Application for Resource Consent (PART A)

This application is made under Section 88 of the Resource Management Act 1991

The purpose of this Part A form and the relevant Part B form(s) is to provide applications with guidance on information that is required under the Resource Management Act 1991. Please note that these forms are to act as a guide only, and Environment Southland reserves the right to request additional information.

To: Environment Southland
Private Bag 90116
Invercargill 9840

Full name, address and contact details of applicant *(in whose name consent is to be issued)*

Name: Gravity Fishing Ltd

Address: 41 Taipea Road, RD Otatara, Invercargill

Email: gravityfishing@gmail.com

Phone: 021 447 445 *Preferred* 03 213 0237 *Additional* Fax:

Date(s) of birth: 21/8/1985 Nate Smith

Consultant contact details *(if different from above)*

Contact name/agent: James Bacon Lewis

Address: PO Box 668, Wanaka, 9305

Email: jimlewis.nz@outlook.com

Phone: 021 300 212 *Preferred* *Additional* Fax:

Please tick the box for the consent(s) you are applying for and complete the relevant Part B form(s) where available:

Land Use		***Discharge***		***Coastal***	
	Bore/well		To air		Whitebait stand
	New or expanded dairy farming		To water		Structures/occupation of space
	Effluent storage		To land		Removal of natural materials
	Cultivation	***Water***			Disturb foreshore/seabed
	Tree planting		Take and use surface water		Discharge/deposit substances
	Gravel extraction		Take and use groundwater	x	Commercial surface water activity
	Feed-pad, wintering pad, calving pad or silage pad		Dam water		Reclaim/drain foreshore/seabed
	Riverbed activity		Divert water		Marine farming
	Bridges and culverts				Other coastal activities

1 Are there any **current** or **expired** consents relating to this proposal? [ ] Yes [X] No

If yes, please provide consent number(s) and description:

2 Are any other consents required from Environment Southland or **other authorities**? [ ] Yes [X] No

If yes, please state the relevant authority and the type of consent(s) required:

3 For what **purpose** is this consent(s) required: (e.g. discharge of effluent, gravel extraction etc.)

The purpose of this application is to enable charter vessel "Gravity" or similar size replacement vessel to anchor for night or take shelter and load and unload between Yates Point in the north to Dusky Sound in the south.

4 **Location** of proposed activity

Address: The coastal marine area (CMA) adjacent to Fiordland National Park, from Yates Point to and including Dusky Sound/Tamatea, but excluding overnighting or any other commercial surface activity in the Doubtful Sound/Patea complex.

Legal Description:

Map Reference (NZTM 2000): ---------- E ---------- N

5 The name and address of the **owner /occupier**: (if other than the applicant)

Name: New Zealand Government Phone: 04 4600110

Address: c/ - Minister of Lands, LINZ, PO Box 5501, Wellington 6145

6 **Please attach a map or a coloured aerial photograph, showing at a minimum, the location of the proposed activities.** See attachment

7 Assessment of effects on the environment (AEE)

Please complete the applicable Part B form(s) for the proposed activities. For those activities where no Part B form is available, please attach a written statement that assesses the effects that your activities may have on the environment. An assessment of effects **must** include the following information:

(a) if it likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity;

(b) an assessment of the actual or potential effect on the environment of the activity;

(c) if the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use;

(d) if the activity includes the discharge of any contaminant, a description of—

(i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and

(ii) any possible alternative methods of discharge, including discharge into any other receiving environment;

(e) a description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help or prevent or reduce the actual or potential effect;

(f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any persons consulted;

(g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved;

(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).

You should also include:

(a) an assessment of the activity against any relevant provisions of any relevant objectives, policies, or rules;

(b) any information specified to be included in the application in accordance with the relevant regional plan;

(c) for an application to replace an existing consent, an assessment of the value of the investment of the existing consent holder:

An assessment of effects **must** address the following matters:

(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects;

(b) any physical effect on the locality, including any landscape and visual effects;

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity;

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations;

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants;

(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.

8 Affected Parties

Please attach written approval from parties who may be affected by your activity. *Written Approval of an Affected Party* forms are available on the Environment Southland website. During the processing of your application, Council may determine that additional approvals are required.

9 Correspondence from Council when using a consultant

It is standard practice that both you and your consultant are copied into all correspondence relating to the consent process. This is so that you know what is going on with your application. Please let us know below if you would like us to only contact your consultant. This means you will only hear from us when your application is/is not accepted, when a decision is made or if we feel that you need to be contacted.

I want all correspondence about my application to go to my consultant only [X] Yes [ ] No

10 Site visit from the Consents Team

Consents staff are able to meet with you, visit your site and see what you are proposing to do. We find that this is beneficial to everyone involved. The cost of the visit will be included in the total cost of processing your consent. However, we find that applications that have an on-site visit are processed with less congestion and at a similar or lesser overall cost. Please let us know below if you would like us to come and see your site.

I would like a member of the Consents Team to visit my site [ ] Yes [X] No

11 How much will it cost to process my application? We have funds in hand from the Applicant in the sum of $1500 which sum will be paid by direct credit to Environment Southland approximately one day before application is filed.

The cost of a consent depends on the complexity of the activities. Staff time is charged out at a rate of $145/hr and vehicle use for site visits is charged at $0.73/km (inclusive of GST).

The fees shown below under section two are **deposits to be paid at the time of application**. Due to the complexity of these activities, this deposit will not usually cover the full cost of processing the application. **Further costs may be incurred** relating to staff time, disbursements, legal charges, consultation fees, and hearing commissioner fees. Environment Southland's User Charges and Fees document is available at:

www.es.govt.nz/fees-and-charges

When the consent has been processed you will receive an invoice for an additional fee, or for a refund.

The Council's user charges are fixed under Section 36 of the Resource Management Act 1991. Our fee schedule is:

1. Fixed fee:	
Bores and wells	**$297**
Whitebait stand	**$225**
2. Deposit:	
All other non-notified applications including: • Certificates of compliance • Changes to consent conditions (variations) • Change of lapse date	**$1,500**
Applications that require notification or limited notification	**$2,000**

How to pay

Environment Southland accepts payment in the forms of cash, Eftpos, cheque, or electronic transfer. All electronic transfers must include the applicant's name and "consent application" as a reference. Please make electronic payments to: Environment Southland, 01-0961-0018998-00.

User Charges

Please note that additional Annual User Charges will apply to all consents. These are payable in advance on the first day of July each year. Tables 4, 5 and 6 of the Environment Southland User Charges and Fees Schedule outlines the fees associated with Annual Administration Charges and Annual Consent Monitoring and Inspection Charges. Table 7: Annual Research and Monitoring Charges applies only to surface and groundwater takes and comprises the following:

- **Surface water takes (per consent, for volumes up to 50,000 m^3/day):**
  - A charge of **$1.98** per year per cubic metre authorised as a maximum daily take.
  - Minimum of **$138**, maximum of **$7,964**.
- **Surface water takes (per consent, for volumes over 50,000 m^3/day):**
  - **$0.0031** per cubic metre authorised as a maximum daily take.
- **Groundwater takes (per consent):**
  - A charge of **$0.93** per year per cubic metre.
  - Minimum of **$162**, maximum of **$1,871**.

Municipal and stock water discount (of 50%) no longer applies.

12 Checklist: Have you included the following?

x	Payment of the required deposit *(see fee schedule)*
NA	Written approval from all potentially affected parties *(forms available from the Environment Southland website)*
x	Site plan/location map/sketch of the proposed activity
x	A copy of the Certificate of Incorporation (*where applicant is a company*)
x	Part B form(s) specific to your activity and/or a separate assessment of environmental effects (AEE)

Note:

(a) If your application does not contain the necessary information and the appropriate fee, Environment Southland must return the application.

Signature of applicant

I hereby certify that to the best of my knowledge and belief, the information given in this application is true and correct.

I undertake to pay all actual and reasonable application processing costs incurred by Environment Southland.

Name (block capitals) Gravity Fishing Ltd by its authorised agent Nate Smith

Signed _____ **Date** 4-1-2022

(Signature of applicant or person authorised to sign on behalf of applicant)

Application for a Coastal Permit (PART B)

This application is made under Section 88 of the Resource Management Act 1991

environment SOUTHLAND
Te Taiao Tonga

A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. **Please also refer to Chapter 18 of the Regional Coastal Plan for Southland, 2013.**

To: Environment Southland
Private Bag 90116
Invercargill 9840

1 What is this application for?

- [ ] The discharge of water to water
- [ ] The discharge of contaminants to water
- [ ] Structures - erecting/placing, reconstructing, altering/extending, removing/demolishing
- [ ] Occupying space within the coastal marine area
- [ ] Removing sand, shingle, shell or other natural material
- [ ] Disturbing the foreshore or seabed - excavating, drilling, tunnelling etc
- [ ] Discharging/depositing any substance in, on, or under the seabed or to coastal waters
- [x] Commercial surface water activities
- [ ] Reclaiming or draining the foreshore or seabed
- [ ] Marine farming
- [ ] Other activity carried out in, on, under or over the coastal marine area – please specify:

2 What duration of resource consent is sought? 15 years

3 Please describe how the activity will be carried out. For structures, you must include engineering diagrams showing the dimensions and position of the structures.

The purpose of this application is to enable charter vessel "Gravity" or similar size replacement vessel to anchor for night or take shelter and load and unload between Yates Point in the north to Dusky Sound in the south."Gravity" is 17m length overall with Doosan V10 main engine, alloy hull/GRP superstructure.Vessel sleeps 7 guests + 1 crew. Gravity cruises at 17 knots.
Operating season will be from 1st December each year until 30th June each year.
My mission is to show new approach, a better way of fishing and only fish outside of the Sounds where there is and abundance of fish.
Early in season till end of January fishing Albacore only, mid to late season Bluefin Tuna. Gravity Fishing's main objective is to provide "the experience of lifetime" and educate the public to live off the sea for a few days.
Length of each trip will be min 2 nights and maximum 4 nights with maximum one trip per week. This means best case assuming full bookings plus perfect weather approximately 64 days per annum to maximum up to 126 days per annum.
All load and unload will take place in Milford Sound where we have an arrangement to share in the use of berth 8A - Milford Fisherman's Wharf.
Typical trip:Clients fly in (Air NZ) to Queenstown. Followed by 2nd flight small plane - Queenstown - Milford Sound landing strip. Gravity will be berthed at Milford Sound Freshwater Basin, Fishermans Wharf. Pick up clients. Tow lures south.
Early season for Albacore Tuna to Poison Bay or Bligh Sound (overnight there). Late in season (bluefin) - tow lures toward Thompson Sound/ Doubtful Sound - but don't overnight there as Dusky is better as the season progresses a large biomass of bluefin tuna congregates off Dusky Sound. In the late season we will operate Milford to Dusky - a 6x hr lure tow. Stay overnight around Anchor Island.
Crayfishing /Paua - Gravity Fishing Ltd. will put a very limited effort into crayfishing and paua fishing using free diving tanks. No diving inside the Sounds.
"Gravity" is operating under MTOP Certificate. Certified to operate safely in the waters surrounding Bluff, Oban (Halfmoon Bay) Rakiora, Fiordland, Riverton.

4 Please state the proposed date of commencement of the activity/works and the proposed date of completion.

Proposed commencement of activity- soon after this application is formally granted.
Proposed date of completion - consent is to last 15 years from date of original grant.

5 Details of the contractor (or any other person) who will undertake the activity works.

Contracting company name: Gravity Fishing Ltd

Contact person: Nathan George Smith - vessel skipper and vessel owner

Phone number: 021 477 445 gravityfishingnz@gmail.com

Existing Environment

6 Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.

	Yes	No
(a) Signs of marine life (e.g. fish, mammals, native birds, shellfish, invertebrates)?	✓	
(b) Areas where food is gathered from (e.g. watercress, eels, wildfowl)??		✓
(c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)?		✓
(d) Other activities occurring in the area (e.g. commercial activity, fishing, swimming, boating)?	✓	
(e) Areas of particular aesthetic, cultural, heritage or scientific value (e.g. archaeological sites)?	✓	
(f) Waste discharges, water takes and/or monitoring sites?		✓

The above features marked with a tick will be encountered to a greater or lesser degree by vessel "Gravity" and its passengers and crew whilst the vessel is operating in Fiordland.
The features marked are referred to elsewhere in this application - please refer to the Environmental Assessment document lodged with this Application.

6 contd

Please attach photographs and a map or a coloured aerial photograph showing the following:

- the location(s) of your proposed activity;
- any nearby rivers, creeks, estuaries, drains or any other water body;
- the location of any wetland, estuary or wildlife habitats;
- the location of any other coastal activities or structures in proximity to the proposed activity;
- activities/structures occurring on adjacent land, along with the names of the adjacent landowners.

7. In addition to the above description of the existing environment, please describe the following:

- Is the beach aggrading or degrading (if applicable)? Are there any signs of shoreline erosion?
- What is the nature of the seabed (i.e. muddy, sandy, silty, rock etc)?
- In what way has the foreshore/seabed been altered as a result of other activities occurring in the area?

Please provide cross sections and any other supportive evidence as required.

Not applicable.

Assessment of Effects

8 How will the proposed activity affect the coastal environment in the short term? For example, how do the initial stages of the proposed activity (including, but not limited to, construction and sea bed disturbance) affect the coast, particularly in terms of coastal erosion and effects on ecosystems?

See attached Enviromental Assesment document.

9 How will the proposed activity affect the coastal environment in the long term? For example, through the long-term occupation of the coast.

See attached Enviromental Assesment document.

10 How will your activity effect any other users of the coastal area and/or activities occurring on adjoining land?

See attached Enviromental Assesment document.

11 **Are there any structures near to the proposed activity? If yes, will the proposed activity have any effect on these structures? Please provide specific details including the type of structure, owner of structure, distance from proposed activity, what effects the proposed activity will have on the stability/function of the structure.**

The only relevant structure to the knowledge of the Applicant is the Fisherman's Wharf at Milford Sound/Piopiotahi, where clients will embark and disembark from vessel Gravity. Suggest there will be nil effect on the stability or function of that wharf as it is purpose built for this function.

12 **Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:**

(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

See attached Enviromental Assesment document.

(b) any physical effect on the locality, including any landscape and visual effects

See attached Enviromental Assesment document.

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

See attached Enviromental Assesment document.

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

See attached Enviromental Assesment document.

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

See attached Enviromental Assesment document.

(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

See attached Enviromental Assesment document.

13 **Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, remedy or mitigate the actual or potential effects on environmental features and values.**

See attached Enviromental Assesment document.

14 **For construction works, please describe how you will minimise the release of silt, sediment, concrete and other contaminants into water.**

Not applicable.

15 **Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.**

There are no alternatives to the southern fiords. This is recognized in the Introduction to Chapter 16 of the Regional Coastal Plan.

16 **Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc), government departments/ministries (e.g. DOC, Maritime NZ), territorial authorities, advisory bodies (e.g. Fiordland Marine Guardians), non-governmental organisations (e.g. Forest & Bird), industry representatives (e.g. CRA8 Management Committee and recreational associations).**

Applicant has some months ago commenced consultation with the following parties and briefly summarised below are the results of consultation to date:

1)Te Ao Marama Inc. - they had no real objection of note about the Application - they did raise certain points which the applicant totally agrees with and the net result of the consultation was "go ahead" - the Applicant has lodged with this Application a letter from Te Ao Marama Inc. which contains the above.

2) Guardians of Fiordland - several months ago consultation was initiated with the Guardians for evidence of this refer to the Environment Assessment attached.

3) Applicant also contacted Department of Conservation Te Anau, but was advised to hold fire until the actual granting of Resource Consent - DOC would then come into the picture to guide Applicant with detail.

Please note that in accordance with Schedule 4 of the RMA, you may also be required to provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents.

(a) New Zealand Coastal Policy Statement, 2010
(b) Regional Policy Statement for Southland, 1997 (and any proposed/ subsequent versions)
(c) Regional Coastal Plan for Southland, 2013 (and any proposed/ subsequent versions)
(d) Any other relevant Resource Management Regulations or National Environmental Standards

Staff are able to advise whether this is required, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this.

END OF FORM

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   1.1. Background
   1.2. Resource Consents Required
   1.3. Vessel "Gravity"
2. The Proposed Activity
3. Effects on the Environment
   3.1. Receiving Environment/Site Description
   3.2. Assessment of Actual and Potential Effects on the Environment
      3.2.1 Social and Economic Affects
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      3.2.9 Natural Character of the Coastal Marine Area
      3.2.10 Pollution
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      3.2.11 Structures
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      3.2.12 Risk due to Natural Hazards
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4. Legislative Framework
   4.1. The New Zealand Coastal Policy Statement
   4.2. The Southland Regional Policy Statement 2017
   4.3. Regional Coastal Plan for Southland
   4.4. Southland Murihiku Conservation Management Strategy 2016
   4.5. Fiordland National Park Management Plan
   4.6. Te Tangi a Tauira
5. Part 2 Purpose and Principles of the RMA
   5.1. Purpose of the RMA - Section 5
   5.2. Matters of National lmportance and other matters - Section 6 and 7
6. Consultation
7. Conditions Proposed by the Applicant
8. Conclusion

APPLICATION FOR RESOURCE CONSENT
PURSUANT TO SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991 (RMA)
Includes Assessment of Environmental Effects (AEE)

To: Environment Southland
Private Bag 90116,
Invercargill 9840

From: Gravity Fishing Limited
Invercargill
c/- James Bacon Lewis
jimlewis.nz@outlook.com
021 300 212

1. Gravity Fishing Limited is applying for the following resource consent:

RMA Section	Resource Consent	Duration of Consent
12(3)(a)	commercial surface water activities	15 years

Please refer below for further background as to the reasons for seeking Resource Consent for the proposed activity.

2. The activity to which this Resource Consent relates is:
The operation of the charter vessel "Gravity" (or replacement vessel); undertaking commercial surface water activities, in the coastal marine area adjacent to the Fiordland National Park.

3. The site to which this application relates is located within the coastal marine area (CMA) adjacent to Fiordland National Park, from Yates Point to and including Dusky Sound/Tamatea – but however excluding overnighting or any other commercial surface activity in the Doubtful Sound/Patea complex.

4. The Application is primarily for an occasional/intermittent one night or two night floating accommodation base in the CMA and will have, the Applicant contents, no effects which are more than minor on the wildlife or vegetation in the CMA.

5. No other Resource Consents are required for this activity other than the Consent sought in this application.

6. Included in this application for the proposed activity is an assessment of:
a) the actual and/or proposed potential environmental effects (AEE) as required by the Forth Schedule of the RMA. The AEE corresponds to the scale and significance of the potential effects on the environment;
b) the proposed activity against the matters set out in Part 2 of the Resource Management Act 1991; and
c) the proposed activity against any relevant provisions of a document referred to in section 104(1)(b) of the Resource Management Act 1991, including the information required by clause 2(2) of schedule 4 of that Act.

1. Introduction

1.1. Background

The purpose of this Application is to enable the charter vessel "Gravity" or a similar sized replacement vessel to load and unload passengers at Fisherman's Wharf, Deep Water Basin, Milford Sound/Piopiotahi and later to anchor for the night or take shelter from bad weather inside the sounds of Fiordland from Yates Point in the north to Dusky Sound/Tamatea in the south but always excluding Doubtful Sound/Patea complex which is not included in this application.

The main daily activities undertaken for clients will all take place in the open sea and these activities include fishing by rod and reel in the open sea targeting albacore and bluefin tuna plus diving, also in the open sea, targeting crayfish and paua.

With reference to this Application the main approach and philosophies of the Applicant are set out here.
Our mission here is to show a new approach, a better way of operating, only fishing outside of the Sounds where there is an abundance of fish. The main nub of this application is that there will be absolutely no traditional fishing and no diving inside any Sound in Fiordland.

- **The Applicant's main shareholder and director, Nate Smith is a 3rd generation Ngai Tahu fisherman. In recent years he has made the brave personal commitment to return to sustainable fishing practices in a bid to preserve precious southern fish stocks.**
- **Catch and bag limits are not a target! Take only enough for a feed, it's all about the experience!**
- **We want to show to all affected parties a better way - new approach - only fish outside the Sounds**
- **There is an abundance of fish outside the Sounds! There is no need to fish inside the Sounds**
- **Crayfish and paua are being hammered in the sounds as are blue cod and groper**
- **For each species - target each fish type in its "prime condition" season - leave the fish alone when not.**
- **One aim is to show/educate the public to live off the sea for a few days and to provide as our overall objective the experience of a lifetime!**

Applicant's background (the below excerpted from "Te Karaka" magazine, July 2019)
Bluff fisherman Nate Smith is on a mission to change the face of commercial fishing in the deep south.
With 12+ years experience of commercial fishing under his belt, Nate noticed a significant decline in blue cod catches in the last decade and decided to do something about conserving this iconic resource.
In July 2019 he switched from bulk harvesting techniques in common use by the fishing industry to a more traditional style of fishing with hooks and line. He specifically targets a handful of fish species and takes only what his customers have pre-ordered.
Gravity Fishing Ltd's annual catch dropped from 50 tonnes to eight tonnes of fish. However, his financial returns have actually improved by cutting running costs and taking control of all aspects of catching, packing and marketing a range of premium quality whole fish through the company's own processing facility.
In the last 2-3 years, Gravity Fishing has developed a growing domestic market supplying whole fish to chefs in some of the country's leading restaurants.
He started fishing as a teenager, working as a deckhand on fishing boats operating out of Bluff and Stewart Island. He learnt the art of fishing with hooks and line from his father, who used to catch whole fish for his late father-in-law's family's fish factory in Bluff. After completing his skipper's ticket, Nate went straight into seismic survey for the oil and gas industry, work that took him all around the world, mostly the Middle East, Western Australia and the west coast of the North Island. He went fishing commercially for Sanfords for 11 years, initially leasing a few boats. In November 2014, he bought the 17-metre alloy vessel Gravity in Australia, modified it for fishing on the southern coast and went to work catching blue cod and crayfish quota for Sanfords.

In little more than a decade, Nate had noticed a decline in blue cod catches in particular and began to question the sustainability of using cod pots for bulk harvesting blue cod.

"When we first started fishing we were averaging 700-800kgs of blue cod a day and the last season we did with cod pots we were down to an average of 300kgs. In that time I'd seen the decline and I just knew there was a real problem."
The fishing industry has a total allowable catch (TAC) of 1,239 tonnes of blue cod and 2 seasons ago was 304 tonnes under caught. Although the Ministry of Fisheries took steps to fix that by changing the mesh size of cod pots to harvest only larger fish, smaller fish were still being caught.
Nate regards blue cod as an iconic native species not found anywhere else in the world. The pristine waters, tidal flow and nutrients in the waters he fishes - Area 5 between Slope Point on the Catlins coast and Awarua Point north of Milford Sound – all contribute to what he believes is the best quality blue cod in New Zealand.
Historically, fisheries in "the Roaring Forties" were protected from over-fishing by this region's legendary strong winds and tides, but with bigger boats and modern technologies Nate says these fisheries don't get a rest any more.
After lots of research, trial and error, he converted Gravity to hook and line jig fishing, only catching and supplying pre-ordered species of fish while reducing pressure on the precious blue cod fishery.
As Nate explains, financial gain has never been a major driver for him. He reckons sustainability is the biggest issue facing the fishing industry right now.
For example, during May and June Gravity targeted hapuka because they were in the best condition they were likely to be in for the next 12 months. By the end of June they moved on to blue cod, striped trumpeter and octopus for the winter months.
In the summer months they target kingfish and the tunas, migratory species.
"That's sustainable, that's looking after a fishery first and foremost and if you can achieve that and start to see stock numbers come back, that's when we can say we did the right thing there."
He believes such changes would have an instant effect on blue cod fishery stocks in particular.
"Within 12 months you would start to see huge numbers of blue cod biomass, the way it used to be. If we want to continue to eat fish in future, it's a logical step.
"For me it's personal," he says. "I've seen the enthusiasm of my own son catching a blue cod for the first time that I've experienced myself. When I saw that I thought: 'How can we preserve this'?"

1.2. Resource Consent Required

In the Regional Coastal Plan for Southland any commercial surface water activities in the internal waters of Fiordland from Yates Point to Puysegur Point are a **Discretionary Activity** in accordance with Rule 16.2.1(7).

Gravity Fishing Limited's coastal permit Application may be considered a Discretionary Activity as per the proposed activity description.

Use of Doubtful Sound and Thompson Sound will comply with Policy 16.2.9 - Use of Doubtful Sound and Thompson Sound as a thoroughfare:

Provide for commercial surface water activity to use Doubtful Sound and Thompson Sound where it is necessary to:

1. pick up or off-load passengers to or from shore;
2. access services;
3. access wharves or launching areas;
4. travel from one arm of Doubtful Sound to another in the case of commercial backcountry activities;
5. off-load cargo and uplift stores;
6. carry out activities associated with the construction and maintenance of the Manapouri Power Scheme and tailrace.

The following resource consent is required and applied for under the Regional Coastal Plan for Southland;

- **Discretionary Activity** in accordance with Rule 16.2.1(7);

1.3. Vessel "Gravity"

Vessel "Gravity" which will be operating in this region is a commercial charter vessel with a maximum registered length of 17metres and maximum passenger capacity of 7x passengers plus 1 x crewman. Maritime New Zealand number 135429 – vessel has a current MTOP (Marine Transport Operating Plan) which allows for charter operations in, inter alia, Fiordland. Copy of this MTOP will be lodged with Environment Southland at the same time as the Application. Vessel is in Maritime New Zealand Safe Ship Management with its certificate expiring on 11th April 2026. This Survey allows the vessel to operate within New Zealand Coastal 12 mile limit – South Island.

On occasions it is possible that the vessel being used at any one time may also be smaller and have a lesser passenger carrying capacity.

2. The Proposed Activity

Operating season will be from 1st December each year until 30th June each year. Early in season till end of January fishing albacore only, mid to late season bluefin tuna.

Length of each trip will be min 2 nights and maximum 4 nights with maximum one trip per week. This means best case assuming full bookings and perfect weather approx 64 days per annum to a theoretical maximum up to 126 days per annum. Note re above "days per annum". The Applicant is aware that "full bookings" and "perfect weather" are in fact never achievable. Therefore these "days per annum" are not reality but only hypothetical maximums. All passenger loading and unloading will take place in Milford Sound/Piopiotahi where we have an arrangement to share in the use of berth 8A - Milford Fisherman's Wharf.

Typical trip: clients fly in to Queenstown from their home area. Followed by 2nd flight small plane - Queenstown - Milford Sound landing strip. Or clients will travel in to Milford by car. "Gravity" will be berthed at Milford Sound/Piopiotahi awaiting the clients. Tow lures south. Early season for albacore tuna to Poison Bay or Bligh Sound (overnight there). Late in season (bluefin) - tow lures toward Thompson Sound/Doubtfull Sound - but don't overnight there as Dusky is more sheltered. As the season progresses a large biomass of bluefin congregates off Dusky Sound. In this late season the Applicant will operate Milford/Piopiotahi to Dusky/Tamatea (excluding Doubtful/Patea complex) - a 6x hr lure tow. Stay overnight around Anchor Island.

Diving for crayfish/paua – we will put a very limited effort into crayfishing and paua fishing using freediving only-no tanks. Our diving will be restricted to the open sea coast only – Looking Glass Bay, Catseye Bay, Anchor Island surrounds (Dusky). No diving inside the Sounds.

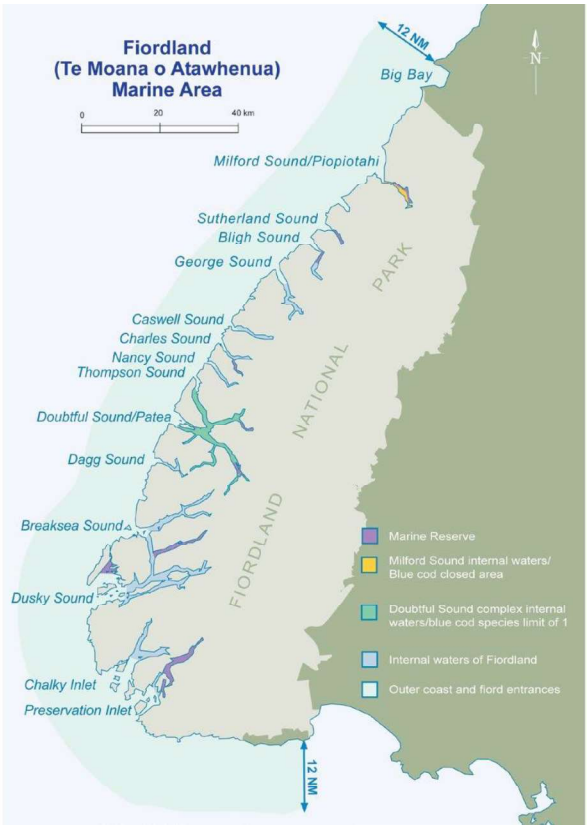
3. Effects on the Environment

3.1. Receiving Environment/Site Description

Fiordland's unique environment is described in "Beneath the Reflections" user guide created by Fiordland Marine Guardians (first published October 2008 and updated June 2020) as follows:

Carved out by glaciers approximately 20,000 years ago, the U-shaped fiords are characterised by near-vertical rock walls, which plunge several hundred metres below the water's surface to the mud silt floor below. With rainfall exceeding seven metres a year in places, thundering waterfalls and cascades appear

at every turn. This is a place of many moods – wind can whip the sea's surface into a froth of funnels and swirls, but when the day is calm, mirrored reflections are nothing short of magic. And the magic does not stop at the water's surface. Beneath the reflections of the fiords, something unusual is happening. Fresh water soaking down through the carpeted forest floor absorbs tannins from decaying leaf matter, which stain it the colour of tea. On reaching the salt water, the less-dense fresh water floats on the surface forming a tea-stained layer that reduces the amount of light reaching the sea water below. Kelps, normally the basis of marine communities, do not grow well in the light-poor conditions, and are replaced by animals which normally inhabit greater, darker depths. Near the fiord entrances, the underwater sill (made up of glacial moraine debris) forms an effective barrier restricting sea water circulation into the fiords. Beneath the top 3 metres of the freshwater layer and restricted light, the steep-walled inner fiord habitat is colonised by spectacular sea life, such as red and black corals and fragile sea pens, and other species of rare biodiversity that elsewhere would normally inhabit greater depths. At the fiord entrances and along the outer coast, conditions are very different, and much more dynamic. The fiord sill entrances are comparatively shallow, and the wave action there mixes the fresh and salt water. In the greater light, algal phytoplankton and stands of red and brown seaweed flourish, while on the exposed outer coast dense forests of bull kelp, Durvillaea, proliferate, fostering productive marine communities where rock lobster (kōura) teem and pāua graze the rocks. Such profound differences between the inner fiord environment and the entrances and open coast have fundamental implications for the fish communities. Alongside Fiordland's fish communities live some of its special inhabitants – bottlenase dolphins, New Zealand fur seals (kekeno), Fiordland crested penguins (tawaki), and blue penguins (kororā).



