BEFORE THE ENVIRONMENT COURT
AT AUCKLAND

IN THE MATTER:	of the Resource Management Act 1991
AND	
IN THE MATTER:	of appeals pursuant to clause 14 of the First Schedule to the Act
BETWEEN	**MOTITI ROHE MOANA TRUST**
	(ENV-2015-AKL-000134)
	NGATI MAKINO HERITAGE TRUST
	(ENV-2015-AKL-000140)
	NGATI RANGINUI IWI INCORPORATED SOCIETY
	(ENV-2015-AKL-000141)
	Appellants
AND	**BAY OF PLENTY REGIONAL COUNCIL**
	Respondent
AND	**VARIOUS**
	Section 274 Parties

STATEMENT OF EVIDENCE OF REUBEN FRANCIS FRASER

7 November 2017

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MHH-133911-694-547-V5:mhh

QUALIFICATIONS AND EXPERIENCE

1. My full name is Reuben Francis Fraser. I am the Consents Manager at Bay of Plenty Regional Council (**Regional Council**), a position I have held since August 2014.

2. I hold a Masters of Arts degree in Geography (Auckland 1999), specialising in coastal management. I am also a certified Resource Management Act 1991 (**RMA**) decision maker through the Making Good Decisions certification programme run by the Ministry for the Environment and Local Government New Zealand.

3. I have been employed by the Regional Council since October 2003; firstly as a scientist, then as a consents officer (from May 2005) and as a Senior Consents Officer from January 2008. From December 2012 to July 2014 I was the Council's Maritime Manager. From August 2014 I have been the Manager of the Council's consents team.

4. As the Consents Manager I am responsible for overseeing the Council's processing of resource consent applications. I am also responsible for managing a team of 15 planning officers and nine administrators.

5. During my employment with the Regional Council I have processed a wide range of consent applications including consents for land disturbance, discharges, water use, stream diversions, coastal occupation, dredging proposals and the discharge of dairy effluent. Many of these applications had a focus on cultural and natural heritage values. Two applications in particular have specific relevance to Motiti and/or Otaiti. I was the processing officer for an application to carry out earthworks to create an access track on the eastern side of Motiti Island, which was subject to an Environment Court hearing and decision. I have also been Council's expert planner in relation to the application to abandon the remains of the cargo ship MV Rena on Otaiti.

6. I have been involved in the development and implementation of the Bay of Plenty Regional Water and Land Plan and provided expert advice to various plan reviews and changes. During my time as Maritime Manager I oversaw the imposition and management of an exclusion zone around the Rena salvage works.

7. As the Regional Council's Consents Manager, I am familiar with the RMA, National Policy Statements and National Environmental Standards and other regulations, and the Regional Council's planning documents. I have previously presented evidence at Council hearings, in the Environment Court, and in the District Court as part of enforcement proceedings.

8. I have read the Code of Conduct for expert witnesses in the Environment Court Practice Note 2014. I agree to comply with that Code. The evidence in my statement is within my area of expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

SCOPE OF EVIDENCE

9. The purpose of my evidence is to provide an enforcement and consenting perspective on some of the issues and challenges the Regional Council could be expected to encounter if the relief sought by the Appellant, Motiti Rohe Moana Trust (**MRMT**) is granted by the Court. I have also provided some indication of the likely costs to Council associated with implementing and enforcing the proposed regime if the relief sought by MRMT is granted by the Court.

10. As I understand the relief, in practical terms MRMT is seeking rules in the Proposed Regional Coastal Environment Plan (**PRCEP**) which, among other things, would provide for a total prohibition on fishing[1] in certain identified "waahi tapu" areas, and a restricted discretionary or discretionary resource requirement for fishing in a wider "waahi taonga" area subject to certain conditions.

11. Within the wider Motiti Natural Environment Management Area (**MNEMA**) sought to be recognised in the PRCEP, the total area of the waahi tapu is 14,264.1 hectares and the total area of the waahi taonga is 41,581.2 hectares, resulting in a total area for the MNEMA of 87,496.5 hectares. Council received a copy of the geographic data used to map the proposed wāhi tapu and wāhi taonga from MRMT's landscape expert. This was then used by a GIS analyst at council to calculate the area covered by wāhi tapu and wāhi taonga.

12. I have addressed the prohibition and consenting aspects of the proposed regime separately below.

PROHIBITION

13. The Regional Council has a duty to enforce the observance of the Coastal Plan. It is therefore of the utmost importance that any rules are clear, certain, and practicably enforceable.

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[1] Taking, removal, damage or destruction of indigenous flora or fauna, Attachment 6, Supplementary Evidence of Graeme Lawrence.

14. Council has a number of real concerns about the fishing restrictions sought to be included in the PRCP by MRMT from an enforcement perspective. These can be summarised as:

(a) Absence of community awareness and engagement in relation to the proposed rules;

(b) Lack of sufficient and suitable resources to enforce the proposed rules;

(c) Practical difficulties relating to the prohibition and consenting regime.

15. **Community engagement**

15.1 In my experience a successful RMA Plan or Plan Change is one in which the community, or relevant affected interests, have been involved in developing. This enables the provisions to be tested, particularly from a practical implementation perspective. It also engenders a sense of community "buy in", even where not everyone is completely satisfied with the final outcome.

15.2 This process also greatly assists with compliance. Although ignorance is not an excuse, awareness of rules and a clear understanding of what they require is the first step towards positive compliance.

15.3 The ability for Councils to control fishing is a novel issue which is still developing. I share the concerns expressed in the evidence of Joanna Noble (the Reporting Planner) that the wider community, particularly directly affected parties such as recreational fishing clubs, commercial fishing interests and other tangata whenua groups with overlapping customary interests, have not been consulted about the proposal to prohibit or require consent for fishing.

15.4 In my opinion the community would not expect fishing to be controlled in the Regional Coastal Plan or enforced by the Regional Council. If these provisions are imposed without formal community consultation, or at the very least engagement on the issue, I would expect considerable surprise, and in some cases strong resistance, from certain groups within the community. This could be expected to pose some real challenges for Council when seeking to enforce the regime.

