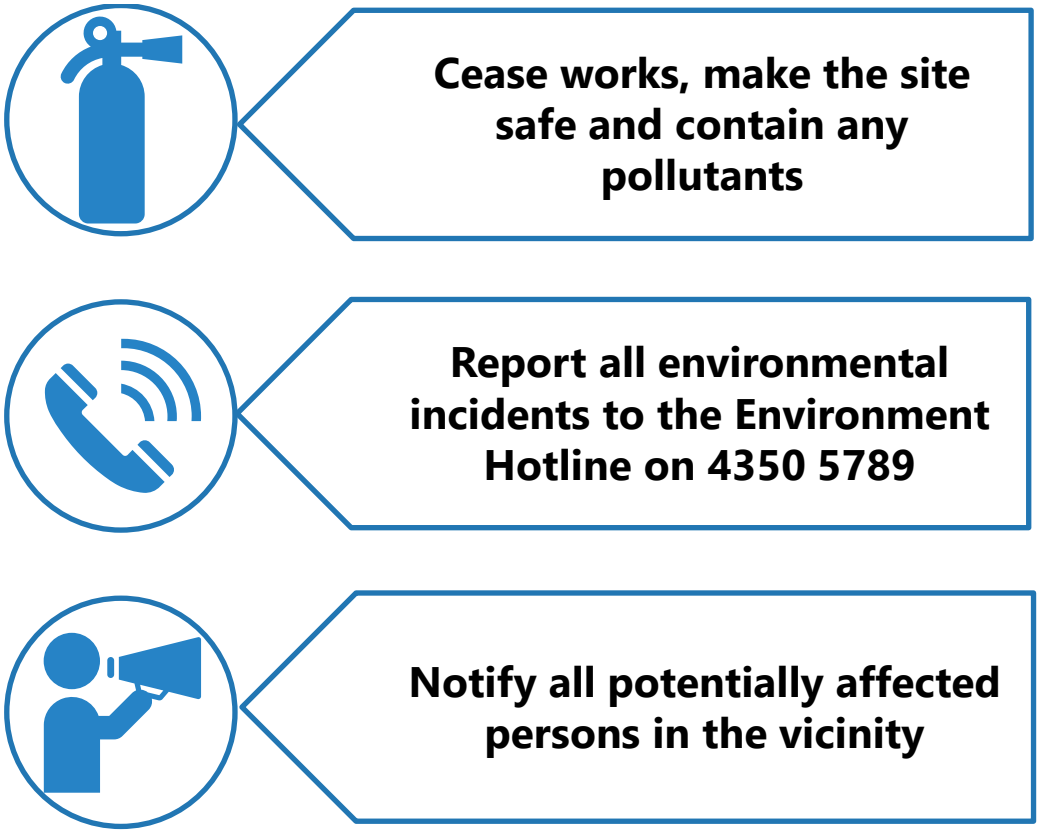
# Appendix 1: Pollution Incident Response Management Plan (PIRMP)

# Pollution Incident Response Management Plan

CCC holds an Environmental Protection Licence (EPL 3200) with the NSW EPA for the dredging program as it involves discharge of dredge spoil to waters. All EPL's require the licensee to prepare a Pollution Incident Response Management Plan (PIRMP) which must be activated if a pollution incident occurs at the premises that causes or threatens material harm to the environment. The content required for all PIRMPs is outlined in Clause 131(1) of the *Protection of the Environment Operations (General) Regulation 2021* and is detailed in the Plan below.




