

Sadele Hayle
31 Jan 2019

DEPARTMENT OF THE ENVIRONMENT AND ENERGY

To: Assistant Secretary, Assessments and Governance Branch, (for decision)

Referral Decision Brief – Toondah Harbour Development, Queensland (EPBC 2018/8225)

Timing: The statutory timeframe for making this decision was 2 July 2018.

Recommended Decision	NCA <input type="checkbox"/> NCA(pm) <input type="checkbox"/> CA <input checked="" type="checkbox"/>												
Designated Proponent	Walker Group Holdings Pty Limited ACN: 001 215 069												
Controlling Provisions triggered or matters protected by particular manner	<table border="0"> <tr> <td>World Heritage (s12 & s15A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> <td>National Heritage (s15B & s15C) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> </tr> <tr> <td>Wetlands (Ramsar)(s16 & s17B) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No if PM <input type="checkbox"/></td> <td>Threatened Species & Communities (s18 & s18A) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No if PM <input type="checkbox"/></td> </tr> <tr> <td>Migratory Species (s20 & s20A) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No if PM <input type="checkbox"/></td> <td>C'wealth marine (s23 & s24A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> </tr> <tr> <td>Nuclear actions (s21 & s22A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> <td>C'wealth land (s26 & s27A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> </tr> <tr> <td>C'wealth actions (s28) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> <td>GBRMP (s24B & s24C) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> </tr> <tr> <td>A water resource – large coal mines and CSG (s24D & s24E) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> <td>C'wealth heritage o/s (s27B & s27C) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/></td> </tr> </table>	World Heritage (s12 & s15A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	National Heritage (s15B & s15C) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	Wetlands (Ramsar)(s16 & s17B) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No if PM <input type="checkbox"/>	Threatened Species & Communities (s18 & s18A) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No if PM <input type="checkbox"/>	Migratory Species (s20 & s20A) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> No if PM <input type="checkbox"/>	C'wealth marine (s23 & s24A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	Nuclear actions (s21 & s22A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	C'wealth land (s26 & s27A) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	C'wealth actions (s28) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	GBRMP (s24B & s24C) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	A water resource – large coal mines and CSG (s24D & s24E) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>	C'wealth heritage o/s (s27B & s27C) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> No if PM <input type="checkbox"/>
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Public Comments	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Number: 75 individual and 2,224 campaign. See <u>Attachment L</u> .												
Ministerial Comments	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Who: Queensland Department of Environment and Science. See <u>Attachment I</u> .												
Assessment Approach Decision	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> What: Environmental Impact Statement Bilateral Applies <input type="checkbox"/>												
Recommendations: 1. Consider the information in this brief, the referral (<u>Attachment A</u>) and other the information in the attachments. <div style="text-align: right;"> Considered / Please discuss </div> 2. Agree with the recommended decision. <div style="text-align: right;"> Agreed / Not agreed </div>													

UNCLASSIFIED

3. If you agree to 2, indicate that you accept the reasoning in the Departmental briefing package as the basis for your decision.

Accepted / Please discuss

4. Agree to the designated proponent.

Agreed / Not agreed

5. Agree the action be assessed on environmental impact statement.

Agreed / Not agreed

6. Agree to the fee schedule and justification table (Attachment D) and that the fee schedule be sent to the proponent.

Agreed / Not agreed

7. Note an invoice will be provided in the letter to the person proposing to take the action for Stage 1 of the assessment, for the preparation of the guidelines.

Noted / Please discuss

8. Sign the notice at Attachment B which will be published on the Department's website if you make the recommended decision.

Signed / Not signed

9. Sign the letters at Attachment C advising the proponent and relevant parties of your decision.

Signed / Not signed

Date: 23/7/2018

Assistant Secretary
Assessments and Governance Branch:

Comments:

BACKGROUND:

Description of the referral

1. Toondah Harbour is an existing marine area that serves as the base for water taxi, passenger and ferry services between the mainland and North Stradbroke Island. Walker Group Holdings Pty Ltd (the proponent) is proposing to develop a mixed use residential, commercial, retail and tourism precinct including new ferry terminals and a marina at Toondah Harbour, 30 kilometres (km) south of Brisbane. The proposal will involve the excavation of a new marina and reclaiming land within the adjoining Moreton Bay Ramsar wetland. The Toondah Harbour project is proposed to be delivered in stages over a 15 to 20 year period.