15.5 I agree with the evidence of Dr Shears on behalf of the Appellant, which recognises the importance of a well designed and enforced no take regime if the benefits of a marine protected area are to be realised (Shears primary evidence at para 6). However, the Appellant's evidence does not

acknowledge the potential challenges of enforcement of its proposed regime by Council.

15.6 Some parties may hold the view that the regime will be self-policing and that Council will not be expected to enforce the prohibition or the requirement for consent. I have some reservations about such an approach in light of Council's duty to enforce observance with its Plans. The alternative is a complaints driven approach. However, given the objective of ecological and cultural restoration, a more reactive approach could undermine the intent and legitimacy of the Plan's provisions. Given the popularity of the area, particularly for recreational fishing and diving, I also have concerns about Council's ability to respond to complaints. This is addressed under resourcing and practical issues below.

15.7 The evidence of Joanna Noble addresses these issues in the context of the analysis required under s.32 of the RMA.

16. Resourcing and practical issues

16.1 Because Council has not historically controlled fishing or fishing related activities it is not well set up for this function, either in terms of equipment or suitably experienced staff.

16.2 The temporary exclusion zone set up around the Rena wreck under the Bay of Plenty Regional Navigation Safety Bylaw 2010 and the Maritime Transport Act 1994 was initially patrolled using Council vessels and contracted skippers during periods of anticipated heavy use (fine weekends and the 2011/2012 summer holiday period), enforced by members of the navy and ultimately on an ad hoc basis by salvage crew because Council did not have a standing resource which could be allocated to this task during the summer season. Nor could resources be diverted from elsewhere. Management of the exclusion zone was also undertaken remotely using AIS (Automatic Identification System) technology whereby the Harbourmaster was (and continues to be) automatically notified of any ship carrying an AIS transponder entering the exclusion zone. Every registered vessel over 300 gross tonnes is required to carry an AIS transponder[2].

16.3 The Rena exclusion zone prevented any vessels from entering a zone around the wreck. The size of the zone varied during the imposition of the exclusion zone. It was therefore relatively easy to enforce, as all that was required to

[2] The International Maritime Organization's International Convention for the Safety of Life at Sea.

ascertain a breach was sighting an unauthorised vessel within the exclusion zone. Despite this, there were numerous incursions during the four and a half year period it was in place for smaller vessels.[3] In my opinion the relatively high degree of non-compliance was due to a combination of lack of awareness about the zone, and deliberate infringements due to awareness that the zone was not closely policed.

16.4 I would expect the regime proposed by the Appellant to be considerably more challenging to enforce. The mere presence of a vessel within the waahi tapu or waahi taonga areas would not amount to a breach. Rather, an enforcement officer would need to ascertain whether any indigenous flora or fauna had been taken or damaged and whether this occurred within a waahi tapu or waahi taonga area. If the latter, it will be necessary to ascertain whether there is a current resource consent which governs the activity.

16.5 Given the MNEMA is only approximately 8 nautical miles wide (between its widest points) and considerably narrower in places, it would not be difficult for a person intent on fishing to simply move out of the area with their catch. Even if they were caught within the zone with their catch, unless observed in the act of fishing it could be difficult to sustain an enforcement action.

16.6 It could be expected that those wishing to fish in the area undetected would be more likely to fish at night. To provide the minimum level of service required to monitor activities in the MNEMA for enforcement purposes, in my opinion Council would require a dedicated patrol boat and two crews in order to maintain a daily presence.

16.7 This acknowledges the MNEMA is a very popular area for recreational fishing and diving, as explained in the evidence of Robert Greenaway for the Mount Maunganui Underwater Club in the Rena proceedings. Mr Greenaway observed, based upon research, that Astrolabe Reef is a "marine hot spot" in the Bay of Plenty for diving, fishing, spear fishing, cray fishing, bird watching and big game fishing in waters nearby. The relative proximity to Tauranga Harbour and shelter offered by Motiti Island in adverse weather conditions make it (in his words) "likely to be of regional significance for marine recreation",[4]

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[3] The exclusion zone remains in place for large ships.
[4] Statement of Evidence of Robert James Greenaway dated 23 December 2016 a copy of which is appended to this evidence. Refer in particular section 5 "Recreation and Tourism Overview".

16.8 This is consistent with my own knowledge and observations of the area. While many craft may not be in the vicinity for fishing purposes, it will be very difficult to distinguish between legitimate activities and those which breach the proposed rules, particularly where some fishing is prohibited while some is allowed provided it is pursuant to a resource consent.

16.9 Staff would need to be warranted and experienced enforcement officers and also hold seafaring qualifications. They would also need sufficient specialist knowledge to be able to identify species of fish in order to ascertain whether they were a species prohibited under the Rules.

16.10 During the busy summer period in particular it would not be feasible in my opinion to divert resources from other areas such as the harbourmaster and maritime officers, as this would reduce the level of service in those areas to unacceptable levels. The function of those officers is to address maritime safety issues. This requires vigilance and sometime urgent attention. Having the additional responsibility of monitoring the MNMEA could place those officers in a conflict of interest.

16.11 I would estimate the cost of allocating a dedicated resource to this issue to be in the order of $4.5M.[5] This relates to the purchase of a patrol boat plus annual maintenance costs and annual costs of two crews, which would be needed to maintain a daily presence, over the 10 year life of the plan. During the patrolling of the Rena exclusion zone, a 10 hour shift was estimated to cost $1,700, including hire of a vessel and two warranted patrol crew at $36 per person per hour.

16.12 I acknowledge that under the RMA Council could potentially delegate the responsibility for enforcing breaches of the fishing prohibition to fisheries officers employed by the Ministry of Primary Industries. However, I expect this option would not be palatable to either Council or MPI, particularly given it would likely cause confusion as to the purpose of the rules and blur the lines between enforcement by MPI of regulations under the Fisheries Act and enforcement of the PRCEP regime.

