Coastal Offset Strategy

Strategy

Document No.: X075-AH-STR-0001 Security Classification: Unrestricted

Revision	Date	Issue Reason	Prepared	Checked	Endorsed	Approved
7	12/10/2020	Issued for Use	J Corbett B Davis	J Carle	D Robotham	V Ee

This document has been approved and the audit history is recorded on the last page.

RECORD OF AMENDMENT

Revision	Section	Amendment
1	-	Re-issue for information
2	-	Re-issue for information
3	-	Re-issue for information
4	-	Re-issue for information
5	-	Revision withdrawn
6	Tables 3-1 and 3-6 Sections 3.3 and 3.3.1	Update completion status of <i>Long-term monitoring of coastal</i> dolphins in Darwin Harbour and the abundance and distribution of dugongs in the Northern Territory
7	Table 3-1 and 3-8 Sections 3.1.1 and 3.4.2	Revised to reflect approved variation to Condition 11a, changing "Conservation management of marine megafauna in the western Top End" to "Conservation management of dugongs, cetaceans and threatened marine matters of national environmental significance in the Top End".
	Section 4	Updated to reflect current status and planned works for Conditions 11b and 11c

Copy no.	Name	Hard copy	Electronic copy
00	Document Control	х	x
01	Department of Water Energy and the Environment		x
02			
03			
04			
05			
06			
07			
08			
09			
10			

DOCUMENT DISTRIBUTION

NOTICE

All information contained within this document has been classified by INPEX as Unrestricted and must only be used in accordance with that classification. Any use contrary to this document's classification may expose the recipient and subsequent user(s) to legal action. If you are unsure of restrictions on use imposed by the classification of this document you must refer to 0000-A9-STD-60008, Sensitive Information Protection Standard or seek clarification from INPEX.

Uncontrolled when printed.

TABLE	OF CONTENTS	
TERMS	, ABBREVIATIONS OR ACRONYMS	v
1	INTRODUCTION	6
1.1	Project overview	6
1.2	Purpose	
2	BACKGROUND TO ENVIRONMENTAL OFFSETS	
3	ENVIRONMENTAL OFFSETS PROGRAMS	
3.1	Collaboration with the NTG	
3.2	Funding arrangements	13
3.3	Completed environmental offset programs	
3.4	Ongoing environmental offset programs	17
4	PROTECTION OF TERRESTRIAL AND MARINE HABITAT	23
4.1	Purpose and objectives	23
4.2	Scope	23
4.3	Methodology	23
4.4	Funding arrangement	27
4.5	Timing	27
5	REGULATOR CONSULTATION	29
6	REFERENCES	30

LIST OF TABLES

Table 3-1:	Environmental offset programs within the scope of the Coastal Offset Strategy
Table 3-2:	Conservation status of coastal dolphins in the Northern Territory14
Table 3-3:	Habitat mapping for Darwin region (including Bynoe Harbour)14
Table 3-4:	Publication of Kimberley research data15
Table 3-5:	Funding of ARC Linkage Projects15
Table 3-6:	Long-term monitoring of coastal dolphins in Darwin Harbour and the
	abundance of dugongs in the Northern Territory16
Table 3-7:	Implementation plan—Darwin Harbour IMMRP17
Table 3-8:	Implementation plan – conservation management of dugongs, cetaceans and
	threatened marine MNES in the Top End19
Table 4-1:	Indicative schedule for terrestrial and marine conservation sites27

LIST OF FIGURES

Figure 1-1: Location of the Ichthys Field and GEP route7
Figure 3-1: Overview of ARGP assessment process and indicative reporting requirements
Figure 4-1 Outline of the method for implementing Condition 11(b) and 11(c)24

TABLE OF APPENDICES

TERMS, ABBREVIATIONS OR ACRONYMS

Term, abbreviation or acronym	Description
ALMAG	Aboriginal Land Management Advisory Group
ARGP	Aboriginal Ranger Grants Program
ARC	Australian Research Council
Company-run	IPVOA programs managed by the INPEX
CPF	central processing facility
CPI	Consumer Price Index
Cwlth	Commonwealth
DAWE	Department of Agriculture, Water and the Environment (Cwlth)
DENR	Department of Environment and Natural Resources (NT)
DCM	Department of Chief Minister (NT)
EA Act	Environmental Assessment Act (NT)
EIS	environmental impact statement
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)
FPSO	floating production, storage and offtake facility
GEP	gas export pipeline
НОА	heads of agreement
IMMRP	integrated marine monitoring and research program
IPVOA	Ichthys Project Voluntary Offset Agreement
LNG	liquified natural gas
LPG	liquified petroleum gas
MNES	matters of national environmental significance
NT	Northern Territory
NTG	Northern Territory Government
PEP	project execution plan
Territory-run	IPVOA programs managed by the NTG
LMCF Guideline	Aboriginal Ranger Grant Program Land Management and Conservation Fund Guidelines

1 INTRODUCTION

1.1 Project overview

The Ichthys LNG Project (the Project) is a joint venture between INPEX group companies, Total, and the Australian subsidiaries of CPC Corporation Taiwan, Tokyo Gas, Osaka Gas, Kansai Electric Power, JERA and Toho Gas. INPEX Operations Australia Pty Ltd acts as the Operator of the Project.

Drawing on the hydrocarbon resources of the Ichthys gas and condensate field in the Browse Basin at the western edge of the Timor Sea offshore Western Australia, the Project is expected to produce 8.9 Mt of liquefied natural gas (LNG) and 1.6 Mt of liquefied petroleum gases (LPG) per annum, along with up to approximately 100,000 barrels of condensate, per day, at peak. The Project has an expected operational life of at least 40 years.

The extraction of natural gas and condensate is carried out via a floating semi-submersible central processing facility (CPF) at the Ichthys Field. This removes water and most of the condensate from the reservoir fluids and the separated water and condensate are transferred to a floating production, storage and offtake (FPSO) facility moored approximately 3.5 km from the CPF. After further processing on the FPSO, the condensate is exported from the FPSO at an average rate of up to 85,000 barrels per day (at the start of LNG production).

The dehydrated gas and the remainder of the condensate is compressed and exported through an approximately 890 km long gas export pipeline (GEP) to the Project's onshore processing plant at Bladin Point¹ in Darwin Harbour in the Northern Territory (NT) (Figure 1-1).

¹ Previously Blaydin Point - <u>https://www.ntlis.nt.gov.au/placenames/view.jsp?id=24572</u>

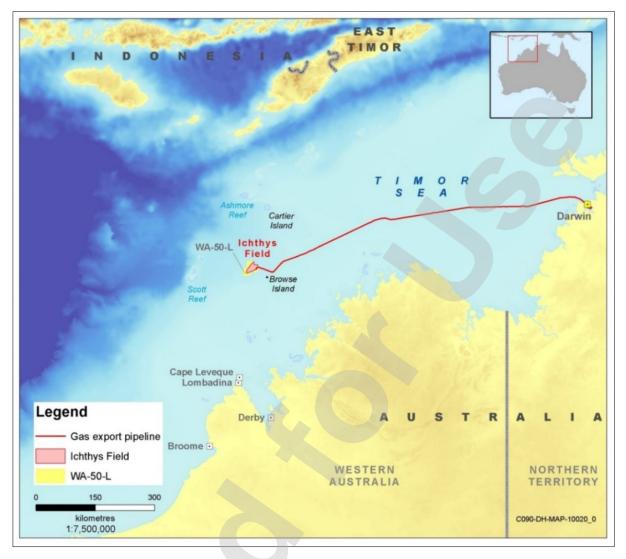


Figure 1-1: Location of the Ichthys Field and GEP route

The Project's infield facilities, including the greater part of the offshore component of the subsea pipeline, fall under Commonwealth jurisdiction, while the nearshore and onshore facilities in Darwin fall under both Commonwealth and NT jurisdiction.

