



**GIPPSLAND LAKES OCEAN ACCESS**

# **Environmental Management Plan**

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## GLOA Environmental Management Plan

### Document revision

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Version 3	28 October 2011	Margaret Supplitt	Amended and issued for approval under CMAC
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Version 5.1	August 2023	Damian Snell / David Holding	For DEECA review and approval Revised to capture new consent conditions

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## Abbreviations

AHO	Australian Hydrographic Office
CD	Chart Datum
CSD	Cutter Suction Dredge
DAFF	Department of Agriculture Fisheries and Forestry
DMG	Dredged Material Ground
DAWE	Department of Agriculture Water and Environment
DEECA	Department of Energy, Environment and Climate Action
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DELWP	Department of Environment, Land, Water and Planning
DoT	Department of Transport for Victoria
DTP	Department of Transport and Planning
EMP	Environmental Management Plan
GLaWAC	GunaiKurnai Land and Waters Aboriginal Corporation
GLOA	Gippsland Lakes Ocean Access
GP	Gippsland Ports
IMO	International Maritime Organisation
LTMMMP	Long Term Monitoring and Management Plan
MACA	Marine and Coastal Act 2018
MENSAR	Marine Emergency - Non Search and Rescue
MDP	Maintenance Dredging Program
PDS	Project Delivery Standards
SCD	Side Casting Dredge
SDP	Sea Dumping Permit
SEMP	Safety and Environment Management Plan
STS	Sand Transfer System or Sand Transfer Station
TACC	Technical Advisory and Consultative Committee
TSHD	Trailing Suction Hopper Dredge

# 1 Introduction

## 1.1 Scope

The Environmental Management Plan (EMP) details the environmental management requirements to be followed for Gippsland Lakes Ocean Access (GLOA) activities.

This EMP includes:

- the requirements for environmental management during the planning, implementation, evaluation and review of dredging activities;
- the responsibilities for implementing this EMP; and
- the project delivery standards (PDS) including environmental controls and limits to ensure that project objectives and targets are achieved.

This EMP applies to the maintenance dredging works described below. GP has overall responsibility for the implementation of GLOA activities in accordance with the requirements of this EMP.

## 1.2 Program Description

In order to maintain reliable navigable waters between the Port of Gippsland Lakes and Bass Strait, Gippsland Ports must conduct maintenance dredging at Lakes Entrance in the Inner Channels and the Bar. For over 30 years to 2008 this was undertaken using a side casting dredge (SCD) *April Hamer*. However, it became apparent that this approach could not keep up with the accumulating sands and in 2005 the Victorian Government announced the Lakes Entrance Sand Management Program. One aspect of this program was the trial use of the Trailing Suction Hopper Dredge (TSHD) in 2008, 2009 and 2010 with purposeful placement of dredge material at Dredge Material Grounds (DMGs) along the coast outside the entrance. TSHD maintenance dredging with the Van Oord Australia vessel *Pelican* occurred from 2011 until 2016 under the GLOA program. From 2017 maintenance dredging has been conducted using the Victorian State-government funded and Gippsland Ports owned TSHD *Tommy Norton*. This is consistent with Gippsland Ports continuous improvement approach to the delivery of reliable navigation access to and from the Gippsland Lakes and is supported and funded by the Victorian Government.

Key activities associated with the GLOA program are:

- Trailing Suction Hopper Dredge (TSHD) – a TSHD (*Tommy Norton*) has been purchased by Gippsland Ports to undertake continuous year-round maintenance dredging.
- Cutter Suction Dredge (CSD) to maintain navigable profile of the inner channels (Swing Basin, The Narrows, Cunninghame Arm, Hopetoun Channel and North Arm) (see Figure 1: Dredging areas).
- The Sand Transfer System (STS) associated with the CSD dredging (see Figure 2: Elements of the Sand Transfer System) comprising operation and maintenance of:
  - a pump house called the Sand Transfer Station (STS) located at Flagstaff.
  - transfer pipelines and riser to bring dredge slurry from the CSD to the STS.
  - a pipeline and near-shore discharge to deliver pumped material to Ninety Mile Beach about one kilometre east of the Entrance.
  - a pipeline and near-shore discharge to deliver pumped material to Ninety Mile Beach about one kilometre west of the Entrance.
- Purposeful placement of dredge material in one of two identified Dredge Material Grounds outside the entrance for the TSHD (Figure 3: Location of Dredged Material Grounds for TSHD).

### Dredging Priorities

The channel areas, zones and dredging priorities for *Tommy Norton* TSHD and *Kalimna* CSD are shown in Figure 1 and listed in Table 1 below.



Figure 1: Dredging areas

Table 1: TSHD dredging priority area

Area	<i>Tommy Norton</i> TSHD	<i>Kalimna</i> CSD
Zone 1 Bar and Wedge	Priority 1	Not Applicable #
Zone 2 Entrance Channel	Priority 2	Not Applicable #
Zone 2 Turning Circle (Swing Basin)	Priority 2	Priority 1
Zone 2 Cunninghame Arm	Priority 2	Priority 2
Zone 3 Reeves Channel/The Narrows	Priority 3	Priority 2
Zone 3 Hopetoun Channel	Not Applicable *	Priority 3
Zone 3 North Arm	Not Applicable *	Priority 4

# *Kalimna* CSD is not designed to, and is not permitted to, operate in sea conditions of The Bar or within the Entrance Channel

\* Hopetoun Channel and North Arm cannot be safely dredged with *Tommy Norton* TSHD due to channel size restrictions

#### TSHD Dredging priorities (in order)

- Maintaining the Bar Channel to a water depth of up to -5.5m CD design depth and a width of 80m
- Maintaining Bar Wedge either side of the Bar Channel up to a depth of -5.5m CD
- Maintaining Entrance Channel up to -4.5m CD
- Assisting *Kalimna* to maintain Turning Circle (Swing Basin) up to -4.5m CD
- Assisting *Kalimna* to maintain Cunninghame Arm up to -4.5m CD
- Assisting *Kalimna* to maintain Reeves Channel/The Narrows up to -4.0m CD

**Note:** if conditions on the Bar (Zone 1) are unsuitable for dredging; it is planned that the *Tommy N* continues to dredge in Zone 2 and 3 areas where placement at DMGs is still practicable.



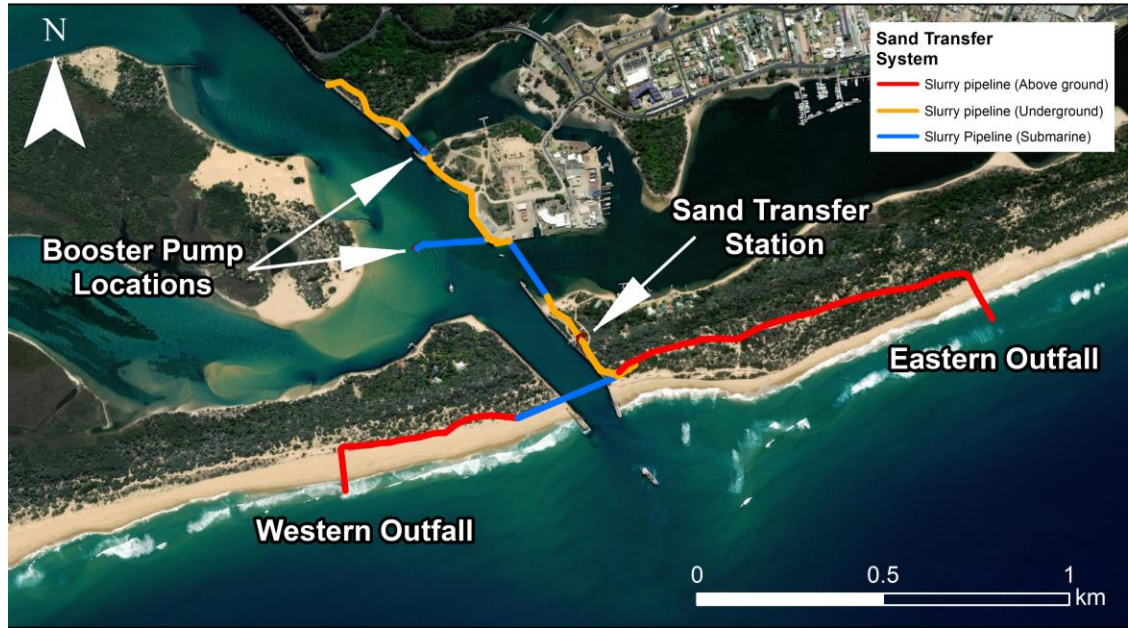


Figure 2: Elements of the Sand Transfer System

Table 2: Coordinates for Dredged Material Grounds for TSHD.