16.13 To address the lack of public awareness about Council's ability to control fishing for certain purposes, Council would need to develop and implement a community education programme explaining the fishing prohibition and

[5] This is based on $1.35 million in the first year for capital costs and a proportion of maintenance and storage and then $350,000 per annum for crews, maintenance and storage.

consenting regime, and the area it covers. This is an important strategy in order to reduce potential resistance to Council seeking to regulate and enforce fishing, such as challenges to enforcement officers, or deliberate flouting of the rules. The rationale for the rules would need to be clearly explained.

16.14 Council's communications team has estimated the cost of rolling out such a programme to a Bay of Plenty, Waikato and Auckland audience to be in the order of $37,500 (including all Tauranga Harbour signs being updated). This is based on a standard promotional campaign involving free and paid social media, a series of media releases being distributed, radio advertising and staff promoting the change at boat ramps, newspaper advertising, paid editorial in fishing and diving magazines and online advertising on weather related websites over a four week period prior to the launch of such a rule change. This estimate does not account for staff time.

16.15 Council would also need to develop new policies regarding enforcement. Issues requiring careful consideration are whether to provide a grace period to enable the rules to be socialised with the community. However, this may not be acceptable to tangata whenua who may expect a hard line to be taken. Council faces the prospect of challenge (potentially legal) from both the fishing community and tangata whenua / environmental interests if the balance is not appropriately struck.

16.16 At least initially a relatively high degree of non-compliance is envisaged, particularly in relation to the requirement to seek resource consent. If Council exercised its enforcement discretion in favour of formal action as a deterrent to ensure future compliance, this would also place pressure on resources required to investigate and if appropriate prosecute breaches. Such costs are difficult to estimate in a hypothetical scenario.

CONSENTING REGIME

17. The rules proposed by MRMT[6] envisage that a resource consent would be required to take or remove indigenous flora or fauna within the Waahi Taonga Area. This would be subject to first providing a spatial survey by a suitably qualified person that the waahi taonga area contains less than 10% "kina barren count", as defined I proposed Rule MNEMA 3 (b). The kina barren level must be confirmed by at least two surveys undertaken sequentially with a 3 month gap.

[6] Refer Supplementary Evidence of Graeme Lawrence.

18. Any high value areas[7] must also be avoided and methods used must not involve dredging or trawling or disturb the foreshore or seabed.

19. If these conditions are not met then consent for a fully discretionary activity must be obtained.

20. Rules of any kind need to be carefully considered and tested through a consultation process and section 32 analysis. I have a number of real concerns about the rule framework proposed. Given the breadth of the matters over which Council is proposed to limit its discretion I would expect a comprehensive AEE even for the restricted discretionary activity. I also note that, though many have tried, I have not seen the imposition of successful, or even universally accepted, mauri monitoring requirements.

21. I agree with the evidence of Dr De Luca that a considerable level of expertise would be required to support Council officers in determining whether to grant resource consents for the resumption of fishing, particularly the proposed discretionary consents which are not based on any proposed ecological trigger, and that a very clear and consistent consenting strategy would need to be developed based on robust ecological evidence (De Luca primary evidence at paras 47 and 48). Council does not have that expertise in-house and would need to engage external consultants. I expect that comprehensive data would be required in order to understand whether the biodiversity and ecological health of the area has reached self-sustainable state for the support of taonga species.

22. I anticipate that the consenting requirements would be time and cost prohibitive for anyone not expecting a significant commercial return. Therefore, I expect the rules would be a de facto prohibition. If that is the case, then it would be simpler to prohibit.

Dated 7 November 2017

Reuben Francis Fraser

[7] Indigenous Biodiversity Area A, Outstanding Natural Character Overlay or Outstanding Natural Feature and Landscape.

Appendix - Statement of Evidence of Robert James Greenaway

BEFORE THE ENVIRONMENT COURT **ENV-2016-AKL-42, 43 and 45**

IN THE MATTER	of the Resource Management Act 1991 ("RMA")
AND	
IN THE MATTER	of appeals under s120 of the RMA
BETWEEN	**Ngā Potiki a Tamapahore Trust and Others** Appellants
AND	**Bay of Plenty Regional Council** Respondent
AND	**The Astrolabe Community Trust** Applicant
AND	**Ngati Makino Heritage Trust and Others** Section 274 Parties

STATEMENT OF EVIDENCE OF ROBERT JAMES GREENAWAY ON BEHALF OF THE MOUNT MAUNGANUI UNDERWATER CLUB INC

23 December 2016

Issues covered by reference to Appendices A, B and C of the Court's Directions dated 29 June 2016:

- *A: paragraphs 29-30; and 33.*
- *B: paragraphs; 2.2(b), (d) and (e); and 9.1.*
- *C: paragraphs 15-16.*

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1 INTRODUCTION

1.1 My name is Robert James Greenaway.

1.2 I am an independent consultant recreation and tourism researcher and planner.

1.3 I graduated from Lincoln University in 1987 with a three-year Diploma in Parks and Recreation Management with Distinction, and completed 18 months of postgraduate study in conservation management. I hold the status of an Accredited Recreation Professional with the NZ Recreation Association (NZRA), am a member and past Chair of the NZRA Board of Accreditation for member accreditation to professional status. I am also a 'core group' member of the New Zealand Association for Impact Assessment. In 2011 I was appointed as an inaugural Board member of the Sir Edmund Hillary Outdoor Recreation Council, to assist Sport New Zealand with the implementation of the National Outdoor Recreation Strategy, amongst other things.

1.4 I was awarded the Ian Galloway Memorial Cup in 2004 by the NZRA to recognise 'excellence and outstanding personal contribution to the wider parks industry'. In 2013 I was awarded the status of Fellow with the NZRA.

1.5 I was employed in the fields of recreation and tourism at Tourism Resource Consultants (1990-1995) and at Boffa Miskell Limited (1995-1997) before beginning to work independently in 1997.

