

Offset Reconciliation Statement Summary

Australia Pacific LNG Pty Limited (Australia Pacific LNG) is committed to delivering environmental offsets to compensate for significant, residual, unavoidable impacts on environmental values as result of its multibillion dollar, world-class Coal Seam Gas (CSG) to Liquefied Natural Gas (LNG) export project in Queensland (the Project). To date Australia Pacific LNG has developed an extensive portfolio of direct land based offsets and indirect offset solutions including contributions to research activities and biodiversity projects, in accordance with the Queensland Government approved Australia Pacific LNG Environmental Offset Strategy.

This annual reconciliation statement provides an update on Australia Pacific LNG's extensive offsets portfolio and details progress made over the 2013-2014 reporting year (November 2013 to November 2014). It also provides a reconciliation of offsets against actual disturbance in accordance with the Queensland Coordinator-General's approval condition Appendix 1, Part 1, Condition 5(3g, h, i and j). In November 2013, Origin Energy Resources Limited (Origin) on behalf of Australia Pacific LNG submitted the 'Environmental Offset Reconciliation Statement 2012-2013' (2012-2013 Reconciliation Statement); detailing progress of Project offsets over the 2012-2013 reporting year (November 2010 to November 2013). This is the second annual reconciliation statement to be submitted to the Coordinator-General, Queensland Department of Environment and Heritage Protection and the Australian Government Department of the Environment.

Offsets are currently required for unavoidable, significant, residual impacts on environmental values including Great Barrier Reef World Heritage values, threatened ecological communities, endangered and of concern remnant and regrowth vegetation, marine habitat, wetlands, watercourses, threatened flora species and habitat for threatened fauna species. Australia Pacific LNG has made substantial progress on its secured and preferred offset sites over the 2013-2014 reporting year including:

- The purchase/surrender/transfer of freehold and leasehold interests over the Monte Cristo Property to the Queensland Government. Dedication of most of the property as Conservation Park is almost complete. The cattle grazing rights over the adjacent Curtis Island Conservation Park and State Forest have also been secured and relinquished to the Queensland Government.
- The leasehold interests over the Dukes Plain property were secured in November 2013. Work is progressing to legally protect the offset area as a Nature Refuge and in principle support has been gained from the Queensland Government to ideally transition the offset area to National Park. The dedicated offset and rehabilitation areas on the property have been agreed with the sub lessee and on-ground management activities of these areas has commenced. Origin is finalizing the Dukes Plain Offset and Rehabilitation Area Management Plan for submission to the Australian Government in December 2014 and the Queensland Government by March 2015. Following approval it will be used to inform ongoing management of the offset and rehabilitation areas.
- Origin, on behalf of Australia Pacific LNG, signed an offset agreement with the landowner of the Inverness property to establish a 200 ha offset area for threatened flora species *Cycas megacarpa* and *Acacia pedleyi*. A total of 261 *C. megacarpa* individuals were successfully translocated to the Inverness offset area in August and September 2014. Management and monitoring activities of the offset area, including specific maintenance activities for translocated cycad individuals, are being undertaken in accordance with the Inverness Offset Area Management Plan and the *Cycas megacarpa* Management and Translocation Plan.

- Ongoing management and monitoring is being undertaken of legally secured offset sites Pinehurst and Rockwood for threatened flora species *Rutidosia lanata* and *Eleocharis blakeana* in accordance with the Offset Area Management Plans. This also included submission of the first annual management and monitoring reports for each offset in July 2014.
- Negotiations with the Colamba landowner have recommenced to establish an offset area for Brigalow TEC, wetlands and threatened fauna species habitat.
- The location of the proposed offset for *A. wardellii* on the Rockwood property has been changed to an area with more suitable potential habitat for the species. The Species Technical Committee has recommended for reclassification of *A. wardellii* from near threatened. Should *A. wardellii* be reclassified, an offset would not be warranted, instead like-for-like rehabilitation of the impact area would be conducted. However, Origin will continue to progress with the proposed offset until otherwise advised.

Australia Pacific LNG is continuing to make progress on its indirect offset activities. Biodiversity and marine research projects are well underway through the Gas Industry Social & Environmental Research Alliance (GISERA). Positive progress is also being made on additional indirect offset projects in which Australia Pacific LNG has provided financial contributions toward. These include the Long Term Marine Turtle Management Plan, water mouse research on Curtis Island, removal of fish barrier works at the Condamine Town Weir and Fitzroy River turtle nest protection.

