## DEPARTMENT OF THE ENVIRONMENT AND ENERGY

FOI 191205 Document 1

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

Referral Decision Brief – North Galilee Water Scheme Water Infrastructure Project, near Clermont, Queensland (EPBC 2019/8508)

Timing: The statutory timeframe for making a decision was 15 October 2019.

Recommended Decision	NCA NCA(pm) CA	
Designated Proponent	Adani Infrastructure Pty Ltd ACN: 606 764 827	
Controlling Provisions triggered or	World Heritage (s12 & s15A) Yes ☐ No ☒ No if PM ☐	National Heritage (s15B & s15C) Yes ☐ No ☒ No if PM ☐
matters protected by particular manner	Ramsar wetland (s16 & s17B)  Yes □ No ☑ No if PM □	Threatened Species & Communities (s18 & s18A)  Yes ⊠ No □ No if PM □
	Migratory Species (s20 & s20A)	C'wealth marine (s23 & s24A)
	Yes ☐ No ☒ No if PM ☐	Yes No No if PM
	Nuclear actions (s21 & s22A)	C'wealth land (s26 & s27A)
	Yes ☐ No ☒ No if PM ☐	Yes No No if PM
	C'wealth actions (s28)	GBRMP (s24B & s24C)
	Yes ☐ No ☒ No if PM ☐	Yes No No if PM
	A water resource – large coal mines and CSG (s24D & s24E)	C'wealth heritage o/s (s27B & s27C)
	Yes ☐ No ☒ No if PM ☐	Yes ☐ No ☒ No if PM ☐
Public Comments		032 received during the public omment period (Attachment D).
Ministerial Comments	Yes No Who: Queensland Department of Environment and Science, Department of Agriculture, Department of Industry, Innovation and Science and Geoscience Australia (Attachment E).	
Assessment Approach Decision		minary documentation (further mation required).
Recommendation/s:		
	ur obligations under the EPBC Act, the nt A), the public comments (Attachm	
		Considered Please discuss

2. Tha	t you accept the referral of the proposed action.
	Accepted Not accepted
_	ee with the recommended decision that the proposed action is a controlled action, and the controlling provisions are sections 18 and 18A.
	Agreed Not agreed
4. Agre	ee to the designated proponent.
	Agreed Not agreed
	ee the proposed action be assessed on preliminary documentation (further information uired) under Division 4 of Part 8 of the EPBC Act.
	Agreed Not agreed
1	ou agree to 3 and 5, indicate that you accept the reasoning in the Departmental fing package as the basis for your decision.
	Accepted Please discuss
_	ee to the fee schedule and justification table (Attachment F) and that the fee schedule ttachment G be sent to the proponent.
asse lette	e the letter notifying the person proposing to take the action of your referral and essment approach decisions will include an invoice for Stage 1 assessment fees. A er requesting further information under section 95A(2) of the EPBC Act will be pared for your signature within 10 business days of the Stage 1 payment.
	Noted Please discuss
	the notice at Attachment H which will be published on the Department's website if make the recommended decision.
	Signed Not signed
10. Sigr	the letters at Attachment I advising relevant parties of your decision.
C	J. Centll Lee Signed Not signed
Assista	McNee ant Secretary ments and Governance Branch ents:  Date: 9. 12.19

#### **KEY ISSUES:**

- The Department considers the proposed action is likely to have a significant impact on listed threatened species and communities and their habitat, including important habitat for the vulnerable Ornamental Snake (*Denisonia maculata*), as a result of vegetation clearance and direct mortality.
- The Department considers the proposed action will result in extraction of water from the Suttor River, which is likely to have a significant impact on downstream listed threatened species and communities, and their habitat, due to changes in downstream flow regimes.
- The Department does not consider the proposed action to be a part of the Carmichael Coal Mine and Rail Project (EPBC 2010/5736).
- The Department considers that the water trigger does not apply to the proposed action.

## BACKGROUND:

## Description of the referral

A valid referral was received on 16 September 2019. The action was referred by CDM Smith Australia Pty Ltd on behalf of Adani Infrastructure Pty Ltd (the proponent), who have stated in the referral that it is their belief that the proposal is not a controlled action for the purposes of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

## Description of the proposal (including location)

The proposed action is to construct and operate the North Galilee Water Scheme Water Infrastructure (NGWSWI) project to supply water to the Carmichael Coal Mine Project (CCMP) (EPBC 2010/5736). The NGWSWI project is located approximately 160 kilometres (km) northwest of Clermont in central Queensland. While the referred action includes the operation of water harvest infrastructure, the proponent has not referred the extraction of water because, in the proponent's view, the extraction of water will not have any significant impact on a matter of national environmental significance (MNES) (Attachment A).

