

Statement No.

000600

MINISTER FOR THE ENVIRONMENT AND HERITAGE

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF THE ENVIRONMENTAL PROTECTION ACT 1986)

GERALDTON PORT ENHANCEMENT AND PREPARATORY WORKS FOR TOWN BEACH FORESHORE REDEVELOPMENT

Proposal:

Upgrading of the Geraldton Port, including deepening and widening of the shipping channel; deepening of the harbour basin; reclamation of land; offshore disposal of dredge spoil; reconfiguration and construction of breakwaters; the construction of a railway line on the eastern breakwater; the construction of beach stabilisation groynes in Town Beach; and the reclamation of Town Beach by sand nourishment, as documented in schedule 1 of this statement.

;

Geraldton Port Authority

Proponent Address:

Proponent:

298 Marine Terrace, Geraldton WA 6530

Assessment Number:

1379

Report of the Environmental Protection Authority: Bulletin 1050

The proposal referred to above may be implemented subject to the following conditions and procedures:

Procedural conditions

1 Implementation and Changes

- 1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

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1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of written advice.

2 Proponent Commitments

- 2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in this statement.

3 Proponent Nomination and Contact Details

- 3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal until such time as the Minister for the Environment and Heritage has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environmental Protection of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

- 4-1 The proponent shall provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced or the approval granted in this statement shall lapse and be void.
 - Note: The Minister for the Environment and Heritage will determine any dispute as to whether the proposal has been substantially commenced.
- 4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment and Heritage, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- · the environmental factors of the proposal have not changed significantly;
- · new, significant, environmental issues have not arisen; and
- all relevant government authorities have been consulted.

Note: The Minister for the Environment and Heritage may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

Environmental conditions

5 Compliance Audit and Performance Review

- 5-1 The proponent shall prepare an audit program in consultation with and submit compliance reports to the Department of Environmental Protection which address:
 - the implementation of the proposal as defined in schedule 1 of this statement;
 - evidence of compliance with the conditions and commitments; and
 - the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the Environmental Protection Act 1986, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement. Usually, the Department of Environmental Protection prepares an audit table which can be utilised by the proponent, if required, to prepare an audit program to ensure that the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off by either the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

- 5-2 The proponent shall submit a performance review report one year after the completion of construction and every five years thereafter, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority, which addresses:
 - the major environmental issues associated with the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;
 - the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best available technology where practicable;
 - significant improvements gained in environmental management, including the use of external peer reviews;

- stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
- the proposed environmental targets over the next five years, including improvements in technology and management processes.

6 Public Availability of Environmental Management Programmes and Plans

- 6-1 Prior to the implementation of the environmental management programmes and/or plans referred to within the commitments, the proponent shall make the following programmes and plans publicly available, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority:
 - 1. Environmental Management Programme (see commitment 1);
 - 2. Water Quality Monitoring and Management Plan (see commitment 3);
 - 3. Artificial Reef Management Plan (see commitment 5);
 - 4. Seagrass Monitoring Plan (see commitment 7);
 - 5. Marine Mammal Monitoring Plan (see commitment 9);
 - 6. Breakwater Construction and Reclamation Management Plan (see commitment 12);
 - 7. Northern Beaches Stabilisation Programme (see commitment 14); and
 - 8. Dredging Management Plan (see commitment 16).

7 Marine Management

- 7-1 The proponent shall monitor and manage water quality of the inner harbour basin and Town Beach to achieve the following Environmental Quality Objectives as defined in the Environmental Protection Authority document "Perth's Coastal Waters, Environmental Values and Objectives" (Environmental Protection Authority, 2000):
 - 1 Maintenance of ecosystem integrity;

The levels of protection to apply are as follows;

- a. "High level" of protection for the waters of Town Beach as delineated in figure 4 of schedule 1; and
- b. "Moderate level" of protection for the waters of the inner harbour basin as delineated in figure 4 of schedule 1.
- 2 Maintenance of aquatic life for human consumption;
- 3 Maintenance of aquaculture (Town Beach only);
- 4 Maintenance of primary contact recreational values;
- 5 Maintenance of secondary contact recreational values; and
- 6 Maintenance of aesthetic values,

to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Note: The above Environmental Quality Objective zones are subject to review in both extent and the guideline values and standard criteria applying to them, and may be varied from time to time on advice of the Environmental Protection Authority.