The nearshore infrastructure consists of an approximately 27 km length of the GEP from the mouth of Darwin Harbour to the pipeline shore crossing on the western side of Middle Arm Peninsula; a two-berth product loading jetty on the north western end of Bladin Point; and a navigation channel, turning basin and berthing pocket for the product tankers.

The onshore facilities at Bladin Point include an 8 km long onshore pipeline corridor from the shore crossing area to the Bladin Point gas-processing plant; two gas liquefaction trains, each capable of producing approximately 4.45 Mt/a of LNG; an LPG (propane and butane) fractionation plant; a condensate stabilisation plant; seven storage tanks (two for LNG, three for condensate, one for propane and one for butane); and associated utilities and administration facilities. The Project was assessed under the Northern Territory Government's (NTG) *Environmental Assessment Act* (EA Act) and the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in 2010 and 2011 as an environmental impact statement (EIS). The NTG Minister for Natural Resources, Environment and Heritage assessed the Project under the EA Act on 17 May 2011, attaching a set of recommendations to this assessment report (NRETAS 2011). The Commonwealth Minister for Sustainability, Environment, Water, Population and Communities approved the Project under the EPBC Act on 27 June 2011, with a set of conditions (Minister for the Environment 2011).

1.2 Purpose

The purpose of this document is to detail INPEX's Coastal Offset Strategy in accordance with Condition 11 of the Commonwealth's Approval Decision (EPBC 2008/4208), and as varied on 21 August 2020². Specifically, this document includes:

- high-level details on the implementation of offsets specified in Condition 11(a)
- scope and methodology for the permanent protection of approximately 2000 ha of terrestrial vegetation and mangroves, in accordance with Condition 11(b)
- scope and methodology for the permanent protection of marine habitat as required by Condition 11(c).

² See <u>http://epbcnotices.environment.gov.au/ entity/annotation/a0777f29-24e7-ea11-be57-005056842ad1/a71d58ad-4cba-48b6-8dab-f3091fc31cd5?t=1600236436809</u>

2 BACKGROUND TO ENVIRONMENTAL OFFSETS

The NTG and Commonwealth Government determined that the Project be formally assessed at the EIS level.

INPEX submitted its Draft EIS in July 2010 and, after a period of public review, published its EIS Supplement in April 2011. In the EIS Supplement (Section 4.9 page 137 of the EIS Supplement), INPEX committed to a number of environmental offsets which included the following:

- a long-term boat-based survey of coastal dolphins in Darwin Harbour to improve understanding of their abundance, distribution and critical resource needs
- participation in a proposed integrated marine monitoring and research program for Darwin Harbour
- support of the Australian Research Council (ARC) Linkage Projects scheme. INPEX has
 committed to supporting two ARC Linkage research proposals in Darwin Harbour and
 will make a significant contribution in cash or in kind that will be equal to, or greater
 than, ARC funding of the projects
- the publication of the results of the extensive biological and ecological studies undertaken by INPEX along the Western Australian Kimberley coastline to support the preparation of its EIS.

A tripartite process was established during the environmental approvals process between the Department of Chief Minister (DCM) (representing the NTG), Department of Agriculture, Water and the Environment (DAWE³) and INPEX to negotiate an environmental offset package that included those committed to in the EIS Supplement.

In May 2011, the NTG provided a letter to the then Acting Secretary of the Commonwealth environment department outlining the agreements reached between INPEX and the NTG on various environmental offsets that INPEX would voluntarily commit to should the Project be approved. The environmental offsets outlined in this letter may be summarised as follows:

- greenhouse gas offsets: \$37 million over 20 years for savannah burning projects in the NT
- environmental offsets: \$51 million over 40 years for seven other environmental projects
- social and community development: \$3 million to assist with the establishment of a Hydrocarbon Centre of Excellence at Charles Darwin University.

As previously noted, the Commonwealth Minister for the Environment granted approval of the Project on 27 June 2011 under the EPBC Act. The Approval Decision included a condition (Condition 11) for INPEX to submit a Coastal Offset Strategy (this document), to implement various environmental offset programs, and to set aside for permanent protection terrestrial and marine habitat in the NT. A number of the voluntary environmental offsets agreed by the NTG and INPEX and outlined in the NTG's letter to the Commonwealth in May 2011 were incorporated into Condition 11 of the Commonwealth Minister's Approval Decision to become legally enforceable commitments. These environmental offsets are described in Condition 11 of the Approval Decision (as varied on 21 August 2020) as follows:

³ Previously the Department of Sustainability, Environment, Water, Population and Communities

"The person taking action must submit for the Minister's approval a Coastal Offset Strategy for the protection of listed threatened species and listed migratory species impacted by the proposal in Darwin Harbour. The Coastal Offset Strategy must include:

- a. High level details on the implementation of the following offsets outlined in the Northern Territory's letter to the Acting Secretary of the Department of Sustainability, Environment, Water, Population and Communities dated 23 May 2011, including a commitment and indicative schedule for the development of detailed sub-plans for each offset program
 - publication of data collected for the Browse Basin and Kimberley coastline
 - an integrated monitoring and research program for Darwin Harbour
 - habitat mapping for Darwin Harbour Region (including Bynoe Harbour)
 - funding of Australian Research Council Linkage project
 - conservation management of marine megafauna in the western Top End
 - research on the conservation status, distribution and habitat use of coastal dolphins.
- b. Provision for the permanent protection of approximately 2000 ha of terrestrial vegetation and mangroves, or of an area as otherwise agreed by the Minister and provision for the management of the protected area(s) for the life of the project;

Note 1: Permanent protection can include the acquisition and inclusion of an area in the conservation estate, covenanting arrangements on private land, other formal agreements with private landholders, or permanent changes to management regimes on Crown or Aboriginal land.

Note 2: This condition does not limit the provision of these offsets in synergy with any conditions of any other approving party.

c. Provision for the permanent protection of marine habitat for inshore dolphins, marine turtles and Dugong that is preferably, but not necessarily, adjacent to the protected mangrove vegetation and provision for the management of the protected area(s) for the life of the project;

Note 1: Permanent protection can include the acquisition and inclusion of an area in the conservation estate, covenanting arrangements on private land, other formal agreements with private landholders, or permanent changes to management regimes on Crown or Aboriginal land.

Note 2: This condition does not limit the provision of these offsets in synergy with any conditions of any other approving party.

The Coastal Offset Strategy must include commitments to timeframes and funding arrangements, and be made available on the proponent's website. The strategy must be submitted for approval at least three months before construction activities commence in Darwin Harbour. No construction activities may commence in Darwin Harbour until the Coastal Offset Strategy is approved."

The environmental offsets set in Condition 11 include direct and indirect offsets and are designed to compensate for residual environmental impacts associated with the Project.

For the purposes of this Coastal Offset Strategy, the environmental offsets outlined in Condition 11 of the Approval Decision are placed in two broad categories:

- Environmental offset programs: Offset programs listed in Condition 11(a) (Section 3)
- Habitat protection: The permanent protection of approximately 2000 ha of terrestrial vegetation and mangroves as described in Condition 11(b) and marine habitat as described in Condition 11(c) (Section 4).

3 CONDITION 11(A) ENVIRONMENTAL OFFSETS PROGRAMS

3.1 Collaboration with the NTG

In order to formalise the implementation of the Project's environmental offset programs, a Heads of Agreement (HOA) was established between the NTG and the Ichthys Joint Venture participants. The HOA was drafted in May 2011 and executed in June 2011.

