



VP1231 **River Rat**  
MSA 124017  
Call sign: **ZMU3652**

# SHIP'S MANUAL & EMERGENCY RESPONSE

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# SHIP'S MANUAL & EMERGENCY RESPONSE

1991 4.57 metre Alloy Jet Boat . Power 186 kw. Trailer registration: 3198F

## 1.0 Crew Induction Notes

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- All personnel (Skippers and crew) must complete an induction and fill out the vessel's induction form. (Skipper to check and sign off crew.)
- Skippers and crew must not be under the influence of alcohol or drugs.
- Crew are to listen to and abide by all lawful instruction of the vessel's skipper.
- Crew are to be shown the location and operation of the vessel's safety equipment including:
  - Flares
  - First aid kit
  - Paddles
  - EPIRP / SPOT
  - Radio
  - Anchor (note if not tied on)
- Crew are to be shown a copy of the ship's hazard register
- Crew are to be shown a copy of the vessel's emergency procedures
- No garbage or waste is to be thrown overboard (must all be returned to shore)
- Who to call in the event of emergency
- Keep hands and feet inside the vessel when berthing
- Ensure you have sun protection
- Ensure you have adequate food and drink for the planned work
- Ensure you have adequate clothing including wet weather gear for unexpected weather changes.
- **At all times a Personal Flotation Device (PFD) will be worn on this vessel. (If inflating, it must be auto-inflating.)**

# SHIP'S MANUAL & EMERGENCY RESPONSE

## 2.0 Safety Equipment List

Safety Equipment	Qty	Where Located
Fire Extinguishers	1	5kg Mounted beside driver to flood foam
	1	2.1 kg Dash mounted CO <sub>2</sub>
Fire Buckets	1	10 litre under dash
Life Jackets	5	Under dash (New 11-06-2013)
EPIRB	1	Dash Mounted (New 12/05/2014)
SPOT beacon	1	Dash Mounted
First Aid Kit (s)	1	Under skipper's seat (New 02/10/2014)
Tool Box	1	Under rear seat
Knife	1	Under rear seat
Flares -Smoke Floats	2	Waterproof container
Manual fog horn	1	Under dash
Tow Line	1	Aft
Throw line	1	On board
Radio VHF	1	Dash Mounted
Anchors (detail size & type)	1	CQR size 7 and chain
Boat Hook	1	Starboard side rack
Hand bearing compass	1	Waterproof container
NZ Almanac	1	Hydrology Office
Ship's Manual	1	Boat Folder
Log Book	1	Boat Folder

## 3.0 Operating procedures

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### Weather

An assessment of weather conditions, including sea state and wind, will be made on the day. The decision of whether to proceed or cancel a day's operation remains the sole responsibility of the skipper.

Vessel Name	MNZ number	Operation	Max wind	Max waves
River Rat (VP1231)	124017	Day time	30 knots	1.0 m

\*Day time operation:

Vessels not fitted with navigation lights will not be used between the hours of ½ hour before sunset, and ½ hour after sunrise.

### Perform vessel safety checks and complete vessel's log book

**If any of the equipment listed in the safety equipment list is not on board, or has expired, the vessel shall not be launched.**

**Ensure there is enough fuel on board for the day's running and safe return.**

**Inform shore-based personnel of the following details:**

- Where you are launching
- Names of those aboard
- The intended destination / activity
- ETA: When you expect to get there
- Check-in procedures during the day

**During the day / while on the water, inform shore-based personnel:**

- Of any issues as they occur
- Regular updates of position / check-in as previously arranged
- Changes to planned return times or destinations

**During the day while on the water:**

- Ensure all staff are wearing PFD's
- Keep an eye on fuel levels
- Keep an eye on engine temperature
- Keep an eye on water levels in the boat / bilge. Operate the bilge pumps as needed.

**After returning to shore:**

- Inform shore-based personnel that you are safely back ashore
- Inform shore-based personnel of any incidents that occurred
- Fill out log book
- Note any breakages / faults and arrange repairs as needed.