### Water harvest and storage infrastructure

This component of the proposed action includes the construction and operation of water harvest and storage infrastructure to harvest up to 12.5 gigalitres (GL) of water from the Suttor River and store it in the upgraded Belyando Junction Dam. The water harvest and storage infrastructure includes (Attachment A):

- an intake pump station, diesel tanks, and intake channel from the Suttor River;
- a 3.8 km buried pipeline from the Suttor River to the Belyando Junction Dam, within a construction corridor of 30 metres (m);
- upgrade of the existing 2.2 GL Belyando Junction Dam to a nominal 10 GL capacity;
- two laydown areas immediately adjacent to the dam and intake pump station area; and
- access tracks and a temporary workers camp.

#### Stage A pipeline

The Stage A pipeline component includes the construction and operation of a pipeline and associated infrastructure to supply water from the upgraded Belyando Junction Dam to the Stage B pipeline (which is outside the scope of this referral), and ultimately the CCMP.

Stage A pipeline includes:

- a 49 km buried pipeline from the Belyando Junction Dam to the start of the Stage B pipeline, within a 30 m construction corridor;
- · the Gregory Development Road break tank and pump station; and
- two laydown areas immediately adjacent to the Stage A pipeline corridor at Mt Douglas Station and Disney Station.

The referral states that the project site is 623.63 hectares (ha) across six lots and three roads, comprising freehold, leasehold and State land. The disturbance footprint is approximately 188.24 ha, noting disturbance associated with the buried pipeline will occur in a maximum 30 m wide corridor (Attachment A).

Construction of both components is scheduled to commence in the first quarter of 2020 and be completed in fourth quarter of 2020 (Appendix J to <u>Attachment A</u>). The estimated project life of the proposed action is 60 years (<u>Attachment A1</u>).

## Description of the environment

The project site is located largely within the Belyando Downs subregion near the north-west boundary of the Brigalow Belt Bioregion in central Queensland. The main land zones in these regions are Queensland land zone 3 and land zone 4 (Attachment A). The endangered Brigalow (Acacia harpophylla dominant and co-dominant) threatened ecological community (Brigalow TEC) and vulnerable Ornamental Snake (Denisonia maculata) and its habitat have been recorded most frequently in these land zones. Cracking clay soils were identified in gilgai formations on and adjacent to the project site. The project site contains areas of sandy soils and sandy creek beds where the vulnerable Squatter Pigeon (Southern) (Geophaps scripta scripta) was observed (Attachment A).

The project site occurs in an agricultural area primarily used for cattle grazing and much of the landscape is therefore cleared of woody vegetation. The remaining vegetation is restricted to elevated rocky areas, watercourses and several protected areas (including national parks) (Attachment A). This vegetation includes suitable Koala (*Phascolarctos cinereus*) food trees including *Eucalyptus coolabah* and *E. camaldulensis*.

The project site is primarily located within the Belyando Basin and partly within the Suttor Basin which are characterised by wide floodplains of braided watercourses. Both basins are located within the Burdekin River Basin. The referral notes the flow regime in the Belyando Basin is highly seasonal with flows peaking from December to April (the wet season) and with low to negligible flows from May to October (the dry season). The water quality of the Belyando Basin is known to have moderately elevated suspended sediments during the wet season.

Suitable habitat for the Koala, Squatter Pigeon (Southern), Southern Black-throated Finch (*Poephila cincta cincta*) and Ornamental Snake was identified along the Suttor and Belyando rivers during 2019 surveys at and downstream of the project site, particularly in the form of riparian vegetation, gilgai and Brigalow TEC (<u>Attachment A</u>).

The referral notes that pools were observed at the proposed intake pump on the Suttor River and at the point where the Stage A pipeline crosses the Belyando River. The proponent considers that these pools provide suitable forage trees for Koala, and suitable water sources for the Squatter Pigeon (Southern) and Southern Black-throated Finch (Attachment A). The proponent notes that the existing Belyando Junction Dam provides habitat value for waterbirds and may provide an additional water source for the Squatter Pigeon (Southern) and Southern Black-throated Finch (Attachment A).

## State Government approvals

On 23 July 2015, the Charters Towers Regional Council issued a Development Permit under the *Sustainable Planning Act 2009* (Qld) to the proponent for the upgrade of off-stream flood harvesting storage (Belyando Junction Dam) and associated infrastructure (Appendix A to Attachment A).

On 29 May 2019, the Queensland Department of Natural Resources, Mines and Energy issued a water licence under the *Water Act 2000* (Qld) to the proponent for the taking of water from the Suttor River and the transfer of water to off-stream storage via the Belyando River anabranch (Appendix A to Attachment A). The water licence conditions include:

- authorisation to supply water for the Carmichael Coal Mine and Rail Project;
- a maximum volume extraction limit of 12.5 GL from the Suttor River during a water year (i.e. a 12 month period);
- a mean annual volume extraction limit assigned from the strategic reserve as provided in the Water Plan (Burdekin Basin) 2007 (Qld) of 10.8 GL from the Suttor River;
- permission to take water from the Suttor River only when flow exceeds 2,592 ML/day; and
- a daily volume extraction limit of 830 ML.