CORNER	Western Dredged Material Ground		Eastern Dredged Material Ground	
	Longitude	Latitude	Longitude	Latitude
North-west	147°56.17616E	37°54.12'S	147°59.43972'E	37°53.26315'S
South-west	147°56.2776'E	37°54.3274'S	147°59.53999'E	37°53.46463'S
South-east	147°57.44375'E	37°53.72533'S	148°00.70888'E	37°52.86686'S
North-east	147°57.53540'E	37°53.92621'S	148°00.80920'E	37°53.06770'S

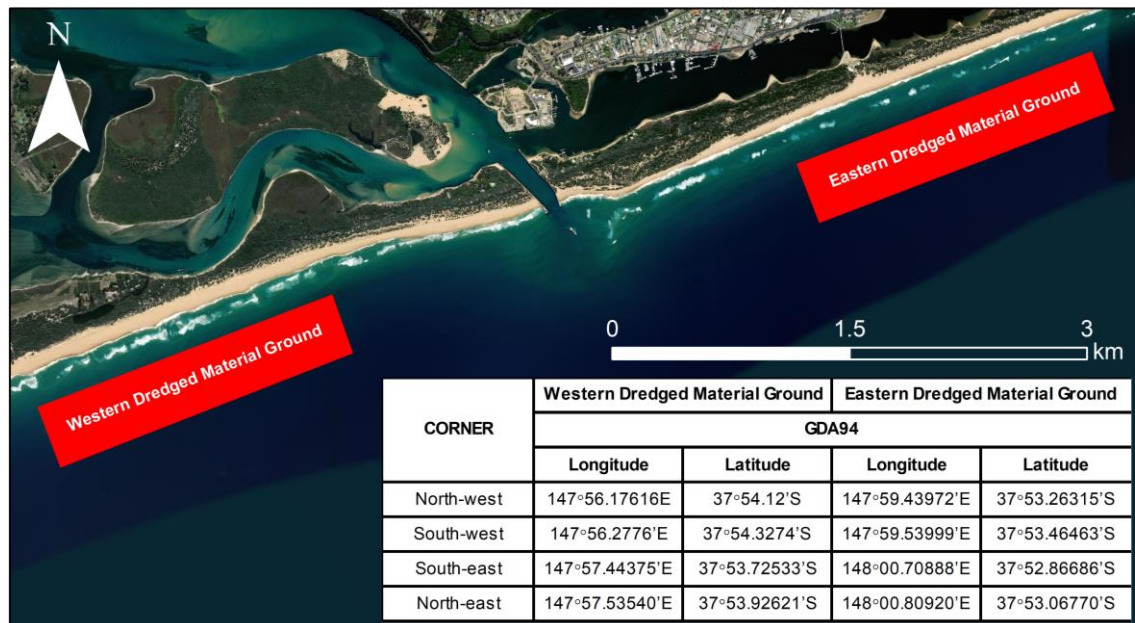


Figure 3: Location of nearshore Dredged Material Grounds for TSHD

The use of the TSHD *Tommy Norton* will comprise an ongoing annual program working week days during daylight hours and dredging mainly in the bar area. Dredging with the CSD *Kalimna* is generally confined to the inner channels and is also carried out on a week days, daylight hours basis, depending on the status of the channels as a result of dynamic oceanic and weather conditions.

Ocean conditions at Lakes Entrance are dynamic, and there may be a need at any time for maintenance dredging to ensure reliable navigable vessel access is maintained between the Gippsland Lakes and Bass Strait.

No dredging is allowed within the Rigby Island Buffer zone (as shown in Figure 4) between October and March inclusive due to presence of Little Terns and Fairy Terns during their breeding season. It is noted that the majority of the dredge design channel is outside of this buffer zone. Dredged material may be placed on Rigby Island, Boole Poole or Long Island with approval from relevant land managers in order to maintain a suitable environment for bird habitat and reduce vegetation losses associated with bank erosion.



**Figure 4: Rigby Island Buffer Zone**



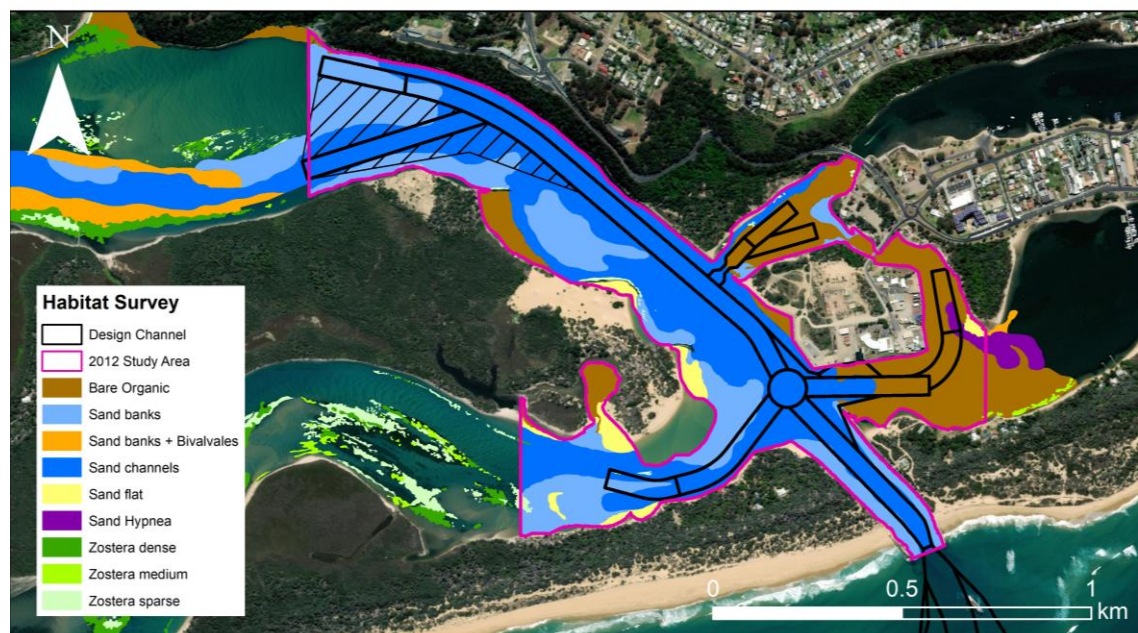


Figure 5: Inner channel habitat zones

### 1.3 Environmental Policy

The Gippsland Ports Environmental Policy provides the umbrella policy direction for the maintenance dredging program.

The overall environmental management of the Port of Gippsland Lakes is guided by Gippsland Ports' Safety and Environmental Management Plan (SEMP) which is prepared as part of Gippsland Ports' obligations under Part 6A of the Victorian Port Management Act 1995. Dredging activities at Lakes Entrance are specifically controlled by this Environmental Management Plan (EMP) which is periodically updated with the approval of regulatory agencies.

The Environmental Policy Statement is displayed in the workplace. Key requirements and responsibilities will be communicated via inductions or other training programs (refer to Section 2.8).

Gippsland Ports is committed to undertaking GLOA in an environmentally responsible manner and in accordance with its statutory approvals and this EMP.

### 1.4 Environmental Management Plan Overview

The implementation of the EMP is underpinned by the systems procedures of GP's integrated Safety Environmental Management Plan (SEMP), which is prepared consistent with Part 6A of the *Port Management Act 1995 (Vic.)*. The development of Gippsland Ports Risk Assessment Framework is based on the application of the following Australian-New Zealand and International Standards:

- ISO 31000-2009 Risk management – Principles and guidelines;
- AS/NZS 4801:2001 Occupational health and safety management systems – Specification with guidance for use;
- AS/NZS ISO14001:2004 Environmental management systems – Specification with guidance for use; and
- AS/NZS ISO14004:2004 Environmental management systems – General guidelines on principles, systems and supporting techniques.

This EMP has been prepared to fulfil the following objectives:

- To establish the processes and controls that will be implemented to ensure that GLOA activities are delivered with no greater risk or effects than those identified in the environmental risk assessment.
- To communicate the environmental management requirements of the EMP to the dredging Masters and crews
- To embed environmental management requirements in the GLOA activities of Gippsland Ports.

## 2 Planning

### 2.1 Legal Requirements

Project approvals, legal requirements, and other relevant requirements such as guidelines and codes of practice have been identified.

Where legislation requires a specific management action or response, these requirements have been identified within the Project Delivery Standards (PDS) as environmental controls, environmental limits, environmental monitoring programs or within contingency plans. The content of a PDS is further described in Section 2.2. The GLOA PDS associated with key legislation are identified in Table 3.

Compliance with legal and other relevant requirements will be evaluated in accordance with the Internal / External Audit Procedure.