2. A referral for the project (Attachment A) was submitted under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 5 June 2018. The statutory timeframe for a referral decision under the EPBC Act was 2 July 2018.
3. In its referral, the proponent stated its belief that the proposal is a controlled action for the purposes of the EPBC Act and will likely have a significant impact on the ecological character of the Moreton Bay Ramsar wetland, listed threatened species and ecological communities, and listed migratory species. The proponent has stated in the referral that there are no alternatives to the location and footprint of the action generally located in the Queensland Priority Development Area.
4. Three referrals for the development of Toondah Harbour have been submitted by the proponent:
 - Referral submitted on 25 November 2015 (EPBC 2015/7612). Withdrawn by the proponent before a referral decision was made.
 - Referral submitted on 11 May 2017 (EPBC 2017/7939). The Minister determined this proposal to be a controlled action as it was likely to have a significant impact on the ecological character of the Moreton Bay Ramsar site; listed threatened species, including marine turtles and the critically endangered Eastern Curlew (*Numenius madagascariensis*); and listed migratory species, including the Dugong. This proposal has not been withdrawn.
 - Current referral submitted on 5 June 2018 (EPBC 2018/8225).
5. The referral documentation for the revised proposed action (EPBC 2018/8225) states that the development has undergone design changes to better integrate with the ecological character and demonstrate 'wise use' of this part of the Moreton Bay Ramsar wetland. The key changes relate to a reduced development footprint and a reduced area of land reclamation, reducing the marina from 400 berths to 200 berths, new conservation areas, incorporation of waterways and wetland features into the urban footprint and a cultural education centre.
6. The key components of the proposal are:
 - referral area of 52 hectares (ha), of which approximately 42 ha is within the Moreton Bay Ramsar wetland (the entire State Priority Development Area [PDA] is 67.4 ha);
 - approximately 32 ha of reclamation within Moreton Bay Ramsar wetland;
 - new ferry terminals to improve access to North Stradbroke Island;
 - mixed use development including 3,600 residential dwellings, retail, commercial and tourism uses;
 - a 200 berth marina;
 - 1,010 ferry public car parks with provision of a further 500 in a multi deck car park;
 - 10 ha of new parklands and conservation areas, public open space and boardwalks providing foreshore access; and
 - dredging (approximately 500,000 cubic metres) and widening of the existing Toondah Harbour marine access channel.

7. The project includes a minimum 250 metre (m) buffer between the high tide roost sites and any urban or tourism uses, reduction of the development footprint to be entirely contained within the PDA (aside from the Fison Channel works) and a wetland education and cultural centre.

State approval process

8. In June 2013, at the request of Redland City Council, the Queensland State Government declared Toondah Harbour a PDA under the *Economic Development Act 2012* (Qld). As a result, the PDA is exempt from the standard planning and development assessment processes and will be assessed by Economic Development Queensland against the PDA Development Scheme.
9. The Queensland Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) has reviewed the referral documentation and advised that the Coordinator-General has not received a request for declaration of this proposal as a coordinated project under Part 4 of the *State Development and Public Works Organisation Act 1971* (Qld). However, the Project Facilitation unit of DSDMIP are leading discussions with the proponent and State Government on possible assessment processes for the proposal. This includes the assessment of the proposal by EIS under the *Queensland Marine Parks Act 2004*. This process is not accredited under the assessment Bilateral Agreement with the Commonwealth.
10. The referral area is within a Habitat Protection Zone of Moreton Bay Marine Park and will require assessment and approval under the *Marine Parks Act 2004*.

RECOMMENDED DECISION:

11. Under section 75 of the EPBC Act you must decide whether the action that is the subject of the referral is a controlled action, and which provisions of Part 3 (if any) are controlling provisions for the action. In making your decision you must consider all adverse impacts the action has, will have, or is likely to have, on the matter protected by each provision of Part 3. You must not consider any beneficial impacts the action has, will have or is likely to have on the matter protected by each provision of Part 3.
12. The Department recommends that you decide that the proposed action is likely to have a significant impact on:
 - the ecological character of the Moreton Bay Ramsar site (sections 16 and 17B);
 - listed threatened species, including marine turtles and the critically endangered Eastern Curlew (sections 18 and 18A); and
 - listed migratory species, including the Dugong (sections 20 and 20A).

