Glacier; (7) group of 6 ponds centred 379718 at confluence of Sinclair and Clyde Rivers; (8) lake 474745 adjacent to Lawrence River; (9) tarn 476618 in Erewhon Park ski fields; (10) tarn 525735 drains to South Branch Ashburton River; (11) tarn 537617. Maximum altitude shown on this sheet 2591m (8500ft) Warrior Peak 418791.

Sheet S73 - Lake Heron

1st Ed. 1969

R 6.303.1NNE Heron 718640 32 km SW of Lake Coleridge. 694 6.6

Surrounded by glacial outwash gravel and alluvium. Lake stream flows from N end to Rakaia River. Lake fed by Swin River. Mettish Stream and Home Creek on E side and Dunbar, Triangle and Olliver Streams on W side. Swamp on W side of lake. Maximum depth 37 m.

Minor lakes - (1) 3 small lakes centred 660830; (2) 2 small lakes centred 668685; (3) group of 5 small lakes centred 680640 close to W side Lake Heron; (4) 11 small lakes centred 698720; (5) 2 small lakes centred 722680; (6) group



Name	National Grid Ref.	Geographical Position	Altitude (m)	TITTO	Area q km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S73 continued

of 21 very small lakes centred 730620 SE side of Lake Heron; (7) 2 small lakes centred 771751 in high country near lagoon Pk; (8) 2 very small lakes centred 852618; (9) group of 5 very small lakes centred 923703; (10) small lake 931770. Maximum altitude shown on this sheet 2332 m (7650 ft) 844627.

Sheet S74 - Springfield

4th Ed. 1970

Coleridge	*1	005855	34.8 km WNW of Springfield.	507	G	32.90	17.8	3.4	NW	Also on Sheets S65 & S73. Maximum depth 200 m (Flain 1970). One island. Coleridge Stream flows into S end; Scamander and Simois Streams and Ryton River flow into W side. Lake Stream and Harper River diversion at N end of lake connect to Harper River.
Georgina		062827	5.7 km ESE of centre of Lake Coleridge.	545	G	0.20	0.75	0.3	N	Maximum depth 10.0 m (Stout 1969a).
Lyndon		180848	18.8 km WNW of Springfield.	841	G	1.11	3.9	0.5	NE	Maximum depth 28 m (Stout 1969a).

Minor lakes - (1) many small tarns and lakes in 8.0 km radius of S end of Lake Coleridge including Red Lakes 100815 approximately 70 in number, all situated on relatively flat land S and E of lake and between Lake Coleridge and Lake Lyndon; (2) 2 small lakes centred 082652; (3) 9 small lakes centred 140735 near Acheron Stream; (4) 2 small lakes centred 143795; (5) 3 small lakes centred 165670; (6) Lake Rubicon 294851 9.0 km NW of Springfield. Maximum altitude shown on this sheet 2189m (7180ft) Mt Hutt 023640.

Sheet S75 - Waimakariri

2nd Ed. 1 September 1963

Minor lakes - (1) many small reservoirs in area centred 460685 S of Sheffield; (2) small silt pond 704640 7.5 km NE of Kirwee; (3) 3 very small bodies of water marked "Water Supply" within Eyrewell Plantation; (4) many small reservoirs in farm country lying between Darfield and Halket. Maximum altitude shown on this sheet 496 m (1624 ft), 578887.

Sheet S76 - Kaiapoi : Interim

4th Ed. 1969

Minor lakes - (1) lake 915639 adjacent to salmon ponds 2.3 km NW of Christchurch Airport; (2) small lake 003655;



(3) group 4 small takes centred 011691; (4) small takes, 2, centred 625698; (5) group of 4 small takes centred 034770 adjacent to Main North Road 2.3 km NNW of Kaiapoi; (6) small lake 035785; (7) small lake 037797; (8) lake 067810 surrounded by plantation and scrub adjacent to coast 0.5 km away; (9) 2 small lakes centred 067830 in swampland. Maximum altitude shown on this sheet 91 m (300ft), contour NW sheet corner 910990.

Sheet S77 - Paringa: Interim 1st Ed. 1 August 1966

Moeraki	043300	11.6 km WSW of Lake Paringa township.	2	D	2.20	3.3	1.1	NW	Also part on Sheet S87. Bush-surrounded. Moeraki River flows in SE end and out NE end to sea, 2.3 km away.
Rasselas	104343	6.2 km NW of Lake Paringa township.	0-30	ŝ	0.25	0.9	0.4	WNW	Drains by Hambone Creek SE to Lake Paringa S arm. Bush-surrounded.
Paringa	158315	1.4 km SW of Lake Paringa township.	0-30	¥3	4.80	3.2	3.0	NW	Bush-surrounded, U-shaped lake with arms in NW-SE direction. Swampland at SE end.

Maximum altitude shown on this sheet 843 m (2766 ft) Moeraki Hill 085306.

Sheet S78 - Bruce Bay

1st Ed. 1970

	272458	3.9 km W of Bruce Bay Pt.	0-30	S	0.05	0.5	0.2	NE	0.2km from sea. Surrounded by swamp with bush close to W shore.
Kini	343463	2.8km ESE of Bruce Bay Pt.	0-30	S	0.23	8.0	0.7	NE	In Pakihi Swampland 1.8km from sea at Bruce Bay.
	446418	12.6 km ESE of Bruce Bay Pt.	1189-1220	G	0.10	0.6	0.2	W	In high country, one stream enters at E end.
Rototekoeti	467419	14.0 km ESE of Bruce Bay Pt.	1249-1280	G	0.25	1.0	0.4	W	In high country, one stream enters at W end.
	628355	29.5 _{km} ESE of Bruce Bay Pt.	946-975	G	0.30	1.4	0.4	W	At foot of Douglas Glacier surrounded by moraine. Douglas River drains from W end into Karangarua River.

Minor lakes - (1) 4 small lakes centred 280315 in Douglas Range; (2) small lake 292417; (3) small lake 379510; (4) 4 small lakes centred 390400; (5) small lake 410351; (6) lake 425363 Bannock Brae Range; (7) small lake 439422; (8) 2 small lakes centred 479465; (9) group 3 small lakes 566492 at base of terminal moraine; (10) 6 small lakes centred 597373 in terminal moraine; (11) 5 small lakes 623551 in moraine; (12) group 5 small lakes centred 624552. All minor lakes are in high country; probably tarns or associated with glacial regions. Maximum altitude shown on this sheet 2332 m (7650 ft) Pioneer Peak 632378.

Sheet S79 - Mt Cook

1st Ed. 1972

954460 At terminal face of Murchison 976-1006 G $0.10 \quad 0.6 \quad 0.4$ WNW At head of Murchison River. Glacier.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S79 continued

095595 At terminal face of Classen 914-944 G 0.65 1.4 0.6 NNW Also on Sheets S71 & S80 but small area not shown on Sheet S71 as a lake but as glacier.

Minor lakes - (1) tarn 677333; (2) small "Saddle Lake" 689537; (3) group of 3 tarns centred 706443; (4) lake 734416 at terminal face of Copland Glacier; (5) tarn 786346; (6) small tarn 809377; (7) Blue Lakes centred 822359 at terminal face of Tasman Glacier; (8) small lake 869450; (9) small tarn 883461; (10) small lake 915454; (11) tarn 934339; (12) tarn 941308; (13) 2 small lakes adjacent to lake 954460 at terminal face of Murchison Glacier; (14) 2 tarns centred 956362; (15) small tarn 941308; (16) lake 975422; (17) 2 small tarns centred 957362; (18) tarn 984491; (19) tarn 025417; (20) tarn 050484; (21) small tarn 060455; (22) tarn 067327; (23) small lake 069339; (24) small lake 096584. Maximum altitude shown on this sheet 3764 m (12,349ft) Mt Cook 801480.

Sheet S80 - Macaulay

1st Ed. 1969

Minor lakes - (1) small lake 146387; (2) 2 small lakes centred 150532; (3) small lake 152375; (4) small lake 182547 source of Upper Tindill Stream; (5) small lake 183515 in Tindill Basin, source of Lower Tindill Stream; (6) small lake 189393; (7) group 3 lakes centred 200417; (8) lake 203456; (9) 22 small lakes centred 300360 all at heads of streams in Two Thumb Range; (10) 15 small lakes centred 360340 mainly W side of Sinclair Range and few E side; (11) small lake 407421; (12) group of 31 small lakes in relatively flat swampland Butler Downs centred 470370 W of Rangitata River. Maximum altitude shown on this sheet 2804 m (9200 ft) Mt Sibbald 164538.

Sheet S81 - Mt Somers

2nd Ed. 1970

Clearwater (Tripp)	600478	10.0km WNW of Hakatere.	668	G	1.98	3.8	1.1	W	One island. Swampland at E and W ends. Maximum depth 18 m (Stout 1969a). Craddock Stream from Mystery Lake flows into W end; Lambies Stream flows out at E end.
Camp (Howard)	607465	1.5 km S of Lake Clearwater.	671-701	G	0.49	1.3	0.5	WNW	Maximum depth 13m (Stout 1969a). Stream flows out of E end to Lake Roundabout.
Roundabout	643455	4.5 km SE of Lake Clearwater.	65 8	G	0.13	0.5	0.4	NE	Maximum depth 2 m (Stout 1969a). Swampland on SW side.



Emma (Acland)	652440	6.0 km SE of Lake Clearwater.	657	G	1.55	1.9	1.5	ΝW	Maximum depth 3 m (Stout 1969a). Swamp on W side; Balmacaan Stream flows into W end. Lake drains from E side to join Lambies Stream.
Maori Lakes	706519	9.5 km NE of Lake Clearwater.	610-640	R	0.05	0.6	0.4	WNW	In low swampland. Drains to S branch Ashburton River, fed by stream W. side.
Maori Lakes	719513	10.4 km ENE of Lake Clearwater.	624	R	0.05	8.0	0.4	N	In swampland. Drains to S branch Ashburton River; fed by Jacobs, Gentleman and Johnstone Streams on N side.
Emily	759543	14.8 km ENE of Lake Clearwater.	<671	R	0.14	0.6	0.4	NW	In a depression contained within 671 m contour. Swampland on NW side.
Manuka Lake	774567	17.8 km ENE of Lake Clearwater.	731-762	G?	0.05	0.5	0.5	W	Stream flows out of N side.
Seagull Lake	777594	19.2 km NE of Lake Clearwater.	823-854	R	0.30	0.9	0.3	NNE	Surrounded by cliff or terrace. Finger Stream flows into S end. Flows from N end to Swin River, thence to Lake Heron.

Minor lakes - (1) group 5 small lakes centred 560495 adjacent to swampland NNW of Lake Clearwater; (2) small lake Mystery Lake 582554; (3) small lake 631467 surrounded by swamp on Lambies Stream; (4) small lake 637375; (5) 2 small lakes centred 639447 in swampland adjacent to Lakes Emma and Roundabout; (6) group 10 lakes, Spider Lakes, centred 663472; (7) Lake Denny 667397 at confluence of Denny Stream and Pudding Valley Creek; (8) small lake 670405 0.8 km NNE of Lake Denny; (9) 2 lakes centred 673464; (10) 3 lakes centred 697441; 2 very small; (11) 2 small Maori Lakes in swampland centred 712518 between large Maori Lakes; (12) 2 small lakes centred 764580 1.5 km NW of Manuka Lake; (13) small lake 769552; (14) small lake 779538; All minor lakes on this sheet are situated in relatively level country many associated with swampland. Maximum altitude shown on this sheet is 2330m (7643 ft) Mt Taylor 839596.

Sheet S82 - Methven: Interim

4th Ed. 1968

Minor lakes - (1) 2 small lakes centred 105570 at Mt Hutt; (2) 2 small lakes centred 159596; (3) small lake 239578 4.5 km ESE of Windwhistle. Maximum altitude shown on this sheet 1476 m (4843 ft) 001563.

Sheet S83 - Burnham: Interim 4th Ed. 1 January 1966

No lakes shown on this sheet. Maximum altitude shown on this sheet 187 m (614 ft) 496589.

Sheet S84 - Christchurch: Interim

5th Ed. 1968



Minor lakes - (1) very small lake 938442; (1) very small lake 948382; (3) small lake 953408; (4) 2 very small tarns centred 959391; (5) 5 small lakes centred 992565, 4 of them very small in Nth Hagley Park; (6) 1 small tarn 064401; (7) 2 small dams centred 085435; (8) 3 small dams centred 140488; (9) area between Port Levy and Little Akatoa Bay

Max. Max. Major Altitude Area National Geographical Position Type lgth wdth axis Notes Name Grid Ref. sqkm km dir. km

Sheet S84 continued

centred 260410; about 34 very small dams and water holes and reservoirs shown; (10) waterhole 345331. Maximum altitude shown on this sheet 920 m (3015 ft) Herbert Peak 095367.

Sheets S85 & S95 - Okains & Goughs

2nd Ed. 1 April 1963

Minor lakes - (1) very small reservoir 364388. Maximum altitude shown on this sheet 582 m (1906 ft) 372235.

Sheet S86 - Okuru : Interim 1st Ed. November 1967

2.4 km SE of Okuru Mac's Lagoon 733057 0.10 1.1 0.1 NNW Adjacent to Turnbull River. Ox-bow-type lake. Bush on NE side. 746043 4.0 km SE of Okuru. R? 0.100.70.1 WNW Bush-surrounded in swampland.

Minor lakes - (1) 5 small lakes centred 695005 in swamp; (2) 2 small lakes centred 745069 in swamp; (3) small lake 748097. Maximum altitude shown on this sheet 16.5 m (53 ft) Mussel Point Trig PN 695069.

Sheet S87 - Haast

1st Ed. 1970

	798109	2.5 km SSW of Haast township.	0-30	W	0.04	0.7	0.1	NE	In swampland. Bush-surrounded; lying parallel to and 1.3 km from coastline.
	874195	8.1 km NNE of Haast township.	0-30	W	0.04	1.0	0.1	NE	Near low swampland. Bush-surrounded; lying parallel and 0.3km from coastline.
Tawharekiri Lakes	878172	7.2 km NE of Haast township.	0-30	S	0.32	1.7	0.3	NE	In swampland which is bush-surrounded. Lake adjacent and parallel to coast 2.2 km away; drains to other lakes then to Maori River thence to Waita River.
Tawharekiri Lakes	888188	8.7 km NE of Haast township.	0-30	S	0.11	0.7	0.3	NE	In swampland. Of irregular shape. Receives drainage from 3 other lakes in group to S and

drains to Maori River thence to Waita River.



Douglas	885006	13.7 km SE of Haast township.	610-640	G?	0.50	1.7	0.5	WNW	Fed by Staircase Creek at E end. Drains to Okuru River. Large delta 0.6 km long at E end of lake where Staircase Creek enters.
Topsy	061266	3.5 km SSE of Lake Moeraki.	152-183	G?	0.10	0.6	0.2	ENE	Bush-surrounded; drains westwards to small lake and thence to Whakapohai River.

Minor lakes - (1) small coastal lake 760100 0.4 km from coastline in swampland; (2) lake 802114 in swampland, bush-surrounded; (3) 2 small lakes centred 808105 in swampland; (4) small coastal lake 814140; (5) group 3 lakes centred 814085 in swampland; (6) group 4 lakes centred 870020 N of Lake Douglas; (7) 29 small lakes centred 880190 in swampland adjacent to coast in bush country, all at altitudes 0-30m near Tawharekiri and including Tawharekiri Lakes; (8) 5 small lakes centred 940095; (9) 7 small lakes centred 000150 in Mataketake Range; (10) Lake Law 037203; (11) Lake Dime 045183; (12) Lake 049267 1.0 km W of Lake Topsy; (13) lake 072137 drains to Thomas River; (14) 2 lakes centred 132170; (15) lake 142227; (16) Lake Sweeny 165235; (17) lake 185276. Maximum altitude shown on this sheet 2057 m (6750ft) Mt MacFarlane 135074. Note: The minor lakes on this sheet fall into two groups. Those adjacent to the coast at low altitude, coastal type lakes, and those at altitudes of 914-1218 m which are tarms formed by glacial action.

Sheet S88 - Landsborough

1st Ed. 1971

427204	5.0 km NW of Kea Flat adjacent to Landsborough River.	914-944 G	0.28	0.7	0.3	NE	At base of glacier; ponded area in shingle and moraine. Drains to Otoko River thence Paringa River.
621266	1.6 km SE of headwaters of Landsborough River.	1067-1097 G	0.15	0.8	0.1	NNW	At base of Le Blanc Glacier. Surrounded by moraine. Drains via Romping Water to Landsborough River.

Minor lakes - (1) small lake 230119; (2) small lake 300075 1.5 km NE of Harper Flat; (3) group of 7 small lakes centred 328090; (4) lake 365180; (5) group of 4 lakes centred 397150 at Marks Flat; (6) small lake 421147; (7) lake 440250; (8) small lake 459159; (9) lake 522161; (10) lake 581265 at confluence of Fettes and Townsend Glacier, drains to headwaters of Landsborough River; (11) small lake 621261 adjacent to lake listed 621266 at base of Le Blanc Glacier. Maximum altitude shown on this sheet 2682 m (8800ft) Mt Hopkins 647239.

Sheet S89 - Tasman

2nd Ed. 1970

	018059	5.7 km WSW of Lake Alexandrina.	853-883	G	0.10	0.7	0.2	NNW	In high, relatively flat country; tarn.
	060115	4.5 km NNW of Lake Alexandrina.	853-883	G	0.05	0.5	0.2	N	In high, relatively flat country; tam.
Hartley Tarn	068137	5.9 km NNW of Lake Alexandrina.	823-853	G	0.03	0.6	0.1	NW	In high, relatively flat country amongst many other bodies of water.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet S89 continued.									
Stony Tarn	073145	6.8 km N of Lake Alexandrina.	793-823	G	0.05	0.8	0.2	ENE	In high, relatively flat country amongst many other bodies of water.
Tui Tarn	077152	7.4 km N of Lake Alexandrina.	763-793	G	0.05	0.7	0.1	NE	In high, relatively flat country amongst many other bodies of water.
Alexandrina	080070	5.5 km NNW of Mt John.	732-763	3 G	5.80	6.9	1.3	N	Receives drainage from 4 streams on W side, 2 on N side, drains at E side to Lake McGregor. One small island in lake.
McGregor	095070	5.5 km N of Mt John.	732-763	G	0.40	0.9	0.6	WNW	W shore 0.3 km from Lake Tekapo. Drains to Lake Tekapo. Also on Sheet S90.
Murray	095107	3.8 km NNE of Lake	732-763	G	0.05	0.5	0.2	NW	In high, relatively flat country; tam.

Minor lakes - (1) lake 704228; (2) group of 3 small lakes centred 739005; (3) group of 3 small lakes 745175; (4) group of 7 small lakes centred 768115; (5) Red Lake 770289; (6) 2 lakes centred 851203; (7) 2 small lakes 865125; (8) 4 small lakes centred 870098; (9) group of 62 lakes over area S of Landslip Creek and around Mary Burn, and between Tasman River in the W and Irishman Creek in the E, centred approx. 910060, all small tarns in flat country; (10) 2 small lakes centred 937218; (11) small lake 941265; (12) 3 small lakes centred 954292; (13) small lake 955165; (14) lake 992046 surrounded by swamp; (15) lake 996095; (16) small lake 010156; (17) small lake 017064; (18) group of 34 small tarns or lakes NW and N of Lake Alexandrina near to Hartley, Stony and Tui Tarns and including Sunday Tarn 051108, all in relatively flat high country; (19) 2 small lakes centred 082222; (20) 2 small lakes centred 092050 1.8 km SSW of Lake McGregor; (21) small lake 094076 adjacent to N shore of Lake McGregor a bar lake. All minor lakes are tarns of glacial origin except (21) a cut off bar lake at Lake McGregor. Maximum altitude shown on this sheet 2738 m (8984 ft) Mt Burns 665295.

Sheet S90 - Lake Tekapo

2nd Ed. 1970

Tekapo 145160 17.0 km NNE of Tekapo town- 708 G 86.80 25.2 5.9 N ship.

Alexandrina.

Tekapo a glacial lake, is fed by the Godley River which enters at the N end across an extensive delta. Lake drains via Tekapo River at S end. Mistake and Cass Rivers enter W side. Boundary and Washdyke Streams E side. One main island, Motuariki, several other small islands uncover at low level. Lake controlled for hydro-electric power generation. Maximum depth 120 m.



162014 5.5 km E of Tekapo township. 763-793 G 0.251.2 0.3NNW Swampland at S end.

Minor lakes - (1) lake 126172 bar-type, cut off from Lake Tekapo: (2) group of 34 very small lakes between Two Thumb Range and E shore of lake, tarns centred 200060 between Washdyke Stream and base of shed; (3) group of 22 tarns centred 210270 mainly associated with Macaulay River; (4) lake 261159 in Two Thumb Range; (5) group of 7 lakes centred 265080; (6) group of 14 small tarns centred 290275; (7) 3 lakes centred 330200; (8) lake 319230; (9) 2 lakes centred 332275; (10) small lake 345195; (11) group of 11 lakes centred 380190; (12) group of 3 lakes centred 418263. Maximum altitude shown on this sheet 2328 m (7650 ft) Fox Peak 368193.

Sheet S91 - Mt Peel

2nd Ed. 1970

Minor lakes - (1) lake 569149 adjacent to Orari River fed by 2 streams; (2) pond 943159. Maximum altitude shown on this sheet 1717 m (5633 ft) Mt Peel 702183.

Sheet S92 - Ashburton

2nd Ed. 1 February 1965

Minor lakes - (1) 3 small lakes shown 219121 adjacent to Ashburton Hospital and 0.4km from State Highway 1 Main South Road. Maximum altitude shown on this sheet 244 m (800 ft) contour NW corner of sheet.

Sheet S93 - Rakaia: Interim

3rd Ed. 1970

Coopers Lagoon 707157 11.4 km S of Leeston. 0-31В 0.45 1.8 0.7NNE In low swampland 0.4 km from coast behind low shingle bank along sea front. Piped outfall from lagoon to sea. ENE 18.0km E of Leeston. 0 - 31B 181.75 26.3 12.9 Large shallow lake separated from the sea Ellesmere 890270

> by large shingle spit (Kaitorete Spit). Lake edge elsewhere surrounded by mud flats. Outline shown at 3.25 ft contour. Edge varies widely according to lake level, maximum depth shown as approx. 7 ft below mean low-water level. Also shown on Sheets S83 and S94. Selwyn River enters N side, artificial flood control outlet through spit.

Maximum altitude shown on this sheet 103 m (338 ft) Rakaia 460258.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S94 - Akaroa: Interim 4th Ed. 1 October 1965

Forsyth 100234 4.6 km SW of Little River.

0-73 B 5.6 7.6 1.3 NE

Adjacent to sea and divided from it by narrow (0.1 km) E end of Kaitorete Spit. Okana River flows into NE end; mud flats at NE end.