**Table 3: Key legislation and associated GLOA PDS**

Legislation	PDS
<i>Marine and Coastal Act 2018 (Vic)</i> <i>Environment Protection Act 1970 (Vic)</i> <i>Environment Protection and Biodiversity Conservation Act 1999</i> <i>Environment Protection (Sea Dumping Act) 1981</i> <i>Aboriginal Heritage Act 2006</i>	All GLOA PDS
<i>Wildlife Act 1975 (Vic)</i>	Marine based works Dredging and plume Dredged material management

### 2.2 GLOA Project Delivery Standards

GLOA Project Delivery Standards (PDS) have been identified for GLOA to address key environmental risks, effects and legal requirements. The GLOA PDS are a collation of the management and mitigation measures, environmental performance monitoring and contingency plans for the project. The GLOA PDS are:

- Hours of operation
- Airbourne noise
- Waste management
- Equipment maintenance
- Fuels, oils, chemicals and hazardous goods
- Emergency response preparedness
- Marine pests
- Vessel anchoring
- Vessel bunkering
- Cetaceans
- Heritage – identification of potential relics and Traditional Owner interests
- Dredging
- Dredging schedule
- Consideration of seasonal sensitivities
- Dredged material placement
- Placement site dissipation monitoring
- Seagrass

The PDS relevant to the GLOA are contained in Annexure 3 of this EMP.

The GLOA PDS include the following:

- An objective – the performance goal.
- A target – performance level at which the objective is demonstrated as being achieved.
- Application – the project activities and project areas to which the PDS applies.
- Environmental controls – management and mitigation measures required to support achievement of the objective during the implementation of the project. These include process controls and associated monitoring
- Reference to environmental or process limits – numerical performance standards which the project must comply with
- Reference to environmental or process monitoring programs – the monitoring programs applicable to the PDS.

### 2.3 External notification and reporting requirements

Performance against this EMP will be reported to government agencies and stakeholder groups as described in Table 4.

**Table 4: External notification and reporting requirements**

PDS	Subject	Reporting or notification	
		Government Agency / Stakeholder	Timeframe
18a	Pollution event or imminent environmental hazard (as defined in Environmental Auditor Guidelines for Conducting Environmental Audits, Publication 953.2, October 2007, EPA, Victoria)	EPA, DEECA, DCCEEW, DTP	Immediate notification (Incident report required).
18b	Project Delivery Standard	DEECA, DCCEEW	Notification within one (1) business day of verifying non-conformance with a PDS.
18c	TSHD program	DEECA, DCCEEW	Since 2017, the TSHD program operates on a year-round continuous basis.
18d	Annual GLOA performance report	DEECA	Within 90 days of completion of all placement activities associated with a year-round TSHD program. A year finishes on 31 December.
18e	SDP annual compliance report	DCCEEW	By 31 January annually, including on the day of the expiry of the permit or completion of all dredging under the permit, in required IMO format (or as approved by DCCEEW) to facilitate annual reporting to IMO.
18f	SDP hydrographic survey	Australian Hydrographic Office (AHO)	Annual bathymetric surveys of DMGs authorised under the SDP, are to be provided to AHO within two (2) months.
18g	SDP hydrographic survey report	DCCEEW	For the annual bathymetric survey completed of all placement activities authorised under the SDP, provide a report within two (2) months including a chart showing the change in sea floor bathymetry as a result of placement and include written commentary on the volumes of placed material that appear to have been retained within the placement site.
18h	Annual reporting and continuous improvement planning	TACC, DEECA, DCCEEW	Stakeholder awareness annually (typically), with outcome summary to DCCEEW TACC agenda prior to meetings and minutes following meetings detailing issues together with proposed actions, accountability, timelines and outcomes.

## 2.4 Risk Management

Environmental risks associated with GLOA have been identified and assessed consistent with the Australian/New Zealand Standard: Risk Management (AS/NZS 4360:2004; Standards Australia and Standards New Zealand 2004) and the Standards Australia Handbook: Environmental risk management - principles and process (HB 203-2000; Standards Australia and Standards New Zealand 2006). Environmental risks are detailed in the GLOA Environmental Risk Register.

## 2.5 Organisational structure and responsibility

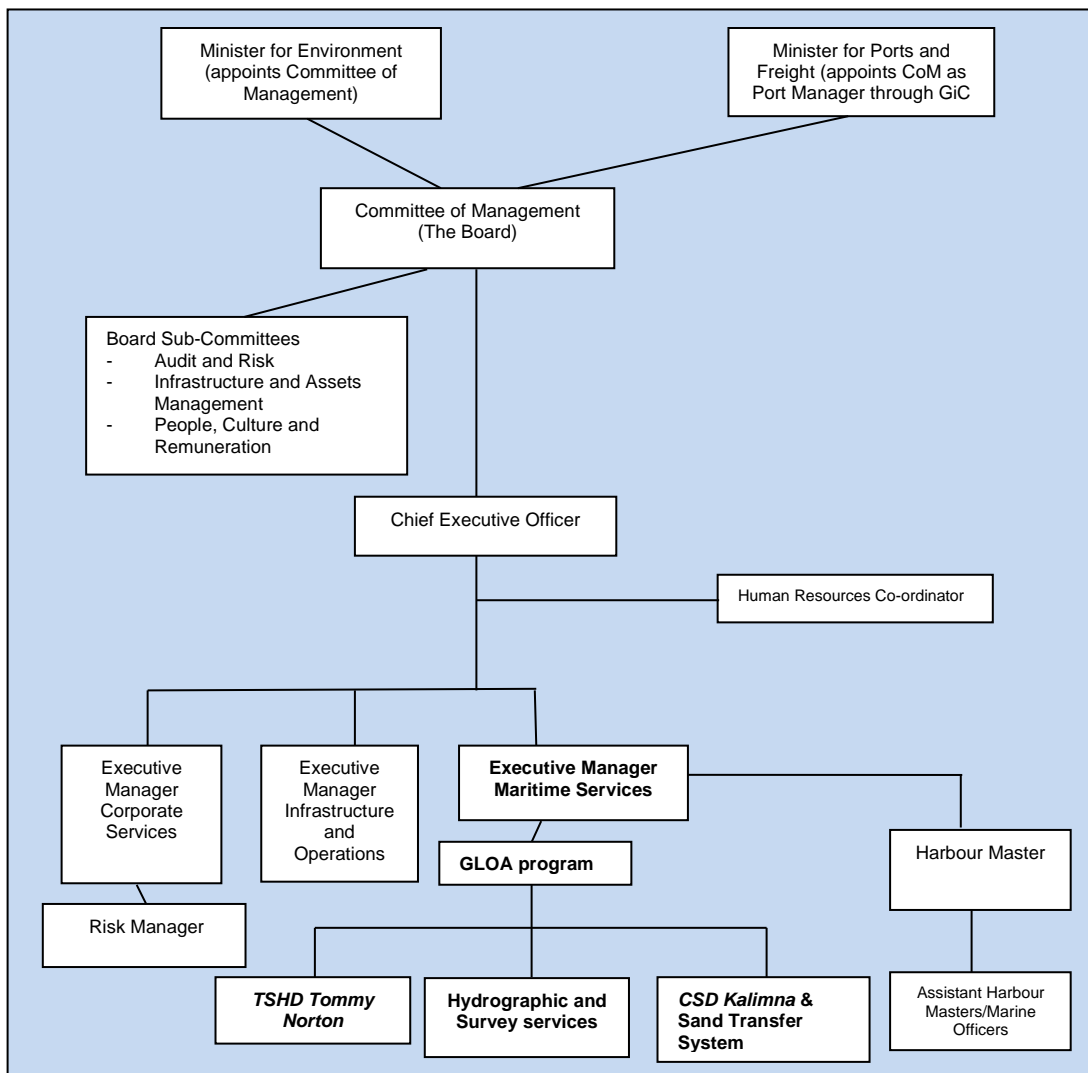
Gippsland Ports has overall responsibility for the implementation of GLOA activities in accordance with the requirements of this EMP.

The CEO or nominated delegate is accountable for:

- Implementing the EMP.
- Co-ordinating all activities relating to the EMP.
- Communicating responsibilities to contractors.
- Providing adequate resources to undertake GLOA in accordance with the EMP.

Responsibility for implementing the EMP will be delegated by the Gippsland Ports CEO through the executive management team to the work force. All levels within the management structure have duties and responsibilities associated with implementing the EMP. Specific operational responsibilities for implementing the EMP will be identified in GP internal procedures, and are outlined in Figure 6 which illustrates line management responsibility for GLOA activities lies with the Executive Manager Maritime Services (EMMS) position.

**Figure 6: Gippsland Ports indicative organisational structure**



## 2.6 Document and record control

Environment documents and records will be managed in accordance with Gippsland Ports' Safety and Environmental Document Control and Records procedures.

## 2.7 Gippsland Ports' change management arrangements

Proposed changes to the project will be assessed and documented following Gippsland Ports Safety and Environmental Document Control and Safety and Environmental Records procedures.