- 7-2 In meeting the requirements of condition 7-1, the proponent shall address the following which are in addition to the requirements included in commitment 3 in schedule 2 (Water Quality Monitoring and Management Plan):
 - the identification of indicators to maintain the Environmental Quality Objectives (referred to in condition 7-1) appropriate to the inner harbour basin and Town Beach based on the threats to the environmental quality and the cause and effect pathways;
 - development and implementation of site-specific guideline values and standard criteria for the indicators, if available generic environmental quality criteria are not appropriate; and
 - the development and implementation of adaptive management strategies to ensure that the Environmental Quality Objectives are achieved and maintained in the event that agreed guidelines and standards are not met,

to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

8 Town Beach Management

- 8-1 The proponent shall prepare and establish a new, stable Town Beach, as documented in schedule 1, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority and the City of Geraldton.
- 8-2 The proponent shall monitor the stability of Town Beach at a frequency consistent with the requirements of commitment 14 (Northern Beaches Stabilisation Programme), to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.
- 8-3 The proponent, in consultation with the City of Geraldton, shall manage the Town Beach to achieve long-term stability and shall include replenishment and/or nourishment on an "as needs" basis for a period of at least four years, and thereafter to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

9 Eastern Breakwater

9-1 The proponent shall undertake further evaluation of the proposed eastern breakwater as part of the detailed design of the breakwater in accordance with the proponent's commitment 11, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Note: In providing further advice to the Minister for the Environment and Heritage, the Environmental Protection Authority will consider the environmental factors of marine mammals, water quality, water circulation, recreation, heritage, noise and visual impacts.

10 Memorandum of Understanding

10-1 The proponent shall implement the matters that relate to environmental management, which may be subject of a Memorandum of Understanding to be agreed between the proponent and the City of Geraldton, to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority.

Procedures

- Where a condition states "to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority", the Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.
- The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of the Department of Environmental Protection.

Notes

The Minister for the Environment and Heritage will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection over the fulfilment of the requirements of the conditions.

Dr Judy Edwards MLA MINISTER FOR THE ENVIRONMENT AND HERITAGE

The Proposal (Assessment No. 1379)

The proposal is to upgrade the Port of Geraldton and undertake preparatory works as part of the Town Beach Foreshore Redevelopment Project. The objective of the proposal is to enable vessels to sail from the port fully laden.

The main elements of the proposal are (see Figures 2 and 3 attached):

- deepening by dredging of the harbour basin from 9.3 metres depth to 12.1 metres depth;
- widening of the existing channel and extension out to sea from 90 metres to 200
 metres at the entrance to the harbour basin, from 150 metres to 230 metres wide
 around the corner, and from 150 metres to 200 metres along the outer straight;
- disposal of dredge spoil (3.5 million cubic metres of limestone material) from channel dredging offshore to create artificial rock lobster habitat reefs approximately 3 to 5 kilometres south-west of Point Moore (see figure 3);
- reconfiguration and construction of breakwaters;
- relocation of the existing northern breakwater;
- reclamation of land adjacent to the existing northern breakwater requiring 0.3 to 0.4 million cubic metres of fill, and within and adjacent to the new eastern breakwater;
- sand nourishment of Town Beach with 0.5 million cubic metres of spoil from the Southern Transport Corridor; and
- construction and operation of a railway line on the eastern breakwater.

The key characteristics of the proposal are summarised in Table 1 below.