Substantial progress has been made over the last reporting year to progress the extensive portfolio of direct and indirect offsets to compensate for significant, residual, unavoidable Project impacts on environmental values.

Planned progress over the next 12 months includes:

- The legal protection of the Dukes Plain, Colamba and Inverness offset areas.
- The transfer of interests over the Monte Christo Property to the Queensland Government for legal protection.
- Refining the reconciliation calculations for the remaining Project offset requirements.
- The completion of the 2014 Fitzroy River Turtle nest protection program.
- The design and construction of the Condamine Town Weir fishway.
- A presentation at the Australian Petroleum Production and Exploration Association (APPEA)
- conference on the lessons learned in implementing offsets.
- Planning future management of offsets.
- Considering effective and ecologically beneficial approaches to compensating for significant, residual impacts on threatened fauna habitat.

Following legal protection of direct land based offsets identified as part of Australia Pacific LNG's portfolio, on ground offset implementation and long term management will be conducted in accordance with offset area management plans for each site. Substantial funds have been allocated for each direct offset for management for the life of the offset.

Origin is working towards quantifying remaining Project offset requirements and providing appropriate offset solutions, direct or indirect, to compensate for impacts on environmental values and achieving beneficial ecological outcomes for the environment.

Table 6: Reconciliation of Predicted and Actual Offset Requirements with Secured and Preferred Offset Sites to be Provided for the Project