1.6 I have completed more than 350 consultancy projects nationally since 1997 and have presented evidence at more than 70 resource management hearings, including on marinas, marine discharges, marine farms and marine mining. I am currently working on three major harbour deepening projects (Whangarei, Wellington and Lyttelton) as well as the proposed runway extension to the Wellington International Airport. I presented evidence for the Lyttelton Port Company on the Lyttelton Port Recovery Plan in 2015, the Marlborough District Council for the King Salmon hearing in 2012, and prepared a review of recreational snapper quota in the SNA1 area for the NZ Sports Fishing Council in 2013. I presented evidence for The Astrolabe Community Trust at the 2015 Rena Council hearing.

1.7 I own a 10m yacht based in the Nelson marina, and have had substantial recreational marine experience (blue water and coastal). I was raised in Tauranga and gained a NZ Underwater Association diving qualification in Tauranga in 1983.

1.8 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014 and agree to comply with it. This evidence is within my area of expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

2 INVESTIGATION AND BASIS FOR MY EVIDENCE AND OPINIONS

2.1 I have carried out the following investigations since mid-2012 when I was first contracted by the Applicant to work on the Rena project:

(a) Research and analysis of existing data describing recreation and tourism activities in the marine environment in New Zealand and the Bay of Plenty;

(b) Telephone interviews with 73 commercial marine tourism charter operators I identified as potentially active in the Bay of Plenty;

(c) Attended three recreation and community stakeholder workshops, and conducted telephone interviews with other stakeholders and management agencies (including local authorities, Tourism Bay of Plenty and the Department of Conservation);

(d) A technical workshop in Tauranga in August 2012 with the specialist team convened by Beca – including marine ecologists, wreck removal experts and water quality scientists – to review wreck removal options;

(e) Liaison with wreck diving specialist Shane Wasik;[1]

(f) Review of feedback from public information processes carried out by Beca in Tauranga;

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1 Shane Wasik was a Director of Oceanz Diving Ltd, and is an experienced professional diver, wreck surveyor and marine biologist, and past-President of the NZ Underwater Association. He reviewed options for wreck removal for the Rena and wreck management for diving and prepared the report, *Recreational Diving Safety Assessment of the Wreck of the MV Rena, Bay of Plenty, NZ,* 9 March 2014.

(g) A 'dry' site visit in April 2015;

(h) A dive on the remains of the wreck with the Mount Maunganui Underwater Club in November 2016 (discussed in detail in this evidence in section 7 and illustrated in my attachments);

(i) An interview with the President of the Maketu Coastguard in November 2016; and

(j) I have also considered relevant parts of the evidence in chief of the following witnesses for the Applicant and the Bay of Plenty Regional Council:

(i) Mr Andrew Dodd (heritage values);
(ii) Captain John Owen (overview of work done);
(iii) Mr Keith Frentz (planning);
(iv) Dr Philip Ross (marine ecology);
(v) Mr Richard Boyd (fisheries);
(vi) Captain Roger King (overview of salvage, recovery and state of the wreck etc);
(vii) Mr Peter Cressey (human health);
(viii) Mr John Hudson (natural character and natural landscape);
(ix) Mr Lance Marshall (wreck deterioration);
(x) Mr Camiel de Jongh (wreck removal); and
(xi) Dr Jon Brodie (ecology and ecotoxicity).

3 PREVIOUS REPORTING ON THE RENA

3.1 In 2014 I prepared a report "Recreation Assessment: Proposal to Leave the Remains of the MV Rena on the Astrolabe Reef". This report took into account the peer review report of Ross Corbett of TRC Tourism (TRC) prepared for Council: "Technical Audit on the Draft Conditions and Recreation AEE relating to the Proposal to Leave the Remains of the MV Rena on the Astrolabe Reef" dated 8 August 2014. This peer review and my report were in accord.

3.2 Prior to lodgement of the resource consent application, I was engaged by the Applicant to consider various options regarding the preferred treatment of the wreck for recreation values. I assessed the recreation and tourism effects of

various options and recommended a preferred outcome. The consent application was and remains consistent with my recommendations, although I tended towards maximising the amount of super-structure retained on the reef due to the limited scale adverse effects on recreation (once the clean-up work was completed) and the positive effects for diving.

3.3 The conclusions of my reporting and evidence at the original hearing in 2015 were:

(a) The grounding of the Rena in October 2011 had significant adverse effects on recreation and tourism activity in the Bay of Plenty. However, these effects – particularly the closure of beaches and the presence of oil and debris on them – had passed (at the time), and coastal recreation and tourism opportunities were largely the same as prior to the grounding. The exception at the time was the inability to access Astrolabe Reef for recreational purposes as a result of the exclusion zone which had been in place from October 2011 to the Council hearing date.

(b) Astrolabe Reef is a significant recreation and tourism resource for the Bay of Plenty. Prior to the grounding, more than 20 commercial charter operators included the Reef in their tours. It is an important regional recreational diving, fishing and sightseeing destination, supporting approximately $1.6 million of annual expenditure on commercial marine charter activities.[2]

3.4 In my opinion the proposal took a balanced approach to the management of recreation and tourism values associated with Astrolabe Reef and the Bay of Plenty.

3.5 I also concluded and remain of the opinion that the proposed Monitoring Plan, Wreck Access Plan, Shoreline Debris Management Plan and Restoration and Mitigation Packages avoid or mitigate adverse effects on recreation and tourism values and I did not consider further mitigation measures were required.

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2 Copeland, M., 2012. *MV Rena Wreck Recovery Assessment of Economic Effects.* Brown, Copeland & Co Ltd Client report for Lowndes Associates.

3.6 I have undertaken further work since my original reporting for the resource consent hearing before the Bay of Plenty Regional Council. I describe that further work in this evidence, together with that I have relied on. I set out my updated conclusions below.

