

## Situation Report: Aotea and Ahuahu Island exotic Caulerpa Delimitation (MPI Response Panel Contract)

Co-ordinated by:	NIWA
Report Number	#007
Date and time	24 July 2023
Period covered	24 July 07:00-19:00
Summary of day's activities	<ul style="list-style-type: none"> <li>- 0700-0730 Breakfast at Port Fitzroy, toolbox meeting and clean anchor prior to transit to Port Fitzroy (Figure 1).</li> <li>- 0730-0815 Three fifteen-minute dive transects completed in Port Abercrombie (ABC158, ABC156, MOT172; Figure 1, Table 1). <b>No exotic Caulerpa was detected.</b></li> <li>- 0820- 0920 Transit from Port Abercrombie to Motairehe/Katherine Bay to pick up Jeff Cleave.</li> <li>- 0945-1410 Nine fifteen-minute dive transect searches in the Port Fitzroy area (MOT164-MOT171; Figure 1, Table 1). <b>No exotic Caulerpa was detected.</b></li> <li>- 1430-1540 Transit from Motairehe to Rangiwahakaea Bay and Okiwi Bay</li> <li>- 1540-1620 Two fifteen-minute dive transect searches on the Aotea east coast (ARI159-160; Figure 1, Table 1). <b>No exotic Caulerpa was detected.</b></li> <li>- 1620-1730 Transit to Whangapoua to drop Jeff Cleave off and anchor in a sheltered bay off the coast.</li> <li>- 1745-1800 The dive team updated the project manager of the daily activities and sent the data through for SitRep.</li> <li>- 1800-1900 Complete SitRep and collate data.</li> </ul>
Actions carried out	<ul style="list-style-type: none"> <li>• 14 dive transects around Motairehe and Eastern Aotea.</li> <li>• Data collation, mapping, and SitRep.</li> </ul>
Plan for tomorrow	<ul style="list-style-type: none"> <li>• Complete 3 fifteen-minute dive searches at Arid island and an additional 3 dives at the edges of the infestation at Port Fitzroy</li> <li>• Disinfect vessel, anchor and gear before transiting to Tutukaka harbour to drop off two of the out-of-town divers to catch flights at Wednesday morning.</li> <li>• The additional Northland staff will stay onboard to unload the vessel at Whangaruru</li> </ul>

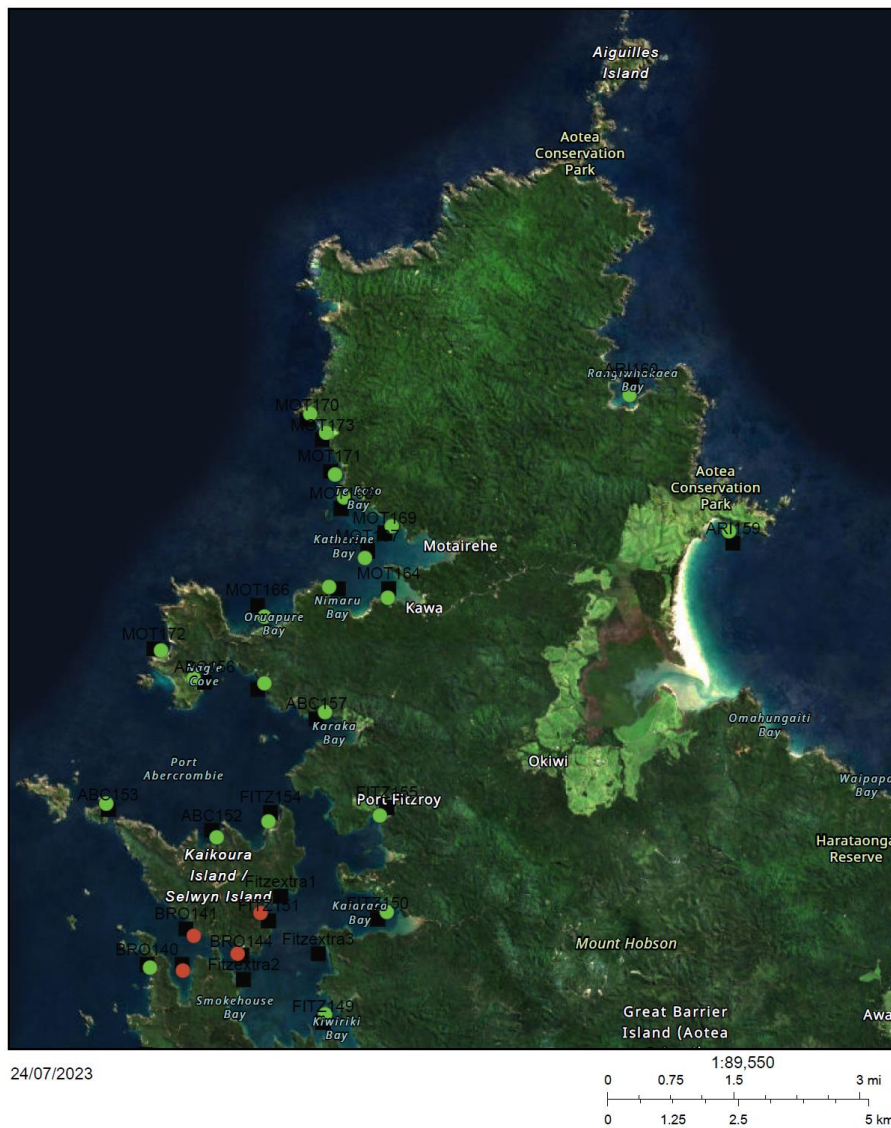
**Table 1:** Transect locations, substrate, depth and presence of exotic Caulerpa (in yellow) completed during the delimitation survey on 23 July 2023 by NIWA divers