Table 1: Key proposal characteristics

| Element | Description | | | |
|---|---|--|--|--|
| Deepen harbour basin and access channel | • Deepen harbour basin from 9.3 metres depth | | | |
| | to 12.1 metres depth. | | | |
| · | • Deepen access channel to between 12.5 | | | |
| | metres at the inshore end, and 14.2 to 14.7 | | | |
| · | metres at the offshore end: | | | |
| Widen the access channel. | • Widen the access channel from 90 metres to | | | |
| * | 200 metres at the straight entrance to the | | | |
| | harbour basin; from 150 metres to 230 metres | | | |
| | wide around the corner; and from 150 metres | | | |
| | to 200 metres along the outer straight. | | | |
| Disposal of dredged material | Dispose of approximately 3.5 million cubic | | | |
| | metres of dredged limestone material offshore | | | |
| * | to the south-west of Point Moore in sand | | | |
| | veneered pavement habitat, between 25 metres | | | |
| | and 30 metres deep, to create artificial rock | | | |
| lobster habitat reefs. | | | | |

| | TD 50 1 0 1 1 7 51 | | | |
|--|---|--|--|--|
| Reconfigure outer breakwater | Remove 50 metres from the western end of the | | | |
| | outer breakwater and relocate the rocks | | | |
| | adjacent to the channel entrance to form an | | | |
| | 'L'-shape. | | | |
| Relocate existing northern breakwater. | Remove existing northern breakwater on the | | | |
| Relocate existing northern broakwater. | | | | |
| | western side of the port entrance, and relocate | | | |
| | it some 50 metres to the west, and extend it a | | | |
| | further 200 metres north. | | | |
| Construct eastern breakwater | • Fill deep hole north of Geraldton Port | | | |
| | Authority recreational boat harbour with | | | |
| | marine sands from harbour entrance using | | | |
| | small cutter suction dredge. | | | |
| * · | • Construction of new eastern breakwater | | | |
| | | | | |
| | between the Geraldton Port Authority | | | |
| A V D SAME W V | Recreational Boat Harbour and almost to the | | | |
| * * * * * * * * * * * * * * * * * * * | outer breakwater, but leaving a 10 metre wide | | | |
| , a | water buffer. | | | |
| Wharf modifications | • Modify wharves to access the deeper | | | |
| | harbour basin. Install navigational aids. | | | |
| | • Install new navigational aids to mark the | | | |
| | external boundaries of the widened channel. | | | |
| Reclaim land adjacent to existing northern | • Up to 0.4 million cubic metres of dredged | | | |
| breakwater | material will be pumped directly into the | | | |
| Dieakwater | | | | |
| | northern reclamation area to provide future | | | |
| | hard standing and cargo storage capacity for | | | |
| | two future berths adjacent to the northern | | | |
| | breakwater. | | | |
| Construction of railway line on eastern | Up to 1 kilometre of double railway track | | | |
| breakwater | from the grain unloading facility to end of the | | | |
| * • | eastern breakwater. | | | |
| Reclaim land within eastern breakwater and | | | | |
| sand nourishment of Town Beach | material from the Southern Transport Corridor | | | |
| Salle Hourisimient of Town Deach | | | | |
| | project will be used to provide the fill | | | |
| | required. | | | |
| Construction of beach stabilisation groynes in | | | | |
| Town Beach. | will be lengthened by approximately 50 | | | |
| | metres. | | | |
| | • A new groyne will be constructed on the | | | |
| | north-west corner of the Batavia Coast | | | |
| | Marina. | | | |
| | TATCH TITCH. | | | |

Figures (attached)

Figure 1: - Locality of the Port of Geraldton.

Figure 2: - Proposed modifications to the channel alignment, the Geraldton Port and Town Beach.

Figure 3: - Location of proposed dredged material disposal area.

Figure 4: - Environmental Quality Objective for Maintenance of Ecosystem Integrity - Levels of Protection.