Maximum altitude shown on this sheet 840 m (2758 ft) Saddle Hill 197231.

Sheet S95 - See Sheets S85 & S95.

Sheet S96 - Cascade

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000 Sheet 19 Haast.

No lakes shown on this sheet. Maximum altitude shown on this sheet 845 m (2771 ft) Dee Hill 294817.

Sheet S97 - Jacksons Bay

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000 Sheet 19 Haast.

	441720	26.5 km SE of Cascade Point.	88	G?	Ξ	0.8	0.5	NW	In Olivine Range.
Ellery	506891	24 km ESE of Cascade Point.		G?	2.50	4.7	1.1	NW	Between Stafford Range and Burmeister Tops 4.8 km from Arawata River course and 6.0 km from sea at Jacksons Bay.
Dan	519779	28.3 km SE of Cascade Point.	2	G?	•	0.6	0.2	NE	In Olivine Range. Drainage via Thomson Creek to the Arawata River.
Bux	521759	29.7 km SE of Cascade Point.	Ø.	G?	ै	0.6	0.2	NNE	In Olivine Range. Drainage via Thomson Creek to the Arawata River.
Leeb	522786	27.9 km SE of Cascade Point.	9	G?	8	0.8	0.4	N	In Olivine Range. Drainage via Turnley Creek to Jacksons River.
Clark	527801	28 km SE of Cascade Point.	4	G?	0.83	1.2	0.5	NNE	In Olivine Range. Drainage via Carl Creek to Jacksons River.
	621845	39.9 km ESE of Cascade Point.		G?	8	0.8	0.2	WNW	In Haast Range. Drainage via Tuning Fork Creek to Arawata River. Close to Mt Hevelitt.



Nisson 629930 15.6 km SE of Jacksons Head. S 0.83 1.0 0.9 NE In low swampland 5.0 km from coast.

Minor lakes - (1) Delta Tarn 335778; (2) Theta Tarn 349702; (3) group of 5 small lakes centred 455740; (4) small lake 478906 3.0 km from Lake Ellery; (5) small lake 621819 at head of Madcap Creek; (6) lake 625857; (7) small lake 632948 1.6 km from Lake Nisson; (8) small lake 721870. Maximum altitude shown on this sheet 2109 m (6918 ft) Rosy Peak 655760.

Sheet S98 - Haast Pass

Print at 1:47,520 from Photography 21.4.66 and 25.2.68

	783759	3.5 km SSE of Dispute Glacier.	1646 -1676	G	0.42	1.0	0.4	NNW	In Main Divide Southern Alps. Outlet NW side.
Eggeling	935987	6.0 km NE of Okuru River.	883-914	G	0.09	0.6	0.2	NNW	Swampland SE side. Drains NW side.
	040989	5.5 km N of Burke River.	1067-1097	G	0.27	0.6	0.5	N	Near-circular tarn. Outlet NE side.

Note: Sheet S98

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000.

Lake Mystery 755835 23 km SSW of Okuru. - 0.6 0.3

Not shown on Sheet S98 Haast Pass print 1:47,520 but shown on N.Z. Geological Survey Sheet 19 Haast. 1st Ed. 1964.

Minor lakes - (1) small tarn 759878; (2) small tarn 762938; (3) circular tarn 819755; (4) group of 3 very small tarns 822950; (5) small lake in river course 828929; (6) tarn 828756; (7) very small tarn 870855; (8) tarn 898928 adjacent to Okuru River; (9) 2 small tarns 867850; (10) very small tarn 088902; (11) very small tarn 114908; (12) tarn 166741. Maximum altitude shown on this sheet 2355 m (7725 ft) 802762.

Sheet S99 - Ohau

1st Ed. 1970

Minor lakes - (1) group of 4 small lakes centred 225953 in Bealey Range; (2) very small lake 263975; (3) 2 lakes centred 270884; (4) small lake 372862; (5) 2 small lakes centred 565940; (6) small lake 373744; (7) group of 5 small lakes centred 632850 in Ben Ohau Range. Maximum altitude shown on this sheet 2499 m (8200 ft) Mt Huxley 406895. Note: All the small lakes shown on this sheet are in high country (more than 1522 m) and are probably tarns of glacial origin.

Sheet S100 - Pukaki

1st Ed. 1 February 1964

736948 18.6 km NNW of Lake Pukaki G 0.20 0.6 0.2 NW In Ben Ohau Range. township.



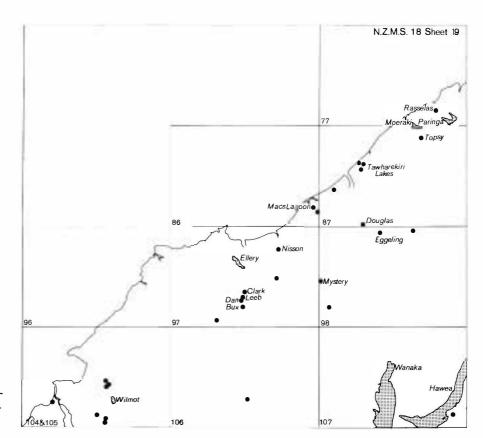


Fig. 21. NZMS 1 Sheets S77, 86, 96-98, 104-107 showing locations of listed lakes.

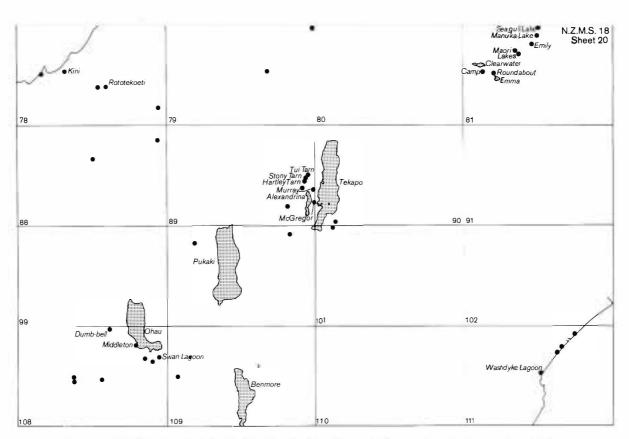
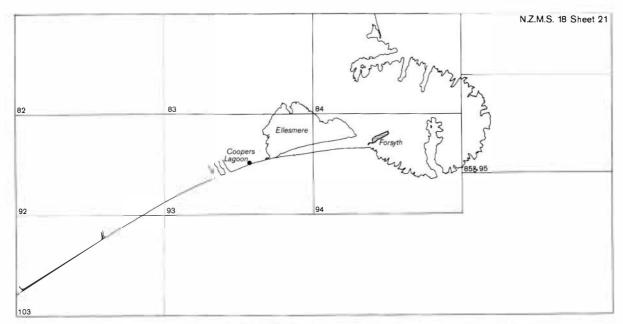
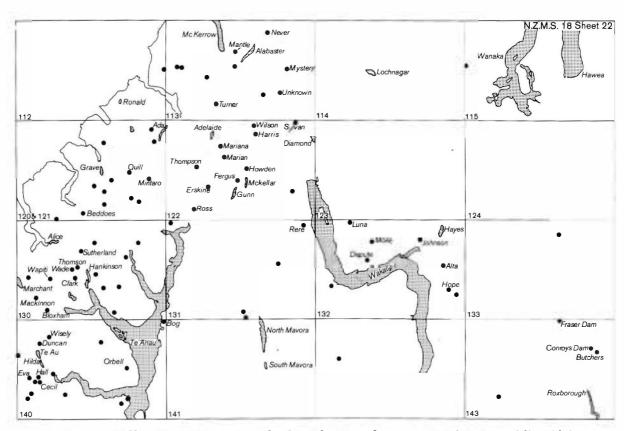


Fig. 22. NZMS 1 Sheets S78-81, 88-91, 99-102, 108-111 showing locations of listed lakes.



NZMS 1 Sheets S82-85, 92-95, 103 showing locations of listed lakes. Fig. 23.



NZMS 1 Sheets S112 · 115, 120 · 124, 130 · 133, 140 · 143 showing locations of listed lakes.



Sheet S100 continued Maximum depth 70 m (Irwin 1970e). 12.3 km NNE of Lake Pukaki 494 98.90 22.9 N 835890 Pukaki Outlet controlled for hydro-electric power township. generation. Level varies approx. 8 m summer to winter (lower in winter) and surface area decreases by approx, onethird. Tasman River inflow N end; Pukaki River outflow S end. 023976 27.9 km NE of Lake Pukaki 793-823 G 0.050.50.2 NE Swampland N edge in relatively flat township. country.

> Minor lakes - (1) small lake 657837; (2) small lake 672885; (3) small lake 690957; (4) group of 12 small lakes, centred 735970 in Ben Ohau Range; (5) group of 5 small lakes centred 790940 1.3 km from lake shore; (6) group of 5 small lakes centred 791845 1.5 km from lake shore; (7) 3 small bodies of water including 2 reservoirs centred 804757 close to Lake Pukaki township; (8) group of 1 small and 5 very small lakes centred 860765 S shore Lake Pukaki; (9) 5 lakes centred 880895; (10) group of 8 lakes centred 890980 including The Black Hole; (11) 3 lakes centred 985910 at Irishmans Creek; (12) group of 4 small lakes centred 092985 near Lake Tekapo township. Maximum altitude shown on this sheet 2200 m (7218 ft) 713947.

Sheet S101 - Fairlie

2nd Ed. 1970

4.5 km NE of Lake Tekapo 793-823 G? 0.050.50.2 NE 152998 township.

Minor lakes - (1) group of 19 small lakes centred 140970 within 7 km radius from Lake Tekapo township in NE S sector all W of Edwards Stream. Maximum altitude shown on this sheet 1917 m (6286 ft) Mt Edwards 208984.

Sheet S102 - Geraldine

2nd Ed. 1 August 1962

Minor lakes - (1) small lake 807780 0.5 km NNW of Winchester, surrounded by trees. Maximum altitude shown on this sheet 863 m (2834 ft) 593966.



Sheet S103 - Hinds: Provisional

October 1942

No lakes shown on this sheet. Maximum altitude shown on this sheet 91 m (300ft) contour NW corner of sheet.

Sheets S104 & S105 - Martins Bay

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000 Sheet 19 Haast.

	944474	5.4 km SSW of Long Reef Point.	9	W	0.33	1.2	0.3	NNE	0.4 km from coast at Martins Bay. Coastal lake in sand dunes. Drains to Hollyford River.
	080435	15 km SE of Long Reef Point.		G?	0.5	1.2	0.3	NE	In Skippers Range, draining to Wilmot River.
	102414	18 km SE of Long Reef Point.	-			0.8	0.3	NNE	On Wilmot River.
	106424	17.9 km SE of Long Reef Point.	-	12		0.5	0.2	NNE	On Wilmot River.
	106539	14.8 km E of Long Reef Point.	-			0.5	0.2	NNW	
	109520	15.0 km E of Long Reef Point.	_	-		0.5	0.1	N	
	114529	15.7 km E of Long Reef Point.		02		0.6	0.2	N	
Wilmot	130489	17.9 km ESE of Long Reef Point.	2	R	1.67	2.1	1.2	NNW	Pyke River inflow and outflow.

Minor lakes - (1) small lake 073459 in Skippers Range; (2) small lake 123500 drains to Lake Wilmot; (3) group of 3 lakes 152623 in McKenzie Range; (4) Lake Crescent 245486 in Olivine Range, flows via Crescent Creek to Pyke River; (5) small lake 248625; (6) small lake 250595; (7) small lake 252602; (8) small lake 253630; (9) small lake 270648; (10) small lake 275667; (11) small lake 276665. Maximum altitude shown on this sheet 2225 m (7300 ft) Pic d'argent 269454.

Sheet S106 - Aspiring

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000 Sheet 19 Haast.

533485 4.7 km WSW of Mt Aspiring.

G - 0.7 0.4 NW At

At terminal face of Bonar Glacier.

Minor lakes - (1) group of 3 lakes centred 320620 in Redoubt Peaks; (2) lake 341665 drains to Cascade River; (3) lake 362660; (4) lake 571581; (5) Lake Diana 718658; (6) Lake Castalia 738694. Maximum altitude shown on this sheet 3036 m (9960ft) Mt Aspiring 582492.

Sheet S107 - Makarora

1st Ed. 1970

155440 2.5 km NE of Silver I. in 335-366 G 0.25 0.7 0.6 W In flat country. Lake Hawea.



Name	National Grid Ref.	Geographical Position	Altitude , (m)	Type Are sqkr	Igrn	Max. wdth km	Major axis dir.	Notes
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Sheet S107 continued

Hawea 120440 20 km NNW of Lake Hawea 347 G 137.60 41.9 10.4 N-NNW Also partly on Sheets S108 & S115.

Maximum depth 384 m. Outlet controlled

township.

for hydro-electric power generation. Inlet Hunter River at N end. Main outlet Hawea River at S end to join Clutha River at Albert Town. One island - Silver Island. Numerous small streams enter lake including Timaru River on E shore. Arm of lake extends WNW towards Lake Wanaka. "The Neck" 1.6 km wide divides Lakes Wanaka and Hawea.

Minor lakes - (1) tarn 917518 1.4 km from shore of Snag Bay; (2) tarn 926610 close to Mt Gilbert; (3) lake 928510 0.2 km from Snag Bay, drains to Snag Bay; (4) tarn 930617 close to Mt Gilbert; (5) small tarn 941682; (6) lake 946645 in bed of Wilkin River; (7) 2 tarns centred 031638; (9) tarn 059694; (9) tarn 067690; (10) tarn 092677; (11) tarn 115689. Maximum altitude shown on this sheet 2302 m (7550ft) Oblong Peak 791678.

Sheet S108 - Diadem 1st Ed. 1969

	370548	3.2 km NNE of Ben Avon Station.	702-732	R	0.05	0.7	0.1	N	U-shaped lake 0.3 km from Ahuriri River course, adjacent to river.
	372538	2.2 km NNE of Ben Avon Station.	702-732	R	0.05	0.9	0.2	NNW	Irregular shaped lake 0.3 km from Ahuriri River course, adjacent to river.
	458542	8.9 km NE of Ben Avon Station.	1152	G?	0.15	0.7	0.2	ENE	In high mountainous country. No inlet or outlet shown.
Dumb-bell	480687	7.4 km W of Lake Ohau.	1555	G?	0.13	8.0	0.2	NNE	In high mountainous country. Outlet on W side.
Middleton	559646	4 km S of Lake Ohau.	517	В	0.20	0.8	0.4	N	Separated by 0.1 km strip of land from Lake Ohau and at same level. A bar lake associated with shoreline.
Ohau	560690	21 km NE of the Ahuriri River.	517	G	53.85	16.8	5.1	N	Also on Sheet S99. L-shaped lake. Ohau Range W side, Ben Ohau Range E side. Main inflow at N end from Hopkins River and Dobson River, which join 9 km N of the head of lake. Outlet at S end, Ohau



River.	Many sm	all streams	enter	lake	on
E and	W shores.	Maximum	depth	129 m	
(Irwin	1970).				

at dam to Waitaki River 5km to Aviemore

Dam. Maximum width in NW arm.

Raupo Lagoon	582605	8 km SSE of Lake Ohau.	579-610	G	0.10	0.8	0.4	NNW	In relatively flat land adjacent to Lake Ohau Road. Irregular outline.
	605598	9.5 km SSE of Lake Ohau.	549-579	G	0.20	1.2	0.3	NNW	In flat land. Lake contains two islands, one of which is large, 0.7 km long.
Swan Lagoon	627607	9.7 km SE of Lake Ohau.	579-610	G	0.25	1.1	0.4	NW	In flat land adjacent to Lake Ohau Road.

Minor lakes - (1) tarn 315508; (2) group of 4 small lakes centred 355592 in swampland adjacent to Ahuriri River; (3) very small lake 379668; (4) 2 very small lakes 380626; (5) group of 40 lakes centred 395520 all adjacent to Ahuriri River; most in flat country and some in swamp, few in adjacent high valleys; (6) group of 13 lakes in high country (tarns?) centred 460640 10 km SW of Lake Ohau; (7) 3 small lakes centred 538616; (8) 3 small lakes centred 545575; (9) small lake 578617 1.2 km SSW of Raupo Lagoon; (10) group of 5 very small lakes 587620; (11) 2 lakes centred 595535 surrounded by swamp S of Wairepo Creek. Maximum altitude shown on this sheet 2332 m (7650 ft) Mt St Mary 388667.

Sheet S109 - Benmore

1st Ed. October 1967

	683548	3 1.7 km SW of Clear burn.	549-579	G?	0.15	0.6	0.4	NNE	Ohau and Omarama-Pukaki Road.
Benmore	88044	17.2 km N of Otematata township.	360	D	68.6	26.1	6.1	N	Also on Sheet S117. Main body of lake N-S Arm extends NW from S end. Man-made, dam for hydro-electric purposes. Six islands, 2 of which up to 1 km long. Ohau, Twizel, Pukaki and Tekapo Rivers enter lake at N end. Ahuriri River feeds NW arm. Outlet

Minor lakes - (1) 2 small lakes centred 681558; (2) small lake adjacent to Lake Benmore 921517; (3) very small lake 998609; (4) very small lake 059693. Maximum altitude shown on this sheet 1864 m (6111 ft) Benmore Peak 776482.

Sheet S110 - Cave: Interim 1st Ed. July 1967

No lakes shown on this sheet. Maximum altitude shown on this sheet 1911 m (6269 ft) 153598.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet S111 - Timaru 4th Ed. 1970	: Interim								
Washdyke Lagoon	785557	3.8km N of Timaru.	0-30) В	0.35	2.1	0.5	NE	Separated from sea by narrow (0.2 km) wide sand and shingle beach; fed by Washdyke Stream. Situated in low area.

Bird sanctuary.

2 main arms.

Behind sand and shingle beach, long

Adjacent to coast, U-shaped.

narrow lake parallel to coast. Drainage from W side enters N end of lake.

Adjacent to coast. Irregular shape with

Minor lakes - (1) very many very small bodies of water (farm dams?) appear all over this sheet; (2) "Spiders Lagoon" 906694 close to coastline. Maximum altitude shown on this sheet 543 m (1780 ft) Cave Hill 570542.

0-30

0-30

0-30

В

0.03

0.08

0.1

0.1

0.2

0.9

1.4

NNE

NE

NE

Sheet S112 - Milford

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

834619

848637

889679

10.4 km NE of Timaru.

12.4 km NE of Timaru.

17.6 km NE of Timaru.

Ronald	714155	8.8 km SSW of St Anne Point, Milford Sound.		G?	1.00	1.4	0.6	NNE	2.5 km from coast.
	845252	7.6 km ENE of St Anne Point,	*	G	2	0.7	0.2	NE	4 km from coast.

Minor lakes - (1) small lake 846280 shown on John O'Groats River. Maximum altitude shown on this sheet $1963\,\mathrm{m}$ ($6440\,\mathrm{ft}$) Llawrenny Peaks 787132.

Sheet S113 - Tutoko

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

883260 11.2 km NE of St Anne Point, G 0.6 0.2 WNW Drains to Harrison River thence to Milford Sound.



	893257	12.1 km ENE of St Anne Point, Milford Sound.	140	G	٠	0.6	0.4	ENE	Drains to Harrison River thence to Milford Sound.
	977229	19.2 km E of St Anne Point, Milford Sound.	-	G	7.	0.8	0.6	NE	Drains to Stick-up Creek, to Hollyford River, to Lake McKerrow.
Turner	002150	23 km ESE of St Anne Point, Milford Sound.		G		8.0	0.6	WNW	Drains to Tutoko Creek, to Hollyford River, to Lake McKerrow.
McKerrow	007383	26.2 km NE of St Anne Point, Milford Sound.	5413	G	18.3	15.3	2.2	NNW	Main inflow is Hollyford River at S end. Hollyford River flows out through river flood plain and beach deposits and swamp to discharge in Martins Bay 2.4 km away. Also shown on Sheet S105. Chart BA2589 shows soundings of 21-96 fathoms (38-176 m).
Mantle	060307	9 km SSW of Lake McKerrow.	120	G	0.05	1.0	0.1	NNW	Drains to Hollyford River thence to Lake McKerrow. Situated in country between Lakes McKerrow and Alabaster.
	061258	13.4 km SSW of Lake McKerrow.			1.5	0.6	0.3	NNE	Drains to Hollyford River, to Lake McKerrow.
Alabaster	105302	12.2 km SW of Lake McKerrow.	12	R	4.17	6.0	0.9	NE	Pyke River flows into N end. Lake discharges via Pyke River to Hollyford River thence to Lake McKerrow.
	142175	12.2 km SSW of Lake Alabaster.	(* F	G	74	0.5	0.3	E	Small lake in Humboldt Mountains drains via Rock Burn to the Dart River and thence to Lake Wakatipu.
Never	162362	7.5 km NE of Lake Alabaster.	*	G	8	0.6	0.1	WNW	In Bryneira Range. Drains to Olivine River.
Unknown	195181	14.2 km SSE of Lake Alabaster.	17	G	0.10	1.1	0.4	WNW	Drains to Beans Burn thence to Dart River.
Mystery	222255	11.7 km SE of Lake Alabaster.		G	•	0.6	0.2	WNW	Drains to Dart River.

Minor lakes - (1) small lake 881255; (2) small lake 904262; (3) Lake Agnes 016272 drains to Hollyford River; (4) small lake 985275 drains to Hollyford River; (5) group of 3 small lakes centred 152362 W of Lake Never; (6) 2 small lakes (Föhn Lakes) 191346; (7) small lake 207395; (8) small lake 219240 S of Lake Mystery.

Maximum altitude shown on this sheet 2756 m (9042 ft) Tutoko 972211.

Sheet S114 - Earnslaw

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

Lochnager 470245 46.5 km WNW of Wanaka township. G? 2.50 3.2 1.2 WNW Drains to Shotover River.

> Minor lakes - (1) small lakes 480228 SW of Lochnager. Maximum altitude shown on this sheet 2383 m (9308 ft) Mt Earnslaw 325191.



km km dir.	Name	National Grid Ref.	Geographical Position	Altitude (m) Type	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S115 - Wanaka 1st Ed. 1969

Wanaka

756264 22.5 km NW of Wanaka. 274-305 R 0.25 0.7 0.2 NW 940345 20.5 km N of Wanaka township. 277 G 180.1 45.5 11.6 NNE

In Matukituki River bed.

Also on Sheet S107. Large glacial lake. Maximum depth 311 m. Makarora River flows into N end. Clutha River drains lake from SE corner. Fed also by many small streams and large Matukituki River which enter lake on SW side. Six islands: Harwich I. and Rabbit or Crescent I. in the main body of the lake and an island in Stevenson's Arm, all over 1.4 km long, are the three largest. Harwich I., the longest, has a small lake, Arethusa Pool, near its summit.

