

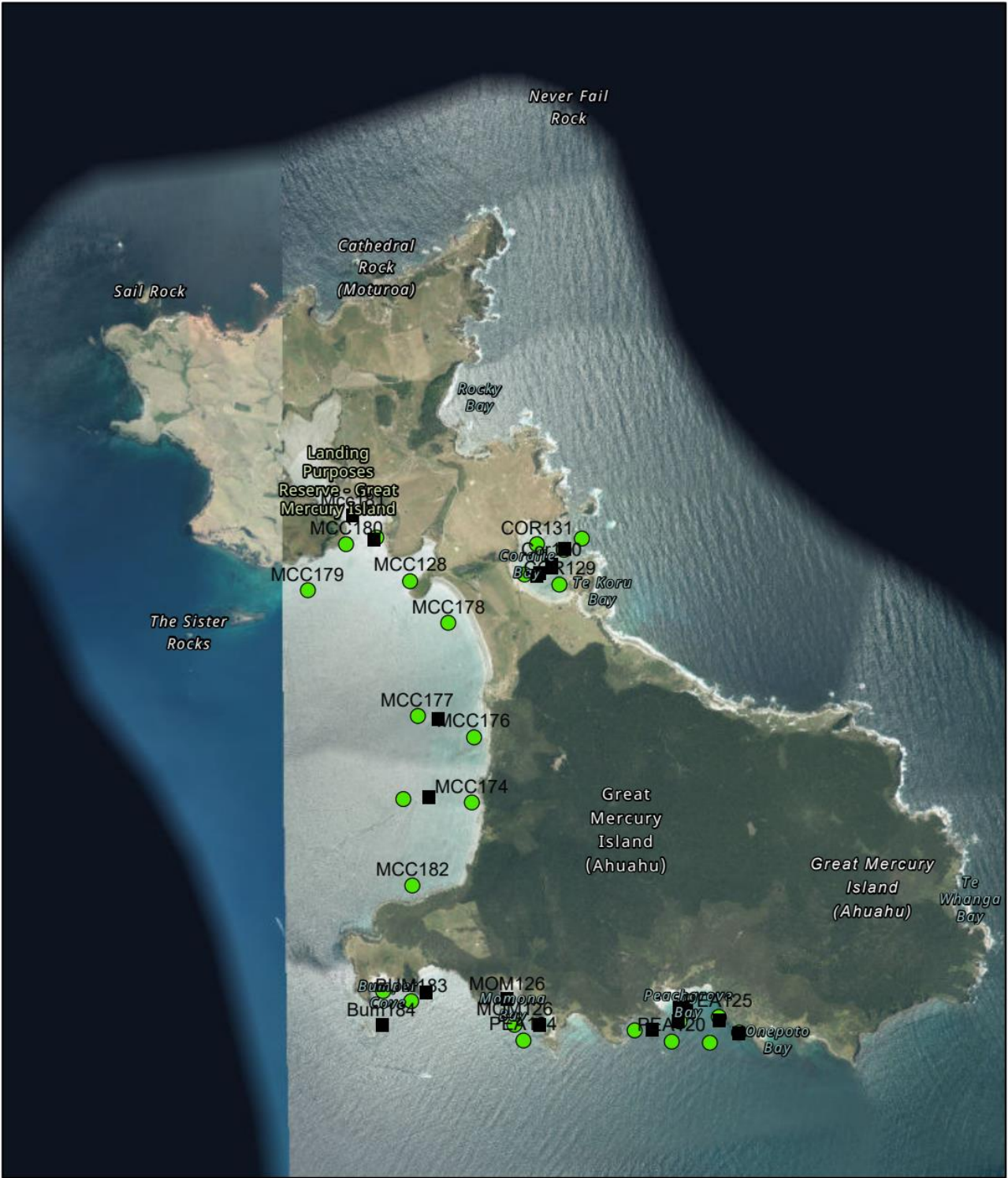
Situation Report: Aotea and Ahuahu Island exotic Caulerpa Delimitation (MPI Response Panel Contract)