**A copy of EPL 3200 is located on the EPA website.**
https://app.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=3200&id=3200&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

**The publicly available version of this PIRMP is located on CCC's website.**
https://www.centralcoast.nsw.gov.au/environment/environmental-programs/environmental-management

# Hazards and Pre-emptive Actions

**a)** A description of the hazards to human health or the environment associated with the activity to which the licence relates
**b)** The likelihood of any such hazards occurring, including details of any conditions or events that could, or would, increase that likelihood,
**c)** details of the pre-emptive action to be taken to minimise or prevent any risk of harm to human health or the environment arising out of the relevant activity

**Table A: Hazards and Pre-emptive actions**

| a) Potential hazard | b) Likelihood of hazard (Almost certain, likely, possible, unlikely, rare) | c) Pre-emptive actions |
|---|---|---|
| **Water pollution – pH**<br>May be caused by disposal of dredge spoil if acidic sediments are not managed appropriately | **Unlikely** if controls are implemented | • Water quality monitoring<br>• Frequent inspections of discharge<br>• Licenced discharge limits<br>• Dewatering procedure (sediment curtains, bunded area)<br>• Site induction for staff |
| **Water pollution - Total Suspended Solids**<br>May be caused by disposal of dredge spoil if dewatering procedures are not implemented | **Unlikely** if controls are implemented but could be more likely if background water quality is highly turbid due to weather or other conditions in the catchment | • Water quality monitoring<br>• Frequent inspections of discharge<br>• Licenced discharge limits<br>• Dewatering procedure (sediment curtains, bunded area)<br>• Site induction for staff<br>• Refer to EPL3200 Condition L2.7 for special conditions when background water quality is highly turbid |
| **Water pollution – oils and fuels**<br>Spills may occur from machinery and equipment | **Unlikely** if machinery and equipment checks and inspections are undertaken | • Machinery and equipment checks and inspections<br>• Refuelling of plant and machinery to only occur in site compound area in Karagi Carpark<br>• Site induction for staff |

| | | |
|---|---|---|
| **Smoke, fumes and odours**<br>May be generated by machinery and equipment | **Rare** if machinery and equipment checks and inspections are undertaken | • Machinery and equipment checks and inspections<br>• Site induction for staff<br>• Training of staff operating machinery and equipment |
| **Offensive noise**<br>May be generated by machinery and equipment | **Unlikely** if approved hours of operation are adhered to | • Machinery and equipment checks and inspections<br>• Operate during approved hours only (no public holidays or nights)<br>• Limit noise near Little Tern colony |
| **Fire**<br>Could occur in the site compound or on machinery and equipment | **Rare** if machinery and equipment checks and inspections are undertaken | • Machinery and equipment checks and inspections<br>• Site induction for staff<br>• Training of staff operating machinery and equipment |
| **Harm to threatened species** could occur if dredging activities disturb Little Terns or other birds from nesting | **Unlikely** if works are timed to avoid Little Tern settlement in the area. | • Timing of works<br>• Fencing of Little Tern area<br>• Regular inspections and monitoring of Little Terns<br>• Site induction for staff |

# Inventory of Pollutants

**d)** an inventory of potential pollutants on the premises or used in carrying out the relevant activity

**e)** the maximum quantity of any pollutant that is likely to be stored or held at particular locations (including underground tanks) at or on the premises to which the licence relates

- Machinery Oil – 300L
- Hydraulic Fluid – 300L
- Diesel Fuel – 1000L
- Unleaded Petrol – 1000L
- Dredge spoil discharge (estuary water mixed with natural sediments) – 100,000L

# Safety Equipment

**f)** a description of the safety equipment or other devices that are used to minimise the risks to human health or the environment and to contain or control a pollution incident

- Life jackets on all boats
- Fire extinguishers in large plant/machinery
- Fire extinguisher in site office
- Spill kit in site office
- Spill kit on all boats
- Spill kit available for large/plant machinery
- Radios for communication between personnel
- Water quality monitoring equipment – hand held multi-meter and sample jars
- Where deemed necessary floating sediment booms around dredge spoil disposal area
- Fencing around site compound
- Security cameras around site compound

# Contact Details

**g)** the names, positions and 24-hour contact details of those key individuals who: are responsible for activating the plan, and are authorised to notify relevant authorities under section 148 of the Act, and are responsible for managing the response to a pollution incident,