Minor lakes - (1) lake 752302 in swampland, near Matukituki River; (2) 2 small lakes centred 754482; (3) 2 small lakes 755123; (4) 9 lakes centred 765252 on N bank of Matukituki River; (5) 2 small lakes 765227 at Cattle Flat; (6) group of 3 lakes centred 784315 in high country; (7) lake 786182 adjacent to Motatapu River; (8) small lake 791212; (9) Diamond Lake 799177; (10) small lake 800339; (11) very small lake 804284; (12) small tarn 824184; (13) small lake 826317; (14) 2 small lakes centred 841258; (15) 4 lakes centred 848195 on Matukituki River delta (16) small lake 866171; (17) small lake 891155; (18) small lake, Arethusa Pool, 900293 on Harwich Island, Lake Wanaka; (19) very small lake 962134; (20) lake 991142 adjacent to Clutha River; (21) small lake 015126; (22) small tarn 012112; (23) small lake 022146; (24) small lake 046113; (25) small lake 057119; (26) lake 078231 close to S shore of Lake Hawea; (27) dam 103147. Maximum altitude shown on this sheet 2347 m (7700 ft) Mt Alta 801352.

Sheet S116 - Lindis

1st Ed. 1969

Minor lakes - (1) group of 8 very small lakes centred 230370; (2) small lake 245317; (3) very small lake 268318; (4) small lake adjacent to Lindis River 287227; (5) 2 very small lakes centred 339136; (6) group of 4 small lakes centred 490120; (7) lake 495195 in St Bathans Range, drains to Manuherikia River West Branch; (8) small lake 501205 in St Bathans Range. Maximum altitude shown on this sheet 2134 m (7000 ft) 483111.

Sheet S117 - Omarama

1st Ed. 1968

Aviemore

950240 8 km ESE of Otematata township. 271

D 24.80 17.6 4.5

NW

Man-made dam on Waitaki River for hydro-electric power generation.



Waitaki 042175 17.5 km SE of Otematata town- 230 D 5.55 7.2 2.3 NW Man-made dam on Waitaki River for ship.

Minor lakes - (1) lake 686123; (2) reservoir 867230 2 km S of Otematata; (3) tarn 013109; (4) small lake 039129. Maximum altitude shown on this sheet 1910m (6266 ft) Mt Sutton 048396.

Sheet S118 - Hakataramea: Interim

2nd Ed. 1970

Minor lakes - (1) dam 346103. Maximum altitude shown on this sheet 1864 m (6115ft) B.146327.

Sheet S119 - Waimate: Provisional

May 1943

Wainono Lagoon 700145 8.8 km NE of Waimate.

0-30 B 3.25 4.6 1.7

Large lagoon separated from the sea on E side by shingle beach 100m wide 4.6 km long. Remainder of lake swamp-surrounded. Drains from S end to Waihao River.

Maximum altitude shown on this sheet 263 m (863 ft) 553103.

Sheets S120 & S121 - Bligh

1st Ed. 1960 (S120)

1st Ed. 1964 (S121)

From N.Z. Geological Survey map 1:250,000 Sheet 27 Fiord and Sheet 22 Wakatipu.

	521805	6.0 km ENE of Anchorage Cove, George Sound.	(*)	G?	0.83	1.1	0.6	NNE	Drains to George Sound at Anchorage Cove.
Beddoes	600821	3.1 km SE of Bounty Haven, Bligh Sound.	**	G?	0.83	1.4	8.0	NW	Fed by Pitt River SE end. Flows to Bounty Haven, Bligh Sound.
	634904	8.3 km NE of Bounty Haven, Bligh Sound.		G?	2	0.8	0.5	NNE	Drains to Wild Natives River, thence to Bounty Haven, Bligh Sound.
Grave	657945	6.7 km E of Bligh Sound.		G?	1.67	2.8	0.9	NNW	Fed by Dark River flowing into S end. Drains at N end to Sutherland Sound.
	662849	7.8 km E of Bounty Haven, Bligh Sound.		G?	0.83	1.4	0.5	NW	Drains to Wild Natives River, thence to Bounty Haven, Bligh Sound.
	664885	8.3 km NE of Bounty Haven, Bligh Sound.		G?	0.83	1.1	8.0	NE	Drains to Wild Natives River, thence to Bounty Haven, Bligh Sound.
	665032	12.2 km ENE of Tommy Point N Entrance to Bligh Sound.		G?	0.42	1.1	0.6	N	Drains S to Sutherland Sound.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheets S120 & S12	1 continued								
	687921	3.6 km SE of Lake Grave.	σ,	G?	33	0.9	0.3	ENE	On Dark River, flows into S end of Lake Grave.
Quill	739941	8.2 km SE of head of Sutherland Sound.	*	G	0.53	1.1	0.1	NNE	A cirque lake situated as in the lower cirque on a cirque stairway (Cotton 1952; Hutchinson 1957). Lake feeds Sutherland Falls, thence flows via Arthur River to Lake Ada and Milford Sound.
75	748868	15.6 km ENE of Bounty Haven, Bligh Sound.	2	G?	0.42	1.0	0.6	NNW	Drains to Worsley Stream which flows to head of Lake Te Anau. Situated in Franklin Mountains.
	761073	6.8 km ESE of Poison Bay.	2	G?	1.00	1.8	1.0	NNW	Transit River flows northwards from lake to Transit Beach on coast between Milfo Sound and Poison Bay.
	770855	17.3 km E of Bounty Haven, Bligh Sound.	-	G?	0.42	1.2	0.5	NNW	Drains to Worsley Stream which flows to head of Lake Te Anau. Situated in Franklin Mountains.
Mintaro	800923	6.0 km SE of Lake Quill.	0	G?	: ## I	0.8	0.2	NW	Drains over St Quintin Falls to Clinton River which flows into N end of Lake Te Anau.
	807073	11.5km ESE of Poison Bay.	÷	G?		0.6	0.3	NW	Drains to Arthur River and Lake Ada.
	815036	3.8 km SW of Lake Ada.	4	R	0.83	2.0	0.6	NE	U-shaped lake fed by Arthur River, drains to Lake Ada.
Ada	842065	6.3 km SSW of Milford.	0	R	2.50	4.9	0.9	NNE	Fed by Arthur River. Drains to Milford Sound via Arthur River. Also shown on Sheet S122.

Minor lakes - (1) lake 518898 close to Bare Cone; (2) lake 576874 drains to Bounty Haven, Bligh Sound; (3) 2 lakes 591977 drain to Bligh Sound; (4) lake 652808 drains to Glaisnock River to North Fiord Lake Te Anau; (5) lake 662838; (6) 2 lakes centred 685808 drain to Glaisnock River to North Fiord, Lake Te Anau; (7) 2 lakes centred 710072; (8) 2 lakes centred 730058; (9) lake 742891; (10) Lake Ella 775944. Maximum altitude shown on this sheet 2095 m (6872 ft) Castle Mt 791894.

Note: On this sheet an unnamed body of water centred 650995 is shown as connected by a wide river channel to Sutherland Sound. The river channel area on this geological map is given as stream deposits. Inspection of aerial photographs dated 12.3.66 and 18.2.71 shows this body of water to be separated from the head of the Sound by a



650995 5.0 km SE of head of Sutherland S? 2.10 3.0 0.9 NNW Sound.

Connected to Sutherland Sound by 3.5 km river flowing NW. May be part of the Sound. Fed by water from Lake Grave which with Lightfoot River flows into S end. Small lake drains to head of arta.

Sheet S122 - Hollyford

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

Ross	937834	4.2 km NNE of Glade House, N end Lake Te Anau.	Š	G?	T	0.9	0.4	NNE	On Neale River and drains to join Clinton River and flows into N end of Lake Te Anau. Situated in Darran Mountains.
Thompson	943959	15.2 km NNE of Glade House, N end Lake Te Anau.	2	G?	12	0.9	0.5	NNE	Drains to Neale River and flows to Nend of Lake Te Anau. Situated in Darran Mountains.
Erskine	979902	11.0 km NNE of Glade House, N end Lake Te Anau.	*	G?	10	0.9	0.4	NNE	Drains to Neale River via Bowmar Falls and to Lake Te Anau. Situated in Darran Mountains.
Adelaide	991057	11.0 km SE of Milford.	2	G	1.67	2.2	0.9	NNE	Moraine Creek flows out of N end to flow to Hollyford River. Situated in Darran Mountains.
Mariana	015203	14.3 km SE of Milford.		G?		0.5	0.3	E	In Darran Mountains.
Marian	026990	17.4 km SE of Milford.	8	G?	0.83	12	8.0	NNW	In Darran Mountains. Feeds Hollyford River.
Gunn	055880	14.8 km NNE of Glade House, N end Lake Te Anau.	*	340	1.67	3.8	0.9	NNE	Drains via Eglinton River to Lake Te Anau. Situated at head of Eglinton Valley.
Fergus	071917	17.5 km NNE of Glade House, N end Lake Te Anau.	5		0.42	2.1	0.3	NNE	Drains to Lake Gunn and by Eglinton River to Lake Te Anau. Situated at head of Eglinton Valley.
McKellar	093915	19.2 km NE of Glade House, N end Lake Te Anau.			1.00	3.2	0.6	N	Drains via McKellar Branch to Greenstone River which flows eastwards to Lake Wakatipu.
Howden	094952	21.6 km NNE of Glade House, N end Lake Te Anau.	*	14	527	0.7	0.2	N	Drains via Pass Creek northwards to join Hollyford River. Situated at head of Hollyford Valley.

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet S122 continued	1								
Harris	122060	22.5 km ESE of Milford.	ß	G	100	0.7	0.4	NNW	In Humboldt Mountains. Drains via Route Burn to Dart River which flows into head of Lake Wakatipu.
Wilson	123084	22 km E of Milford.		G	0.42	1.0	0.7	NNE	In Humboldt Mountains. Drains to Lak Harris which flows then to Dart River and Lake Wakatipu.
#:	232885	29.8 km NE of Glade House N end of Lake Te Anau.	-	G		0.6	0.2	NE	In Humboldt Mountains. Lake flows in Caples River which joins Greenstone River to enter W side of Lake Wakatipu
Sylvan	241089	19.8 km NNW of Glenorchy.			0.50	1.0	0.7	NNW	1.5 km from Dart River course. No inlead or outlet shown.
Diamond	296048	14.8 km NNW of Glenorchy.	89	R	1 .67	2.4	1.4	NW	Receives water from creek in Earnslaw Burn and drains at S end to Rees River which flows into N end of Lake Wakati

Minor lakes: (1) lake 887938; (2) small lake 909974; (3) Lake Marianette 023021; (4) Rainbow Lake 050098; (5) Lake Lochie 076933; (6) Lake 117958; (7) Lake Mackenzie 122011. Maximum altitude shown on this sheet 2225 m (7300 ft) Mt Talbot 960026.

Sheet S123 - Skippers

1st Ed. 1964

From N.Z. Geological Survey Map 1:250,000 Sheet 22 Wakatipu.

Minor lakes: (1) lake 309018 receives water from Diamond Lake and drains to Rees River. Maximum altitude shown on this sheet 2265 m (7432 ft) Mt Larkins 400879.

Sheet S124 - Cardrona

1st Ed. 1964

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.



Minor lakes: (1) lake 009925 situated in Pisa Range; (2) Lake McKay 018927 situated in Pisa Range; (3) small lake 103022. Maximum altitude shown on this sheet 1961 m (6433 ft) Mt Pisa 017908.

Sheet S125 - St Bathans

1st Ed. 1969

Blue	539930	0.6 km N of St Bathans.	549-579	-	0.10	0.9	0.2	NNW	Next to St Bathans township. Small area of scrub at N end.
Falls Dam	625935	7.8 km ENE of St Bathans.	549-579	Đ	1.20	2.2	1.0	NNE	On Manuherikia River. Has mud and sand around periphery including wide (0.7 km) area of mud and sand at N or inflow end. Manuherikia River flows into N end and Johnson Creek into E side

Minor lakes: (1) small lake 204939; (2) 2 very small lakes 446904; (3) group of 15 small ponds centred 470820; (4) small dam 463860; (5) small dam 477852; (6) 3 ponds centred 478890; (7) pond 493924; (8) Curling Dam 547923 St Bathans. Maximum altitude shown on this sheet 2088m (6848ft) Mt St Bathans 495091.

Sheet S126 - Mt Ida

1st Ed. 1970

Minor lakes: (1) lake 686084 flows to Clear Stream; (2) small tarn 695062; (3) very small pond 840968; (4) 3 dams, 1 reservoir and 1 pond all small, centred 095025. Maximum altitude shown on this sheet 1871 m (6137 ft) 675082.

Sheet S127 - Duntroon: Interim

2nd Ed. September 1966

No lakes shown on this sheet. Maximum altitude shown on this sheet 1172 m (3848 ft) Otekaieka Hill 114924.

Sheet S128 - Waitaki : Interim

2nd Ed. 1970

No lakes shown on this sheet. Maximum altitude shown on this sheet 408 m (1340 ft) 573091.

Sheet S129 - Caswell

1st Ed. 1960

From N.Z. Geological Survey map 1:250,000 Sheet 27 Fiord.

Shirley	332615	5.0 km SW of head of Caswell Sound.	*	G	0.67	2.1	0.4	NNE	Drains via Shirley Falls into Caswell Sound from its N end.
	361700	5.8 km NNW of head of Caswell Sound.	÷	G	14	0.5	0.2	E	Drains at E end to Expectation Stream which joins Stillwater River which flows to Caswell Sound via Lake Marchant.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S129 continued

372717 7.0km N of head of Caswell 0.6 0.2 NNW Sound.

Minor lakes: (1) lake 312682 drains to Caswell Sound; (2) lake 386598 drains to Lake Marchant. Maximum altitude shown on this sheet 1472 m (4830 ft) 312605.

Sheet S130 - Stuart

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

Marchant	403613	3.1 km E of head of Caswell Sound.	-	G	2.50	3.7	1.5	NNW	Stillwater River flows into N end and drains NW side to Caswell Sound.
	434628	10.5 km SW of head of George Sound.	•	G	14	0.6	0.3	NNW	Drains to Large Burn and then to Lake Marchant.
MacKinnon	458569	14.9 km SSW of head of George Sound.	3	G	*	0.9	0.4	NNW	Receives drainage from Myth Tarn.
Bloxham	490530	17.3 km S of head of George Sound.	×	G	0.83	1.4	0.9	E	Drains via Junction Burn eastwards to SW arm, Middle Fiord, Lake Te Anau.
Wapiti	500625	9.6 km W of head of George Sound.	*	G	0.83	1.3	0.7	NNE	Drains via Doon River to SW arm, Middle Fiord, Lake Te Anau.
Alice	515735	2.0 km ESE of head of George Sound.		G	1.67	2.8	0.9	E	Edith River flows into E end and lake drains via W end into George Sound.
Wade	568651	7.0 km NW of head of NW arm, Middle Fiord, Lake Te Anau.	**	G	in.	0.9	0.6	NNE	Drains to Lake Thomson 1.5 km NW of Lake Wade.
	569568	4.0 km N of SW arm, Middle Fiord, Lake Te Anau.	91	G	1.50	2.9	1.1	NW	Drains from S end into SW arm, Middle Fiord, Lake Te Anau.
Clark	577627	5.0 km NW of head of NW arm, Middle Fiord, Lake Te Anau.		G		0.7	0.3	E	Drains to Lake Thomson 3.2 km N of Lake Clark.
Thomson	581660	7.0 km NW of head of NW arm, Middle Fiord, Lake Te Anau.	2	G	0.83	1.8	0.5	NW	Receives water from Wapiti River at N end and drains at S end to Lake Hankinson.
Sutherland	591708	10.5 km NNW of head of NW arm, Middle Fiord, Lake Te Anau.	59	8	2	8.0	0.5	NNE	On the Wapiti River which flows to Lakes Thomson and Hankinson.

Hankinson	618620	2.5 km NNW of head of NW arm, Middle Fiord, Lake Te Anau.	Œ	G	2.50	5.5	0.8	NNW	Long narrow lake, S shore 0.6 km from head of NW arm, Middle Fiord, Lake Te Anau. Receives water from Wapiti River at N end and drains to Lake Te Anau.
	634731	12.8 km N of head of NW arm, Lake Te Anau.	15	G	873	0.9	0.4	NE	Drains via S end to Wapiti River. Situated in Stuart Mountains.
	638637	4.3 km N of head of NW arm, Lake Te Anau.	*	G	*	0.6	0.2	NNW	Drains to Lake Hankinson.
	661594	3.7 km E of head of NW arm, Lake Te Anau.		G	363	0.5	0.3	E	Drains to Loch Burn and to Middle Fiord, Lake Te Anau.
	694521	9.5 km SE of head of NW arm, Lake Te Anau.		G	0.50	1.1	0.7	E	1.0km from Middle Fiord and drains to Middle Fiord.
	705600	8.0 km E of head of NW arm, Lake Te Anau.		G	0.83	2.0	0.5	NW	Drains to Mid Burn and to Lake Te Anau on W side.
	729688	2.5 km SW of head of North Fiord, Lake Te Anau.	3	G	*	0.6	0.4	NE	Close to Mt McDougall. Drains to North Fiord.
	767730	3.0 km NNE of head of North Fiord, Lake Te Anau.	*	G	(A)	8.0	0.2	NE	Drains to Glaisnock River which enters head of North Fiord, Lake Te Anau.
	661594 694521 705600 729688 767730	Lake Te Anau. 3.7 km E of head of NW arm, Lake Te Anau. 9.5 km SE of head of NW arm, Lake Te Anau. 8.0 km E of head of NW arm, Lake Te Anau. 2.5 km SW of head of North Fiord, Lake Te Anau. 3.0 km NNE of head of North Fiord,		G G G	0.50	0.5 1.1 2.0 0.6	0.3 0.7 0.5 0.4	E E NW NE	Drains to Loch Burn and to Middle Fiord, Lake Te Anau. 1.0km from Middle Fiord and drains to Middle Fiord. Drains to Mid Burn and to Lake Te Anau on W side. Close to Mt McDougall. Drains to North Fiord. Drains to Glaisnock River which enter

Minor lakes: (1) Myth Tarn 432551 flows to Lake MacKinnon; (2) group of 5 small lakes centred 460520, 4 draining to Lake MacKinnon and then via Large Burn to Lake Marchant; 1 draining to Jennings Burn to join Junction Burn thence to SW arm, Lake Te Anau; (3) 2 small lakes centred 470650, both draining to Stillwater River; (4) small lake 480768, drains to George Sound; (5) Lake Ogle 594603 drains to Lake Hankinson; (6) small lake 723667 drains to North Fiord, Lake Te Anau. Maximum altitude shown on this sheet is 1750 m (5740ft) Mt Kane 766773.

Sheet S131 - Eglinton

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

	866791	5.0 km W of Glade House, head of Lake Te Anau.		G	(*)	0.6	0.4	NNW	Drains to head of Lake Te Anau.
	083522	8.4 km NW of North Mavora Lake.	ु	G		0.9	0.7	N	In Livingston Mountains.
	090507	6.8 km NW of North Mavora Lake.	-2	G		0.5	0.4	NNW	In Livingston Mountains.
	190680	20.2 km NNE of North Mavora Lake.	-	R		0.6	0.3	NNW	At head of Mararoa River.
Rere	268782	2.0 km W of shore of Lake Wakatipu at Elfin Bay.	-	G	0.33	1.2	0.3	WNW	Flows to Greenstone River. Lies between Ailsa and Humbolt Mountains.

Minor lakes: (1) small lake 881603 0.7 km E of Camp Bay, Lake Te Anau; (2) small lake 069659 in Livingston Mountains, drains to Mavora Lakes; (3) small lake 206691 near Pond Burn. Maximum altitude shown on this sheet 2085 m (6840 ft) Moffat Peak 095682.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth	Major axis	Notes
						KIII	km	dir.	

Sheet S132 - Wakatipu

1st Ed. 1967

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu, and compilation parts at 1:15,840 S132/3, S132/6, S132/8 & 9, and S132/9 from photography in 1959, 1960 and 1961.

and compitation parts at 1.15,840 5152/5, 5152/6, 5152/6 & 9, and 5132/9 from photography in 1959, 1960 and 1961.										
	345600	21.3 km SW of Queenstown.	12	G	0.50	1.3	0.4	NNW	In outwash or moraine. Drains via Lagoon Creek, Afton Burn, to Lake Wakatipu which is 1.5 km from Whites Bay, Lake Wakatipu.	
Luna	405791	16.4 km NW of Queenstown.	*	G	0.50	1.8	0.4	N	Drains via Luna Creek to Moonlight Creek and to Shotover River. Maximum depth 122 ft (37.2 m) (Willett 1938). Situated in Richardson Mountains. Also on sheet S123.	
Dispute Lake	457680	9.5 km WSW of Queenstown.	12	G	0.50	1.6	0.3	NNE	Drains to Lake Wakatipu, 2.5 km away, via Nine Mile Creek.	
Moke	472735	8.7 km NW of Queenstown.	8	G	0.83	2.1	0.9	N	Drains via Moke Creek NE to Shotover River. A U-shaped lake, maximum depth 145 ft (44.2 m) (Park 1909).	
Wakatipu	500640	7.5 km SW of Queenstown.	310	G	289.17	75.2	6.2	N & NNE	Large lake in three sections from head lake trends S for 30 km, ENE for 18 km then S for 32 km. Maximum depth 380 m. Contains three islands in N section, Pigeon, Pig and Tree Islands. Main inflow at N end from Dart and Rees rivers. Outflow via Kawarau River on E side, 32 km N of the S end. Also on sheets S122, S123, S131, S142.	
Johnstone (Johnson) (S132/3 Lake Hayes)	613737	1.4 km N of Frankton.	392	•	0.20	0.9	0.3	NNW	Drains via N end to Shotover River. Maximum depth 88 ft (26.8 m) (Park 1909).	
Hayes (S132/3 Lake Hayes)	678767	7.5 km NE of Frankton.	329	*	2.03	3.1	1.1	NNE	Drains to Kawarau River, S end. Maximum depth 108 ft (32.9 m) (Park 1909).	
Jones (Lake Alta) (S132/6 Cone)	683667	7.3 km SE of Peninsula Hill.	1806	G	0.09	0.5	0.3	E	In Remarkables (mountains). Named Lake Alta on Geological Survey map 1:250,000.	
Hope (S132/9)	703579	17.0 km SE of Queenstown.	1786	G	0.15	0.6	0.5	NE	In Remarkables (mountains). Not named on S132/9 print.	

(S132/9) 727572 17.0 km SE of Queenstown.

G 0.08 0.5 0.4 NNE In Remarkables (mountains).