Impacts to Moreton Bay Ramsar wetlands

13. The Moreton Bay Ramsar site is located in and around Moreton Bay, east of Brisbane in Queensland (Attachment E). The Ramsar wetland supports extensive intertidal areas of sand and mud flat habitats, seagrass, mangroves and saltmarsh that provide vital habitat for dugongs, turtles and waterbirds including significant populations of migratory shorebirds. The wetland supports more than 50,000 migratory waders. At least 43 species of wading birds use the intertidal habitats, including 30 migratory species listed on international conservation agreements.

14. In addition, Moreton Bay is one of only two Ramsar sites in Australia that supports the critically endangered Eastern Curlew throughout the year, with juvenile birds not migrating until they are 2-3 years old. The ecological character of the Moreton Bay Ramsar wetland is described in *Ecological Character Description – Moreton Bay Ramsar Site* ([Attachment F](#)) and *Information sheet on Moreton Bay Ramsar Site* ([Attachment G](#)).
15. The proposed development area is immediately adjacent to and within the Moreton Bay Ramsar site.
16. The referral states that it is likely that the proposed action will result in significant impacts on the ecological character of a portion of the Moreton Bay Ramsar wetland. In particular, the proposed action will permanently remove an area of the Ramsar wetland through approximately 32 ha of land reclamation and is likely to negatively impact the ecological character of the wetland.
17. The referral states that the proposed action may cause measurable and permanent change in the hydrological regime of the wetland and that these impacts are likely to occur upstream and downstream of the proposed action including areas adjacent to the PDA that contribute to the ecological character of the wetland.
18. Advice from the Department's Wetland Section ([Attachment H](#)) considers that direct impacts to the ecological character of the wetland will occur as the proposed action will result in:
 - areas of the wetland within the referral area being removed or substantially modified through dredging, excavation and/or land reclamation activities;
 - impacts on habitat values through the removal of seagrass, mangroves and intertidal mudflats;
 - impacts on the lifecycle of an ecologically significant proportion of the population of the Eastern Curlew and Bar-tailed Godwit (*Limosa lapponica baueri*), as well as other listed migratory species, such as Whimbrels and Grey-tailed Tattler (*Tringa brevipes*), through the removal of, or disturbance to, foraging and roosting habitat in or near the referral area;
 - changes in the hydrological regime of the wetland and associated impacts including:
 - i. changes to water quality and aquatic habitats from sedimentation;
 - ii. impacts to mangroves on Cassim Island due to increased wave activity as a result of narrowed channel and decreased distance to shoreline;
 - iii. changes to sand and sediment movement in adjacent areas of the Ramsar site;
 - slow moving water in the marina creating conditions beneficial to the growth of algal blooms.