Environmental value requiring offset	Status			Predicted offset requirement (Offset strategy and Federal Approval conditions)	Total actual offset requirement (to date) - grouped by offset value	Proposed offset ³¹	Offset requirement on track to be fulfilled ³²
	Value	Cth	State				
World Heritage values							
Great Barrier Reef World Heritage Area	World Heritage	-	ha	1,153 + indirect offset	1188.5 ³³ + indirect offset	Monte Christo (1/3 share) - 1,187.37 ha; Removal of threatening processes (1/3 share) - 6,684.00 ha CIEMP offset (1/4 share) - 730.50 ha Indirect offset: \$200,000/year + \$100,000/ LNG train/ year	Yes
Threatened ecological communities							
Brigalow TEC	E	-	ha	1000.2 (30% remnant, 70% HVR & regrowth)	114.16 (30% remnant, 70% HVR & regrowth)	Dukes Plain - 906.65 ha ³⁴ Colamba - 242 ha	Yes
Semi-evergreen vine thicket TEC	E	-	ha	41.36	0.44	Dukes Plain - 41.36 ha ³⁵	Yes
Brigalow and SEVT Rehabilitation Area offset	E	-	ha	1,209.67 (incl. remnant and/or HVR)	1,209.67 (incl. remnant and/or HVR)	Dukes Plain - 1,209.67 ha ³⁶	Yes
Endangered remnant and HVR REs							
BVG 17a	-	E	ha	6.6 (remnant) + 11.3 (HVR)	0.61 (remnant) + 15.81 (HVR)	TBC	TBC
BVG 25a	-	E	ha	174.4 (remnant) + 16.5 (HVR)	9.76 (remnant) + 17.79 (HVR)	Dukes Plain - 2002.78 ha (incl. approx. 1,730 ha HVR and non-remnant) Colamba - 242 ha	Yes
BVG 7a	-	E	ha	0 (remnant) + 0.6 (HVR)	-	-	Not yet required
Unknown endangered HVR	-	E	ha	-	6.05 (HVR)	Dukes Plain - Surplus 25a (E)	Yes
Of concern remnant and HVR REs							
BVG 13c - South East Queensland bioregion	-	OC	ha	84.6 (remnant)	84.62 (remnant)	Monte Christo (1/3 share) - 29.91 ha; Removal of threatening processes (1/3 share) - 200.00 ha CIEMP offset (1/4 share) - 10.49 ha	Yes
BVG 16c - Brigalow Belt Bioregion	-	OC	ha	34.2 (remnant) + 39.5 (HVR)	14.10 (remnant) + 2.93 (HVR)	Dukes Plain - 161.32 ha (incl. approx. 9 ha HVR and non-remnant)	Yes
BVG 16c - South East Queensland bioregion	-	OC	ha	56.4 (remnant)	57.12 (remnant)	Monte Christo (1/3 share) - 6.80 ha; Removal of threatening processes (1/3 share) - 73.33 ha CIEMP offset (1/4 share) - 39.59 ha	Yes
BVG 17a	-	OC	ha	185.8 (remnant) + 34.9 (HVR)	23.04 (remnant) + 12.13 (HVR)	Dukes Plain - 987.41 ha (incl. approx. 390 ha HVR and non-remnant)	Yes
BVG 17b	-	OC	ha	1.0 (remnant)	-	-	Not yet required
BVG 25a	-	OC	ha	56.5 (remnant) + 4.1 (HVR)	6.08 (remnant)	Dukes Plain - Surplus 25a (E)	Yes
BVG 7a	-	OC	ha	9.5 (remnant) + 2.9 (HVR)	0.11 (remnant) + 0.91 (HVR)	Dukes Plain - 154.90 ha (predominantly HVR and non-remnant)	Yes
Unknown of concern HVR	-	OC	ha	-	3.92 (HVR)	Dukes Plain - Surplus 16c or 17a (OC)	Yes
Other REs (threshold or critically limited)							
Threshold RE 11.5.5 (remnant and HVR)	-	LC	ha	Indirect offset	Indirect offset	Indirect offset: Threshold REs	Yes
Marine fish habitat							
Mangroves	-	Fisheries	ha	6.14	82.72	Monte Christo (1/3 share) - 103.88 ha; Removal of threatening processes (1/3 share) - 1,483.18 ha CIEMP offset (1/4 share) - 15.07 ha	Yes
Saltpan	-	Fisheries	ha	39.02			
Marine environments containing seagrass	-	Fisheries	ha	15.89			
Sub-tidal areas (bare substrate)	-	Fisheries	ha	22			
Wetlands							
Wetlands - refer to Table 2 for definitions used	-	Wetland	ha	102.08	41.95	Colamba - 104 ha	Yes
Watercourses							
Watercourse crossings (stream order 3 and above) - Fitzroy & Murray Darling catchments	-	Fisheries	# crossings	Indirect offset	Indirect offset	Indirect offset: Removal of waterway barriers	Yes
Fauna in Brigalow habitat							
Dunmall's snake (<i>Furina dunmalli</i>)	V	V	ha	524.98	TBC	Dukes Plain - Potential habitat Colamba - Potential habitat	Likely
Yakka skink (<i>Egernia rugosa</i>)	V	V	ha	146.88	TBC	Dukes Plain - Potential habitat Colamba - Potential habitat	Likely
Brigalow scaly-foot (<i>Paradelma orientalis</i>) - incl. EH (VM Act)	ψ	V	ha	1,548.44 (60.14 EH offset)	TBC (will incl. EH offset - currently 8)	Dukes Plain - Confirmed presence Colamba - Potential habitat	Likely
Death adder (<i>Acanthopis antarcticus</i>)	-	NT	ha	476	TBC	Dukes Plain - Confirmed presence Colamba - Potential habitat	Likely
Golden-tailed gecko (<i>Strophurus taenicauda</i>) - incl. EH (VM Act)	-	NT	ha	1,458 (58.62 EH offset)	TBC (will incl. EH offset - currently 0.57)	Dukes Plain - Potential habitat Colamba - Confirmed presence	Likely
Grey snake (<i>Hemiaspis damelii</i>)	-	E	ha	86	TBC	Dukes Plain - Potential habitat Colamba - Potential habitat	Likely

³¹ Monte Christo and CIEMP offset areas represent Australia Pacific LNG's share of the offset (1/3 and 1/4 respectively). Dukes Plain areas reflect values on whole property (outside existing Nature Refuge) - will be refined following on-ground vegetation surveys; Colamba areas reflect values on whole property - will be refined during discussions with landholder; Inverness offset area will be refined after discussions with the landholder - will have sufficient capacity for plant requirements and meet minimum size (141 ha); Rockwood (site 2) offset area and plant capacity will be refined after internal discussions.

³² Based on larger of predicted and actual offset requirement; and if progress continues towards legally securing all properties listed in table and environmental values are verified (where not already undertaken).

³³ World Heritage offsets for the Pipeline component of the Project were not outlined in the Offset Strategy.

³⁴ Separate to Brigalow component of Rehabilitation Area offset which is also proposed to be located on Dukes Plain.

³⁵ Separate to SEVT component of Rehabilitation Area offset which is also proposed to be located on Dukes Plain.