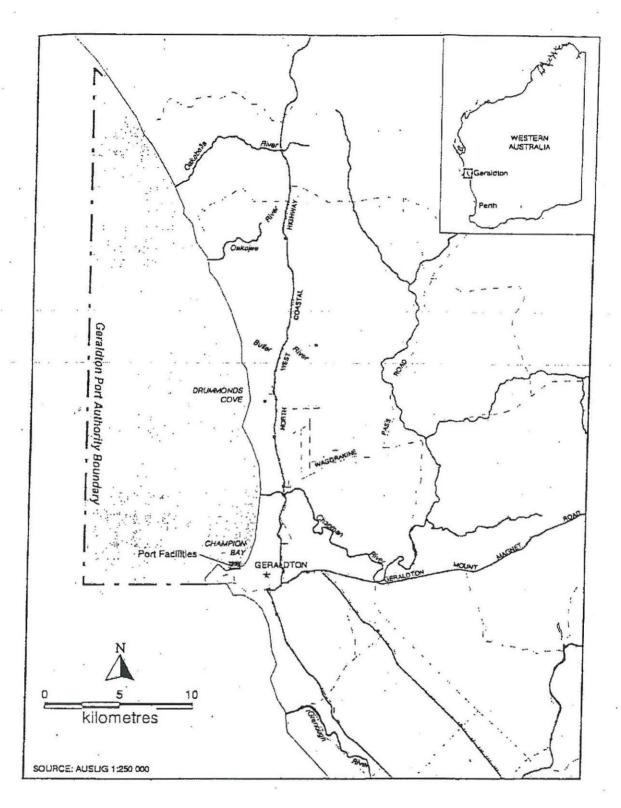


Figure 1: Locality of the Port of Geraldton (Source: Port Enhancement Project PER, URS, 2001)

Figure 2: FI (2) G 4.5s 5M Proposed modifications to the channel alignment, the Geraldton Port and Town Beach (Source: Port Enhancement Project PER, URS, 2001) 800 1000 Existing Channel, Dredging METRES BAYHARAS No 8 Proposed Channel Widening Mayhil (1895) (Northern Breakwater KnollExtension Knoll Inner LFI G 6s 8m 3M 28°46'S Proposed Northern Reclaniation Area Buat SOURCE: Department of Transport, Geraldton 939 Chart, 1999 MARINE FARM (See Note) Western Coast Reclamation Existing Groynes
To Be Extended Four Fathom Page's Beach Bldg (conspic) B Fishing Boat Harbour New Eastern Proposed Town Breakwater WEST END Reclamation Beach Foreshore Redevelopment STREET.