19. The referral states that in addition to increased buffer zones between the urban development and high tide roosting sites at Cassim Island and Nandeebie Claypan, the proposed action will be designed and managed to avoid permanent impacts through measures including:
- construction of appropriate barriers, such as fences to restrict access; to ensure there is limited/no public access (by humans and/or domestic animals) to areas identified as important to migratory shorebirds;
 - use of temporary enclosures such as sheet piles or silt curtains to reduce the distribution of potential water quality impacts during construction;
 - a linear 3.5 ha conservation area, which will provide a buffer zone between the proposed development and the Cassim Island high tide roost site. The referral states that this area is not intended for general public access but may have controlled access with supervision and guided walks associated with the proposed wetland education and community ranger programs;
 - landscape and urban design to include sympathetic lighting strategies, vegetation screening and sound attenuation;
 - increased community education through mechanisms including a wetland education and cultural centre, bird hides, walking trails and interpretive signs; and
 - creation of approximately 5.1 ha of new intertidal conservation areas.
20. As noted above, unlike the 2015 and 2017 referrals, this referral proposes the incorporation of wetland features into the development itself, including over 17 hectares of waterways, sheltered coves and wetland edges that will not be reclaimed or permanently impacted by the development. The project includes a minimum 250 m buffer between the high tide roost sites and any urban or tourism uses, reduction of the development footprint to be entirely contained within the PDA (aside from the Fison Channel works) and a wetland education and cultural centre.
21. Although the referral makes these and other commitments for further consideration in an assessment process, with the information available in the referral, the Department considers it is likely that the proposed action will have significant impacts on the ecological character of the Moreton Bay Ramsar wetland.
22. In addition, advice from the Department's Wetland Section concludes that the impacts on the ecological character of the site will be difficult to mitigate and offset. The advice notes that design and operational measures have been proposed to mitigate some of the impacts, but it is not possible, with the limited information available at this stage of the process, to assess the effects of these mitigating measures.
23. Although the referral states that a buffer zone will be included between the development and the mangroves and high tide roosting site at Cassim Island, it does not provide sufficient information for the Department to be confident that this will reduce the impacts on migratory shorebirds.
24. The Department therefore concludes that the proposed action is likely to have a significant impact on the ecological character of the Moreton Bay Ramsar wetland.

Obligation under the Ramsar Convention (s.138)

25. Should you decide that the proposal is a controlled action, the Department notes that the process of further assessment would, among other things, need to demonstrate how the proposal is consistent with Australia's obligations under the Ramsar Convention, including the obligation to conserve its Ramsar listed wetlands, and to maintain the ecological character of those wetlands.
26. Section 138 of the EPBC Act also provides that in deciding whether or not to approve an action, and what conditions to attach to such an approval, you must not act inconsistently with Australia's obligations under the Ramsar Convention. Further, under Schedule 6 to the EPBC Regulations, an action should not be approved if it would be inconsistent with maintaining the ecological character of the wetland or the conservation and sustainable use of the wetland.
27. The referral notes that the development was previously referred in 2017 (EPBC 2017/7939) however the proposal has undergone design changes to better integrate with the ecological character and demonstrate 'wise use' of this part of the Moreton Bay Ramsar Wetland. The referral states that planning and design of the project has been directed towards minimising impacts and integrating the development with the aesthetic and environmental values of the wetland and that this is achieved through *the adoption of 'wise use' principles and modelling itself on successful wetland developments globally by incorporating world leading best practice wetland conservation, education and eco-tourism.*
28. The proponent would need to demonstrate that the proposal will maintain or enhance the ecological character of the site, and be in accordance with "wise use" which the Conference of the Contracting Parties to the Convention has accepted as meaning: "the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development".

Impact to listed migratory species

29. The Department's Environment Reporting Tool (ERT) indicates that a total of 76 listed migratory species may occur within two kilometres of the proposed action (Attachment J). Based on the location of the action and likely habitat present in the area of the proposed action, the Department considers that significant impacts are likely in relation to the following matters:

Listed migratory shorebirds

30. The referral notes that habitat used by migratory shorebirds for foraging or roosting within Toondah Harbour and roosting habitat adjoining the project area are characterised as 'important habitat' for migratory shorebirds under the *EPBC Act Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (2013).
31. Eleven migratory shorebirds were recorded within or immediately adjacent to the project area during the proponent's field surveys. These include:
 - Grey-tailed Tattler (*Tringa brevipes*);
 - Ruddy Turnstone (*Arenaria interpres*);
 - Great Knot (*Calidris tenuirostris*) (also listed as critically endangered);
 - Red-necked Stint (*Calidris ruficollis*);