# SHIP'S MANUAL & EMERGENCY RESPONSE

## 4.0 Vessels Hazard ID

### Vessel: River Rat (Jet boat VP 1231)

1991, 5.57 metre alloy jet boat

MNZ 124017

Maximum Permitted crew: 4

VHF call sign: ZMU3652

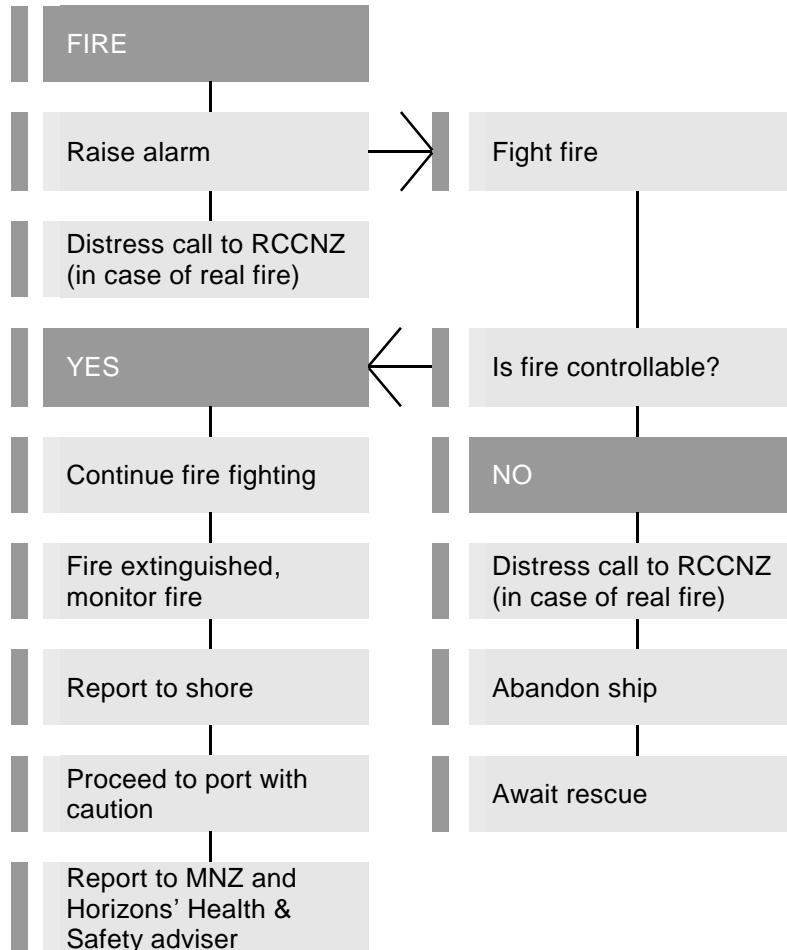
Trailer Registration: 3198F

Hazard	Significant		Can it be eliminated		Can it be isolated		Method of control
	Yes	No	Yes	No	Yes	No	
Fire hazard in engine bay	✓			✓		✓	Fire extinguisher beside driver feeding into the engine bay.
Taking on water	✓			✓		✓	Hull checked for damage prior to outing. Bilge pumps fitted to boat. Bungs checked before departure.
Lose equipment	✓			✓		✓	Correctly and securely stow all equipment
Stones in jet unit linkage	✓			✓		✓	Be aware this can happen. Check the linkage prior to launching.
Intakes blocked	✓			✓		✓	Weed, debris, and stones can block the water intakes. Check the intake grill prior to launching and remove stones and debris. This can happen when operating the vessel. Power will drop off. Turning the engine off and restarting will it will normally clear material from the intakes. In addition there is a rake carried on board to remove debris.
Weather	✓			✓		✓	Skipper needs to be aware of weather forecast. Winds of greater than 30 knots or sea conditions greater than 1 metre should be avoided.
Engine failure		✓		✓		✓	Anchor carried. Oars carried. Communication equipment carried. Vessel serviced annually.
Running out of fuel		✓		✓		✓	Fuel levels checked prior to departure / ensure enough fuel to get home safely.
Trailer faults	✓			✓		✓	Trailer condition checked each day of use, and a WOF every 6 months
Drowning (man overboard / knocked unconscious)	✓			✓		✓	Life jackets must be worn at all times. If inflatable they must be automatic.
No navigational lights	✓		✓				Vessel is not to be used between the hours of 30 minutes before sunset and 30 minutes after sunrise.

# SHIP'S MANUAL & EMERGENCY RESPONSE

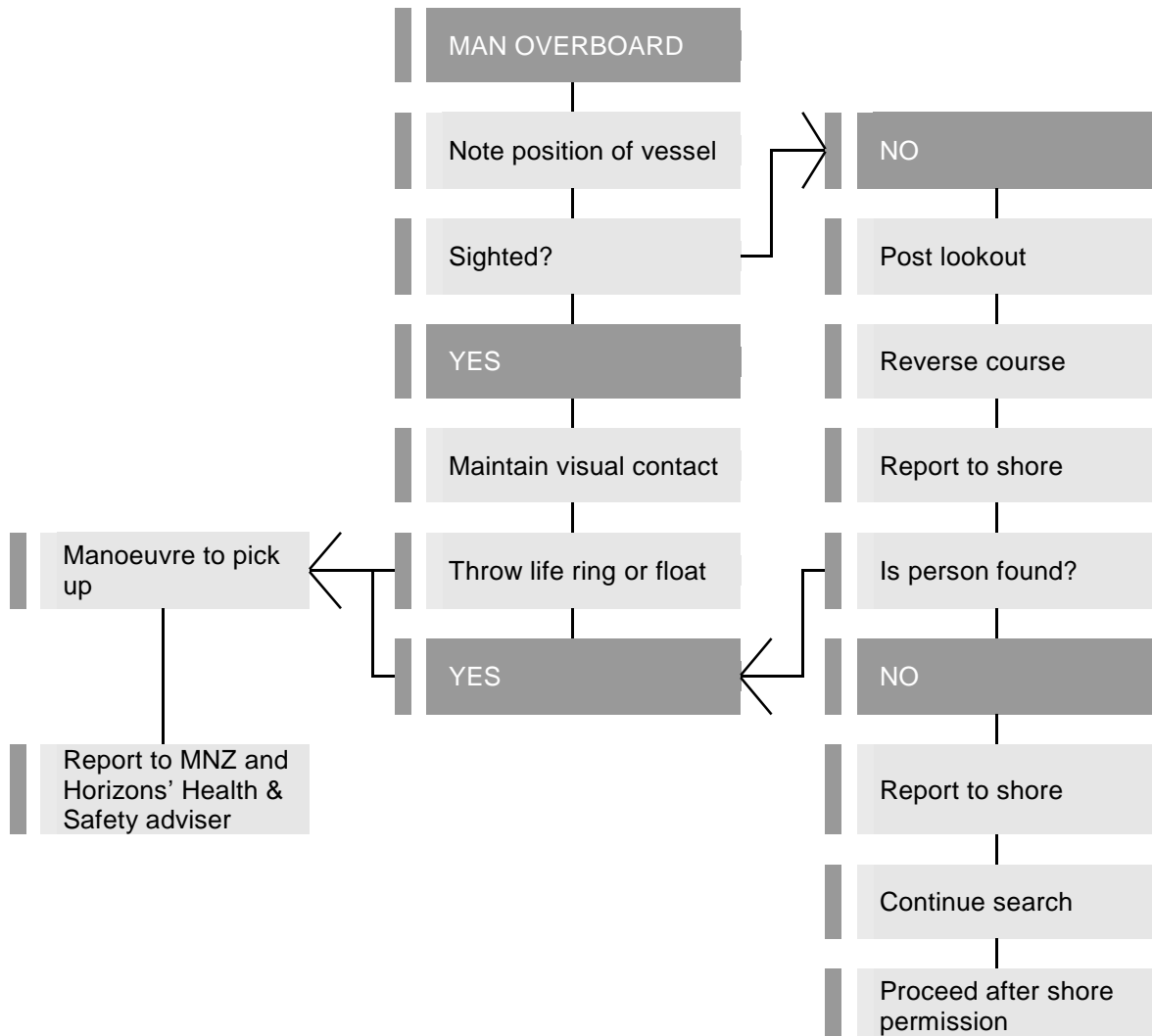
## 5.1 Emergency Response – Fire fighting Flowchart