The HOA outlines the collaborative approach to implementing offsets for the Project, which includes the environmental offsets detailed in this Coastal Offset Strategy.

Obligations in the HOA include the establishment of a formal consultation process and reporting requirements between the NTG, INPEX and the Ichthys Project Joint Venture participants. The HOA also included a legally enforceable commitment to develop a detailed agreement, the Ichthys Project Voluntary Offsets Agreement (IPVOA), to further build on the obligations in the HOA. The IPVOA was executed on 1 July 2014.

The IPVOA reinforces the commitment to the environmental offset programs, including INPEX's commitment to spending \$91 million to fund offset programs. It also describes the funding and reporting arrangements along with deliverables for each program. The IPVOA outlines the obligations of the Company (INPEX on behalf of the Project) and the NTG, including the requirement for parties to develop, manage, resource and implement offset programs. It provides for governance procedures by way of a Steering Committee with representatives from the NTG and INPEX to ensure that the implementation of the environmental offset programs remains a collaborative process between the parties.

These programs have been further defined in the IPVOA, with some of these programs being managed by the NTG ("Territory-run"), while other programs will be managed by INPEX ("Company-run"). Table 3-1 describes which programs are Territory-run and which are Company-run, how they relate to Condition 11(a) and their current status. With exception of one program, all programs have commenced, and five of the seven Coastal Offsets Strategy programs are completed.

The environmental offset programs specifically conditioned under Condition 11(a) are further described in the following subsections.

Table 3-1: Environmental offset programs within the scope of the Coastal Offset Strategy

IPVOA program title	Party responsible for delivery	Outline description	Status
Darwin Harbour integrated marine monitoring and research program	Territory-run	An integrated monitoring and research program for Darwin Harbour. Included in the scope of this Coastal Offset Strategy.	Commenced in November 2014 and is ongoing for 40 years
Conservation status of coastal dolphins in the Northern Territory	Territory-run	Research on the conservation status, distribution and habitat use of coastal dolphins. Included in the scope of this Coastal Offset Strategy.	Completed June 2017
Habitat mapping for Darwin region (including Bynoe Harbour)	Territory-run	Habitat mapping for Darwin Harbour region (including Bynoe Harbour). Included in the scope of this Coastal Offset Strategy.	Completed June 2018
Conservation management of dugongs, cetaceans and threatened marine matters of environmental significance in the Top End	Territory-run	Conservation management of dugongs, cetaceans and threatened marine matters of national environmental significance (MNES) in the Top End. Included in scope of this Coastal Offset Strategy.	Program funding to commence July 2021
Publication of Kimberley research	Company-run	Publication of data collected for the Browse Basin and Kimberley coastline. Included in scope of this Coastal Offset Strategy.	Completed October 2014
Long-Term Monitoring of Coastal Dolphins in Darwin Harbour and the Abundance and Distribution of Dugongs in the Northern Territory	Territory-run	Continuation of long-term monitoring of coastal dolphins. Research on the conservation status, distribution and habitat use of dugongs. Included in scope of this Coastal Offset Strategy.	Completed June 2020
Supporting two Australian Research Council Linkage Projects	Company-run	Funding of Australian Research Council Linkage project. Included in scope of this Coastal Offset Strategy.	Completed July 2015

3.1.1 Changes to environmental offset programs

More recently, changes to the INPEX environmental offset programs have been agreed with the NTG. These include:

- formalisation and commencement of a program to replace the program formerly known as Coastal Dolphin Research (note that this program has transferred from a companyrun offset program to a territory-run offset program). INPEX's originally proposed offset was to complete a research and monitoring program on coastal dolphins in Darwin Harbour. However, this was subsequently considered to be routine and essential monitoring to be undertaken during the construction phase of the Project. INPEX subsequently undertook this survey with assistance from Department of Environment and Natural Resources (DENR) over a five- year period, as well as working with DENR further to identify and develop an appropriate offset program. Following investigations, it was discovered that the greatest benefit would be derived from extending the dolphin monitoring project until 2020. In addition to INPEX's requirements, through agreement with the NTG, it was decided that a project determining the abundance and distribution of dugongs, a data-deficient species in the NT, was valuable. These projects aim to address key knowledge gaps and inform management priorities for marine megafauna species (coastal dolphins and dugong), which are Matters of National Environmental Significance under the EPBC Act.
- INPEX submitted a formal variation request to DAWE that was subsequently approved varying Condition 11a offset program "Conservation management of marine megafauna in the western Top End" to "Conservation management of dugongs, cetaceans and threatened marine MNES in the Top End". The purpose of the variation was to increase the spatial area in which the offset program was applicable and include threatened marine MNES, providing greater environmental, social and economic benefits across the Top End.

The total spend for the offset programs under Condition 11a will remain the same as in the HOA.

3.2 Condition 11(a) funding arrangements

The IPVOA defines the headline funding amount for the voluntary offsets package with NTG; this is \$91 million plus Consumer Price Index (CPI) adjustment which is attributed annually to the remaining unspent amount . This funding has been apportioned to each offset program by the IPVOA Steering Committee to fulfil various environmental outcomes as stated in the applicable IPVOA implementation schedules.

3.3 Completed environmental offset programs

Table 3-2 to Table 3-6 provide details of Condition 11(a) environmental offset programs that have been completed, specifically the following programs:

- Conservation status of coastal dolphins in the Northern Territory
- Habitat mapping for Darwin region (including Bynoe Harbour)
- Publication of Kimberley research data
- Funding of Australian Research Council (ARC) Linkage projects
- Long-term monitoring of coastal dolphins in Darwin Harbour and the abundance and distribution of dugongs in the Northern Territory.

Item	Description
Project timeframe	This program began in July 2014 and was completed in June 2017.
Purpose and objectives	 Project outcomes included: identification of significant habitat and areas of high conservation value for coastal dolphin species. assessment of the regional conservation status of coastal dolphin species in the NT waters. improved data accessibility to relevant stakeholders.
Scope	The offset program was developed by the NTG (through DENR) to deliver robust scientific data to support the assessment of the regional conservation status of all species of coastal dolphins. The project provided a framework for ongoing monitoring and management of dolphin populations and habitats in the NT, strengthen evidence-based decision-making, and assisted in evaluating future environmental impact assessments. This was a new program that was additional to any other work conducted by DENR.
Deliverables	 Deliverables included: scientific data and maps a final scientific report. All data, maps and the final report have been made publicly available on the DENR website. A summary list of offset reports produced by this program are also available on the INPEX website at https://www.inpex.com.au/projects/ichthys-lng/our-commitments/.

Table 3-2: Conservation status of coastal dolphins in the Northern Territory

Item	Description
Project timeframe	This program began in July 2014 and was completed in June 2018.
Purpose and objectives	 Project outcomes included: improved knowledge and understanding of the distribution and characteristics of marine habitats in Darwin and Bynoe harbours. improved evidence-based decision-making to support the sustainable development of Darwin and Bynoe harbours. improved accessibility of marine data to the public through dedicated web services. improved marine research capacity in the NT through partnerships between research agencies and government.
Scope	The project conducted seabed mapping to obtain high resolution bathymetric and backscatter data; examined the abiotic patterns important to benthic communities; and characterised the seafloor fauna and flora (benthos) within Darwin and Bynoe harbours. These data improved knowledge and understanding of the marine habitats in Darwin and Bynoe harbours, which supports evidence-based management decision-making for the protection and sustainable development of marine resources in these areas. This was a new program that is additional to any other work that is being conducted by DENR or project partners.
Deliverables	Reporting requirements were developed by the NTG, and included:

Item	Description
	 scientific data and GIS data layers final scientific reports on various aspects of the program (seabed characteristics, abiotic factors, seafloor communities). All data, maps and the final report have been made publicly available on the DENR website.