Minor lakes: (1) 2 small lakes centred 351595 near lake in Afton Burn 345600; (2) Lake Isobel 401701 drains via Twelve Mile Creek to Lake Wakatipu; (3) small lake 479703 on Seven Mile Creek, (note: 1-3 from 1:250,000 geological map); (4) 10 small tarns centred 700660 around Lake Jones (Alta) in Remarkables; (5) 4 tarns centred 727610 in Remarkables; (6) 15 small tarns close to listed lakes on sheet \$132/9\$, situated in Remarkables centred 720580; (7) 16 tarns centred 720530 in Remarkables. Maximum altitude shown on this sheet 2324m (7625ft), 682657 1 km S of Lake Jones (Alta) on \$132/6\$.

Sheet S133 - Cromwell

1st Ed. 1969

037757 5.5 km NNE of Cromwell.

R 0.15 0.7 0.2 NNE

L-shaped long narrow lake parallel to river course in old gold-dredge tailings.

Minor lakes: (1) 2 tarns 753523; (2) pond 964685; (3) 2 ponds centred 983716; (4) reservoir 005713; (5) 5 dams and ponds centred 015785; (6) 17 small ponds in or close to dredge tailings on W side of Clutha River, N of Cromwell and Lowburn, centred 040780; (7) dam 012658; (8) 7 tarns in circle radius 2.5 km centred 080520; (9) pond 157523 2.7 km ESE of Clyde. Maximum altitude shown on this sheet 1905 m (6250 ft) 761532.

Sheet S134 - Omakau

1st Ed. 1968

Minor lakes: Numerous very small lakes and dams shown on this sheet, most having a largest dimension of 0.1-0.2 km. They fall in two groups: one W of Raggedy Range, the other E, both in relatively flat farmed valleys. Maximum altitude shown on this sheet 1472 m (4827 ft) in the Dunstan Mountains 211733.

Sheet S135 - Ranfurly

1st Ed. 1970

	730510	11.3 km SW of Ranfurly.	335-366	R	0.03	1.1	0.05	NW	Ox-bow lake from Taieri River; nearly a complete circle. Situated in swampland.
	747534	9.1 km SW of Ranfurly.	335-366	R	0.03	0.5	0.1	NE	Ox-bow lake from Taieri River. Adjacent to swampland joined to other ox-bow lakes and river by stream.
West Eweburn Dam	773772	6.1 km NW of Naseby.	671-700	D	0.15	1.0	0.3	NE	Adjacent to Naseby State Forest and shown as half filled at N end with sand.
	787537	7.0 km S of Ranfurly.	335-366	R	0.03	0.6	80.0	WNW	Ox-bow lake from Taieri River. Joined by stream to river.
	793527	7.9 km S of Ranfurly.	335-366	R	0.01	1.0	0.05	ENE	Ox-bow lake from Taieri River. Joined by stream to other small ox-bow lakes and to the Taieri River.



Name National Geographical Position	Altitude Typ	e Area	Max. lgth km	Max. wdth km	Major axis dir.	Notes	
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Sheet S135 continued

804541	6.7 km S of Ranfurly.	335-366	R	0.03	0.8	0.05 ENE	Ox-bow lake adjacent to Taieri River.
813536	7.4 km SSE of Ranfurly.	335-366	R	0.02	0.6	0.05 NE	Ox-bow lake adjacent to Taieri River. Joined by stream to Taieri River.

Minor lakes: (1) lake 717634; (2) coalpit dam 809748 2 km WNW of Naseby; (3) small lake 873558 adjacent to Taieri River. Maximum altitude shown on this sheet 1442 m (5390 ft) Mt Pisgah 046678. Note: On this sheet except in the Kakahui Mountains NE corner, there are numerous very small lakes or dams, mostly with a maximum dimension of 0.1 km or less, also a number of small ox-bow lakes adjacent to the Taieri River which lie across the southern border of this sheet.

Sheet S136 - Oamaru: Interim

2nd Ed. 1 March 1966

Minor lakes: (1) small lake 429738; (2) reservoir 543701 4 km NNE of Oamaru, height 84 m (275 ft); (3) reservoir 547644 2 km SSE of Oamaru. Maximum altitude shown for this sheet 1425 m (4676 ft) Obi 119538.

Sheet S137 - Pukeuri: Provisional

April 1943

No lakes shown on this sheet. Maximum altitude shown on this sheet 155m (510ft) Flume 551753.

Sheets S138 & S139 - Doubtful

1st Ed. 1960

From N.Z. Geological Survey map 1:250,000 Sheet 27 Fiord.

040213	12.2 km SSE of Febrero Point, Doubtful Sound.	÷	G	1.7	0.6	0.4	NNW	Drains to Crooked Arm, Doubtful Sound.
050203	13.5 km SSE of Febrero Point, Doubtful Sound.	3.0	G	1.00	0.6	0.5	NW	Drains to Crooked Arm, Doubtful Sound.
091351	9.6 km ENE of Febrero Point, Doubtful Sound.	*	G		0.6	0.3	ENE	Drains to Thompson Sound. Situated on Secretary Island.
153365	15.6 km ENE of Febrero Point, Doubtful Sound.		G	100	0.6	0.3	NE	Drains to Surgeon Bay, Thompson Sound.



Annie

168393	17.1 km ENE of Febrero Point, Doubtful Sound.	*	G	0.33	1.1	0.4	NE	Drains to Thompson Sound.
218277	22.0km ESE of Febrero Point, Doubtful Sound.	16	G		0.6	0.3	NE	Drains to Malaspina Sound. Situated in Behind Peaks.
228292	22.7 km ESE of Febrero Point, Doubtful Sound.	2	G		0.6	0.3	E	Drains to Malaspina Sound. Situated between Behind Peaks and Marrington Peaks.
232305	22.8 km E of Febrero Point, Doubtful Sound.	*	G	i.	0.9	0.5	NNE	Drains to Malaspina Sound. Situated in Marrington Peaks.
243249	24.8 km SE of Febrero Point, Doubtful Sound.	*	G	*	0.6	0.4	NNE	Drains to Malaspina Sound.
272260	26.8 km ESE of Febrero Point, Doubtful Sound.	-	G		0.6	0.3	NNW	Drains to Malaspina Sound.
301417	29.6km ENE of Febrero Point, Doubtful Sound.		G	1.00	1.0	0.7	NE	Drains to Precipice Cove, Bradshaw Sound.
350445	34.8 km NE of Febrero Point, Doubtful Sound.	*	G	Ħ	0.8	0.3	N	Near Coronation Peak.
369255	4.6 km SSE of head of Gaer Arm, Bradshaw Sound.	2	G	d4	0.9	0.3	NNE	Drains to Camelot River and to Gaer Arm, Bradshaw Sound.
371399	6.3 km ENE of Precipice Cove, Bradshaw Sound.	3	G	92	8.0	0.3	NE	Near Coronation Peak.
380375	7.0km ESE of Precipice Cove, Bradshaw Sound.	*	G		0.9	0.5	WNW	Drains to Cozette Burn.
393223	7.8 km SE of head of Gaer Arm, Bradshaw Sound.	*	G	े र	0.9	0.6	NNW	Drains via Awe Burn to North Arm, Lake Manapouri.

Minor lakes: (1) small lake 016252 drains to Snug Cove, First Arm, Doubtful Sound; (2) 2 small lakes centred 165450 drain to Thompson Sound and lie between Thompson and Nancy Sounds; (3) lake 251389 drains to Bradshaw Sound; (4) 2 lakes centred 305250 drain to Malaspina Sound; (5) group of 3 very small lakes centred 320430 draining to lake 301417 and to Bradshaw Sound; (6) very small lake 352465; (7) lake 343261 drains to Camelot River and to Gaer Arm; (8) lake 357257 drains to Malaspina Sound; (9) small lake centred 360213; (10) very small lake 363391; (11) 2 small lakes centred 368229. Maximum altitude shown on this sheet 1854m (6080ft) Mt Soaker 362220.

Sheet S140 - Te Anau

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

0.5 N 403392 11.6 km NW of head of South Fiord, G 0.831.4Lake Te Anau.

Drains via Cozette Burn to Gaer Arm, Bradshaw Sound. Also on sheet S139.



Kill Kill Ull.	Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
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Sheet S140 continued

		433259	9.8 km SW of head of South Fiord, Lake Te Anau.	•	G		0.9	0.4	NNE	Drains to Freeman Burn and enters North Arm, Lake Manapouri.
Eva		436328	7.0 km W of head of South Fiord, Lake Te Anau.	Ç	G	:	0.6	0.3	E	Drains via Gorge Burn to South Fiord, Lake Te Anau.
		442274	8.2 km SW of head of South Fiord, Lake Te Anau.	÷	G	0.42	1.0	0.5	NNE	Drains to Freeman Burn and enters North Arm, Lake Manapouri.
		452312	5.8 km WSW of head of South Fiord, Lake Te Anau.		G	i t	0.7	0.2	NW	In Gorge Burn drains to South Fiord, Lake Te Anau.
Te Au	FE.	465396	7.3 km NW of head of South Fiord, Lake Te Anau.	×	G	2.50	2.4	8.0	NNW	Drains to Lake Hilda then via Esk Burn to South Fiord, Lake Te Anau.
Hall		461326	4.8 km W of head of South Fiord, Lake Te Anau.		G	÷:	8.0	0.4	ENE	Drains to Gorge Burn which flows to South Fiord, Lake Te Anau.
Duncan		467430	9.8 km NNW of head of South Fiord, Lake Te Anau.	Š	G		0.7	0.6	NNE	Drains to Lake Te Anau.
Cecil		467311	5.0 km WSW of head of South Fiord, Lake Te Anau.	*	G	27	0.6	0.3	E	In Gorge Burn, draining to South Fiord, Lake Te Anau.
Hilda		472368	4.8 km NW of head of South Fiord, Lake Te Anau.	•	G	1.67	2.3	0.7	NNW	Drains to Esk Burn to South Fiord, Lake Te Anau.
Wisely		497450	10.8 km NNW of head of South Fiord, Lake Te Anau.	•	G	0.50	1.2	0.4	NNE	Drains to Lake Duncan situated in the Murchison Mountains.
		510335	0.5 km NW of head of South Fiord, Lake Te Anau.	ā	R?		0.6	0.3	WNW	In Esk Burn.
		543274	6.0km SE of head of South Fiord, Lake Te Anau.	Ť	G	(7)	0.6	0.4	WNW	Drains via Tutu Burn to South Fiord, Lake Te Anau.
		654431	15.7 km NE of head of South Fiord, Lake Te Anau.	×	G	4	0.6	0.2	NNE	Near Dana Peaks. Drains via Ettrick Burn to Lake Te Anau.
		713248	20.0km ESE of head of South Fiord, Lake Te Anau.	-	G		0.5	0.3	NNW	On point at southern entrance to South Fiord, Lake Te Anau.
Orbell		730354	20.0km E of head of South Fiord, Lake Te Anau.	•	G	0.42	1.0	0.5	E	Takahe Stream flows into W end. Discharges at E end to Tunnel Burn and to Lake Te Anau.



	735261	21.2 km ESE of head of South Fiord, Lake Te Anau	-	G		0.6	0.3	E	On point at southern entrance to South Fiord, Lake Te Anau.
Te Anau	800450	23.0 km from Te Anau township.	ve.	G :	347.50	6Q.0	28.6	NNE	Largest South Island lake (26 islands). Sixteen islands shown on sheet 22 Wakatipu. Main inflows at head of lake and at heads of 3 fiord arms which extend NW and W to Southern Alps. Bush on W and NE shore. Scrub and farmland on E and SE shores. Maximum depth 417 m in South Fiord (Irwin 1971b). Maximum width of main body of lake is 7.5 km off Middle Fiord; lake drains at S end via Waiau River to Lake Manapouri. Also on sheets S130, S131, S149. Altitude is approximately 203 m above sea level.
Bog Lake	843493	33.5km NE of head of South Fiord, Lake Te Anau.	÷	9	0.83	1.1	0.5	N	1 km from shore of Lake Te Anau in low country.

Minor lakes: (1) 2 small lakes including Lake Ione centred 433332 close to Lake Eva; (2) 2 small lakes centred . 437457 near Robin Saddle Murchison Mountains; (3) Lake Tuaraki 438304; (4) lake 462420; (5) lake 462499; (6) 2 small lakes centred 472331 near Lake Hall; (7) 2 lakes in Gorge Burn centred 482312 downstream of Lake Cecil; (8) small lake 506453; (9) lake 538355 on Waterfall Creek; (10) small lake 542429; (11) lake 572428 in Chester Burn; (12) lake 659343 near Black Cone, Murchison Mountains; (13) group of 5 small lakes centred 730253 situated at southern entrance to South Fiord, Lake Te Anau. Maximum altitude shown for this sheet 1858 m (6097 ft) Mt Lyall 619361.

Sheet S141 - Mayora

1st Ed. 1962

From N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu, and compilation prints at 1:15,840 S141/4, S141/5, S141/6, S141/7, S141/8, S141/9. Photography 1957-1960.

North Mavora Lake	143450	42.0 km NE of Te Anau township.	619 approx. (S141/5)	G	10.83	10.2	1.7	NNW	Fed by Mararoa River at N end, drains to South Mavora Lake at S end. Situated between Livingston and Thomson Mountains. Also on sheets S131, S141/5.
South Mavora Lake (S141/5, S141/6)	148355	38.5 km ENE of Te Anau township.	613 approx.	G	1.23	2.2	8.0	NNW	Fed by water from North Mavora Lake entering N end and draining at S end as Mararoa River. Bush-surrounded, situated between Livingston and Thomson Mounts. Also on sheet \$141/6.



Minor lakes: (1) S141/4 many small tarns centred 910340 and grouped into 4 or 5 tarns, many less than 0.1 km maximum dimension; (2) S141/5 group of many small tarns centred 115370; (3) S141/5 group of 9 small tarns centred 145320; (4) S141/6 many small tarns E side of this sheet, most 0.1 km or less maximum dimension;

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Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max.	Max.	Major axis	Notes
						km	km	dir.	

Sheet S141 continued.

(5) S141/7 tarn 931278; (6) S141/7 3 tarns centred 980229; (7) 2 very small tarns centred 928210; (8) S141/9 group of 7 tarns centred 198234; (9) tarn 264298; (10) tarn 267283; (11) 4 tarns centred 258262; (12) 12 tarns centred 263218; (13) tarn 268207; (14) 2 tarns centred 295230. Maximum altitude shown on this sheet 2026 m (6650 ft) Jane Peak 280329.

Sheet S142 - Kingston

From compilation sheets at 1:15,840 S142/1-9 from photography, 1957-1960.

364373 4.3 km NE of Eyre Peak.

853-884 G

0.11 0.6 0.3

NNE

In Right Hand Branch of the Lochy River.

S142/4

Minor lakes: (1) S142/1 tarn 350437; (2) tarn 350413; (3) tarn 357427; (4) tarn 383480; (5) tarn 449403; (6) group of 7 tarns centred 580430; (7) S142/2 small tarn 477440; (8) S142/3 group of 11 tarns centred 720465; (9) tarn 322377; (10) S142/4 group of 4 tarns 348333; (11) 3 tarns centred 348397; (12) tarn 369384 in right branch Lochy River; (13) group of 9 tarns centred 400350; (14) S142/5 and Part 6, tarn 461348; (15) tarn 523396; (16) 2 tarns centred 582397; (17) S142/7 tarn 310234; (18) tarn (S142/9) 701271; (19) S142/9 3 small ponds centred 704213; (20) small tarns centred 741229. Maximum altitude shown on this sheet 1996 m (6550 ft) Eyre Peak 396339 from N.Z. Geological Survey map 1:250,000 Sheet 22 Wakatipu.

Sheet S143 - Alexandra

1st Ed. 1969

	857261	1.7 km ESE of Rocky Mount.	1494	G	0.05	0.5	0.2	NNW	Tarn situated in the Gervie Mountains.
Fraser Dam	034497	14.6 km WNW of Alexandra.	547	D	0.20	1.1	0.6	N	Fed by Earnscleugh and Fraser rivers. Fraser River flows out of N end and into Clutha River 2.8 km NW of Alexandra. Also on Sheet S133.
Conroys Dam	128415	6.4 km SW of Alexandra.	243-274	D	0.15	0.8	0.3	NE	Fed by Conroy's Creek and drained by Conroy's Creek via NE end to Fraser River.
Roxburgh	124275	17.5 km WSW of Alexandra.	133	D	4.50	27.8	0.7	NNE	Hydro-electric dam on the Clutha River. Three islands. Length taken from dam face to bridge on Highway 8 at Alexandra.



Butchers Dam 147400 6.1 km SW of Alexandra.

274-305 D 0.35 1.2 08 NE

Drains via NE side to Clutha River at Butchers Point. Situated at Butchers Gully adjacent to State Highway 8.

Minor lakes: (1) lake 757350; (2) lake 757213; (3) lake 773378; (4) Misty Tarn 788203; (5) group of 27 small lakes centred 830260; (6) group of 30 lakes centred 860340; (7) group of 4 lakes 883284; (8) group of 6 lakes 930425; (9) lake 099346; (10) dam 100430; (11) dam 100362; (12) group of 6 lakes centred 158470 in old gold-dredge tailings; (13) dam 179438; (14) group of 4 dams centred 180270. Maximum altitude shown on this sheet 1889 m (6198 ft) Rocky Mount 839265.

Sheet S144 - Manorburn

1st Ed. 1969

	226307	15.0 km W of Manorburn Dam.	610-641	D	0.15	1.3	0.2	NNE	In Speargrass Creek; dammed at $N\ \mbox{end.}$
Lower Manorburn Dam	237467	4.5 km NE of Alexandra on Sheet S143.	152-183	D	0.35	2.1	0.3	WNW	In Manor Burn. Drains to Manuherikia River.
Manorburn Reservoir	389298	23.0 km SE of Alexandra on Sheet S143.	740	D	1.60	3.8	2.6	NNW	Dammed at N end. Situated in Manor Burn. Joined to Greenland Reservoir at S end.
Greenland Reservoir	393250	26.5 km SE of Alexandra on Sheet S143.	740	D	3.00	3.9	2.1	NNW	Joined to Manorburn Reservoir by narrow river 2.0km long, at same level and dammed also by Manorburn Dam. Swampland on SE and E side. Six small islands.
Moa Creek Reservoir	403469	16.0 km N of Manorburn Reservoir.	458-488	D	0.05	0.6	0.05	N	On Moa Creek. Dammed at N end.
Poolburn Reservoir	492391	13.1 km NNE of Manorburn Reservoir.	823-854	D	3.95	5.0	3.0	NW	On Poolburn, Dammed NE side, Of very irregular shape, Contains large island approx. 1sq.km. Four smaller islands and 28 very small islands.
	594205	20.5 km SE of Manorburn Reservoir.	549-579	R	0.04	0.6	0.1	NNW	Ox-bow lake near Taieri River on Serpentine Flat.

Minor lakes: (1) group of 14 small lakes centred 335378; (2) dam 371364; (3) 5 small - 2 dams and 3 lakes centred 460203; (4) 2 dams centred 461251; (5) lake 485345; (6) 2 small lakes 492367 close to Poolburn Reservoir; (7) lake 577368; (8) 3 small lakes centred 592228 near Taieri River; (9) 4 small dams centred 610420; (10) 12 small lakes centred 630365. Maximum altitude shown on this sheet 1166 m (3824 ft) South Rough Ridge Hill 512281. Note: Area centred 640250 Old Oxbow Lakes, one lake shown in pecked outline.



Name	National Grid Ref.	Geographical Position	Altitude (m) Typ	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Name		Geographical Position	(m) Typ		lgth km		axıs	Notes

Sheet S145 - Hyde

1st Ed. 1969

667373 10.3 km SSW of Patearoa.

366-396 R 0.08 0.6 0.1 N

Ox-bow lake cut off from Taieri River 0.3 km away.

Minor lakes: (1) small lake (circular cut-off from river, ox-bow type) 659257; (2) 4 small lakes 660485; (3) 2 small lakes centred 665461; (4) 4 small lakes centred 668369; (5) dam 674483; (6) many small ox-bow R-type lakes most shown as indefinite (i.e., broken line) close to both sides of the Taieri River in swampland, centred 700450; (7) 4 small lakes 670385; (8) dam 692381; (9) group of 30 very small lakes centred 730440; (10) reservoir 731483; (11) group of 36 very small lakes centred 775490 4.5 km NNE of Patearoa; (12) dam 852457; (13) small lake 973205; (14) lake 989307; (15) dam 049289; (16) lake 049219; (17) small lake 070251; (18) group of 8 small lakes centred 085310 at Macraes Flat. Maximum altitude shown for this sheet 1449 m (4756 ft) Summit Rock 777256.

Sheet S146 - Moeraki : Interim

2nd Ed. 1 March 1966

Minor lakes: (1) dam 403215. Maximum altitude shown on this sheet 887 m (2907 ft) Mt Miserable 249454.

Sheet S147 - Breaksea

1st Ed. 1968

From NZMS 18 Sheet 24 Invercargill 1:250,000.

Minor lakes: (1) Lake Beattie 934053 on the Coal River. Maximum altitude on this sheet 1113 m (3650 ft) Calm Peak 937090.

Sheet S148 - Wilmot

1st Ed. 1968

From NZMS 18 Sheet 24 Invercargill 1:250,000.

981022	1.1 km N of head of Second Cove, Breaksea Sound.	*	G	*)	0.5	0.3	N	Drains to Second Cove, Vancouver Arm, Breaksea Sound.
053939	2.9 km SSE of Mt Anderson		G	7 8	8.0	0.5	NE	Drains to Wet Jacket Arm, Breaksea Sound.



	063189	3.4 km NE of Seventy Fathoms Point		G	0.42	1.0	0.4	NE	
	074174	3.5km ENE of Seventy Fathoms Point.	*	G	*	0.9	0.5	NNE	Drains to Crooked Arm.
Stump Lake	195043	2.4 km SW of Hall Arm, Doubtful Sound.	100	G	*	0.9	8.0	NNW	Drains to Hall Arm, Doubtful Sound.
Browne	207177	3.4km W of Elizabeth Island, Doubtful Sound.		G	21	8.0	0.5	EW	Drains via Brown Falls to Doubtful Sound. Cirque Lake - (Hutchinson 1957).
Gair Loch	260919	1.8 km SSW of Aubrey Peak, Dingwall Mountains.		G?	8	0.8	0.3	NE	Drains by Seaforth River to Dusky Sound.
Lucy	325118	3.6 km E of head of Deep Cove, Doubtful Sound.	•	G	20	0.6	0.3	EW	Drains to Mica Burn to Spey River to West Arm, Lake Manapouri.
Matilda	336117	5.6 km E of head of Deep Cove, Doubtful Sound.	3.50	G	25	0.7	0.3	ENE	Drains to Mica Burn to Spey River to West Arm, Lake Manapouri.
	339161	3.5 km SW of Onaha Saddle.		G	*	0.7	0.6	NW	Drains to Doubtful Sound.
St Patrick	349930	3.0 km SE of Mt Ward.		G	7,0	0.9	0.5	NW	Drains to Grebe River thence into South Arm, Lake Manapouri.
	366141	2.0 km SSE of Onaha Saddle.	•	G	*	0.9	0.5	N	Drains via Onaha Burn to West Arm, Lake Manapouri.
	369160	3.8 km SSE of Onaha Saddle.		G	0.75	1.2	0.7	NNE	Drains to Onaha Burn to West Arm, Lake Manapouri.
Carina	375073	2.5 km ENE of head of West Arm, Lake Manapouri.	2.00	G	23	0.5	0.4	N	Drains to Spey River thence to West Arm, Lake Manapouri.
Lucille	376082	3.0 km NE of head of West Arm, Lake Manapouri.	07%	G	58	0.5	0.5	N	Drains to Spey River thence to West Arm, Lake Manapouri.