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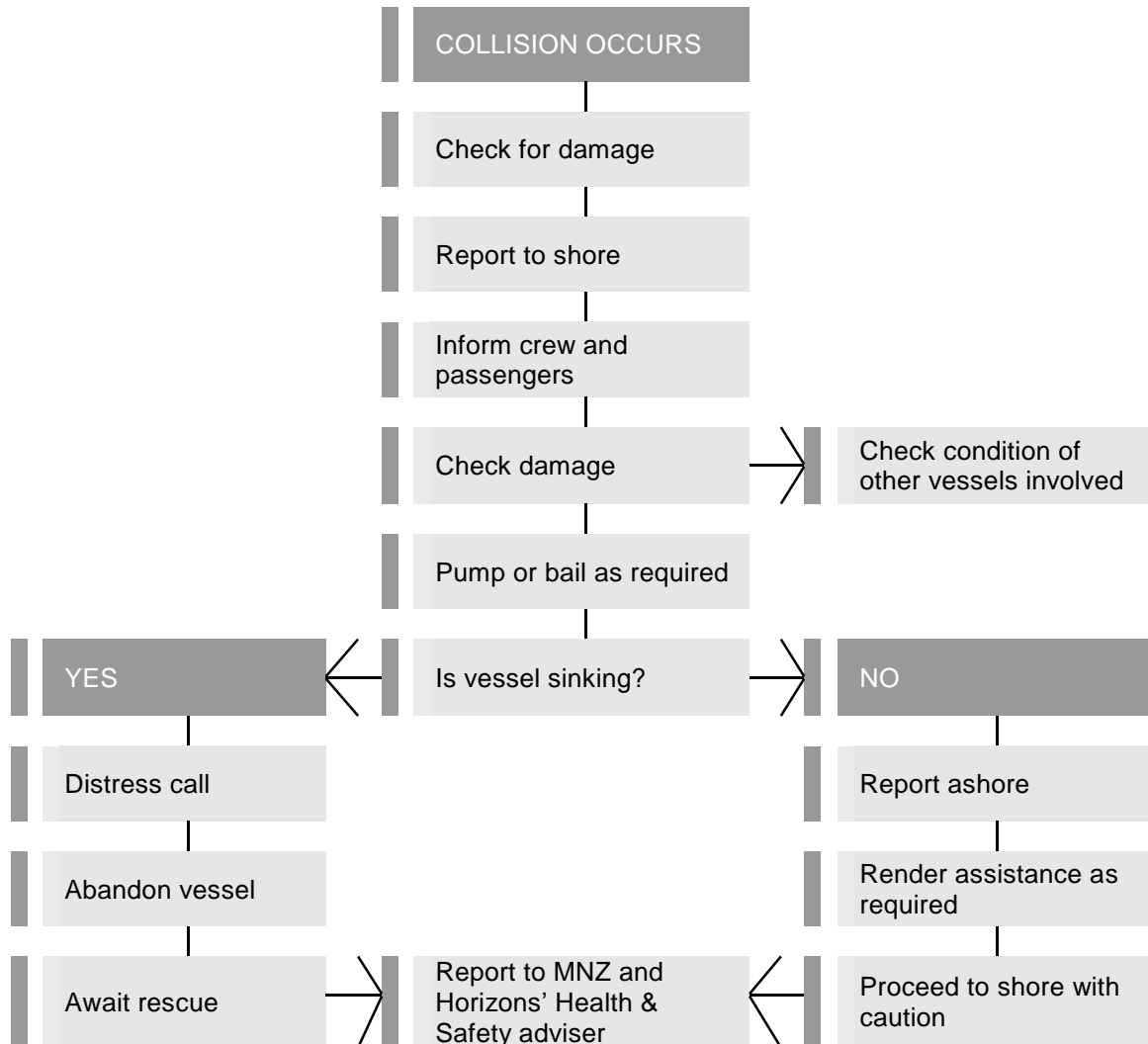
# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.2 Emergency Response – Man overboard Flowchart



# SHIP'S MANUAL & EMERGENCY RESPONSE

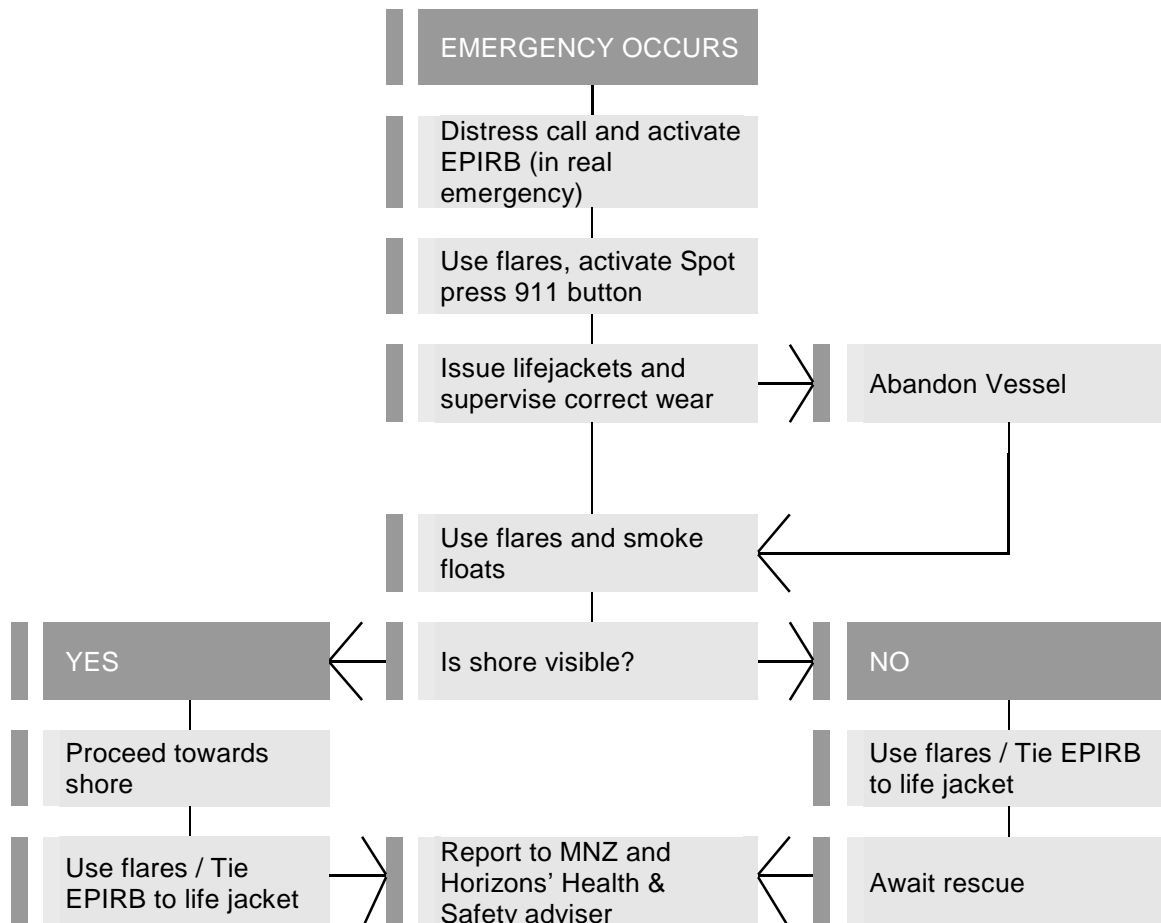
## 5.3 Emergency Response - Structural Breach or Collision Flowchart