Item	Description
Project timeframe	This program began in 2012 and was completed in October 2014.
Purpose and objectives	The intent of this offset program was to publish the results of the extensive biological and ecological studies undertaken by INPEX in the Browse Basin and along the Western Australian Kimberly coastline.
Scope	 Publication of results of studies undertaken in the Kimberley region during 2007 and 2009, including: investigations of fauna on the Maret Islands and other islands in the Bonaparte Archipelago flora and vegetation surveys on the Maret Islands, East Montalivet Island, Berthier Island, Albert Island and Lamarck Island marine sediment and water quality surveys around the Maret Islands and offshore waters surveys of intertidal and subtidal communities on the Maret Islands cetacean and other marine megafauna studies in the Browse Basin and around the Maret Islands marine turtle studies in the northwest Kimberley region investigations into the sources of sea noise in the Browse Basin and Maret Islands.
Deliverables	 Publication of the <i>Ecological studies of the Bonaparte Archipelago and Browse Basin</i> book, which has been made publicly available by INPEX and can be accessed at < <u>https://www.inpex.com.au/media/2528/ecological-studies-of-the-bonaparte-archipelago-and-browse-basin-v7-web.pdf</u> >. Much of the environmental data contained in the book is considered ground-breaking because very few detailed surveys have been undertaken in these remote areas. By publishing these data, INPEX made important information available to the scientific community, regulatory authorities and general community, providing the following benefits: it has assisted in improving knowledge of the biological and ecological values of the Kimberley region. it has informed environmental assessment of future projects in the Kimberley region.

Table 3-5: Funding of ARC Linkage Projects

Item	Description
Project timeframe	The program began in 2011 and was completed in July 2015.

Item	Description
Purpose and objectives	The intent of this offset program was to benefit the community and increase knowledge of environmental processes by contributing to national research through the Australian Research Council Linkage (ARC) Linkage program, which promotes research partnerships between researchers and other agencies including business, industry and government.
Scope	 INPEX entered into ARC Linkage Collaborative Research Agreements to assist with funding for the following projects: New South Wales (UNSW) project entitled "Understanding and predicting sediment distribution and net transport in estuaries and coastal oceans with an emphasis on muddy bottom layers". The partner organisations involved in this project were AIMS and the State Key Laboratory of Satellite Ocean Environment Dynamics (SOISOA) of China. This project commenced in March 2011 and ceased in 2013. Charles Darwin University (CDU) project entitled "Microbiology of a tropical creek impacted by sewage effluent: novel assessment using N-cycle functional markers and changes in community composition". This project commenced in 2013 and ceased in 2015.
Deliverables	The general benefits of this offset program to fund ARC Linkage projects included support of Australian researchers, contribution to scientific knowledge and improved environmental management of Darwin Harbour. Each of the two ARC Linkage projects had its own specific environmental offset benefits; the UNSW project made a major contribution to understanding mud transport and siltation problems in muddy ports and coastal waters while the CDU project improved knowledge and understanding of microbes (including pathogens) in sediments, water and fish of the Darwin Harbour.

Table 3-6: Long-term monitoring of coastal dolphins in Darwin Harbour and theabundance of dugongs in the Northern Territory

Contents	Description
Timing	The Project commenced in July 2015 and completed in June 2020.
Purpose and objectives	 Project outcomes included: enhanced understanding of coastal dolphin population dynamics in Darwin Harbour and surrounding waters. improved knowledge of the abundance, distribution and habitat use of dugong in NT coastal waters.
Scope	This offset program extended the collaborative NTG/INPEX Darwin Harbour dolphin monitoring program and delivered new information on dugong distribution that contributed to management of the species in the NT. This is a new program that complements DENR's core deliverables and Commonwealth obligations while engaging with Aboriginal ranger groups and other relevant stakeholders.
Deliverables	All data, maps and the final report have been made publicly available on the DENR website. A summary of published reports can also be viewed on the INPEX website at <u>https://www.inpex.com.au/projects/ichthys-lng/our-commitments/</u> , such as:

Contents	Description
	 scientific data a technical report for the NT-wide dugong aerial surveys including analysis of distribution and abundance
	 a technical report describing the results for Darwin Harbour dolphin monitoring including habitat use and population dynamics
	a technical report describing the dugong satellite telemetry program
	 a technical report for the 2nd NT-wide dugong aerial surveys including analysis of distribution and abundance
	• a technical report on the Population Viability Analysis management implications for coastal dolphins in Darwin Harbour and the results of the long-term monitoring program including habitat use and population dynamics.

3.4 Ongoing environmental offset programs

The following sections provide details of Condition 11(a) environmental offset programs that are ongoing, specifically the following programs:

- Darwin Harbour integrated marine monitoring and research program
- Conservation management of dugongs, cetaceans and threatened marine MNES in the Top End.

3.4.1 Darwin Harbour integrated marine monitoring and research program

The intent of the Darwin Harbour integrated marine monitoring and research program (IMMRP) is to provide a greater understanding of the biophysical patterns and ecological processes in Darwin Harbour, and subsequently improve knowledge of potential risks posed by coastal developments to marine health and resilience in Darwin Harbour.

This is a Territory-run project, where the NTG has developed the program with INPEX's approval and reports to INPEX on the progress of the program.

The design of the monitoring and research program is governed by the NTG, with review and approval provided by INPEX. The program consists of several themes which address water quality, sediment quality habitats and anthropogenic pressures in Darwin Harbour.

A technical working group comprising members from DENR and INPEX has been established to review program performance and identify key focus areas for research and monitoring.

In addition, the Darwin Harbour IMMRP implementation plan has required the establishment of a stakeholder committee, the Darwin Harbour Region Integrated Monitoring and Research Coordination Committee (DHR-IMR-CC). The purpose of the DHR-IMR-CC is to facilitate the integration of all Darwin Harbour monitoring and research activities into the IMMRP and to act as a forum to share information collected under the IMMRP with the broader scientific community working in Darwin Harbour.

An implementation plan for the Darwin Harbour IMMRP is provided in Table 3-7.

Contents	Description
Timing	The Project commenced in November 2014 and is ongoing until 2054 (40 year life).

Table 3-7: Implementation plan—Darwin Harbour IMMRP

Contents	Description
Purpose and objectives	 Key objectives of this offset program are to: increase confidence in the management of Darwin Harbour and the commitment of Harbour users to protect key values
	• increase awareness and understanding of the influences on Darwin Harbour's marine condition
	 provide sound, evidence-based assessments of change in Darwin Harbour's marine condition, and triggering of appropriate and timely responses from regulators
	 provide a better knowledge-base for improved environmental monitoring and management.
Scope	The IMMRP will be integrated with current monitoring programs and the anticipated investment being undertaken by other INPEX offset programs. The IMMRP commenced in 2014 and is undertaken in 5-year increments. The first increment of the program (Increment 1; 2014-2019) comprised scientific reviews of past research and monitoring relevant to Darwin Harbour, and the development and implementation of a suite of pilot projects designed to provide scientific basis for the implementation of long-term monitoring programs. These pilot projects addressed water and sediment quality, and mangrove habitat. The second five-year increment (Increment 2; 2019-2024) will focus on the completion of Increment 1 pilot projects, and the development, commencement and communication of long-term integrated monitoring programs addressing key priorities for Darwin Harbour, and likely to include water quality, sediment quality, habitats and anthropogenic pressures. Research projects to address key knowledge gaps for Darwin Harbour may also be developed. The IMMRP is supported by a Project Execution Plan (PEP) that provides more detail regarding the scope of the sub-programs and timelines for major deliverables. The PEP is reviewed and (if required) updated annually following consultation with the technical committee to ensure that the program remains focussed on key priorities for Darwin Harbour.
Methodology	conducted by DENR or project partners. There are multiple projects that contribute to this program and that may change over the 40-year program timeframe. As such, the methodology for this program is detailed in the Project Execution Plan and associated project plans.
Consultation	This program is managed by the NTG.
process	This offset program is completed in collaboration with INPEX, as well as relevant government, scientific and industry stakeholders.
	INPEX is a stakeholder in this program and will be provided with progress reports.
Funding arrangements	Funding to undertake activities that deliver the project outcomes has been allocated under the IPVOA through discussion with NTG and budgeted for by INPEX for the life of this offset project (refer to Section 3.2).
Deliverables	 Deliverables include: research reports including data analysis and scientific results inclusion of information in Darwin Harbour Report Cards.