Map from - Beneath the Reflections - A user's guide to the Fiordland (Te Moana o Atawhenua) Marine Area – Fiordland Marine Guardians

Fiordland Coastal Marine Area

Fiordland is a geographic region of New Zealand in the south west corner of the South Island comprising the westernmost third of Southland. Most of Fiordland is dominated by the steep sides of the snow capped Southern Alps, deep lakes and its steep, glacier carved and now ocean flooded western valleys. Fiordland is dominated by, and very roughly coterminous with, Fiordland National Park, New Zealand's largest National Park and one of the larger parks in the world with an area of 12,600 square kms. This National Park is part of Wahipounamu and a UNESCO World Heritage site.

Due to the often steep terrain and high amount of rainfall supporting dense vegetation, the Coastal Marine Area of Fiordland is largely inaccessible and almost completely uninhabited. The area was never subject to notable logging operations and even attempts at whaling, seal hunting and mining were small scale and short-lived, partly because of the extremely challenging weather in the area and partly because of poor access.

There are 12 major fiords on Fiordland's west coast, the most notable two being Milford/Piopiotahi and Doubtful Sound/Patea. Milford is the most famous and the only fiord fully accessible by public road. Pre Covid Milford Sound often attracted on a busy day during the period December to March up to 3000 visitors. Doubtful Sound/Patea which is much larger is also a tourist destination but only accessible following a boat trip over Lake Manapouri and a road transfer over Wilmot Pass to Deep Cove. It is estimated that the maximum daily visitors into Deep Cove on a busy day pre Covid would have been in the order of 300-400 people.

History

Maori knew the area well over hundreds of years but visited seasonally for periods for hunting, fishing and to collect the precious stone, pounamu.

Captain Cook visited Fiordland twice, firstly in 1770 and he returned and anchored in Dusky Sound/Tamatea for 5 weeks in 1773. Whilst at Dusky, Cook and his crew had several mainly positive interactions with Maori who were then living in the area. Cook's maps and descriptions soon attracted sealers and whalers who formed the first European settlements of New Zealand. From the middle of the 19th century surveyors, explorers and prospectors began to penetrate Fiordland's interior. Occasionally minerals were discovered but efforts to establish mines, timber mills and farms in Fiordland have always been short lived. The main factors inhibiting settlement are the remote location and the climate.

Tourism in the early times began with the opening up of the Milford Track in 1889 and has continued from strength to strength since.

Conservation efforts to protect the threatened species of kakapo and kiwi began in the late 1890's and early 1900's and continues to today with the very highly successful Department of Conservation operation at Resolution Island near Dusky Sound/Tamatea where populations of such birds as kakapo, kiwi, tieke/sadddleback are protected and re-established.

Most interestingly in Fiordland right up to the present day, there is no permanent human habitation except for very small numbers at Milford, Deep Cove and a small tourist lodge at Preservation Inlet.

Latitude

Fiordland is exactly half way between the equator and the south pole. Its latitudes are in the 40's.

Weather

The prevailing wind in Fiordland is westerly, this combined with the high mountain ranges forms orographic rainfall on the west coast of Fiordland. As a result, approximately 6 metres of fresh water is deposited into the fiords each year. This creates a unique marine environment as the base water layer in the fiords is the dense saltwater from the Tasman Sea, while the less dense layer which floats on top consists of the fresh water created by rainfall and runoff. The runoff comes from the water that drains through the Fiordland National Park forest; this becomes stained with tannins from the leaf litter and it turns the freshwater layer that sits on top of the saltwater, dark in colour.

A consequence of the dark fresh water layer is that it limits the amount of light that can reach the water's depths, inhibiting the growth of kelp. This results in the inner fiord areas having species (normally found at significant depths) colonised on the steep fiord walls between the surface and approximately 40 meters in depth, these species are living close to the surface to get their energy source from sunlight and off the debris that flow into the fiord from the surrounding Fiordland National Park forest.

The Coastal Marine Area's (CMA's) outer coastal area environments are not subject to limited light effects on the tannin stained freshwater layer, therefore in these areas kelp and other marine species are located at "normal" depths in the ocean. When comparing the inner and outer fiord communities of Fiordland, the inner fiord communities do not appear to be as productive as the outer coastal area communities. It is thought that this is likely to be due to the inner fiord communities lack of food source.

Ecology

Fish species commonly found in the CMA include blue cod, rock lobster, paua, scallops, jock stewart and kina. Red and black coral are located within the fiords.

As well as invertebrates and seaweeds, Fiordland is also the habitat of bottlenose dolphins, Fiordland crested penguins, migratory whale species (humpback and southern right) , New Zealand fur seals and other wildlife.

Pests

The Fiordland Coastal Marine Area is susceptible to pest invasion. The Asian seaweed *Undaria pinnatifida (Undaria)* has established in many parts of New Zealand over the last 20 years. *Undaria* is a threat to Fiordland's unique marine environment and the fishing and tourism economies it supports. This plant has been found in Breaksea Sound. As a result of this incursion, the Fiordland Marine Regional Pathway Management Plan was developed in an endeavour to prevent any further marine pest incursions into Fiordland. Secretary Island is a sanctuary island and for it to remain in this state, extreme care must be taken to ensure terrestrial pests do not enter the island via vessels in the fiord.

For some time now vessel Gravity has operated as a commercial fishing vessel fishing outside of the CMA but using the fiords as a overnight anchorage, consequently a vessel of this size and the scale of the proposed activity is currently part of the existing environment of the CMA. Further, recreational and fishing boat activity is a permitted activity in the CMA. Because of this it is the commercial nature of the proposal that should be considered in this Assessment of Environmental Effects; that being, regular vessel movement within the CMA.

It is relevant that private water craft are "uncontrolled" or "unregulated" (through any resource consent requirement). In comparison, Gravity Fishing Limited activity will be carefully controlled through its comprehensive Maritime Transport Operations Plan. The operation will further be regulated by the Coastal Permit Conditions (if granted) and also by Maritime New Zealand. These measures are greater than those undertaken by recreational boat users of the CMA and because of this the proposed operation in this environment should be considered safer than recreational users of the environment.

The Applicant's views are that the proposed operation of vessel Gravity in the CMA will have no more than minor effect on the environment. The assessment of actual and potential effects on the environment for the proposed commercial surface water activities are examined in section 3.2 below.

3.2. Assessment of Actual and Potential Effects on the Environment

3.2.1 Social and Economic Affects

Positive effects on people and communities:

There are benefits to the local and regional communities and their economic well-being through allowing this activity to take place. These include:

1. The Application, if granted, creates opportunities for the public to learn about and connect with the natural environment of Fiordland and to have a positive experience in the natural environment of the CMA. If visitors experience the natural environment of the CMA then there is far more chance that they will care about it. If they care about it there is also more chance that they will protect it.
2. Allowing an alternative choice of charter vessel and service to visitors to the area – more especially as this Application enables a totally new charter fishing format to become established – fishing daily in the open sea outside the sounds whilst overnighting for safety and comfort inside the sounds!
3. Benefits to ancillary tourist operators (e.g.airlines, bus operators, accommodation and food and beverage providers) and tourism service industries in the district.

There are specific economic benefits to Milford Sound/Piopiotahi. These economic benefits include increased tourist spend while passengers transfer through to Milford Sound/Piopiotahi, and increased servicing activity (provisioning, transport etc) resulting from the additional passengers from this new operation which would currently have no competitors.

3.2.2 Navigational Safety

The Applicants objectives are to ensure safety at sea, prevent human injury or loss of life, and avoid damage to the environment, in particular to the marine environment, and to property. In meeting safety objectives the Applicant shall ensure that the vessel is 'fit for purpose' and is compliant with all applicable maritime & marine protection rules. Other than in emergency no client of Gravity's will go ashore in Fiordland. Anyone who does go ashore in an emergency will be given a safety briefing prior to landing.
Gravity Fishing Limited has its own MTOP (a copy of which has been filed with this Application) which is a construct of a number of existing plans and processes that are implemented on daily basis.

3.2.3 Public Access and Other Users

Other users of the coastal marine area of Fiordland from Yates Point to Dusky Sound include but are not limited to recreational boaters, kayakers and recreational fishermen, commercial fishing operators, commercial tourism operators, research groups; including Otago University students and researchers and Meridian Energy Limited the operators of the Manapouri Power Station. The Fiordland National Park is adjacent the coastal marine area of Fiordland.
The Applicant has been operating as a self employed commercial fisherman in the coastal marine waters of Fiordland since approximately 2006 without conflict with other users of the area. Because of this the proposal will have a less than minor effect on other users of the area.
This proposal does not inhibit public access to the CMA. This proposal will not conflict with other users as vessels operating in this area are subject to Maritime New Zealand's requirements to operate in accordance with Part 22 of Maritime Rules: Collision Prevention.
The Applicant draws to your attention one of the findings contained in the Milford Opportunities Project published in 2021 which proposed to ban large cruise ships from Milford Sound/Piopiotahi – this follows a similar decision in mid 2021 when the city of Venice decided to ban large cruise ships from its harbour. Similar decisions reducing or limiting cruise ship visits were noted in 2021 in both the Port of Dublin (Ireland) and the port of Santorini (Greece).

3.2.4 Wildlife, Ecosystems and Habitats

The CMA's most significant benthic wildlife predominantly lives within the inner fiords, these are identified as China Shops, Representative Areas and Marine Reserves. Gravity will not be operating within the Doubtful Sound / Patea Complex.
Research indicates that within the fiords, a significant amount of marine life lives within the 40-meter band; which is from the surface to 40 meters in depth, there is a lot less biodiversity below this band. This is due to the dark freshwater layer in the fiords inhibiting the growth of kelp. As a result of this the marine life has adapted to live in communities closer to the water's surface, on walls, as this enables them to access as much light as possible and to also feed off the debris that are entering the fiords from the adjacent Fiordland National Park. The lack of 'typical' outer coastal food source within the inner fiords is thought to slow the growth of marine communities that reside in the inner fiords. Many of the communities that live within the 40 metre band have been identified as China Shops in the Fiordland Marine Conservation Strategy.
China shops are located in:

- Bligh Sound/Hawea
- Precipice Cove (Bradshaw Sound)
- Te Awaatu Channel and Pendulo Reach (Doubtful Sound/Patea)
- Wet Jacket Arm/Moana Uta
- Nine Fathom Passage (Dusky Sound/Tamatea)
- Awash Rock
- The Narrows (Long Sound, Preservation Inlet).

China Shops are not directly affected by the proposed operation of the Gravity in the CMA; because the China Shops in the proposed operation areas are either in depths of water in excess of 20 metres deep, close inshore or near rocks which pose a navigational safety risk. The Gravity would cruise at a distance past these wall communities and the resulting vessel wake is no greater than normal wave action.

Gravity will be traversing through the water in or near Marine Reserves within the CMA - this is not in conflict with regulations set in the Marine Reserves Act 1971.

Gravity will not be operating any tours focused on marine mammal viewing. Any marine mammal viewing will be incidental.

The presence of the Gravity in the CMA will have a minor impact on the habitats and ecosystems of this environment. This is because the vessel will not directly impact the habitats and ecosystems of the area.

3.2.5 Intrinsic Values of Ecosystems

Section 7(d) of the Resource Management Act states that in achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to the intrinsic values of ecosystems. The Regional Coastal Plan for Southland, Appendix 1 defines the intrinsic values of ecosystems as;

Intrinsic values in relation to ecosystems, means those aspects of ecosystems and their constituent ports which have value in their own right, including -

a) their biological and genetic diversity; and

b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience.

Comment: The New Zealand Biodiversity Strategy (NZBS) defines an ecosystem as an interacting system of living and non-living parts. Operations in the CMA need to ensure that they do not create an adverse effect on these coastal ecosystems as ecosystem disturbance can impact resilience, form and structure of the ecosystem. The two most significant forms of disturbance to coastal marine environments are sedimentation disturbance from land and marine activities; and physical habitat disturbance.

The proposed operations of Gravity in the CMA will not have a more than minor effect on the intrinsic values of ecosystems. This is because this proposal does not significantly increase sedimentation disturbance (having the potential to smother seabed ecosystems) within the coastal marine waters. The geology of Fiordland's coast and seabed is predominantly metamorphic rock. Because of this, sediment is not entering the coastal marine waters via erosion and the depth of the coastal marine waters ensures that a vessel traversing through the water does not increase sediment movement any more than normal wave action. The only areas in the CMA with typical sediment present which would be affected by vessel movement are on delta plains and estuaries present in some of the fiords. However, the Gravity will rarely traverse past these areas and if it does it will be at very slow speeds with no wake effect which does not increase erosion in the area above normal wave action.

Gravity will have a less than minor effect on physical habitat of the CMA. This is because the vessel is only using the sounds for shelter overnight and in extreme bad weather days. This will minimise any disturbance to habitats.

The Applicant will take all practical measures to reduce the potential risk of pest organisms and plant species entering the CMA waterways. The Applicant is aware of the situation and will exercise common sense measures to reduce the risk of contaminants and organic/ inorganic matter entering the CMA.

The proposed operation of the Gravity in the CMA will not create an adverse effect on the intrinsic values of the ecosystems of this place. Any actual and potential effect on the intrinsic values of the ecosystems should not be viewed as more than minor.

3.2.6 Bio lnvasion

Bio invasion is a threat to the CMA. Currently the most serious threat to this area is *Undaria pinnatifida,* as it is currently present in all New Zealand's major ports and has moved from port to port competing with and replacing endemic benthic flora. *Undaria pinnatifida* is found in Bluff Harbour, Stewart Island, Breaksea Sound and most recently, Chalky lnlet.

To reduce the risk of bio invasion from species such as *Undaria pinnatifida* into the wider CMA, the Fiordland Marine Regional Pathway Plan has been developed by Environment Southland. It incorporates rules for clean

vessels and gear, and requires all vessels entering the coastal marine waters of Fiordland to hold the Fiordland 'Clean Vessel Pass'. The Applicant is well aware that Gravity and its tender vessel are to be cleaned and anti-fouled (when required) before re-entering Fiordland's waters. Gravity is removed from the water in Bluff for hull cleaning biannually.
If Gravity is away from Fiordland for over 14 days, the hull will be checked again by divers before returning to Fiordland waters. Same with its tender vessel.
The Ministry of Primary Industries currently contracts The Young Fishing Company Limited to complete random vessel inspections in Bluff (from November to April) for pest and weed species.
Rodents - The Applicant will agree to maintain:

- the vessel in a rodent free state while operating in and around Fiordland; and
- at least one bait station on the vessel at all times.

In particular, the Applicant shall inspect the vessel operating pursuant to this Consent (if granted), including its compartments and any cargo for pests, in particular rodents, on each occasion of operating, and prior to re-entering the coastal waters of Fiordland.

Monitoring of pest control for operators in the Fiordland National Park is conducted by the Department of Conservation's Biosecurity Officer. Monitoring includes rodent inspections with a contract rodent dog handler and a rodent detection dog. Because the Applicant will take all practical measures to avoid the introduction of pest species into the CMA, the actual and potential environmental effect of the proposal regarding bio security should only be viewed as minor.

3.2.7 Landscape and Visual Amenity Values

In the Regional Coastal Plan for Southland a landscape is defined as one which;

Reflects the cumulative effects of physical and cultural processes. It combines the visual expression of physical, biological and cultural processes and the way that people experience and perceive the phenomena or elements orconfigurations of elements arising from those processes in the environment.

Policy 5.2.1 in the Regional Coastal Plan for Southland Identifies fiords in the CMA as an Outstanding Natural Landscape. Landscape Unit 19 of this Plan also provides the fiords of Fiordland with the highest naturalness rating of 5.
The presence of Gravity in the CMA will not physically change the landscape because the vessel is not permanently affixed to the place and can be removed at anytime. The proposed operation of Gravity in the CMA should only be deemed to have a minor effect on the landscape values of the CMA. This is because the vessel's presence in the CMA will only be a minor and temporary visual impact on the landscape, as the vessel's presence will be transitory in nature. Further the size and scale of the landscape's fjords have the capacity to absorb the presence of the vessel. Gravity is a small charter boat, it is less than half the size of some other consented Fiordland charter boats and could never be said to dominate. The visual impact can only be viewed as minor.
Gravity will be operating at low speeds between 6 knots and 10 knots (except when within 200m off the shore when the speed is reduced to 5 knots), it does not create significant wake.
The wake effect that is created by the Gravity traversing through the water it is no greater than normal wave action. The CMA's geology consists of metamorphic rock which is very dense and because of this there is a lowrate of erosion due to wave action and wake. Some fiords have delta plains where the river in the mountains above the fiord meets the water. Some of these have resulted in gravel bars. The proposed operation of Gravity would rarely traverse past these places.

3.2.8 Historical, Spiritual and Cultural Values

The Fiordland Coastal Marine Area is significant to Ngai Tahu. Under section 313 of the Ngai Tahu Claims Settlement Act 1998, the Crown acknowledges Te Runanga o Ngai Tahu's statement of Ngai Tahu's cultural, spiritual, historic, and traditional association to Te Mimi o Tu Te Rakiwhanoa (Fiordland Coastal Marine Area). Ngai Tahu are kaitaiki of the CMA and any activity within the CMA should not be in conflict with Ngai Tahu's values for this place. The Applicant earlier identified Te Ao Marama Incorporated as a Potentially Affected Party in this coastal permit application for feedback on the proposal's impact on Ngai Tahu's values.

The proposed operation of Gravity in the CMA should not affect the historical, spiritual or cultural values associated with this place. The Applicant undertakes to put into effect all practical measures to reduce the impact of vessel operations on the mauri of the CMA. The waste water from Gravity will be discharged only out at open sea. Gravity shall comply with the rules and regulations put in place to mitigate any potential harm that could be caused by the bio invasion of pest species into the area. Furthermore, the Applicant shall adhere to the regulations in place to protect the marine reserves and marine life of the CMA.

The proposed operation of Gravity does not involve shore landings or drone usage. Hence, any actual or potential impact due to the proposal regarding the history, culture and spirituality of the CMA should only be viewed as minor.

3.2.9 Natural Character of the Coastal Marine Area

Section 6(a) of the Resource Management Act 1991 states that Council shall recognise and provide for the preservation of the natural character of the coastal environment and the protection of them from inappropriate use, and development. The Regional Coastal Plan for Southland defines Natural Character as;

The qualities of the environment that give it recognisable character. Embraces ecological, spiritual, cultural, intrinsic and aesthetic values and includes modified and managed environments

Sections 3.2.4 to 3.2.8 of this AEE detail that the proposed operation of Gravity will not create an adverse effect on the ecological, spiritual, cultural, intrinsic and aesthetic values associated within the CMA. Boating activity is identified as an appropriate use of the CMA in the Regional Coastal Plan for Southland and the commercial nature of this proposal will not create a greater impact on the natural character of the place than permitted recreational boating activity.

3.2.10 Pollution

a) Hazardous Substances

The Applicant has systems in place to reduce the potential for accidental pollution from hazardous substances to near zero.

The only external cleaning compound (e.g. for deck cleaning, window washing etc) used is "Simple Green" washing fluid an environmentally friendly product. This is non-toxic, non-flammable, biodegradable and non-abrasive.

Potential fuel/oil spills

In the event of any spill of oil or fuel from the vessel, Gravity Fishing Ltd shall take immediate steps to contain the spill and recover it. Please note that during the Applicants time in the local and the off shore oil industry he became fully trained and well conversant with oil mop up procedures.

b) Exhaust/Discharge to Air

There potentially could be minor exhaust discharges to air from the proposed vessel's activities, however Gravity is a small monohull vessel with 1x small regularly maintained main engine which incorporates a good exhaust system to minimise discharges. Similar to many of the currently consented charter vessels. All practical measures to mitigate any adverse effects from vessel exhaust will be taken.

c) Sewerage

The vessel "Gravity" has sewage holding tank of 180litres capacity. Toilet waste from vessel will initially be stored in the tank and will later be discharged at sea. No discharges will occur in the application area.

d) Rubbish

All boat waste will be stored on board until such time as it is able to be transported off-vessel to rubbish skips at Deepwater Basin.

e) Noise Pollution

During his ownership of "Gravity", the Applicant has received no known noise complaints. Gravity is a typical small to medium sized charter vessel very similar to other existing Fiordland charter boats. Regular servicing of the vessel and appropriate management of those on board by the skipper will assist considerably to mitigate any noise effects to no more than minor. Noise level measurement – on 3rd February 2022 the Applicant

carried out noise level testing on the back deck of the Gravity doing 10 knots – these readings averaged 70.6 decibels. Screenshot from Sound Meter App test is to be filed with Application.

f) Light Pollution

The proposed operation of Gravity would utilise lighting after nightfall on board the vessel once it is stationary and has anchored or moored for the evening. When at anchor a masthead anchor light must be shown for navigation safety purposes and in addition low power on-board lighting is required to enable passengers to safely move about the vessel at night. These lights will be reduced significantly once passengers have turned in for the evening. The light spill created by the proposed Gravity's operation is considered minimal and tiny in scale. Therefore, this is viewed by the Applicant as a minor effect on the environment.

g) Access to fresh potable water – there are three locations where Gravity will take on fresh potable water as under:

- Cascade Cove (Wallis barge)
- Duck Cove
- Luncheon Cove at Anchor Island

3.2.11 Structures

a) Anchoring

This application is not for occupation of the coastal marine area, other than use of occasional anchoring sites or mooring sites. Wherever possible existing fisherman's moorings or mooring pontoons will be utilised. Possible *anchoring* areas include (but are not limited to) the following:

Milford Sound/Piopiotahi

- Vessel base for Gravity berth 8A at Fisherman's Wharf, Deepwater Basin

Anchoring sites

- Early season albacore: Bligh Sound, Poison Bay and Anita Bay.
- Later in season (bluefin time): Dusky Sound/Tamatea – Anchor Island area.
- For diving trips targeting crayfish/paua: Bligh Sound or George Sound + when south anchoring at Anchor Island (Dusky).

Gravity Fishing Ltd vessel will not anchor in Marine Reserves or sensitive "China Shop" areas where the unique benthic fauna may be adversely affected. Further, the Applicant will never anchor in "areas of habitat" – he will only anchor in places with a good holding bottom – silty sediment. On occasion other areas may be used due to weather conditions or other extenuating circumstances. In the Sounds these anchoring sites are utilised on occasions by many different operators and it will be the Applicant's policy (as always) to work in conjunction with other skippers on the radio so as to avoid any congestion at anchoring sites. Generally in Fiordland there is excellent communication and cooperation between all of the commercial skippers – they work together, almost without exception so as to avoid overcrowding and therefore, so as to protect Fiordland's precious environment. An example of this cooperation is that Maria and Sean Ellis, the owners of "Pure Salt" (charter operators in Fiordland) have offered the Applicant the use of their mooring blocks at Cascade Cove whenever "Pure Salt" are not occupying that mooring.

b) Use of Breastlines and Stern Lines instead of using anchors

In Fiordland the Applicant estimates there are in fact upwards of 50 permanent breastlines in place. In Dusky Sound alone there are probably 14 or 15 breastlines – these breastlines do away with the need for using an anchor - no need to anchor at all – just tie up to the existing lines.

Further examples - at Bligh Sound or George Sound there is no need to anchor at all – use just bowlines or breastlines.

It is the Applicants case that there is absolutely no need for the anchor in ordinary operations.

And no anchors mean - no bottom impactions.

The Applicant states that during May and June 2019 he spent 30 days the general area of Bligh and George Sounds and never dropped the anchor once.

3.2.12 Risk due to Natural Hazards

The CMA is at risk of landslides, tsunami, sea level changes, high winds and earthquakes. To reduce the potential effect of being at risk of a natural hazard, the Applicant makes every endeavour not to operate in adverse weather conditions. However, as natural hazards are sometimes unpredictable, to reduce the effect of a natural hazard the Applicant has Health and Safety procedures in place to educate, reduce, respond and reflect upon the risks imposed by mother nature.

The risk of Alpine Fault earthquakes – during 2021 the Applicant has noticed a very much increased local awareness of dangers which would follow an Alpine Fault earthquake. The earthquake experts in NZ are predicting with a high degree of confidence that within say 50 years from now there may well be a massive earthquake event along the Alpine Fault resulting in up to magnitude 8 earthquake.

It is the Applicant's submission that vessels such as Gravity – small and shallow drafted charter vessels are the very best vessels possible to cope with big earthquakes and with the damaging tsunamis which may follow them. The best place for any vessel at all in a time of earthquakes and tsunamis is out in the open sea – very much safer there. Vessels such as Gravity are nimble and they can at very short notice, proceed to sea quickly and through fairly shallow waters if needed. If following earthquake or tsunami there were people stranded in inaccessible parts of Fiordland then small and nimble vessels such as Gravity would be ideally suited to carry out rescue operations.

3.2.13 Climate Change / Coastal Processes

The Intergovernmental Panel for Climate Change (IPCC) has utilised computer modelling to predict the effects on the global environment due to climate change. Part 2 7i) of the Act, states that to achieve the purpose of the Act, Council in managing the use of natural resources shall have particular regard to the effects of climate change.

It is generally predicted that climate change is coming and will affect Southland – the experts tell us that by say 2050 temperatures will rise throughout the world including here and further that the temperatures of the oceans will increase. An inevitable consequence of this is that sea levels will rise perhaps by up to 60cm by the beginning of 2100.

The predicted effects of climate change in Southland are that by 2040 global temperatures and ocean temperatures are going to increase. Predictions are that by the middle of this century westerly winds will increase and will be strongest in the winter and spring.

This may mean that the frequency of heavy swells in the CMA will increase. It is common knowledge that Fiordland is primarily affected by westerly winds.

To summarise how many experts see the future it is likely that the CMA will experience more and larger storms, increased levels of westerly winds, higher rainfall and heavier and higher swells.

In the face of these predictions, and as a counter to any of these dire events, it is the Applicants case that he has been working the area for many years - and very often lately as ships master (sole command) – in all weathers. His hard won experience can be relied upon in difficult or unusual weather conditions to make the best and safest decisions on behalf of his passengers.

We remind Environment Southland, that in the event of landslides, tsunamis, floods etc the safest place is *always* out in the open ocean exactly where all Gravity's daily fishing charter operations will take place.

3.2.14 Alternative Locations

The Applicant could suggest some alternative locations but this is not being attempted because of the unique nature of the proposed operations – only overnighting in the sounds and no clientele being allowed to go ashore in the Sounds except in emergency.

3.2.15 Integrated Management and Conservation

In order to reduce the Applicants environmental footprint, the Applicant proposes:

1) **Bluefin stock monitoring -** for some time now the Applicant has been working with Hillary Ayrton who is a Marine Manager for Ministry of Primary Industries – MPI is planning to carry out proper monitoring of bluefin stocks on the West Coast of the South Island, however the Applicant has been advised that the Department is short of funds and the Applicant has therefore offered to assist MPI with monitoring bluefin stocks by providing vessel "Gravity" as a research platform off Fiordland once a year

at cast plus an agreed day rate for the Applicant as skipper. The Applicant believes this offer has been accepted in principle.

2) **Kingfish survey –** whilst consulting with the Ministry of Primary Industries the Applicant has received an informal request from MPI (acting together with NIWA) to assist them in carrying out stock assessments of kingfish which have showed up in outer Fiordland waters over the last 6 or so years. The Applicant has agreed to assist with such a survey.
3) In addition the Applicant hereby offers to Environment Southland to carry out, once a month - a full days beach cleanup and pick up rubbish either off the beach or the seafloor – rubbish to be disposed of as set out elsewhere in this assessment. The Applicant has no objection to this aspect being added as a Condition to a Coastal Permit when granted.

3.2.16 Monitoring

The natural environment of the CMA is monitored in several ways: voluntary monitoring, government agency monitoring, scientific monitoring and university academic monitoring.
Environment Southland requires vessels operating in the CMA to have a Fiordland 'Clean Vessel Pass' and vessels are checked by DoC for rodent incursions. The Otago University Marine Science Department is regularly conducting research and monitoring waters in the CMA, hence, the CMA's natural environment is monitored appropriately, and it is considered no further monitoring is required.

4. Legislative Framework

4.1. The New Zealand Coastal Policy Statement

The NZCPS sets out a number of objectives and policies for achieving the purpose of the RMA in relation to the coastal environment. It contains provisions which address the ensuing matters of relevance to the proposed application:

Social and Economic Wellbeing of communities

Regarding providing for the social and economic wellbeing of communities, Objective 6, and Policy 6 of the NZCPS seeks to, amongst other things, enable people and communities to provide for their social and economic wellbeing through the use and development of natural and physical resources in the coastal environment. The relevant aspects of Objective 6 and Policies 6 to this Applicant's proposal are detailed below:

Objective 6

To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:

• the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;

• some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic, and cultural wellbeing of people and communities;

• functionally some uses and developments can only be located on the coast or in the coastal marine area;

• the coastal environment contains renewable energy resources of significant value;

• the protection of habitats of living marine resources contributes to the social, economic and cultural wellbeing of people and communities;

• the potential to protect, use, and develop natural and physical resources in the coastal marine area should not be compromised by activities on land;

• the proportion of the coastal marine area under any formal protection is small and therefore management under the Act is an important means by which the natural resources of the coastal marine area can be protected; and

• historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development.