## 2.8 Instruction, Training and awareness

All personnel shall be suitably qualified and experienced to undertake their work in an environmentally responsible manner. Personnel who have formal responsibilities under this plan will undergo instruction or training in the requirements of this EMP.

Instruction and training may include formal training courses, personnel inductions and meetings, tool box talks, and ongoing awareness instruction and mentoring in the field. Records of training and inductions will be maintained.

Instruction and training requirements will include relevant personnel in identification of cetaceans (whales, dolphins), and threatened bird species (for example, hooded plover, little tern), and relevant protocols for working in proximity to these species.

All personnel involved in GLOA activities will be required to complete site, vessel and dredging program inductions which will incorporate key environmental aspects of the GLOA program. All personnel will be required to complete an assessment during site inductions to demonstrate an understanding of key issues, requirements and responsibilities.

Induction topics will include the following:

- GP Environmental Policy
- Legislative requirements and key environmental issues
- Safety management procedures
- Emergency response
- Incident reporting
- Waste management
- Cetacean and other threatened species requirements
- Individual and organisational responsibilities
- Communication requirements
- Consequence of compliance failures, with particular emphasis on EMP undertakings.

## 2.9 Communication

Internal and external communication and consultation arrangements are described below. The CEO and EMMS will be responsible for and undertake all requirements with respect to community liaison.

### 2.9.1 Internal communication

Internal communication methods include meeting agendas and notices distributed by email.

Toolbox meetings are held by EMMS with the *Tommy Norton* and *Kalimna* crews and separately by the Masters with their crews. Environmental matters are included as agenda item at meetings.



### **2.9.2 External communication**

A variety of methods will be used to enable information to be distributed to, and received from, interested members of the community and GLOA stakeholders, the Gippsland Lakes Ocean Access Stakeholder Engagement Plan refers.

These may include the following:

- GP website ([www.gippslandports.vic.gov.au](http://www.gippslandports.vic.gov.au))
- Broadcast email
- Media releases
- Social Media
- Newspaper advertisements
- Direct verbal or written advice (one or more of telephone, post or email)
- Notices to Mariners.

The provision of information to GLOA users of non-English speaking origin, if requested, will be consistent with current State Government of Victoria protocol for the translation and distribution of communications in languages other than English.

Key communication activities include the following:

- GLOA operational activities to be included on the GP website.
- All Feedback and complaints regarding dredging will receive a response within 2 business days and resolved within 30 days. Complaints will be managed following the process described in Annexure 5 and resolved as soon as practicable.
- Engage various stakeholder groups every year (typically) through a formal TACC meeting.

Key stakeholders include:

- Relevant local, state and federal government bodies
- recreational, business and commercial users and industry representatives
- Traditional Owners
- heritage groups
- local resident groups
- environmental interest groups

## **2.10 Emergency preparedness, response and recovery**

Emergency scenarios are identified in the GLOA Environmental Risk Register.

GP has statutory responsibility under the state Emergency Management Act for response to marine pollution in the Gippsland Lakes in accordance with the state MENSAR plan. The Gippsland Ports Emergency Response Procedure includes GLOA activities and risks.

All emergencies are managed in accordance with the vessels Safety Management System and GP policy and procedures. Following an emergency incident, an investigation will be conducted and corrective actions identified and addressed.

## **3 Measurement and evaluation**

### **3.1 Incident reporting and investigation**

Environmental incidents and hazards, including pollution incidents will be reported and recorded. This requirement will be included in inductions and reinforced at operational meetings.

Gippsland Ports has an Incident / Hazard Reporting procedure (refer to Annexure 2). Once complete the report must be actioned and the details entered into the Incident Register and kept

on file for a minimum of 7 years. Incident / Hazard Reports and the Incident Register are considered as part of the quarterly Environment Health and Safety Committee agenda and reported to the Gippsland Ports Board.

External reporting requirements in relation to hazards and incidents are identified in Table 4.

### **3.2 Audits**

Audits will be undertaken to monitor compliance with the GLOA EMP and all approval conditions. Improvement opportunities may also be identified during audits.

Auditing of Gippsland Ports' SEMP is documented in Safety and Environment Audit Procedures and Safety and Environment Audit program. These procedures require a regular program of internal auditing and triennial external certification audits.

Gippsland Ports has established an annual audit program since 2011 to ensure that the GLOA EMP is embedded in the operational context and will align the EMP and the SEMP.

Conformance with this EMP and all approval conditions will be assessed through observation of GLOA activities, interviews and review of dredge records that may include the following:

1. Inspection reports;
2. Dredge and STS record sheets (Project Plans, Inductions, Daily Reports, Operational hours reports, waste disposal records, Marine Fauna Observation logs)
3. Hydrographic surveys
4. Dredge drag head tracking data (Track Plots)

GP implementation of the EMP will be audited annually using an external auditor engaged by Gippsland Ports, with this audit focusing on the operation of the TSHD.

### **3.3 Monitoring of environmental performance**

Environmental performance will be monitored through process monitoring, inspections and surveys. Monitoring of operational activities and physical conditions (eg. tracking equipment and hydrographic survey and weather station). Process monitoring, inspections and surveys are identified in PDS alongside process controls. Monitoring of dredging data informs any additional management action that may be required.

In addition to monitoring undertaken by Gippsland Ports, results of monitoring undertaken by other Agencies that are provided to Gippsland Ports will be collated and form part of the auditing and reporting process.

### **3.4 Timing contingency for monitoring activities**

Operational monitoring and inspections (including surveys) will be scheduled but timing of these activities will consider safety issues and vessel workability.

## **4 Review and Reporting**

### **4.1 Maintenance dredging program management review and report**

A review of the EMP and environmental performance will be undertaken annually.

The review will include:

- Compliance with PDS
- Compliance with legal requirements including statutory approvals and other commitments
- Results of inspections, surveys and audits.

## GLOA Environmental Management Plan

An annual GLOA performance report will be prepared following the management review. The annual GLOA report will contain a summary of GLOA outcomes for the previous 12-month period including:

- a summary of activities
- volumes dredged, calculated from hydrographic survey results
- volumes taken to DMGs, calculated from hydrographic survey results
- conformance with PDS
- stakeholder engagement.
- Commentary on coastal processes monitoring
- Commentary on current advice on sea level rise
- Commentary on navigation depths maintained

The annual GLOA performance report will be provided to DEECA within 90 days following completion of the year-round dredging program on 31 December

Gippsland Ports maintains Safety and Environmental Review processes, and review of this EMP will be incorporated into this existing process once this EMP is embedded operationally to the satisfaction of Gippsland Ports management.

## Annexure 1 - Environmental Policy



### 3.1 ENVIRONMENTAL POLICY

Policy Number: 3.1  
Date of Current Issue: March 2021  
Date of Next Review: March 2024

**Policy Scope:** This policy applies to all Gippsland Ports' employees, contractors, customers, visitors, and the public. The policy applies to all Gippsland Ports' functions and operations, including contributions to regional environmental management.

**Policy Purpose:** This Environment Policy is a statement of Gippsland Ports' intentions and principles in relation to its overall environmental performance and provides guidance for action and the setting of environmental objectives and targets.

This policy informs Gippsland Ports management of any existing and emerging environmental impacts associated with its operations and responsibilities for ports, waterways and related assets.

**Policy:** Gippsland Ports recognises that the environmental health of its ports and waterways has a direct impact on the health and wellbeing of Gippslanders. It is therefore committed to: minimising the environmental impacts of its operations, fulfilling our environmental responsibilities and planning for and adapting to changes in the environment.

Gippsland Ports is committed to operating in accordance with relevant environmental legislation in a manner that includes and respects environmental values and sustainability for the benefit of present and future generations.

It will aim to go beyond its legislative obligations to ensure, where opportunities exist, best practice environmental management is implemented. Gippsland Ports will engage with key agencies and stakeholders to respond to environmental matters of mutual interest and support regional environmental management initiatives.

Through the setting of targets and assisting with the monitoring of the port and waterway environment, Gippsland Ports will contribute to ensuring that its ports and waterways are not adversely impacted. In its everyday operations it will implement waste management strategies that will encourage energy reduction, reuse, and recycling.

The training of its personnel, provision of information to its contractors, customers, visitors, and the public will lead to the development of improved and sustainable environmental practices. Gippsland Ports will identify where its actions may lead to environmental impacts and implement programs to eliminate, or where elimination is not possible, so far as is reasonably practicable, reduce, the impacts of such actions.

**Related Processes:** The following documents, policies and procedures are related to this policy:

- Gippsland Ports Safety and Environmental Management Plans
- Gippsland Ports Environmental, Health & Safety Management MAINSTAY Program

**Related Legislation:** Environment Protection Act (VIC) 1970  
Pollution of Waters by Oils and Noxious Substances Act 1986 (POWBONS)

**Date Adopted** 28 August 2012

**Date Reviewed & Endorsed** February 2018, March 2021

**Next Review Date** March 2024



# Annexure 2 – Incident / Hazard Report



## INCIDENT/HAZARD REPORT

Number:   
(Please use only) RHS 204.2-00-01

Use this form to report a current or potential hazardous situation, risk, event or near miss or any incident that has the potential to affect staff, public, customers, equipment, property or the environment. If in doubt, complete this report. Provide to the Risk & Compliance Manager within 48 hours. Provide any additional details over page.