4 KEY FINDINGS OF THIS EVIDENCE

4.1 National recreation participation research indicates that marine recreation in New Zealand is one of our most important forms of active recreation, with almost 20% of the population fishing and 3.4% of the population diving. The latter figure may appear relatively low, but only 3.6% of the population play rugby union and 5.3% play cricket.

4.2 Tourism monitoring and research data indicate that the Bay of Plenty – despite its obvious coastal attractions for, primarily, domestic visitors and locals – is 'product poor' for tourism. There is good reason to increase the number of options for dive tourism, and to augment the wreck dive options in the region, which previously focussed largely on the Taioma – a tug deliberately sunk south of Motiti as a dive site in 2000. (Two other local wrecks are used for diving, but one is very small (Taranaki) and the other partly destroyed by scrap recovery and at a difficult dive site and depth (SS Taupo)). The Rena provides a significant additional attraction for diving at Astrolabe Reef compared with its pre-Rena condition.

4.3 My observation is that the remains of the wreck have settled into Astrolabe Reef, are well-encrusted with sea life, densely populated with fish, and occupy a small portion of the reef (major components of the Rena wreck occupy approximately 2.1% of Astrolabe Reef according to data referenced in the evidence of Dr Philip Ross, paragraph 3.28). Indeed, it can be a challenge to work out what is wreck and what is reef in the shallow bow sections.

4.4 In my opinion, and based on discussions with the Maketu Coastguard, there is little scope for the wreck remains to conflict with fishing on and around the reef due to its relatively small footprint and because most bottom fishing occurs on the drop-offs on the reef's edge, well away from the bow sections.

4.5 In my opinion, the bow thruster – part of the shallow bow section – is a critical component of the dive experience, as it is a very legible part of the wreck and

is the most accessible. Most other remains in the shallow areas are hull plates and, while attractive diving settings, sheltering interesting sea life with some easy swim-throughs, are not readily identifiable as specific components of the ship. The stern section is highly legible.

4.6 In summary, acknowledging there are a number of other considerations beyond the scope of my evidence, there is, in my opinion, no reason to remove the remains of the wreck to benefit recreation and tourism, and an important rationale exists for retaining it as a diving destination.

5 RECREATION AND TOURISM OVERVIEW

5.1 Sport NZ reported in 2015 that fishing, both freshwater and marine, was the fifth most important 'active leisure' pursuit in New Zealand with 19.5% of the national population participating in 2013/14, and 16.6% fishing in marine settings in 2007/08 (approximately 540,000 people). (The difference between marine and freshwater fishing is not reported for the 2013/14 data).[3] This makes fishing more popular as a participation activity than, for example, golf, tramping, cricket, tennis and rugby. Almost thirty percent of men fished in 2014/15, and 10.5% of women. Scuba diving was undertaken by 3.4% of the population in 2013/14, compared with cricket at 5.3%, rugby union at 3.6% and football at 6.3%.

5.2 Vance (2014)[4] indicated that, based on eight Colmar Brunton surveys completed between 2002 and 2011, a range of 16% to 19% of households owned at least one boat in New Zealand. Vance estimated that between 30% and 50% of boat users go out at least every couple of weeks; and that levels of ownership have been reasonably consistent since at least 2006, but with possible increases in the ownership of trailer power boats and canoes and kayaks.

5.3 Regional recreational values in the Bay of Plenty are strongly associated with the marine environment, fishing and boating especially. Using different data

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3 Sport New Zealand, 2015. *Sport and Active Recreation in the Lives of New Zealand Adults. 2013/14 Active New Zealand Survey Results.*

4 Vance, P., 2014. *Synthesis of research conducted in recreational boating*, Maritime NZ internal report.

analysis methods to those reported above, Sport NZ estimates that 26.2% of Bay of Plenty residents fish compared with a national average of 16.7%.[5]

5.4 Interviews I undertook in 2013 and 2014 indicated that Astrolabe Reef is considered a marine 'hot spot' in the Bay of Plenty.[6] Marine currents, the reef environment and food supplies combine to create a very productive area for marine mammals, fish (small and game), crayfish, birds and other wildlife. As a result, the reef is highly popular for diving, fishing, spear fishing, cray fishing, bird watching and for big game fishing in waters nearby.

5.5 The reef is reasonably close to Tauranga and is accessible to small craft in good weather. Motiti Island, nearby, offers shelter in adverse conditions. Motiti residents have easy access to a substantial local fishing and diving resource.

5.6 While there are several alternatives to the reef for angling and diving, the reef is considered a very important regional focal point for marine recreation. Interviewees in my research indicated that fishing competitions frequently result in trophy fish being taken from on or near the reef.

5.7 The Ministry for Primary Industry (MPI) provides some data on the level of use of Astrolabe Reef for fishing and diving in the 2004/05 season, showing it had lower levels of use than inshore areas nearer the coast and around the large islands of Motiti, Mayor, Slipper and Shoe. Diving activity is not reported separately in the MPI data and is likely to be subsumed by the much larger scale of fishing.

5.8 There are no other data available which quantify the level of recreation activity on and around the reef. (A repeat of the 2004/05 MPI study was completed while the Rena exclusion zone was in place and therefore does not provide useful additional context.) However, it is likely to be of regional significance for marine recreation due to the level of its use, the variety and

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5 These data are provided via the Sport NZ online Insights tool which relies on the Sport NZ Active NZ data for 2013/14. However, due to different analysis methods, there are differences in the data as reported in other Sport NZ publications based on the same national survey. While the absolute figures may be approximate only, the relative values are useful.

6 Interviews and meetings with more than 80 commercial and club marine recreation providers.

quality of the available marine recreation experience and its value to tourism. However, the wreck of the Rena will have a national reputation as a dive site.

5.9 Tourism data indicate that the Bay of Plenty is primarily a domestic tourism destination, but with an important international contribution. The national ratio between international and domestic tourism spend is 1:1.3. For the Bay of Plenty, not including Rotorua, the ratio is 1:3.7.[7] Over 60% of domestic visitors to Tauranga City come from Auckland City, Rotorua District, Hamilton City, Taupo and the remainder of the Bay of Plenty.[8] Tourism spend in the Bay of Plenty is heavily dependent on domestic visitors and those who do not travel far.