Policy 6 Activities in the coastal environment

(1) In relation to the coastal environment……
(a) recognise that the provision of infrastructure, the supply and transport of energy including the generation and transmission of electricity, and the extraction of minerals are activities important to the social, economic and cultural well-being of people and communities;
(b) consider the rate at which built development and the associated public infrastructure should be enabled to provide for the reasonably foreseeable needs of population growth without compromising the other values of the coastal environment;
(c) encourage the consolidation of existing coastal settlements and urban areas where this will contribute to the avoidance or mitigation of sprawling or sporadic patterns of settlement and urban growth;
(d) recognise tangata whenua needs for papakāinga, marae and associated developments and make appropriate provision for them;
(e) consider where and how built development on land should be controlled so that it does not compromise activities of national or regional importance that have a functional need to locate and operate in the coastal marine area;
(f) consider where development that maintains the character of the existing built environment should be encouraged, and where development resulting in a change in character would be acceptable;
(g) take into account the potential of renewable resources in the coastal environment, such as energy from wind, waves, currents and tides, to meet the reasonably foreseeable needs of future generations;
(h) consider how adverse visual impacts of development can be avoided in areas sensitive to such effects, such as headlands and prominent ridgelines, and as far as practicable and reasonable apply controls or conditions to avoid those effects;
(i) set back development from the coastal marine area and other water bodies, where practicable and reasonable, to protect the natural character, open space, public access and amenity values of the coastal environment; and
(j) where appropriate, buffer areas and sites of significant indigenous biological diversity, or historic heritage value.
(2) Additionally, in relation to the coastal marine area:
(a) recognise potential contributions to the social, economic and cultural wellbeing of people and communities from use and development of the coastal marine area, including the potential for renewable marine energy to contribute to meeting the energy needs of future generations:
(b) recognise the need to maintain and enhance the public open space and recreation qualities and values of the coastal marine area;
(c) recognise that there are activities that have a functional need to be located in the coastal marine area, and provide for those activities in appropriate places;
(d) recognise that activities that do not have a functional need for location in the coastal marine area generally should not be located there; and
(e) promote the efficient use of occupied space, including by:
(i) requiring that structures be made available for public or multiple use wherever reasonable and practicable;
(ii) requiring the removal of any abandoned or redundant structure that has no heritage, amenity or reuse value; and
(iii) considering whether consent conditions should be applied to ensure that space occupied for an activity is used for that purpose effectively and without unreasonable delay.
Comment:
Key directives of these provisions when considering the Applicant's proposal include:
The social and economic benefits of the proposed changes are to be recognised and are to be taken into account; and
That the protection of the values of the coastal environment does not preclude use and development where it is located in an appropriate place and form, and within appropriate limits.
Gravity's presence in Fiordland will assist in the objective of attempting to maintain some of the economic value of the New Zealand Tourism Industry in this post COVID-19 situation.

Precautionary Approach

Policy 3 of the NZCPS addresses the precautionary approach. It states:

Policy 3 Precautionary approach

(1) Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.

(2) In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:

(a) avoidable social and economic loss and harm to communities does not occur;

(b) natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and

(c) the natural character, public access, amenity, and other values of the coastal environment meet the needs of future generations.

Comment:

Clause (1) of Policy 3 is considered most relevant to the Applicant's proposal in that it directs decision-makers to adopt a precautionary approach towards proposed activities whose effects on the coastal environment are *"uncertain, unknown, or little understood, but potentially significantly adverse."*

Over any given year, and on any given night, there are many, both charter and private vessels, moored in various places in the CMA . Therefore the effects of these activities are known and well understood. With respect to "*potentially significantly adverse"* effects, the Applicants proposal is for occasional overnights and is not permanent in nature and the Applicant does not believe it will cause significantly adverse effects. The anchorages or moorings utilised by Gravity will vary, possibly night by night, as the weather changes day by day. Variety will be the keynote!

Indigenous Biodiversity

Objective 1 and Policy 11 of the NZCPS are its key provisions in respect of the management of indigenous biodiversity in the coastal environment. They state:

Objective 1

To safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems, including marine and intertidal areas, estuaries, dunes, and land, by:

• maintaining or enhancing natural biological and physical processes in the coastal environment and recognising their dynamic, complex, and interdependent nature;

• protecting representative or significant natural ecosystems and sites of biological importance and maintaining the diversity of New Zealand's indigenous coastal flora and fauna; and

• maintaining coastal water quality and enhancing it where it has deteriorated from what would otherwise be its natural condition, with significant adverse effects on ecology and habitat, because of discharges associated with human activity.

Policy 11 Indigenous biological diversity (biodiversity)

To protect indigenous biological diversity in the coastal environment:

(a) avoid adverse effects of activities on:

(i) indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;

(ii) taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;

(iii) indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare;

(iv) habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;

(v) areas containing nationally significant examples of indigenous community types; and

(vi) areas set aside for full or partial protection of indigenous biological diversity under other legislation; and

(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on:

(i) areas of predominantly indigenous vegetation in the coastal environment;

(ii) habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;

(iii) indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dune lands, intertidal zones, rocky reef systems, eelgrass, and salt marsh;

(iv) habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional, or cultural purposes;

(v) habitats, including areas and routes, important to migratory species; and

(vi) ecological corridors, and areas important for linking or maintaining biological values identified under this policy.

Comment:
In summary, Objective 1, and Policy 11 of the New Zealand Coastal Policy Statement seeks to avoid the adverse effects of activities on significant or important indigenous biodiversity values in the coastal environment. The Applicant's proposal to utilise vessel Gravity as an overnighter in the CMA, without more, will not adversely affect the life-cycle of the species and taxa identified in Clause (a) of Policy 11 of the NZCPS, and section 2 of the Applicant's assessment of effects (named "Proposed Activity") has not identified significant adverse effects on habitats and areas of the coastal environment in accordance with Clause (b) of Policy 11 of the NZCPS.

Natural Character and Landscape Values

Objective 2 of the New Zealand Coastal Policy Statement addresses natural character and landscape values and states:

Objective 2
To preserve the natural character of the coastal environment and protect natural features and landscape values through:
• recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;

• identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and

encouraging restoration of the coastal environment.

Policy 13 provides direction on how natural character is to be preserved and states:

Policy 13 Preservation of natural character
(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and

(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment; including by:

(c) assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and

(d) ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies, and rules, and include those provisions.

(2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:

(a) natural elements, processes, and patterns;

(b) biophysical, ecological, geological, and geomorphological aspects;

(c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs, and surf breaks;

(d) the natural movement of water and sediment;

(e) the natural darkness of the night sky;

(f) places or areas that are wild or scenic;

(g) a range of natural character from pristine to modified; and

(h) experiential attributes, including the sounds and smell of the sea; and their context or setting

Policy 15 contains direction on how natural features and landscapes in the coastal environment are to be protected and states:

Policy 15 Natural features and natural landscapes
To protect the natural features and landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use and development:

(a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes;

(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment. Including by:

(c) identifying and assessing the natural features and natural landscapes of the coastal environment of the region, at a minimum by land typing, soil characterisation and landscape characterisation and having regard to:

(i) natural science factors

(ii) the presence of water

(iii) legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes

(iv) aesthetic values including memorability and naturalness

(v) vegetation (native and exotic)

(vi) transient values including presence of wildlife at certain times of the day or year

(vii) whether values are shared and recognised

(viii) cultural and spiritual values including their expression as cultural landscapes and features

(ix) historical and heritage associations

(x) wild or scenic values.

(d) Ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies, and rules.

Comment:
It is the Applicant's contention that operations as set out in Section 2 above (named "Proposed Activity"), will not impact natural character and landscape values as the uses proposed will not have significant effects on landscape and visual values.

Amenity and Access

Objective 4 of the NZCPS addresses the public open space and recreation values attributed to the coastal environment and states:

Objective 4

To maintain and enhance the public open space qualities and recreation opportunities of the coastal environment by:

• recognising that the coastal marine area is an extensive area of public space for the public to use and enjoy;

• recognising the potential for coastal processes, including those likely to be affected by climate change, to restrict access to the coastal environment and the need to ensure that public access is maintained even when the coastal marine area advances inland.

Comment:
The New Zealand Coastal Policy Statement contains no clear policy direction as to how activities should be managed to achieve Objective 4. Gravity's occasional occupation of the CMA for overnights at any one mooring or anchorage will be intermittent and in any one year will not be in any way a significant constraint on available public space. Gravity's footprint will be only a light footprint.

Further, Policy 6 does contain the succeeding relevant matters that should be had regard to when considering the Applicant's proposal.

Policy 6 Activities in the coastal environment……

(2) Additionally, in relation to the coastal marine area:

(a) recognise potential contributions to the social, economic, and cultural wellbeing of people and communities from use and development of the coastal marine area, including the potential for renewable marine energy to contribute to meeting the energy needs of future generations:

(b) recognise the need to maintain and enhance the public open space and recreation qualities and values of the coastal marine area;

(c) recognise that there are activities that have a functional need to be located in the coastal marine area, and provide for those activities in appropriate places;

(d) recognise that activities that do not have a functional need for location in the coastal marine area generally should not be located there; and

(e) promote the efficient use of occupied space, including by:

(i) requiring that structures be made available for public or multiple use wherever reasonable and practicable;

(ii) requiring the removal of any abandoned or redundant structure that has no heritage, amenity, or reuse value; and

(iii) considering whether consent conditions should be applied to ensure that space occupied for an activity is used for that purpose effectively and without unreasonable delay.

Comment:
Section 3.2 of this AEE outlines potential effects of the Applicant's proposal. Comment: Gravity's footprint will be only a light footprint.

Treaty of Waitangi

Objective 3 of the NZCPS addresses the Treaty of Waitangi, and states:

Objective 3

To take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment by:

• recognising the ongoing and enduring relationship of tangata whenua over their lands, rohe and resources;

• promoting meaningful relationships and interactions between tangata whenua and persons exercising functions and powers under the Act;

• incorporating mātauranga Māori into sustainable management practices; and

• recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua.

Policy 2 The Treaty of Waitangi, tangata whenua and Māori heritage

In taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and kaitiakitanga, in relation to the coastal environment:

(a) recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations;

(b) involve iwi authorities or hapū on behalf of tangata whenua in the preparation of regional policy statements, and plans, by undertaking effective consultation with tangata whenua; with such consultation to be early, meaningful, and as far as practicable in accordance with tikanga Māori;

(c) with the consent of tangata whenua and as far as practicable in accordance with tikanga Māori, incorporate mātauranga Māori in regional policy statements, in plans, and in the consideration of applications for resource consents, notices of requirement for designation and private plan changes;

(d) provide opportunities in appropriate circumstances for Māori involvement in decision making, for example when a consent application or notice of requirement is dealing with cultural localities or issues of cultural significance, and Māori experts, including pūkenga, may have knowledge not otherwise available;

(e) take into account any relevant iwi resource management plan and any other relevant planning document recognised by the appropriate iwi authority or hapū and lodged with the council, to the extent that its content has a bearing on resource management issues in the region or district; and

(i) where appropriate incorporate references to, or material from, iwi resource management plans in regional policy statements and in plans; and

(ii) consider providing practical assistance to iwi or hapū who have indicated a wish to develop iwi resource management plans;

(f) provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands, and fisheries in the coastal environment through such measures as:

(i) bringing cultural understanding to monitoring of natural resources;

(ii) providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua;

(iii) having regard to regulations, rules or bylaws relating to ensuring sustainability of fisheries resources such as taiāpure, mahinga mātaitai or other non-commercial Māori customary fishing; and

(g) in consultation and collaboration with tangata whenua, working as far as practicable in accordance with tikanga Māori, and recognising that tangata whenua have the right to choose not to identify places or values of historic, cultural, or spiritual significance or special value:

(i) recognise the importance of Māori cultural and heritage values through such methods as historic heritage, landscape, and cultural impact assessments; and

(ii) provide for the identification, assessment, protection and management of areas or sites of significance or special value to Māori, including by historic analysis and archaeological survey and the development of methods such as alert layers and predictive methodologies for identifying areas of high potential for undiscovered Māori heritage, for example coastal pā or fishing villages.

Comment:

Objective 3 and Policy 2 of the New Zealand Coastal Policy Statement seek to take account of the principles of the Treaty of Waitangi, recognise the role of tangata whenua as kaitiaki and provide for tangata whenua involvement in management of the coastal environment. This is particularly relevant as under section 313 of the

Ngāi Tahu Claims Settlement Act 1998, the Crown acknowledges Te Rūnanga o Ngāi Tahu's cultural, spiritual, historic, and traditional association to Te Mimi o Tū Te Rakiwhānoa (Fiordland Coastal Marine Area). This coastal permit application has examined the Ngāi Tahu's principles outlined in Te Tangi a Tauira the discussion of which is included in this Application under section 4.6.
Te Ao Marama Incorporated have been identified by the Applicant as a Potentially Affected Party in this coastal permit application and will be involved as kaitiaki in this application process. Contact has been made with Te Ao Marama Incorporated.
All practical measures to protect the indigenous biodiversity of the CMA shall be undertaken by the Applicant.

Discharges

Policy 23 of the New Zealand Coastal Policy Statement addresses discharges to water in the coastal environment, and states:

Policy 23 Discharge of contaminants

(1) In managing discharges to water in the coastal environment, have particular regard to:

(a) the sensitivity of the receiving environment;

(b) the nature of the contaminants to be discharged, the particular concentration of contaminants needed to achieve the required water quality in the receiving environment, and the risks if that concentration of contaminants is exceeded; and

(c) the capacity of the receiving environment to assimilate the contaminants; and:

(d) avoid significant adverse effects on ecosystems and habitats after reasonable mixing;

(e) use the smallest mixing zone necessary to achieve the required water quality in the receiving environment; and

(f) minimise adverse effects on the life-supporting capacity of water within a mixing zone.

(2) In managing discharge of human sewage, do not allow:

(a) discharge of human sewage directly to water in the coastal environment without treatment; and

(b) the discharge of treated human sewage to water in the coastal environment, unless:

(i) there has been adequate consideration of alternative methods, sites, and routes for undertaking the discharge; and

(ii) informed by an understanding of tangata whenua values and the effects on them.

(3) Objectives, policies, and rules in plans which provide for the discharge of treated human sewage into waters of the coastal environment must have been subject to early and meaningful consultation with tangata whenua.

(5) In managing discharges from ports and other marine facilities:

(a) require operators of ports and other marine facilities to take all practicable steps to avoid contamination of coastal waters, substrate, ecosystems, and habitats that is more than minor;

(b) require that the disturbance or relocation of contaminated seabed material, other than by the movement of vessels, and the dumping or storage of dredged material does not result in significant adverse effects on water quality or the seabed, substrate, ecosystems, or habitats;

(c) require operators of ports, marinas, and other relevant marine facilities to provide for the collection of sewage and waste from vessels, and for residues from vessel maintenance to be safely contained and disposed of; and

(d) consider the need for facilities for the collection of sewage and other wastes for recreational and commercial boating.

Comment:
The vessel Gravity will generate two types of waste as follows:

1) Sewage, which will be stored on board in the vessel's wastewater tanks and disposed of in the open sea outside the CMA in accordance with Resource Management (Marine Pollution) Regulations 1998
2) Ship's rubbish – all boat waste will be stored on board until such time as it is able to be transported off-vessel to rubbish skips at Deep Water Basin.

Hence, all practicable measures will be taken to minimise any adverse effects created by these discharges.

4.2. The Southland Regional Policy Statement 2017

The Southland Regional Policy Statement 2017 ("**SRPS**") became operative in 2017 and contains 17 chapters. The following chapters are relevant to this application: Chapter 6 – Biodiversity; Chapter 7 – Coast; Chapter 10 – Natural Features and Landscapes; and

Chapter 6 – Biodiversity

The ensuing objectives and policies are applicable to this Application:

Objective BIO.2 – Maintain and protect

Maintain indigenous biodiversity in Southland and protect areas of significant indigenous vegetation and significant habitats of indigenous fauna for present and future generations.

Policy BIO.3 – Protect coastal indigenous biodiversity

Protect indigenous biodiversity from adverse effects in the coastal environment as set out in Policy 11 of the New Zealand Coastal Policy Statement 2010.

Policy BIO.4 – Maintain indigenous biodiversity

Manage a full range of indigenous habitats and ecosystems to achieve a healthy functioning state, and to ensure viable and diverse populations of native species are maintained, while making appropriate provisions for lawful maintenance and operation of existing activities. In giving effect to this policy, regard will be had to the following potential adverse effects:

(i) fragmentation of, or reduction in the extent of, indigenous vegetation or habitats of indigenous fauna;

(ii) fragmentation or disruption of connections and linkages between ecosystems or habitats of indigenous fauna;

(iii) loss of, or damage to, buffering of ecosystems or habitats of indigenous fauna;

(iv) loss or reduction of rare or threatened indigenous species' populations or habitats.

Comment:

Objective BIO.2 seeks to maintain indigenous biodiversity and enhance significant biodiversity. In the coastal environment, this is to be achieved by Policy BIO.3, which seeks to protect indigenous biodiversity from adverse effects in the coastal environment. Furthermore, Policy BIO.4 seeks to achieve a healthy functioning ecosystem, ensuring populations of native species are maintained, and making appropriate provision for the lawful operation of existing activities.

The Applicant has reviewed the likely effects on biodiversity in section 2.2C of this AEE and has not identified significant adverse effects on habitats and areas of the coastal environment therefore it is submitted that none of the adverse effects identified in Policy BIO.4 will occur as a result of this proposal.

Chapter 7 – Coast

Chapter 7 of the SRPS addresses the coastal environment and contains five objectives and seven policies. Those relevant to the proposed changes are set out and analysed below.

Objective COAST.2 – Activities in the coastal environment

Infrastructure, ports, energy projects, aquaculture, mineral extraction activities, subdivision, use and development in the coastal environment are provided for and able to expand, where appropriate, while managing the adverse effects of those activities.

Objective COAST.3 – Coastal water quality and ecosystems *Coastal water quality and ecosystems are maintained or enhanced*

Objective COAST.4 – Natural character *The natural character of the coastal environment is restored, rehabilitated, or preserved*

Policy COAST.2 – Management of activities in the coastal environment

Ensure adequate measures or methods are utilised within the coastal environment when making provision for subdivision, use and development to:

(a) protect indigenous biodiversity, historic heritage, natural character, and natural features and landscape values;

(b) maintain or enhance amenity, social, intrinsic, ecological, and cultural values, landscapes of cultural significance to tangata whenua and coastal dune systems;

(c) maintain or enhance public access; and

(d) avoid or mitigate the impacts of natural hazards, including predicted sea level rise and climate change

Policy COAST.5 – Management of effects on coastal water quality and ecosystems

Avoid, remedy, or mitigate adverse effects of land-based and marine activities on coastal water quality and its ecosystems.

Policy COAST.7 – Management of activities in the coastal marine area *Within the coastal marine area, provide a framework to avoid or mitigate adverse effects on the coastal environment for the following activities:*

(a) the allocation, use and occupation of coastal space;

(b) the use and development of the natural and physical resources of the coastal marine area;

(c) the emission of noise;

(d) commercial activities on the water and on the foreshore and seabed.

Comment: The Applicant is aware that the most notable adverse marine effect from his proposed operations is when his vessel anchors for the night. All of the vessel's charter fishing activities (and diving) will take place out of the CMA in the open ocean and Gravity shall only come inside the CMA to overnight either on existing mooring lines or to anchor or to shelter from bad weather – night or day. The Applicant recognises that anchoring will cause some indeterminate damage to the seafloor and in so recognising, he is determined to minimise such damage which might be caused either by the anchor or portions of the anchor chain. His modus operandi will be where possible to avoid anchoring in favour of utilising existing mooring lines.

Chapter 10 – Natural Features and Landscapes

The subsequent objective is relevant to the Application:

Objective LNF.1 - Identification and protection of outstanding natural features and landscapes

Southland's outstanding natural features and landscapes are identified and protected from inappropriate subdivision, use and development.

Policy LNF.4 – Protection of outstanding natural features and landscapes

Local authorities shall protect outstanding natural features and landscapes from inappropriate subdivision, use and development by having regard to the following:

(a) whether the adverse effects of inappropriate activities on outstanding natural features and landscapes are avoided;

(b) the extent to which the outstanding natural feature or landscape would be modified or damaged including duration, frequency, magnitude, or scale of any effect;

(c) the irreversibility of adverse effects on outstanding natural features or landscape values;

(d) the resilience of the outstanding natural feature or landscape to change;

(e) opportunities to remedy or mitigate previous adverse effects on the outstanding natural feature or landscape;

(f) whether the activity will lead to cumulative adverse effects on the outstanding natural feature or landscape;

(g) the relationship of the landscape to the surrounding environment.

Comment:

The Applicants proposal is overall small/low impact – light footprint and will not impact significantly on the natural features and outstanding landscapes of Fiordland.

4.3. Regional Coastal Plan for Southland

The Regional Coastal Plan for Southland contains 20 chapters. The chapters containing objectives and policies relevant to this Application include:

4. Fundamental Principles;
5. General Matters;
7. Coastal Water;
8. Occupation;
10. Seabed and Foreshore

Chapter 4 Regional Coastal Plan - Fundamental Principles

Objective 4.2.1 - Need for coastal location

To ensure that only those activities and developments that have a functional need to be located in the coastal marine area or for which there is no practicable alternative location outside the coastal marine area are situated there.

Policy 4.2.1 - Justifying coastal location

Require that proposals for uses and developments in the coastal marine area justify the functional necessity for that location or demonstrate that there is no practicable alternative location outside the coastal marine area.

Policy 4.2.2 - Consideration of alternatives

Where the adverse effects of use or development are more than minor, require alternative sites and methods be considered to determine the option that best avoids, remedies, or mitigates the adverse effects of the use and development of the coastal marine area.

Comment:

From experience in Fiordland the Applicant believes that use of small commercial charter boats to show Fiordland to the public is by far the best method. Such small charter vessels (say length overall – 22m and less) are nimble – can move in and out of any troublesome area quickly and over the years they proved generally not to be too noisy. If they ever have a mishap then that mishap tends to be small and easily managed. The clean ups are quick and simple. In the Applicant's view this reasoning does not apply to cruise ships which if they ever got into trouble in Fiordland it would be big trouble and the environmental impact would not be easily managed. Vessels, such as Gravity and the other small charter boats as defined above are able to give quite good numbers of tourists a really good close up feel for Fiordland without the noise that would be generated by aircraft and without the massive risks involved in having cruise ships inside the CMA.

Are alternative sites and methods available? The Applicant has considered this question and has come up with a set of solutions as follows:

- Whilst suitable alternative sites may be available, the Applicant is very familiar with the sites applied for – having worked and fished in those sites for a number of years.
- As an alternative to fishing in the Sounds all fishing (including diving) to be conducted in the open sea.
- Fish species generally are starting to get hammered inside the Sounds – there is an abundance of fish to be had outside.
- Further for each species – target each fish type in its "prime condition" season – leave the fish alone when not.
- The Applicant's aim is to show/educate the public to live of the sea for a few days – to achieve the experience of a lifetime!

Objective 4.6.1 - Concentrating use and development *To protect areas free from use and development by seeking, wherever practicable, to concentrate use and development into areas where those activities are already taking place.*

Policy 4.6.1 - Concentrate compatible activities

Encourage concentration of compatible activities in areas of existing uses and developments, where adverse effects can be avoided, remedied, or mitigated, in preference to using undeveloped areas in the coastal marine area.

Comment:

To the Applicant's knowledge this Application involving as it does all fishing outside in the open sea is the first of its kind, should the Coastal Permit be granted. To the Applicants knowledge *all other existing charter vessels* if they conduct fishing operations at all for their clients, currently fish **inside** the CMA – there are no known exceptions to this currently.

Objective 4.7.1 - Avoid, remedy, or mitigate cumulative adverse effects
To avoid, remedy or mitigate cumulative adverse effects.
Objective 4.7.2 - Obtain an appropriate level of use in the coastal marine area
To obtain a level of use which is appropriate in the coastal marine area, particularly in areas where remoteness, wilderness and tranquillity are significant components of the environment.
Policy 4.7.1 - Avoid, remedy, or mitigate adverse cumulative effects *To avoid, remedy or mitigate adverse cumulative effects of activities in the coastal marine area.*
Under the RMA cumulative effects are defined as follows:
Meaning of effect *In this Act, unless the context otherwise requires, the term* ***effect*** *includes—*
(a) any positive or adverse effect; and
(b) any temporary or permanent effect; and
(c) any past, present, or future effect; and
(d) any cumulative effect which arises over time or in combination with other effects—
regardless of the scale, intensity, duration, or frequency of the effect, and also includes—
(e) any potential effect of high probability; and
(f) any potential effect of low probability which has a high potential impact.

Comment:
Applicant's main points relating to cumulative effects:

- Vessel's maximum loadings on any one trip - 7 guests.
- Maximum operating period in any one year December through June – 7 months operating – 5 months vessel will be elsewhere.
- One trip per week.
- Theoretical maximum days per annum 126.

Overall the Applicant's case is that this is cumulatively an extremely light footprint.

Objective 4.8.1 - Distinguish between commercial and non-commercial surface water activities
To manage surface water activities in the coastal marine area by making a distinction between commercial and non-commercial activities where the cumulative effects of either type of activity will significantly outweigh the other.
Policy 4.8.1 - Commercial activities in the coastal marine area
To distinguish, where appropriate, commercial activities in the coastal marine area from non-commercial activities.
Comment:
The above objective and policy make the distinction between commercial and non-commercial surface water activities consequently the Applicant's proposed activity is identified a commercial surface water activity.

Chapter 5 General Matters

Due to the outstanding natural landscape classification of the site of the Application the ensuing policies and objectives are applicable.
Objective 5.1.1- Preserve natural character
To preserve the natural character of the coastal marine area
Objective 5.2.1 - Protecting outstanding natural features and landscapes
To protect outstanding natural features and landscapes in the region's coastal marine area from the adverse effects of use, development, and subdivision.
Comment:
As described in Section 2 above, the Applicants proposed activity will not impact the natural character and landscape values.
Objective 5.3.1 - Protection of amenity values
To ensure that the use and development of the resources of the coastal marine area will not have significant adverse effects on amenity values, nor on the safety of the public, nor on the enjoyment of the coast by the public.
Objective 5.3.3 - Open space

To recognise, maintain and enhance the contribution that open space makes to the amenity values in the coastal environment.

Objective 5.3.6 - Safe environment

To maintain a safe environment for all people using of the coastal marine area.

Policy 5.3.1 - Amenity values

Protect amenity values of the coastal marine area

Policy 5.3.2 - Open space values

Maintain and enhance open space values of the coastal marine area.

Comment:

Amenity values being those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes. The proposed activity itself because of its very small footprint will have little effects on the amenity values of the CMA. However when the vessel is moored overnight there will be some impact on amenity values due to the vessel's presence. Still currently, the area which is the subject of this application is regularly used by other vessels. That is, it is generally expected that there will be vessel activity in the CMA area however because of the temporary nature such vessel activity, it does not significantly adversely impact on the amenity values.

With respect to maintaining a safe environment in the CMA Gravity's operation will not compromise navigational safety in as there will be sufficient "sea room" allowing other vessels to safely navigate. But this proposal will adversely affect the open space values of the CMA by occupying a small area of this "open space".

Policy 5.3.6 - Activities and structures

Limit activities and structures in the coastal marine area to those that:

a. have a functional need for that location; or

b. contribute to the amenities of that area;

c. are a necessary and functional part of activities also undertaken on adjoining land

Comment:

Vessel Gravity will provide overnight accommodation for up to 7 passengers - there is no accommodation facilities in the CMA available other than on charter vessels. No guests will be allowed to land inside the Sounds. It is for these reasons that the Applicant's proposal will comply with policy 5.3.6.

Policy 5.3.16 - Health and well-being of people

Protect the health and well-being of the public from the adverse effects of noise in the coastal marine area.

Rule 5.3.4 - General noise limits

Excluding Rule 5.3.8, unless subject to other rules in this Plan, it is a permitted activity for any activity within the coastal marine area to generate noise provided that the following noise limits are not exceeded, at any point at the landward boundary of the coastal marine area:

i. between 7:00 a.m. and 10:00 p.m. the L10 shall not exceed 50 dBA;

ii. between 10:00 p.m. and 7:00 a.m. the following day, the L10 noise level shall not exceed 40 dBA;

iii. between 10:00 p.m. and 7:00 a.m. the following day, the Lmax noise level shall not exceed 70 dBA.

Noise shall be measured and assessed in accordance with the provisions of NZS 6801:1991 "Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sound".

Objective 5.4.1.1 - Protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna

To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna within the coastal marine area.

Objective 5.4.1.2 - Protect intrinsic values of ecosystems

To protect the intrinsic values of ecosystem

Policy 5.4.1.1 - Disturbance of areas of significant indigenous vegetation and significant habitats of indigenous fauna

Avoid significant adverse effects of disturbance to areas of significant indigenous vegetation or significant habitats of indigenous fauna.

Policy 5.4.1.2 - Protection of habitats of important species

Protect the habitats of species in the coastal marine area which are important for commercial, recreational, traditional, or cultural purposes

Comment:

As identified above, when Gravity is overnighting inside the CMA utilising an anchor, then there will be some damage or degradation to fauna – this damage caused by the anchor and portions of its chain when the vessel swings overnight in the breeze. To quantify this damage would be extremely difficult. To minimise this aspect, it is the Applicant's intention to use fixed moorings wherever possible and to use the anchor only when no fixed mooring is available.