Site ID (i.e. Dive01/Rov01)	Start Coordinates		End Coordinates		Depth category <sup>1</sup>	Water temp	Max depth	Transect width	Substrate <sup>2</sup>	Approx. Visibility (m)	Caulerpa (Y/N)
	Lat	Long	Lat	Long							
ABC156	175.321432	-36.142656	175.3341733	-36.14257163	D	14	15.4	6	7-8	8	N
ABC158	175.3326526	-36.14357965	175.3191869	-36.14207726	D	14	15	8	3	8	N
ARI159	175.4332324	-36.11646188	175.3121004	-36.13726453	D	14	18	8	3-8	8	N
ARI160	175.4106929	-36.0894546	175.3338217	-36.13112317	D	15	12.5	8	3-8	8	N
MOT164	175.3601895	-36.1257584	175.3474682	-36.1257362	D	15	15.2	4	2	4	N
MOT165	175.3492991	-36.12591988	175.3601235	-36.12727709	M	15	5.7	2	3-8	1	N
MOT166	175.3323594	-36.1291381	175.3549964	-36.12049308	D	14	15.7	8	2	8	N
MOT167	175.3555088	-36.11926296	175.3604942	-36.11491369	M	14	10	8	10	8	N
MOT168	175.3497122	-36.11205346	175.350171	-36.11016231	D	14	12.8	8	10-8	8	N
MOT169	175.3590157	-36.11619379	175.3482447	-36.10628495	D	15	18.6	8	3-5	8	N
MOT170	175.3419655	-36.09694891	175.3460786	-36.09906375	D	15	11.5	6	3-8	6	N
MOT171	175.3470071	-36.10569675	175.3425122	-36.09582105	D	15	13.4	6	3-8	6	N
MOT172	175.310486	-36.13708296	175.4104339	-36.09116108	M	14	9.1	3	8-3	1	N
MOT173	175.3453486	-36.10032842	175.432346	-36.11439874	M	14	10	6	3-5	4	N

<sup>1</sup>Depth Category codes (NS <2m, S 2-5m, M, 5-10m, D >10m)  
<sup>2</sup>Substrate codes: 1- Sandy mud, 2- Muddy sand, 3- Sand, 4- Sandy gravel, 5- Shelly gravel, 6- Sand fowl, 7- Sand reef, 8- Reef, 9- Other (Please state), 10 - Mud can have multiple codes ADD COMMENTS



**Figure 1:** Anchor chain disinfection post anchoring in Port Fitzroy for the night.



**Figure 2:** Start points without exotic *Caulerpa* (green circles), start points with exotic *Caulerpa* (red circles), and end (black squares) points for the dive searches completed around Aotea/Great Barrier Island on 23 and 24 July 2023.