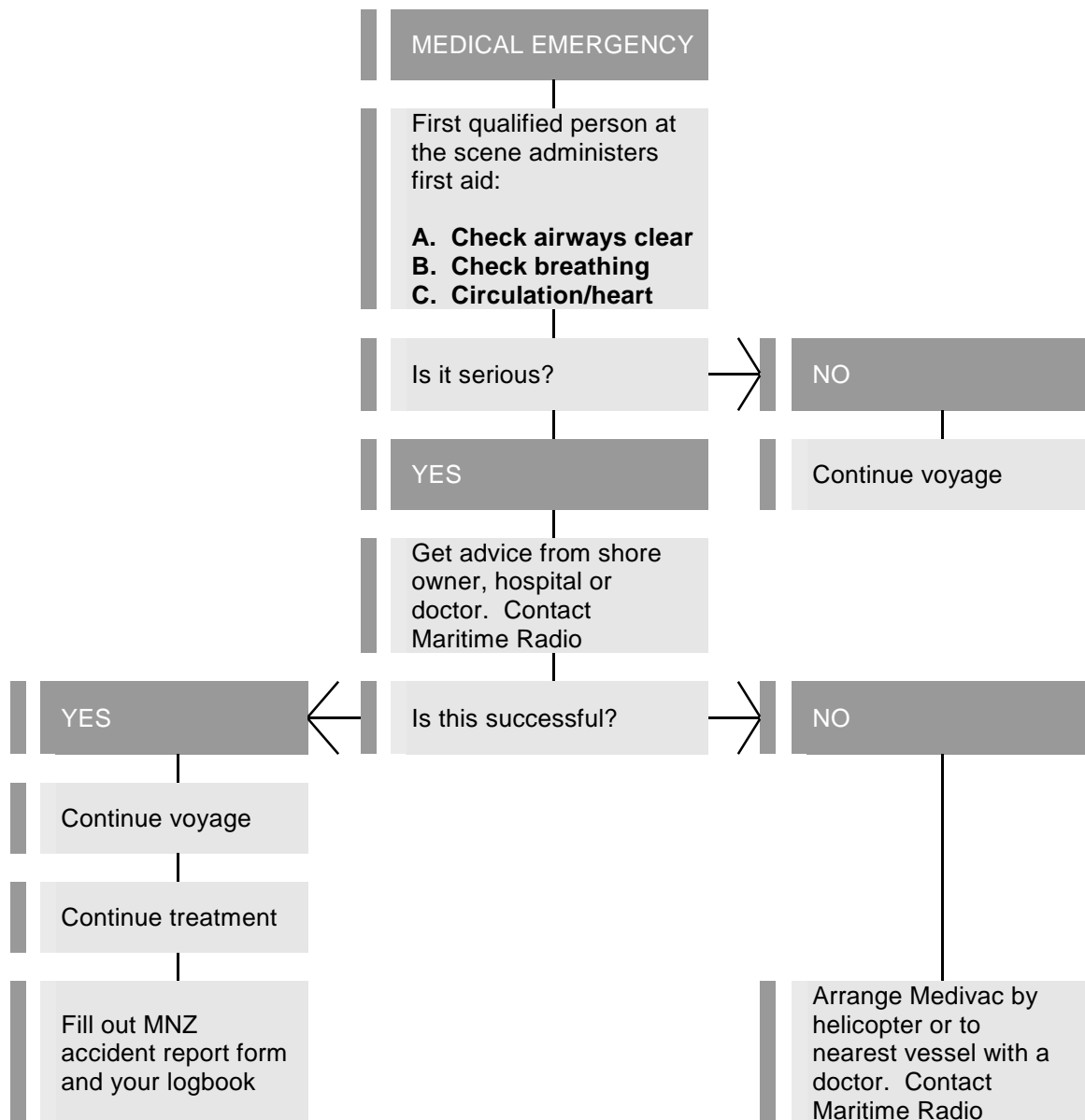
# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.4 Emergency Response - Abandon Ship Flowchart