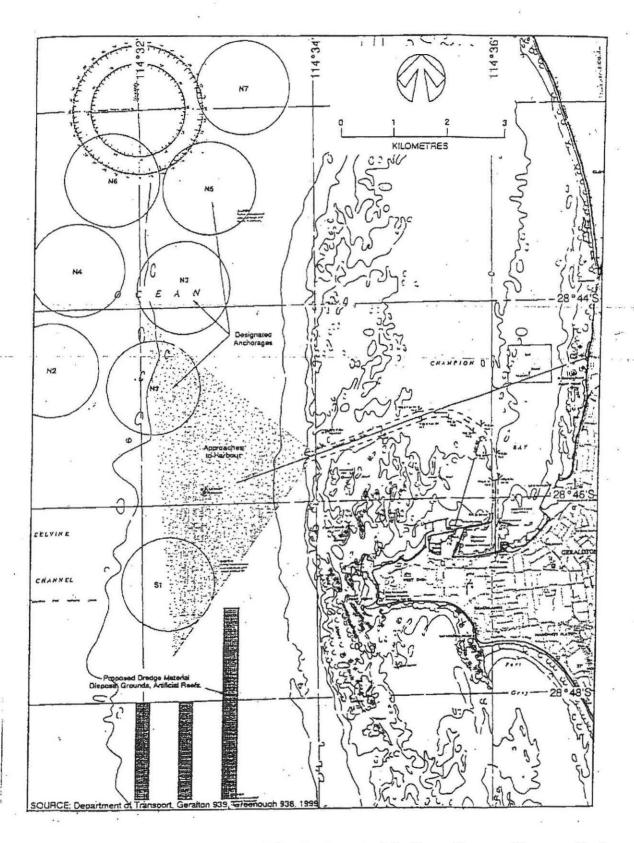


Figure 3: Location of proposed dredged material disposal area (Source: Port Enhancement Project PER, URS, 2001)

Figure 4: FI(2) R 4.5s 5M, 0 No 2 FIG 3s No 3 EQ01-E2 FI(3) Y 20s FIG3s No 5 200 800 1000 METRES BAYEQ01-E2 Mayhill (1895) EQ01-E2 Outer Knoll Inner Knoll FI(2) G 5s No 9 LFI G 6s Bm 3k Onter Breakwater
, EQO1-E3 Bat New Groyne MARINE FARM (See Note) Western Coast Reclamation Department of Trail Four Falhom 1735 7m 4M EQ01-E3 Geraldion Harbour Page's Beach EQ01-E2 Bldg (consplc) Geraldton 939 Chart, New Eastern Breakwater Reclamation B Fishing Boat Harbour WEST END Town
Beach Foreshore
Redevelopment STREET

Environmental Quality Objective for Maintenance of Ecosystem Integrity – Levels of Protection

Proponent's Environmental Management Commitments

30 July 2002

GERALDTON PORT ENHANCEMENT PROJECT AND PREPARATORY WORKS FOR TOWN BEACH FORESHORE REDEVELOPMENT

(Assessment No. 1379)

Geraldton Port Authority

| | Activity/Topic | Action | Objective | Timing | Advice |
|----|--|---|--|--|--------------------------|
| | Environmental Management Programme (EMP) | Prepare an EMP containing the following: Water Quality Management and Monitoring Programme (WQMMP) (commitment 3); Seagrass Management and Monitoring Programme (SMMP) (commitment 7); Artificial Reef Management Programme (ARMP) (commitment 5); Marine Mammal Management and Monitoring Programme (MMMP) (commitment 9) Breakwater Construction and Town Beach Reclamation Management Plan (BCRMP) (commitment 12); Northern Beaches Stabilisation Programme (NBSP) (commitment 14); and Dredging Management Plan (DMP) (commitment 16). Each plan/programme will address: (1) plans to meet environmental management requirements of specific project activities; (2) implementation (method and timing); (3) measurement and evaluation of environmental performance; and | To minimise the potential for adverse environmental impacts and to confirm the reliability of impact predictions. | Prior to commence ment of construction | CoG CALM EA DoF |
| 2. | ЕМР | (4) reporting and compliance auditing of environmental performance. Implement the EMP. | Achieve the objectives of commitment 1. | Pre-, during and post- construction stages of project. | CoG CALM EA DoF |
| 3. | Water Quality Management and Monitoring Programme (WQMMP) | Finalise the WQMMP which addresses the following key elements: (1) environmental quality objectives, environmental quality criteria and locations to be protected; (2) definitions of agreed 'alert' and 'action' levels of water turbidity and light attenuation, and locations at which they will apply; (3) definitions of 'alert' and 'action' levels agreed with the lobster exporters to protect water quality at the seawater intakes for the live lobster holding activities; (4) definition of management actions applicable to agreed 'alert' and 'action' levels; (5) location of monitoring stations and sampling frequency; and (6) means by which monitoring results will be reported. | To protect water quality at the seawater intakes for the lobster holding facilities. To protect ecological, recreational and aesthetic values of marine waters. | Prior to commence ment of construction | Lobster exporters |