Objective 5.5.1 - Maintain and enhance public access

Where appropriate, to maintain and enhance public access by suitable means to and along the coastal marine area.

Policy 5.5.2 - Access to sites of value to tangata whenua

Identify as far as practicable, the access which Maori people have to sites of cultural value to them, according to tikaka Maori.

Policy 5.5.3 - Maintenance and enhancement of public access

Maintain and enhance public access to and along, the coast while having regard to the mode of access and the amenities of the area, unless a restriction on access is necessary to:

a. protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna; or

b. protect Maori cultural values; or

c. protect public health or safety; or

d. ensure a level of security consistent with the purpose of a resource consent; or

e. protect national security or the temporary use of an area for defence purposes; or

f. protect heritage, natural or cultural values; or

g. in other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access.

Comment:

As stated above Gravity's proposal will not compromise access to the CMA, including sites of value to tangata whenua, but through the operations proposed in this Application there will be available to the public additional opportunities to access the CMA via a stay on board the Gravity.

Objective 5.6.1 - Recognise values of Ngai Tahu

To recognise and provide for cultural, spiritual, and traditional values and uses of Ngai Tahu in the coastal marine area.

Objective 5.6.2 - Consultation with tangata whenua

To ensure that consultation takes place with tangata whenua in appropriate circumstances.

Policy 5.6.1 – Kaitiakitaka

Have particular regard to the concept of kaitiakitaka in relation to managing the use, development, and protection of natural and physical resources in the coastal marine area.

Comment:

Objectives 5.6.1, 5.6.2 and Policy 5.6.1 of the Coastal Plan seek to recognise the values of Ngāi Tahu, and ensure consultation takes place where appropriate. Applicant has some time ago commenced consultation with the Te Ao Marama Inc. - they had no real objection of note about the Application - they did raise certain points which the applicant totally agrees with and the net result of the consultation was **"go ahead"** - the Applicant

has lodged with this Application a letter from Te Ao Marama Inc. dated 18th December 2020 which contains the above.

Coastal Water

The succeeding objectives and policies seek the maintenance of coastal water quality where it is suitable for a range of activities and to ensure healthy aquatic ecosystems.

Objective 7.2.2.1 - Maintenance of coastal water quality

To maintain the quality of coastal waters in those areas where ambient water quality is suitable for:

a. contact recreation;

b. the growth of shellfish, the human consumption of which is not limited by pathogenic or chemical contamination;

c. the health and vitality of aquatic ecosystems; and

d. a fishery, including aquaculture, the produce of which is not limited for human consumption by pathogenic or chemical contamination:

and except for the area described in Objective 7.2.2.3, to enhance the quality of coastal waters in areas where ambient water quality has been degraded, to a level which is suitable for:

a. contact recreation;

b. the growth of shellfish, the human consumption of which is not limited by pathogenic or chemical contamination;

c. the health and vitality of aquatic ecosystems; and

d. a fishery including aquaculture, the produce of which is not limited for human consumption by pathogenic or chemical contamination by the year 2020.

Objective 7.2.2.2 - Protect the natural state of some coastal waters

To protect the natural state of coastal waters wherever it is considered that they can be fairly described as being in their natural state.

Policy 7.2.2.2 - Natural state (NS) waters

Manage areas of water in the coastal marine area as Class NS Water (being water managed in its natural state) where:

a. water in these areas has been identified as being, for the mast part, unaffected by land use practices and

b. is considered to be in its natural state (NS)

Objective 7.3.2.1 - Effects on the amenity of the coastal marine area

To avoid adverse effects on the amenity of the coastal marine area caused by inappropriate discharge of waste products of marine species from ships in the coastal marine area.

Policy 7.3.2.1 - Adverse effects of the discharge of contaminants

Avoid, remedy, or mitigate the adverse effects of the discharge of contaminants into the coastal marine area of Southland.

Policy 7.3.2.12 - Discharges of human sewage and ballast water into coastal waters from ships

Strongly discourage discharges of human sewage and ballast water into coastal waters from ships.

Policy 7.3.2.13 - Encourage the use of onboard sewage collection and treatment

Encourage the use of systems onboard ships for the collection, storage, treatment, and transfer of human sewage to avoid, wherever practicable, mitigate or remedy the adverse effects of discharging sewage into the coastal marine area.

Comment:

The Applicant procedures for discharging contaminants and sewage to ensure healthy aquatic ecosystems in the CMA are described in chapters 3.2.10 a) and c) above.

4.4. Southland/Murihiku Conservation Management Strategy 2016

The Fiordland coastal marine area

"The interdependence of the indigenous terrestrial and marine ecosystems is acknowledged and recognised. Working closely with Ngāi Tahu, the Fiordland Marine Guardians, relevant agencies, commercial interests and

the community, integrated management and protection is achieved across the land and marine interface, and the introduction and establishment of invasive species is prevented. Wild, rugged landscapes dominate, and natural character increases the further south and west people venture, with the southern fiords offering o near-wilderness experience. The marine environment is thriving, with ample opportunities for visitors to observe marine mammals and other marine wildlife from the water, air and land in a way that does not adversely affect the wildlife. Tahora/southern right wholes, terehu/bottlenose dolphins, and tawaki/Fiordland crested penguins are regular sights, with populations stable or increasing. An enhanced representative range of marine ecosystems and species are protected across this environment, and the marine reserves are managed to preserve and improve their natural habitat values. People are aware of and appreciate the importance of the Fiordland coastal marine area and are actively involved in its protection. Structural development within the Fiordland coastal marine area does not detract from the outstanding natural character and natural quiet of this place, particularly in the southern fiords, where the only modifications are those necessary to support visitor access, scientific research and monitoring, or the fishing industry, and artificial light does not prevent viewing of the night sky. Commercial recreational activities promote the values of the Fiordland coastal marine area and all commercial activities are aware of the need for healthy marine ecosystems, avoiding impacts on important marine habitats or significant species and maintaining and enhancing visitor experiences.

Comment:
The Southland/Murihiku Conservation Management Strategy provides for commercial recreational activities in the CMA for visitor experiences and acknowledges commercial activities promote the values of the Fiordland coastal marine area, at the same time as understanding the importance of protecting the natural environment.

4.5. Fiordland National Park Management Plan

The operation of vessel Gravity in the coastal marine area of Fiordland from Yates Point to and including Dusky Sound/Tamatea – but however excluding overnighting or any other commercial surface activity in the Doubtful Sound/Patea complex occurs next to the adjoining land of the Fiordland National Park. The relevant sections of the Fiordland National Park Management Plan for this application are outlined below.

Part Four: Biodiversity, Landscapes and Historical Management
4.4 Biosecurity
Objectives
1. To preserve the intrinsic natural values of Fiordland National Park.
2. To increase the awareness of biosecurity risks to Fiordland Notional Park.
4.5 Introduced Animals
Objectives
1. To preserve those areas of high natural biodiversity values in Fiordland National Park most at risk from introduced animals.
2. To reduce and control introduced animal numbers by all available means to a level that allows for the regeneration of browsed indigenous flora and the recovery of predated fauna. Initial emphasis will be placed on identified priority areas and species.
3. To monitor vegetation condition in key areas of Fiordland as well as monitoring the result of introduced animal management programmes.
4. To prevent the colonisation by introduced species of new areas within Fiordland National Park and to prevent the establishment of introduced animal species not already present within Fiordland National Park.
5. To support habitat management programmes with specific introduced animal control measures.

4.6 Introduced Plants
Objectives
1. To control and, where appropriate and practical, eradicate all undesirable introduced plants within Fiord/and National Park.
2. To prevent the spread of plant pests into weed-free areas of Fiordland Notional Park.
3. To give priority for pest plant control to those park ecosystems , which are actively or potentially threatened, especially those susceptible to irreversible change .

4. To give priority for pest plant control to ecological communities which are highly representative of a particular area of Fiordland National Park, or to ecological communities which are locally uncommon within Fiordland National Park.

5. To ensure that the source of the weed problem is treated, not just the infestations encountered.

6. To undertake control work on pest plants where this is feasible and necessary to protect natural values or otherwise address biosecurity issues.

7. To liaise with local authorities and the community to ensure effective coordination of weed control operations across boundaries, and to develop on awareness of the threats weeds pose to Fiordland National Park.

4.7 Water and Fish

Objectives

1. To ensure that the freshwater systems within Fiordland National Park maintain their unique, intact, high-quality nature through active management and advocacy.

2. To protect indigenous freshwater fish and their habitats including shellfish, fish passage and the marine interface.

3. To Improve knowledge on the distribution and habitat requirements of indigenous freshwater fish in Fiordland National Park.

4. To raise awareness within local communities of the importance of freshwater fish and their habitats and of the risks posed to them by noxious weeds and fish .

5. to restore, wherever possible, freshwater fish habitats.

6. To seek the protection of inshore marine waters adjoining Fiordland National Park.

7. To recognise and provide for the existing recreational salmonid sport fishery in Fiordland National Park within the context of Implementations 4 and 5.

8. To prevent the introduction of noxious fish species into Fiord/and Notional Park and to eradicate them if introduction does occur.

9 To avoid the further spread of introduced animals and plant pests amongst the waters of Fiordland National Park.

4.8 Island Management

Objectives

1. To eradicate animal and plant pests from islands where possible and practical. Where eradication is not possible or practical at present, to control them if the natural values of the islands are threatened .

2. To manage , or advocate for the management of the islands to ensure that the significant natural values of Fiordland National Park are maintained.

3. To avoid the further spread of introduced animal and plant pests among islands on the Fiordland coast.

4. To manage access to the islands of Fiordland National Park where necessary so as to protect the indigenous biodiversity of these islands.

4.9 Marine Mammals

Objectives

To protect, conserve and manage marine mammals within Fiordland National Park.

To increase the Department of Conservation's and the publics' understanding of marine mammal behaviour, ecology and the effects of human activities on them.

Comment:

The objectives above aim to protect and preserve the natural biodiversity of the Fiordland National Park (FNP), increase awareness and educate people about the potential risks to the FNP, eradicate pest species where practical and monitor the environment. These are in place to preserve the intrinsic values of the FNP. To achieve this integrated management is required. The Applicant intends to comply with the objectives stated above in order to preserve and protect the natural environment of the CMA.

To protect the biosecurity of the CMA, Gravity shall follow the guidelines set in the Fiordland Marine Regional Pathway Management Plan. As part of this plan Gravity will need to obtain and hold Fiordland 'Clean Vessel Passes'.
Gravity is removed from water and the hull (the underside) is cleaned at Bluff biannually.
To protect Fiordland's coastal marine waters from bio invasion, vessels are subject to hull inspections. The Young Fishing Company Limited will be contracted to complete vessel inspections at Bluff for pest and weed species. Gravity has passed all of these inspections to date. The Fiordland Marine Regional Pathway Management Plan along with hull inspections safeguards the biosecurity of the CMA.
To protect and preserve the biodiversity and wildlife of the CMA Gravity complies with the regulations set by the Department of Conservation for this place. The Applicant complies with the Marine Mammal Protection Regulations.
These documents set regulations for contact with wildlife in the area. The Applicant intends to comply with the regulations set for activity in the Marine Reserves by the Department of Conservation in the 'Fiordland Marine Reserves' documentation.
Sometimes vessel Gravity will operate in the vicinity of Secretary lsland. To shield this restoration island, the Applicant will continue to take precautionary pest control measures on board of the vessel.
The Gravity has rodent traps located in the vessel. Monitoring of pest control for operators in the Fiordland National Park is conducted by the Department of Conservation's Biosecurity Officer. Monitoring includes rodent inspections with a contract rodent dog handler and a rodent detection dog.

5.3.3 Visitor settings
5.3.7 Backcountry Visitor Setting
Recreation Opportunities
Visitors to these areas will need to be reasonably self-reliant with moderate backcountry skills although they may be able to rely on sound basic huts, well-marked tracks and bridges where necessary. Accommodation other than basic huts is generally incompatible with this setting. Motorised access tends to be more readily available. The landscape within this setting is unmodified and natural and is accessible without major physical effort.
Objective
1. To provide opportunities for a variety of recreation experiences in o natural setting that may be challenging but can be accessed relatively easily; while protecting other national park values. Key attributes defining back country include :
o) Catering for less experienced users who are prepared to experience a degree of risk and discomfort;
b) Visitors being reasonably self-reliant;
c) Facilities comprising basic huts and well-marked tracks;
d) Some reliance on mechanised access; and
e) Visitors expecting to have regular interactions with others (meeting up to ten groups per day).

5.6 Boating and Facilities
Objectives
3. To ensure commercial booting activities in Fiordland National Park are consistent with the visitor setting objectives in section 5.3 Visitor Settings.
lmplementation
General Provisions
Advocate to Southland Regional Council through the Resource Management Act 1991 or other processes the following:
d) Retain extremely low levels of commercial use on some of the fiords between Milford Sound/Piopiotahi and Doubtful Sound/Patea (Caswell, Charles and Nancy Sounds);
Comment:
The proposed activities are not in conflict with the objectives and implementations stated above. The activities will occur in the coastal marine area of Fiordland which is not part of the Fordland National Park. However, the integrated management of this place requires each area to be managed in accordance with other users of the place. The Fiordland National Park land adjacent to the coastal marine area of Fiordland is identified as a remote visitor setting and it is acknowledged to be towards the backcountry end of the remote spectrum. Because of this, vessel use and interactions with others is considered a suitable use of the environment under this Plan.

4.6 Te Tangi a Tauira

Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008.
This Iwi Management Plan consolidates Ngāi Tahu values, knowledge and perspectives on natural resource and environmental issues within the Southland environment. The Plan assists Ngāi Tahu in carrying out kaitaiaki roles and responsibilities within Murihiku. The policies of Te Tangi a Tauira which relate to this Coastal Permit application are examined below.
This Iwi Management Plan details Ngāi Tahu values, knowledge and perspectives on natural resource and environmental issues within the Southland environment. The Plan assists Ngāi Tahu in carrying out kaitaiaki roles and responsibilities within Murihiku. The Te Tangi a Tauira policies which relate to this coastal permit application are examined below.

3.1 Huringa Ahua o Te Rangi - Climate Change
Ngā Koupapa - Policy
7. Actively understand the vulnerability of Murihiku communities to climate change to ensure communities become more resilient.
12. Support further development and improvement of contingency measures to recognise for increased natural hazard risk as a result of sea level rise and unpredictable weather patterns. Ngai Tahu ki Murihiku will take an active role in the development of contingency measures and the education of local communities.

3.1.2 Economy and Industry
Ngā Koupapa - Policy
2. Ensure that Ngāi Tahu ki Murihiku are consulted at all levels to remove uncertainties with respect to the implications of climate change policy.
3. Support improvement of existing technologies to reduce emission and discharge levels and support movement toward new and efficient forms of technology as they develop. Support development of more efficient use of renewable energy sources.
8. Participate in planning for climate change and its potential risks to ensure industries and communities are well placed (build resilience) to deal with climate change conditions in the future. Such involvement could include building of partnerships with scientists, sharing of information, enhanced community engagement and education, joint management and co management of resources, and enhanced economic development through changing environments and technologies.
10. Endorse capacity building among Ngāi Tahu ki Murihiku to ensure that representation of the Maori world view and values held, help to drive research and development with respect to climate change mitigation and response

3.1.3 Influences of Climate Change on Society and Health
Ngā Kaupapa - Policy
4. Recognise that differing regions will be affected differently by climate change. Ngāi Tahu ki Murihiku wish to endorse this issue and ensure policy formed at a national level reflects regional dimensions and the stresses that climate change may have. Research must be reflective of the issues that face Murihiku communities. Policy should therefore be fully informed to recognise for regional divergence.
5. Ngāi Tahu ki Murihiku must be involved in risk management analysis that deals with climate change issues

Comment;
The Applicant is not in conflict with the policies above. This proposal is seeking approval to operate commercial surface water activities. This request is being made in response to the predicted effect of climate change on the CMA which may be evident by 2040. This is detailed in section 3.2.13 of this AEE.

3.6 Te Akau Tai Tonga - Southland's Coastal Environment
3.6.1 General Policy for Southland's Coastal Environment
Ngā Kaupapa - Policy
1. Ensure the land, water and biodiversity at the interface of Southland's coastal environment are

managed in on integrated way through careful planning and policy instruments which ovoid compartmentalising the natural environment.
2. Recognise that the degree of connection between the coastal and inland environments is inherent when developing robust systems to address areas of degradation and mitigate for future and potential environmental effects.
3. Promote communication and collaboration between groups with on interest in or have links with the coastal environment and its management.
6. Respect, protect and enhance coastal areas of importance where possible.
7. Protect and enhance kaimoana and koimataitai for future generations.
8. Support continued research into coastal erosion processes

Comment:
The Applicant supports and undertakes to comply with the integrated management of the CMA to protect and enhance the coastal marine water of this place. This is detailed in section 3.2 of this application.

3.6.4 Coastal Access
Ngā Kaupapa - Policy
1. Ensure that all coastal regions are sustained and protected in perpetuity for all New Zealanders and visitors to enjoy.
2. Ensure that access across any private land to coastal areas is in consultation with the landowner.
3. Encourage education among tourists and other visitors about the cultural importance of the coastal environment and its links to inland river, lakes and lands.
4. Work with stakeholders, local government agencies and others whom have an interest in the coastal environment to promote and provide information relating to values associated with the area and the need to respect the environment through promotion of responsible tourism.
5. All Ngai Tau Whanui, current and future generations, must have the capacity to access, use and protect coastal environment landscapes, wahi tapu and mahinga kai sites and the history and traditions that are linked to these landscapes.
6. Advocate limits to coastal areas (which may include camping sites, reserves, parks) that are considered under pressure or susceptible to increased demand and do not have adequate facilities to meet pressures.
7. Ensure robust consultation with Ngāi Tahu ki Murihiku in respect to aspects of improved access to the coastal environment. This includes the development of structures to facilitate access such as public toilets, upgrading of existing structures, and waste disposal and discharge methods.

Comment:
The Applicant undertakes to comply with access regulations to the CMA. The proposal will not restrict public access to the CMA.

3.6.6 Fiordland Commercial Surface Water Activities
Ngi Kaupapa - Policy
1. Strongly discourage discharges of human sewage and ballast water into coastal waters from commercial vessels and ships.
Comment:
The human sewage aspect is already dealt with elsewhere in this AEE. The ballast water aspect is non applicable to Gravity which has no ballast tanks at all.
2. Encourage adherence to avoidance measures (existing or developed) by vessel or ship operators to ensure the protection of coastal waters from the introduction of exotic vegetation and fauna through foulinq.
Comment:
The Applicant has lived and worked in this area for many years and he is aware of the dangers and of the damage which could be caused by the accidental introduction of exotic vegetation and fauna through fouling. Clean Pass procedures will be the keynote.
3. Advocate for removal of contaminated effluent to designated land based sewage and grey water discharge facilities in all areas where commercial vessels operate (e.g. Patea), or where appropriate, the use of technology that avoids discharge of effluent to water.

Comment:
As above – the Applicant knows the area intimately and pays the greatest respect to keeping contaminated effluent and grey water out of the pristine waters of Fiordland.
4. Ensure that sewage tanks on the commercial boats have 24 hours of storage capability.
Comment:
The vessel Gravity has storage capacity of at least 1-2 weeks.
5. Encourage all vessel operators to invest in the overall health of coastal Fiordland, through using only environmentally friendly products on board (e.g. soaps and detergents).
Comment:
This is also the policy of the Applicant.
6. Carefully monitor the nature and number of concession applications for commercial recreation and tourism operations, to ensure that such activities are not compromising the natural character, beauty or ecology of the region.
Comment:
The above is in the hands of Environment Southland.
7. Concession holders and/or staff shall not discuss Ngai Tahu history, traditions, culture and spirituality with clients without first consulting with and obtaining the approval of Ngāi Tahu ki Murihiku to ensure that information is both appropriate and accurate. Any interpretation or portrayal of Ngāi Tahu history or associations is subject to policies for cultural interpretation, as per Section 1.3.9 (Cultural Interpretation) of this Iwi Management Plan.
Comment:
The Applicant has no issue with this policy.He is of Ngāi Tahu whakapapa.
8. Concession holders operating commercial surface water activities must ensure that clients do not remove any pounamu.
Comment:
No issue here – agreed.
9. Encourage operators to take advantage of new technologies to better manage the effects of commercial tourism development on the environment (e.g. waste discharge from boats).
Comment:
The Applicant agrees.
10. All concession activities with commercial surface water activities are subject to Ngāi Tahu Standard Conditions for Concessions (Appendix 5), and any other special conditions required by Nqa Runanga o Murihiku.
Comment:
The Applicant has had a dialogue with Te Ao Marama Inc. – it appears they have no special conditions - that they wish to impose.
11. Require that, where possible, commercial boat operators use existing moorings to avoid setting the anchor as this is better for the seabed environment.
Comment:
The Applicant agrees 100%
12. Concession applicants must demonstrate o full understanding of the regulations pertaining to the Fiordland Marine Area, including but not restricted to; daily fishing limits within areas, accumulation limits, and the locations and boundaries of the marine reserves.

Comment:
The Applicant is a professional fisherman, his main livelihood comes from fishing – his policy is at all times to strictly observe daily fishing limits – his motto is that less fish is better than more fish plus also his aim is to target each fish type in its prime condition season and leave that fish type alone when not. The aim is to show and educate the public to live of the sea for few days. Eat what you catch policy will mean accumulation limits do not become a problem. No fishing inside the Sounds. Respect the location and boundaries of marine reserves.

3.6.13 Coastal Ecosystems
Ngā Kaupapa - Policy
1. Avoid coastal activities that may disturb, and have o direct or indirect detrimental impact, on areas of significant vegetation and habitats. Direct impacts may be physical damage while indirect impacts may

include effects arising from siltation, deposition or displacement over time.
2. Advocate protection of species located in the coastal environments that are of cultural importance to ensure continued cultural well-being.
3. Have active involvement in promoting the understanding of ecosystem interactions within the coastal environment and the impacts that changes to water quality and levels of deposition and disturbance may have on each organism and their subsequent role in maintaining ecosystem health.
Comment: Agreed.
4. Promote the uniqueness of estuarine ecosystems through maintenance and enhancement of their productive nature.
Comment: Agreed.
6. Provide and recognise for the strong cultural links with coastal landscapes and biodiversity held by Ngāi Tahu ki Murihiku.
Comment: Agreed.
6. Avoid changes to coastal landscapes and biodiversity which have detrimental impacts on Ngāi Tahu ki Murihiku relationships and associations with coastal land, water, wahi tapu and wahi taonga areas.
Comment: Agreed.
7. Recognise for the importance of coastal wetland areas as mahinga kai communities and, where appropriate, expand or create new coastal wetland areas.
Comment: Fully agree.
8. Advocate and support initiatives for restocking of lagoon and other coastal waterways with indigenous fish species and be actively involved in maintaining these areas as a suitable fishery habitat.
Comment: Fully agree.
9. Ensure Ngāi Tahu ki Murihiku participation in the development of new coastal reserves and/or marine protected areas to ensure on assessment is undertaken with respect to effects of such on areas of cultural importance and continued access.
Comment: Agreed.
10. Advocate for protection and methods of enhancement of threatened coastal species, particularly those of cultural significance.
Comment: The whole thrust of the Applicant's operation is to educate guests to protect and enhance all species not just the threatened species or those of cultural significance.
11. Promote the importance of the health of kaimoana in coastal waters.
Comment: This point is fundamental to the Applicant's beliefs.
12. Ensure continued access to coastal areas for customary use and to promote continued support among local authorities to ensure such access is maintained.
Comment: Fully agree
13. Avoid adverse impacts on vulnerable coastal dune environments as o result of subdivision, residential development, forestry, farming, mineral extraction, tourism and general public access.
14. Encourage and support projects for the re-establishment and restoration of indigenous plants in coastal dune environments.
Comment: Indigenous plants are already thriving in Fiordland.
15. Discourage use of recreational vehicles or coastal activities whereby dune environments may be damaged and bird nesting areas threatened.
Comment: Irrelevant here – no vehicles, no dunes.
16. Support and encourage information sharing between agencies with respect to coastal biosecurity risks.
17. Support effective communication among coastal users with respect to risks posed by entry of unwanted organisms to New Zealand marine environments.
Comment: This point is of vital importance.
18. Avoid cleaning of hulls or "lay-ups" whereby indigenous marine biodiversity will be compromised. Agencies should form best practice protocol for such activities and actively implement these among coastal users.
Comment: Fully agree.

Comment:
The Applicant's proposal is not contrary to the policies stated above. The proposal does not impact directly on the coastal marine area's habitats, biodiversity or species. The vessel Gravity will traverse through the water and it will follow all of the regulations set for this place.

3.6.14 Marine Birds
Ngā Kaupapa - Policy
1. Recognise for Ngāi Tahu ki Murihiku cultural, historical and spiritual association with taonga species. Such associations must be provided for within all management planning documents (Taonga Species as listed under the Ngāi Tahu Claims Settlement Act 1998 are found in Appendix 4)
2. Protect coastal environments in which marine birds nest and feed, particularly titi populations.
3. Continue working with local authorities to ensure the protection and education of the public of important marine bird populations.
4. Avoid compromising marine bird habitats as o result of inappropriate coastal land use, subdivision or development.

Comment;
The Applicant intends to comply strictly with all regulations protecting taonga species and their environments and habitats.

3.3.5 Fiordland Future Development
Ngā Kaupapa - Policy
1. The relationship of manawhenua with their ancestral lands, water, sites wahi tapu and other taonga of Fiordland must be recognised and provided for in all decisions relating to development.
2. Ngāi Tahu's right to development, as per the Treaty of Waitangi, must be recognised and provided for with respect to future development and commercial activities in Fiordland, including the export of water.
Comment: No issues.
3. Ensure that the natural character of the Fiordland environment is protected for future generations. The effects of visitors and other tourism development on the environment must be managed in a way that ensures that the values of Fiordland are not compromised.
Comment: Agree.
4. Advocate for keeping future development in areas that are presently modified and that already have infrastructure in place. The preference of Ngai Tahu ki Murihiku is to leave undeveloped or minimally developed areas of Fiordland in as natural state as possible.
Comment: This is also the preference of the Applicant.
5. Advocate for existing infrastructure to be improved to the highest possible standards, and for the utilisation of new technologies that con enable new growth and development while minimising adverse effects.

Management of cumulative effects
5. Planning for future development must recognise and provide for cumulative effects on the land, water, biodiversity and cultural landscape of Fiordland.

Comment:
This proposal will not alter the fundamental character of the CMA, rather it will be a presence in it. The proposal is for commercial tourism activities which have a primary purpose to provide access to view the natural environment. Ngāi Tahu are kaitaiki of the CMA, because of this Te Ao Marama lncorporated have been identified as a Potentially Affected Party in this Application to provide feedback if the Application is in conflict with the iwi's values. No negative feedback has been received.

3.3.6 Visitor Management
Ngā Kaupapa – Policy
Visitor impacts
1. Advocate for the concentration of the majority of visitor activities in areas that are presently modified and that already have infrastructure in place. The preference of Ngai Tahu ki Murihiku is to leave undeveloped, or minimally developed areas of Fiordland, in as natural state as possible.
Comment: Agreed. The Applicant has no proposals for development.

2. Require that commercial operators take advantage of new technology, as it becomes available; to better manage the effects of tourism activities on the environment (e.g. waste discharge from boats, noise suppression on aeroplanes).
Comment: No issue with this.
3. Require that the cultural and natural values of Fiordland are not compromised for recreation or tourism opportunities.
Comment: Of course.
4. Support Deportment of Conservation upgrades on improvements to huts, toilets and other facilities in order to make use of new technologies and minimise adverse effects on the environment.
Comment: The Applicant's clients will not be going ashore except in emergencies.
5. Encourage noise suppression on all commercial and recreational aircrafts operating in high use areas such as Piopiotahi.

Overall comment:
The proposal will embark and disembark passengers from Piopiotahi. The proposal will use the existing infrastructure in place at Piopiotahi or Deep Cove to embark and disembark passengers. This proposed operation will therefore be carried out in a presently modified environment and it will use existing infrastructure which is kept in good repair.
As new technology becomes available and is practical to put in place, the Applicant will apply it to improve the operation.

5. Resource Management Act 1991

5.1 Part 2 Purpose and Principles of the Resource Management Act

The matters which are relevant to this Application are discussed in the following sections 5.1.1, 5.1.2 and 5.1.3.

5.1.1 Purpose of the Resource Management Act - Section 5

The purpose of the Resource Management Act 1991 is to promote the sustainable management of natural and physical resources. Sustainable management means managing the use of the environment in a way that enables people and their communities to provide for their social, economic and cultural wellbeing and for their health and safety, while sustaining and safeguarding the environment. The proposed operation of the Gravity in the CMA meets the purpose of the Act, as commercial surface water activities provide for the social and economic wellbeing of the Southland and Otago communities.

5.1.2 Matters of National lmportance and other matters - Section 6 and 7

To achieve the purpose of the Act, matters of national importance and other matters must be recognised and provided for. The matters which relate to this application are below;
Section 6 - Matters of national importance
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:
(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga:
(f) the protection of historic heritage from inappropriate subdivision, use, and development:
(g) the protection of protected customary rights:
(h) the management of significant risks from natural hazards.

Section 7 - Other matters
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to-
(a) kaitiakitanga.
(aa) the ethic of stewardship.
(b) the efficient use and development of natural and physical resources.
(bb) the efficiency of the end use of energy.
(c) the maintenance and enhancement of amenity values,
(d) intrinsic values of ecosystems.
(e) [repealed]
(f) maintenance and enhancement of the quality of the environment
(g) any finite characteristics of natural and physical resources:
(i) the effects of climate change
j) the benefits to be derived from the use and development of renewable energy.