³⁶ Mixture of Brigalow and SEVT remnant, high-value regrowth and non-remnant; does not include areas listed for offsets against SEVT and Brigalow TEC values.

Environmental value requiring offset				Predicted offset requirement (Offset strategy and Federal Approval conditions)	Total actual offset requirement (to date) - grouped by offset value	Proposed offset ¹¹	Offset requirement on track to be fulfilled ¹²
Value	Status	State	Unit				
Glossy-black cockatoo (<i>Calyptorhynchus lathami</i>)	-	V	ha	44	TBC	Monte Christo (1/3 share) - 1,058.55 ha; Removal of threatening processes (1/3 share) - 2,666.67 ha CIEMP offset (1/4 share) - 536.66 ha Colamba - Confirmed presence	Likely
Woma (<i>Aspidites ramsayi</i>) - incl. EH (VM Act)	-	NT	ha	632 (0.0006 EH offset)	TBC (will incl. EH offset - currently 0)	TBC	TBC
Pale imperial hairstreak (<i>Jalmenus eubulus</i>) - incl. EH (VM Act)	-	V	ha	47.02 (1.72 EH offset)	TBC (will incl. EH offset - currently 0)	Dukes Plain - Potential habitat Colamba - Potential habitat	Likely
Shorebirds (shorebird habitat)							
Eastern Curlew (<i>Numenius madagascariensis</i>)	M/M	SLC	ha	78.04	78.04	Monte Christo (1/3 share) - 103.88 ha; Removal of threatening processes (1/3 share) - 1,483.18 ha CIEMP offset (1/4 share) - 15.07 ha	Yes
Whimbrel (<i>Numenius phaeopus</i>)	M/M	SLC	ha				
Red-necked Stint (<i>Calidris ruficollis</i>)	M/M	SLC	ha				
Beach stone-curlew (<i>Esacus magnirostris</i>)	Marine	V	ha				
Fauna in seagrass habitat							
Dugong (<i>Dugong dugon</i>)	M/M	V	ha	31.78	31.78	Indirect offsets: Long-term marine turtle monitoring program Research undertaken through GISERA	Yes
Green turtles (<i>Chelonia mydas</i>)	V	V	ha				
Australian snubfin dolphin (<i>Orcaella heinsohni</i>)	Migratory	NT	ha				
Fauna in bare substrate							
Loggerhead turtles (<i>Caretta caretta</i>)	E	E	ha	44 + indirect offset (\$150k Marine Turtle Management Plan)	42.64		
Indo-Pacific humpback dolphin (<i>Sousa chinensis</i>)	Migratory	NT	ha				
Bottlenose dolphin (<i>Tursiops aduncus</i>)	Cetacean	NT	ha				
Other fauna							
Water mouse (<i>Xeromyz myoides</i>)	V	V	ha	33.6	37.40	Monte Christo (1/3 share) - 167.51 ha; Removal of threatening processes (1/3 share) - 2,731.35 ha CIEMP offset (1/4 share) - 18.11 ha	Yes
Rough frog (<i>Cyclorana verrucosa</i>)	-	NT	ha	82.34	TBC	Colamba - Confirmed presence	Likely
Little Pied Bat (<i>Chalinolobus picatus</i>) - EH (VM Act)	-	NT	ha	-	4.52	Colamba - Confirmed presence	Likely
Large-eared Pied Bat (<i>Chalinolobus dvyeri</i>) - EH (VM Act)	-	V	ha	4.20	-	Colamba - Potential habitat (foraging habitat)	Likely
Greater Long-eared Bat (<i>Nyctophilus timoriensis</i>) - EH (VM Act)	V	V	ha	2.27	6.09	Colamba - Potential habitat	Likely