- Bar-tailed Godwit (*Limosa lapponica baueri*) (also listed as vulnerable);
 - Whimbrel (*Numenius phaeopus*);
 - Eastern Curlew (*Numenius madagascariensis*) (also listed as critically endangered);
 - Terek Sandpiper (*Xenus cinereus*); and
 - Curlew Sandpiper (*Calidris ferruginea*) (also listed as critically endangered).
32. Migratory shorebirds use two different habitat types within or adjacent to the project area, namely intertidal mudflats that provide feeding habitat when exposed at low tide, and stands of mangrove trees, offshore sandbars and shoreline saltmarsh and claypan areas that provide high tide roost sites.
 33. The referral states that the proposed action is likely to have both direct and indirect impacts on migratory shorebirds through clearing of approximately 32 ha of foraging habitat for dredging and land reclamation, and disturbance during construction including changes to water quality during dredging and reclamation works.
 34. However, the referral also states that the project area is not considered to be a major foraging site in terms of diversity or numbers of migratory shorebirds as similar habitat is found throughout Moreton Bay, and the project site provides less than 0.001% of feeding habitat within the Ramsar wetland. As outlined below, the Department considers that the loss of this foraging habitat, combined with the indirect impacts of the proposal, is likely to have a significant impact on migratory shorebirds.
 35. Surveys undertaken by the proponent mapped large areas of intertidal foraging habitats in the project area, comprising areas of mudflat, sandflat, seagrass and areas of surface coral rubble, and two high tide roost sites directly adjacent to the project area (Figure 2, Attachment 3 of Attachment A).
 36. Important roosting sites - Cassim Island and Nandeebie Claypan - are in close proximity to the proposed action. It is likely that the proposed action will have indirect impacts on these roosting sites, including noise and visual disturbance as a result of increased human use of the area.
 37. Survey results provided in the referral (Attachment A) confirmed that Cassim Island, immediately east of the project area, and the Nandeebie Claypan, immediately south of the project area, are important roosting habitat for migratory shorebirds based on the relatively large total numbers of migratory shorebirds using these roost sites. Up to 920 migratory shorebirds of four species known to roost in mangrove trees were recorded at Cassim Island, while up to 1,060 migratory shorebirds were recorded roosting at the Nandeebie Claypan.
 38. The *EPBC Act Policy Statement 1.1 Significant Impact Guidelines* (2013) and the *EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species* (2017) provide that a proposed action will be likely to have a significant impact on migratory species where the proposal will substantially modify, destroy or isolate an area of important habitat for migratory species.
 39. The proposed action will reduce the area of occupancy for migratory shorebird species by removing approximately 32 ha of foraging habitat; adversely affecting important roosting habitat and modifying, destroying, isolating and decreasing the availability and quality of habitat through indirect impacts such as light, noise and human interaction.

40. In addition to the above, advice received from the Department's Migratory Species Section (Attachment H) concluded that the proposed action will seriously disrupt the lifecycle (feeding, migration and resting behaviour) of an ecologically significant population of the Eastern Curlew and Bar-tailed Godwit, as well as other listed migratory species, such as Whimbrels and Grey-tailed Tattlers, through the removal of, or disturbance to, foraging and roosting habitat in or near the referral area. Additional impacts will result from linking important offshore roosting sites with the mainland as it will interfere with the recovery of the Eastern Curlew by removing important habitat and causing an increase in ongoing disturbance.
41. While lighting and noise may increase which is likely to cause disturbance to shorebirds, a minimum 250 m buffer has been proposed between the development and Cassim Island and Nandeebie Claypan high tide roost sites. The referral has been amended to ensure that most intensive human activities are conducted in areas furthest from the roost site. The referral also states that sympathetic lighting strategies, vegetation screening and sound attenuation will be incorporated during the detailed design to ensure impacts are avoided and minimised.
42. The referral states that construction activities, particularly activities such as dredging and pile driving near sensitive areas will be timed to occur during the winter months (May to August) when most migratory shorebirds are absent from Moreton Bay. Construction will also be staged over several years.
43. The revised proposed action includes the following additional measures to minimise the impacts to migratory species:
- increased buffer between the development and high tide roost sites;
 - increased management of the local area through a community ranger program;
 - wetland education and cultural centre;
 - community awareness campaigns; and
 - educational signage, in particular in areas surrounding high tide roost sites.

Other Migratory species

44. Moreton Bay supports important foraging populations of Green, Hawksbill and Loggerhead Turtles and is close to the southern-most extent of their range. The *Marine Bioregional Plan for the Temperate East Marine Region* (2012) (Attachment K) considered Moreton Bay a significant feeding ground for the Green Turtle (*Chelonia mydas*).
45. Advice from the Department's Migratory Species Section (Attachment H) considers that light pollution, vessel disturbance and habitat modification (though dredging and infrastructure/coastal development) are known threats to migratory marine species. The Department considers it likely that the proposed action will increase these threats to migratory marine species and reduce the area of occupancy of the species.
46. The referral states that in addition to impacts associated with construction, the operation of the proposed action is likely to cause the following ongoing impacts:
- increased boating traffic (commercial and recreational);
 - increased lighting and noise associated with ongoing uses; and
 - ongoing maintenance dredging of the harbour, marina and entrance channel.