### PART 1 - INFORM

**IMPORTANT: Download form and save before making entries.**

**A. Incident/ Hazard Location Date & Time**

Site & Location:  Incident/hazard Date:  Time:   
 Person Completing form:  Date:   
 Manager/rep advised - Date:  Time:  HSR advised- Date:  Time:

**B. Person(s) involved/injured/ witnesses** (note any additional persons next page.) **CONFIDENTIAL-** section below when filled

Names	Employee/Other <small>(Note 1)</small>	Role <small>(note 2)</small>	Injury -nature & bodily location <small>(as applicable)</small>
<input type="text"/>	<input type="text"/> *	<input type="text"/> *	<input type="text"/>
<input type="text"/>	<input type="text"/> *	<input type="text"/> *	<input type="text"/>
<input type="text"/>	<input type="text"/> *	<input type="text"/> *	<input type="text"/>

Note 1: Employee OR GP Contractor OR Independent Contractor OR Public Note 2- Role: Witness OR First Aider OR Injured

**C. Activity & Incident/ Hazard** (describe - include names of any vehicles/plant involved)

**Forward to Manager & RCM (or delegate) by email for further advice on followup.**  
 Provide any additional details at next page.

### PART 2 - FOLLOWUP

**D. Investigation findings & recommendations** (to prevent recurrence)

**E. Manager/ Supervisor comments**

Manager name:  Signature/ Acknowledge ref:  Date:

**F. RCM Action/ Comments** - Entered at register Date:  Time:   
 Finalised copy provided to originator, supervisor & HSR Date:  Time:

RCM/ rep name:  Signature:  Date:

Revision 4.0, 11/2019

Number:   
(Office Use Only)

**G. Incident/ Hazard Report - additional details:**

**Images/ Photos/ Diagrams:**

Description:

Description:

Description:

Description:

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Gippsland Ports

EHS 204.2

# INCIDENT REPORT

**IMPORTANT:**  
Download form and save before making entries.

Use this form to report a current or potential hazardous situation, risk, event or near miss or any incident that has the potential to affect staff, public, customers, equipment, property and/or the environment in GP workplaces including GP vessels. If in doubt, complete this form. Provide to the EHS Team within 48 hours.

Person Completing Report:

Date of Incident:  Time of Incident:  AM PM  
(circle)

Site & Location: *Provide the site name and the location within the site where the incident occurred.*

Incident Description: *Include names of any vehicles/plant involved along with any first aid provided.*

Additional Details: *Provide any additional details including other people involved and any witnesses.*

**This section CONFIDENTIAL if completed.**

Injured Person(s) Name(s):   
*Provide full name(s) of the injured persons. If no injury - leave blank.*

Injury(s) Description:   
*Describe the nature and bodily location of the injury. Otherwise leave blank.*

**Provide a COPY to your Manager, HSR and the EHS Team.**



## Annexure 3 - Project Delivery Standards

**Table 5: Operational management (all activities and areas) PDS**

Operational management (all activities)	
<b>Objective</b>	To plan and implement operational aspects of GLOA. To ensure materials are appropriately stored, handled and disposed of.
<b>Target</b>	Conformance with all environmental limits and controls.
<b>Application</b>	Throughout all GLOA operational activities and areas.
Environmental controls	Operational phase
<b>1. Hours of operation</b> a) All activities may be conducted on a 24 hour, 7 days a week basis, except where explicitly restricted within this EMP, or by legislation. b) Normal hours of operation are weekdays, daylight hours.	Operation
<b>2. Airbourne noise</b> a) Airbourne noise monitoring will be conducted if and when stakeholder feedback and/or complaints received indicate equipment used in facilitating GLOA is resulting in non-compliance. Note: GP has operated dredging equipment in the same locations over decades resulting in one complaint which was resolved by amending an operating procedure requiring door closure at the STS pump station. b) Noise monitoring will be conducted if required in accordance with the procedure outlined in Annexure 4 which references 'Noise from Industry in Regional Victoria' (EPA Pub. No.1411 and 'Control of Noise from Commerce, Industry and Trade' (SEPP N-1).	Maintenance and operation
<b>3. Waste management</b> a) All dredgers have sewage containment facilities. b) No disposal of untreated sewage or other waste to waterway. "nothing overboard" c) All waste management arrangements to include waste minimization, containment, segregation and appropriate reuse, recycling, treatment and disposal. d) The handling and disposal of unexpected materials identified during dredging (eg. Inert debris such as steel sections and timber) to be included in waste management arrangements. e) All waste to be managed in accordance with: <ul style="list-style-type: none"> <li>o <i>Environment Protection Act 1970 (Vic)</i></li> <li>o <i>Quarantine Act 1908 (Commonwealth)</i> for applicable vessels</li> <li>o <i>Pollution of Waters by Oil and Noxious Substances Act 1986 (Vic)</i></li> </ul>	Maintenance and operation
<b>4. Equipment maintenance</b> a) Maintenance programs will be implemented for all plant and equipment as defined in GP's procedures and the <i>Occupational Health and Safety Regulations 2007 (Vic)</i> .	Maintenance and operation
<b>5. Fuels, oils, chemicals and hazardous goods</b> a) Storage and handling of chemicals in accordance with: <ul style="list-style-type: none"> <li>o <i>Dangerous Goods Act 1985 (Vic)</i></li> <li>o <i>International Ship Management (ISM) Code</i> for applicable vessels</li> <li>o <i>Pollution of Waters by Oil and Noxious Substances Act 1986 (Vic)</i></li> </ul> b) Asbestos audits indicate that no asbestos is present in any GLOA infrastructure,	Maintenance and operation



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<p>however, should asbestos be found, it will be managed in accordance with the</p> <ul style="list-style-type: none"> <li>o <i>Occupational Health and Safety Regulations 2007 (Vic).</i></li> </ul>		
<p><b>6. Emergency response preparedness</b></p> <p>a) Development and testing of emergency response procedures, integrated with the GP EMP, including provision for fuel, oil and chemical spills.</p> <p>b) All dredging vessels have oil spill response kits on board. Relevant personnel are trained in pollution response procedures.</p>		<p>Maintenance and operation</p>
<p><b>Environmental limit</b></p> <p>Airborne noise</p>	<p><b>Environmental monitoring program</b></p> <p>Airborne noise</p>	
<p><b>Contingencies</b></p>	<p>Vessel Safety Management System</p> <p>Airborne Noise Contingency Plan</p> <p>Emergency response managed by GP Emergency Response Plan.</p> <p>GP is the marine pollution emergency response agency for Gippsland under the state Marine Non-Search And Rescue (MENSAR) plan.</p>	

**Table 6: Marine-based works (all areas) PDS**

<b>Operational management (all activities)</b>	
<b>Objective</b>	To appropriately manage marine-based works. To minimise disturbance to and appropriately manage Traditional Owner and heritage values. To minimise impacts on cetaceans due to vessel maneuvering.
<b>Target</b>	Conformance with all environmental limits and controls.
<b>Application</b>	All marine-based GLOA activities.
<b>Environmental controls</b>	<b>Operational phase</b>
<b>7. Marine pests</b> a) The TSHD <i>Tommy Norton</i> and CSD <i>Kalimna</i> are based at Lakes Entrance, Victoria. If additional contracted vessels are required or GP vessels work at, and return from another Australian port, then appropriate marine pest inspection, risk assessments and clearance certification is required before mobilisation to Gippsland Lakes. Relevant Certification must be received from the final port of call before entry to the Gippsland Lakes. b) All vessels to comply with <i>Protocol for Environmental Management – Domestic Ballast Water Management in Victorian State Waters</i> , EPA Publication 949.3 (July 2010). c) All vessels to comply with <i>Australian Ballast Water Management Requirements</i> .	Pre-arrival at Gippsland Lakes
<b>8. Vessel anchoring</b> a) Vessels to anchor or berth in accordance with Gippsland Ports Harbour Master's instructions.	Maintenance and operation
<b>9. Vessel bunkering</b> a) All bunkering to take place in accordance with conditions stated in Gippsland Ports' issued Fueling Permit and approved vessel bunkering procedures.	Maintenance and operation
<b>10. Cetaceans – vessel activities</b> a) The TSHD <i>Tommy Norton</i> will operate in accordance with the <a href="#">Australian National Guidelines for Whale and Dolphin Watching 2017</a> . During dredging and placement activities the TSHD <i>Tommy Norton</i> typically operates at low speeds of 1 – 2 knots. b) The CSD <i>Kalimna</i> is non-self-propelled and effectively stationary during operations and hence these guidelines do not apply. c) A cetacean register will be maintained as per PDS 11.	Operation
<b>11. Cetacean sightings and log</b> a) A check for cetaceans within the 'approach' and 'caution' monitoring zones (refer PDS 10a) will occur prior to commencement of each dredging or placement run. b) Personnel on board vessels are to report all sightings of cetaceans. c) Cetaceans will be actively avoided if possible and will not be deliberately approached by the dredge. d) If cetaceans are sighted within the 'approach' and 'caution' monitoring zones (refer PDS 10a), material dredging or placement operation will cease until cetacean is outside the monitoring zone or not sighted for 20 minutes. The Master may move the dredge to extend the distance from the cetacean. e) A log of cetacean sightings and action taken will be maintained in the Marine Fauna	Operation Annual Report