Contents	Description
	All data and final reports have been made publicly available on the DENR website.
	Information collected has informed Darwin Harbour Report Cards.
	Further a summary of published reports can be viewed on the INPEX website at https://www.inpex.com.au/projects/ichthys-lng/our-commitments/ .

3.4.2 Conservation management of dugongs, cetaceans and threatened marine MNES in the Top End

The intent of this offset program is to fund dugong, cetacean and threatened marine MNES conservation management programs in the Top End through partnering with the NTG existing Aboriginal Ranger Grants Program (ARGP)⁴. The offset program will be funded by INPEX and coordinated by DENR as a Territory-run program under the IPVOA with independent advice provided by the Aboriginal Land Management Advisory Group (ALMAG).

Funding for the offset program has been allocated under the IPVOA after discussions with NTG and budgeted for by INPEX for the life of the offset program (refer to Section 3.2).

An implementation plan for conservation management of dugongs, cetaceans and threatened marine MNES in the Top End is provided in Table 3-8. The list of species to be protected under the program is provided at Appendix A.

Contents	Description
Timing	The offset program will commence July 2021 and operate until and including 2043.
Purpose and objectives	The purpose of the offset program is to support Aboriginal ranger groups to deliver conservation management of dugongs, cetaceans and threatened marine MNES in the Top End through partnering with the NTG's existing ARGP. Key objectives of this offset program are to:
	 implement management actions that enhance the conservation of dugongs, cetaceans and threatened marine MNES (as listed in Appendix A) and their habitat
4	• enhance and maintain the capacity of Aboriginal ranger groups to deliver these management actions.
Scope	A list of species within the scope of the offset program is provided in Appendix A.
6	This will be a Territory-run offset program. It has been developed to fund activities that can achieve environmental outcomes that support existing Commonwealth policies, plans and programs (e.g. Recovery Plans, Threat Abatement Plans, Indigenous Protected Area Management Plans, and Species Profile and Threats Database).
	The offset program aligns with the NT Draft Offset Policy (DCM and DENR 2019), NT Coastal and Marine Management Strategy (DENR 2019) and the NT Aboriginal Land and Sea Action Plan (DCM 2019) so that it:

 Table 3-8: Implementation plan – conservation management of dugongs, cetaceans and threatened marine MNES in the Top End

⁴ For more information on the NTG run ARGP, go to DENR's website <u>https://denr.nt.gov.au/programs-and-</u><u>strategies/aboriginal-ranger-grants-program</u>

Contents	Description
	 results in a benefit to the protected species through management activities applied at regional scales;
	 identifies relevant environmental targets and actions required to measure, monitor and evaluate outcomes for protected species (Appendix A); and
	 support Aboriginal landowners to manage their land and sea country in the manner and way that best suits them.
Methodology	The Aboriginal Ranger Grant Program Land Management and Conservation Fund Guidelines (LMCF Guideline; DENR 2020) has been developed by DENR to implement the ARGP. The LMCF Guideline and the Land Management and Conservation Fund Grant Application Assessment Criteria Guidelines (DENR undated) provides guidance for Aboriginal rangers applying for conservation management funding. A guideline will be developed for conservation management of dugongs, cetaceans and threatened marine MNES under the ARGP. This will allow eligibility and assessment criteria to be specifically tailored to address the
	purpose and objectives of the offset program. Criteria for assessing the eligibility and assessment of each project will be detailed in the new guideline following consultation with DENR, ALMAG and Aboriginal ranger groups and will be reviewed annually. The guideline will also set out conservation programs (direct and indirect) and capital expenditure. ⁵ that may be funded.
	It is envisaged that the application and assessment process will reflect the current ARGP processes. An indicative overview of these processes and reporting requirements is provided in Figure 3-1.
	There will be multiple projects (single and multi-year, and where possible standalone and coordinated regional programs) that contribute to this offset program over the 22-year program timeframe.
	An example of conservation programs that could be funded include, but are not limited to:
	 marine debris removal and management programs
	 direct or indirect (e.g. habitat) monitoring and management for dugongs, turtles or cetaceans
	 introduced species control and management to reduce turtle egg predation
	 development of regional management plans for threatened marine MNES (Appendix A)
C	Regular evaluation of the ARGP will ensure that project specific targets and outcomes are being achieved. An initial evaluation of the ARGP performance will occur following the first three years of implementation to ensure the purpose and objectives of the program are being met. Additionally, the NTG will conduct an independent evaluation of the ARGP performance every five years. Revisions to guidelines and project priorities will occur based on the outcomes of these evaluations.
	A summary of funded projects will be made available on the DENR ARGP website - <u>https://denr.nt.gov.au/programs-and-strategies/aboriginal-ranger-grants-program</u>
Consultation process	The offset program will be managed by the NTG through the ARGP. The ALMAG provides additional advice as to the relative merits of ARGP projects.

 5 capital expenditure must be linked to a conservation outcome (e.g. purchase of a vessel for a marine debris removal program)

Contents	Description
	All consultation with relevant stakeholders will be undertaken by NTG with input from INPEX on an as-needs basis.
Funding arrangements	INPEX will provide funding of \$24 million over 22 years to deliver program outcomes for the life of this offset project (refer to Section 3.2). Successful ranger applicants will enter into a Funding Agreement with the NTG, which contractually binds them to implement the approved program. The agreement includes processes for the repayment of funds to NTG under circumstances where a project does not commence or is noncompliant with the approved program.
Deliverables	 The new guideline to be developed will identify the reporting, record keeping and acquittal requirements for Aboriginal ranger projects. Deliverables to NTG include: regular progress reports during the term of the Funding Agreement financial reports as specified in the Funding Agreement a final project report which will evaluate the success of the project and the extent to which project outcomes were achieved (i.e. positive environmental outcomes for dugongs, cetaceans and/or threatened marine MNES). INPEX will provide an overview (i.e. financial and outcomes) of the offset program in its annual compliance report to the Commonwealth drawing on key information from NTG deliverables. The annual compliance report will be made publicly available on the INPEX website - https://www.inpex.com.au/projects/ichthys-Ing/reports/ Additionally, every five years INPEX will provide a program summary report to the Commonwealth that includes a more detailed evaluation of program expenditure, performance and outcomes. The report will also summarise the outcomes of the five yearly NT independent evaluation report of the ARGP, which will focus on the program effectiveness in achieving its purpose and objectives. This summary report will consider the merit of expanding the list of eligible species for funding as defined in Appendix A.