Minor lakes: (1) 3 small lakes (including Lakes Louise and Colwell) centred 260030; (2) lake 270098 - drains to Deep Cove, Doubtful Sound, via Huntleigh Falls; (3) 2 small lakes centred 370100; (4) very small lake 396081. Maximum altitude shown on this sheet 1719 m (5637 ft) Mt Ward 318942.

Sheet S149 - Manapouri

From NZMS 18 Sheet 24 Invercargill 1:250,000.

	429130	7.2 km NNE of head of West Arm, Lake Manapouri.	3.5%	G	1.00	2.3	0.7	WNW	Close to North Arm, Lake Manapouri. No inlet or outlet shown.
Lois	450068	5.0km ENE of head of West Arm, Lake Manapouri.	*	G	0.67	1.7	0.6	ENE	Close to West Arm, Lake Manapouri. No outlet shown.
	481043	8.0 km ESE of head of West Arm, Lake Manapouri.	*	G	**	0.5	0.3	NE	No inlet or outlet shown.



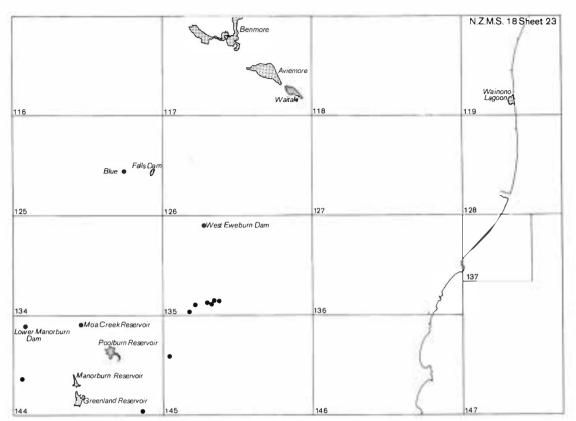
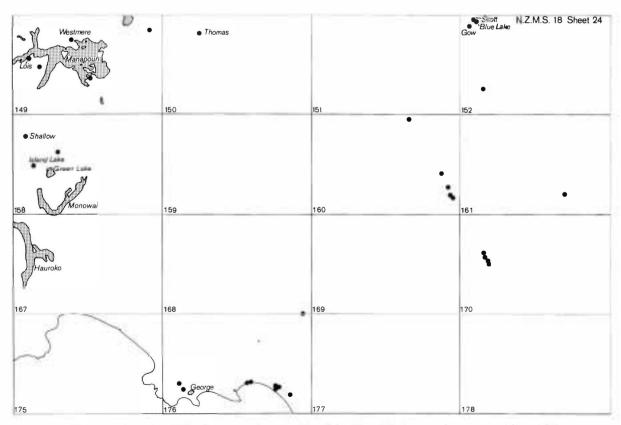


Fig. 25. NZMS 1 Sheets S116-119, 125-128, 134-137, 144-147 showing locations of listed lakes. listed lakes.



NZMS 1 Sheets S149-152, 158-161, 167-170, 175-178 showing locations of listed lakes.

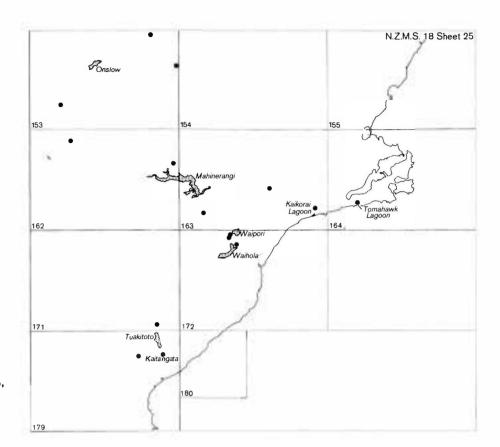


Fig. 27. NZMS 1 Sheets S153-155, 162-164, 171, 172, 179, 180 showing locations of listed lakes.

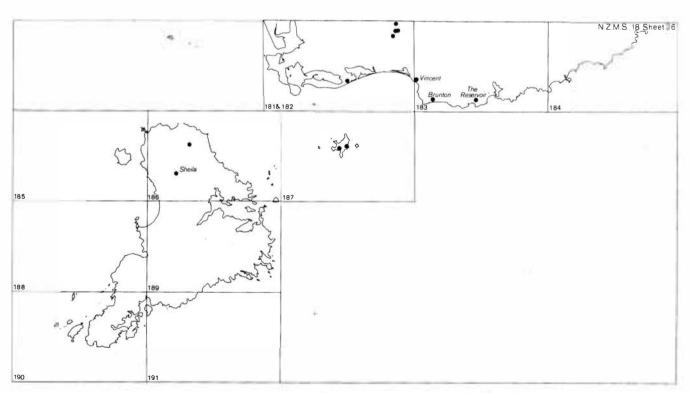


Fig. 28. NZMS 1 Sheets S181-191 showing locations of listed lakes.

Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet S149 continued									
Westmere	577123	1.1 km WNW of head of Calm Bay, Lake Manapouri.	2		12	0.7	0.5	EW	Drains to Calm Bay, Lake Manapouri.
Manapouri	590070	9.7 km WNW of Manapouri township.	179	G	143.3	3 28.3	11.5	EW	Glacial Fiord type lake, maximum depth 444m (Irwin 1969e, 1971c). Waiau Rive flows in NE end and flows out SE end. Four main tributary arms (North, West, South and Hope Arms). Number of islands. Used for power generation from intake at West Arm, then water flows to Doubtful Sound.
1	635011	$4.3\mathrm{km}$ WNW of Manapouri township.	179	G	0.42	1.0	0.5	ENE	No inlet or outlet shown.
	668941	7.0 km SSW of Manapouri township.	*	G	1.00	2.0	0.8	NNW	Drains to Garnock Burn and to Hope Arm, Lake Manapouri.
	812151	2.2 km NW of Lynwood.		R S	্	0.8	0.4	NNW	Near swampland.

Minor lakes: (1) Lake Virginia 419058; (2) 3 small lakes centred 440950. Maximum altitude shown on this sheet 1741 m (5711 ft) Flat Mountain 517964.

Sheet S150 - Mossburn

1st Ed. 1 December 1965

Thomas 961143 9.2 km NNE of The Key. 488-518 0.25 0.8 0.7 W Swamp on NW side. Lake adjacent to Thomas Burn.

Minor lakes: (1) 6 very small ponds centred 865935; (2) small lake 872162; (3) small lake 876144; (4) small lake 882135; (5) 2 very small ponds 887938; (6) 5 small lakes centred 895111; (7) 17 small tarns E of Takitimu Mountains centred 950935 in radius of 2 km; (8) small lake adjacent to Lake Thomas 963148; (9) scattered tarns 135055; (10) 3 small lakes centred 176170; (11) 2 small lakes 250196. Maximum altitude shown on this sheet 1569 m (5146 ft) Gladstone Peak 944926.

Sheet S151 - Nokomai

1st Ed. 1968

No lakes shown on this sheet. Maximum altitude shown on this sheet 1613 m (5290 ft) Mt Cameron 744134.



Sheet S152 - Roxburgh

1st Ed. 1970

Gow	774167	9.5 km NW of Titan Rocks.	1341	G	0.30	1.5	0.4	N	Drains to Gow Burn.
Scott	786187	9.8 km NW of Titan Rocks.	1403-1432	G	0.15	0.7	0.2	NW	Drains to Lake Scott.
Blue Lake	801109	7.6 km NW of Titan Rocks.	1291	G	0.50	1.4	0.4	NW	Drained by Blue Creek.
	813980	1 km SE of Whitecomb.	0-210	R	0.05	1.1	0.05	WNW	Adjacent to Waikaia River. Ox-bow type.

Minor lakes: (1) 5 small lakes including Lake Laura centred 765170 in a 1.5 km radius circle near Lake Gow; (2) small lake 771911; (3) Skeleton Lakes, 2,796196; (4) 2 small lakes centred 807187; (5) 8 small lakes centred 808970; (6) small lake in stream 844028; (7) 2 tarms centred 850113 near Titan Rocks; (8) Gem Lake 957059; (9) 23 dams and small lakes in area E of Clutha River, in area NE and SW of Roxburgh. Maximum altitude shown on this sheet 1752 m (5750 ft) 784177.

Sheet S153 - Teviot

1st Ed. 1969

	294973	7.0 km ENE of Millers Flat.	51	D	0.50	0.8	0.1	NNE	Bush on W side. Drains through Minzion Burn to Clutha River.
Onslow	400400	21.0 km NE of Millers Flat.	671-700	D	3.50	4.8	1.4	NE	In swampland. Teviot River flows out of W end.
	570190	1.5 km NW of Upper Taieri- Paerau Road.	549-579	R	0.15	2.0	0.05	NW	Ox-bow lake in swampland next to Taieri River.
	645097	9.3 km SE of Upper Taieri- Paerau Road.	792-823	S	0.10	0.5	0.3	NE	In swampland.

Minor lakes: (1) dam 203099; (2) 4 small dams centred 225087; (3) small lake 243110; (4) small lake 422104 adjacent to Lake Onslow; (5) small lake 431191; (6) 8 small tarns centred 438960; (7) small lake 475132; (8) small tarn 491933; (9) small lake 534066 next to Taieri River; (10) 3 small lakes adjacent to Taieri River centred 537159; (11) small lake 642094; (12) 2 small lakes centred 647107. Maximum altitude shown on this sheet 1210 m (3973 ft) Lammerlaw Top 414963.

Sheet S154 - Middlemarch: Provisional

September 1947

Minor lakes: (1) small lake 678946; (2) small lake and very small dam centred 684947; (3) 3 small lakes centred 697945; (4) very small lake 722981; (5) small tarn 737156; (6) "Salt Lake" 793073; (7) dam 793939; (8) small lake 802079; (9) 4 small lakes centred 852092; (10) small lake near Middlemarch-Stoker Road 895084; (11) dam 936980; (12) very small lake 067099. Maximum altitude shown on this sheet 131 m (430ft) McPhees Rock 711199.



Max. Max. Major National Altitude Geographical Position Туре wdth axis Name lgth Notes (m) Grid Ref. sqkm km km dir.

Sheet S155 - Waikouaiti

2nd Ed. 1 October 1963

No lakes shown on this sheet. Maximum altitude shown on this sheet 695 m (2280 ft) 113175.

Sheet S156 - Dusky

1st Ed. 1968

From NZMS 18 Sheet 24 Invercargill 1:250,000.

	768731	On Anchor Island.	(*)	G	*	8.0	0.3	NNW	On Anchor Island.
Fraser	781603	14.8 km W of head of Edwardson Sound.	*	G	0.75	1.4	0.7	E-W	Drains to W coast 6.5km away. Also on Sheet S165.
	796680	6 km SE of Anchor Island.		G		0.7	0.2	E-W	Near Pickersgill Harbour.
	868675	6 km ESE of Indian Island.	3	G		0.6	0.2	NE	Drains to Lumaluma Creek and Edwardson Sound.
	882679	7.2 km ESE of Indian Island.	55	G	0.83	1.4	0.8	NNW	Drains to Lumaluma Creek and Edwardson Sound.
	892661	6.5 km S of Long Island.	85	G	*	0.9	0.5	NNW	Drains to Lumaluma Creek and Edwardson Sound.

Minor lakes: (1) small lake 831756; (2) lake 666849; (3) small lake 895685; (4) small lake 899773; (5) lake 938800. Maximum altitude on this sheet 1134 m (3720 ft) 837650.

Sheet S157 - Heath

From NZMS 18 Sheet 24 Invercargill. 1:250,000.

Cadman Lake	960605	22 km ENE of Edwardson Sound.	.53	G	1.67	2.7	0.7	NE	Close to head of Edwardson Sound.
	990840	6.5 km NNW of Cooper Island.	-	G		0.6	0.2	E-W	Drains to Dusky Sound.
	005836	5.6 km N of Cooper Island.		G	9	0.8	0.3	N-S	Drains to Dusky Sound.
	017845	6.0 km N of Cooper Island.	2	G		0.5	0.4	NNW	Drains to Dusky Sound.
	080692	5 km SE of head of Fanny Bay.	್ಷ	G	0.50	1.5	0.6	E-W	Drains to Dusky Sound.
	093892	12.8 km NE of Cooper Island.		G	15	0.8	0.4	NW	Drains to Fanny Bay, Dusky Sound.
Mike	095650	6.9 km SE of head of Fanny Bay.	0.00	G	0.83	1.2	0.5	N-S	Drains to Fanny Bay, Dusky Sound.



	214779	18.3 km E of Cooper Island.		G		0.5	0.3	NNE	Drains via Roa Stream to Dusky Sound.
Loch Maree	228840	19.8 km ENE of Cooper Island.		GR	0.67	2.1	0.6	ENE	On Seaforth River.
	232706	20.4 km ESE of Cooper Island.		G	0.67	1.2	0.6	E-W	Drains to Hay River, thence to Lake Hauroko.
	273659	20.6 km SE of Cooper Island.	10	G	7.1	0.9	0.3	ESE	On Hay River and drains to Lake Hauroko.
Roe	307822	27.8 km ESE of Cooper Island.	*	G	*	0.8	0.5	ESE	Drains via Deadwood Creek to Seaforth River.
Story	321781	28 km ESE of Cooper Island.		G	**	0.7	0.5	WSW	Drains to Lake Hauroko.

Minor lakes: (1) small lake 990729; (2) small lake 016687; (3) 2 small lakes centred 196680; (4) small lake 214772; (5) 4 small lakes centred 490825; (6) small lake 358872; (7) 5 small lakes centred 680360; (8) small lake near "White Peak" 388622. Maximum altitude shown on this sheet 1454 m (4770 ft) Mt Solitary 161794.

Sheet S158 - Monowai

From NZMS 18 Sheet 24 Invercargill. 1:250,000

Shallow	440837	19.4 km WSW of Monowai town-ship.	*	G	**	0.6	0.4	N-S	Drains to South Arm, Lake Manapouri via Grebe River.
Island Lake	461748	$21.2\mathrm{km}$ W of Monowai township.	4	G		0.9	0.7	NW	Drains to South Arm, Lake Manapouri.
Green Lake	513725	16.8 km W of Monowai township.		G	5.00	2.9	2.4	NNE	Drains to South Arm, Lake Manapouri.
	535789	15 km WNW of Monowai township.	S2	G		0.7	0.2	W-E	Drains via Borland Burn to Waiau River.
Monowai	550628	17.5 km SW of Monowai township.	Ş.	G	32.5	20.6	2.5	NE	Dammed for hydro-electric power generation. Drains via Monowai River to Waiau River. Maximum depth 161 m.

Minor lakes: (1) small lake 411780; (2) lake 521703; (3) small lake 531868; (4) small lake 539709; (5) small lake 550778. Maximum altitude shown on this sheet 1728 m (5643 ft) Mt Titiroa 610895.

Sheet S159 - Morley: Provisional

March 1945

Minor lakes: (1) 2 small lakes in swampland centred 214757. Maximum altitude on this sheet 1640 m (5382 ft) Spence Peak 892840.

Sheet S160 - Lumsdem: Provisional

March 1945

595887 1.9 km W of Round Hill. 183-213 R Ox-bow lake 0.9 km from Mataura River. $0.05 \quad 1.5$ 0.1NNW



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sqkm	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet S160 con	tinued.								
	694723	7.6 km NNE of Riversdale.	122-15	2 R	0.02	0.7	0.1	NE	Ox-bow lake 0.3 km from Whakaea River.
	710654	4.7 km ENE of Riversdale.	91-12	2 R	0.03	0.6	0.0	5 WNW	Ox-bow lake 0.3 km from Whakaea River.
	716683	6.1 km NE of Riversdale.	122-15	2 R	0.05	0.7	0.1	NNE	Ox-bow lake 0.9 km from Mataura River.
	725650	6.0km E of Riversdale.	91-12	2 R	0.05	0.7	0.1	NE	Ox-bow lake 0.3 km from Mataura River.

Minor lakes: (1) tarn 410784; (2) small lake (possibly ox-bow) 594859; (3) 2 small lakes centred 668682; (4) 2 small lakes or tarns centred 666824; (5) 11 small tarns (some in swampland) centred 692815; (6) small lake 691769; (7) 3 small lakes on E side of Mataura River centred 760700; (8) small ox-bow lake 718661; (9) 3 small tarns centred 719615; (10) 32 small tarns and lakes within 0.5 km distance of, and on both sides of Mataura River, centred 720830. Maximum altitude shown on this sheet 630 m (2230 ft) Round Hill 613890.

Sheet S161 - Heriot

2nd Ed. 1 November 1957

067664 0.9 km from Kelso township. 122-152 R 0.08 1.7 0.07 NW Ox-bow lake adjacent to Pomohaka River.

Minor lakes: (1) 2 small lakes centred 036701; (2) small lake adjacent to Pomohaka River 052678; (3) small lake adjacent to Pomohaka River 058665; (4) small lake 066639. Lakes centred around Kelso on Paradise Flat. Maximum altitude shown on this sheet 1090 m (3575 ft) in Black Umbrella Range 874878.

Sheet S162 - Lawrence: Provisional

October 1946

324873 9.9 km N of Beaumont. 305-335 D 0.10 0.9 0.3 NNE Drains to Clutha River. 634802 28.4 km ENE of Beaumont. 488-518 - 0.05 0.5 0.3 N

Minor lakes: (1) small lake on Craig Flat 295864; (2) group of 9 small lakes centred 455698; (3) group of 4 small lakes (including small reservoir) centred 472719; (4) group of 6 small lakes centred 473670; (5) Phoenix Dam 480693; (6) Malorie's Dam 490683; (7) small lake 543634; (8) dam 604848. Maximum altitude shown on this sheet 1160m (3805ft) 502897.

Sheet S163 - Mosgiel

2nd Ed. 1 February 1965

Lake Mahinerangi 755660 24 km NNW of Outram Central. 391 D 18.60 21.5 3.4 W Dam used for hydro-electric power generation. Also on Sheet S162.



	725652	19.4 km WSW of Outram.	91-122	D	0.20	1.3	0.2	W	Dam on Waipori River.
	921725	0.5 km from Outram.	0-30	R	0.05	1.3	0.1	WNW	Ox-bow lake close to Outram.
Kaikorai Lagoon	065660	0.6 km from Waldronville.	0-30	S	0.40	1.9	0.3	NNE	Swamp at N end drains by Kaikorai Stream to sea. Lake's southern boundary taken as Brighton Road. May be open to sea at high water.

Minor lakes: (1) small lake adjacent to Lake Mahinerangi 654768; (2) dam 737693; (3) dam 759738; (4) small lake next to Taieri River 912633; (5) very small lake 919644; (6) small ox-bow lake next to Taieri River 932651; (7) small tarn next to Taieri River 932724; (8) ox-bow lake (small) 940730; (9) small lake 951877; (10) very small lake (pond) 953672; (11) dam 978666. Maximum altitude shown on sheet 894 m (2936 ft) Maungatua 822703.

Sheet S164 - Dunedin

3rd Ed. 1 December 1965

Tomahawk Lagoon 190682 4.5 km SE of Dunedin (Octagon). 0-30 B 0.40 1.4 1.0 NW In two parts on Sheet S164. Drains

to sea. Three inflowing streams, shown. Closed to sea at high water.

Minor lakes: (1) Southern Reservoir 108698; (2) reservoir 149749; (3) very small lake 165863; (4) Sullivan's Dam 168798; (5) reservoir 227816; (6) reservoir 235801; (7) small lake 240782. Maximum altitude shown on this sheet 768 m (2550 ft) Silver Peak No. 2 103882.

Sheet S165 - Chalky

1st Ed. 1968

From NZMS 18 Sheet 24 Invercargill. 1:250,000.

Thomas	740450	7 km W of Great Island.	*	G	0.83	1.0	0.6	NW	2.0 km from sea coast. No inlet or outlet shown.
Hector	780450	4 km W of Great Island.	100	G	0.83	1.1	0.6	NNW	Drains to Chalky Inlet.
Caesar	823489	4.1 km N of Great Island.	*.	G		0.6	0.3	NW	No inlet or outlet shown.
Rimmer	837525	7.7 km NNE of Great Island.	2.5	G	2.6	0.8	0.5	ENE	Drains to Chalky Inlet.
Macarthur	844583	13 km N of Great Island.	*5	G	1.00	1.4	0.7	NE	Drains to Lake Fraser thence to sea.
	849556	10.8 km NNE of Great Island.	53	G	32	0.9	0.4	ENE	No inlet or outlet shown.
	901388	9.2 km SE of Great Island.	-	G		0.8	0.6	NNE	On peninsula N of Preservation Inlet.
	910405	5.4 km ESE of Great Island.	23	G	17	0.6	0.4	NNE	On peninsula N of Preservation Inlet.

Minor lakes: (1) Lake Esau 815447; (2) Lake Dobson 819435; (3) small lake 909393. Maximum altitude shown on this sheet 1116 m (3650 ft) The Stopper 874569.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes	
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Sheet S166 - Cameron

1st Ed. 1968

From NZMS 18 Sheet 24 Invercargill. 1:250,000.

Victor	011538	2.3 km NE of head of Islet Cove, Cunaris Sound.	ា	G R	0.83	1.5	0.7	NE	On Carrick River. Drains to Cunaris Sound, Chalky Inlet.
Widgeon	122564	1.6 km NNE of head of Long Sound.	ii.	G R	0.25	1.2	0.5	NNE	In Long Burn. Drains to Cascade Basin, head of Long Sound, Preservation Inlet.
Monk	161446	10.2 km SE of head of Long Sound.		G	1.67	2.3	8.0	NNW	A source of Big River flowing to Lake Hakapoua.
+()	198548	7.6 km E of head of Long Sound.	9	G	0.50	1.3	0.5	NE	Flows to Richard Burn, thence to Cascade Basin, head of Long Sound, Preservation Inlet.
Mouat	209433	10.4 km SE of head of Long Sound.		G	1.50	2.4	0.7	NNW	Drains to Lake Poteriteri.
Kakapo	240557	11.5 km E of head of Long Sound.		G	0.50	1.5	0.5	ENE	Drains to Lake Poteriteri.
Poteriteri	280371	22 km SE of head of Long Sound.	55	G	42.50	27.2	3.0	NNW	Drains to sea (S coast) via Waitutu River. Also on Sheet S174.