**h)** the contact details of each relevant authority referred to in section 148 of the Act,

**Table B: Contact Details for managing the response to a pollution incident**

| Contact Name | Contact Details | Responsibility |
|---|---|---|
| CCC Environmental Hotline | 4350 5789 (24 hours) | Central point for all environmental incident reporting in CCC. Undertakes notification to other agencies in the event of a notifiable incident. |
| Matthew Barnett – Section Manager Environmental Infrastructure | 0400 685 438 (business hours)<br>Matthew.barnett@centralcoast.nsw.gov.au | Responsibility – to be updated each dredge campaign |
| Nathan Green – Team Leader Environmental Infrastructure Catchments | 0455 433 894 (business hours)<br>nathan.green@centralcoast.nsw.gov.au | Responsibility - to be updated each dredge campaign |
| Andrew Robinson – Technical Officer Environmental Infrastructure | 0407 204 375 (24 hours)<br>Andrew.robinson@centralcoast.nsw.gov.au | Matters relating to Little Terns |
| Mairin Ireland – Environmental Management Coordinator | 4325 8865 - (business hours)<br>mairin.ireland@centralcoast.nsw.gov.au | Assisting with incident response and reporting.<br>Undertaking incident investigation. |
| Contractor Foreman – to be updated each dredge campaign | Contact - to be updated each dredge campaign | Responsibility - to be updated each dredge campaign |
| Council Project Manager - to be updated each dredge campaign | Contact - to be updated each dredge campaign | Responsibility - to be updated each dredge campaign |
| WHS site inspector - to be updated each dredge campaign | Contact - to be updated each dredge campaign | Responsibility - to be updated each dredge campaign |

| | | |
|---|---|---|
| NSW Environment Protection Authority | 131 555 (24 hours) | Authority requiring notification under POEO Act |
| SafeWork NSW | 131 050 (24 hours) | |
| Fire and Rescue | 9469 3111 (24 hours)<br>000 (in an emergency only) | |
| NSW Health – Local Area District | 4320 9730 (business hours)<br>4320 2111 (after hours, ask for public health nurse) | |
| Central Coast Council customer service switch | 1300 463 954 (24 hours) | |

# Notifying People in the Vicinity

**i)** details of the mechanisms for providing early warnings and regular updates to the owners and occupiers of premises in the vicinity of the premises to which the licence relates or where the scheduled activity is carried on,

The premises of the EPL is the Entrance Channel and surrounding foreshore, with the site compound generally being located in Karagi Carpark. Dredging machinery and equipment may operate anywhere within this locality. Discharge of dredge spoil is undertaken within a designated area that is set up each season, generally close to Karagi Carpark on the northern side of the channel.

Surrounding the compound area is a caravan park to the north-west, vegetated reserve to the south and residential dwellings to the north-east. The southern side of the Entrance Channel is a public precinct containing shops, restaurants and parks. The Entrance Channel is utilised by the public for fishing, boating and swimming.

Early warnings and updates to the above stakeholders is provided via the following:

- The public are notified of the works via CCC's social media, website and other media avenues.
- Signage and (electronic billboard) is displayed to notify the public before closure of Karagi Carpark for use as the site compound.
- Signage and site fencing is installed around the site compound.
- Phone numbers are displayed on site signage.
- Verbal consultation with the Boat Shed.
- Verbal consultation with the Caravan Park.

# Minimising Risk of Harm to Persons on Site and Reducing Risks of Harm to Human Health

**j)** the arrangements for minimising the risk of harm to any persons who are on the premises or who are present where the scheduled activity is being carried on

**l)** a detailed description of how any identified risk of harm to human health will be reduced, including (as a minimum) by means of early warnings, updates and the action to be taken during or immediately after a pollution incident to reduce that risk,

- The evacuation muster point is within the site compound unless the emergency is within the site compound and then the muster point will be at the entry to the compound on Hutton Road.
- Users of the waterway will be kept out of any area where an incident occurs via a support boat that can patrol the area, if required contact marine rescue or Transport for New South Wales Maritime for assistance.
- The site compound is secured with fencing and all staff and visitors are required to sign in.
- The site compound is locked outside working hours.
- Daily pre-works site inspections are undertaken by Compliance officer and/or Site Supervisor in relation to both WHS and EMP.
- Daily safety inspections and risk assessment, tool box talks are undertaken by all personnel on site when and who.
- Other inspections/checks.
- Fire extinguishers and spill kits are available on site.
- Personnel on the water and shore communicate regularly via radio
- In the event of any pollution incidents, the stakeholders above will be contacted.
- All directions will be followed from relevant agencies such as the EPA and Hazmat.