Comment:
As detailed in section 3.2 of this Application, the proposal is not in conflict with section 6 or section 7 of the Resource Management Act 1991. This application is asking Council to have particular regard to the Applicant's request to have access for vessel Gravity to the CMA for the purpose of using the shelter provided by the CMA to moor of to overnight with up to 7 guests aboard. The vessel Gravity is a small single engined charter boat of less than 22m length overall - small number of guests – all fishing and diving involving the guests to take place out in the open sea not in the CMA. The vessel to enter the CMA to shelter overnight and/or to shelter from bad weather conditions at sea. No permanent structure to be erected. No one set mooring place or anchorage place – all activity to vary on a day by day basis. In the Applicant's submission – small footprint.

5.1.3 Treaty of Waitangi - Section 8

The Resource Management Act 1991. must take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).
Comment: Ngai Tahu are kaitiaki of the coastal marine area of Fiordland, thus Te Ao Marama lncorporated have been identified as a Potentially Affected Party in this application for their feedback on the proposed activity in relation to Ngai Tahu culture and traditions.

5.2 Part 6 Section 104 Resource Management Act – Decisions

sets out the matters to be considered when assessing an application for a resource consent. Section 104(1) of the Resource Management Act, 1991, states:

(1) When considering an application for a resource consent and any submission received, the consent authority must, subject to Part 2, have regard to:
(a) any actual and potential effects on the environment of allowing the activity; and
(b) any relevant provisions of –
(i) a national environmental standard:
(ii) other regulations:
(iii) a national policy statement:
(iv) a New Zealand coastal policy statement:
(v) a regional or proposed regional policy statement:
(vi) a plan or proposed plan; and
(c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

Comment:
The matters to be considered above are in the opinion of the Applicant adequately dealt with in this Application.

6. Consultation undertaken by the Applicant

Applicant has some time ago commenced consultation with the following parties and briefly summarised below are the results of consultation to date:

a) Te Ao Marama Inc. - they had no real objection of note about the Application - they did raise certain points which the applicant totally agrees with and the net result of the consultation was **"go ahead"** - the Applicant has lodged with this Application a letter dated 18th December 2020 from Te Ao Marama Inc. which contains the above.

b) Guardians of Fiordland – some time ago consultation was initiated with the Guardians. Full details of the Application were given to the Guardians on 22nd September 2020 and a reply from Mark Peychers of the Guardians was received on the same day stating **"I cannot see any issues other than biosecurity when the vessel comes up from Bluff to Milford. This should be covered in his "Clean vessel pass" with Environment Southland."** (Copy of the email is being lodged with Application documents)

c) Applicant also contacted Department of Conservation Te Anau with a view to consulting, but was advised to hold fire until the actual granting of Resource Consent – DOC would then come into the picture to guide Applicant with detail.

7. Conditions proposed by the Applicant

The Applicant intends to mitigate potential and cumulative effects to the extent that they become no more than minor. The Applicant respectfully suggests that the following conditions be placed on this Consent.

1) Proposed Activity

Undertaking of commercial surface water activities, in the coastal marine area adjacent to Fiordland National Park from Yates Point to Dusky Sound/Tamatea (but excluding operations in Doubtful Sound/Patea complex) with:
(a) one vessel of up to 17 metres registered length ;
(c) one tender craft; and
(d) up to 7 passengers and 1 crew.
for the purpose of undertaking commercial backcountry activities, as described in the Application for Resource Consent.

2) Operational Restrictions

The Consent Holder may only transit within Doubtful Sound, Thompson Sound, and Deep Cove as a thoroughfare for the purpose of, and to the extent necessary to:
(a) pick up or off-load passengers to or from shore;
(b) access services, wharves and launching areas; and
(c) off-load cargo and uplift stores.

The travel speed of the main vessel, tender vessels must not exceed 5 knots within 200 metres of the shoreline.

Marine bird and mammal nesting and breeding areas must be avoided by ensuring:
(a) passengers or crew shall not land on any foreshore; and
(b) neither the main vessel or tender vessels authorised by this permit, shall moor or anchor or otherwise stop; within 50 metres of New Zealand fur seal colonies or penguin colonies.

The travel speed of the main vessel or tender vessels shall not exceed 5 knots within 500 metres of a seal or penguin colony.

This permit does not authorise anchoring within the following china shop areas:

(a) Clio Rock in Bligh Sound;
(b) the area at the intersection of Acheron Passage and Wet Jacket Arm between Breaksea and Dusky Sounds;
(c) Nine Fathoms Passage, off Cooper Island, Dusky Sound.

This permit does not authorise the anchoring within 400 metres of the following rat-free islands:
(a) Breaksea Island Group, including Wairaki Island and the island approximately 700 metres generally west thereof, and Hawea Island and the island approximately 700 metres east thereof;
(b) Entry Island;
(c) Thrum Cap.

Passengers or crew of the main vessel or tender vessel, shall not land on, moor or anchor adjacent to the foreshore of the Nee Islets at the mouth of Doubtful Sound.

3) Biosecurity
The following biosecurity procedures are to be followed at all times:
(a) At the last port of call prior to entering the Fiordland marine area, the hull of any vessel operating under this Consent:
- be inspected for pests and fouling organisms, in particular *Undaria*;
- clean and dry mooring lines, buoys and any other equipment that have come into contact with coastal waters, in a manner that kills marine pests and unwanted organisms;
- after cleaning the hull and equipment, have the hull and associated equipment inspected by a suitably qualified person to ensure that there are no visible signs of marine pests and unwanted organisms; and
(b) The Consent Holder should use their best endeavours to carry out a further inspection six weeks after the above inspection. Specifically, the Consent Holder shall inspect the main vessel, tender vessel, mooring lines, buoys and any other equipment that has come into contact with coastal water to check for marine pests and unwanted organisms; and
(c) Immediately after each inspection required, if any marine pests or unwanted organisms are found, the Consent Holder shall notify the Consent Authority and seek advice from a suitably qualified person regarding removal, treatment, and disposal of the pest(s) or unwanted organism(s). Once this advice is received, the Consent Holder shall immediately ensure that the pest(s) or unwanted organism(s) are removed and disposed of in accordance with that advice.
In addition the Consent Holder shall:
(d) maintain the vessel in a rodent free state at all times;
(e) maintain at least one bait station or trap in each of the pantries on the vessel at all times for the purposes of rodent eradication; and
(f) inspect the vessel, and any cargo, for pests, in particular, rodents, and prior to re-entering the Fiordland coastal marine area on each occasion.

4) No passenger landings
Under the terms of this Consent no passengers or crew of the vessel shall land on the CMA (excepting only emergency situations), nor shall the vessel moor adjacent to, any foreshore within 50 metres of New Zealand fur seal colonies or penguin colonies.

5) Reporting Requirements
The Consent Holder shall maintain a log of all operations, including:
1) timing, location, number of passengers and purpose of all activities;
2) the timing and location of sewage discharges;
and a copy of the entries in this log shall be furnished to the Environment Southland's Compliance Manager every three months.
3) a log of all trip activities, including the following details:
(i) departure date and return date for each day trip;
(ii) location(s) travelled to for each day trip;
(iii) number of passengers aboard the vessel for each day trip; and
(iv) the purpose of all activities, including use of the vessel and any ancillary activities; and

(v) the results of inspections for pests, unwanted organisms, or hull fouling organisms on the vessels and equipment.

A copy of the entries in this log shall be provided to the Consent Authority every three months in accordance with the following schedule:

Quarter Finish	Due Before
31 March	30 April
30 June	31 July
30 September	31 October
31 December	31 January

Rubbish disposal
All rubbish shall be removed from the coastal marine area and disposed of at rubbish at a designated refuse disposal site.

Effluent Discharge
Sewage shall be discharged in accordance with the Resource Management (Marine Pollution) Regulations 1998, and the Resource Management (Marine Pollution) Amendment Regulations 2002. The sewage shall be discharged into holding tanks for disposal at least 500 metres seaward from mean high water springs.

Fuel/Oil spills
(a) A fuel/oil spill kit that is suitable for the operation shall be available on the main vessel at all times. This spill kit shall contain, at a minimum:
- oleophilic booms, pads and pillows;
- personal protection equipment;
- plastic bags; and
- absorbent materials for smaller spills on board.

(b) In the event of any spill of oil, fuel or other contaminant, contaminants shall be removed immediately from the site and mitigation undertaken to adequately contain and recover the spill.
(c) The Consent Holder shall immediately notify the Consent Authority (ph. 0800 76 88 45 or email escompliance@es.govt.nz) that a spill has occurred. Notification shall include the type and quantity of oil, fuel or other contaminant spilled, and the steps taken to avoid, remedy or mitigate any adverse effects.
(d) In the event of a spill of any contaminant, no dispersants or degrading agents shall be discharged to water without the prior approval of the Consent Authority.

Noise
At least 20 working days before the FV Gravity is used in the exercise of this Consent, the Consent Holder shall provide to the Southland Regional Council evidence that this vessel can meet the noise standards of Rules 5.3.4 and 5.3.6 in the Regional Coastal Plan for Southland 2013 (or the relevant standards in any subsequent version), in accordance with the provisions of NZS 6801:1991 "Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sound".

Review of Consent Conditions
The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, for the purposes of:
(a) determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment, including cumulative effects, which may arise from the exercise of the consent, and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the consent; or
(b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or Policy Statement; or
(c) amending the monitoring programme to be undertaken; or

(d) adding or adjusting compliance limits; or
(e) requiring the Consent Holder to adopt the best practicable option to avoid, remedy or mitigate any adverse effect on the environment arising as a result of the exercise of this consent.

8. Conclusion

The proposed commercial surface water activities in the coastal marine area of Fiordland will not give rise to any significant adverse environmental effects and they will have positive social and economic effects on the Southland and Otago Communities. This proposal does not conflict with the purpose of the Resource Management Act 1991; the Southland Coastal Policy Statement; the Regional Coastal Plan for Southland; The Fiordland National Park Management Plan; or Te Tangi Te Tauira. Therefore, it is considered appropriate to approve the Application.

This Application does not include interfering with any plantings. No effects of the proposed activity on public access to and along the coastal mFarine area are anticipated. No occupation of the coastal marine area is needed or contemplated, other than at the anchorages or moorings outlined above. The proposed activity does not involve the taking, use, damming or diversion of coastal water, or discharges to coastal water within the application area. The proposed activity will not result in the alteration of the foreshore or seabed.

NEW ZEALAND COMPANIES OFFICE | COMPANIES REGISTER

Certificate of Incorporation

GRAVITY FISHING LIMITED

4299578

NZBN: 9429030342408

This is to certify that SEA SHAG CHARTERS LIMITED was incorporated under the Companies Act 1993 on the 22nd day of February 2013
and changed its name to GRAVITY FISHING LIMITED on the 31st day of October 2018.

Registrar of Companies
2nd day of November 2020

REGISTRAR OF COMPANIES NEW ZEALAND

Certificate generated 02 November 2020 09:58 AM NZDT

Maritime Transport Operator Plan for

GRAVITY FISHING LTD

Date submitted to Maritime New Zealand: 6-11-2020

Index

CATEGEORY A. – Maritime Transport Operator Plan

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CATEGORY B – Vessel Specific Information for F.V Gravity

Section 1. Management and policies

Gravity Fishing Ltd is an independently owned fishing and charter business, operating primarily out of the port of Bluff.

1.1 Full legal name of the operator

Operators name	Nathan Smith
Operation name	Gravity fishing ltd

1.2 Persons Responsible

	Areas of responsibility			
	The maritime transport operation	Resourcing of the maritime transport operation	Crew training and competency assessments	Operational decisions
Nathan Smith	✓	✓	✓	✓

1.3 Primary harbors or ports

Bluff
Oban (Halfmoon Bay)
Milford Sound
Riverton

1.4 Vessel Categories

Passenger Vessel
Fishing Vessel

1.5 Activities

Fishing	**Charter Business**
Pot fishing	Charter (fishing)
Trolling	Party cruise charter
Gill & set netting	Hunting expeditions
Diving	
Drop lining	

1.6. Ship Details

Ship name	F.V Gravity
MNZ Number	135429

Section 1.7. Personnel Details

Certificates of competency and endorsements	Inshore launch master (ILM) Radio Operators Certificate Radar certificate	
Employees required to hold a certificate of competency	Nathan George Smith (skipper)	
Relevant experience and training	Deckhand 2004 – 2006 Skipper 2006 - present	
Certificates held	ILM F.R.C Radio certificate	N021336 85786

1.8. Shore based personnel

Shore based personnel responsible for managing trip reports and emergency responses

Name	Merri Leask
Contact details	03 212 7281 or VHF channel 61 or 65
Responsibility	Search and rescue person

Name	Nathan Smith
Contact details	021477445
Responsibility	Vessel owner and skipper

Section 2. Control of Information, Records and Documents

2.1 Location of MTOP Certificate

The original copy of the certificate will be kept at the business's registered address. A copy if the certificate will also be kept on board the vessel at all times, to be available when necessary.

2.2 Location of MTOP

A master copy of the entire plan will be kept as an electronic version available at the business's registered address. A copy will be made and kept onboard the vessel to act as a live document and for training purposes when necessary.

2.3 Sharing the plan with new crew and personnel

Upon implementation all existing crew will be given an induction of the plan and will be supervised with their understanding of detail within the plan. As changes are made and information within the plan updated, crew will be advised and revisions will be performed as part of the training process. Any subsequent new crew will undertake a training process as part of their induction to ensure full understanding of the plan.

2.4 Review and continuous improvements of the plan

A review of the plan will be made annually in the month of February. A review will involve the skipper and any crewmembers who have been involved in the operation for over a 6 month period, to discuss policies and procedures within the plan. This may be more frequent if a significant occurrence was to arise, such as a vessel overhaul or serious incident.

Any changes to the plan will be immediately updated in the master copy and recorded in the amendments section of the plan and signed off where necessary. New documentation will be provided for the vessels copy of the plan to ensure all information is up to date.

2.5 Accident/Incident recording and reporting

Accident, incidents and near misses will be recorded in the accident/incident register in the vessel specific section of the maritime transport operator's plan. As a general rule, if the first aid kit is opened, details will be recorded in the register. All accidents resulting in serious harm will be reported to Maritime NZ as soon as practicable and a report will be prepared when required.

When an accident or incident requires assistance the skipper will make the call to contact emergency services on:

RCCNZ: 0508 222 433 or on VHF Channel 16

2.6 Ships Log

Before commencing a trip, including the start of a working day while at sea, the skipper will use the vessel's log to record engine status, POB, maintenance required, weather conditions, and any other comments that need to be made or to describe

the trip. Any of this information will beefed through to relevant areas, such as the vessel's maintenance log.
The ships log will be kept in the wheelhouse of the vessel so as it can be readily available.

2.7 Trip Reporting

A trip report is a message from the skipper to a shore-based contact. The skipper will ensure the vessels location is known and everyone on board is safe by checking in with the designated SAR person every night while out at sea. This will be done via VHF radio channel 61 and 65.
The following items may be in the trip report:

- when the ship is departing and from where
- the planned destination or area of operation
- the total number of people on board (POB)
- the expected time of arrival (ETA) and/or next communication.

A cellphone will also be on board the vessel at all times, and will be used as a secondary form of communication when in cell phone coverage.

Reporting Interval
Every night at sea, departure and arrival from port.

2.8 Audits of MTOP by MNZ

A record of any audits made by MNZ will be kept with the master copy of the MTOP.

Section 3. Health and Safety

We are an independently owned and operated inshore fishing and charter operating business. We are committed to achieving a high standard of health and safety on board the vessel and will take all practicable steps to create a safe and healthy work environment. This will be achieved and maintained by the following procedures:

3.1 Hazard identification, Assessment and Management

A hazard is any activity, situation or substance that can cause harm. This is also recognized in a situation where a person's behavior may be an actual source of harm to themselves or others. Hazards are identified as being actual or potential, including temporary conditions that can affect a person's behavior, such as fatigue, shock, alcohol or drugs. Hazards could also include events that occur elsewhere ashore.

The skipper will also take all practicable steps to ensure that any hazards do not harm any people who are:

- On board the vessel either as visitor or as a passenger
- Lawfully at work on the boat (as employees, contractors etc)

Crew will be responsible for:

- Safe work practices
- Informing the skipper if they are unable to make a work practice safe
- Co-operate in the monitoring of hazards and of their health
- Report Hazards

Identification
The hazard identification procedure will identify potential safety risks and kept as an active register in the vessel specific section of the maritime transport operator plan. Ways of identifying hazards will include:

- Inspecting the boat and equipment
- Analysing the work that needs to be done on the boat and how it's being done
- Reviewing previous accidents (including near misses) and looking at what happened and why

The crew will be given reasonable opportunities and shares the responsibility to be part of the hazard management process, including identification of hazards. It is the owner's responsibility to perform reviews of the hazard identification process and will be made annually.

Assessment and Management
Everyone on board the vessel will share in the responsibility to recognise and manage problems themselves.

Hazards will be assessed to determine whether or not they are **significant.** The preferred action is to **eliminate** the hazard, by changing things so that the hazard no longer exists. This might include:

- Relocating equipment or instruments, which restrict forward visibility, or replacing a hazardous substance with one that is harmless.

If this can't be reasonably done, the hazard will be **isolated**, by putting in place a process or mechanism that keeps crew and passengers away from the hazard. This might include:

- Permanently fixing a guard to cover a dangerous part of a particular machine

If this can't reasonably be done, the hazard must be **minimised**, by doing what can reasonably be done to lessen the likelihood of harm being caused by the hazard and to protect everyone on board the vessel. This might include:

- Providing crew with suitable protective clothing or equipment

3.2 Drug and alcohol policy

Alcohol and drugs, including illegal drugs and prescription drugs, which may impair your ability to work safely, are considered a hazard on board the vessel.

The use of alcohol or drugs may affect:
- The ability to make good decisions
- Co-ordination
- Motor control
- Concentration and alertness.

The use of alcohol and other drugs on board the vessel may cause the following problems:

- Potential for misuse of machinery or equipment
- Increased risk of causing harm of injury to self or other employees
- Falling from heights, into holds, overboard, boarding and leaving vessel etc.
- Decreased skills, poor judgment, slower reaction times
- Inappropriate behavior, like fighting, abusive language
- Increased risk of fatigue.

Alcohol
The consumption of alcohol onboard the F.V Gravity is permitted under the following conditions:

- Skipper and crew may only consume alcohol on board the vessel once a working day has ended and the vessel is shut down in a secure location. This may include at anchorage during an overnight trip.
- Alcohol is to be consumed in a responsible manner that will be controlled by the skipper, and must not be consumed within 4 hours of starting a working day.
- Passengers and visitors may consume alcohol while on board the vessel but will do so in a controlled manner to be overseen by the skipper.
- At no time is any persons to be intoxicated on the board the vessel. If this was to occur the person would be isolated to a safe area where they are unable to cause harm to themselves or others, and be returned to port as soon as practicable.

Drugs
The consumption or use of drugs is illegal and not permitted onboard the vessel F.V Gravity. This includes instruments for the purpose of taking drugs (pipes,etc). Crew or passengers may use prescribed drugs for health conditions. The skipper needs to know about this, and how to manage any side effects from medication or from the health condition requiring the medication.

The policy will be part of the induction process for both crew and passengers. If an accident occurs or someone is injured while under the influence of alcohol or other drugs, this affects the ability to claim insurance.

Responsibilities
The owner/skipper will be responsible for:

- Enforcing the policy
- Setting an example to crew and passengers

Crew will be responsible for:

- Assisting in monitoring any visitors or passengers alcohol consumption on the vessel
- Informing the skipper when prescription drugs are being used

3.3 Stress Management

Workplace stress happens when someone becomes aware that they are not able to cope with the demands of their work environment, and they have a negative emotional response to that awareness. The key is that they are overwhelmed by the situation and they care about feeling that way - it is having an impact on their happiness or enjoyment of life.
Stressors are things that lead to someone feeling that they are unable to cope with either physical or psychological demands.
Stressors can:

- Be because of things that make the job what it is - for example, the peak workloads in fishing, knowing that the work of being a commercial fisherman is to some degree inherently dangerous, working in cramped conditions on board a vessel.
- Arise because of the way the work is organised. This can include physical factors (such as cold, wetness, noise etc.) as well as physiological factors (such as shift work, lack of time to rest etc.)
- Arise out of excessive work demands such as unrealistic deadlines
- Arise out of personal factors such as health status, relationships, ability to cope with difficult situation etc.

How do I manage stress as a hazard?

For all crew:

- Identify areas of the work that are naturally stressful - start with the list of stressors at the beginning of this section.
- Work with the skipper to figure out how to eliminate or reduce the impact of those stressors.
- Learn ways that help you to manage your own stress levels.
- Tell your skipper when stress levels get too high.

For the Skipper:

Make sure that work practices on the vessel don't cause unnecessary stress, and have systems in place to deal with crew member stress. You are not required to monitor all your crew members stress levels all the time. You are required to put things in place to minimise stress and if a crew member says they are stressed you need to take this seriously.

- Where possible, create clear work routines and operating procedures so there is a more predictable work environment.
- If a crew member says that they are stressed or unable to cope with the work, you need to investigate what they are saying. Talk to the crew about their concerns and find ways to manage the situation if possible (remember you only have to take all practicable steps to deal with the hazard).
- Be aware that someone who is suffering from stress may be a danger to themselves or to others while working. That includes yourself. .
- If a crew member is consistently unable to carry out their work because of non-work stress factors, manage this as you would any performance issue. Talk to the crew member about your concerns and work out a way to resolve the situation.
- Work out how you will handle a situation where a crew member tells you that they are stressed. Document this and make sure that the crew know that there is a system in place for dealing with stress and that everything possible will be done to deal with the situation in a confidential manner.
- Consider how you will decide whether a crew member is coping with their work or whether they are affected by stress.
- Schedule time to regularly think about whether stress is a problem on your vessel. Make sure you treat each person as an individual, as different people cope with things in different ways.

- Ensure that there are different activities available on board to allow people to relax on their off duty hours.
- Make sure that there is adequate time available for rest.
- Work to create a supportive environment on board the vessel, and recognition of people's different needs for space and time to themselves.
- Carefully investigate any crew claims of feeling stressed and put in place any necessary measures to reduce their stress levels.
- Make sure you identify the things in the job that are inherently stressful, and talk about them with potential crew before you offer them the job.

3.4 Fatigue Management

Guidelines for Skippers and Crew

Commercial fishing is an occupation that involves a high demand of awareness, long working hours, physical work, erratic sleep patterns and at times uncomfortable sleeping conditions. These are just some of the points that lead to the skipper and crew being fatigued.

Under the Health & Safety in Employment Act the skipper has a number of duties and responsibilities that must be discharged. One of these duties is to make sure that any hazard does not harm anyone who is on the vessel or in the vicinity. Fatigue is a hazard, and monitoring work and rest is a practical step to take.

Effects of Fatigue

One of the main effects is becoming less aware of what is happening both around you and to you. This means that you aren't aware that you are less alert and your performance is worse, which can lead to serious injury accidents. People who are fatigued cut corners, take risks, forget things make mistakes and respond slowly. Eventually a fatigued person will fall to sleep despite efforts to stay alert. Often this happens as the person gets sleepier and sleepier. Small micro sleeps last from several seconds to 2 minutes or more. It is common for people not to be aware that they had been asleep.

Getting Enough Sleep

Most people can work safely if they get 6 hours of continuous sleep each night. As a general rule Maritime NZ recommends

- A minimum of 77 hours rest in a 7 day period; and
- At least 14 hours sleep in 48 hours; and
- Two consecutive nights available for sleep between 10pm and 8am, at least once every two weeks, better if once per week.

A poor sleep environment will result in less effective sleep. Motion, vibration and noise are common on fishing boats. If these conditions are bad, your effective sleep will be less than the hours you spend sleeping.

Managing Your Shifts When Steaming

Navigating to and from your fishing grounds can be lengthy and uncomfortable at times making it difficult for a person fatigued to stay alert and awake. Most vessel

accidents caused by fatigue happen while navigating to the grounds or back home. Aftermidnight is a high risk for going to sleep, as you have usually been awake for some time and it is the time the body's natural sleep cycle kicks in, especially around 3 am – or earlier if you are an early riser.
Split the time involved into equal shifts of 2 hours on 2 hours off amongst the skipper and crew. Ensure that the person on first knows that they are and that they're rested before taking the wheel. If it's on the way back home, if possible, allow the person on duty first to get a short nap, even if it's 20-40 minutes. It's best to have naps that are 20 – 40 minutes, or 2 hours - 3.5 hours long. Otherwise deep sleep will kick in and you may be very groggy from sleep when you wake, finding it difficult to stay awake, or focus on the job.
If not possible then anchor the vessel in a safe anchorage and everyone get some rest before steaming home. **Lives are more important than fish!!**

When changing shifts allow the next watch keeper to adjust to the surroundings and wake from sleeping. Fresh air, stretching, caffeinated drinks (coffee, red bull), chewing gum, light snacks, drinking water and talking on the phone or VHF are all good things to keep you alert while on watch. **Never sit still and get too comfortable in one spot!**
Ask yourself each trip "are you aware of fatigue and are you managing it on board?"

Homework On Fatigue
Dealing with fatigue when at sea is more effective if you have planned how you will deal with it before you get there. A crew get together to discuss the trade-offs around fatigue makes sensible decisions at sea easier to make. Consider not only your usual pattern of work, but also the effects of unplanned events on fatigue – while you can't tell when these will strike, often you know what they are

The following table gives some guidance on the effects of fatigue and associated signs and symptoms:

PERFORMANCE IMPAIRMENT	**Signs and symptoms**
Impaired attention, loss of concentration, and diminished decision-making power	• Overlook or incorrectly order sequential task element • Preoccupation with single tasks or elements • Exhibit lack of awareness or poor performance • Failure to appreciate the gravity of a situation • Failure to anticipate danger • Failure to observe and obey warning signs
Diminished memory	• Overlook a task or elements of a task • Fail to remember the sequence of task or task elements • Inaccurate recall of operational events
Delayed reaction time	• Respond slowly or fail to respond altogether to normal, abnormal, or emergency situation • Reduced attention span

Diminished problem solving ability	• Display poor judgment of distance, speed, and/or time • Inaccurate interpretation of a situation • Display problems with such things as arithmetic and geometry
Mood Changes	• Less conversant than normal • Irritability, tiredness, depression • Distracted by discomfort
Attitude change	• Display willingness to take risks • Ignore normal checks and procedures • Display a “don’t care” attitude
Adverse physiological effects	• Exhibit speech effects-slur, rate, content • Impaired co-ordination of control skills-key punch entry errors, switch selection
Impaired alertness	• Succumb to uncontrollable sleep-nap, long sleep episode • Display automatic behaviour syndrome

3.5 Training

The owner will take responsibility to:

- Complete crew inductions
- Provide safety information to the crew and passengers ☐
- Provide refresher training or supervision to make sure the work is done safely
- Keep an eye on the crew to make sure their work isn’t causing them health problems

The crew will be responsible for:

- Knowing about and following the boat’s health and safety practices and procedures

Crew induction completed forms and copies of the form will be available in the forms and registers section of the operations maritime transport operator plan.

3.6 Protective Clothing

The owner will provide suitable protective equipment and clothing to the crew. ☐

The crew will take responsibility to use the protective equipment and clothing provided.

3.7 Recreational use of the vessel

In the event that the vessel may be used for recreational use the following procedures will be undertaken:

- Contact Ministry of Primary Industries (MPI) to advise that the trip would not involve any commercial fishing or charter operations and the planned dates of travel
- Continue to operate safely and ensure the safety of all on board
- Contact MPI to advise that the recreational trip had commenced to have the vessel re-registered for commercial purposes.

Section 4. Safe Operating Procedures

Pre -Trip Checks

The Skipper will complete appropriate pre trip checks and record when completed in the vessel trip log prior to commencing each trip. The skipper may delegate checks to the crew when needed.
Pre departure, at sea and return to port checks are listed in section 1 of the vessel maintenance plan.

Return To Port/End Of Trip

Once a trip has commenced the vessel will shut down as per the checks listed in section 1 of the maintenance plan. Any reporting of accidents, reviews of hazards, etc. will be done as soon as practicable.

Listening Watch

A listening watch will be maintained on VHF channel 16. The skipper will scan the appropriate channels when he is able to do so safely.

Conditions in which the vessels operation at sea should stop

While the vessel is at sea the skipper will ensure the safety of the vessel and all on board, and will make the final decision when the operation should stop. This may happen under the condition that:

- The weather conditions are unsafe

- Industry specific guidelines or guidelines within the maritime transport operators plan plan are not being met

Watch Keeping

The watch keeper is responsible for the vessel and the lives of all those on board the vessel. The watch keeper must remain vigilant at all times to ensure the safety of the vessel and all who sail on board.
Watch keeping duties are rarely performed in ideal conditions. The weather may be rough and make it hard to do the job. Even when the weather is calm the watch keeper can sometimes get a bit bored, and not focus on the job.

The three main jobs of the watch-keeper are:

- Avoid collisions with other vessels or objects either floating or submerged.
- Keep the vessel on track and away from dangerous land and rocks and on her intended track.
- Manage the vessel and its logs books, charts and communications well and conduct other routine and training tasks professionally.

These are important responsibilities. The vessel's safety depends on you!

Good watch keeping practices

- Use more than one method to confirm your actual position. Use visual fixing, radar fixing and GPS regularly.
- Keep records of incidents, sea conditions and watch changes in Log Book.
- Safe navigation should never become second priority. Even when you have to attend to fishing operations and have to take longer between fixes, complete thorough checks before you leave the wheelhouse.
- Keep yourself active through out the watch. Make sure you have plenty of jobs to do. If you are moving and working, you are less likely to fall asleep.
- Ensure, and regularly check that your own navigational equipment, particularly navigational and fishing lights are operable and switched on (or off) to indicate the vessel's mode of operations.
- Always maintain anchor watches. Make sure your position is checked regularly. In adverse weather keep a bridge watch while at anchor.