Coastal sheath-tail bat (<i>Taphozous australis</i>) - incl. EH (VM Act)	-	V	ha	18.70 (EH offset)	12.73	Monte Christo (1/3 share) - 253.54 ha; Removal of threatening processes (1/3 share) - 1,556.67 ha CIEMP offset (1/4 share) - 138.73 ha	Yes
Koala (<i>Phascolarctos cinereus</i>) - incl. EH (VM Act)	-V	LC; V in SEQ	ha	56.22 (EH offset)	59.90 (incl. 56.22 ha offset for impact on species habitat)	Monte Christo (1/3 share) - 399.11 ha; Removal of threatening processes (1/3 share) - 833.33 ha CIEMP offset (1/4 share) - 125.83 ha Colamba - Confirmed presence	Yes
Murray cod (<i>Maccullochella peelii</i>)	V	-	# crossings	-	Indirect offset	Indirect offset: Removal of fish barrier works and associated activities (carp trapping etc)	Yes
Fitzroy River Turtle (<i>Rheodytes leukops</i>)	V	V	# crossings	-	Indirect offset	Indirect offset: Fitzroy River Turtle nest protection	Yes
Flora							
Acacia pedleyi (Pedley's wattle) - incl. EH (VM Act)	-	V	ha/# plants	21 ha (28.84 ha EH offset)	8,050 plants (will incl. EH offset - currently 22.36 ha)	Inverness - Capacity for 8,050 plants (approx. 25 ha)	Yes
Acacia calantha (a wattle)	-	NT	# plants	45	-	-	Not yet required
Acacia chinchillensis (Chinchilla wattle) - EH (VM Act)	-	V	ha	30.36 (EH offset)	-	-	Not yet required
Acacia tenuinervis (Scrub wattle)	-	NT	# plants	-	-	-	Not yet required
Acacia wardellii (Thomby Range wattle)	ψ -	V	# plants	-	196 plants	Rockwood (site 2) - Capacity for at least 5,000 plants	Yes
Cadellia pentasyliis (Ooline)	V	V	# plants	To be offset if impacted	4 plants	Dukes Plain - Potential habitat	Likely
Cycas megacarpa (Large-fruited Zamia) - incl. EH (VM Act)	E	E	ha/# plants	141 ha (up to 2,340 plants) (30 ha EH offset)	1,800 plants (min. size 141 ha; will incl. EH offset - currently 24.69 ha)	Inverness - Capacity for 1,800 plants (approx. 150 ha; min. 141 ha)	Yes
Desmodium macrocarpum (Large-podded trefoil) - EH (VM Act)	-	NT	ha	1.02 (EH offset)	0.01	TBC	TBC
Eleocharis blakeana (Blake's spikerush)	-	NT	# plants	-	31,509 plants (plus rehabilitation of 38,955 plants)	Pinehurst - Capacity for over 31,509 plants Colamba - Confirmed presence	Yes
Graptophyllum excelsum (Scarlet fuchsia) - EH (VM Act)	-	NT	ha	2.84 (EH offset)	0.0009	TBC	TBC
Micromyrtus carinata (Gurumundi heath-myrtle) - EH (VM Act)	-	E	ha	12.48 (EH offset)	-	-	Not yet required
Philothea sporadica (Kogan waxflower) - EH (VM Act)	V	V	ha	29.54 (EH offset)	1.81	Colamba - Potential habitat	Likely
Rutidosis lanata (Red-soil woolly wrinklewort) - incl. EH (VM Act)	-	E	ha/# plants	0.0006 ha (EH offset)	70,330 plants (will incl. EH offset if required - currently 0 ha)	Pinehurst - Capacity for approx. 26,658 plants Rockwood (site 1) - Capacity for approx. 19,145 plants	TBC - additional site or indirect offset likely to be required