# Maps

**k)** a detailed map (or set of maps) showing the location of the premises to which the licence relates, the surrounding area that is likely to be affected by a pollution incident, the location of potential pollutants on the premises and the location of any stormwater drains on the premises.

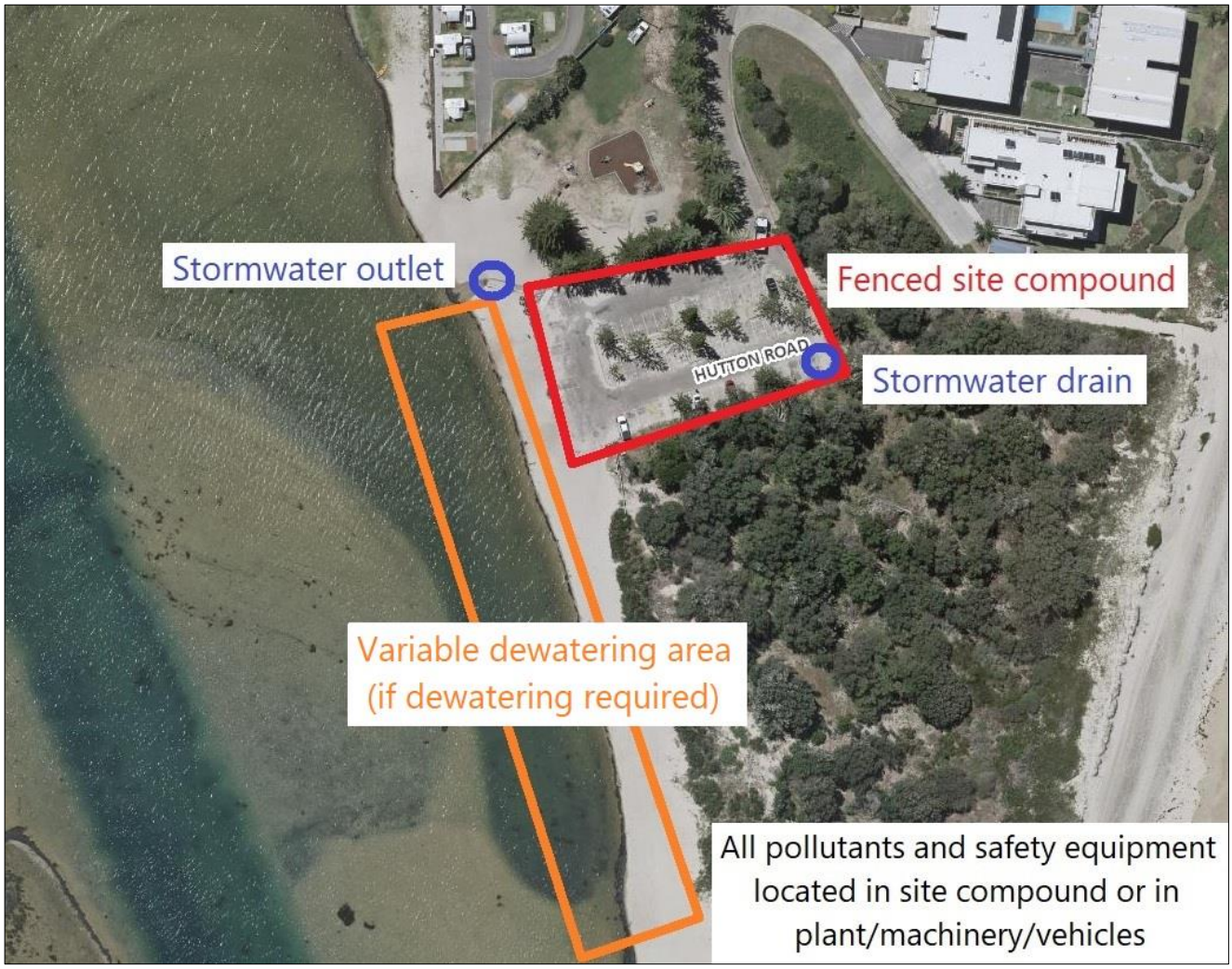



*Figure 1: Location of potential pollutants, safety equipment and drains*

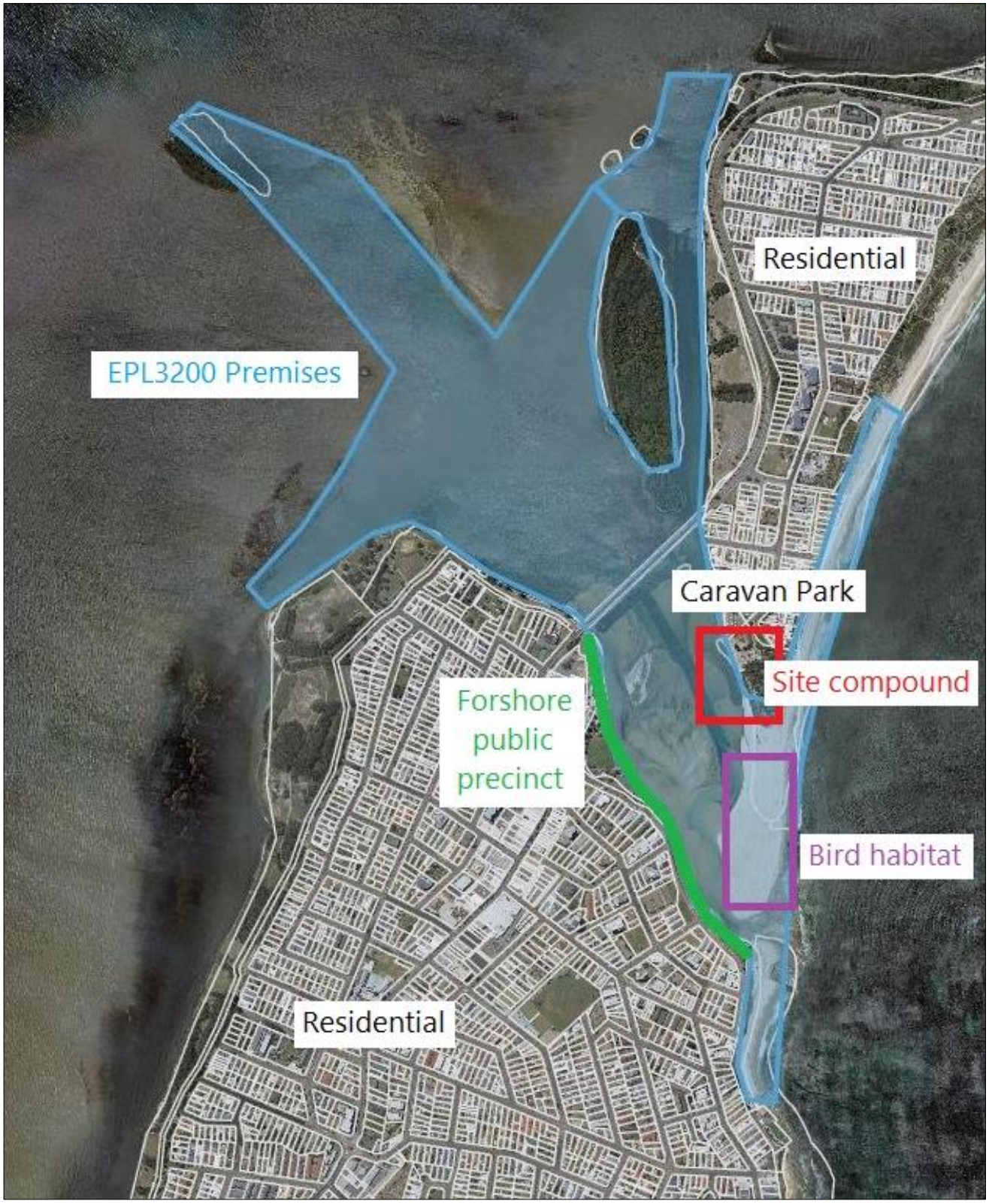



*Figure 2: Premises to which EPL3200 relates and surrounding area*

# Training, Testing and Updating the PIRMP

**m)** the nature and objectives of any staff training program in relation to the plan
**n)** the dates on which the plan has been tested and the name of the person who carried out the test,
**o)** the dates on which the plan is updated,
**p)** the manner in which the plan is to be tested and maintained

The PIRMP is tested annually during the pre-works induction meeting where all personnel are trained in the environmental controls for the program. This includes the EPL and PIRMP, details from the Review of Environmental Factors and Fisheries Permit. The PIRMP test involves a hypothetical incident drill and questioning personnel on response actions.

The PIRMP is reviewed annually prior to the dredging season by CCC's Environmental Reporting Team in consultation with CCC's Dredge Working Group. The PIRMP is not reviewed in years where no dredging occurs.