Coastal Offset Strategy

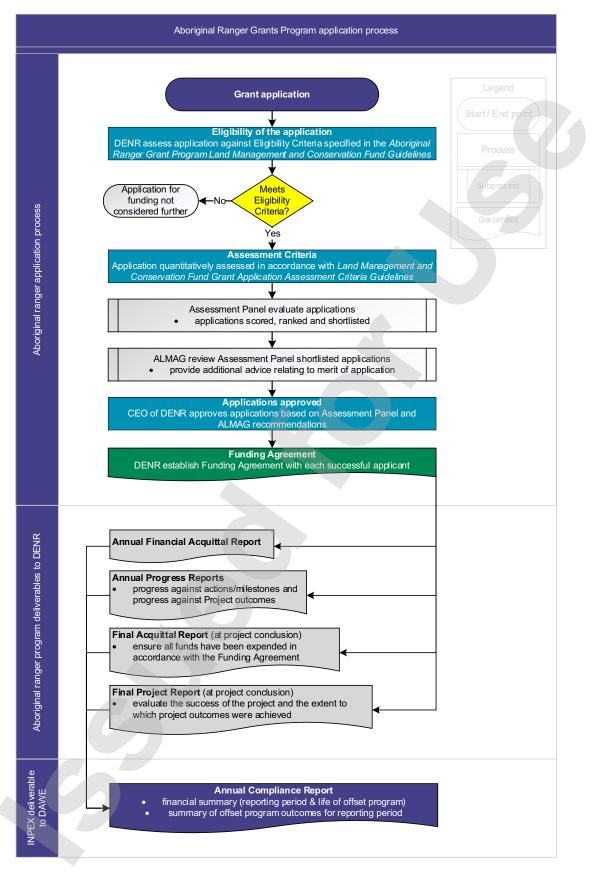


Figure 3-1: Overview of ARGP assessment process and indicative reporting requirements

4 CONDITION 11(B) AND 11(C) PROTECTION OF TERRESTRIAL AND MARINE HABITAT

4.1 **Purpose and objectives**

Condition 11(b) requires INPEX to protect approximately 2000 ha of terrestrial vegetation and mangroves. Condition 11(c) requires the protection of (preferably) adjoining marine habitat for marine species including dugongs, inshore dolphins and marine turtles. These areas must be permanently protected and managed by INPEX (or it's agent/s).

The target species and habitats to be protected under Conditions 11(b) and 11(c) are:

- Condition 11(b):
 - habitat such as mangroves, monsoon vine thickets and eucalypt woodlands⁶
- Condition 11(c):
 - coastal dolphin species (Orcaella heinsohni, Sousa sahulensis.⁷, Tursiops aduncus)
 - dugongs (Dugong dugon)
 - marine turtle species (Natator depressus, Eretmochelys imbricata, Chelonia mydas)
 - and associated habitats (seagrass and turtle nesting beaches).

4.2 Scope

The geographical scope of this offset program is terrestrial and marine habitat within the Northern Territory. The temporal scope is for the period of effect of EPBC Act approval (to July 2061).

4.3 Methodology

The process for selection and protection of appropriate terrestrial and marine habitats is outlined in Figure 4-1 and further described below.

⁶ Also known as tropical savannas

⁷ Previously included with *S. chinensis*, *S. sahulensis* was elevated to a species in 2014. *Sousa chinensis* is now used for humpback dolphins in the eastern Indian and western Pacific Oceans and *S. sahulensis* is used for humpback dolphins in the waters of the Sahul Shelf from northern Australia to southern New Guinea.

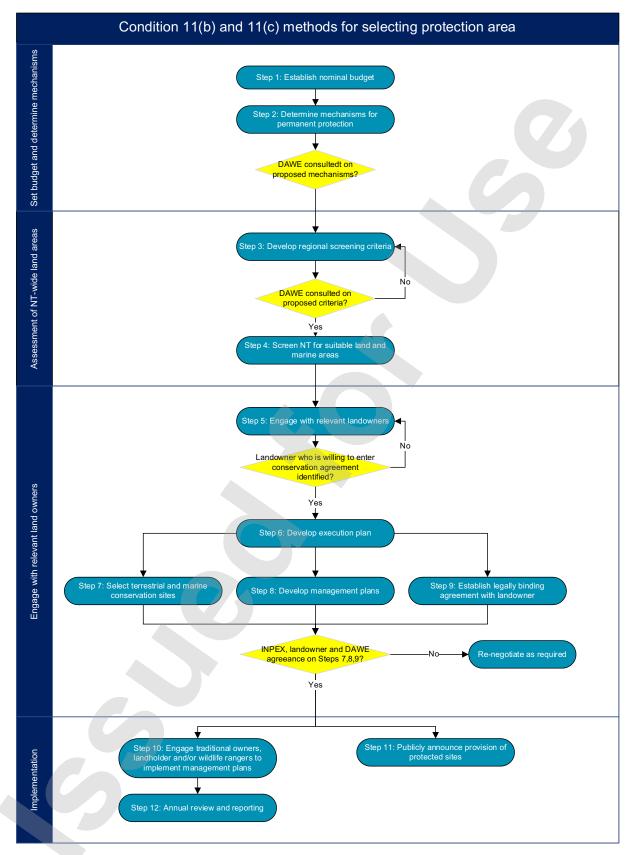


Figure 4-1 Outline of the method for implementing Condition 11(b) and 11(c)

- 1. **establish nominal budget:** A nominal annual value for ongoing operational costs has been planned by INPEX for life of Project. Given that costs for establishing and managing the conservation areas are largely unknown, INPEX will commit to a regular review of the provisional budget to ensure Conditions 11(b) and 11(c) are fully funded.
- 2. **determine mechanisms for permanent protection:** INPEX has scoped and evaluated mechanisms for permanent protection of land and sea in the Northern Territory. Land types included Crown Land, Private Land and Aboriginal Land. INPEX has consulted with relevant landowners and occupiers and DAWE, as well as subject matter experts, to identify the most suitable mechanism to protect the terrestrial and marine habitats. INPEX completed this step on 7 September 2020.
- 3. **develop regional screening criteria:** Criteria for the selection of regional areas within the NT for protection have been developed. These criteria are based on the Condition requirements (including species identified in Section 4.1 and area requirements of Condition 11(b)), relevant policy and guidance (i.e. EPBC Act Environmental Offsets Policy) and mechanisms for permanent protection. The criteria includes environmental and social characteristics, and a weighting system to assist with quantitative evaluation of regions. INPEX completed this step on 7 September 2020.
- 4. screen NT for suitable land and marine areas: INPEX has identified areas of land and water in the NT that are suitable for fulfilling Conditions 11(b) and 11(c). INPEX has undertaken a desktop assessment of current land and water uses to identify any social, cultural or political constraints, which may exclude areas from further consideration. The screening criteria has been applied to potential terrestrial and marine areas to evaluate their suitability for permanent protection. This task was completed on 7 September 2020. Land areas selected through this process may span several landowners, which will be subject to a more detailed evaluation and shortlist process (Step 5).
- 5. **engage with relevant landowners:** INPEX will consult with DAWE once the shortlist of potential landowners is generated. Detailed engagement with interested landowners will follow as part of the evaluation process. INPEX may undertake further studies and site assessments as deemed necessary. At the end of this process, one or more landowners will be identified as meeting the selection criteria, for progression to detailed site selection. The final landowner(s) will be selected on or before 30 October 2021.
- 6. **develop execution plan:** A detailed execution plan will be developed. This plan will outline the methods for identifying and selecting a suitable area of land for terrestrial habitat protection, and a suitable area for marine habitat protection with the relevant landowner/s. This will include a gap analysis of relevant environmental and social data, and a plan to fill gaps where required. The execution plan will be finalised on or before 30 October 2021.
- 7. **select terrestrial and marine conservation sites:** The terrestrial and marine areas deemed most suitable for permanent protection will be nominated for selection as conservation sites. This will include any required site-specific surveys, desktop-based studies and stakeholder engagement where required. Data will be used to select individual parcels of land and sea that satisfy the selection criteria through the use of systematic conservation planning methods. INPEX will seek DAWE agreement to the proposed terrestrial and marine conservation sites before January 1 2023.
- 8. **develop management plans:** Management plans will be developed for the terrestrial and marine conservation sites with traditional owners and landholders. INPEX will ensure that key stakeholders, including the DAWE and NTG, are

consulted during the development of the plans. The plans will address the environmental and social aspects and characteristics of the sites, and will include management measures that ensure the protection of the natural and cultural qualities to the required level of protection to meet Conditions 11(b) and 11(c), and will be prepared in accordance with the DAWE's Environmental Management Plan guidelines (DoE 2014) and related advice from DAWE. Management measures will be site specific, and will address as a minimum native fauna, feral animals, Aboriginal natural and cultural resources, flora, vegetation, fire, weeds and conservation management of the marine environment. Management plans will be finalised on or before June 30 2023, including DAWE review and agreement.