Minor lakes: (1) small lake draining into Lake Poteriteri, S of "West Peak" 315406; (2) group of 4 small lakes centred 330450; (3) lake draining into Lake Hauroko, E of Caroline Peak 370539; (4) small lake near Beatrice Peaks 359416; (5) small lake draining into Lake Hauroko 395528. Maximum altitude shown on this sheet 1701 m (5575 ft) Caroline Peak 351539.

Sheet S167 - Tautapere

2nd Ed. October 1968

Hauroko 440530 36 km NW of Tuatapere township. 157 G 68.30 33.7 7.8 N I

Drains at S end by Wairaurahiri River to sea coast. In Fiordland National Park. Bush-surrounded. Several islands, one of them, Mary Island, large. Note: Dimensions taken from Sheet 24 NZMS 18 series Invercargill. Also on Sheets S157, S166. Maximum depth 462 m.



Sheet S168 - Nightcaps: Provisional

November 1944

Minor lakes: (1) small lakes (possibly ox-bow type) next to Orauea River 865417; (2) 2 small lakes centred 280342; (3) 2 small lakes centred 293428; (4) 3 small lakes centred 292367. Maximum altitude shown on this sheet 609 m (2000ft) Bald Hill 892335. Note: Nos (2)-(4) lakes next to Oreti or New River.

Sheet S169 - Winton

3rd Ed. 1 January 1964

Minor lakes: (1) small pool 438544; (2) pond 488311; (3) pond 496434; (4) pond 504494; (5) 2 small lakes near Mataura River centred 725568. Maximum altitude shown on this sheet 754 m (2482ft) Bare Hill 531533.

Sheet S170 - Gore

2nd Ed. 1 March 1963

818462	5.0km NNW of Gore.	61-91	R	0.02	0.5	0.1	NW	Ox-bow lake close to Mataura River.
820484	6.8 km NNW of Gore.	61-91	R	0.01	0.6	0.05	NE	Ox-bow lake close to Mataura River.
823473	5.8 km NNW of Gore.	61-91	R	0.02	0.7	0.1	NW	Ox-bow lake close to Mataura River.
833457	4.2 km N of Gore.	61-91	R	0.01	0.6	0.05	NW	Ox-bow lake close to Mataura River.

Minor lakes: (1) small ox-bow lake 789521; (2) 3 small lakes centred 794504; (3) small ox-bow lake 824363; (4) very small lake 828463; (5) small lake 837448; (6) small lake 087478; (7) small lake 129444. Note: All but No. (7) possibly R-type. Maximum altitude shown on this sheet 627 m (2060ft) East Peak No. 2 771471.

Sheet S171 - Waitahuna: Provisional

December 1945

583315 7.0km SSW of Crichton. 0-30 S 0.25 2.0 0.4 N Surrounded by swamp.

Minor lakes: (1) small lake 289341; (2) small lake 483331; (3) very small lake 419588; (4) 2 small lakes centred 575540; (5) dam 644543. Maximum altitude shown on this sheet 554 m (1820ft) 623596.

Sheet S172 - Milton

2nd Ed. 1 June 1963

	802580	6 km W of Henley.	0-30	S	0.20	1.0	0.3	N	Surrounded by swampland, lying between Lake Waipori and Lake Waihola.
Waihola	804534	6.8 km SW of Henley.	0-30	R S	6.05	6.5	1.8		Swampy to the N and S end, drains to Waipori River and to Taieri River.



Name	National Grid Ref.	Geographical Position	Altitude (m)	Туре	Area sq km	Max. lgth km	Max. wdth km	Major axis dir.	Notes
Sheet S172 continued									
	807589	5.3 km WNW of Henley.	0-30	S	0.1	0.6	0.2	NNE	Surrounded by swampland between Lakes Waipori and Waihola.
Waipori	824594	4.0 km WNW of Henley. •	0-30	RS	2.25	2.5	1.6	W	Waipori River drains from S end to join Taieri River, thence to sea. Surrounded by swampland. Also on Sheet S163.
	824558	4.1 km SW of Henley.	0-30	S	0.10	0.5	0.4	N	Surrounded by swampland between Lakes Waipori and Waihola.

Minor lakes: (1) dam 692505; (2) small lake 808574; (3) 2 small lakes centred 815568. Maximum altitude shown on this sheet 530 m (1740ft) 677598.

Sheet S173 - Preservation

From NZMS 18 Sheet 24 Invercargill. 1:250.000.

No lakes shown on this sheet. Maximum altitude shown on this sheet 768 m (1256 ft) The Knob 946271.

Sheet S174 - Hakapoua

From NZMS 18 Sheet 24 Invercargill. 1:250,000.

Kiwi	026257	7.6 km NNE of Green Island.	3.5	7	0.50	1.7	0.4	NNE	Drains via Kiwi Burn to S coast.
Hakapoua	154258	5 km SW of Mt Aitken.		G	5.00	5.9	1.0	NNE	Drains via Big River to S coast.
Innes	170241	5.4 km SSW of Mt Aitken.	*	G	0.83	1.6	0.6	NNW	1.8km from Lake Hakapoua. Drains via Aan River to coast at Knife and Steel Boat Harbour.

Minor lakes: (1) small lake 085272 in headwaters of Fred Burn; (2) small lake 130278 draining to Lake Hakapoua; (3) Lake Marshall 167259 between Lakes Hakapoua and Innes. Maximum altitude shown on this sheet 1189 m (3900 ft) Mount Aitken 198292.

Sheet S175 - Orepuki

2nd Ed. September 1967.

No lakes shown on this sheet. Maximum altitude shown on this sheet 578 m (3313 ft) 467218.



Sheet S176 - Riverton: Provisional

June 1943

	900091	15.3 km WNW of Riverton.	0-30	3	0.05	0.5	0.1	NE	In low-lying land.
	911073	13.8 km W of Riverton.	0-30	-	0.10	0.5	0.3	NNW	Surrounded by quicksand and swamp.
George	934063	11.6 km W of Riverton.	0-30	S	1.50	1.8	1.3	WNW	Surrounded by bush and swamp.
	105094	4.2 km NE of Riverton.	0-15	W	0.10	0.9	0.1	ENE	Close to coast in low sandhills.
	115096	5.0 km NE of Riverton.	0-15	W	0.09	0.8	0.1	ENE	Close to coast in low sandhills.
	192075	11.2 km E of Riverton.	0-15	W	0.05	0.5	0.2	NW	Close to coast in sandhills and low swampland.
	197076	11.6 km E of Riverton.	0-15	W	0.20	1.3	0.2	NW	Close to coast in sandhills and low swampland.
	201080	12.1 km ENE of Riverton.	0-15	W	0.25	0.6	0.5	N	Close to coast in sandhills and low swampland.
	233058	15 km E of Riverton.	0-15	S	0.03	0.5	0.1	N	
	278300	28.8 km NE of Riverton.	30-61	R	0.05	1.4	0.1	NNW	Ox-bow type. Also on Sheet S168. Close to Oreti River.

Minor lakes: (1) 2 small lakes centred 901101; (2) 4 small lakes centred 909081; (3) small tarn 946083;

- (4) 5 small lakes centred 075128; (5) small ox-bow lake 082272; (6) 2 small lakes centred 142100;
- (7) 5 small lakes 187078; (8) small lake 215063; (9) 2 small lakes 235058; (10) Lake Murihiku 277020. Maximum altitude shown on this sheet 760 m (2494 ft) Longwood 912193.

Sheet S177 - Invercargill

2nd Ed. 1 September 1960

No lakes shown on this sheet. Maximum altitude shown on this sheet 198 m (650 ft) 414248.

Sheet S178 - Wyndham

2nd Ed. 1 April 1965

Minor lakes: (1) small ox-bow lake 761131 adjacent to Mataura River, Wyndham. Maximum altitude shown on this sheet 721 m (2361 ft) Mt Pye 136044.

Sheet S179 - Balclutha

2nd Ed. 1 November 1965

	527227	3.9 km S of Balclutha.	0-30	R	0.03	0.7	0.1	NNW	Ox-bow lake adjacent to Clutha River.
Tuakitoto	586269	5.8 km E of Balclutha.	0.3	R'S	3.35	4.3	1.4	N	Swamp on W side; drains to swampland surrounding Lake Kaitangata.



Sheet \$179 continued.

Kaitangata

596229 7.6 km ESE of Balclutha.

0-30 RS 0.70 1.1 0.4

NNW Completely surrounded by swamp.
Drains to Clutha River.

Minor lakes: (1) small lake 518212; (2) 2 small lakes centred 525243; (3) small lake 536248. Note: Lake Kaitangata has been drained and is now farmland (Dec. 1973). Lake Tuakitoto is being drained and now occupies approximately one half the area shown on Sheet S179 (Dec. 1973). Maximum altitude shown on this sheet 691 m (2266 ft) Mt Tautuku 212035.

Sheet S180 - Wangaloa : Provisional 1944

No lakes shown on this sheet. Maximum altitude shown on this sheet 174 m (570 ft) 650246.

Sheets S181 & S182 - Omaui & Bluff: Interim September 1942

527804	17.1 km E of Bluff.	•	W	0.15	0.7	0.3	NW	Drains to Waituna Lagoon in scrub-covered low sandhills.
679952	33.9km NE of Bluff.	*	S	0.05	0.7	0.2	NE	Ox-bow lake close to Mataura River.
686968	35.0 km NE of Bluff.		R	0.03	0.5	0.1	NNW	Ox-bow lake close to Mataura River.
686974	35.5 km NE of Bluff.	8.00	R	0.20	1.9	0.2	NW	Ox-bow lake close to Mataura River.
687993	36.6 km NE of Bluff.		R	0.07	0.7	0.1	NW	Ox-bow lake close to Mataura River.

Minor lakes: (1) 1 very small reservoir, 1 small tarn and 1 small secondary reservoir centred 346777; (2) 3 lakes centred 289930; (3) 2 small lakes in sand dunes centred 388799; (4) 12 small lakes centred 395841; (5) 14 small tarns and lakes in circle, radius 2 km, centred 450850; (6) 2 small tarns centred 484904; (7) 3 small tarns centred 507926; (8) 7 small tarns in swampland centred 531891; (9) 4 small lakes centred 542807; (10) small lake 557882; (11) small lake 569875; (12) 19 small lakes centred 595854; (13) small ox-bow lake 677968; (14) small lake 679989; (15) very small lake 711955; (16) very small lake 733857; (17) 2 very small ponds (tarns) on edge of bush centred 738819; (18) 2 small lakes centred 747810. Maximum altitude shown on this sheet 265 m (868 ft) near The Bluff 350767.



Sheet S183 - Tokanui : Provisional

1944

Vincent	756809	6.8 km NW of Otara.	0-30	W	0.25	1.4	0.4	NW	Behind sandhills 12-37 m high. Swamp at SE end.
Brunton	812749	1.6 km S of Otara.	0-30	W	0.30	3.8	0.5	WNW	In low sandhills and surrounded by swamp.
"The Reservoir"	956738	13.6 km W of Otara.	11	¥	0.50	2.0	0.6	NE	In low sandhills.

Minor lakes: (1) small lake next to Lake Vincent 756814; (2) Lake Charles 788763; (3) small lake 744795; (4) small lake 806766; (5) Lake Cook 840741; (6) small lake 854995; (7) small lake in sand dunes 867736. Maximum altitude shown on this sheet 620 m (2031 ft) Kenneths Peak 154964.

Sheet S184 - Papatowai: Provisional

1945

·No lakes shown on this sheet. Maximum altitude shown on this sheet 485 m (1590 ft) Titan Bluff 252986.

Sheet S185 - Codfish

2nd Ed. January 1968

From NZMS 219 Stewart Island 1:126,720.

No lakes shown on this sheet. Maximum altitude shown on this sheet 159 m (520 ft) on Rugged Islands 832635.

Sheet S186 - Mt Anglem

2nd Ed. January 1968

From NZMS 219 Stewart Island 1:126,720.

Sheila	946489	8.3 km E of Richards Point.	*	S	0.20	0.7	0.3	WNW	Situated in swampland in Rugged Flat, amongst other small lakes.
	990589	1.6 km SW of Mt Anglem.		(6)	0.24	0.6	0.2	N	Close to Mt Anglem in high country.

Minor lakes: (1) Double Lakes 928495; (2) 2 small lakes centred 949501; (3) 4 small lakes in 1 km radius centred 913515; (4) 9 very small lakes including Lake Calder and Lake Alexander centred 970490; (5) very small lake 991446; (6) 2 small lakes near Mt Anglem centred 012593. Maximum altitude shown on this sheet 1163 m (3214 ft) Mt Anglem 004899.



Name	National Grid Ref.	Geographical Position	Altitude (m) T	ype Area	Max. lgth km	Max. wdth km	Major axis dir.	Notes
	GIIG NOI		()	oq	km	km	dir.	

Sheet S187 - Ruapuke

2nd Ed. January 1968

From NZMS 219 Stewart Island 1:95.040.

Waitokariro Lagoon	498577	2.7 km N of South Point, Ruapuke Island.	*	В	0.36	0.6	0.4	NNW	On Ruapuke Island, Foveaux Strait, close to sea on SW coast, Henrietta Bay.
Moana Putakitaki Lagoon	541582	0.8 km W of Parangiaio Point, Ruapuke Island.	Ş.	В	0.20	1.3	0.2	NNE	Narrow lagoon behind cliffs and beach on E side of island.

Minor lakes: (1) small Tauatemaku Lagoon on Ruapuke Island 518564; (2) small Te Awatuiau Lagoon, Ruapuke Island near Lagoon Bay 538579. Maximum altitude shown on this sheet 64 m (210 ft) on West Point, Ruapuke Island 522572.

Sheet S188 - Deceit

2nd Ed. January 1968

From NZMS 219 Stewart Island 1:126,720.

No lakes shown on this sheet. Maximum altitude shown on this sheet 146 m (481 ft) 813310.

Sheet S189 - Rakiura

2nd Ed. January 1968

From NZMS 219 Stewart Island 1:126,720.

Minor lakes : (1) small lake 929170; (2) small lake 938341; (3) small lake 081183 in Toitoi Flat. Maximum altitude shown on this sheet $715\,\mathrm{m}$ (2347ft) Table Hill 941231.

Sheet 190 - South Cape

2nd Ed. January 1968

From NZMS 219 Stewart Island 1:126,720.

No lakes shown on this sheet. Maximum altitude shown on this sheet 536m (1758ft) Smith Lookout 712176.



No lakes shown on this sheet, Maximum altitude shown on this sheet 304 m (996 ft) 957084.

Sheet S191 - Pegasus 2nd Ed. January 1968 From NZMS 219 Stewart Island 1:126,720

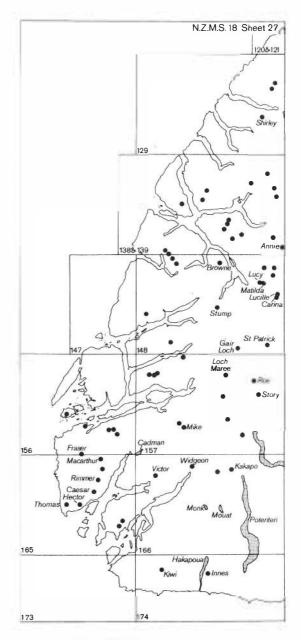


Fig. 29. N ZMS 1 Sheets S129, 138, 139, 147, 148, 156, 157, 165, 166, 173, 174 showing locations of listed lakes.



ANALYSES OF TABULATED DATA

NORTH ISLAND

Tables 1, 2, 3

LAKE TYPE DISTRIBUTION

The predominant lake type is the wind-formed, coastal, and dune lake. These lakes which lie almost exclusively on the west coast of the North Island, are characterised by their low altitude, mostly less

than 91 m (300 ft), and relatively small area, 83 percent being less than $0.5\,\mathrm{km}^2$ (Tables 1, 2).

Fifty-nine lakes are associated with rivers, including ox-bows cut off from the river course. These occur at low altitudes, mostly less than 30 m (100 ft), and 73 percent have surface areas less than



Fig. 30. Lake Tarawera and Lake Rotomahana (volcanic). Photo: Whites Aviation Ltd.



Fig. 31. Lake Rotoiti and Lake Rotorua (volcanic). Photo: Whites Aviation Ltd.



0.5km². This type of lake is formed adjacent to river courses, where rivers flow over comparatively flat country at a slow rate. They do not occur at the headwaters of rivers, where the inclination of the river bed is steep and the current fast, but nearer the outlet to the sea.

Excluding unclassified lakes, the next most frequent are those lakes associated with volcanic activity and man-made dams. Volcanic lakes, dammed and eruptive, are found throughout the whole area range and much of the altitude range. In the North Island this type is grouped in volcanic areas, e.g., the Rotorua district. Most lakes fall in the 274-366 m (900-1200 ft) altitude group but four occur at altitudes over 610 m (2000 ft). The latter group lie in the central North Island volcanic area and each lake is less than $0.5\,\mathrm{km}^2$ in surface area.

Dams are predominantly less than 0.5 km² in area (19 of the 29 listed). Generally, small dams are reservoirs for town or city water supplies and large

dams are used for hydro-electric power generation. This type of lake occurs over a wide range of altitudes.

Nineteen lakes are associated with swamps; most have surface areas less than $0.5\,\mathrm{km^2}$, and they lie at altitudes below 30 m. They are mainly confined to lowlying areas near rivers in poorly-drained land.

Bar lakes are also small, mostly less than $0.5\,\mathrm{km^2}$ in area, and lie at altitudes below $30\,\mathrm{m}$. Formed by wave action, they usually lie adjacent to river mouths close to the sea. They are also formed in lakes as wave action eventually forms a barrier cutting off a small area of lake adjacent to the main lake. The three lakes listed in Table 3 at altitudes between $305\text{-}335\,\mathrm{m}$ are bar lakes formed near larger lakes.

Only three tectonic lakes, i.e., lakes associated with earth movement, are listed. Two are small and at low altitudes but Lake Wairarapa, at the southern end of the North Island, is in the area group 50-500 $\rm km^2$

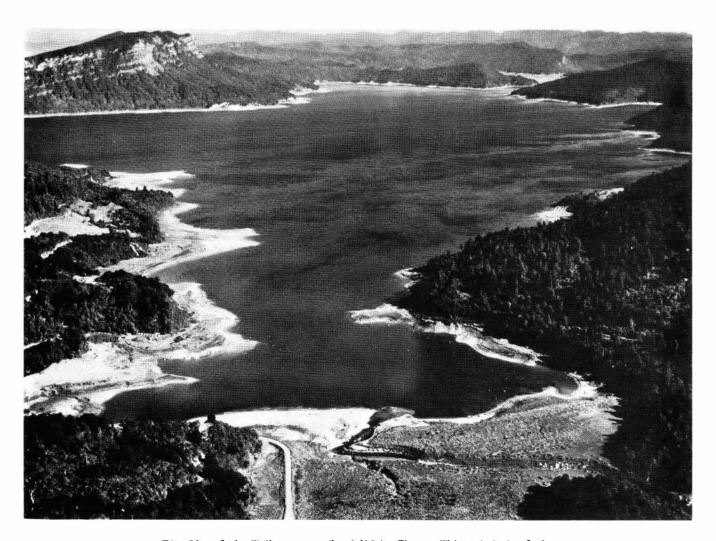


Fig. 32. Lake Waikaremoana (landslide). Photo: Whites Aviation Ltd.



Of the three landslide lakes, the largest is Lake Waikaremoana $(50-500\,\mathrm{km^2}$ group), and its existence is attributed to a large rockslide.

Of the 34 unclassified lakes, although 29 are in the minimum area group $(<0.5\,\mathrm{km}^{\,2})$ the lakes occur over a wide range of altitudes (Table 2). Probably many either are man-made dams or were formed by small landslides.

FREQUENCY OF AREAS

Lakes of $<0.5\,\mathrm{km^2}$ surface area predominate almost four-fold over the next most frequent area group $(0.5\text{-}5\,\mathrm{km^2})$. This distribution can be related to the predominance of lakes associated with wind and rivers. Such lakes are by their nature small; sand dune lakes are formed in consolidated and active sand hills which limit their area, and river-associated lakes are kept small as they are cut off from river courses.

Lakes with areas between 5-50 km² are mainly volcanic lakes in the Rotorua district.

The three lakes with areas between 50-500 km²

are: volcanic-Lake Rotorua; landslide-Lake Wai-karemoana; tectonic-Lake Wairarapa.

The lake with the largest surface area, over 500 km², is Lake Taupo, which is of volcanic origin.

For purposes such as hydro-electric power generation, where usable height may be limited and surface area is important, lakes in the three largest size groups offer by far the greatest potential, and the volcanic lakes represent the greatest proportion of this potential.

FREQUENCY OF ALTITUDES

As with area groupings it is the type of lake which determines altitude groupings. Most lakes lie between 0-61 m (0-200 ft) and are either formed by the wind or associated with rivers (Tables 2, 3).

Lakes associated with volcanic activity and dams cover the widest range of altitude groups. Volcanic areas are found at varying altitudes; man-made dams, whether for water supply or for hydro-electric power generation, require altitude for their use.



Fig. 33. Lake Waikare (river and swamp). Photo: Whites Aviation Ltd.





Fig. 34. Lake Wahakari (wind-formed). Photo: E.J. Thornley.

			Area	(km ²)		Totals
Lake Type	< 0.5	0.5 - 5	5 - 50	50 - 500	500 - 5000	Totals
Tectonic	2	1		1		4
Volcanic	10	8	9	1	1	29
Landslide	1	1		1		3
Swamp	16	3				19
River	43	13	3			59
Wind	88	18				106
Bar	9	2	1			12
Dam	19	7	3			29
Glacial						
Not determined	29	4				33
Totals	217	57	16	3	1	294

TABLE 1. Area frequency of lake types, North Island.

Lake Type	Altitude ft m	0		200 61	300 91			600 183		800 243			1100 335	1200 366	1300 396	1400 427	1500 458	1600 488	1700 518	1800 549	1900 579		>2000 >610	No Contours	Totals
Tectonic			3					1																	4
Volcanic			1			1			1	1	1	4	3	5	1	4	1	1			1		4		29
Landslide							1		1													2			3
Swamp			9	5			2										1						1	1	19
River		4	8	5				1	1			1												3	59
Wind		3	4 2	9 1	3	3	1								- 1				- 1					26	106
Bar			9										3		1				- 1				- 1		12
Dam			1	3	1		4	3	2	2	2	2	1	2	- 1					1				5	29
Glacial															-11										
Not determined			5	4	2	4	3	4	2			2 _			1					1			2	3	34
Totals		11	0 4	6 1	6	8	11	9	6	3	3	9	7	7	2	4	2	1		2	1	2	7	38	294

TABLE 2. Altitude frequency of lake types, North Island.