Keep a good lookout. To do this:

- Regularly go outside and scan the sea around the vessel.
- Use binoculars to scan the horizon.
- Regularly check the radar for new contacts.
- Keep note of the water depth under the vessel.
- Listen for sounds that are different or unusual.
- Listen on the radio for changing weather.
- Make sure you know the shapes and light configurations of different signals.

This will help you to know what other vessels are doing.

- It is very important to remain vigilant. Listen and look for things that may endanger the vessel and the crew. All available means includes using your equipment such as depth sounders and radars that provide look-out information.
- When you finish your watch, conduct a good handover. Explain what has happened during your watch; point out the vessel's current position, intended track and any immediate hazards. Tell the next watch keeper about any other points of concern you have.

Navigational Equipment

Compass
Radar
Navigational Lighting
Day shapes
Depth Sounder
GPS
3D Bottom Mapping System

4.1 Fishing Operations

Trolling

Key Points

- Deck personnel on trolling vessels must wear safety glasses whenever practical.
- The most common hazard is when the fish gets off the line while the line is under tension (pop-offs). Watch for pop-offs and, if possible, keep out of the line of pull.
- If two or more lines are tangled in the water be aware that any one of the lures could be taken (putting tension on line and other hooks). Remove all lures from the water before attempting to untangle them.
- Pay attention when unhooking lures.

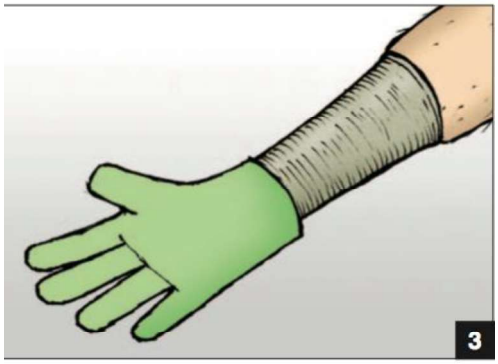
Pot Fishing

Hazards and safety procedures unique to pot fishing operations are shown below:

Preparation:

1. Pot fishing involves a considerable amount of lifting by the crew:

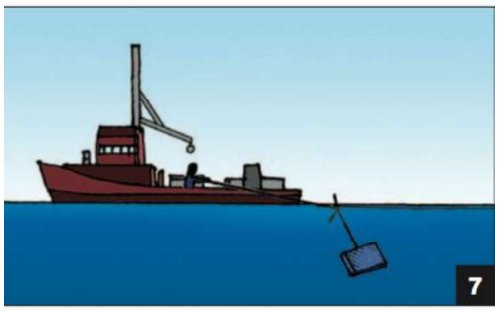
- Always stretch your muscles before starting work.
- Always be conscious of lifting methods. Use your legs not your back.
- Wear back and knee supports if you need these.
- Keep the load close to your body.



2. Crew need protection against cuts and nips from the lobsters. Wear long sleeves and tuck the sleeves into your gloves.

3. Make sure you wear tight fitting gloves.

4. Clean cuts and abrasions continually with fresh or salt water. This helps to prevent cray poisoning.



Retrieving:

5. Make sure that there is constant and clear communication between the wheelhouse and the person in the deck launching position.

6. Launch and retrieve pots at a safe pace.

7. When retrieving pots, keep a close eye on the grapnel line in case it “pings off”. Keep out of its way as much as practical.

8. When you use a boom and block to lift pots, be careful to ““arrest”” the strain on the line before transferring the line from the hauler.

9. Keep your fingers away from the hauler drum.

10. Work with pots up off deck level as much as possible.

11. Stow pots at a safe height for your vessel. Be aware of how the weight of the pots might affect the stability of your vessel.

12. As each pot is set, or retrieved, the lines must be safely stowed to minimise the risk of entanglement.

Setting:

13. Unload post evenly. Start from the unloading side and work evenly across the vessel.

14. When setting pots make sure the line is free to go overboard without getting caught.

15. If two crew are setting, the crew member releasing the pot should be close to the crew member throwing the line.

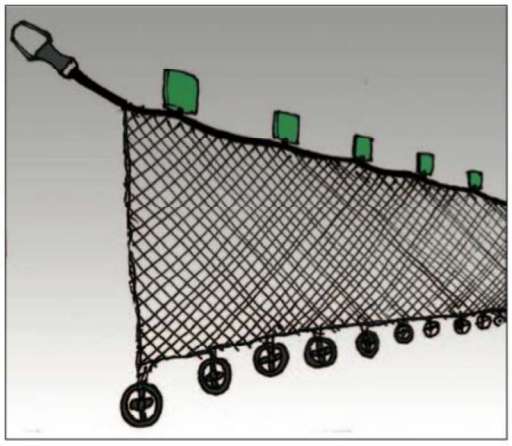
16. Crew should have a “rope cutter” tied to them, so that if they did get caught in a setting line they would be able to free themselves underwater.

17. A vessel should never be overloaded. **What is more expensive: - an extra trip to the fishing grounds or a new boat?**

Gill or Set Netting

This section deals with hazards unique to set netting.

Deploying the net



Once the first set of floats at one end are in the water the vessel moves at speed until the net is reached. During this time the line deploys at speed.

- Don't let the line run through your hands.
- Stand well clear of the bite.
- Keep your fingers clear of the net as it deploys.
- Keep clothing clear at all times.
- Do not attempt to unhook / untangle mesh when the vessel is underway and before the brake has been applied to net hauler. Stop the net then attend to any tangles before continuing to set.

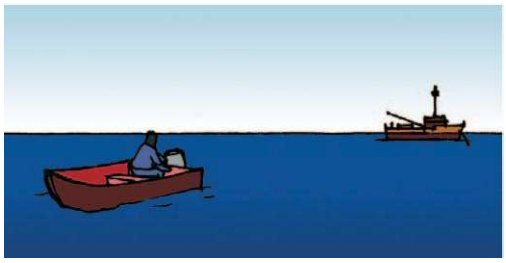
Retrieving/hauling in the net

Depending on the tide and wind, pick from the correct end so the boat doesn't drift into the net and get the rudder or propeller tangled in the net.

- Take care when hauling down lines. The lines are under tension and could part and snap back in your direction.
- Haul the net at a safe speed depending on weather conditions etc.

Diving

Key points



1. When diving from small dinghies off larger mother vessels, always anchor the larger vessel down wind (or current) from where you will dive. Then, if the dinghy breaks down, you will drift back towards the main vessel.

2. When you anchor the dive boat make sure it is secure and not going to "drag the anchor" out to sea or onto the rocks.

3. Pay attention to the conditions where you have anchored. Tide levels will change and swell conditions may change.

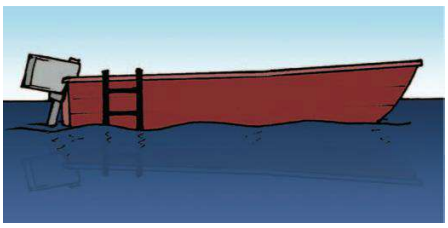
4. A boat driver must be aware of where the divers are so as not to run them over. This is even more important when 2 or more divers are working off the one dive boat.

5. Find out where all the divers are before moving to pick up catches.

6. When working close to other operators, be aware of their divers as well as your own so you don't accidentally run them over.

7. Stay aware of the conditions around you! Don't:

- Get caught in cracks or caves.
- Get caught in the surge zone and end up on rocks



8. Keep an eye on fuel; make sure you have enough to get back to your main vessel or your launch site.

9. When you are responsible for positioning the boat for pick-ups, be aware of the conditions around you. Know where waves are breaking. If possible pick up divers with the boat facing towards the waves.

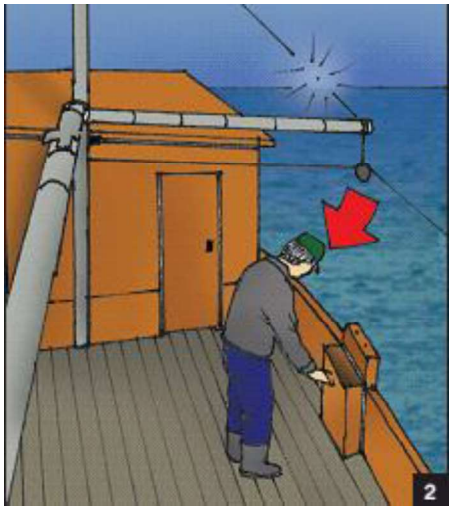
10. Divers must take care around props when entering and leaving the water. Prop guards can help keep divers safe at times, but can also cause loss of performance.

General

A lot of the hazards and procedures covered in earlier sections of these guidelines are applicable to any vessel at sea.

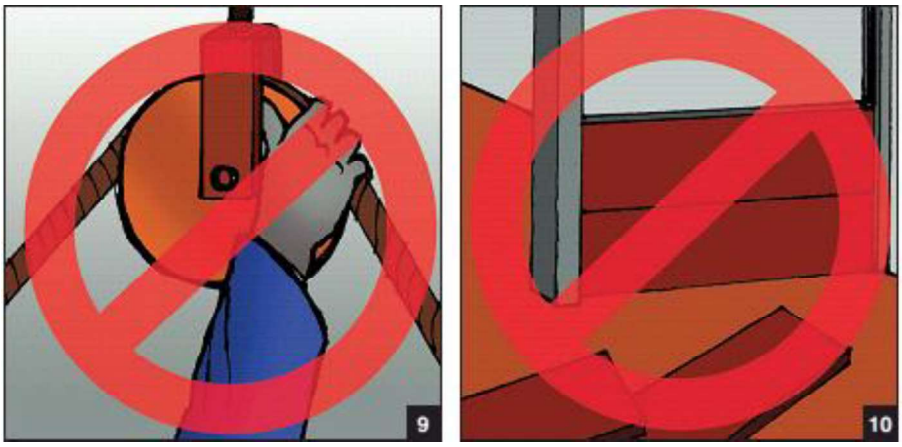
There are a number of further hazards that are related to work with fish and the gear we use to work with fish.

The first things to remember are:



1. Always wear protective clothing in work areas.
2. Always wear personal floatation equipment on board.
3. Rigging gear is often tightly strained as it takes on a load. Keep this equipment well maintained and safe. This gear is often exposed to the adverse elements at sea so will deteriorate. It is also often close to work areas and if it gives way people can get hurt.
4. Do not wear rings or any other jewelry when you handle nets or other fishing gear.
5. Stand clear of running warps and wires so that the vessel's motion does not throw you onto these wires and ropes.
6. Never stand in a bight of rope or wire. It could tighten suddenly and cause a serious injury.

General Continued



7. Be careful where you put your feet, especially where wires, ropes or nets are moving along the deck.
8. Don't stand on parts of the gear lying on the deck when the remaining part is still in the water.
9. Use the correct tool to clear a line from the sheave of a block. Don't risk crushing your fingers.
10. Make sure shelving and staging in fish rooms is safe. Pond boards should be piled properly in the fish hold or on deck.
11. If you are not required on the working deck keep clear.
12. Watch your head. Don't stand under a load, or in areas where overhead equipment may swing and cause serious injury.
13. Keep your hard hat on at all times.
14. Make sure there is good communication between the winch operator and the person driving the boat.

General Continued

15. Fish leave oils on the deck where they have laid. Wash down decks once fish have been cleared off!
16. When you handle a large fish share the load with other crew when transferring it or lifting. Minimise the strain on your body by adjusting your position and bending your knees.
17. Install guardrails where practical around processing and work areas to allow crew to brace themselves against vessel roll.
18. Always place cargo on timber to allow drainage underneath.
19. Tie all loads on deck, or in the hold, down securely.
20. Stow heavy gear in accessible area so minimal twisting is needed, or strain on the body (particularly the back), to access it.
21. Stay fit. Fishing is a physical job.
22. Do stretches before you start work.

Recovery of Foul/Snagged Gear

When a net or a line snags on a rocky bottom, a small fishing vessel is in an extremely dangerous situation.

- Its power has been eliminated by being held fast by the line or warp.
- Its maneuverability has been reduced because it is held in position by the anchored line or warp.
- Its floatation qualities have been reduced because it is held down by the anchored line and not able to rise with the swell.
- Its stability has been affected because of external force acts on the boat every time the line or warp goes taut.

In such a state the vessel is extremely vulnerable to the elements so action needs to be taken quickly and thoughtfully. A snag should be regarded as one of the most dangerous situations fishermen will find themselves in.
Gear can quickly break in such conditions. Extra load is placed on surviving lines and equipment. The crews on deck are also vulnerable.

Never underestimate the immediate hazards associated with gear becoming snagged.

Reduce power immediately, in a controlled manner. This will reduce the risk of being dragged astern by the snagged net and therefor reduce the risk of taking on seawater over the stern.
Then, decide... Is it safe to attempt to free the gear?
The weather and sea conditions will be the main factors that influence this decision. If the weather is rough or there is a large swell, it is very dangerous to keep the vessel attached to the snagged gear.

Check the chart to see if there is a known hazard (i.e. wreck or pinnacle) in the position.
Remember that maneuverability will be severely reduced. There is also a significant risk of fouling the rudder or propeller because

- Headway is reduced because of the snag
- The boat is tossed about by rough seas or a large swell.

If the vessel is snagged and stuck fast, be aware of the danger that she will go down in the stern. If this happens the vessel will most likely take on some water. This could escalate the situation into a catastrophe.
Close hatches and clip on.
You may have to release the warps or lines to release the vessel. If possible, attach a float to the ends. This will help you to recover of the gear at a later stage.

Recovering Snagged/Foul Gear Continued

When attempting to recover the gear, try to make the lifting point to as low as possible. The extra load on the upper derrick, gantry or fantail where the trawl blocks normally are will affect the center of gravity of the vessel and affect stability. The lifting points should be as near to the center of the vessel as possible and remain at the stern.
To avoid cross-overs the recovery is normally attempted straight above the snagged gear. Keep a close eye on the vessel's trim and heel. Keep personnel away from the lines and warps as they will be under extreme loads.
If this doesn't work, you may wish to try and to clear the snag from the opposite direction.
Consider radioing for assistance from a bigger vessel. Yes j there will be a cost, but remember the cost of losing your vessel!
Your vessel should have an axe, large bolt cutters or some other way to cut the lines or warps in an emergency.

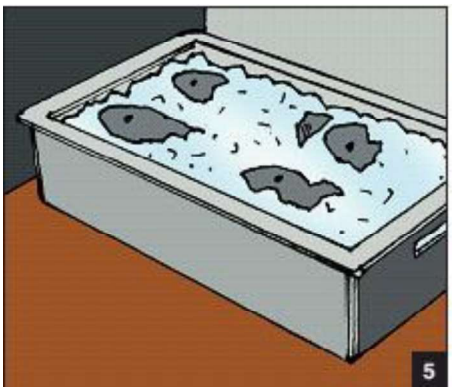
Fish and Ice Handling

There are specific hazards caused by processing, storage, general handling of fish and using ice.
Using and handling ice:
You must take care as you prepare for, take, and stow ice. Take special care if you are taking ice from a wharf ice plant that you must operate yourself.
Most ice plants rely on an auger system to convey ice from the ice plant bunker to the vessel by way of a gravity chute. A common hazard is the 'bridge' of ice that forms immediately over the auger. The ice bridge results in a cavity forming over the auger, and this stops ice from reaching the chute. The ice bridge has to be broken before you can continue the ice transfer operation. This is often done by the plant operator, who climbs into the ice bunker to break up the bridge with an ice shovel.
If you have to do this, turn the auger off and isolate the electric system. People have been seriously injured and killed when the ice collapsed under them, causing them to fall into the moving auger.
1. If you have to break ice bridging in an ice plant ensure that the plant machinery and augers are electrically isolated and that the augers are not moving.
2. Only enter the ice plant bunker after checking that the plant is not operating. Make sure that someone else knows what you are doing and is close by to help you if needed, or in the event of an accident.
3. When receiving ice from a gravity feed chute into the hold, wear appropriate thermal protective (warm) clothing, ear protection and hard hat.
4. Ensure that gravity feed ice is adequately pounded to prevent possible free surface effect if the bulk ice should move at sea.

Fish processing and storage

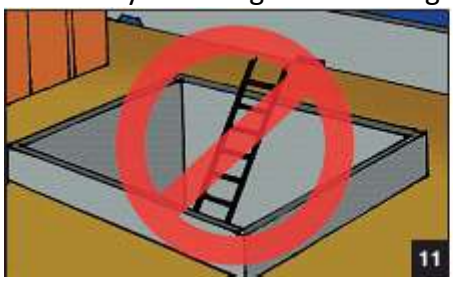
5. In gutting, washing and stowing the catch in ice, fishermen should be familiar with the proper handling of different species of fish to avoid hand injuries from teeth or sharp spines of certain species.

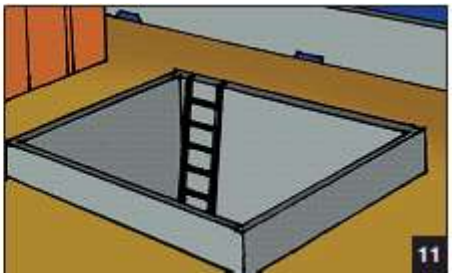
6. When handling fish gloves should be worn. These should be adequate to provide protection against spikes and scratches. Fish picks should be used as much as possible.



7. Cuts and scratches from fish can become very poisonous very quickly.
8. Treat any wound from fish spikes and teeth etc. IMMEDIATELY. Clean the wound and use an antiseptic cream on it. Keep covered and dry. Keep a close eye on these injuries and if swelling and pain persist call for medical assistance without delay.
8. Keep fish chilled or frozen as much as possible. Keep holds clean of decomposing fish. Wet fish kept in storage consume oxygen and can produce poisonous gases as they spoil. In an enclosed space the atmosphere could eventually become so polluted and deficient in oxygen that it could cause illness or even death to someone breathing it.
9. Do not lift bins of fish while holding a knife.
10. When stacking fish bins in the hold make sure
    - The load is distributed evenly.
    - On larger vessel where it is practical keep an access to the bilge wells. On smaller vessel attempt to stack the bins over the bilge well so that if there is a problem you only have to remove a couple of bins to get at the pump rather than half the load.

11. Use ladders that attach securely to the hold.
12. Regularly hose down decks and other areas to remove fish slime.
13. Develop safe work procedures for chucking fish. Good posture and efficient organization of work areas can help prevent back, neck, and arm strains and other injuries caused by throwing and handling fish.





14. Never exceed your safe working load - the amount of weight that your boom, rigging, shackles, blocks, and other equipment can handle safely. Too much strain can cause equipment failure, which can lead to accidents and injury.
15. If fish are loaded on deck, make sure the load is secured.

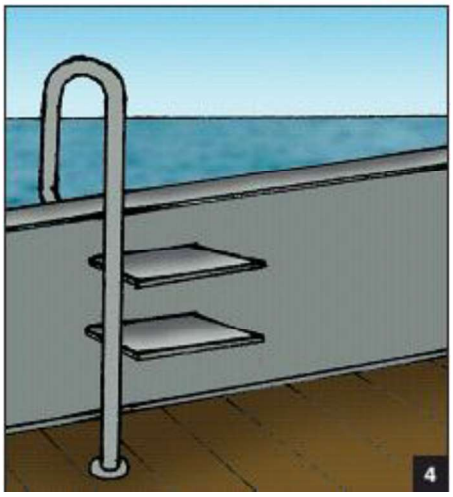
Fish and Ice Handling Continued

16. When processing fish, make sure tables are at a good height to save bending.
    - Work in front of body so there is no need to twist.
    - Keep knives shape.
    - Change knives regularly so your grip changes.
    - Try to keep your wrists straight while working
    - Keep fish in easy reach. Keep fish in easy reach.

DO NOT OVERLOAD THE VESSEL!

Embarking and Disembarking

Getting on and off a vessel is awkward. The vessel size and the tidal drop can sometimes make it difficult to use a gangway.
Sometimes crew have to step onto the vessel direct from the wharf side. It is important that embarking and disembarking is done in the safest manner.
Don't take risks!
1. Set mooring lines so vessel lays parallel to the wharf and doesn't swing too much.
2. Use a gangway whenever possible.
3. Secure ladders or gangways to the vessel.
4. Build permanent hand rails/ steps on side of vessel if practical.



Ropes and Mooring Lines

Ropes securing a load need to be safe.
- Use the appropriate strength rope for the load.
- If the load is dangerous, heavy or expensive - double up!
- Stow ropes and lines up off the deck (if practical)
- Stow ropes and lines in such a way that if they are wet, they will dry.
- Regularly check ropes for fraying or cuts and discard if found to be significant.
- Don't bend large ropes too tightly.
- Never stand where a recoiling rope (springer) may recoil back at you.

Hazardous Substances

Hazardous substances have dangerous properties. A substance is hazardous if has one or more of these properties:

- Explosive
- Flammable
- Oxidising
- Corrosive
- Toxic to people
- Eco toxic (toxic to the environment or to animals and plants)

Any hazardous substances on board the vessel:

- Must be kept in proper container.
- Care taken to ensure labels don't get damaged.
- Cleaned up quickly if any spills occur
- Stowed appropriately in secure, dry but ventilated location
- Disposed of containers and contents safely
- Not kept beside any other hazards that could cause explosion, etc.

Slippery Deck Surface

Maintaining the anti-skid properties of the deck coating and keeping it free of hazards is important!

1. Maintain the deck coating so it is `anti-skid'

Crew need to be sure of their footing while working on deck.
Make sure a good dose of sand or grit is thrown on top of the mast coat of paint, or some other grip tread is applied to the deck.

2. Replace deck gratings

If maintenance work has required the deck plates or gratings to be removed j replace them as soon as possible. Fasten them properly so the edges and corners don't rise up above the deck level.

Ventilation

Small vessels often have small, confined spaces. The air in these spaces can become very stagnant over a short period of time. This can be a health risk to crew working and living in these spaces.

Helpful tips

1. Regularly clean ventilation fans, grills and filters if fitted. These all trap dirt. The dirt can become a fire risk and also reduce the quality and amount of air being supplied. Dirt can also shorten the life of fan motors.

2. Regularly check ventilation gaps and grills. If there are small ventilation gaps or grills at the bottom of the door, check them regularly to make they are clear.

3. Regularly maintain shutters and flaps. Remember in the case of a fire the compartment must be able to be closed down. Regularly grease these and move them through their arc-of-travel.

Lighting

1. Lighting should be fit for purpose.

2. Change light bulbs, lamps and tubes as soon as they extinguish!

3. Keep diffusers and reflectors on light fittings clean.

4. Replace switches, diffusers and reflectors if they get damaged.

5. Regularly test emergency lighting.

6. Regularly check the battery supplying the emergency lighting. Get the local battery shop to check them regularly.

7. Lighting should allow people to move around the vessel with ease and do their work safely. In the accommodation, lighting should allow people to read.

Night lighting at sea

At night, night-vision is of great importance to crew who are moving around on deck or on watch in the bridge. If you are surrounded by white light your night-vision is seriously impaired!

Follow these rules to improve night vision:

1. Keep white lighting at sea down to the minimum. You will have no chance of spotting an object ahead of you on a dark night if you are surrounded by bright white light.

2. In the bridge of any vessel night lighting (blue or red) should be used to work with logs and charts.

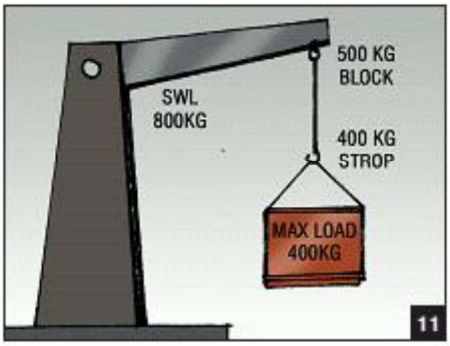
3. Do not use white deck lighting forward of the bridge

Safe Use of Knives

Knives are used extensively throughout the fishing industry. They are used to open packaging, for work on lines and nets as well as in the processing of fish.
Knives are extremely hazardous items, particularly when they are used on an unstable platform such as a boat.

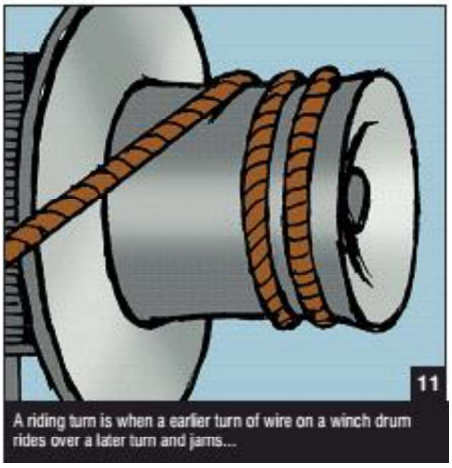
Action Points

1. Knives must be handled with care at all times.
2. When using a knife concentrate on what you are doing!
3. Select the correct knife for the work you are undertaking.
4. Don't leave knives lying around in work areas. Stow them in a sheath or rack when you are not using them.
5. Take care when passing knives to another crew-member.
6. Hold the knife by the handle and point it towards the deck when you walk or move. Whenever possible put it in the sheath before moving.
7. Clean knives separately from other items.
8. Always stow your knife if you need your hands for some other task (even when it's only one hand)!
9. Knife handles should be secure and fixed rigidly to the blade. If the handle is loose tighten it, or replace the knife.
10. Keep the handles dry and clear of grease and oils. Wipe them regularly with a rag.
11. Keep the knife sharp.



Safe Use of Knives Continued

12. When using a knife the action should always be away from your body and your other hand. The knife blade should be angled away from the work and so away from the fingers. Keep out of range of other crew.
13. Don't attempt to catch a falling knife. Leave it to fall. Then you can pick it up safely and clean it.
14. Do not stab knife into the chopping board as your hand may slip down onto the blade.
15. When processing fish use protective gloves.



Lifting Gear Safely

There are a large number of lines, blocks, winches, haulers etc, used on fishing boats. All of these take a substantial load at some time during fishing operations.
It is important that these are used safely and kept well maintained so they don't become hazardous.

General Lifting

1. Regularly examine all gear.
2. Use certified gear only.
3. Get into the habit of checking gear before you use it.
4. Keep blocks and swivels etc, well-greased and maintained.

5. Remember a load on a crane or davit affects stability. The vessel will heel when a crane is used.
6. Even when the load itself is low the force is actually acting at the point from where the wire is suspended (normally through a block) on the boom so the load's effect on the vessel will be greater than you may think.
7. If alongside ensure your fore and aft lines are tight while 'breast' lines should have some slack in them.
8. Use competent, trained and experienced crane or winch drivers.
9. Always attach load control lines and guys.
10. Don't leave loads suspended.
11. Make sure you know the Safe Working Load of the equipment you are using. Remember the SWL is that of the weakest component of the lifting system!
12. Make sure all people are wearing safety hats!

Winch Safety

13. Keep these systems well maintained and get into the habit of checking the controls before you put a load on the winch.
14. Make sure the handlers know the position of emergency stops.
15. Pass only 3 turns around a surge drum.
16. Keep your hands well clear of drum. Pay about a meter from the drum.
17. Avoid riding turns.
18. If anything obstructs your view of the load stop the movement.
19. Always leave a minimum of two turns on the drum.
20. Avoid using a bar to guide wire onto drum where possible. If necessary make sure there is a second person operating the winch controls.

<u>Line handling</u>

Check lines regularly for broken strands or fraying.

21. Twist open stands to check for internal wear.
22. Avoid kinks.
23. Try not to bend wire through a sharp angle.
24. Reverse ends of wire where possible to avoid uneven wear.

25. Listen to sounds from wire under tension during normal working so you will recognise unfamiliar sounds that may warn of a potential failure.
26. Don’t overload lines and avoid putting a sudden (shock) load on.
27. Rollers and sheaves of blocks should be free to rotate. Keep them greased and their bearings or bushes in good shape.
28. Avoid using synthetic lines on surge drums.

4.2 Safe Operating Conditions

Weather Conditions

Smaller fishing vessels are put in danger when caught in extremely bad weather. A large proportion of accidents involving small vessels are weather related. Bad weather makes the work environment onboard the vessel extremely hazardous. It also places a lot of strain on the vessel's structure and equipment.

Marine weather information

Marine weather forecasts state what the weather is expected to do. This is done using series of measures as follows:

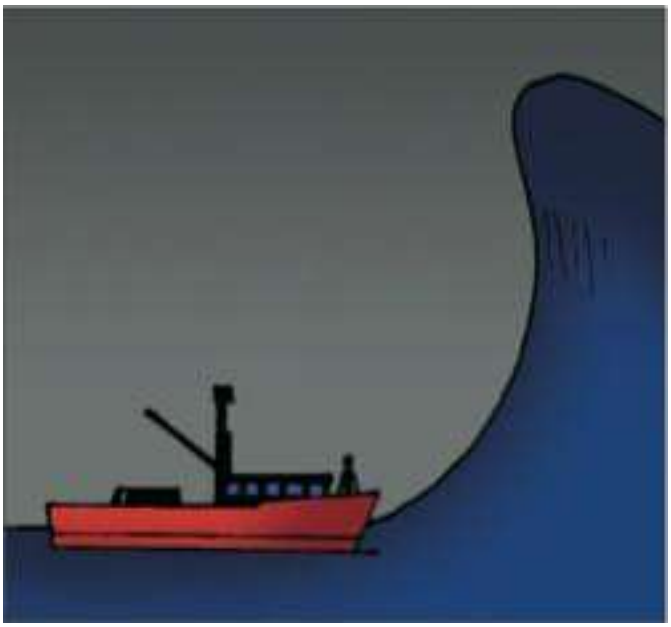
Wave height
Wave height used in forecasts refers to the waves that are generated by the wind in the area that is being reported. The measures used are:

Calm approx. wind wave height 0.1 m
Smooth approx. wind wave height 0.5 m
Slight approx. wind wave height 1.0 m
Moderate approx. wind wave height 2.0 m
Rough approx. wind wave height 3.0 m
Very Rough approx. wind wave height 4.5 m
High approx. wind wave height 6.5 m
Very High approx. wind wave height 8.5 m
Phenomenal approx. wind wave height 11.0 m

Swell
Swell is also forecast. Swell comes from either a distant disturbance, such as a cyclone or depression or the swell develops from wind waves that have been blowing from the same direction for a length of time.