47. The referral states that a Fauna Management Plan will be prepared to minimise the risks to marine fauna as a result of noise and boat strike.
48. Based on this advice and other information available to the Department, such as the Species Profile and Threats database and information from the referral documentation, the Department considers that the proposed action is likely to have significant impacts on other migratory species, such as:
- Loggerhead Turtle (*Caretta caretta*) (also listed as endangered);
 - Green Turtle (*Chelonia mydas*) (also listed as vulnerable);
 - Hawksbill Turtle (*Eretmochelys imbricata*) (also listed as vulnerable);
 - Indo-Pacific Humpback Dolphin (*Sousa chinensis*); and
 - Dugong (*Dugong dugon*).

Impact to listed threatened species and communities

49. The Department's ERT identifies 58 threatened species and two ecological communities may occur within two kilometres of the proposed action ([Attachment J](#)). Based on the location of the action and likely habitat present in the area of the proposed action, the Department considers a number of these species will be impacted by loss of marine, intertidal and terrestrial habitat as well as light and noise disturbance during construction and operation of the project. The Department considers that significant impacts are likely in relation to the following matters:

Eastern Curlew (*Numenius madagascariensis*) – critically endangered

50. The Department has considered the likelihood of direct and indirect impacts, the importance of habitat in, and immediately adjacent to, the project area and the lack of adequate mitigation and management measures to minimise these impacts and concluded that the proposed action is likely to have a significant impact on the critically endangered Eastern Curlew.
51. The critically endangered Eastern Curlew occurs seasonally around the Australian coastline, with up to 3,500 birds estimated to visit Moreton Bay (9% of the flyway population). The Eastern Curlew habitat in the Moreton Bay wetland is internationally important as it supports more than 1% of the individuals in a population of the migratory Eastern Curlew (*EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species* [2017]).
52. The project site contains intertidal foraging habitat for the Eastern Curlew with seven individuals recorded during 2015 surveys ([Attachment A](#)). Important roosting sites, the Nandeebie Claypan and Cassim Island, are also immediately adjacent to the project site with up to 180 Eastern Curlew having been recorded at the Nandeebie Claypan roosting site ([Attachment 6 of Attachment A](#)). Although there are a number of available roost sites for the Eastern Curlew within the region, the Nandeebie Claypan is considered by the Department to be an important site within Moreton Bay ([Attachment 6 of Attachment A](#)).
53. The *Conservation Advice for Numenius madagascariensis (Eastern Curlew)* (2015) states that the species is easily disturbed by human interaction within 250 m. The revised proposed action proposes an increased buffer zone of 250 metres between the development and the outer edge of the core roost site at Cassim Island.

54. The Department considers that as the proposed action will substantially modify, destroy and isolate an area of habitat for the Eastern Curlew it is likely to have a significant impact on the species.

Other listed species

55. The Department's ERT identifies the potential presence of additional threatened species or communities within two kilometres of the proposed action area. Based on information available to the Department and the nature of the proposed action that includes removal of onshore vegetation, intertidal mudflats and seagrass bed that provide habitat for threatened species, the Department considers that the proposed action is likely to have significant impacts on other listed threatened species, such as:

- Great Knot (*Calidris tenuirostris*) – critically endangered;
- Curlew Sandpiper (*Calidris ferruginea*) – critically endangered;
- Bar-tailed Godwit (*Limosa lapponica baueri*) – vulnerable;
- Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) – vulnerable;
- Grey-headed Flying-fox (*Pteropus poliocephalus*) – vulnerable;
- Loggerhead Turtle (*Caretta caretta*) – endangered;
- Green Turtle (*Chelonia mydas*) – vulnerable; and
- Hawksbill Turtle (*Eretmochelys imbricata*) – vulnerable.