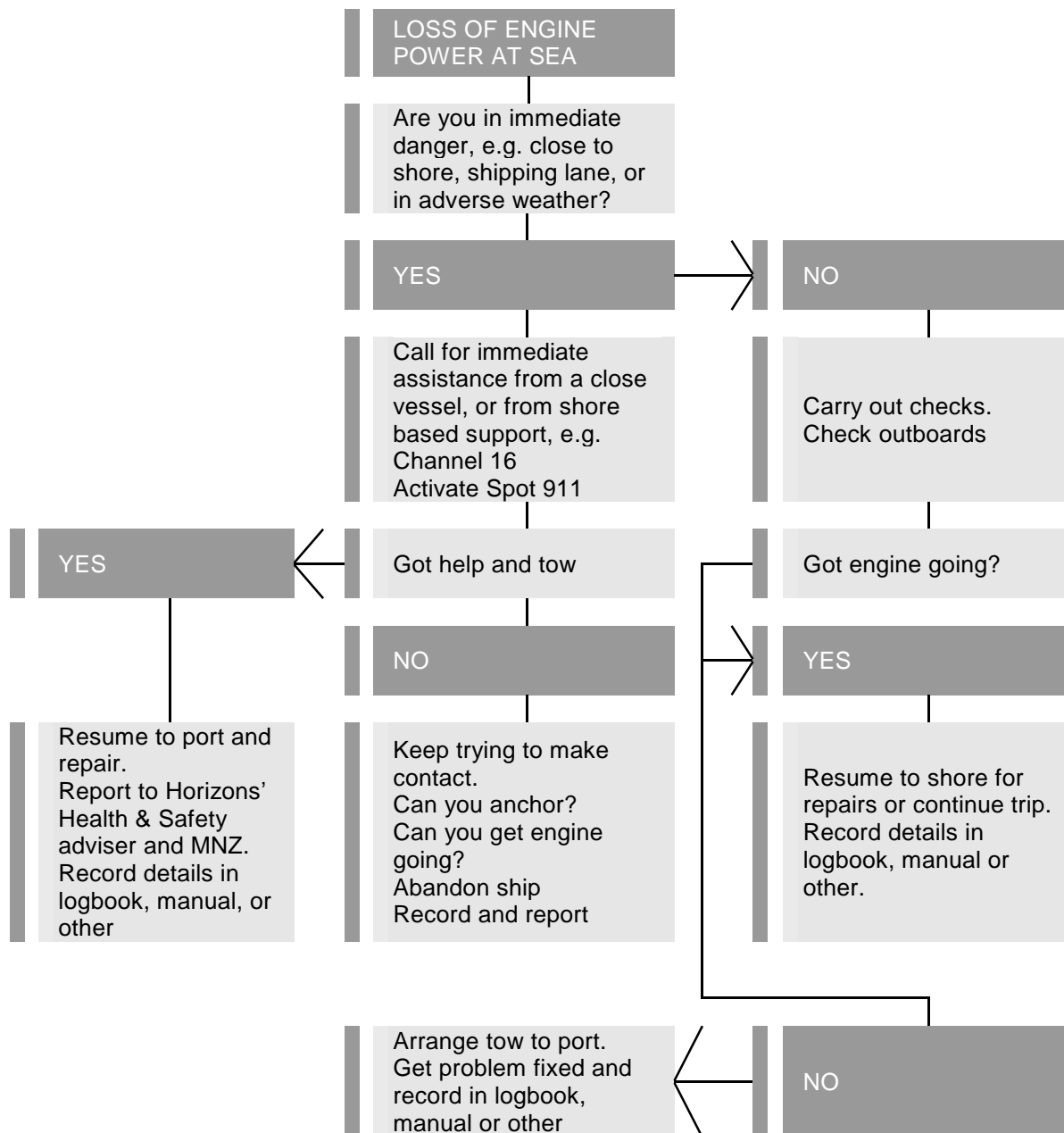
# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.5 Emergency Response - Medical Emergency Flowchart



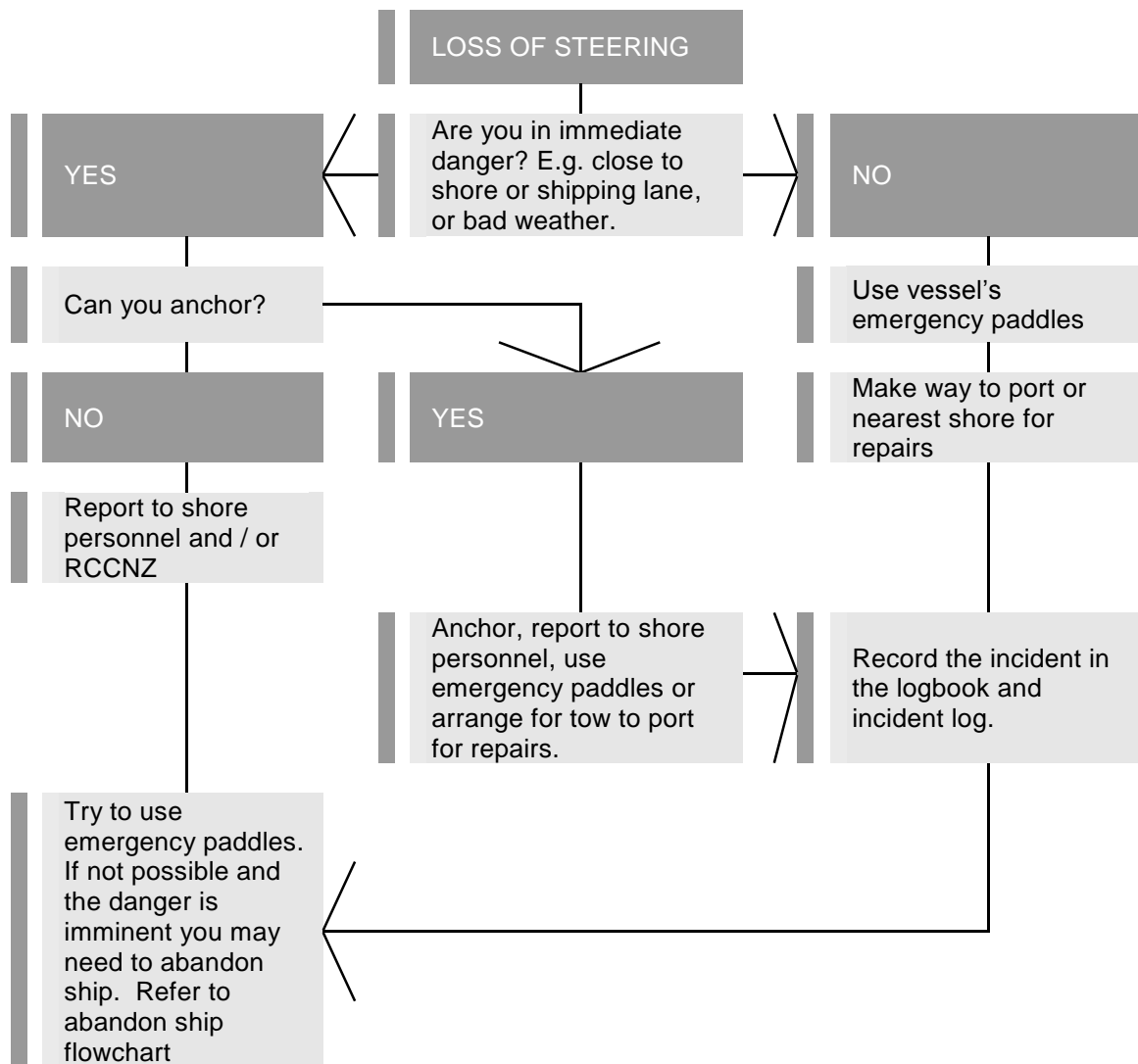
# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.6 Emergency Response - Loss of Power at Sea Flowchart



# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.7 Emergency Response - Loss of Steering Flowchart



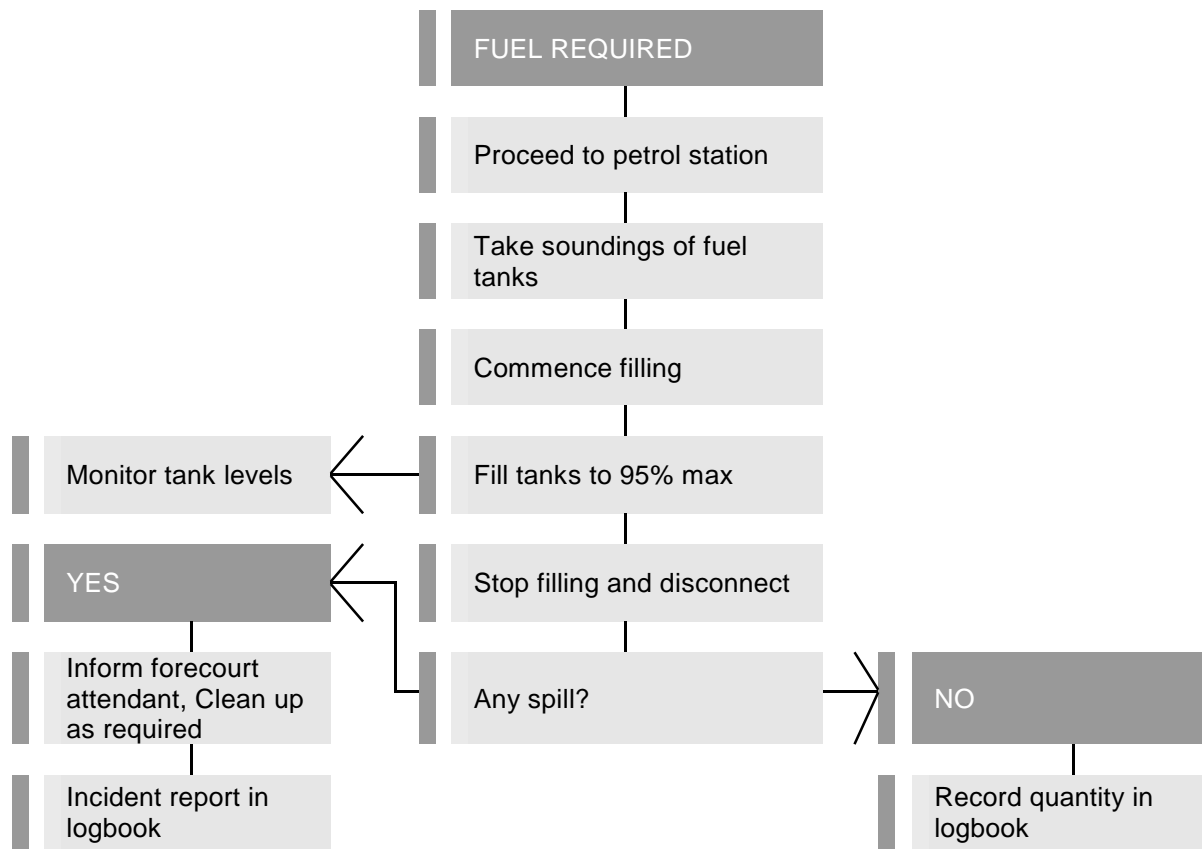
# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.8 Fuelling Flowchart