Swell height can be given in meters or named as follows: Low Under 2.0 m Moderate 2 - 4 m Heavy Over 4 m

Average Sea and Swell
The heights of both sea and swell refer to the average from the trough to the crest of the highest one third of waves present. Occasional waves may reach much higher; about one in a hundred is likely to reach half as high again, and one in a thousand twice the quoted average.



Wind Speed
Wind Speed is given in knots and the direction given is where the wind comes from. Warnings are issued as follows:

Wind: The wind is expected to exceed 33 knots (either steady or in gusts)
Gale: Expect to about 45 knots as a steady wind, gusts can be 50% higher
Storm: To about 60 knots as a steady wind, gusts can be 50% higher
Tropical: Cyclone is over 60 knots but is only used for 'hurricane' type tropical storms

Visibility Distance
Fog: Less than 1.0 nautical miles
Poor: 1 - 3 nautical miles
Fair: 3 - 6 nautical miles
Good: Over 6 nautical miles

Average visibility in New Zealand is about 15 nautical miles

Sources of weather information
The two easiest ways of getting a marine forecast are by VHF Radio and telephone.

VHF Radio
Marine weather forecasts are announced on Channel 16 at 0533, 0733, 1033, 1333, 1733 and 2133 hours.

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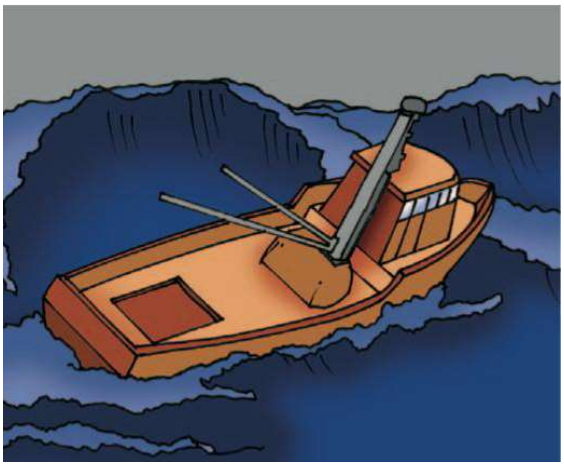
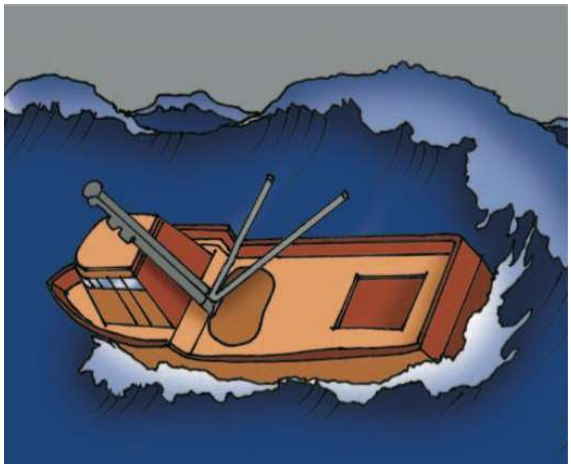
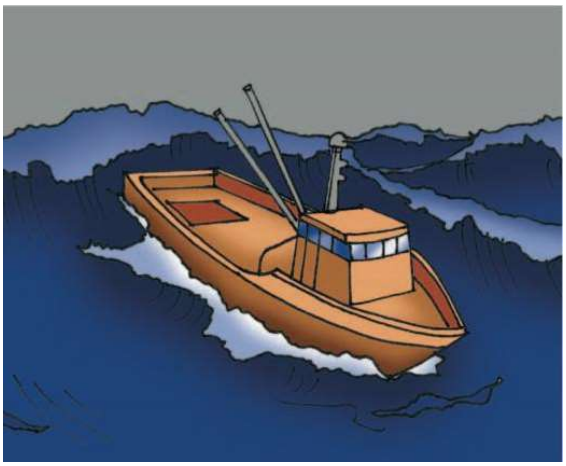
Dangers in extreme seas

Severe seas of any kind are dangerous if you are not prepared. You should take special care in the following situations.

1. In beam seas, excessive roll can cause items on deck to shift, creating a dangerous list. This could cause the vessel to capsize. Strong breaking waves could also capsize the vessel.
2. In following seas, a vessel may lose stability on a wave crest. If a wave crest overtakes the vessel, broaching may occur.
3. In quartering seas, the problems of beam and following seas are combined. Quartering seas represent the most dangerous situation in severe weather.



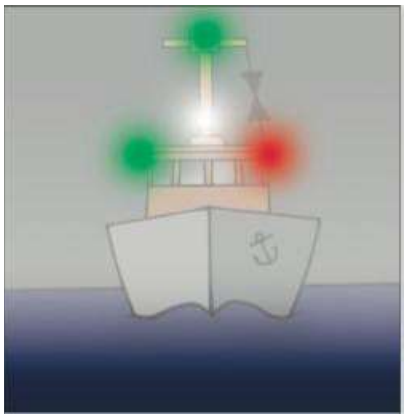




Fog

When encountering fog, and before you enter it, you must:

- Visually check radar
- Reduce speed (so you can stop in half the visible distance is a handy rule of thumb)
- Turn navigation lights on



Section 4.3 Passenger Procedures

Count on / off

- The skipper shall count all passengers before boarding, and verify the count against the booking taken prior to departure.
- If there is a discrepancy, notify the lead group personnel
- The skipper will report the actual POB aboard to the designated SAR before leaving port.
- After any activity involving leaving the vessel during a voyage, passengers will be re-counted before the vessel departs the area.
- Upon disembarkation, the skipper will perform a headcount as they depart the vessel.
- If there is a discrepancy, the skipper will initiate appropriate action to verify the discrepancy (such as an all-spaces search aboard), then initiate Search and Rescue procedures if necessary.

Passenger Access

Before passengers are permitted to embark or disembark the vessel:

- The vessel must be made secure in the most effective way practicable.
- Clear instruction must be given.
- Assistance must be offered where required.
- The action must be abandoned if any concerns for safety are present.

Passenger/Crew Safety Instruction

Unless the skipper deems some of the following unnecessary (due to presence of experienced crew), this briefing shall be before departure and shall include:

- hazard identification (such as slipping, tripping, entanglement or machinery hazards)
- off-limits areas
- locations and use of first aid and other safety equipment (including flares and EPIRB)
- location of personal floatation devices
- Draw attention to illustrated safety information and advise assembly point
- Launch of the life raft and abandon ship procedure
- Basic vessel handling and communications in the event of incapacitation of the skipper
- Pollution regulations summary

Incapacitated skipper briefing

- If there is no crew aboard for a voyage, depending on circumstances the skipper shall either give a basic briefing on how to stop the vessel and call for help, or
- Designate a suitably experienced passenger to take control in the event of skipper incapacitation, and briefly instruct that passenger on the necessary systems to enable a return to shore or call for help.

Life saving devices

As the vessel is full time equipped with an 8-man life raft only, a secondary 12-man raft will be hired from Southern Ocean Safety in Bluff, prior to commencing any passenger trips where more than 8 people are onboard the vessel.

The vessel has an existing cradle for the temporary raft which is located on the wheelhouse roof.

Section 4.4 Protection of the Marine Environment

The following procedures will apply at all times on board the F.V Gravity for the protection of the marine environment. The skipper will enforce the policies and training will be provided for crew and passengers.

Refueling

The vessel is fitted with an aluminum box around the fuel breather and fuel cap so that if there is any spillage it is contained within the aluminum box. Absorbent cloths are placed inside the box so any spillage is absorbed immediately. Other safety measures include:

1. When refueling the skipper or crewmember designated by the skipper, will keep a constant watch.
2. Everyone on board will be made aware that the vessel is fuelling.
3. Everyone on board will be made aware that there can be NO SMOKING during the fuelling operation.
4. Keep absorbent cloths near during the operation.
5. If a large spill occurs, record incident (cause and action taken) in the log and advise MNZ as soon as practicable.

Oil & Oily Waste

Oily rags and other oiled solid waste must not be discharged anywhere with New Zealand waters.

Should a large spill of fuel or oil occur at sea, or one be located at sea from another source, then:

- Radio to shore, advise details and position of spill and advise MNZ Oil Pollution Unit
- Standby spill until assistance arrives
- Record details, if known, in the vessels log

Sewage Discharge

Untreated sewage will not be discharged within 500 meters from land, or in water less than 5 meters deep.

Garbage Discharge

All rubbish and waste will be placed in black rubbish disposal bags and discarded into the skips provided at the end of the number one wharf at Southport, commencing each trip.

Products Used

Eco sensitive products will be used onboard the vessel, provided by reputable manufacturers.

Section 4.5 Emergency Preparedness

There is no harsher natural environment than the sea. This fact makes it one of the most physically demanding and dangerous occupations.
This section covers the emergency procedures and emergency equipment that will be onboard vessel.

The section covers what to do to prevent emergencies:

- If there is a fire on board
- When someone falls overboard
- When someone is injured on board
- If there is a flood on board
- If you have to abandon ship
- If you have to make a MAYDAY call

Preventing emergencies
Many accidents and injuries can be avoided, or their effects reduced through the professionalism of the vessel's management and crew.

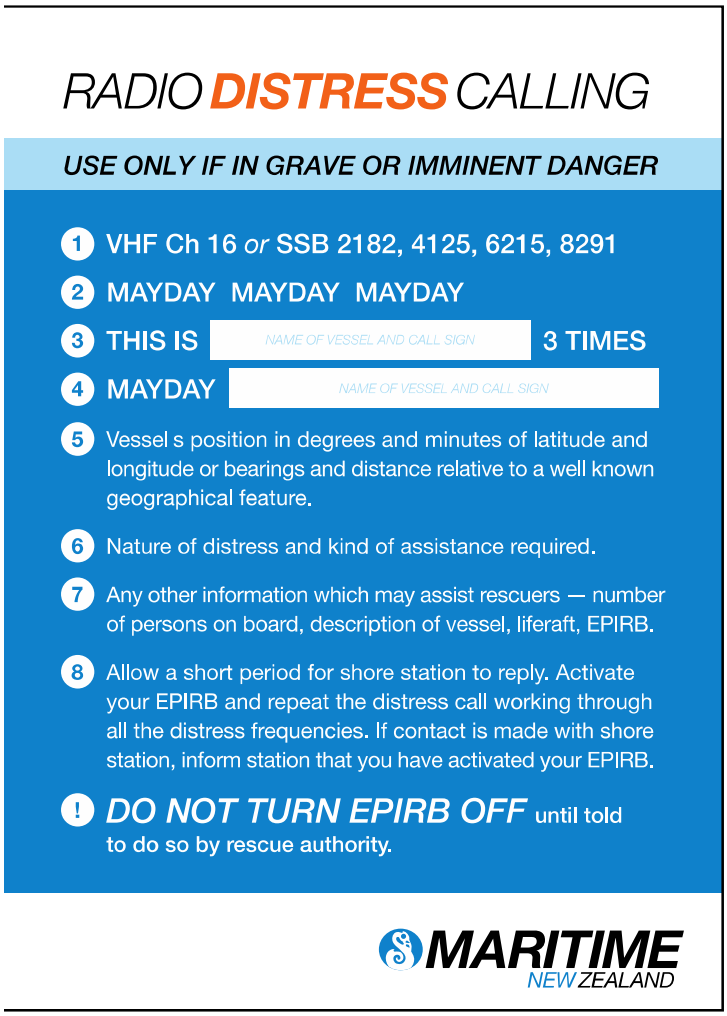
Everyone should do what they can to:

- Keep the vessel in good working condition.
- Keep things on deck and in the wheelhouse tidy
- Secure loose items - Stow things away
- Make sure safety gear is easy to get at, and in excellent condition.
- Report any problems or gear defects to the skipper

Assembly point
An assembly point is a place that crew and passengers know to go to when an alarm is raised and then carry out the action required of them. The assembly point sign located at the stern of the vessel identifies the assembly point on the vessel.

Drills practice
Regular emergency drills will help all crewmembers to know what to do if something goes wrong.
A different practice drill will be performed monthly eg fire for the current month and MOB for the following month. The skipper will conduct the practice and include all crew and will be documented in the drills practice register in the forms and registers section of the maritime transport operator plan.

SAR Emergency Contacts and procedure



You will find this notice near the vessels VHF radio. A MAYDAY message with this information initiates a response from the Rescue Coordination Centre. They can then contact a range of organisations to get you the help you need.

Name	Position	Contact
Merri Leask	Designated SAR	03 212 7281 or VHF61
Maureen Jones	VHF marine shore operator	03 219 1242 or VHF65
Carol Brown	Fiordland radio operator	03 249 9050 or VHF66

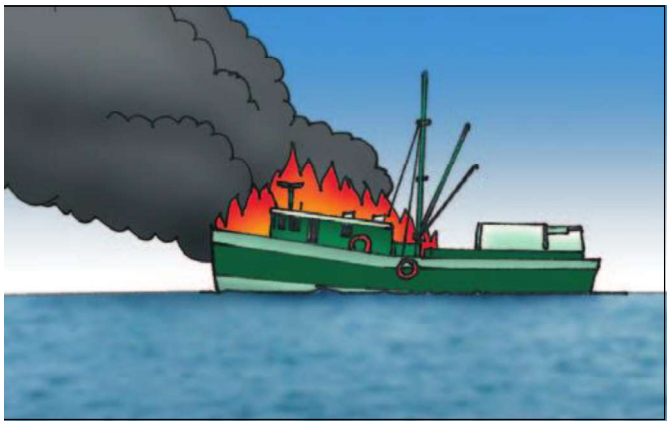
Section 4.6 Emergency Responses

Fire

Fire on board a vessel at sea (or alongside) is extremely serious. Fire can spread quickly and smoke becomes very intense very quickly. This makes fire fighting harder.

Fires can start anywhere on a vessel. You can't share a small vessel with a large fire!

1. Raise alarm. Shout "FIRE"



2. Attempt to put out fire using a portable fire extinguisher.

3. Stop all ventilation.

If unsuccessful:

1. Get out and close up the compartment.

2. Shut off all power and fuel supplies to compartment on fire (if possible).

3. Close all openings, doors and vents to the compartment. Keep an eye out for smoke coming out and block holes so fire is starved of oxygen.

4. Protect the liferaft from the fire.

5. Dampen hot spots on external bulkheads and on the deck above the compartment on fire to stop the spread. Use water sparingly to avoid creating a stability problem due to free surface water.

6. Prepare to abandon ship.

Fire Fighting

Class A	Class B	Class C	Class E	Class F
Wood Paper Plastics	Flammable and combust-ible liquids	Flammable gases	Electrically energized equipment	Cooking oils and fats

Foam Extinguishers – Class A and Class B Fires
Dry Powder Extinguishers – Class B, C, E and F Fires

Man Overboard

A crewmember can fall into the sea at any time while working on a fishing vessel - not only during rough weather.

The southern ocean waters are cold. A crewmember in the water can get hypothermia within minutes.

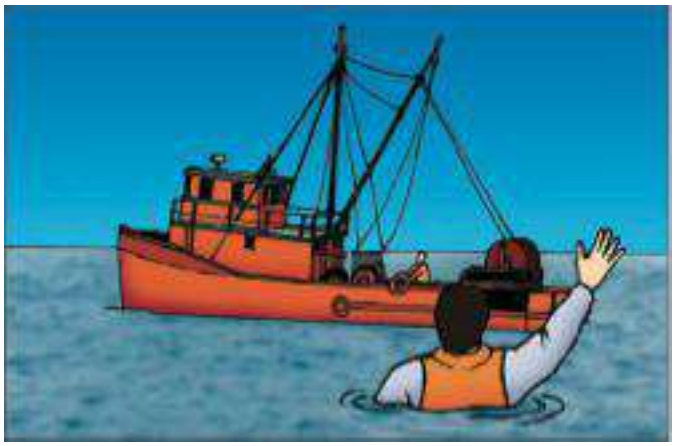
The person entering the water may have been unconscious when they fell in, and might not be able to keep their head above the water. If they are not wearing a floatation aid, they may sink quickly. So it is important to recover the person as fast as you can!

What to do if you hear or see someone fall overboard

- Immediately throw a floatation device into the water. The best thing to use is a life-ring. If you don't have a life ring use a lifejacket or anything else within reach that will assist the person stay afloat. At night throw in a light or reflective item as well.
- Raise alarm! Yell "Man overboard"
- Keep pointing at the person in the water.
- Keep an eye on the flotation device and the person in the water and guide the vessel back to them without taking your eyes off them
- Carefully maneuver the vessel alongside of the person.
- Recover the person being careful not to be pulled into the water yourself.
- Get person warm, and conduct CPR if required immediately.
- Radio for assistance if required.

What to do if someone is missing

- Mark your position and start retracing your track.
- Raise Mayday call immediately so other vessels in area can assist.



Life rings for the vessel are positioned on fly bridge.

Flooding/Collision

Floods can occur through:

- A collision
- Structural failure.
- A broken service (cooling) pipe
- A damaged hull fitting or gland.

Flooding affects the stability of the vessel. It is important to watch out for accumulation of water and understand the free surface effect of loose water.

When a compartment (eg: Fish hold) has water in it, that water is free to "slop around". The surface of the water is called a "free surface", When this water moves to one side, the weight of it moving will oppose the motion of the vessel and can cause it to heal over.

What to do when flooding occurs:

- Raise alarm!
- Start pumps.
- If the skipper calls that assistance is required send a radio message to nearby vessels or ashore. Things may deteriorate quickly once you are assisting and you may not get another chance to get a message off.
- Turn vessel towards shallower water or port. Consider beaching the vessel.
- Attempt to stem the flow of water by shutting valves, or blocking hole.
- Look for holes leaking into adjoining compartments.
- Prepare to abandon ship. Remain on the vessel for as long as it is safe to do so!

Abandon Ship

An emergency situation may be so bad that it is necessary to abandon the vessel in order to save the life of those on board. It is often a difficult decision that should not be made too early or left too late.

Someone who gets into the liferaft relatively dry, with warm clothing, food and water has a greater chance of survival. If you are dealing with an emergency (fire or flooding) and it seems likely that you will have to abandon ship.

The order for "Abandon ship" must only be given by the skipper.

If there is time:

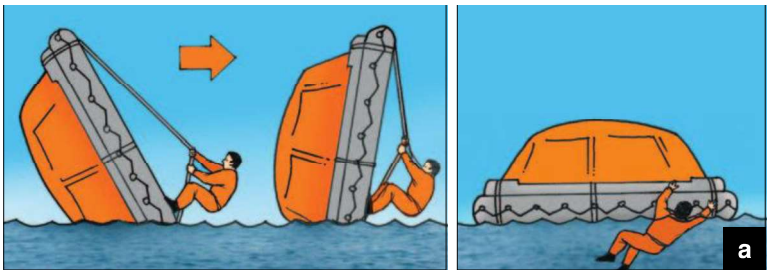
- Radio a Mayday call giving vessels position.
- Collect warm clothing & blankets.
- If possible activate EPIRB and tie to raft or to your person.
- Collect food and water.
- Gather extra flares.
- Launch liferaft and use Painter line to activate inflation of the raft and pull it to the side of the vessel.

Once everyone is in the raft get it clear of the vessel

- Try to stay as dry as you can when you get into the raft. If you are dry, this helps to prevent the on set of hypothermia

Once the raft has been cleared as much as possible of water:

- Close all liferaft openings to reduce chill.
- Stream sea anchor to keep raft in vicinity of last known position of vessel.
- If the vessel is still afloat keep clear in case it tips over or a mast falls.
- If unable to get into the raft dry squeeze the water out of your clothing and bail out as much water as soon as you can.



a. To right a capsized liferaft, grab the righting strip and pull. When it starts to right, you have to spring backward to avoid having the liferaft land on top of you

Overdue Vessel

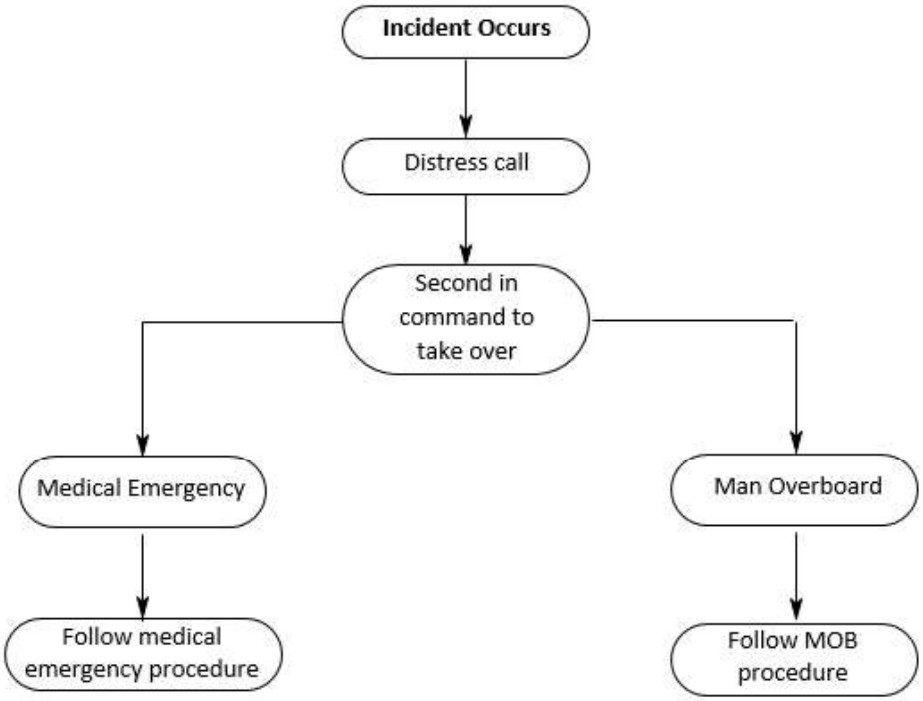
In the event that the vessel does not return or report to shore within the designated time frame, action must be taken. If contact has not been made to the nominated SAR, the SAR must:

- Attempt to make contact.
- If contact was made with the vessel identify any problems that may have occurred or if there is an emergency.
- If contact is not made with the overdue vessel then a report must be made to RCCNZ.

During trips away the skipper and crew on board may also contact family members. If contact has not been made for a duration of time, the person will make contact with the nominated SAR and advise them of the concern.

Loss Of Skipper

In the event that the skipper is incapacitated, the second in command is to take over and follow the relevant procedure.



Medical Emergency

First Aid refers to the assistance given when a person becomes ill or injured.

Key action point when an injury occurs = RAISE ALARM!

Unconscious
1. Secure the scene. Make sure it is safe for you to attempt to save the victims life. Remember A,B,C!
2. Turn the patient on his side and clear his **A**irway.
3. Check that the patient is **B**reathing and conduct Rescue Breathing if required.
4. Check **C**irculation (Check pulse) and conduct CPR if required.

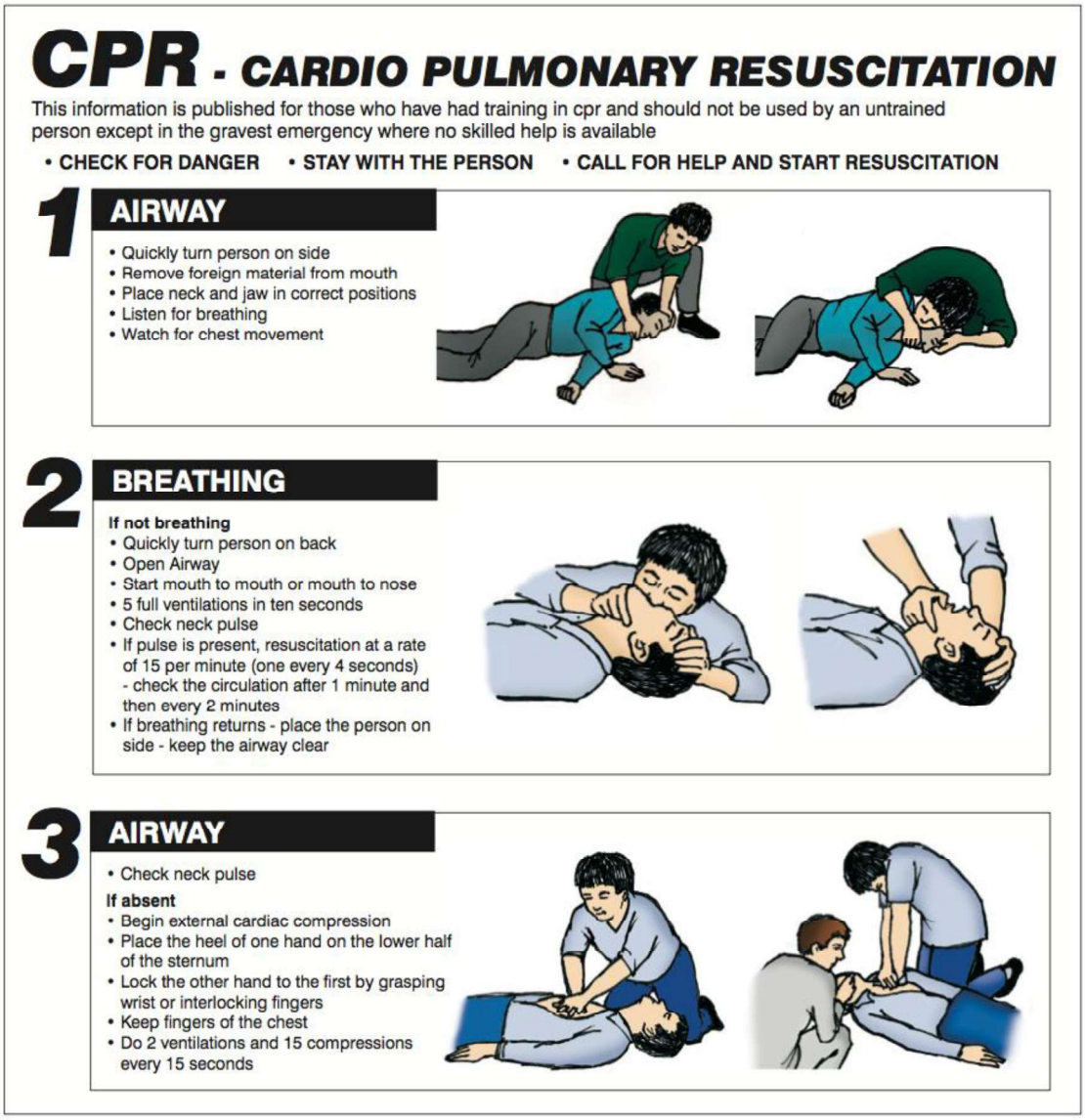
Badly Cut
1. Stem flow of blood by wrapping with any clean bandage material.
2. If an amputation has occurred collect severed section in a clean plastic bag and place on ice.
3. Treat for shock.

Patient Burnt
1. Immerse burnt part of body in cold, fresh water.
2. Keep immersed in cold water for at least 20 mins.
3. Do not put any medication on burns!
4. Wrap in sterile bandage.

Hypothermia
If a patient has been in the water they will most likely experience hypothermia due to the temperature of New Zealand waters. In which case you need to;
1. Get the patient into a sheltered position
2. Remove wet clothing and put dry clothes or blankets on them
3. Get the patient warm and stabilize their temperature
4. Give them warm or high-energy food.

Shock
If a patient has suffered a moderate or major injury they will suffer from shock. Treat them by doing the following:
1. Lay the patient on their back with feet at slightly higher level than their head.
2. Stay with the patient and keep reassuring them.
3. Maintain their body temperature by keeping them warm. Do not over-heat

Medical Assistance is available on VHF Channel 16.



Pollution Procedure

Should a large spill of fuel or oil occur at sea, or one is located while at sea from another source, then:

1. Report to RCCNZ via channel 16 or on 0508472269, advise details and position of spill and request assistance from MNZ Oil Pollution Unit.
2. Standby spill until assistance arrives
3. Record details, if known, and action in the accident/incident register

For all other waste and sewage, follow the protection of the marine environment plan in section 4.4 of this plan.

Section 5. Audits by Maritime New Zealand

Date of audit	Name of auditor	Comments

Section 6. Reviews and changes to the operator plan

Date	Approved by	Comments/actions

CATEGORY B – Vessel Specific Information

F.V GRAVITY
SURVEY PLAN

MNZ Number: 135429
Name of recognized Surveyor: Maritime Management Services
Date Approved by Surveyor:
Surveyors Signature:

Ship details:

Vessel name:	F.V Gravity
MNZ#	135429
Port of registry:	BLUFF
Registry:	#901245
Call sign:	ZMG3045
Fishing number:	9792246
Primary port:	Bluff
Hull construction:	Aluminum
Engine power:	(kW) 603
Drive type:	shaft driven 3inch 316 stainless.
Number of shafts:	1
Length overall:	16.76m
Beam & draft:	4.9m beam draft 1.2
Gross tonnage:	22 tons
Capacity of lifting gear:	2.5 tons
Date built:	1991 Image Boat Builders AUS.