- 9. **establish legally binding agreement with landowner:** To ensure the protection and management of any conservation area, INPEX proposes to utilise a legally-binding conservation agreement established in accordance with s305 of the EPBC Act with the relevant landowner and DAWE. Conservation agreements are an instrument of the EPBC Act, and therefore DAWE will draft the agreement and provide the draft agreement to INPEX for comment, and for INPEX to facilitate negotiations with Land Owners and Land Councils. The conservation agreement will be given effect through its provisions and the environmental management plan prepared for the terrestrial and marine habitats (Step 8). The environmental management plan will form an annexure to the agreement. For it to be executed by the Commonwealth, the conservation agreement must meet the requirements of the EPBC Act. The agreement will be developed in parallel with preparation of the management plan, and finalised before July 1 2023.
- 10. engage traditional owners, landholders and/or wildlife rangers to implement the management plans: INPEX will engage the traditional owners, landowners or interested parties as wildlife rangers (or similar) to manage the terrestrial and marine conservation sites for life of Project in accordance with the agreed management plan. This will be achieved by supporting an existing Aboriginal ranger program, extending an existing program to include the conservation sites or assisting local communities to develop and implement a wildlife and conservation management program based on existing successful programs in the Northern Territory. Should the location of the selected parcel(s) of land prevent Aboriginal ranger engagement for land and sea management, then alternate arrangements will be made to the satisfaction of the landowner and INPEX. This will occur before October 30 2023.
- 11. **publicly announce provision of protected sites:** Once conservation agreements and implementation mechanisms are in place, INPEX will publicise the terrestrial habitat and marine habitat for permanent protection. Public announcements may include media releases, notices in local newspapers and advertisement on websites, and will be made within one month of agreements and mechanisms being established, with agreement from the landowner.
- 12. **annual review and reporting**: The operating funds and budget will be reviewed on an annual basis by INPEX, in collaboration with the landowner. The effectiveness of the management plans will also be reviewed annually by INPEX and will be updated where necessary to ensure the effectiveness of the plans and continuous improvement of management techniques.

4.4 Conditions 11b and 11c funding arrangement

INPEX will fund site selection process, stakeholder consultation, acquisition of conservation sites (if required) and establishment of legal framework/agreements to meet Conditions 11(b) and 11(c). Once established, funding for ongoing operational costs for life of Project (40 years) will be allocated under forward budget planning. It is anticipated that these funds will be used for on-country environmental management programs and training.

The provisional budget will be reviewed and revised, as required, once the acquisition strategy and management arrangements are fully costed. Budget provision will be made for ongoing management funds for the life of the Ichthys Project.

4.5 Timing

A detailed execution plan for permanently protecting terrestrial and marine habitats, in accordance with Conditions 11(b) and 11(c), will be developed following selection of one landowner. A schedule for that purpose is presented in Table 4-1; these dates may change following landowner consultation. Any variation to the Coastal Offsets Strategy will, in accordance with Condition 15C of the EPBC Act approval, be submitted for EPBC Act approval.

Item	Key step	Completion date	Status
1	Establish nominal budget	30 September 2011	Completed
2	Determine mechanisms for permanent protection	7 September 2020	Completed
3	Develop regional screening criteria	7 September 2020 Completed	
4	Screen NT for suitable land and marine areas	7 September 2020	Completed
5	Engage with relevant landowners	October 30 2021	Underway
6	Develop execution plan	October 30 2021	Underway
7	Select terrestrial and marine conservation sites	January 1 2023	To be commenced
8	Develop management plans	June 30 2023	To be commenced
9	Establish legally binding agreement with landowner	July 1 2023	To be commenced
10	Engage traditional owners, landholders and wildlife rangers to implement the management plans	October 30 2023	To be commenced
11	Publicly announce protected sites	within one month of Step 9	To be commenced
12	Annual review and reporting	Annually to align with DAWE annual compliance reporting	To be commenced

Table 4-1: Indicative schedule for terre	estrial and marine conservation sites
Table 4-1. Indicative Schedule for terre	estital and marine conservation sites

Note this schedule does not account for restrictions beyond INPEX's control (i.e. travel restrictions as a result of the COVID-19 pandemic) and therefore may need to be varied. To ensure that the schedule is not significantly impacted by COVID, INPEX has engaged with NT-based conservation specialists to progress on-country consultation and scientific fieldwork. Video conferencing will be used where feasible to mitigate against travel restrictions. INPEX will, where possible, utilise local staff and contractors to complete NT-based work portions.

5 **REGULATOR CONSULTATION**

INPEX will ensure ongoing liaison with DAWE on the status of the environmental offset programs described in this Coastal Offset Strategy. In addition, deliverables as committed to in the implementation plans for each offset program will be provided on request. DAWE will also be notified (through the submission of a revised COS) if significant changes (e.g. change of scope) are made to offset programs as described in this document, or significant milestones are achieved towards the development of program(s) for the protection of terrestrial and marine habitat offsets. Approval of these changes will follow the requirements of Condition 15C of EPBC 2008/4208.

6 **REFERENCES**

DCM – see Department of the Chief Minister

DENR – see Department of Environment and Natural Resources

DoE – see Department of Environment

Department of Environment (2014) Environmental Management Plan Guidelines. Viewed online on 21 September 2020 at <u>http://www.environment.gov.au/system/files/resources/21b0925f-ea74-4b9e-942e-a097391a77fd/files/environmental-management-plan-guidelines.pdf</u>

Department of Environment and Natural Resources. 2019. *Coastal and Marine Management Strategy Northern Territory – 2019-2029*. Northern Territory Department of Environment and Natural Resources, Palmerston, NT. Viewed online on 14 August 2020 <<u>https://denr.nt.gov.au/ data/assets/pdf file/0004/729472/coastal-marine-management-strategy-2019-2029.pdf</u>>

Department of Environment and Natural Resources. 2019. *Aboriginal Ranger Grant Program Land Management and Conservation Fund 2020/2021 – Guidelines*. Northern Territory Department of Environment and Natural Resources, Palmerston, NT. Viewed online on 14 August 2020 <<u>https://denr.nt.gov.au/ data/assets/word doc/0008/805391/guidelines-land-</u> management-conservation-fund-grants-round-2020-2021.DOCX>

Department of Environment and Natural Resources. undated. *Land Management and Conservation Fund Grant Application Assessment Criteria Guidelines*. Northern Territory Department of Environment and Natural Resources, Palmerston, NT.