> Flowchart and procedures table

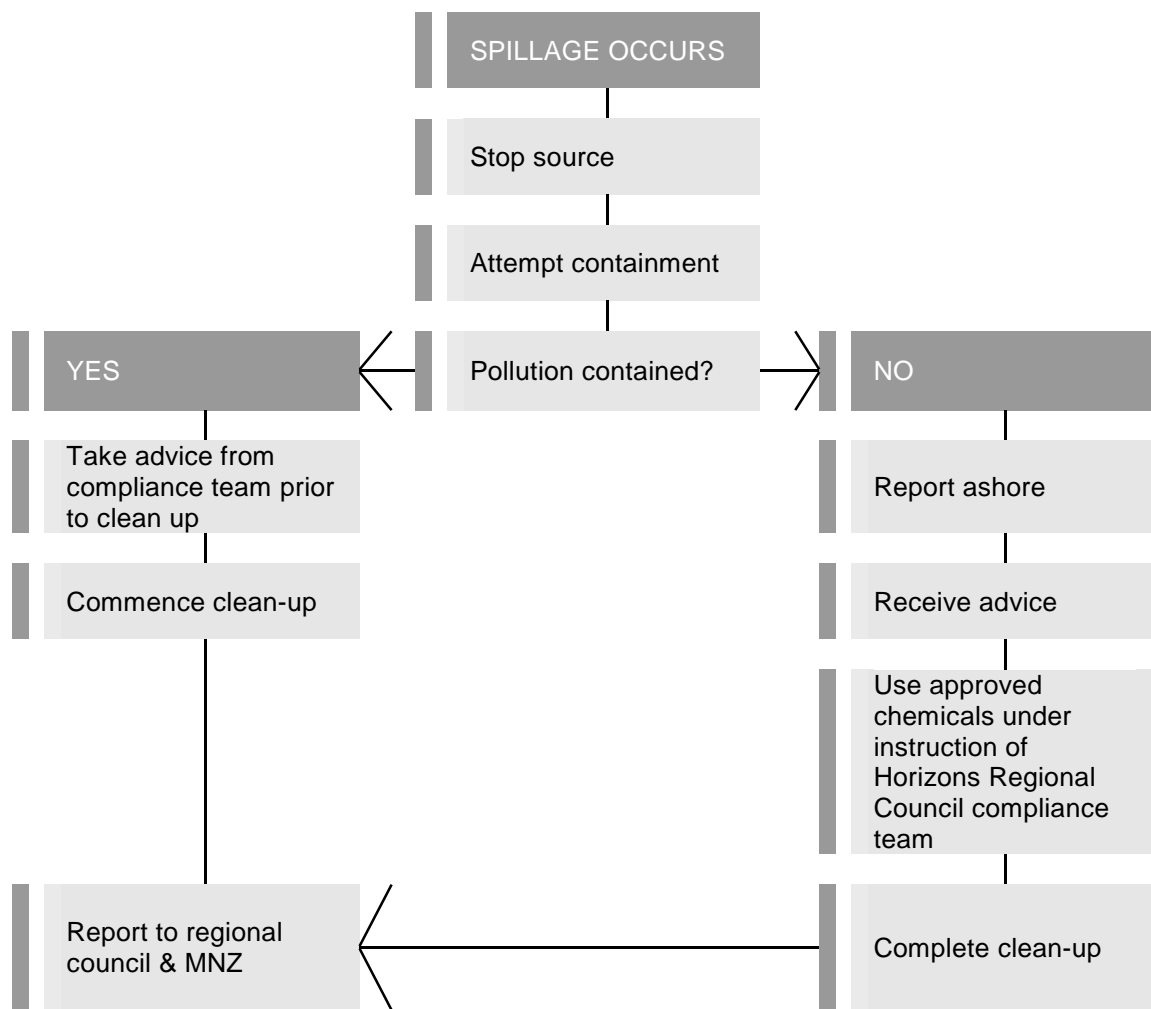
### Requirements

- Trained operators only
- MNZ accident report forms
- Logbook to record details if spill



# SHIP'S MANUAL & EMERGENCY RESPONSE

## 5.9 Pollution Control Flowchart



# COMPASS DEVIATION CARD

Compass (1) error: River Rat

Orientation	Reading (Raw)	Reading (True)	Actual	Error correction
ENE	44	66	60	-6
WSW	224	246	240	-6
WNW	310	332	330	-2
ESE	132	154	150	-4
<b>Adopted error</b>				<b>-5°</b>

Compass (2) error: VP848

Orientation	Reading (Raw)	Reading (True)	Actual	Error correction
ENE	41	63	60	-3
WSW	221	243	240	-3
WNW	310	332	330	-2
ESE	131	153	150	-3
<b>Adopted error</b>				<b>-3°</b>

Compass (3) error: Te Tuna Tapu o Punahau

Orientation	Reading (Raw)	Reading (True)	Actual	Error correction
ENE	42	64	60	-4
WSW	222	244	240	-4
WNW	312	334	330	-4
ESE	132	154	150	-4
<b>Adopted error</b>				<b>-4°</b>

\*Add the magnetic declination to read **true north**

Area	Magnetic Declination (2016)
<b>West coast (North to South)</b>	
Whanganui River mouth	<b>21.56°</b>
Rangitikei River mouth	<b>21.81°</b>
Palmerston North	<b>21.90°</b>
Manawatu River mouth	<b>21.94°</b>
Ohau River mouth	<b>22.05</b>
<b>East Coast (North to South)</b>	
Wainui River Mouth (Herbertville)	<b>22.11°</b>
Akitio River mouth	<b>22.17°</b>

Compass deviations calculated on 27-06-2016, by David Brown

When working in restricted enclosed limits (coast line), please refer to Nautical charts in the Hydrology office, and take a copy on the vessel.