Table 9: Reconciliation of predicted and actual offset requirements with secured and preferred offset sites to be provided for the Project

Environmental value requiring offset Value	Status		Unit	Predicted offset requirement ⁴⁶	Offset requirement (to date) - grouped by offset value	Proposed offset ⁴⁷	Offset on track ⁴⁸	Surplus offset identified ⁴⁹
	Cth ⁵⁰	State ⁵¹						
World Heritage values								
Great Barrier Reef World Heritage Area	World Heritage	-	ha	1,153 + indirect offset	1188.5 ⁵² + indirect offset	Monte Christo (1/3 share) - 1,187.37 ha; Removal of threatening processes (1/3 share) - 6,684.00 ha CIEMP offset (1/4 share) - 730.50 ha Indirect offset: \$200,000/year + \$100,000/ LNG train/ year	Yes	Yes
Threatened ecological communities								
Brigalow TEC	E	-	ha	1000.2	286.52 (30% remnant, 70% HVR & regrowth)	Dukes Plain - 700 ha ⁵³ Colamba - Approx. 250 ha remnant (plus 50 ha containing regrowth)	Yes	-
Semi-evergreen vine thicket TEC	E	-	ha	41.36	11.19	Dukes Plain - 42 ha ⁵⁴	Yes	-
Brigalow and SEVT rehabilitation area offset	E	-	ha	1,209.67 (incl. remnant and/or HVR)	1,209.67 (incl. remnant and/or HVR)	Dukes Plain - 1,210 ha ⁵⁵	Yes	-
Endangered remnant and regrowth REs								
17a	-	E	ha	6.6 (remnant) + 11.3 (HVR)	0.62 (remnant) + 5.15 (regrowth)	TBC	TBC	-
25a	-	-	ha	174.4 (remnant) + 16.5 (HVR)	51.33 (remnant) + 36.61 (regrowth)	Dukes Plain - approx. 1,413.36 ha (528.02 ha remnant, 885.34 ha regrowth)	Yes	Yes
7a	-	-	ha	0 (remnant) + 0.6 (HVR)	0.48 (remnant)	TBC	TBC	-
Of concern remnant and regrowth REs								
BVG 13c - South East Queensland bioregion	-	OC	ha	84.6 (remnant)	84.62 (remnant)	Monte Christo (1/3 share) - 29.91 ha; Removal of threatening processes (1/3 share) - 200.00 ha; CIEMP offset (1/4 share) - 10.49 ha	Yes	Yes
BVG 13c - Brigalow Belt bioregion	-	OC	ha	-	5.59 (regrowth)	TBC	TBC	-
BVG 16c - Brigalow Belt bioregion	-	OC	ha	34.2 (remnant) + 39.5 (HVR)	14.76 (remnant) + 3.09 (regrowth)	Dukes Plain - approx. 1,315.62 ha (remnant)	Yes	Yes
BVG 16c - South East Queensland bioregion	-	OC	ha	56.4 (remnant)	56.44 (remnant)	Monte Christo (1/3 share) - 6.80 ha; Removal of threatening processes (1/3 share) - 73.33 ha CIEMP offset (1/4 share) - 39.59 ha	Yes	Yes
BVG 17a	-	OC	ha	185.8 (remnant) + 34.9 (HVR)	48.20 (remnant) + 18.50 (regrowth)	Dukes Plain - approx. 116.76 ha (97 ha remnant, 19.76 ha regrowth)	Yes	Yes
BVG 17b	-	OC	ha	1.0 (remnant)	-	TBC	Not yet required	-
BVG 25a	-	OC	ha	56.5 (remnant) + 4.1 (HVR)	10.53 (remnant)	Dukes Plain - approx. 1,413.36 ha (528.02 ha remnant, 885.34 ha regrowth)	Yes	Yes
BVG 7a	-	OC	ha	9.5 (remnant) + 2.9 (HVR)	2.87 (remnant) + 0.24 (regrowth)	Dukes Plain - approx. 766.15 ha (incl. 427.69 ha remnant, 338.46 ha regrowth)	Yes	Yes
Unknown Of Concern regrowth	-	OC	ha	-	31.96 (regrowth)	Dukes Plain - Surplus 7a, 16c or 17a (OC)	Yes	Yes
Other REs (Threshold or critically limited)								
Threshold RE 11.5.5 (remnant and regrowth)	-	LC	ha	Indirect offset	Indirect offset	Indirect offset: Threshold REs	Yes	-
Marine Habitat								
Mangroves	-	Fisheries	ha	6.14	82.72	Monte Christo (1/3 share) - 103.88 ha; Removal of threatening processes (1/3 share) - 1,483.18 ha CIEMP offset (1/4 share) - 15.07 ha	Yes	Yes
Saltpan	-	Fisheries	ha	39.01				
Marine environments containing seagrass	-	Fisheries	ha	15.89				
Sub-tidal areas (bare substrate)	-	Fisheries	ha	22				
Wetlands								
Referrable Wetlands - refer to Table 2 for definitions used.	-	Wetland	ha	102.08	2.21	Colamba 104 ha	Approach to offsetting of wetlands of ecological significance to be clarified	-
Watercourses								
Watercourse crossings (stream order 3 and above) - Fitzroy catchment & Murray Darling Downs	-	Fisheries	# crossings	Indirect offset	Indirect offset	Indirect offset: Removal of waterway barriers	Yes	-
Shorebirds (shorebird habitat)								
Eastern curlew (<i>Numenius madagascariensis</i>)	M/M	SLC	ha	78.02	78.02	Monte Christo (1/3 share) - 103.88 ha; Removal of threatening processes (1/3 share) - 1,483.18 ha; CIEMP offset (1/4 share) - 15.07 ha	Yes	Yes
Whimbrel (<i>Numenius phaeopus</i>)	Migratory	SLC	ha					