Geraldton Port Enhancement Project and Town Beach Foreshore Redeveloment

| | Activity/Topic | Action | Objective | Timing | Advice |
|---|--|--|--|---|---|
| 4 | WQMMP | Implement the WQMMP | Achieve the objectives of commitment 3 | During construction and operational phase of project | Lobster exporters |
| 5 | Artificial Reef Management Plan (ARMP) | Prepare an ARMP which addresses the following key elements: (1) detailed design and location of reefs; (2) pre-construction baseline survey of habitat character and lobster catch productivity; (3) confirmation of impact predictions during construction stage; (4) post-construction survey of bathymetry and reef habitat character; (5) post-construction monitoring of reef habitat development and lobster catch productivity; and (6) reporting of survey results. | To design and construct artificial reefs using rocky dredged material to improve the blological and fishing productivity of the seafloor in deep water south west of Point Moore to satisfaction of DoF and local professional lobster fishermen and recreational fishermen. | Prior to commence ment of dredging activities | EA DoF Professional fishermen's associations Recreational fishermen |
| 6 | ARMP | Implement the ARMP | Achieve the objectives of commitment 5 | 2001 – 2005 As necessary prior to, during, and for up to 3 years after completion of construction | EA DoF Professional fishermen's association |

Geraldton Port Enhancement Project and Town Beach Foreshore Redeveloment

| | Activity/Topic | Action | Objective | Timing | Advice |
|---|--|---|--|--|--------|
| 7 | Seagrass Monitoring Programme (SMP) | Prepare an SMP which addresses the following: (1) anticipated impacts and objectives of monitoring; (2) location of monitoring sites; (3) sampling frequency; (4) parameters to be monitored; and (5) reporting of monitoring results. | To confirm the predicted scale of impacts on seagrass resources of Champion Bay. | Prior to commence ment of construction | |
| 8 | SMP | Implement the SMP | Achieve the objectives of commitment 7 | 2001 – 2005 prior to, during and post construction for up to 3 years after completion of construction | , |
| 9 | Marine Mammal Management and Monitoring Plan (MMMP) | Prepare an MMMP to address the following: (1) collection of data during whale migrations; (2) recording of any whale encounters by trailer hopper dredge (THD) during dredged material disposal activities; (3) avoiding whales in accordance with the conditions of the dredging permit and permit to disturb cetaceans issued by EA; (4) collection of data to determine present and future abundance of Sealions in the vicinity of Geraldton port; (5) incorporate flat rock surfaces slightly above the high tide level to create suitable haul-out locations for Sealions (Neophoca cinerea); (6) monitor use of replacement breakwater as a Sealion haul-out location; (7) design and construct a viewing shelter and wall across the end of the breakwater, to minimize the potential for disturbance to Sealions; (8) design and implementation of a series of tests to simulate the disturbance to Sealions associated with train movements on the eastern breakwater, prior to construction of the railway; (9) monitor and record the presence and abundance of dolphins in the port area, prior | To confirm the migration routes followed by the majority of the WA Humpback Whale (Megoptera novaeangliae) population during the 2001, 2002 and 2003 migration periods. To confirm the predicted low level of project impact on migrating Humpback Whales (Megoptera novaeangliae), the | Prior to commence ment of construction | |