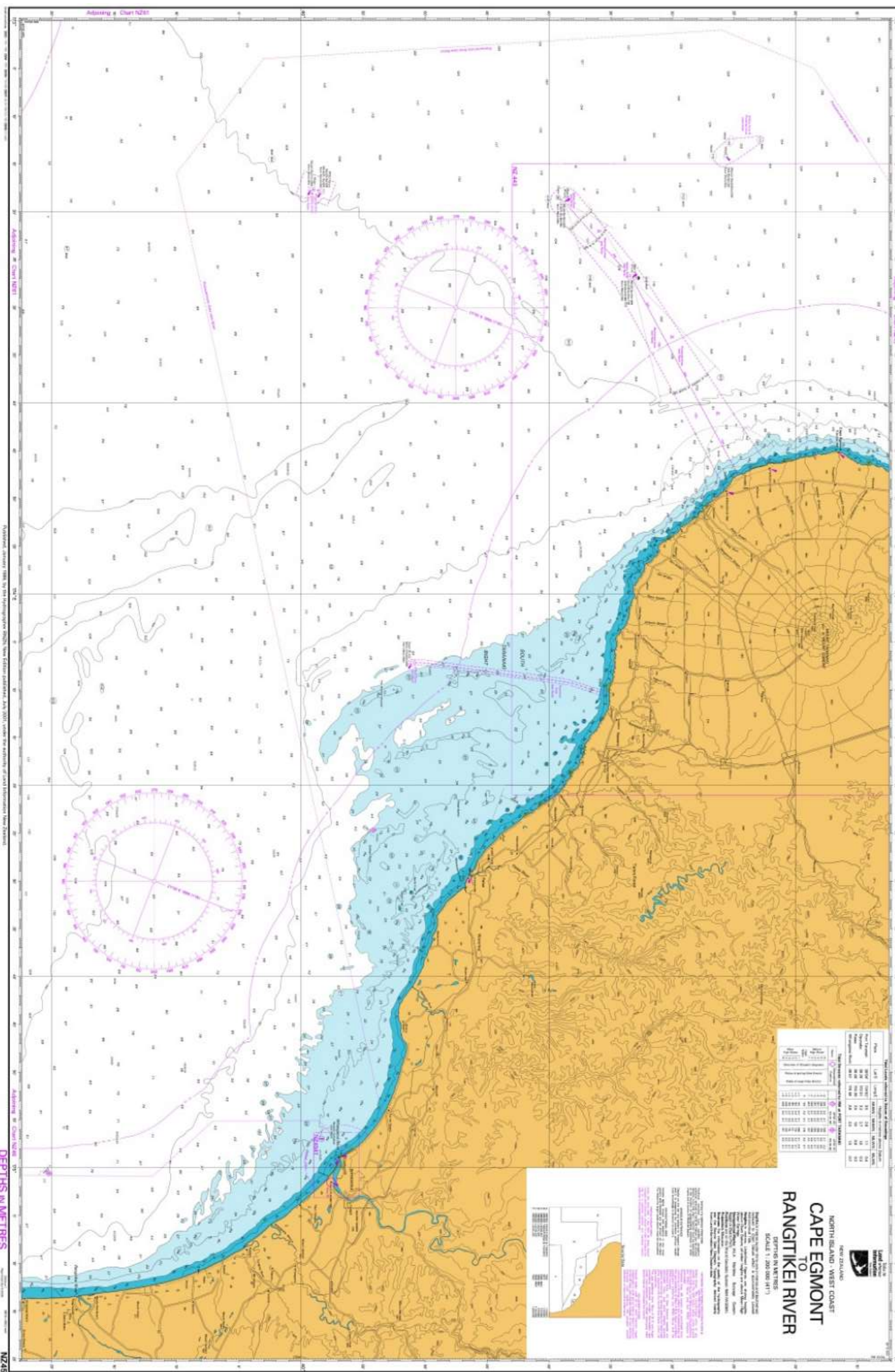


Chart No.	NZ 45
Scale	1:200,000 (N 17)
Datum	WGS 84
Projection	UTM
Zone	50S
Units	Metres
Vertical Datum	MLWS
Horizontal Datum	WGS 84
Chart Type	Nautical Chart
Publication Date	2010
Revision	1
Author	Hydrographic Office
Editor	Hydrographic Office
Printer	Hydrographic Office
Sheet Size	1000mm x 1000mm
Weight	100g
Material	Plastic
Color	Blue, Orange, White
Features	Coastline, Depths, Navigational Aids, Place Names
Notes	For more information, see the back of the chart.



**CAPE EGDMONT  
TO  
RANGITIKEI RIVER**

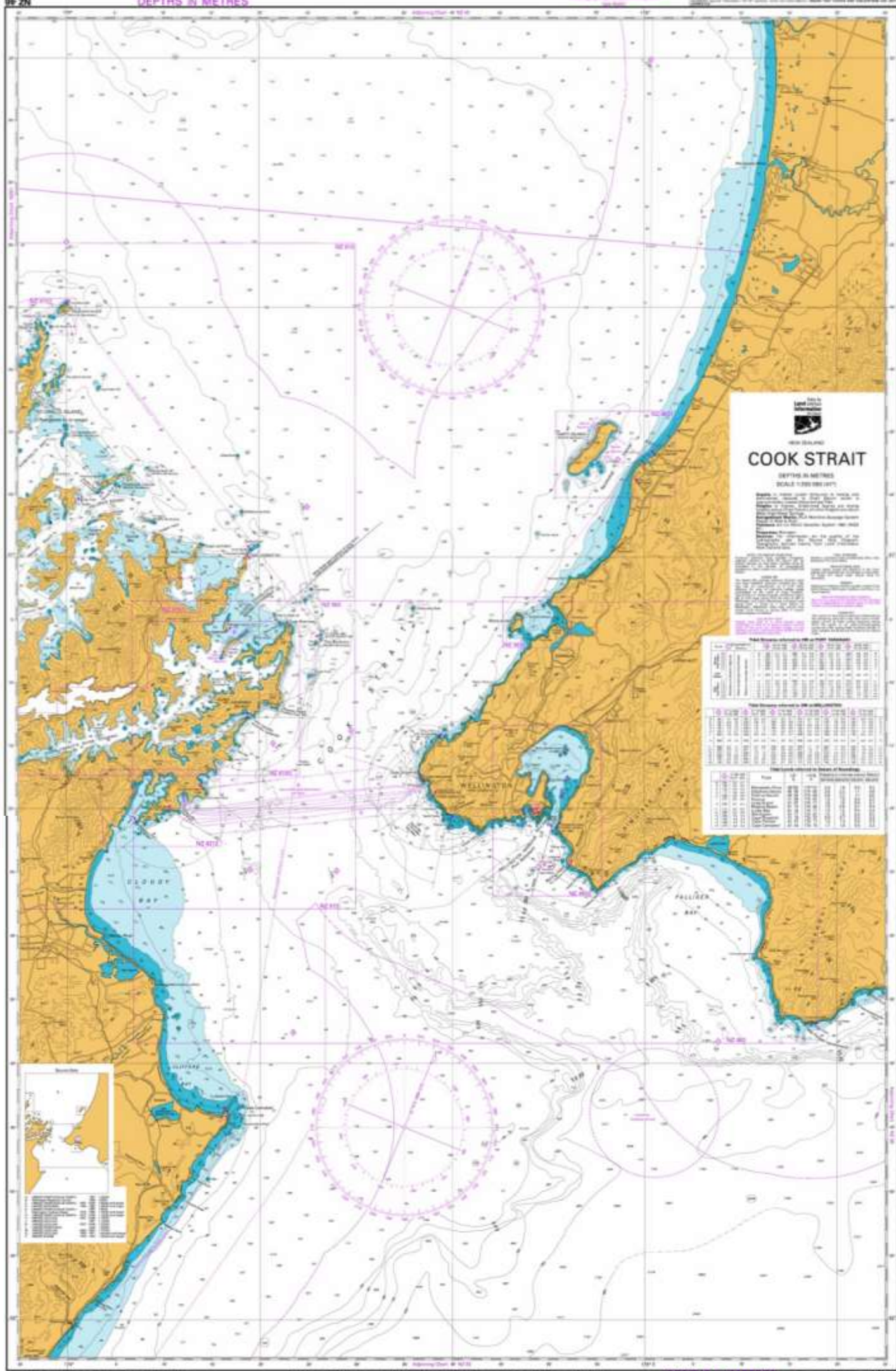
DEPTHS IN METRES

SCALE 1:200,000 (N 17)

NEW ZEALAND  
NORTH ISLAND WEST COAST  
CAPE EGDMONT  
TO  
RANGITIKEI RIVER  
DEPTHS IN METRES  
SCALE 1:200,000 (N 17)

NEW ZEALAND  
NORTH ISLAND WEST COAST  
CAPE EGDMONT  
TO  
RANGITIKEI RIVER  
DEPTHS IN METRES  
SCALE 1:200,000 (N 17)





# COOK STRAIT

DEPTHS in METRES  
SCALE 1:500 000 (1975)

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For more information, please contact the Hydrographic Office, New Zealand, at the following address: Hydrographic Office, New Zealand, P.O. Box 100, Wellington, New Zealand. Tel: 04-499 9000. Fax: 04-499 9001. Email: hydro@landinfo.govt.nz

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