⁴⁶ Offset strategy & Federal Approval conditions⁴⁷ Monte Christo and CIEMP offset areas approved in the Monte Christo Offset Proposal (8 August 2013) represent Australia Pacific LNG's share of the offset (1/3 and 1/4 respectively). Those areas on Monte Christo and CIEMP that have been used to draw down on to acquit additional fauna habitat offset requirements represent Origin's 10% entitlement to the Australia Pacific LNG share (except for squatter pigeon and glassy black cockatoo). Dukes Plain areas reflect values on areas set aside for the Offset and Rehabilitation area (approx. 1,952 ha) -; Colamba areas reflect values on whole property - will be refined during discussions with landholder; Inverness offset area size has been secured through agreement with landholder; Rockwood (site 2) offset area and plant capacity will be refined if required in the future.⁴⁸ Based on larger of predicted and actual offset requirement; and if progress continues towards legally securing all properties listed in table and environmental values are verified (where not already undertaken).⁴⁹ Surplus offset has been identified based on current offset requirements as presented in this reconciliation statement (i.e. either approved disturbance limits or actual impacts). Consequently surplus values on direct offset sites will be used as advanced offsets to draw down on to acquit future Project offset requirements.⁵⁰ Commonwealth status is based on the EPBC Act - Endangered (E), Vulnerable (V), Migratory, Marine, Migratory / Marine (M/M) or Cetacean.⁵¹ State status is based on various Acts depending on the environmental value. REs are based on the conservation status listed under the Vegetation Management Act 1999 - Endangered (E), Of Concern (OC), Least Concern (LC); Marine habitat values are protected under the Fisheries Act 1994; fauna and flora are listed under the Nature Conservation Act 1992 - Endangered (E), Vulnerable (V), Near Threatened (NT) and Special Least Concern (SLC).⁵² World Heritage offsets for the Pipeline component of the Project were not outlined in the Offset Strategy.⁵³ Combination of 30% remnant and 70% HVR and regrowth Brigalow TEC. Separate to Brigalow component of the Rehabilitation Area Offset on Dukes Plain.⁵⁴ Remnant SEVT TEC. Separate to SEVT component of Rehabilitation Area Offset on Dukes Plain.⁵⁵ Mixture of Brigalow and SEVT remnant, high-value regrowth and regrowth; this area is additional to the Brigalow and SEVT TEC offset areas on Dukes Plain.