GLOA Environmental Management Plan

<p>Observation Register. Refer Annexure 6.</p> <p>f) This information is summarised in the annual GLOA performance report and provided to the Marine Mammal Foundation.</p>		
<p><b>12. Heritage (marine based) – identification of potential relics</b></p> <p>a) If potential relics are identified during operational activities, the process described in Annexure 5 will be followed.</p>		Operation
<p><b>13. Traditional Owners</b></p> <p>a. GLaWAC will be engaged per the GLOA Stakeholder Engagement Plan and included in the Technical Advisory Consultative Committee; and also engaged separately in quarterly meetings in a culturally safe manner and location, that includes GLaWAC aspirational and environmental discussions.</p>		Operation Consultation
<p><b>Environmental limit</b></p> <p>Not applicable to this PDS</p>	<p><b>Environmental monitoring program</b></p> <p>Not applicable</p>	
<p><b>Contingencies</b></p>	<p>Not applicable</p>	

**Table 7: Dredging and plume PDS**

<b>Dredging and plume</b>																									
<b>Objective</b>	<p>To appropriately manage dredging activities and sediments.</p> <p>To minimize the area of channel and seabed disturbed and appropriately manage the material removed.</p> <p>To protect assets, beneficial uses and values from long-term adverse effects to dredging-related water quality effects.</p>																								
<b>Target</b>	Conformance with all environmental limits and controls.																								
<b>Application</b>	<p>All dredging activities.</p> <p>The placement of dredged material at the DMGs and Ocean Outfalls.</p> <p>Use of dredges and associated equipment.</p>																								
<b>Environmental controls</b>	<b>Operational phase</b>																								
<p><b>14. Dredging</b></p> <p>a) Dredging must remain within the identified dredging zones and will be confirmed by recorded GPS data. Note: Dredging equipment and associated support vessels will maneuver outside dredge areas, including transit from mooring locations.</p> <p><b>Turbidity</b></p> <p>b) The overflow valve of the TSHD must be closed when the vessel is not engaged in dredging.</p> <p>c) During the period of September to January (grayling migration period) plume caused by dredging activities, i.e. the 'Dredge effect', must not exceed 25NTU, at a distance of 50m from the vessel, across the channel in accordance with the TSHD Turbidity Monitoring Protocol. Note: the 'Dredge effect' is calculated by subtracting the minimum turbidity value of the ten Reference readings (five stations with two depths) from the maximum turbidity value of the ten Test readings (five stations with two depths).</p> <p>d) During the grayling migration period (September to January), the dredge will not operate in overflow mode between the training walls on a flood tide.</p> <p>e) Recording of equipment activity on dredge log sheets will include the following information as a minimum:</p> <table border="1" data-bbox="188 1422 1120 1758"> <thead> <tr> <th>Equipment</th> <th>Time / Date</th> <th>Location / Co-ordinates</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>TSHD</td> <td>✓</td> <td>Management of sand from ..... Sailing and placement of sand to ....</td> <td>Dredging Area; sailing full/empty; placement at East/West DMG; Delays</td> </tr> <tr> <td>CSD</td> <td>✓</td> <td>Management of sand from .....</td> <td>Dredging Area // east or west discharge point</td> </tr> <tr> <td>Other (sand shifters, bulldozer, etc)</td> <td>✓</td> <td>Management of sand from .....</td> <td>Reason for use of equipment other than dredge.</td> </tr> <tr> <td>DMG</td> <td>✓</td> <td>N/A</td> <td>East / West</td> </tr> <tr> <td>DMG</td> <td>✓</td> <td>N/A</td> <td>East / West</td> </tr> </tbody> </table>	Equipment	Time / Date	Location / Co-ordinates	Status	TSHD	✓	Management of sand from ..... Sailing and placement of sand to ....	Dredging Area; sailing full/empty; placement at East/West DMG; Delays	CSD	✓	Management of sand from .....	Dredging Area // east or west discharge point	Other (sand shifters, bulldozer, etc)	✓	Management of sand from .....	Reason for use of equipment other than dredge.	DMG	✓	N/A	East / West	DMG	✓	N/A	East / West	Operation
Equipment	Time / Date	Location / Co-ordinates	Status																						
TSHD	✓	Management of sand from ..... Sailing and placement of sand to ....	Dredging Area; sailing full/empty; placement at East/West DMG; Delays																						
CSD	✓	Management of sand from .....	Dredging Area // east or west discharge point																						
Other (sand shifters, bulldozer, etc)	✓	Management of sand from .....	Reason for use of equipment other than dredge.																						
DMG	✓	N/A	East / West																						
DMG	✓	N/A	East / West																						
<b>Environmental limit</b>	<b>Environmental monitoring program</b>																								
Plume Turbidity	<p>Gippsland Ports' long-term turbidity monitoring (2011 – 2022) has clearly demonstrated that dredging and placement of clean sand does not significantly impact on local water quality.</p> <p>Turbidity, monitoring will continue</p> <p>Seagrass monitoring</p>																								

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	Water quality and flow monitoring
<b>Contingencies</b>	Not applicable



**Table 8: Dredging schedule PDS**

<b>Dredging schedule</b>	
<b>Objective</b>	To develop an appropriate dredging schedule, considering the seasonal sensitivities of the Gippsland Lakes' assets, beneficial uses and values.
<b>Target</b>	Conformance with all environmental limits and controls.
<b>Application</b>	All dredging activities.
<b>Environmental controls</b>	<b>Operational phase</b>
<p><b>15. Dredging schedule</b></p> <p>a) Dredging to take place in accordance with Table 10: Dredging Summary.</p> <p>b) No dredging is allowed within the Rigby Island Buffer zone (as shown in Figure 4) between October and March inclusive. It is noted that with the exception of the end of Hopetoun Channel, the dredge design channels are outside of this buffer zone.</p> <p>c) Dredging schedule to include:</p> <ul style="list-style-type: none"> <li>o Dredging technology.</li> <li>o Timing, duration and sequence of dredging and placement and use of sand</li> </ul>	Planning
<p><b>16. Consideration of seasonal sensitivities</b></p> <p>a) Dredging activities planned with a particular awareness and regard for high recreational use periods (Easter, Summer holidays, long weekends) as set out in Table 11 – Key seasonal sensitivities and preferred seasons.</p>	Planning
<b>Environmental limit</b>	<b>Environmental monitoring program</b>
Not applicable to this PDS	Not applicable
<b>Contingencies</b>	Not applicable

**Table 9: Dredged material management PDS**

<b>Dredged material management</b>	
<b>Objective</b>	To manage and track the placement of dredged material. To relocate dredged material and manage dredged material appropriately within the DMGs (by TSHD) and near-shore points (by CSD to the Ocean Outfalls)
<b>Target</b>	Conformance with all environmental limits and controls.
<b>Application</b>	All dredged material placement and DMG management.
<b>Environmental controls</b>	<b>Operational phase</b>
<p><b>17. Dredged material placement</b></p> <p>a) Dredged material must only be placed within the Western and Eastern placement sites defined by the MGA 94 coordinates in Table 2: Coordinates for Dredged Material Grounds for TSHD.</p> <p>b) Dredged material must be placed along a different alignment for each placement cycle (subject to suitable metocean conditions).</p> <p>c) Prior to placement, establish by GPS that the vessel is within one of the defined placement sites.</p> <p>d) Dredging placement locations to be recorded as per recording of equipment (refer to Table 7: Dredging and plume PDS).</p> <p>Volumes are to be calculated from dredge records and hydrographic survey data.</p>	Operation
<p><b>18. Placement site dissipation monitoring</b></p> <p>a) DMGs - Hydrographic surveys will be undertaken on an annual basis.</p> <p>f) The results of hydrographic surveys will be included in the annual GLOA performance report</p> <p>g) Changes in DMG profile are reported to AHO per IMO requirements and used to inform dredging plans.</p> <p>b) Near-shore discharge:</p> <p>a. Documentation to include photographic records, and aerial or satellite imagery as required to monitor shoreline in vicinity of discharge (outfall) locations.</p>	Operation Reporting
<b>Environmental limit</b>	<b>Environmental monitoring program</b>
Not applicable to this PDS	Not applicable
<b>Contingencies</b>	Not applicable

**Table 10: Dredging Summary**

Location (see Figure below)	Dimensions for navigation reliability (metres)		Dredging Target <sup>2</sup> (metres)		Over Dredging Tolerance <sup>3</sup> (metres)	
	Width <sup>1</sup>	Depth	Width	Depth	Width	Depth
Bar/Wedge	80 to 450	3.5	80	5.5	± 5m	-1.0
Sand traps (Wedge) <sup>6</sup>	n/a	n/a	35	8.5	± 5m	-1.0
Entrance Channel	50	3.5	50	4.5	±2m	-1.0
Swing Basin (diameter)	100	3.5	100	4.5	±2m	-1.0
Cunninghame Arm <sup>4</sup>	50	3.5	50	4.5	±2m	-1.0
The Narrows	50	3	50	4	±2m	-1.0
Hopetoun Channel	50	3	50	4	±2m	-1.0

**Notes:**

All depths are measured from 'Chart Datum' (0.757m below Australia Height Datum).