PROTECTED MATTERS THAT ARE NOT CONTROLLING PROVISIONS:

World Heritage properties	The ERT did not identify any World Heritage properties located within or adjacent to the proposed action area, therefore this controlling provision does not apply.
National Heritage places	The ERT did not identify any National Heritage places located within or adjacent to the proposed action area, therefore this controlling provision does not apply.
Commonwealth marine environment	The proposed action does not occur in the vicinity of a Commonwealth marine environment therefore this controlling provision does not apply.
Commonwealth action	The referring party is not a Commonwealth agency, therefore this controlling provision does not apply.
Commonwealth land	The proposed action is not being undertaken on Commonwealth land therefore this controlling provision does not apply.
Nuclear action	The proposed action does not meet the definition of a nuclear action as defined in the EPBC Act therefore this controlling provision does not apply.

Great Barrier Reef Marine Park	The proposed action is not located in the vicinity of the Great Barrier Reef Marine Park, therefore this controlling provision does not apply.
Commonwealth Heritage places overseas	The proposed action is not located overseas, therefore this controlling provision does not apply.
A water resource, in relation to coal seam gas development and large coal mining development	The proposed action is not a coal seam gas or a large coal mining development, therefore this controlling provision does not apply.

SUBMISSIONS:

Public submissions

56. The proposal was published on the Department's website on 5 June 2018 and public comments were invited until 20 June 2018. A total of 75 public submissions, and a further 2,224 campaign submissions, were received during the public consultation period.
57. The Department considers that the public submissions received during the public consultation of the previous referrals (EPBC 2015/7612 and 2017/7939) are also relevant to this referral decision as the issues associated with the proposed action have not changed. The Department received over 65 public submissions in 2015 and 180 public submissions and a further 1,238 campaign submissions during the 2017 public consultation period. Attachment L provides a summary of the public submissions.
58. The submissions from both public consultation periods raised issues including the following:
 - unacceptable impacts associated with land reclamation within a Ramsar wetland;
 - impacts to migratory shorebirds, seagrass, koalas, turtles and dugongs;
 - Australia's need to meet its obligations as a party to international agreements to protect migratory birds and Ramsar wetlands;
 - impacts related to pollution from dredge spoil;
 - the proposed development is not critical infrastructure – the local community would like to see an upgrade to the ferry terminal but do not support the construction of a marina and housing development; and
 - the multiple referrals suggest that the proponent is trying to get a 'not a controlled action' decision.
59. On 24 May 2017, in relation to the 2017 referral, the Ramsar Secretariat advised that the Moreton Bay Ramsar site will be placed under Article 3.2 notification. Under Article 3.2 of the Ramsar Convention "Each Contracting Party shall arrange to inform the Ramsar Secretariat...at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference".

Comments from Commonwealth Ministers

60. By letter dated 5 June 2018, the following ministers were invited to comment on the referral:
- Senator The Hon Nigel Scullion, Minister for Indigenous Affairs
 - The Hon Michael McCormack MP, Minister for Infrastructure and Transport
 - The Hon Steven Ciobo MP, Minister for Trade, Tourism and Investment
61. No comments were received in response to that invitation.

Comments from State Ministers

62. By letter dated 5 June 2018, the delegate for the Queensland Minister for Environment and the Great Barrier Reef, Minister for Science and Minister for the Arts, the Hon Leeanne Enoch MP, was invited to comment on the referral.
63. The response ([Attachment I](#)) stated that the proposal will not be assessed using the EIS process in Chapter 3 of the Queensland *Environmental Protection Act 1994*. The response also stated that the Queensland Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) has reviewed the referral documentation and advised that the Coordinator-General has not received a request for declaration of this proposal as a coordinated project under Part 4 of the *State Development and Public Works Organisation Act 1971* (Qld). However, the Project Facilitation unit of DSDMIP are leading discussions with the proponent and State Government on possible assessment processes for the proposal. This includes the assessment of the proposal by EIS under the Queensland *Marine Parks Act 2004*. The response also raised the following issues:
- The boundary of the referral area does not include all of the capital and maintenance dredging components of the proposed project.
 - There is a historic shipwreck called the "Toondah" located on Cassim Island immediately adjacent to the Fison Channel which is proposed to be dredged. The Toondah shipwreck is protected under the Commonwealth *Historic Shipwreck Act 1976* and the Queensland *Heritage Act 1992*. This is not discussed in the referral.
64. In relation to the first point, the referral describes the dredging outside the Priority Development Area as "*existing approved maintenance dredge areas*" (Figure 1a, [Attachment A](#)) and notes the existing public navigation channel (the Fison Channel), and the existing swing basin and ferry berths, are periodically dredged. Dredging activities will be clarified further during the assessment process.
65. In relation to the second point, the regulation of historic shipwrecks is not a matter directly relevant to this EPBC Act referral.