Scope of Certification

Vessel categories:	Fishing and chartering
Minimum crew:	1
Maximum persons:	22
Activities engaged in:	Pot fishing, gill netting, trolling, drop lining, and passenger vessel
Operating limits:	NZ Coastal 12 mile limit – South Island
Special conditions/limitations:	N/A

Certificates, Surveys and Exemptions

Certificates and exemptions required for FV Gravity	Certificate number	: Date
Certificate of survey (fit for purpose)		Sep 2019
Out of water hull inspection and survey		Jul2019
Steering and propulsion survey		Jul2019
Compass certificate		Jan 2020
Inflatable life raft certificate	NPR271	Jun2019
Fire extinguisher annual certificate of survey		Jun2019
EPIRB certificate of inspection		Jun2019
Radio certificate of inspection		Jun2019

Survey Items Schedule

		Mid-term			Renewal
Calendar Year	2016	2017	2018	2019	2020
Age of vessel	27	28	29	30	31

Survey Item						
Hull Exterior	Shaft	Due Nov2020				
	Propellers, bearings, rudder, etc.		Due Sep			Due Sep
Hull Interior	Corrosion, steering gear, bulkheads, etc.		Due Sep			Due Sep
Engine Room	Overboard discharge, sea valves, hydraulics, etc.		Due Sep			Due Sep
Safety Equipment	Fire Extinguishers annual inspection and service	Due Jan	Due Jan	Due Jan	Due Jan	Due Jan
	Life Raft annual inspection service	Due Nov	Due Nov	Due Nov	Due Nov	Due Nov
	EPIRB inspection and service				Due Jan	
Lifesaving Equipment	Lifejackets, life rings/buoys etc.		Due Sep			Due Sep
Navigation Equipment	Compass				Due Jan	
	Charts, instruments, radar etc.		Due Sep			Due Sep
General	Log books, ships manual, lines etc.		Due Sep			Due Sep

Key:

Surveyor	
Competent personnel	
Not due for inspection by surveyor (see maintenance plan for owner appropriate)	

History of Survey Plan Amendments:

Amendment date	Amendment description	Name of approving surveyor	Operators signature

F.V Gravity
Maintenance Plan

MNZ number: 135429
Name of recognized surveyor: Maritime Management Services
Date plan agreed to:

Voyage Checks

The following checks will be performed before leaving port and while at sea:

Mechanical:	Visually check oil, water level, pipes and joints, sight glass on fuel tank, gearbox oil, belts and engine mounts
Electrical:	Visually check batteries, warning lamps, nav lights, VHF or SSB radio and bilge pumps
Safety Equipment:	Visually check liferaft, pyrotechnic expiry dates, visual check of EPIRB, fire extinguishers, first aid kit and life jackets
Crew:	Crew inductions and drills completed before and new crew leaves port, drills performed as necessary at sea
Navigation:	Visually check GPS calibration with compass, visually check compass and sounder
General:	Windows are clean for visibility

The following checks will be performed when the vessel is returned to port and shut down:

Engine room:	Visually check main engine for any leaks or wear and tear, spray anti corrosive lubricant on main engine to draw out any moisture accumulated while at sea.
General:	Check compartments for water. General wash down and clean of vessel. Check all equipment and machinery is switched off. Check Bilge float switches are in working order.

Periodical Maintenance Checks

The following information is the planned maintenance for the F.V Gravity. The checks are based on hours of vessel use or in a timely manner. The checks will be monitored and recorded by the online auditing system, Auditz (www.auditz.co.nz). Any unexpected repairs will be created as an entry in the system and

		Frequency
Main engine maintenance for V180TIdoosan diesel marine engine		
Oil and filters changed		200 hours
Fuel filters changed		200 hours
Check fuel lines and flexible hoses		1000 hours
Cooling system:	Change water filter system	500 hours
	Change water additive	150 hours
Visually check water levels in batteries		150 hours
Change air filters		500 hours
Change driving belts		500 hours
Visually check alternator		300 hours
Visually check engine and marine gear mounts		1000 hours
Check and change zinc anodes as required		3 monthly
Check impellor		1000 hours
Steam clean engine		6 monthly
Change fuel injectors		1000 hours
Hull/deck integrity (alloy)		
Internal	Visual check for corrosion	12 monthly
External	Visually check hull, deck and superstructure for corrosion, leaks and damage	12 monthly

	Visually check hatches	12 monthly
	Take off inspection plate and clean	4 yearly
	Replace hull zincs	12 monthly
	Water blast and repaint antifoul	12 monthly
	Buff and clean propeller	12 monthly
Gearbox Maintenance		
Change oil and replace filters		1000 hours
Visually inspect mounts		6 monthly
Steering Equipment Maintenance		
Visually check hydraulic ram		6 monthly
Check rudder stock has adequate packing		12 monthly
Check hydraulic oil levels		3 monthly
Check tiller arm		4 yearly
Anchor winch, chain and connections to anchor		
Re-galvanize chain and anchor		4 yearly
Visually check shackles and replace if needed		4 yearly
Bilge system		
Visually check hoses and connections		500 hours
Full inspection and check of electronic system		12 monthly
Electrical Maintenance		
Full load test and visual check of batteries		12 monthly
Check for replacement of starting bank batteries		12 monthly
Check for replacement of lighting bank		12 montlhy
Diesel stove maintenance		
Clean any loose carbon		3 monthly
Re-season cooktop		3 monthly
Lifting gear/hauler maintenance		

Visually check sheathing and hydraulic hoses and fittings	12 monthly
Visually check hauler block and service as required	6 monthly
Safety Equipment	
Check lights and straps on lifejackets	12 monthly
Check and service fire extinguishers	As per inspection date
Check indicator is green on fire extinguisher	3 monthly
Check expiry dates and replace used items in first aid kit	6 monthly
Check expiry dates of pyrotechnics and replace when necessary	12 monthly
Annual service and replacement of life raft hydrostatic release	As per inspection date
Check and replace life buoy light batteries as necessary	Every 12 months
Radio installation check	As per inspection date
Check compass deviation	4 yearly
Replace EPIRB battery and hydrostatic release unit	As per inspection date
Test and visually check condition of EPIRB	12 monthly
Check emergency contact details are still relevant	12 motnhly

List of shore side maintenance providers and contractors

The following contacts will be contacted for repairs and maintenance as required:

Service	Provider	Name	Number
Welding/fabrication/hydraulics	MacKraft	Peter McKenzie	0274377040
Vessel slipping	Slipway	woody	0274516195
Electronics	Bluff Electrical	Russell Coote	032128822
Marine Electronics	BHM	Steve	032183495
Life raft servicing	Southern Ocean Safety	Steve Sargeant	032128893
Fire extinguisher servicing	Fire Protection	Reginald	0321344198
Diesel mechanic	R G Birch LTD	Rodger	0274364355

Maintenance Log

A record of maintenance will be kept in a log on board the vessel and updated when repairs and maintenance are performed. Periodical checks will record in the log and updated in the Auditz program as soon as practicable.

Record of Maintenance Plan Amendments

Any amendments made to the maintenance plan will be recorded and signed off here:

Amendment date	Amendment description	Operators sign off

Safety Equipment List for F.V Gravity

Date list agreed to:

Navigation equipment

Equipment	Description	Location	Expiry/service date
Compass		Wheelhouse	
GPS/Chart plotter	Garman 750 eco map	Wheelhouse	n/a
Depth sounder	Furuno 1150	Wheelhouse	n/a
Radar	Furuno 72 mile	Wheelhouse	n/a
Navigation charts	Fiordland, Foveaux Straight, Stewart Island and Western approaches	Wheelhouse	n/a

Communications equipment

Equipment	Description	Location	Expiry/service date
EPIRB	GME 406	Wheelhouse	Jan 2021
VHF radio	GME GX600A	Wheelhouse	Jun2019
SSB radio	Barret 550	Wheelhouse	n/a

Lifesaving equipment

Equipment	Description	Location	Expiry/service date
Inflatable life raft	Sea-Air ZHR-U8	Wheelhouse roof	Sep 2021
First aid kit	Full kit	Forecastle	Sep 2021
Lifebuoy	2 on board vessel	Wheelhouse roof	
Life vests	42 on board vessel	Crew cabin under wheelhouse floor	Sep2023
Parachute flares	4 on board vessel	Forecastle	Dec 2020
Smoke floats	2 on board vessel	Forecastle	Dec 2020

Anchoring and mooring equipment

Equipment	Description	Location	Expiry/service date
Anchor	2 Plough anchors on board vessel	1 bow of vessel, 1 spare in after boot	jun 2019
Chain	45m half inch galvanized chain	Chain locker	jun 2019
Boat hook/grapnel	2 stainless steel	1 next t pot hauler, 1 spare in after boot	n/a
Mooring lines	6 32mm lines	Stern of boat	Ongoing

Fire fighting appliances and equipment

Equipment	Description	Location	Expiry/service date
Fire extinguishers	1x 9.1L foam extinguisher, 2x 4.5kg dry powder	Forecastle/Wheelhouse	Jun 2019
Fire pumps/hose	Mechanical pump	Off main engine	Sep 2019
Fire flaps	Aluminum	Port and starboard	Sep 2019
Fire bucket	2x Stainless steel	In the toilet	Sep 2019
Fire axe	1 on board vessel	Under wheelhouse seat	Sep 2019

Machinery safety equipment

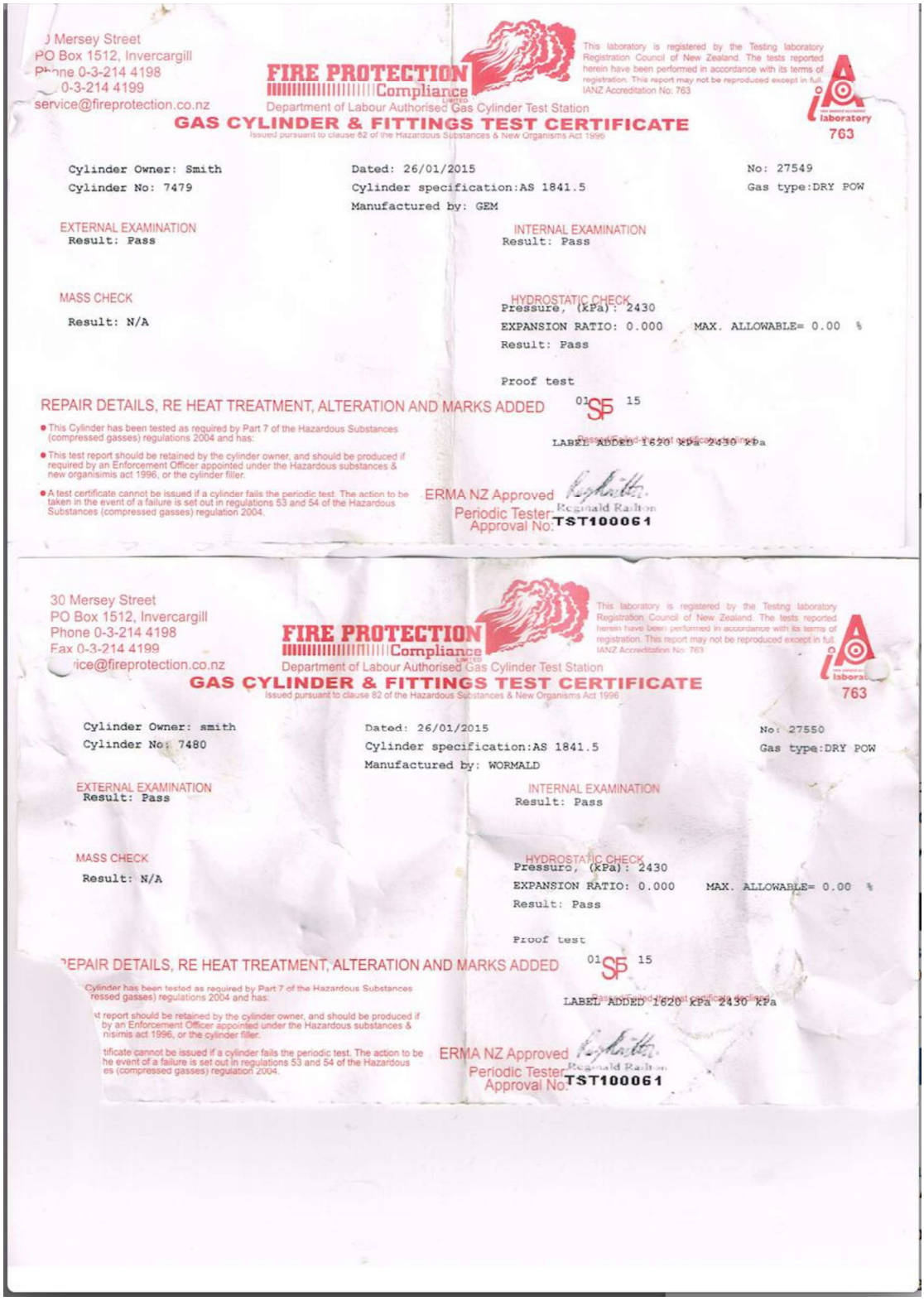
Equipment	Description	Location	Expiry/service date
Water tight bulkheads	5 on board vessel	Throughout	Jun2019
Powered bilge alarm	2 on board vessel	Wheelhouse dashboard	jun 2019
High water level alarm	1 on board vessel	Wheelhouse dashboard	jun 2019
Electric submersibles	2 on board vessel	Engine room bilge and After boot bilge	jun 2019
Emergency steering	Aluminum tiller arm	After boot	jun 2019

Spare parts list for F.V Gravity

Date list agreed to:

Spare parts	Location on board	Expiry or service date
Spare v belts	Under seat in wheelhouse	
Spare oil filters	Under seat in wheelhouse	
Spare fuel filters	Under seat in wheelhouse	
Spare air filter	Under seat in wheelhouse	
Spare hoses/hydraulic & clamps	Under seat in wheelhouse	
Spare bilge pump	Under seat in wheelhouse	
Spare oil	Engine room	
Spare coolant	Engine room	
Steering fluid	Engine room	
Adequate tools	Under seat in wheelhouse	
Spare impellor for deck hose	Under seat in wheelhouse	
Hydraulic oil	Engine room	
Adequate tools	Under the sink in wheelhouse	
Spare Anchor & chain	After boot	
Tow rope	Wheelhouse roof	
Engine zincs	Under seat in wheelhouse	
Steering toggle	Under the sink in wheelhouse	

Certificate of survey to go here!!!



30 Mersey Street
PO Box 1512, Invercargill
Phone 0-3-214 4198
Fax 0-3-214 4199
service@fireprotection.co.nz

FIRE PROTECTION Compliance LIMITED
Department of Labour Authorised Gas Cylinder Test Station

This laboratory is registered by the Testing laboratory Registration Council of New Zealand. The tests reported herein have been performed in accordance with its terms of registration. This report may not be reproduced except in full. IANZ Accreditation No: 763

763

GAS CYLINDER & FITTINGS TEST CERTIFICATE

Issued pursuant to clause 82 of the Hazardous Substances & New Organisms Act 1996

Cylinder Owner: Smith
Cylinder No: 7479

Dated: 26/01/2015
Cylinder specification:AS 1841.5
Manufactured by: GEM

No: 27549
Gas type:DRY POW

EXTERNAL EXAMINATION
Result: Pass

INTERNAL EXAMINATION
Result: Pass

MASS CHECK
Result: N/A

HYDROSTATIC CHECK
Pressure, (kPa): 2430
EXPANSION RATIO: 0.000 MAX. ALLOWABLE= 0.00 %
Result: Pass

Proof test

REPAIR DETAILS, RE HEAT TREATMENT, ALTERATION AND MARKS ADDED

01 SF 15

LABEL ADDED 1620 kPa 2430 kPa

- This Cylinder has been tested as required by Part 7 of the Hazardous Substances (compressed gasses) regulations 2004 and has:
- This test report should be retained by the cylinder owner, and should be produced if required by an Enforcement Officer appointed under the Hazardous substances & new organisimis act 1996, or the cylinder filler.
- A test certificate cannot be issued if a cylinder fails the periodic test. The action to be taken in the event of a failure is set out in regulations 53 and 54 of the Hazardous Substances (compressed gasses) regulation 2004.

ERMA NZ Approved
Periodic Tester: Reginald Railton
Approval No: TST100061

30 Mersey Street
PO Box 1512, Invercargill
Phone 0-3-214 4198
Fax 0-3-214 4199
ice@fireprotection.co.nz

FIRE PROTECTION Compliance LIMITED
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763

GAS CYLINDER & FITTINGS TEST CERTIFICATE

Issued pursuant to clause 82 of the Hazardous Substances & New Organisms Act 1996

Cylinder Owner: smith
Cylinder No: 7480

Dated: 26/01/2015
Cylinder specification:AS 1841.5
Manufactured by: WORMALD

No: 27550
Gas type:DRY POW

EXTERNAL EXAMINATION
Result: Pass

INTERNAL EXAMINATION
Result: Pass

MASS CHECK
Result: N/A

HYDROSTATIC CHECK
Pressure, (kPa): 2430
EXPANSION RATIO: 0.000 MAX. ALLOWABLE= 0.00 %
Result: Pass

Proof test

EPAIR DETAILS, RE HEAT TREATMENT, ALTERATION AND MARKS ADDED

01 SF 15

Cylinder has been tested as required by Part 7 of the Hazardous Substances ressed gasses) regulations 2004 and has:

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LABEL ADDED 1620 kPa 2430 kPa

ERMA NZ Approved
Periodic Tester: Reginald Railton
Approval No: TST100061

Transport & Marine Ltd

Maritime Consultants & Suppliers

Non-Solas Liferaft

CERTIFICATE OF RE-INSPECTION

CERTIFICATE No: NPR271

Manufacturer	Type	Serial No:	Size
Sea-Air	ZHR-U8	U8-0129	8 Person
CO2 cylinder No.	CO2	N2	Cylinder Test Date
000093	2.8 Kg	0.2 Kg	Oct-13

Container/Valise	Painter Length	Emergency Pack Type
Container	10 Meter	MNZB
EPIRB/Radar Reflector type	Serial No:	Hydrostatic Release & Serial No:
TJ-560	410025	N/A

Date of Inspection	Next Inspection Due
1/10/2015	Sep-16
Station: TML NAPIER	Comments:- Pre Sale Survey

Vessel: Gravity

Approval No: HSR-OAP-015

Owner: Sea Shag Charters Ltd.

Signed

TRANSPORT & MARINE LTD T. MAHER HSR-OAP-015 SEA-AIR NAPIER

On Behalf of Transport and Marine Ltd

46 Pandora Road Pandora ∞ PO Box 12166 Ahuriri 4144 Napier NEW ZEALAND
TEL. +64 6 835 3390 ∞ sales@transportandmarine.co.nz
www.transportandmarine.co.nz

Marine Radio Inspection Report MR43.6(3)

navcom ELECTRONICS

NA = Not Applicable | √ = Tested OK | R = See Report | X = Faulty

Equipment Used

Freq Counter	NAV1	RF Ammeter	—	Battery Tester	NAV 3	EPIRB Tester	NAV 49
Power Meter	NAV2			Hydrometer	NAV 39	EPIRB R'XER	NAV 46

Owners Details

Name	SEA SHAG CHARTERS LTD	Phone	
Address	41 MATIPA RD, OTATARA 9879	NATSMITH64@GMAIL.COM	

Vessel Details

Name of Vessel	Callsign	MMSI Number	MSA or ~~IMO~~ Number
F.V. GRAVITY	ZMG3045	—	135429
SSM Company	Registered	Year Built	Length
	✓	✓	55FT LOA
Full Classification	40g PASSENGER . INSHORE . REFER S.S.M. CERT FOR DETAILS.		
	40d FISHING . INSHORE . " . " .		

Operators Radio Qualifications

Name	Class	Certificate Number
NATHAN SMITH		

HF SSB Radio Installation

Equipment	Make	Model	Funcs	Freq Complement
Transceiver 1	BARRETT	550	✓	✓
Transceiver 2				
ASGD				
2182 or 2187.5 Watch RX	/	/	/	

Radio Testing(Time):

Freq(KHz)	Error	Station	Report	Freq(KHz)	Error	Station	Report
2182	+2 HZ	TAUPO	✓	8291	+2Hz	TAUPO	✓
4125	+3 HZ	"	✓	156.8(Mhz)	+4Hz	LOCAL	/
6215	+2 HZ	"	✓				

Antenna Details

Main Ant	Supported Wire or (Whip)	Safety Links	—	Overall Length	7m	Spare Antenna	✓	Visual Inspection	✓

Radio Station

	VHF	SSB		VHF	SSB
Location	✓	✓	Card of instructions	—	—
Clock	✓	✓	Aerial Rigging Plan	—	—
Basic Spare Parts, Fuses	✓	✓	Interference Free Rx	✓	✓
Emergency Lighting	✓	✓	Equipment Mounting and Protection	✓	✓
Distress Procedure Notice	✓	✓			

VHF Installation

	Make	Model	Funcs	SWR	RVSR	Power FWD	DSC	TEST
1	GME	GX600A	✓	1.2:1	0.2W	18W	—	✓
2								

Documentation

Station Licence		Small Ships Booklet		NZ Nautical Almanac	
	✓		✓		✓

Power Checks

Main Source	M/E 24V ALT					Main Location	E/R
Reserve Source	24V MDC BATTERY (4 x 12V 130AH)					Reserve Location	PORT SIDE E/R
Batt Capacity Ah	260 AH	Specific Gravity		Battery Volts	RANGE 13.7V	Testing Facilities	✓
Visual Inspection	✓	Discharge Test	✓	Voltage drop	0.4V	Equipment Supplied	✓

EPIRB

	Make	Model	Serial No	Frequency	Batt EXP	HS Release EXP	M'pt	Site	Test
1	GME	MT400	1007196986	406/121	JAN 2017	—	✓	✓	✓
2									

R=Remarks X=Faults

R1 : OPERATORS CERT TO BE PROVIDED.

Survey Date	Survey Location	Name of Surveyor	Signature
30/1/15	BLUFF	JASON HOLLAND	

Navcom Electronics PO Box 2517 Dunedin PH (03)4776655 Fax 03 4776661 Cell 021726349 Email Jason@navcom.co.nz

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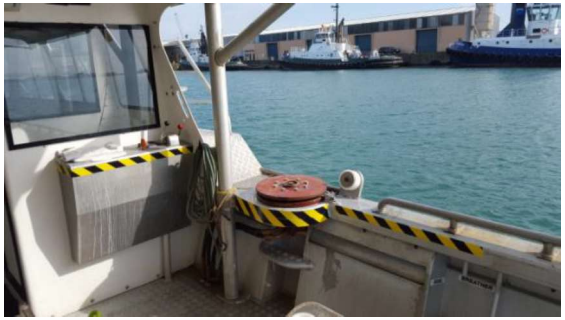
Hazard Register

Hazard	Significant (y/n)	E,I or M	Actions required/Controls	Person responsible
Pot hauler	Y	M	Stand clear while operating at all times	Skipper/crew
Fishing operation	Y	M	Follow safe fishing guidelines in MTOP	Skipper/crew
Slippery deck when wet	N	M	Try to have three points of contact if you can do so safely, wear appropriate footwear	Skipper/Punters own
Tripping on deck	N	E	Keep a clean deck	Skipper/crew
Ropes	Y	I	Stand clear of any mooring ropes being used	Skipper/crew
Berthing vessel	Y	M	Stay on the opposite side to witch you are berthing on	Skipper/crew
Engine room	Y	I & M	Strictly no passengers in the engine room. Crew must wear appropriate PPE and no loose clothing	Skipper/crew
Anchor Hauler	N	I & M	Advise all on board anchor is being deployed/retrieved, stand clear	Skipper
Embarking/disembarking	Y	M	Try to have three points of contact. Supervision of passengers	Skipper/crew
Use of knives	Y	M	Stowed away when not in use and kept sharp	Skipper/crew
Crayfish/fish spikes	Y	M	Wear gloves when able to and treat immediately when occurs	Skipper/crew
Entry to wheelhouse	N	M	Beware of tripping on door frame when entering wheelhouse	Skipper/crew
Fish Hook	N	M	Be careful when handling hooks	Skipper
Fly bridge	Y	I & M	Strictly no passengers on the bridge during charter operation	Skipper
Drugs and alcohol	Y	M	Drug and alcohol policy must be adhered to	Skipper

Passenger Induction/Briefing Information

Assembly Point	**Embarking/disembarking point**	**Pot hauler**
Located at stern of vessel 	Care must be taken when boarding/un-  boarding vessel	Hazardous area, keep clear all times 
VHF radio	**Life bouys**	**Bow of vessel**
Located above dash in wheelhouse 	Located on wheelhouse roof 	No passengers past this point while at sea 

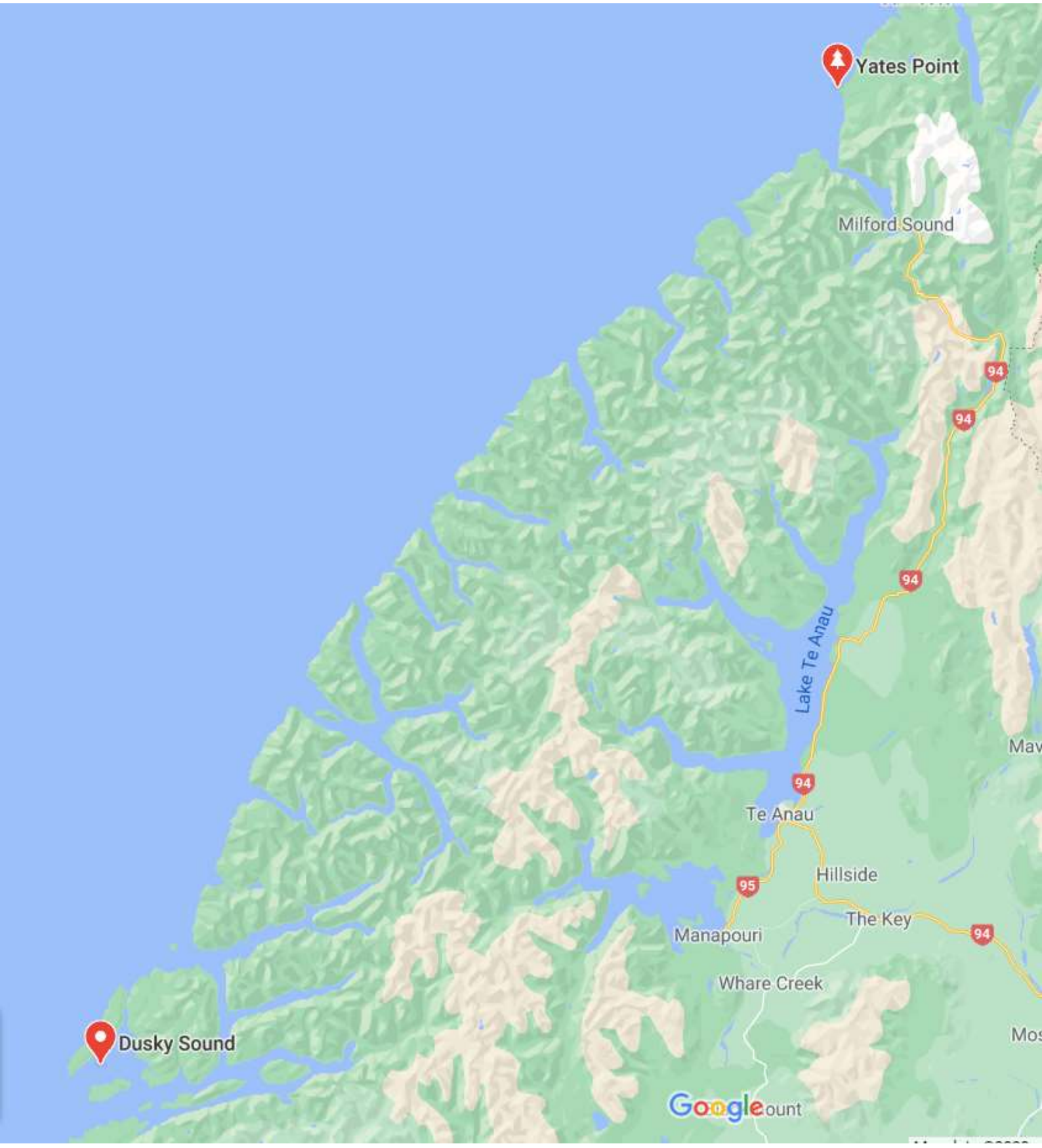
First aid kit	Life vests	Life raft
Located in the forecastle 	Located under the seat in wheelhouse 	Located on wheelhouse roof 

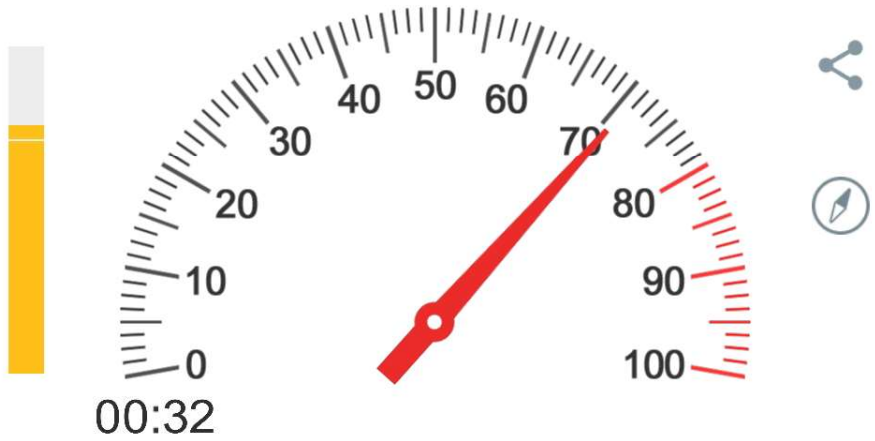
Accident/Incident Register

Accident date	Details	Review/further action taken	Report to MNZ (Y/N)

Drills and Training Log

Date	Crew present	Description of training	Skippers initials


Yates Point
Milford Sound
94
94
94
Lake Te Anau
94
Te Anau
95
Hillside
The Key
94
Manapouri
Whare Creek
Dusky Sound
Google



71.7 dB (SPL)

70dB: busy traffic

AD

MIN	AVG	MAX
68.0	70.6	72.8

3x