**Table C: Training, testing and updating dates**

| PIRMP training test and updating dates | Person who carried out test |
|---|---|
| 2020 PIRMP preparation 29/8/2020 | Hunter Wharf and Barge (dredging contractor) |
| 2020 PIRMP Test November 2020 | Matthew Barnett - Section Manager Environmental Infrastructure |
| 2021 | No dredging undertaken, EPL not implemented |
| 2022 PIRMP was re-written 06/2022 and tested via this full review | Mairin Ireland - Environmental Management Coordinator |
| 2023 Licence not enacted but PIRMP reviewed and noted in the project debrief | Mairin Ireland – Environmental Management Coordinator |
| 1/6/2023 PIRMP was reviewed via the project debrief meeting | Mairin Ireland – Environmental Management Coordinator and the Project Working Group. |

# Appendix 2: Dredge Plan Template

# Dredge Plan Template

| Entrance Channel – Dredge Program | |
|---|---|
| **Year of Program** | Year |
| **Dredge Plan Prepared by** | Name |
| **The reasons/objectives for the dredging activity** | |
| • Reasons<br>• Objectives<br>• | |
| **A map of the areas to be dredged and areas to be nourished** | |
| | |
| **The dimension of the dredge areas and an estimate of the volume/mass of dredge spoil material to be deposited during the dredge campaign** | |
| Dimensions and volume estimate | |
| **The timetable and duration of dredging activities** | |