ASSESSMENT APPROACH:

66. If you agree that the action is a controlled action, you must decide on the approach for assessment in accordance with section 87 of the EPBC Act. The Department recommends that this proposal be assessed by environmental impact statement under Part 8 of the EPBC Act.
67. Given the location of matters of national environmental significance, the number of matters likely to be impacted, the scale of the action, and potential impacts from the

proposal, assessment by environmental impact statement represents an appropriate method that will ensure that impacts on the controlling provisions are appropriately assessed.

68. Under section 87(3)(b) of the EPBC Act, you must consider any other relevant information available about the relevant impacts of the action, including information in a report on the impacts of actions under a policy, plan or program under which the action is to be taken that was given to the Minister under an agreement under Part 10 (about strategic assessments).
69. Advice from Queensland agencies, mentioned above, indicates that the proposal will not be assessed using a method accredited under the assessment Bilateral Agreement.

OTHER MATTERS FOR DECISION-MAKING:

Significant impact guidelines

70. The Department has reviewed the information in the referral against the *EPBC Act Policy Statement 1.1 Significant Impact Guidelines – Matters of National Environmental Significance* (2013) and other relevant material. While this material is not binding or exhaustive, the factors identified are considered adequate for decision-making in the circumstances of this referral. Adequate information is available for decision-making for this proposal.

Precautionary principle

71. In making your decision under section 75 of the EPBC Act, you are required to take account of the precautionary principle (section 391). The precautionary principle is that a lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage. A controlled action decision will require any uncertainties in the referral (e.g. around the potential effectiveness of mitigation measures and availability of environmental offsets) to be clarified through further detailed assessment.

Bioregional Plans

72. In accordance with section 176(5) of the EPBC Act, you are required to have regard to a bioregional plan in making any decision under the EPBC Act to which the plan is relevant. The *Marine Bioregional Plan for the Temperate East Marine Region* (2012) ([Attachment K](#)) is relevant to the proposed action.

Cost Recovery

73. The fee schedule (with justifications) for your consideration is at [Attachment D](#). The fee schedule (without justifications) is also at [Attachment D](#) which will be sent to the person taking the action, including an invoice for Stage 1, seeking fees prior to the commencement of any further activity.

Consultation and handling

73. The Wildlife, Heritage and Marine Division, Wetlands Section and General Counsel Branch were consulted and provided advice in the preparation of this brief.

[REDACTED]
[REDACTED]
A/g Director
Queensland North Assessments
Assessments and Governance Branch
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Queensland North Assessments
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Attachments

- A: Referral documentation
- B: Decision notice – FOR SIGNATURE
- C: Letter to proponent, Queensland Government and relevant Commonwealth Ministers – FOR SIGNATURE
- D: Cost recovery fee schedules and justification table
- E: Maps of project area, regional context and Ramsar site boundary
- F: Ecological Character Description – Moreton Bay Ramsar Site (Final Report)
- G: Information sheet on Moreton Bay Ramsar Site (June 1999)
<http://www.environment.gov.au/water/topics/wetlands/database/pubs/41-ris.pdf>
- H: Departmental advice:
 - Wetlands Section Advice
 - Migratory Species Section Advice
 - Heritage (Historic Shipwrecks) Advice
- I: Submission from Queensland Department of Environment and Science
- J: Department's Environmental Reporting Tool (dated 29 June 2018)
- K: Marine Bioregional Plan for the Temperate East Marine Region (2012)
- L: Summary of public submissions