Co-ordinated by:	NIWA
Report Number	#003
Date and time	21 July 2023
Period covered	20 July 07:00-19:00
Summary of day's activities	<ul style="list-style-type: none"> - 0700-0730 Breakfast at Coralie Bay, toolbox meeting set up gear and move onto site for the first dive in the bay. - 0730- 0930 Five fifteen-minute dive transect searches in the Coralie Bay area (COR129-COR133). No exotic Caulerpa detected (Table 1, Figure 2). - 0945- 1030 transit from Coralie Bay to Peachgrove Bay, remobilise dive team. - 1030- 1330 Seven fifteen-minute dive transect searches in the Peachgrove Bay area (PEA120-125 & PEA127). No exotic Caulerpa detected (Table 1, Figure 2). - 1345- 1450 Three fifteen-minute dive transect searches in the Southern bays of Ahuahu (MOM126, BUM183-BUM184). No exotic Caulerpa detected (Table 1, Figure 2). - 15:30-16:10 Two fifteen-minute dive transect searches in Huruhi Harbour toward the North of Mercury Cove (MCC180-181). No exotic Caulerpa detected (Table 1, Figure 2). - 1615-1800 Anchor at Mercury Cove for the night, debrief day, set up and test boxfish ROV and make a plan for diving tomorrow. The dive team updated the project manager of the daily activities and sent the data through for SitRep - 1730 to 1900 Complete SitRep and collate data.
Actions carried out	<ul style="list-style-type: none"> • 17 dives around Ahuahu/Great Mercury Island. • Set up and text Boxfish ROV • Data collation, mapping and SitRep.
Plan for tomorrow	<ul style="list-style-type: none"> • Complete 10 fifteen-minute dive searches in Mercury Cove area. • Transit to Aotea if weather conditions allow (it is forecast to be high winds tomorrow)

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

Site ID (i.e. Dive01/Rov 01)	Start Coordinates		End Coordinates		Depth category ¹	Water temp	Max depth	Transect width	Substrate ²	Approx. Visibility (m)	Caulerpa (Y/N)
	Lat	Long	Lat	Long							
COR130	175.7911917	-36.6053839	175.7937502	-36.60452066	M	14	8.8	8	3	8	N
COR129	175.7945999	-36.60603201	175.7926257	-36.60523752	M	14	5.6	8	3-8	8	N
COR132	175.7965816	-36.60249932	175.7949351	-36.60331176	D	14	16.4	8	3-8	10	N
COR133	175.7948411	-36.60335785	175.793752	-36.60481019	M	14	9.4	8	3-8	8	N
PEA121	175.8100564	-36.64071132	175.8128688	-36.63995294	D	14	15	8	3	10	N
PEA123	175.812833	-36.63994655	175.8108433	-36.63904752	D	14	15	8	3-8	10	N
PEA125	175.8108317	-36.63876708	175.8077144	-36.63813313	D	14	10	8	3	10	N
PEA120	175.8064631	-36.64071132	175.8070928	-36.63920556	M	14	8.5	8	7	8	N
PEA127	175.8071356	-36.63920122	175.8071187	-36.63812019	M	14	10	8	3-8	8	N
PEA122	175.8028698	-36.63999051	175.8045694	-36.63980877	M	14	8.5	8	3-7	8	N
PEA124	175.792371	-36.64098786	175.7938831	-36.63971889	D	15	12.9	8	3-8	10	N
MOM126	175.7915333	-36.63982269	175.7907355	-36.63785381	D	15	11.1	8	3-8	8	N
BUM183	175.7816705	-36.63825583	175.782961	-36.637507	D	15	10.1	8	8-3	8	N
BUM184	175.7789755	-36.637535	175.7788921	-36.64007757	D	14	10.5	8	3-8	8	N

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



21/07/2023

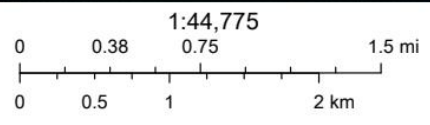


Figure 2: Start (Green circles) and end (black squares) points for the dive searches completed around Ahuahu/Great Mercury Island on 20 July 2023. Note: MCC176 and MCC174 were searched the morning of 21-07-23 and will be reported in sitrep 4.