5.10 Natural and scenic values underpin the region's attractiveness as a destination. The Bay of Plenty region is described as having a paucity and/or a lack of diversity in its tourism product (activities for visitors to do).[9] While Astrolabe Reef only supports a small percentage of regional tourism expenditure (via commercial charters), it supports as many as 20 individual businesses and the diversification of regional tourism attractions. Dolphin swimming and watching, especially, appear to be regionally dependent on Astrolabe Reef.

5.11 Astrolabe Reef is an important recreation destination for a variety of pursuits and so has a regionally important recreation role. Considering the dominance of a proximate domestic tourism market for Tauranga City, activities such as diving on the Rena have the potential to operate as repeat attractions, and not one-off activities suited to those who must invest more in travel and time.

6 ACTIVITY AT ASTROLABE REEF

6.1 A Wreck Access Plan has been implemented at Astrolabe Reef. This required a substantial regional education programme and the provision of written and online information for fishers, divers and boaters. The Maketu Coastguard

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7 Monthly Regional Tourism Estimates, Ministry of Business, Innovation and Employment for September 2016.

8 MBIE Domestic Tourism Survey data, 2015.

9 See: Tourism Strategy Group, 2010. *New Zealand Regional Tourism Forecasts 2010-2016 Bay of Plenty RTO.* Ministry of Economic Development.
Tauranga Economic Development Agency, 2006. *Smart Tourism – Bay of Plenty Tourism Strategy.*
Quality Tourism Development, 2010. *Bay of Plenty Tourism Performance and Future Opportunities Report.*

has been contracted as an 'on-site information advisor' at Astrolabe Reef for the first two summer periods following the lifting of the exclusion zone. Mr King states in his evidence that from 5 April 2016 to 18 June 2016 the Maketu Coastguard spent 34 out of a possible 75 days at Astrolabe Reef, and recorded the following:[10]

(a) 351 boats visited the Reef;

(b) 109 boats were diving;

(c) 233 boats were fishing; and

(d) 26 boats were sightseeing.

6.2 In my opinion, while the quality and quantity of fish around the reef will vary over time and season, the diving amenity provided by the remains of the Rena will be more consistent. For example, my dive in November occurred before the summer influx of pelagic and school fish and clearer water, but was worthwhile nonetheless. Prior to the wreck, there would have been little cause to dive at this time of year. It would stand to reason, in my opinion, that during the summer fishing season, dive activity will be a smaller component of the visitor load at the reef, and later it will be more dominant.

6.3 In November 2016 I interviewed the President of the Maketu Coastguard – Shane Beech – to gain further information on their experience of monitoring the reef. He noted that the split between independent divers and those relying on charters was around 50/50, with charter vessels generally being over 10m in length and familiar to Coastguard members. Mr Beech estimated that 75% of all divers were locals, but that, in his opinion, the opening of the reef was not widely promoted and occurred late in the season; and the percentage of non-locals would likely increase this season as the dive experience becomes more commonly known. (Coastguard monitoring recommenced on 1 December 2016.)

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10 Evidence of Roger King, paragraphs 13.6-13.7. I note that the sum of the figures given by Mr King for the individual activities is greater than the total number of visits given by Mr King (it is possible that this is because some boats undertook multiple activities). As recorded above, I interviewed the President of the Maketu Coastguard in November 2016.

6.4 Mr Beech reported that fishing mostly occurs on the deeper drop-offs around the reef, and the location of the bow sections especially do not compromise fishers. Most of the diving observed was around the wreck remains.

6.5 Mr Beech noted some conflict where boats trolling for pelagic fish – such as kahawai and kingfish – moved between the wreck buoys when divers were present. When a dive flag is shown on a vessel (the A flag, a white and blue swallow-tail pendant) other boats must remain 200m away or travel at less than 5 knots.

7 MY DIVE EXPERIENCE

7.1 I dived the Rena on the 5th of November 2016 with members of the Mount Maunganui Underwater Club, with Mr Stephen Fox as my dive buddy. Several other Club members completed shallow dives on the bow sections of the wreck and two carried out a technical deep dive on the lower sections of the stern section. I have not dived on a shipwreck previously. In the first dive we descended to the port side of the stern section at 36m and worked our way to the midsection in 15m of water. Images taken by a Mount Club member on the same dive are appended as Attachment 1 (Photos 1 – 5). While I did not take these images, they represent the sights I experienced – although the camera flash required at depth makes the images more colourful than what is experienced.

7.2 We completed a second dive on the bow sections in 15m of water. My dive route is shown in Attachment 2.

7.3 The weather was partly cloudy and the underwater visibility was only fair. I could appreciate a far more spectacular experience later in the season with more fish-life and better visibility, but the dive was nonetheless fascinating. I consider my experience to be representative of a casual recreational dive of the wreck, albeit with a knowledgeable dive team. My observations were:

(a) Compared with other dives that I have done – mostly around the Coromandel and often focused on gathering crayfish and scallops – there would be little reason to expend the necessary time and cost to dive Astrolabe Reef without the remains of the Rena wreck in place, unless the visibility was extreme and it was the height of the summer season with increased fish-life. At such times, the setting would be quite

spectacular – but a visitor to the region seldom has the capacity to await such an opportunity, and the remains of the wreck provide a guarantee of an excellent dive option.

(b) While it was quite obvious that the stern section of the Rena is a shipwreck, in many locations in the mid-section and the bow it was often difficult to determine what was wreck and what was reef – such was the scale of marine growth. Photos 4 and 5 in my Attachment 1 demonstrate the scale of seaweed growth on the steel in shallower depths.