1 – 80m width just beyond the seaward end of the training wall and 450m is the maximum width of the wedge.

2 – Dredging Target allows for accretion of sand during non-dredging interval

3 – Over Dredging Tolerance (includes survey tolerance) – allowance for slumping and settlement immediately after dredging

4 – The western end of Cunninghame Arm is dredged to allow safe navigation to unloading facilities for trawlers at Bullock Island and berthing of TSHD *Tommy Norton*.

5 – Two sand traps up to 220m length and 35m width can be dredged if required on both western and eastern boundary of wedge. Exact location dependent on location of Bar formation. Refer indicative locations in Figure below.



**Table 11: Key seasonal sensitivities and preferred seasons**

<b>Project area</b>	<b>Key seasonal sensitivities</b>	<b>Preferred seasons</b>
Seaward of Entrance: Bar channel, wedge, wedge channel	High recreational use over summer / public holiday periods. Occasional whale sightings during migration.	Dredging occurs all year round. April, May, June and July are ranked as the preferred months for dredging due to historically relatively benign weather conditions. Spring is considered least preferred due to weather conditions.
Inner channels	High recreational use over summer / public holiday periods.  Proximity to potential nesting locations of Little Tern – no dredging within buffer between October to March inclusive.	Due to sheltered location, there is no preferred season due to weather conditions.  No dredging occurs within the adopted Rigby Island buffer zone during October to March. Bird monitoring in accordance with Birdlife Australia protocol
Inner channels	September to January inclusive <i>Australian Grayling</i> migration.	Gippsland Ports long-term turbidity monitoring from 2011-2023 has demonstrated no significant increases in turbidity associated with sand removal and placement activities. Controls as per Table 7, 14 b), c), d) Development of a Grayling Monitoring program with Arthur Rylah Institute during migration period.

Note: Since 2017, Gippsland Ports has undertaken year-round maintenance dredging with the TSHD *Tommy Norton*. Key seasonal sensitivities outlined in Table 11 above are still considered when planning the annual dredging program and associated monitoring requirements.

## Annexure 4 – Environmental Monitoring Programs & Contingency Plans

### Ramsar

Gippsland Ports as the appointed port and waterway manager is actively involved with other agencies in the Ramsar wetland management planning for the Gippsland Lakes.

### Reporting

The results of Gippsland Ports GLOA monitoring program required by permits and consents conditions will be reported to DEECA and DCCEEW respectively via the annual GLOA program reports.

### Seagrass

- a. Seagrass monitoring regime including the collation of annual satellite (or drone/aerial) imagery of seagrass in the Lakes Entrance (GLOA) dredging boundary and 100m buffer zones.
- b. Annual surveys of seagrass to be performed within 100 metres of both the dredge and nourishments sites. If, due to GLOA activities, the surveys indicate a loss in area or extend greater than that observed from historical aerial imagery from previous dredging campaigns, mitigation actions to address this change will be included in an updated Environmental Management Plan submitted to the Regional Director, Gippsland Region within 3 months of the surveys taken place.

### Sediment quality

- a. Comprehensive sediment sampling and contaminant analysis was undertaken in 2022 to support ongoing GLOA consent/permits.
- b. Ongoing sediment sampling will be undertaken every three years (2025, 2028 etc.) to confirm status of sediments and determine any long-term trends.

### Seabed

- a. Bathymetric surveys of the DMGs are undertaken on an annual basis (refer Table 9) and monthly for the Bar and Inner Channels. These surveys are published on [Gippsland Ports website](#).
- b. Benthic - The seabed at both DMGs is characterised by a flat sandy bottom with 100mm high sand ripples; comprising of predominantly coarse sand and no sign of marine growth (Water Technology, 2022). AME (2012, 2007) also states “*The coastal study areas outside the entrance have no aspects that would qualify them as of regional, state or national significance. The communities and habitats were generally represented over larger areas with no ecological or environmental features apparent to indicate any increased importance to the study area (DMGs) over other areas of coast in the Lakes Entrance region*”. As such no further benthic surveys (besides seagrass) is proposed for the East and West DMGs which have been approved for ongoing sand placement by the State and Commonwealth regulators since 2008.

### Water Quality and Water Flow

- a. Water flow (current speed) and tides (water levels) at Lakes Entrance are continuously monitored by Gippsland Ports and published on their website at [Lakes Entrance Waves Tides and Weather - Gippsland Ports](#).
- b. Water quality (salinity, dissolved oxygen, temperature, turbidity, pH, nutrients etc.) in the Gippsland Lakes has been monitored monthly by EPA Victoria since 1990 at the following locations:
  - Lake Wellington
  - Lake Victoria
  - Lake King South
  - Lake King North
  - Shaving Point (Metung)

Gippsland Ports will prepare and publish on our website an annual technical note on measured water levels and salinity conditions (provided by EPA Victoria) within the Gippsland Lakes.

### **Invasive Marine Species**

GLOA program risks associated with IMS introduction is managed through arriving vessels' requirements outlined in Table 6. It is noted that both the TSHD *Tommy Norton* and CSD *Kalimna* are based at Lakes Entrance, Victoria.

### **Algal Blooms**

Gippsland Ports will visually monitor for algae blooms during GLOA activities and report to relevant managing agencies (DEECA, CMA, DHS) if sighted.

### **Cetaceans**

- a. Refer Table 6 for cetacean monitoring and recording requirements.

### **Grayling**

- a. Development of a monitoring protocol jointly with the Arthur Rylah Institute to investigate when the species may be moving through the Gippsland Lakes entrance for downstream spawning migration and juvenile return migration.
- b. Refer Table 7 for turbidity monitoring requirements.

### **Birds**

- a. Dredging staff are trained in identification of bird species including fairy terns, little terns, and hooded plovers.
- b. Equipment monitoring and maintenance requiring beach access includes measures to manage potential impacts on shorebirds.
- c. Bird activity will be monitored in accordance with the Birdlife Australia *Protocols for Gippsland Ports for threat minimisation to Hooded Plovers (Thinornis rubricollis)* including activity recorded when required using the Birdlife Australia online *shoreline bird monitoring portal*.
- d. Beneficial reuse of dredged material considers the potential for shoreline habitat renourishment.
- e. Gippsland Ports and Birdlife Australia Gippsland Coordinator work together with EGCMA to deliver shoreline habitat renourishment projects in the Gippsland Lakes.

## **AIRBOURNE NOISE**

### **Context**

This environmental monitoring program relates to airborne noise resulting from GLOA activities, and will be activated if stakeholder feedback and/or complaints received indicate equipment used in facilitating GLOA is resulting in non-compliance.

*Note:* Gippsland Ports has operated equipment in the same locations over decades resulting in one complaint which was resolved by amending an operating procedure requiring door closure at a shed.

### **Environmental monitoring program**

The main aspect of this environmental monitoring program is the use of the standard indicator for airborne noise measurement of "A" weighted equivalent noise level (LAeq) measured in decibels (dB) – as is used within SEPP (Control of Noise from Commerce, Industry and Trade) No.N-1 (SEPP N-1). Noise from Industry in Regional Victoria' (EPA Pub. No.1411) will also be referenced.

Monitoring location(s) will be informed by the feedback and/or complaints received. Monitoring will occur during normal operational activities occurring at the time feedback and/or complaint was received.

Monitoring to confirm SEPP N-1 conformance will be carried out over 3 consecutive days and reflect the time the feedback and/or complaint was received.