Department of Natural Resources, Environment, the Arts and Sport. 2011. *Ichthys Gas Field Development Project, Blaydin Point: INPEX Browse, Ltd.—environmental assessment report and recommendations*. Assessment Report 65. Environment and Heritage Division, Department of Natural Resources, Environment, the Arts and Sport, Darwin, Northern Territory. Viewed online on 21 December 2011 at <<u>https://ntepa.nt.gov.au/ data/assets/pdf file/0010/287470/assessment report nreta s.pdf</u>>.

Department of the Chief Minister. 2019. *Northern Territory Aboriginal Land and Sea Action Plan*. Northern Territory Department of the Chief Minister, Darwin, NT. Viewed online on 14 August 2020 <<u>https://dcm.nt.gov.au/ data/assets/pdf file/0010/681328/land-sea-action-plan.pdf</u>>

Department of the Chief Minister and Department of Environment and Natural Resources. 2019. *Northern Territory Offsets Policy: Draft for Consultation*. Northern Territory Department of the Chief Minister, Darwin, NT. Viewed online on 14 August 2020 <<u>https://haveyoursay.nt.gov.au/51859/widgets/271765/documents/125788</u>>

Minister for the Environment (Commonwealth Minister for Sustainability, Environment, Water, Population and Communities). 2011. *Approval decision: Ichthys offshore and onshore processing facilities and subsea pipeline (EPBC 2008/4208)—conditions attached to the approval*. Department of Sustainability, Environment, Water, Population and Communities, Canberra, ACT. Viewed online on 29 December 2011 at <<u>http://www.environment.gov.au/epbc/notices/assessments/2008/4208/approval.pdf</u>>

NRETAS - see Department of Natural Resources, Environment, the Arts and Sport

APPENDIX A: LIST OF ELIGIBLE CONSERVATION MANAGEMENT SPECIES

List of species (i.e. dugong, cetaceans and threatened marine MNES) eligible for conservation management funding. Species list has been extracted from the list of species identified in the *Minister's Statement of Reasons supporting the decision to approve the Ichthys Development Project*.

Species	Status
Mammals	
Balaenoptera bonaerensis Antarctic Minke Whale, Dark-shoulder Minke Whale	Migratory (marine); Cetacean
<i>Balaenoptera edeni</i> Bryde's Whale	Migratory (marine); Cetacean
<i>Balaenoptera musculus</i> Blue Whale	Threatened (endangered); Migratory (marine); Cetacean
Delphinus delphis Common Dolphin	Cetacean
Dugong dugon Dugong	Migratory (marine); Marine
Feresa attenuata Pygmy Killer Whale	Cetacean
Globicephala macrorhynchus Short-finned Pilot Whale	Cetacean
<i>Grampus griseus</i> Risso's Dolphin, Grampus	Cetacean
<i>Kogia breviceps</i> Pygmy Sperm Whale	Cetacean
Kogia simus Dwarf Sperm Whale	Cetacean
<i>Lagenodelphis hosei</i> Fraser's Dolphin, Sarawak Dolphin	Cetacean
<i>Megaptera novaeangliae</i> Humpback Whale	Threatened (vulnerable); Migratory (marine); Cetacean
<i>Mesoplodon densirostris</i> Blainville's Beaked Whale, Dense-beaked Whale	Cetacean
<i>Orcaella heinsohni</i> ¹ Irrawaddy Dolphin	Migratory (marine); Cetacean
<i>Orcinus orca</i> Killer Whale, Orca	Migratory (marine); Cetacean
Peponocephala electra Melon-headed Whale	Cetacean
<i>Physeter macrocephalus</i> Sperm Whale	Migratory (marine); Cetacean
<i>Pseudorca crassidens</i> False Killer Whale	Cetacean
<i>Sousa chinensis</i> ² Indo-Pacific Humpback Dolphin	Migratory (marine); Cetacean

Species	Status
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin	Cetacean
Stenella coeruleoalba Striped Dolphin, Euphrosyne Dolphin	Cetacean
Stenella longirostris Long-snouted Spinner Dolphin	Cetacean
Steno bredanensis Rough-toothed Dolphin	Cetacean
<i>Tursiops aduncus</i> (Arafura/Timor Sea populations) Spotted Bottlenose Dolphin (Arafura/Timor Sea populations)	Migratory (marine); Cetacean
<i>Tursiops aduncus</i> Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin	Cetacean
<i>Tursiops truncatus s. str.</i> Bottlenose Dolphin	Cetacean
Ziphius cavirostris Cuvier's Beaked Whale, Goose-beaked Whale	Cetacean
Reptiles	
Caretta caretta Loggerhead Turtle	Threatened (endangered); Migratory (marine); Marine
Chelonia mydas Green Turtle	Threatened (vulnerable); Migratory (marine); Marine
<i>Dermochelys coriacea</i> Leathery Turtle, Leatherback Turtle, Luth	Threatened (vulnerable); Migratory (marine); Marine
<i>Eretmochelys imbricata</i> Hawksbill Turtle	Threatened (vulnerable); Migratory (marine); Marine
<i>Lepidochelys olivacea</i> Pacific Ridley, Olive Ridley	Threatened (endangered); Migratory (marine); Marine
Natator depressus Flatback Turtle	Threatened (vulnerable); Migratory (marine); Marine
Sharks	
<i>Pristis pristis³⁴</i> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish	Threatened (vulnerable), Migratory (marine)
Pristis zijsron ^₄ Green Sawfish, Dindagubba, Narrowsnout Sawfish	Threatened (vulnerable), Migratory (marine)
<i>Rhincodon typus</i> Whale Shark	Threatened (vulnerable); Migratory (marine)
Birds	1
<i>Calidris tenuirostris⁵</i> Great Knot	Threatened (critically endangered); Migratory (wetland); Marine
Charadrius leschenaultii ⁵ Greater Sand Plover, Large Sand Plover	Threatened (vulnerable); Migratory (wetland); Marine
Charadrius mongolus ⁵ Lesser Sand Plover, Mongolian Plover	Threatened (endangered); Migratory (wetland); Marine

¹Orcaella brevirostris was amended to O. heinsohni (Australian snubfin dolphin) under Section 209 of the EPBC Act on 29 November 2018

²includes *Sousa sahulensis* which was previously included with *S. chinensis*, *S. sahulensis* was elevated to a species in 2014. *Sousa chinensis* is now used for humpback dolphins in the eastern Indian and western Pacific Oceans and *S. sahulensis* is used for humpback dolphins in the waters of the Sahul Shelf from northern Australia to southern New Guinea.

³*Pristis microdon* (freshwater sawfish) was amended to *P. pristis* on 25 September 2013 under the EPBC Act ⁴species status was amended to include Migratory (marine) on 9 September 2015 under the EPBC Act ⁵species status was amended to included Threatened on 2 May 2016 under the EPBC Act

Document Endorsement and Approvals

This page has been automatically generated and appended to this document by the INPEX Australia Controlled Document Management System (CDS). This page contains key events related to this document that are listed in the tables below and the information is unable to be manually edited.

Document Identification

Document Number	Revision	Security Classification	Date
X075-AH-STR-0001	7	Unrestricted	14/10/20 08:00

Document Revision History

Revision	Date and Time	Issue Reason

Delegation of Authority

From Name	To Name	Date and Time	Action
Nowo Title			
Name		Title	

Electronic Endorsement and Approval

Electronic approval of this document complies with the issued INPEX Electronic Approval Standard (0000-A9-STD-60011) and records evidence that the applicable person has either endorsed and/or approved the content contained within this document. The reviewers of this document are recorded in the CDS.

Name	Title	Date and Time	Action
Valarie Ee	General Manager HSE	14/10/20 10:31	Approver
David Robotham	HSE Support Manager	13/10/20 13:43	Endorser