Geraldton Port Enhancement Project and Town Beach Foreshore Redevelopment

| | Activity/Topic | Action | | Objective | Timing | Advice |
|----|-----------------------|--|---|--|--|------------------------|
| | 4 | (10) reporting results of all monitoring undertaken to DEP, CALM and the CoG. | | and dolphins in southern Champion Bay. | | |
| | | | i | To maximise the opportunity for Sealions (Neophoca cinerea) to return to the area. | | |
| 24 | | | 1 | To confirm the impact of the proposal on Sealions (Neophoca cinerea). | ¥ | 8 |
| 10 | МММР | Implement the MMMP | 1 | To achieve objectives of commitment 9. | Prior to, during and for one year after completion of construction | EA CALM CoG |
| 11 | Eastern Breakwater | Undertake a review of the eastern breakwater design as part of the development of Memorandum of Understanding with the City of Geraldton. The review to be may be a "Mediation Team" comprising of three persons with experience in one or me the following areas: mediation, transport, planning and environmental assessmental appointed by the Minister for the Environment and Heritage. The Mediation Team is to convene multi-party stakeholder groups; assist and fact resolution of issues; and consult with government agencies, the City of Geraldton proponent and the community. The Mediation Team is to prepare recommendation. | inaged ore of t, to be ilitate | To agree on a consensus design of the eastern breakwater. | Consistent with the timing of the Geraldton Southern Transport Corridor | All stake- holders. |
| | | the Environmental Protection Authority after reviewing options for the eastern breakwater against the environmental factors of marine mammals, water quality, circulation, heritage, noise and visual impacts. | | | Project. | |

Geraldton Port Enhancement Project and Town Beach Foreshore Redeveloment

| | Activity/Topic | Action | Objective | Timing | Advice |
|----|--|--|---|---|--------------------|
| 12 | Breakwater Construction and Town Beach Reclamation Management Plan (BCRMP) | Prepare a BCRMP to address the following environmental issues: impact of dust; impact of wind-blown sand; impact of noise; impact of odour; impact of traffic; and impacts on public safety. | To minimise adverse effects of breakwater construction and Town Beach (and breakwater) reclamation earthworks on the public as a result of dust, noise, odour, and traffic. To ensure the public's safety and amenity. | Prior to commence ment of construction | CoG MRWA |
| 13 | BCRMP | Implement BCRMP | To achieve objectives of commitment 12 | During the construction phase of project | DEP CoG MRWA |
| Ĵ | | | | | |
| 14 | Northern Beaches Stabilisation Programme (NBSP) | Prepare an NBSP to address the following key elements: (1) beach monitoring locations and frequency; (2) determine volume of sand nourishment and timing of placement; (3) location and scale of stabilisation works (if any); and (4) management of dust, noise and traffic impacts during nourishment. | To contribute to the CoG's Northern Beaches Stabilisation and Enhancement Strategy in association with CoG and DPI (Coastal and Facilities | Prior to commence ment of construction | CoG DPI |
| | | | Management Branch) | | 3 |



| | Activity/Topic | Action | Objective | Timing | Advice . |
|----|--------------------------------------|--|---|---|---|
| 15 | NBSP | Implement the NBSP | To achieve the objectives of commitment 14 | Ongoing | CoG DoF Professional fishermen's associations Geraldton community |
| 16 | Dredging Management Plan (DMP) | Prepare a DMP to address the following: management of dredging based on the results of turbidity and light attenuation monitoring required under commitment 3; best practice dredging management including operational strategies in the event of exceedences of the agreed action levels; produce a detailed description of proposed dredging works and timing once contractors selected; publish Notices to Mariners and public regarding location and timing of works; confirm dredging equipment on arrival is free from sediment (holds) and of marine organisms (ballast water and hull fouling); and management of works to minimise location of turbid water plumes, and interference to recreational activities in Town Beach area. | To minimise adverse effects of dredging activity on all users of Champion Bay including the Port and Town Beach | Prior to commence ment of dredging | CoG DoF Professional fishermen's associations Geraldton community |
| 17 | DMP | Implement the DMP | To achieve the objectives of commitment 16 | During dredging programme | CoG DoF Professional fishermen's associations Geraldton community |

Abbreviations:

CALM: Department of Conservation and Land Management

DEP: Department of Environmental Protection

GPA: Geraldton Port Authority

MRWA: Main Roads Western Australia

EA: Environment Australia

Geraldton Port Enhancement Project and Town Beach Foreshore Redeveloment.

DoF: Department of Fisheries CoG: City of Geraldton

STC: Southern Transport Corridor PEP: Port Enhancement Project

DPI: Department for Planning and Infrastructure