Area (km²)	Altitude ft	0 10 0 30		0 300 91			600 183					1100 335	1200 366	1300 396	1400 427	1500 458	1600 488	1700 518	1800 549	1900 579	2000 610	>2000 >610	No Contours	Totals
<0.5		82	38	14	7	8	7	4	1	2	4	5	2	2	2		1		2		1	5	32	217
0.5 - 5		23	7	2	1	3	2	2		1			3		2	1						2	6	5.7
5 - 50		4	1						2		4	2	1			1				1				16
50 - 500		1									1										1			3
500 - 5000										_			1											1
Totals		110	46	16	8	11	9	6	3	3	9	7	7	2	4	2	1		2	1	2	7	38	294

TABLE 3. Altitude frequency of lake area groups, North Island.





Lake Karapiro (man-made). Photo: Whites Aviation Ltd.

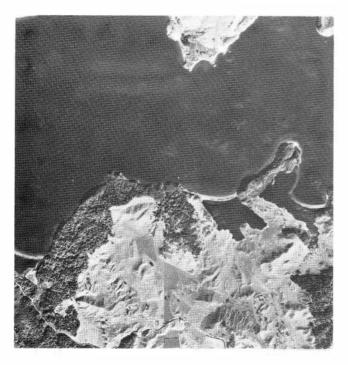


Fig. 35. Lake Rotoma (shoreline). Photo: N.Z. Aerial Mapping Ltd.

SOUTH ISLAND

Tables 4, 5, 6

LAKE TYPE DISTRIBUTION

Lakes attributed to damming by glacial action predominate. Of the 268 glacial lakes, most are small in area (172 less than 0.5 km²) and many lie at high altitudes in the southwest of the South Island. Of the 11 lakes listed as being over 50 km² in area, 9 are glacial and include the well-known large lakes which lie east of the main divide (Tables 4, 5).

Sixty-four lakes are associated with rivers. Fortysix of these are less than 0.5 km2 in area and many are ox-bow lakes cut off from river courses. In the North Island such lakes lie mostly at low altitudes, but in the South Island 10 lie at high altitudes (+610m). Some of the latter lakes, which have formed at the terminal face of a glacier, lie at the head of the river draining the glacier.

Laka Tuna	Area (km²)													
Lake Type	< 0.5	0.5 - 5	5 - 50	50 - 500	500 - 5000	Totals								
Tectonic														
Volcanic						- 2								
Landslide	5	4				9								
Swamp	16	2				18								
River	46	15	3			64								
Wind	13					13								
Bar	13	2	2	1		18								
Dam	17	9	3	1		30								
Glacial	172	74	13	9		268								
Not determined	38	16	1			55								
Totals	320	122	22	11	*	475								

TABLE 4. Area frequency of take types, South Island.



Fig. 37. Lake Rotoroa (glacial). Photo: Whites Aviation Ltd.



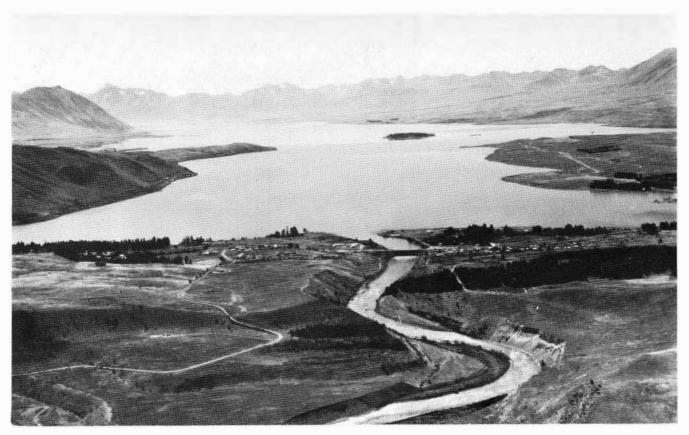


Fig. 38. Lake Tekapo (glacial). Photo: Whites Aviation Ltd.

Of the 475 listed lakes, 55 were not classified. Excluding these, the next most frequent type is the lake formed by a dam. There are 30 such lakes, occuring over a wide range of altitudes, of which 17 are less than $0.5\,\mathrm{km^2}$ in area and are probably irrigation or water-supply dams. Four hydro-electric dams have areas greater than 5 km²: Aviemore, Waitaki, Mahinerangi, and Lake Benmore which is the largest, being over 50 km².

Bar lakes and lakes associated with swamp mostly lie at low altitudes and are small in area. Sixteen of the 18 swamp lakes are less than 0.5 km² as are 13 of the 18 bar lakes. However, Lake Ellesmere, a bar lake on the east coast south of Banks Peninsula, is greater than 50 km² in area.

There are 13 wind-formed lakes, which contrasts greatly with the North Island where 106 of the total 294 lakes are classified as being wind-formed. Most South Island lakes of this type lie at low altitudes (0-30m) in coastal areas, and are less than 0.5km² in area.

Nine landslide lakes are listed all of which are less than 5 km2 in area. Most occur in the northern part of the South Island in an area with many earthquake slips.

Of the 55 unclassified lakes, 38 are less than 0.5km² in area, 16 are less than 5km², and they occur over a large range of altitudes.

FREQUENCY OF AREAS

A total of 320 lakes have areas under $0.5\,\mathrm{km}^2$ and 172 of these are glacial lakes, many being small high-country tarns. Forty-six lakes in this area group are associated with rivers and, as with the glacial lakes, their areas can be related to type. The predominance of type is also found in the next most frequent area group (0.5-5 km).

Lakes with areas between 5-50 km² and 50-500 km² are mostly glacial (Table 4). The largest lakes offer the greatest potential for use in hydro-electric power generation where surface area is an important factor.

FREQUENCY OF ALTITUDES

Half of the South Island lakes were listed from NZMS 18 Series sheets (1:250,000), without land contours. Eighty-seven of the remaining lakes lie at altitudes greater than 610 m (Tables 5, 6), which is a reflection of lake type as many of the small glacial lakes (tarns) lie at high altitudes.



Lake Type	Altitude ft m		100 30	200 61	300 91	_	500 2 152					1000 305	1100 335	1200 366	1300 396	1400 427	1500 458	1600 488	1700 518	1800 549	1900 579	2000 610	>2000 >610	No Contours	Totals
Tectonic																									
Volcanic																									
Landslide								1											4					8	9
Swamp		1	1				1																1	5	18
River		1	0	1	5	2	4	1	2			1		6	1						2		10	19	64
Wind		1	0																					3	13
Bar		1	3																1					4	18
Dam			1	2		1	3	4		1	2	1	1	1	1			1			1		8	2	30
Glacial				1	1		1	3	1		1	1	1	2			1		3	2	2	8	62	178	268
Not determined	l		5	2	2	3	2	Ш			1	1	2		1	1	1	1	1		3	4	6	19	55
Totals		5	0	6	8	6	11	9	3	1	4	4	4	9	3	1	2	2	5	2	8	12	87	238	475

TABLE 5. Altitude frequency of lake types, South Island.

Area (km²)	Altitude $_{\rm m}^{\rm ft}$		100 30	200 61	300 91	400 122		600 183					1100 335	1200 366	1300 396	1400 427	1500 458	1600 488	1700 518	1800 549	1900 579	2000 610	>2000 >610	No Contours	Totals
<0.25		35		4	6	3	7	5	2		1	2	2	7	2	1		1	2	1	7	6	65	161	320
0.5 - 5		11		1	- 1	3	3	2			1	1	1				1			1	1	5	18	73	122
5 - 50		8		1	2		1		1	1	2				1		1	1	1			1	3	3	22
50 - 500		1	.					2				1	1	2		- 10			2				1	1	11
500 - 5000																									
Totals		50	108	6	8	6	11	9	3	1	4	4	4	9	3	1	2	2	5	2	8	12	87	238	475



Lakes at low altitudes (0-30m) are those types which are often associated with low land, i.e., swamp, river, wind and bar lakes.

Dams and glacial lakes cover the widest range of altitudes but glacial lakes predominate in the higher altitudes.

COMPARISON OF NORTH AND SOUTH ISLAND LAKES

The outstanding feature of the New Zealand lakes is that volcanic lakes occur only in the North Island and glacial lakes only in the South Island, demonstrating that lake basins are typified by their formative geologic processes and these processes tend to be confined to certain geographical areas.

The altitude-area tables show that the majority of lakes in the North Island occur at low altitudes. These lakes are wind-formed or are associated with rivers in low-lying country near the coast, where sand is readily moved by the wind and rivers meander, leading to the formation of ox-bow lakes. Most lakes of the South Island are glacial lakes lying at altitudes over 610m (2000ft), and many of those listed with no contours are glacial tarns in high country of the southwest of the South Island where mapping by aerial photography has yet to be completed. Present maps in this area do not show land contour detail.



Fig. 39. Lake Wakatipu (glacial). Photo: Whites Aviation Ltd.

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APPENDIX I

LOCALITIES OF LISTED LAKES HAVING THE SAME OR SIMILAR NAMES

Name	NZMS 1 Sheet Reference	Locality
Adelaide Tarn	\$8	Douglas Range near Takaka
Adelaide	S122	Darran Mountains, near Milford
Alexander	S 28	Mt Horrible, near Blenheim
Alexander	S 186	Stewart Island
Alice	N 143	Near Marton
Alice	S 130	At head of George Sound
Black Lakes	S 17 & S 18	Mt Brilliant, near Little Wanganui River
Black Hole (The)	S 100	Near Lake Pukaki
Blue (Tikitapu)	N76	Near Rotorua
Blue	N112	Tongariro National Park
Blue	S 40	Spencer Mountains
Blue Lakes	S79	At foot of Tasman Glacier
Blue	S 125	Near St Bathans, Otago
Blue	S152	Near Titan Rocks, Garvie Mountains
Camp	S 13	Near Mt Cobb, Nelson District
Camp (Howard)	S81	Near Ashburton
Diamond	S13	Near Mt Lockett, Nelson District
Diamond	S115	Near Glenorchy, Otago
Diamond	S122	Near Lake Wanaka
Emerald	N 85	Waimangu Thermal Valley
Emerald Lakes	N112	Tongariro National Park
Grassmere	\$29	Near Seddon, Marlborough
Grasmere	S 66	Near Craigiebum, Canterbury
Green (Rotokakahi)	N 76	Near Rotorua
Green	N 77	Adjacent to Lake Rotomahana
Green (Ngakora)	N 85	Near Waiotapu
Green (Rotowhero)	N 85	Near Waiotapu
Green	S 158	Fiordland National Park
Horseshoe	N 141	Near Patangata, Hawkes Bay
Horseshoe	S 54	Near Hanmer Springs, Canterbury
Ida	S 50	Hohunu Range, near Hokitika
Ida	S 66	Near Lake Coleridge
Island	S13	Near Mt Cobb, Nelson District
Island	\$40	Spencer Mountains
Island	S158	Fiordland National Park
Kimihia	N 56	Near Huntly
Kimihia	N 56	Near Huntly
Little	S 47	Near Waiau River, Spencer Mountains
Lyttle	S70	Westland National Park
Luna	S17 & S18	Mt Kendall, near Little Wanganui
Luna	S 132	Near Queenstown
Margaret	S 44	Paparoa Range, near Greymouth
Margarets Tarn	S 59	Near Arthurs Pass
Mary	S 53	Near Lake Sumner
Marymere	S 66	Near Craigieburn, Canterbury
Mudhole	N 138	South of Wanganui



Name	NZMS 1 Sheet Reference	Locality
Mud	S 32	Matakitaki River, near Murchison
Mystery	S 81	Dogs Range, near Ashburton
Mystery	S 98	Mt Aspiring National Park
Mystery	S 113	Near Lake Alabaster
Pataka	N65	Near Hamilton
Potaka	N 105	Near Waikaremoana
Potaka	N 134	Near Fernhill, Hastings
Raupo Pond	S60	Near Lake Sumner
Raupo Lagoon	S 108	Southern end of Lake Ohau
Red Lakes	S74	Near Lake Coleridge
Red	S 89	Sealy Range, near Tasman River
Rotoiti	N 51	Near Karioitahi, South Auckland
Rotoiti	N76	Near Rotorua
Rotoiti	S 33	Nelson Lakes National Park
Rotoiti	S 49	Near Kaikoura
Rotokawau	N 6	Near Paparori, Northland
Rotokawau	N7	On Karikari Peninsula, Northland
Rotokawau	N7	On Karikari Peninsula, Northland
Rotokawau	N 33	Near Pouto, Kaipara Harbour
Rotokawau	N 76	Near Rotorua
Rotokawa	N 76	Near Rotorua
Rotokaua (Rotokawa)	N 94	Near Taupo
Rotokauwau	N143	Near Whangaehu
Rotongaio	N 103	Near Waikahanui, Lake Taupo
Rotongaio	N 105	Near Waikaremoana
Rotongata	N75	Near Arapuni
Rotongata (Mirror Lake)	N 76	Between Lakes Rotoiti & Okataina
Rotongaro	N 52	Near Ohinewai, South Auckland
Rotongaro	N 112	Tongariro National Park
Rotopounamu	N 112	Near Tongariro National Park
Rotopounamu	N126 & N127	Near Mahia
Rotoroa	N 9	Near Ahipara, Northland
Rotoroa (Hamilton)	N65	Hamilton
Rotoroa	N73	Near Kawhia Harbour
	N77	Near Kawerau
Rotoroa Rotoroa	N 105	Near Waikaremoana
	S33	Nelson Lakes National Park
Rotoroa	N 76	Rotorua
Rotorua Rotorua	S 49	Near Kaikoura
	N 138	South of Wanganui
Round Hole	S 13	Near Mt Cobb, Nelson District
Round	S13	Near Mt Lockett, Nelson District
Ruby	S 50	Hohunu Range, near Hokitika
Ruby	N 22	Near Maropiu, Northland
Shag		
Shag Tarn	S 17 & S 18 S 81	Near Little Wanganui River Near Ashburton
Spider Lakes	S 111	On the coast near Timaru
Spiders Lagoon		
Swan	N3 & N4	Near Motutangi, Northland
Swan	N6	Near Boute, Kaipara Harbour
Swan	N 33	Near Pouto, Kaipara Harbour



Swan	S 52	Near Rotomanu, Westland
Swan Lagoon	S 108	Southern end of Lake Ohau
Taharoa	N 22	Near Dargaville, Northland
Taharoa	N 73	Near Kawhia Harbour
Thompson +	S 40	Spencer Mountains
Tnompson	S122	Near Lake Wanaka
Thomson	S130	Near Middle Fiord, Lake Te Anau
Virginia	N 138	Wanganui
Virginia	S 149	Near Lake Manapouri
Waikare	N 52	Near Ohinewai, South Auckland
Waikare	N 130	Near Waitotara River
Waikere	N 22	Near Dargaville, Northland
William	N143	Near Marton
William	S17 & S18	Radiant Range, near Little Wanganui

[†] See also "Thompson's Lake", p.160

APPENDIX II

LIST OF LAKES DESCRIBED IN LITERATURE

Alternative names and spellings of lakes are given in brackets throughout. Lands and Survey Department NZMS 1 topographical series sheet numbers are given for each lake. * Lakes not named on the sheets although may be shown unnamed.

ACLAND (Emma) (S81)	ARATIATIA (N 94)
Flint 1970; Haast 1879; Speight 1915; Speight <i>et a</i> 1910; Stout 1969a; Travers 1873.	l Chapman 1970a; Widgery 1967.
ADA (S121) Cotton 1952b; Marshall 1905b, 1908; Speight 1915	Edyly 1000, Edyly et al 1000, Element 1001, Collen
ALABASTER (S113) Cotton 1948, 1952b; Grindley 1958; Marshall 1905a McKay 1881.	(= 00)
ALEXANDRINA (S89) Speight 1915.	ATIAMURI (N 85) Chapman 1970a; Department of Statistics, New Zealand Year Book 1966; Widgery 1967.
ALICE (S130) Andrews 1905.	AVIEMORE (S117) Flint 1970.
ALTA (Jones) (S132) Park 1908.	Flint 1970; Department of Statistics, New Zealand Year Book 1966.
ARAPUNI (N75 Bartrum 1935; Chapman 1970a; Department of Statistics, New Zealand Year Book 1966; Widgery 1967	BERNARD (N143)



BLACKWATER Gage 1959; Haast 1879.	(S66)	DARBY POND Bell 1907b.	(\$8)	
BLUE LAKE Cotton 1952a; Cussen 1891; Gregg 1960; Hi	(N112) ill 1892;	DIAMOND LAKE Flint 1970; McKay 1881; McKerrow 1863.	(\$122)	
Lowe 1897; Thomas 1889. BLUE LAKE 1*	(\$79?)	DISPUTE Park 1909.	(S132)	
Flint 1970. BLUE LAKE 2*	(S 79?)	DIVE Morgan and Gibson 1927.	(N118)	
Flint 1970.	(570.)	DUNCAN	(\$140)	
BOULDER LAKE (Te Warau) Bell 1907b; Braithwaite 1968a, 1968b; Dobse	(S8) on 1871;	Hall 1899. EIGHT MILE LAKE	(S32)	
Marshall 1910; Speight 1915. BREWER'S LAKE	(N137)	Fyfe 1968.	(50%)	
Cunningham et al 1953.		ELLESMERE Burrows 1964; Department of Statistics, New		
BROWNE Hutchinson 1957.	(S129)	Year Book 1966; Evans 1953; Marshall 1905 Percival 1952; Speight 1915, 1931; Stokell 193 Stout 1969b; Suggate 1965.		
BROWNING Bell and Fraser 1906.	(S 58)	EVELYN Speight 1915, 1932; Stout 1969a.	(S66)	
BRUNNER (S5 Brunner 1851; Flint 1970; Haast 1865, 1879; 1905b; Morgan 1911; Department of Statisti		FERGUS Grindley 1958.	(\$122)	
Zealand Year Book 1966; Speight 1915; Sugga	(\$32)	FORSYTH Flint 1970; Speight 1915.	(\$ 94)	
CASLANI Fyfe 1968.	(552)	FOXTON NO. 1*	(N148)	
CATHERINE Haast 1879; Speight 1915, 1932.	(S66)	Cunningham et al 1953. GEORGINA	(\$74)	
CLARA	(\$8)	Haast 1879; Speight 1932; Stout 1969a.		
Bell 1907b. COBB Department of Statistics, New Zealand Ye	(S13)	GRASMERE Flint 1970; Gage 1959; Haast 1879; Irwin Speight 1915; Stout 1969a.	(\$66) n 1969d;	
1966.	(S74)	GREENLAND DAM Furkert 1921.	(\$144)	
COLERIDGE Birks 1915; Department of Statistics, New Year Book 1966; Fish 1969a; Flain 1970; F Haast 1879; Marshall 1905b; Packard 1947	Zealand ox 1908;	GUDDOPS (Duddings or Hogg) Cunningham 1957.	(N 143)	
1913, 1915, 1932; Speight <i>et al</i> 1910; Sugga Stout 1969b; Travers 1873.		GUNN Grindley 1958; McKay 1881.	(S122)	
CRATER HILL LAKE* Cotton 1952a; Hutchinson 1957.	(N 42)	GUYON Suggate 1965; Travers 1873.	(\$47)	
CRISTABEL Reed 1958.	(S 46)	HAKANOA Henderson and Grange 1926.	(N 56)	
DANIELLS Fyfe 1968.	(S 46)	HAKAPOUA (Hakaporia) Blair 1887; Park 1921.	(\$174)	



HALL* (S81?) Haast 1879.	HOROWHENUA (N152) Adkin 1910; Cunningham <i>et al</i> 1953; Speight 1915.
HANKINSON Wright and Carter 1965.	HORSESHOE (S 54) Flint 1970.
HANLAN (S17 & 18) Webb 1910.	HORSESHOE (N141) Kingma 1971.
HARIHARI Marwick 1946. (N73)	HOWARD (Camp) (S81) Flint 1970; Speight 1915; Speight <i>et al</i> 1910; Stout 1969a; 1969b.
HARRIS (S122) Andrews 1905; Marshall 1908; McKay 1881.	HOWDEN (S 122) Carter 1964; Galloway 1964; Grindley 1958; Jones 1964; Thompson 1964.
HATUMA (N146) Lillie 1953.	HUMUHUMU (N 32) Ferrar 1934.
HAUROKO (Hauroto, Howloko) (S167) Blair 1887; Department of Statistics, New Zealand Year Book 1966; Marshall 1905b; McKerrow 1863; Park 1921; Paulin 1882; Smith 1910; Speight 1915; Wood	IANTHE (S64) Morgan 1908; Speight 1915.
1948, 1969.	ICEBERG LAKE* (S121) Marshall 1907a, 1908.
HAWDON (S66) Gage 1959; Stout 1969a.	IDA (S66) Flint 1970; Haast 1879; Speight 1915, 1932; Stout
HAWEA (S 107) Blair 1887; Cotton 1947, 1948; Department of Statistics, New Zealand Year Book 1966; Ferrar 1929;	1969a. JANET* (S68) Wilson 1963.
Flint 1970; Fox 1908; Gordon 1892; Haast 1879; Marshall 1905b; McKay 1884; McKerrow 1862, 1863, 1870; Speight 1915; Suggate 1965; Travers 1873.	JASPER Suggate 1965. (S29)
HAYES (S132) Arthur 1993: Former 1990: Elipt 1970: Tolly 1959, 1957	JOHNSON (Johnstone) (S132) Ferrar 1929; Park 1909.
Arthur 1883; Ferrar 1929; Flint 1970; Jolly 1952, 1957, 1968; McKerrow 1863; Park 1909; Percival 1952; Speight 1915.	KAHUPUARERE (N 33) Ferrar 1934.
HEATON (N143) Cunningham et al 1953.	KAITANGATA (S179) Harrington 1958; Ongley 1939.
HENRIETTA (S 65 & 66) Flint 1970; Speight 1932; Stout 1969a.	KAI-IWI (N22) Irwin 1971a.
HERENGAWE (N137) Cunningham 1957; Cunningham <i>et al</i> 1953; Fleming 1953.	KAITOKE (N138) Fleming 1953.
HERON (S73) Flint 1970; Haast 1879; Speight 1915, 1932; Speight	KAIWAI Hay 1960. (N15)
et al 1910; Travers 1873; Wilson 1963. HILDA (S140)	KANGAROO (S 52) Morgan 1911.
Hall 1899. HOCHSTETTER (S 45)	KANIERE (S58) Bell and Fraser 1906; Department of Statistics, New Zealand Year Book 1966; Fox 1908; Haast 1879; Mar-
Suggate 1965.	shall 1905b; Speight 1915.