Environmental value requiring offset				Predicted offset requirement ⁴⁵	Offset requirement (to date) - grouped by offset value	Proposed offset ⁴⁷	Offset on track ⁴⁸	Surplus offset identified ⁴⁹
Value	Status Cth ⁵⁰	State ⁵¹	Unit					
Red-necked stint (<i>Calidris ruficollis</i>)	Migratory	SLC	ha			Indirect offsets: Long-term marine turtle monitoring program Research undertaken through GISERA		
Beach stone-curlew (<i>Esacus magnirostris</i>)	Marine	V	ha					
Fauna in seagrass habitat								
Dugong (<i>Dugong dugon</i>)	Migratory	V	ha					
Green turtles (<i>Chelonia mydas</i>)	V	V	ha	31.78	31.78			
The Australian snubfin dolphin (<i>Orcaella heinsohni</i>)		NT	ha					
Fauna in bare substrate								
Loggerhead turtles (<i>Caretta caretta</i>)	E	E	ha	44 + indirect offset \$150k	42.64			
Indo-Pacific humpback dolphin (<i>Sousa chinensis</i>)	Migratory	NT	ha	(Long term Marine Turtle Management Plan)				
Bottlenose dolphin (<i>Tursiops aduncus</i>)	Cetacean	NT	ha					
Other fauna								
Brigalow scaly-foot (<i>Paradelma orientalis</i>) - incl. EH (VM Act)	-	V	ha	1,548.44 (60.14 EH offset)	359.40 (incl. EH offset currently 17.79 ha)	Dukes Plain 1,886 ha - Essential habitat (based on the results of fauna habitat modelling (Section 3.3.1); confirmed presence)	Yes	Yes
Death adder (<i>Acanthophis antarcticus</i>)	-	NT	ha	476	245.56	Dukes Plain - Potential habitat Colamba - Potential habitat	Yes	-
Dunmall's snake (<i>Furina dunmalli</i>)	V	V	ha	524.98	135.52	Dukes Plain 888 ha - Essential habitat (based on the results of fauna habitat modelling (Section 3.3.1)) ⁵⁶	Yes	Yes
Golden-tailed gecko (<i>Strophurus taenicauda</i>) - incl. EH (VM Act)	-	NT	ha	1,458	729.74 (incl. EH offset currently 0.56 ha)	Dukes Plain - Confirmed presence Colamba - Confirmed presence ⁵⁷	Yes	-
Grey snake (<i>Hemiaspis damelii</i>)	-	E	ha	86	45.42	Dukes Plain - Potential habitat Colamba - Potential habitat	Yes	-
Woma (<i>Aspidites ramsayi</i>) - incl. EH (VM Act)	-	NT	ha	632	413.30 (incl. EH if disturbed in the future)	Dukes Plain - Potential habitat Colamba - Potential habitat	Yes	-
Yakka skink (<i>Euermia rufoasa</i>)	V	V	ha	146.88	144.94	Dukes Plain 2,634 ha - Essential habitat (based on the results of fauna habitat modelling (Section 3.3.1)) ⁵⁷	Yes	Yes
Pale imperial hairstreak (<i>Jalmenus eubulus</i>) - incl. EH (VM Act)	-	V	ha	47.02	318.64 (incl. EH if disturbed in the future)	Dukes Plain - Potential habitat Colamba - Potential habitat	Yes	-
Rough frog (<i>Cyclorana verrucosa</i>)	-	NT	ha	82.34	338.62	Colamba - Confirmed presence ⁵⁸ Dukes Plain - Potential habitat	Yes	-
Eastern osprey (<i>Pandion cristatus</i>)	M/M	-	ha	-	3.02	Monte Christo (Origin entitlement 10% of 1/3 share) - 14.98 ha; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 56.68 ha CIEMP offset (Origin entitlement 10% of 1/4 share) - 12.58 ha	Yes	Yes
Glossy-black cockatoo (<i>Calyptorhynchus lathami</i>)	-	V	ha	44	234.46	Monte Christo (Origin entitlement 10% of 1/3 share) - 105.85 ha + additional 128.61 ha (part of Conoco Phillips 30% entitlement); Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 266.67 ha Colamba - Confirmed presence Dukes Plain - Potential habitat	Yes	Yes
Rainbow bee-eater (<i>Merops ornatus</i>)	M/M	-	ha	-	116.10	Monte Christo (Origin entitlement 10% of 1/3 share) - 118.73 ha; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 668.4 ha CIEMP offset (Origin entitlement 10% of 1/4 share) - 73.30 ha Colamba - Potential habitat	Yes	Yes
Red goshawk (<i>Erythrotriorchis radiatus</i>)	V	E	ha	-	12.68	Monte Christo (Origin entitlement 10% of 1/3 share) - 118.73 ha; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 668.4 ha CIEMP offset (Origin entitlement 10% of 1/4 share) - 73.30 ha Colamba - Potential habitat	Yes	Yes
Rufous fantail (<i>Rhipidura rufifrons</i>)	M/M	-	ha	-	4.46	Monte Christo (Origin entitlement 10% of 1/3 share) - 105.85 ha; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 462.19 ha CIEMP offset (Origin entitlement 10% of 1/4 share) - 68.69 ha Colamba - Potential habitat	Yes	Yes
Satin flycatcher (<i>Myiagra cyanoleuca</i>)	M/M	-	ha	-	2.10	Monte Christo (Origin entitlement 10% of 1/3 share) - 108.35 ha; Removal of threatening processes (Origin entitlement 10% of 1/3 share) - 586.44 ha CIEMP offset (Origin entitlement 10% of 1/4 share) - 71.79 ha Colamba - Potential habitat	Yes	Yes

⁵⁶ While its presence has not been confirmed on Dukes Plain this is expected given it is a cryptic species

⁵⁷ Dukes Plain - detected opportunistically in a fragmented patch of *Acacia harpophylla* low open forest. Colamba - Recorded to be found in open woodland dominated by *Eucalytus crebra* and *Callitris glaucophylla*.

⁵⁸ Colamba - This species was detected within RE 11.5.1; open woodland dominated by *Eucalytus crebra* and *Callitris glaucophylla* and was also observed near a palustrine wetland