Monitoring will be weather dependent and include consideration of wind conditions that provide for a representative sample of noise at the monitoring location with regard to wind velocity and direction including preference to monitor during a “down wind” scenario where practicable. If conditions are not considered appropriate to achieve a representative noise measurement, days may not be consecutive.

Results of the airborne noise monitoring will be compared against the calculated SEPP N-1 noise limits.

**Environmental limit**

The airborne noise environmental limit relates to the legislative requirements for noise under the SEPP N-1. The airborne noise environmental limit is based on calculated SEPP N-1 limits determined from sampled ambient noise levels at key locations. Table 12 shows the SEPP N-1 time period classification to which different limit levels apply.

**Table 12: SEPP-N1 Time period classifications**

<b>SEPP N-1 time period classification</b>	
Day	7am to 6pm weekdays 7am to 1pm Saturdays
Evening	6pm to 10pm weekdays 1pm to 6pm Saturdays 7am to 6pm Sundays 7am to 6pm Public holidays
Night	10pm to 7am weekdays 6pm to 7am weekends 6pm to 7am Public holidays

**Airbourne noise contingency plan**

This *Airbourne Noise Contingency Plan* relates to a potential or actual exceedance of the noise environmental limit from GLOA activities. Management Actions are provided in Table 13. Noise complaints will be managed via the compliant response process described in Annexure 5. For significant project changes refer to Gippsland Ports change management process.

**Table 13: Management actions - Airborne noise**

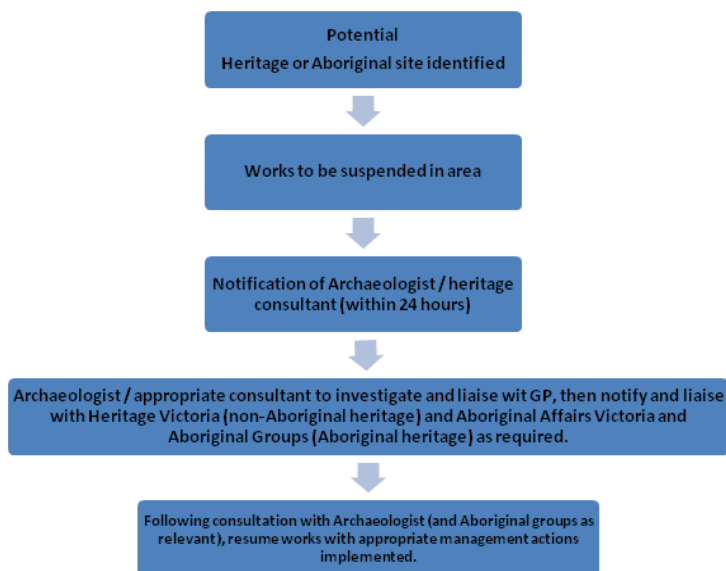
<b>Management actions</b>
<p>If activity does not meet SEPP N-1, if noise monitoring results and/or complaints received indicate a possible exceedance of SEPP N-1, the following actions may be taken:</p> <ul style="list-style-type: none"> <li>➤ Implement alternate works program.</li> <li>➤ Repairs / Modification to vessel / equipment.</li> <li>➤ Restrictions on use of the equipment.</li> <li>➤ Selection of alternative equipment.</li> </ul>

## Annexure 5 - Response Processes

### Heritage (marine based) response process

This heritage (marine based) response process relates to the potential for previously unidentified heritage items or sites to be identified during GLOA activities. Refer to Figure 7 for response process flowchart.

**Figure 7: Heritage (marine based) response process flowchart**



### Complaints response process

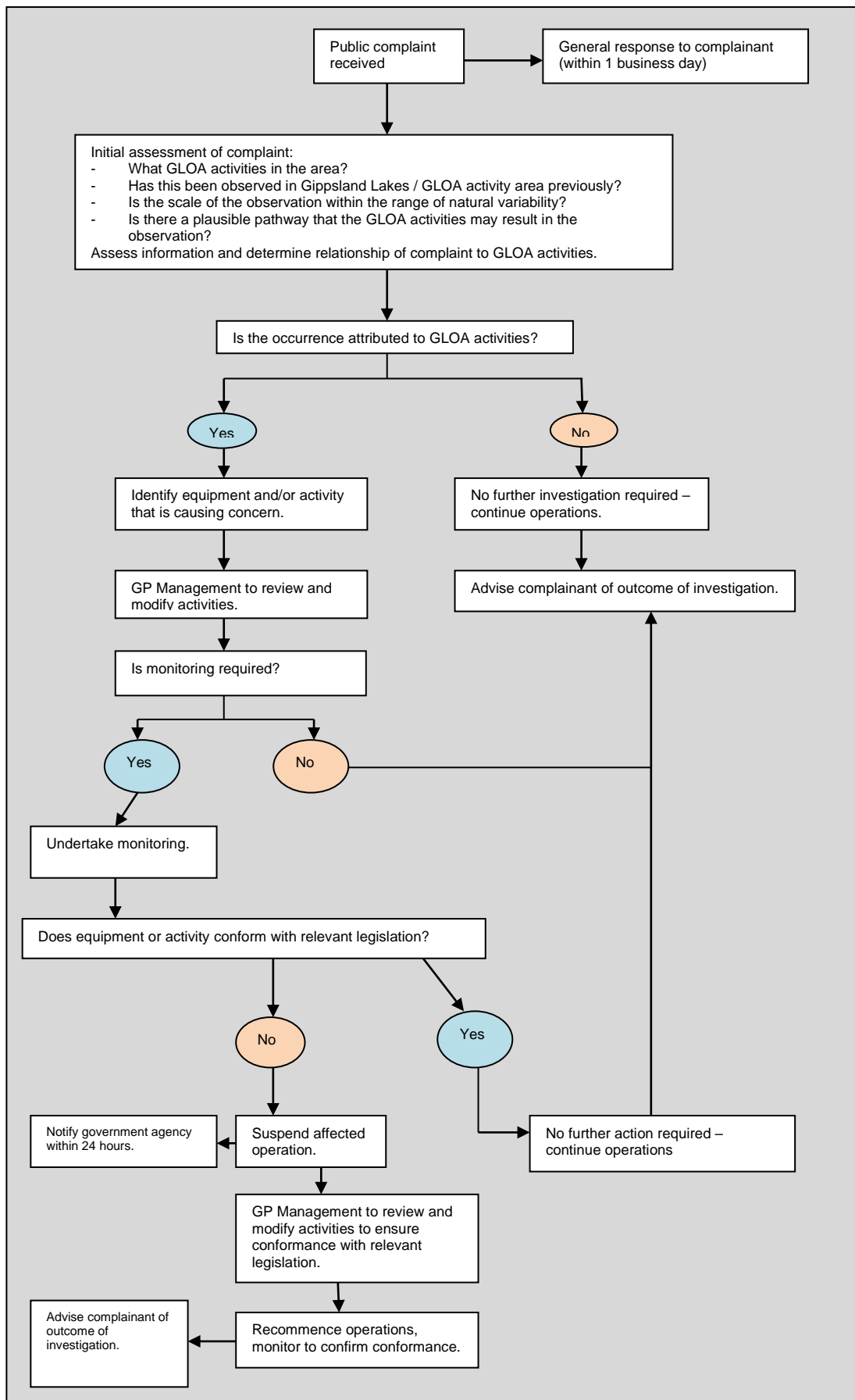
Refer to **Figure 8** for complaints response process flowchart and Table 14 for management actions.

**Table 14: Management actions - complaints response**

Management actions
<p>Management actions if a complaint is received:                      If a complaint is received, a general response will be given to the complainant within one (1) business day. The timeframe for a response to a complaint (aside from the initial response) is dependent on the nature of the complaint and the scale of the investigation (if required). It is expected that there will be management action within one (1) business day of the initial assessment of the complaint. The following options for action may be taken:</p> <ul style="list-style-type: none"> <li>➤ If the complaint is a single event then no monitoring may be required if cause cannot be determined.</li> <li>➤ If there are a number of complaints relating to the same issue then monitoring will be considered as part of the investigation.</li> </ul> <p>Where the assessment of vessels, equipment of activity indicates that it may not conform to relevant legislation, appropriate action to be taken. Management options include:</p> <ul style="list-style-type: none"> <li>➤ Selection of alternative vessel / equipment.</li> <li>➤ Modification to vessel / equipment.</li> <li>➤ Restrictions on use of vessel / equipment.</li> <li>➤ Other actions as deemed appropriate.</li> </ul>



Figure 8: Complaints response process flowchart



## Annexure 6 - Marine Fauna Observation Log

Lakes Entrance										
Marine Fauna Observations Register										
Date	Time	Observer Name	Location	Current Activity (eg. dredging, sailing, dumping)	Distance from vessel (m)	Species (Whale, Dolphin)	No. of Animals	Comments/Mitigation Measures (eg. time in exclusion zone, animal leaving exclusion zone)	Sea State	Visibility