(c) Fish and other marine organisms abounded around the wreck remains. There were clearly more fish sheltering on or in the wreck than on open areas of reef. In the bow section I completed a short swim-through beneath a well-supported section of hull plate (location shown in my Attachment 2) and temporarily lost sight of my diving companion due to the density of fish – perhaps a highlight of the dive.

(d) The wreck and the area around it that I observed were tidy. Loose items of metal or debris were almost all within components of the wreck and not littered on the sea floor. I noted, for example, two aluminium ingots – quite degraded and well-fixed in place – between two hull plates; what appeared to be several loose container twist locks; and many stubs of underwater cutting rods – all within the wreck. The only item that I considered to be litter was a green plastic box for holding underwater cutting rods (the size of a long loaf of bread) also within the wreck.

(e) Many parts of the wreck are not immediately legible. It is often difficult to work out which part of the ship one is looking at. However, the stern section is extremely legible, and the bow section with the caged thruster propeller is easily recognised (location shown in my Attachment 2). In my opinion, the bow thruster is a critical component of the shallow dive as it lends legibility to the entire experience. Photo 6 in my Attachment 1 shows an image of the bow thruster. This photo was taken by a member of the Mount Maunganui Underwater Club on a different visit to mine, but clearly shows the thruster propeller and its protecting grill, which is what I observed.

(f) The wreck remains do not cover much of the reef. When swimming between bow sections it becomes obvious that the remains in the shallows are quite discrete and are not large compared with the rest of the reef.

(g) The Wreck Access Plan is successful in its intent to provide helpful information about the dive conditions and the location and form of the wreck remains. The mooring buoys greatly assist the dive experience and increase safety, although two buoys were missing on the day of my visit.

(h) The level of risk to which I was exposed was familiar. I would not dive to 36m without an experienced diving companion, but otherwise I was quite comfortable with the reef setting and poking around the wreck remains. I did not notice any unusual snag hazards or areas of dangerous metalwork.

7.4 In summary, the dive experience was informative and, from a recreation perspective, an excellent day in the office. The remains of the wreck of the Rena are clearly a diving amenity. Removing any of the remains would reduce the scale of amenity and certainly would not improve the dive experience.

8 CONCLUSIONS

8.1 The Rena wreck provides significant benefits to the locally and nationally important recreational activity of diving. The wreck remains are a substantial attraction to local divers – as shown in the evidence presented by members of the Mount Club – and to visitors. I note that there are already several videos of dive trips to the Rena posted online by commercial operators such as Dive Wellington and Splash Scuba (Auckland and Waikato) and the Auckland University Underwater Club.

8.2 There is no reason to remove the remains of the wreck of the Rena to maintain or improve any recreation values. The only recreation conflict I have identified is a limitation on trolling in areas where divers are active. However, this is also a pre-existing limitation, and due to the scale of the reef, a very minor issue (and one which does not exist when no divers are present).

8.3 Considering the Bay of Plenty is 'product poor' for tourism, and diving is a popular activity nationally - with virtually the same number of people diving as playing rugby union - there is good reason for retaining the remains of the wreck.

8.4 The dive experience is excellent, and the bow sections provide an accessible dive option for all levels of divers. In my opinion, the bow sections of the wreck are critical for diving, particularly the bow thruster.

8.5 The implementation of the Wreck Access Plan – including its various communications to users – has created a common understanding of the location of the wreck, and advice about visiting it. There is no value to the recreation community in resetting this process, with the application of another exclusion zone – regardless of its duration – and the implementation of a revised communications programme.

8.6 In my opinion, the risks associated with diving the remains of the wreck are quite acceptable and do not differ from risks associated with the range of activities we normally accept. For example, between July 2011 and Jun 2016 there were 2,121 Accident Compensation Corporation (ACC) claims resulting from 'underwater diving', and 292,502 claims resulting from rugby union. Both activities have similar numbers of participants (but different frequencies in participation, for which I have no data). Skiing and boarding resulted in 64,794 claims in the same period, and equestrian activities 34,707.[11]

8.7 Compared with the pre-wreck setting, the marine recreation values of the Bay of Plenty have improved, considering: the retention of the ecological values of the Astrolabe Reef,[12] the increase in reef habitat created, the lack of any continuing material adverse effect on coastal recreation, and the important addition of a wreck diving venue which already has a national reputation.

Robert James Greenaway

23 December 2016

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11 See: http://www.acc.co.nz/for-individuals/injury-statistics/

12 My understanding in relation to ecology is informed by the evidence of Dr Philip Ross and Dr Sharon De Luca.

ATTACHMENT 1:

Rena Dive Photos, 5 November 2016. Images 1 to 5 taken by Kim Taylor of the Mount Maunganui Underwater Club: Sony NEX5, 30mm macro lens, 2 x Sea and Sea YSD2 strobes