KANONO Cunningham <i>et al</i> 1953; Ferrar 1934.	(N 33)	MAHINAPUA Bell and Fraser 1906; Haast 1879.	(S 57)
KARAKA Henderson and Grange 1926.	(N 37)	MAHINERANGI Department of Statistics, New Zealand Year 1966; Duncan 1967; Mitchell 1971.	(S163) Book
KARAPIRO Bloodworth 1949; Chapman 1970a; Departme istics, New Zealand Year Book 1966; He Widgery 1967.		Andrews 1905; Blair 1887; Benham 1903; Cottor 1948, 1952b; Department of Statistics, New Z	ealand
KATHERINE* Haast 1879.	(\$53?)	Year Book 1966; Fish 1969a; Flint 1970; Fowler Fox 1908; Grindley 1958; Hutchinson 1957; 1969e, 1971c; Jolly 1957, 1968; Lucas 1904; N	Irwin Marples
KATRINE Andrews 1905; Speight 1915; Suggate 1965	(S 53)	1957; Marshall 1905b, 1908; McKerrow 1863, Park 1921; Speight 1915; Suggate 1965; Suter Turner 1937a, 1937b, 1938.	
KERERU* Hay 1960.	(N15)	MANORBURN DAM Furkert 1921.	(S144)
KERATA Cunningham 1957; Cunningham et al 1953.	(N37)	MAORI LAKES Haast 1879.	(\$81)
KILPATRICK* Jolly 1968; Park 1909.	(S132)	MAPOURIKA Flint 1970; Fox 1908; Haast 1879; Speight 191	(\$71) 15.
KIMIHIA Cotton 1952b; Henderson and Grange 1926.	(N 56)	MARAETAI Chapman 1970a; Department of Statistics, Ne	(N84)
KOHATA Fleming 1953.	(N138)	land Year Book 1966; Fish 1970a; Flint 1970; 1967.	
KOPUREHEREHERE Cunningham et al 1953.	(N152)	MARAHAU Fleming 1953.	(N 137)
KUWAKATAI Cunningham et al 1953.	(N 37)	MARCHANT Poole 1951.	(S130)
LADY LAKE Flint 1970.	(S 5 ?)	MARYMERE Flint 1970; Gage 1959; Stout 1969a, 1969b.	(S66)
LAW Wellman 1955.	(\$87)	MASON Speight 1915.	(S 53)
LETITIA Gage 1959; Haast 1879; Speight 1915.	(\$66)	MATIRI Fyfe 1968.	(S25)
LOCHNAGAR Speight 1915; Willett 1939.	(S114)	MAVORA LAKES Cotton 1947; Grindley 1958; McKerrow 1863 Speight 1915.	(S 141) 3, 1870;
LUNA Cotton 1947; Glock 1925; Park 1909; Wille	(S132) ett 1939.	McKELLAR Grindley 1958.	(S122)
LYES* Morgan 1908.	(\$64?)	McKENZIE Carter 1964; Galloway 1964.	(S122)
LYNDON Gage 1959; Parry 1948; Percival 1948, 1 1952; Percival and Burnet 1963; Speight 1 Stout 1969a, 1969b; Travers 1873.		McKERROW Fox 1908; Marshall 1905a; McKay 1881; Mc 1870; Speight 1915.	(S113) cKerrow



(S59)MINCHIN Marshall 1905b; McKav 1884; McKerrow 1870; Speight 1915: Stout 1969b. Gage 1959. OHINEWAI (S77)(N52)MOERAKI Henderson and Grange 1926. Wellman 1955. OINGA MOKE (S132)(N134)Glock 1925; Jolly 1968; McKerrow 1863; Park 1909; Kingma 1971. Speight 1915. **OKAIHAU** (N41)MONOWAI (S158)Cunningham et al 1953. Blair 1887; Department of Statistics, New Zealand OKAREKA (Okarita) (N76)Year Book 1966; Flint 1970; Marshall 1905b, 1908; McKerrow 1863, 1870; Park 1921; Speight 1915; Wood Cotton 1952a; Department of Statistics, New Zealand Year Book 1966; Grange 1937; Healy 1963; Irwin 1968; Jolly 1968; Martin 1926, 1927; Phillipps and Grigg MORTON DAM (N 164) 1922; Smith 1959; Speight 1915. Flint 1970. OKARO (Okere) (N85)MUDGEE (Mudgie) (S 50 & 51) Fish 1963a, 1968, 1969a, 1970b, 1970c; Grange 1937; Irwin 1968; Jolly 1968; Martin 1926, 1927; Smith 1959. Bell and Fraser 1906. MUIRS LAKE* (N51)**OKATAINA** Cunningham et al 1953. Briggs 1962a, 1962b; Cotton 1952a; Department of Statistics, New Zealand Year Book 1966; Fish 1963a, (N138)NAMUNAMU 1968, 1969a, 1970b; Grange 1937; Healy 1963; Irwin Fleming 1953. 1967, 1968; Jolly 1968; Martin 1926, 1927; Phillipps and Grigg 1922; Smith 1959; Solly and Shanks 1969; NGAHEWA (N85)Speight 1915. Fish 1968; Grange 1937; Phillips and Grigg 1922; Smith 1959. OKOIA (N137)Cunningham et al 1953; Fleming 1953. NGAPOURI (Opouri) (N85)Fish 1963a, 1969a, 1970a, 1970b; Irwin 1968; Jolly **OMAPERE** (N15)1968; Smith 1959; Solly and Shanks 1969. Bell and Clark 1909; Cotton 1952a, 1952b; Hutchinson 1957; McDowall 1965; Speight 1915. (N138)NGARURU ONOKE (N165)Fleming 1953. Cotton 1948, 1952b. NGATU (N9) OTOTOA (Rototoa) (N33) Cunningham et al 1953. Cunningham et al 1953; Ferrar 1934. NIVALIS* (S46)(S2)OTUHIE Suggate 1965. Ongley and Macpherson 1923. NUKUMITI (N73)**OTURI** (N137)Marwick 1946. Cunningham et al 1953; Fleming 1953; Hodge 1964. OHA* (N20)OWHAREITI (N15)(Owhaeiti) Ferrar et al 1925. Ferrar et al 1925. **OHAKURI** (N85)**PAPAITONGA** (N152)Cassie 1969; Chapman 1970a; Department of Statistics, New Zealand Year Book 1966; Flint 1970; Hill Adkin 1910; Buller 1893; Cunningham et al 1953. 1967; Widgery 1967. (S77)PARINGA OHAU (S108)Wellman 1955. Blair 1887; Cotton 1948; Department of Statistics, (N138)**PAURI** New Zealand Year Book 1966; Flint 1970; Fox 1908; Haast 1879; Irwin 1970c; Kitson and Thiele 1910; Cunningham et al 1953; Fleming 1953.



PEARSON (S66)

Flint 1970; Fox 1908; Gage 1959; Haast 1879; Irwin 1970d; Parry 1948; Percival 1948, 1949, 1951, 1952; Speight 1915; Stout 1969a, 1969b.

PHYLLIS (S 17 & 18)

Webb 1910.

PIHOE

(N11)

Ferrar et al 1925.

POERUA (Poherua) (S 50 & 51)

Haast 1879; Speight 1915.

POKOROA (Pokorua) (N47)

Cunningham et al 1953.

POTERITERI (Poteritari, Poutiritiri,

Poritiritiri) (S166)

Blair 1887; Department of Statistics, New Zealand Year Book 1966; Marshall 1905b, 1908; Park 1921; Speight 1915.

POUKAWA (N 141)

Kingma 1971; Lillie 1953.

POUNUI (N165)

McQueen 1969.

PUKAKI (S 100)

Bell 1907a; Blair 1887; Cotton 1947, 1948, 1952b; Department of Statistics, New Zealand Year Book 1966; Flint 1970; Fox 1908; Haast 1865, 1879; Irwin 1970e; Kitson and Thiele 1910; Marshall 1905b; McKerrow 1870; Percival 1952; Speight 1915, 1942; Speight 1963; Stout 1969b; Suggate 1965.

PUKEPUKE (N148)

Cunningham et al 1953; Flint 1970.

PUPUKE (Takapuna) (N42)

Barker 1970; Cheesman 1896; Cotton 1952a, 1952b; Green 1967; Hutchinson 1957; Marshall 1905b; Morgan 1924; Pond 1900; Speight 1915.

PURIMU (N146)

Lillie 1953.

QUILL (S121)

Cotton 1947, 1952b; Hutchinson 1957; Marshall 1908.

RAHUI (S31)

Henderson 1917.

RASSELAS (S77)

Wellman 1955.

RATAHITI* (N89 & 90)

Ongley and Macpherson 1928.

RATAPIKO (N109)

Morgan and Gibson 1927.

RED LAKES (S74)

Speight 1932.

RE PONGAERE (N 98)

Henderson and Ongley 1920.

RERE LAKE (S131)

Marshall 1910.

REREWHAKAAITU (Rerewhakaipu) (N86)

Department of Statistics, New Zealand Year Book 1966; Fish 1969a; Irwin 1970a; Jolly 1968; Martin 1926, 1927; Solly and Shanks 1969; Speight 1915.

ROTOAIRA (N 112)

Cotton 1948, 1952b; Department of Statistics, New Zealand Year Book 1966; Gregg 1960; Hill 1892; Hutchinson 1957; Lucas 1904; Marshall 1905b; Phillipps and Grigg 1922; Speight 1915.

ROTO ATUA (Rotoatua) (N 76)

Grange 1937.

ROTOEHU (N77)

Briggs 1962a, 1962b; Cotton 1952a; Department of Statistics, New Zealand Year Book 1966; Fish 1968, 1969a, 1970a, 1970b; Grange 1937; Healy 1963; Hutchinson 1957; Irwin 1968; Jolly 1968; Martin 1926, 1927; Pittams 1968; Smith 1959; Speight 1915.

ROTOITI (N76)

Benham 1903; Briggs 1962a, 1962b; Carr 1966; Cassie 1969; Chapman 1967, 1970a; Cotton 1952a; Department of Statistics, New Zealand Year Book 1966; Fish 1963b, 1966a, 1969a, 1970a, 1970c; Fish and Chapman 1969; Flint 1970; Green et al 1968; Grange 1937; Healy 1963; Hutchinson 1957; Irwin 1968, 1969a; Jolly 1968; Lucas 1904; Marshall 1905b; Martin 1926, 1927; Pittams 1968; Phillipps and Grigg 1922; Smith 1959; Speight 1915; Suter 1904.

ROTOITI (Rotuiti, Arthur, Rotaiti) (S 33) Brunner 1851; Cotton 1947; Department of Statistics, New Zealand Year Book 1966; Dobson 1871, 1873; Fyfe 1968; Haast 1865; Locke-Travers (Travers) 1866; Marshall 1910; Reed 1958; Speight 1915; Suggate 1965; Travers 1873.

ROTOITI (S 49)

Flint 1970.

ROTOKAKAHI (Green Lake) (N76)

Briggs 1962a, 1962b; Department of Statistics, New Zealand Year Book 1966; Grange 1937; Healy 1963; Hill 1910; Irwin 1968, 1970b; Jolly 1968; Martin 1926, 1927; Phillipps and Grigg 1922; Speight 1915; Travers 1876.



Chapman 1967, 1970a, 1970b; Cotton 1952a, 1952b; ROTOKALIA (Rotokawa) (N94)Department of Statistics, New Zealand Year Book Healy 1941(42). 1966; Fish 1963b, 1969a, 1969b, 1970a, 1970c; Fish and Chapman 1969; Flint 1970; Grange 1937; Healy ROTOKAWA (N76)1963; Hutchinson 1957; Irwin 1968, 1969b; Jolly Martin 1926, 1927. 1968; Lucas 1904; Marshall 1905b, 1912; Martin 1926, 1927; Park 1910; Phillipps and Grigg 1922; Pittams ROTOKAWAU (N76)1968; Smith 1959; Speight 1915. Briggs 1962a, 1962b; Grange 1937; Smith 1959. ROTORUA (S49)ROTOKAWAU (N6)Flint 1970. Cunningham et al 1953; Ferrar 1934; Speight 1915. ROTOTUNA (N27)Ferrar 1934. Briggs 1962a, 1962b; Cotton 1952a; Department of Statistics, New Zealand Year Book 1966; Fish 1969a; ROUNDABOUT (S81)Grange 1937; Healy 1963; Irwin 1967b, 1968; Jolly Flint 1970; Stout 1969a. 1968; Martin 1926, 1927; Phillipps and Grigg 1922; Pittams 1968; Smith 1959; Speight 1915. ROXBURGH (S143)Department of Statistics, New Zealand Year Book ROTOMAHANA (N86)1966: Winter 1964. Bell 1906; Cole 1970; Cotton 1952a, 1952b; Department of Statistics, New Zealand Year Book 1966; RUAPEHU (N122)Flint 1970; Grange 1937; Healy 1963; Hector 1886; Beck 1951; Blyth 1926; Cotton 1945, 1946, 1948, Hill 1905, 1911; Hochstetter 1867; Hutchinson 1957; 1952a, 1952b; Cussen 1886, 1891; Department of Hutton 1868, 1887; Irwin 1968; Jolly 1968; Martin Statistics, New Zealand Year Book 1966; Dibble 1926, 1927; Marshall 1905b, 1907; Phillipps and Grigg 1966: Dunnage 1886, 1894, 1895; Friedlaender 1922; Pond and Smith 1886; Roche 1948; Smith 1886a, 1899: Grange and Williamson 1930: Gregg 1960: Hill 1886b, 1894; Speight 1915; Taylor 1850; Thomas 1892; 1895; Lowe 1897; Marshall 1905b; McKerrow 1888: Tinne 1873: Travers 1876. 1886; Oliver 1945; O'Shea 1954; Park 1887; Reed 1945: Tombs 1960. ROTO NGAIO (Rotongaio) (N103)Jolly 1968. RUBY (S50 & 51) ROTONGARO* (N112)Bell 1906. Gregg 1960. RUNANGA (N134)ROTONGARO (N52)Kingma 1971. Cotton 1952b; Henderson and Grange 1926. RYAN (S44)ROTONGATA (N75)Morgan 1911. Grange 1930, 1937. SADDLE HILL POND* (S163)(Te Roto o Kiwa) ROTO-O-KIWA (N141)Byars 1960. Kingma 1971. SARAH (S66)ROTOPOUNAMU (N112)Flint 1938, 1970; Gage 1959; Haast 1879; Percival Gregg 1960. 1952; Stout 1969a, 1969b. ROTOROA (N73)SEDGEMERE (S40)Marwick 1946. Suggate 1965. **ROTOROA** (Rotorua, Roturoa, Howick Ratorna) (S33)SELFE (S66)Flint 1970; Haast 1879; Speight 1915, 1932; Stout Brunner 1851; Department of Statistics, New Zealand 1969a. Year Book 1966; Dobson 1873; Flint 1970; Fyfe 1968; Haast 1865; Locke-Travers (Travers) 1866; Marshall SHAG TARN (S17 & 18) 1905b, 1910; Reed 1958; Speight 1915; Suggate 1965;



(S60)

(N76)

Webb 1910.

SHEPPARD

Speight 1915; Suggate 1965.

Bell 1906: Briggs 1962a, 1962b; Cassie 1967, 1969;

Travers 1873.

ROTORUA

SUMNER (S53)

Department of Statistics, New Zealand Year Book 1966; Fox 1908; Haast 1879; Marshall 1905b; Speight 1915; Suggate 1965; Travers 1873.

SWAN (N33)

Cunningham et al 1953.

SWEENEY (S87)

Wellman 1955.

TAHAROA (N73)

Marwick 1946.

TAHAROA (N22)

Ferrar 1934; Irwin 1971a.

TAIERI* (S135 & 145)

Ferrar 1929; Marshall 1907; McKay 1884; Williamson 1939.

TAMA LAKES (Upper and Lower) (N112)

Cussen 1891; Gregg 1969; Hill 1892.

(N76)TARAWERA

Bell 1906; Cole 1970; Cotton 1952a, 1952b; Department of Statistics, New Zealand Year Book 1966; Fish 1969a, 1970a; Grange 1937; Healy 1963; Hill 1905, 1911; Hutchinson 1957; Irwin 1968, 1969c; Jolly 1957, 1968; Marshall 1905b; Martin 1926, 1927; Phillipps and Grigg 1922; Speight 1915; Thomas 1888.

(S57)TARLETON

Bell and Fraser 1906.

TAUANUI (N15)

Hay 1960.

(N102)TAUPO

Armstrong 1935; Benham 1903; Bloodworth 1943; Carpenter 1882; Cotton 1948, 1952a, 1952b; Cussen 1887; Department of Statistics, New Zealand Year Book 1966; Fish 1969a, 1970a; Flint 1970; Grange 1937; Hill 1892, 1905, 1911; Hochstetter and Petermann 1864; Hutchinson 1957; Jolly 1957, 1965, 1968; Lucas 1904; Marshall 1905b, 1907; McKerrow 1886; Park 1910; Phillipps and Grigg 1922; Smith 1886; Speight 1915; Suter 1904; Thomas 1889; Ward 1922; Williamson 1930.

(S87)TAUWERIKITI (Tauwharekiri)

Wellman 1955.

(S60)TAYLOR

Flint 1970; Haast 1879; Speight 1915; Suggate 1965; Travers 1873.

TE ANAU (S130, 131, 140)

Andrews 1905; Blair 1887; Cotton 1947, 1952b; Cox 1878; Department of Statistics, New Zealand Year Book 1966; Flint 1970; Fox 1908; Grindley 1958; Irwin 1971b; Jolly 1968; Marshall 1905b, 1908; McKay 1884; McKerrow 1863, 1870; Park 1921; Speight 1915.

TE AU (S140)

Hall 1899.

(Takapo, Takago, TEKAPO

(S90)Te Kapo)

Blair 1887; Cotton 1947, 1948, 1952b; Department of Statistics, New Zealand Year Book 1966; Flint 1970; Fox 1908; Haast 1865, 1879; Kitson and Thiele 1910; Marshall 1905b; McKerrow 1870; Percival 1952; Speight 1915, 1921; Stout 1969b.

TENNYSON (S40)

Locke-Travers (Travers) 1886; Speight 1915; Suggate 1965; Travers 1873.

TE PARITU* (N54)

Bayly 1962; Bayly et al 1956; Brothers 1957; Cotton 1948; Edwards 1953; Gold-Smith 1884; Marshall 1936; Thomson 1926.

THOMPSON'S LAKE* (N51)

Cunningham et al 1953.

THOMSON (S130)

Mark et al 1964; Wright and Carter 1965.

TIKITAPU (Blue Lake) (N76)

Cotton 1952a, 1952b; Department of Statistics, New Zealand Year Book 1966; Grange 1937; Healy 1963; Hill 1911; Hutchinson 1957; Irwin 1967c, 1968; Jolly 1957, 1968; Martin 1926, 1927; Phillipps and Grigg 1922; Smith 1959; Speight 1915; Travers 1876.

TOMAHAWK LAGOON (S164)

Flint 1970; Mitchell 1971.

(Clearwater) (S81)

Flint 1970; Haast 1879; Speight 1915; Speight et al 1910; Stout 1969a, 1969b; Travers 1873.

TUAKITOTO (S179)

Arthur 1883; Harrington 1958; Ongley 1939.

TUTIRA (N114)

Anderson 1948.

VAGABONDS INN (S66)

Flint 1970.

VIRGINIA (N138)

Fleming 1953; Marshall 1905b.

(N 56)WAHT

Cotton 1952b; Henderson and Grange 1926.

(S63)WAHAPO

Haast 1879.



WAIAU

(N137)

WAITAWA

Cunningham et al 1953.

(N152)

Cunningham et al 1953; Fleming 1953.

WAIHOLA

(S172)

Arthur 1883: Department of Statistics, New Zealand Year Book 1966; Harrington 1958; Marples 1957; Marshall 1905b, 1907; Ongley 1939; Speight 1915.

WAIKATO

(N137)

Fleming 1953.

WAIKARE

(N52)

Benham 1903: Cotton 1952b: Haszard 1890: Henderson and Grange 1926; Lucas 1904; Marshall 1905b; Speight 1915; Suter 1904.

WAIKAREMOANA

(N105)

Anderson 1948; Benham 1903; Carter 1951; Colenso 1894; Cotton 1948, 1952b; Department of Statistics, New Zealand Year Book 1966; Hutchinson 1957; Jolly 1968; Lucas 1904; Marshall 1905b, 1927; Ongley 1932; Speight 1915; Suter 1904.

WAIKAREITI

(N96)

Jolly 1968; Speight 1915.

WAIKERE

(N22)

Irwin 1971a.

WAINGATA (N33)

Cunningham 1957; Cunningham et al 1953; Fish 1966b, 1969a.

WAIPAPA

(N84)

Chapman 1970a; Department of Statistics, New Zealand Year Book 1966; Widgery 1967.

WAIPARERA

(N6)

Cunningham et al 1953; Flint 1970.

WAIPORI

(S172)

Mitchell 1971; Ongley 1939.

WAIRARAPA

(N165)

Cotton 1948, 1952b; Crawford 1879; Department of Statistics, New Zealand Year Book 1966; Flint 1970; Marshall 1905b; Speight 1915.

WAITAKI

(S117)

Department of Statistics. New Zealand Year Book 1966: Flint 1970.

WAKATIPU

(S 122, 123, 131, 132, 142)

Andrews 1905; Arthur 1882; 1883; Benham 1903; Blair 1887; Bottomley 1955, 1956a, 1956b; Brodie and Irwin 1971; Cotton 1947, 1948, 1952b; Cox 1965; Department of Statistics, New Zealand Year Book 1966; Ferrar 1929; Flint 1970; Fox 1908; Glock 1925; Gordon 1892; Grindley 1958; Hector 1869; Higginson 1877; Hogg 1904; Hutchinson 1957; Hutton 1872; Irwin and Jolly 1970; Jolly 1957, 1968; Lucas 1904; Marples 1957; Marshall 1905b, 1910; McKay 1881, 1885; McKerrow 1863, 1870; Park 1909; Russell 1876; Speight 1915; Stuart 1881; Suter 1904; Travers 1873.

WANAKA

(S 115)

Arthur 1883; Blair 1887; Cotton 1947, 1948, 1952b; Department of Statistics, New Zealand Year Book 1966; Ferrar 1929; Flint 1970; Fox 1908; Gordon 1892; Haast 1865, 1879; Jolly 1968; Marshall 1905b; McKay 1884; McKerrow 1862, 1863, 1870; Speight 1915; Travers 1873.

WESTMERE

(N137)

Cunningham et al 1953; Fleming 1953; Marshall 1905b.

WHAKAMARINO

(N105)

Department of Statistics, New Zealand Year Book 1966.

WHAKAMARU

(N84)

Chapman 1970a; Department of Statistics, New Zealand Year Book 1966; Fish 1970c; Widgery 1967.

WHAKAWERAWERA

(N77)

Briggs 1962a, 1962b.

WHANGAPE

(N52)

Cotton 1952b; Henderson and Grange 1926; Lucas 1904; Speight 1915.

WILKIE*

Speden 1971.

(S184)

(N143)

WILLIAM

Cunningham 1957.

(N138)

Fleming 1953.

WORLD *

WIRITOA

(S74)

Haast 1879.