| **Start date** | Date |
| **Duration of works** | Duration |
| **Expected completion date** | Date |
| **Plant and equipment to be utilised and location of any pump lines or discharge points** | |
| • Barge mounted excavator<br>• Suction Cutter Dredge<br>• Pump lines<br>• Discharge points<br>• Excavators<br>• Dump trucks<br>• | |

| **Locations of safety features including signage and fencing of nourishment areas** |
|---|
| • Site fencing<br>• Signage<br>• Security cameras |
| **A map showing the location of pollution control structures** |
|  |
| **A description (including appropriate diagrams) of the proposed water pollution control structure and the location of the outlet from that structure** |
| • Describe the dewatering methods<br>• Discharge point<br>• Floating sediment booms etc. |
| **Descriptions of any other environmental protection measures to be used during the dredging activity (including Little Tern fencing)** |
| • Water quality monitoring<br>• Little Tern protection measures<br>• Spill kits |
| **Any other relevant information** |
| Any other relevant information |
| **Dredge debrief (to be completed after works)** |

| | |
|---|---|
| **Volume of material moved** | |
| **Dredged and nourished areas** | |
| **Actual project timetable** | |
| **Water quality results** | |
| **Little Tern Observations** | |
| **Any other lessons learned** | |

# Appendix 3: Little Tern Reference Photos