Photo 1: Stern section port side cargo gantry at 36m

Photo 2: Stern section port side bollard at 28m

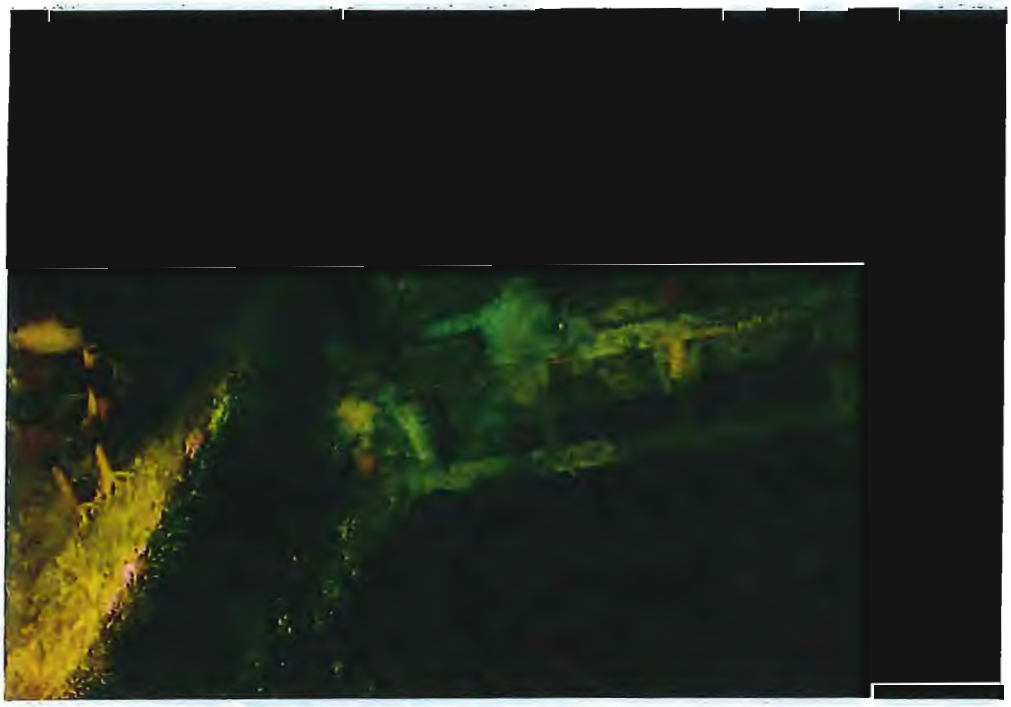

Photo 3: Stern section port side at 26m

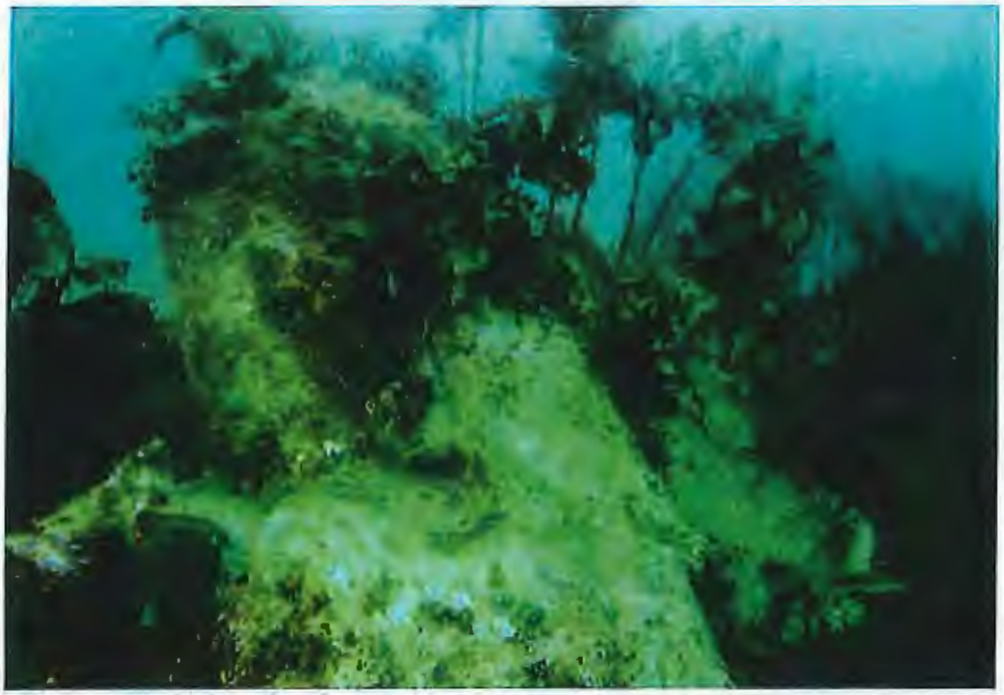

Photo 4: Bow hull plates at 18m

Photo 5: Black angel fish on bow wreckage at 7m

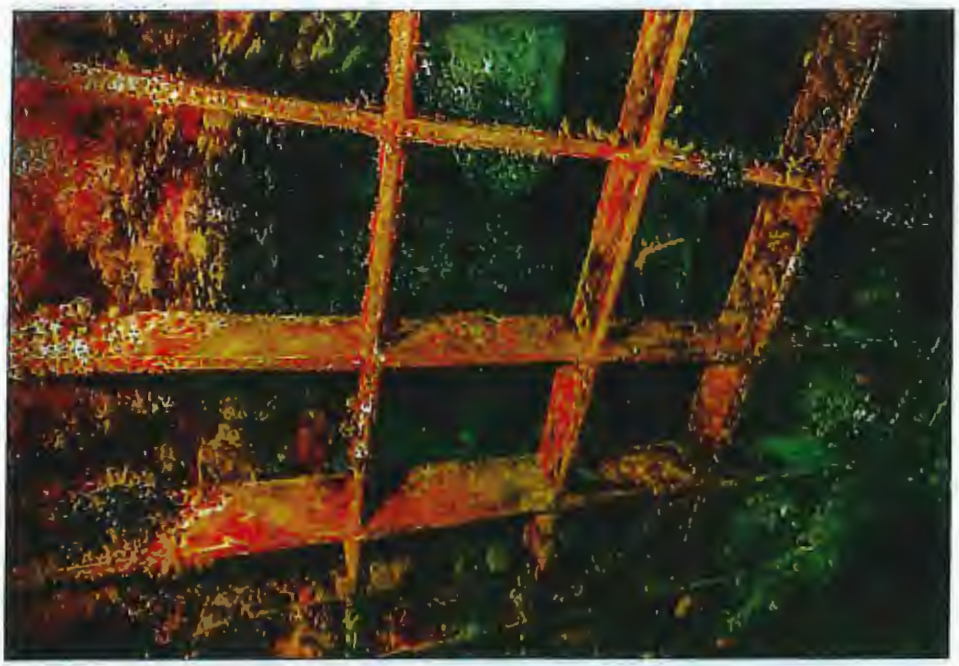

Photo 6: Bow thruster at 18m; photo by Ian Sherwood of the Mount Maunganui Underwater Club, 9 September 2015

ATTACHMENT 2:

Dive routes, 5 November 2016