## SUBMISSIONS:

#### **Public submissions**

As required by section 74(3) of the EPBC Act, the proposal was published on the Department's website on 16 September 2019 and public comments were invited for a period of 10 business days until 30 September 2019 (Attachment D1). Under section 75(1A) of the EPBC Act, you must consider all comments received in response to that invitation within the public comment period. A total of 7032 public submissions were received on the referral during the public comment period. All public comments at Attachment D are available for your consideration. A summary of the public comments, and the issues raised, is provided below.

The Department notes that a significant number of the public submissions were submitted as part of campaigns. These submissions contain identical, pro forma text; however, many of them also include variations or additions to the pro forma text. Accordingly, it is not the case that all comments submitted as part of the campaigns are the same or even substantially the same. You should consider each of the public comments at <a href="Attachment D">Attachment D</a>, as well as the summary below.

The Department notes that some of the public comments received did not address the requirements of the invitation to comment provided on the Department's website (Attachment D1), including whether the action should be considered a 'controlled action' for the purposes of the EPBC Act. However, for the sake of completeness, the Department has considered all public comments received.

Public submissions - received within public comment period

A total of 7032 public submissions were received on the referral during the public comment period. The Department notes that this number (7032) includes 5 public submissions that were received on an unknown date. These 5 public submissions were treated as if they were made within the public comment period and have been considered and addressed in the preparation of this brief.

The submissions raised/included the following issues in relation to whether the action is a 'controlled action':

- The Minister must determine the proposed action is a controlled action, including with the consideration of the principles of ecologically sustainable development.
- The proposed action is likely to have a significant impact on water resources (s24D and s24E) and the 'water trigger' applies because:
  - it is designed solely to facilitate extraction of coal from the CCMP;
  - the water assessment is not adequate to properly assess the impacts on the Suttor River because it is focussed on peak flood events and does not properly address impacts on smaller river flows;
  - the groundwater model for the CCMP has underestimated groundwater impacts and contains unrealistic assumptions;
  - it is likely to facilitate cumulative hydrological impacts on water resources in the Galilee Basin by facilitating the development of other coal mines (e.g. Alpha North, China Stone and Alpha West) by providing a reliable source of surface water;
  - the referral does not reference the Bioregional Assessment undertaken for the potential cumulative impacts of seven large coal mines in the Galilee Basin; and
  - the proposal will have impacts on surface water quantity downstream of the extraction point, and groundwater quality and quantity.
- The Significant Impact Guidelines 1.3 (2013) note that associated infrastructure does not
  constitute a coal mining activity, however the guidelines are not a relevant consideration of
  the Minister in deciding whether the action is a controlled action under section 75(1) of the
  EPBC Act.
- The proposed action is likely to have a significant impact on listed threatened species and communities (s18 and s18A), including the Southern Black-throated Finch, Ornamental Snake, Squatter Pigeon (Southern), Greater Glider and the Koala.
- The proposed action is likely to have a significant impact on the Great Barrier Reef Marine Park (s24B and s24C), including its world heritage values (s12 and s15A) and national heritage values (s15B and s15C), because:
  - it will contribute to climate change and global warming, including as a result of greenhouse gas emissions from the burning of coal extracted from the CCMP;
  - flood harvesting will occur in the Burdekin catchment and no extensive hydrological assessment and modelling has been conducted; and
  - the cumulative impacts on the GBRWHA with the NGWSWI project were not considered in the assessment of the CCMP.
- The proposal should be assessed by environmental impact statement, with the impacts on water resources considered by the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC).
- The proposal does not meet the requirements of 'assessment on referral information' due to the proponent's poor environmental history outside of Australia, and the alleged offence of providing false and misleading information in its 2017/18 Annual Return to the Queensland Government.

- Several components of the original North Galilee Water Scheme (EPBC 2018/8191), in particular the Stage B pipeline and the water extraction, have not been referred as part of this new NGWSWI project.
- The water proposed to be extracted should not be used for coal mining but instead be better used by farmers and the environment currently impacted by drought.
- The survey effort on the project site for listed threatened species and communities is inadequate both in duration and seasonality, and there is minimal information on the survey techniques and intensity of the surveys conducted.
- The survey effort (both in duration and seasonality) downstream of the project site for listed threatened species and ecological communities, and listed migratory species, and their habitat (i.e. riparian vegetation, waterholes, wetlands, lagoons and floodplain ecosystems) is inadequate.
- The proposal be considered as 'part of a larger action' under the EPBC Act because the NGWSWI project is proposing to take greater volumes of surface water than identified in the original EIS for the CCMP, and the proposed surface water extraction was not assessed in the EIS for the CCMP.
- The referred action does not include information about the proponent's 2016 water permit
  for the extraction of water from Mistake Creek, storage of the water take in the Disney Dam,
  and possible connection of this dam to the NGWSWI project.
- Projects affecting the same species with a smaller footprint have been declared a controlled action in the past, in particular the Olive Downs Water Pipeline Project (EPBC 2017/7868).

A number of public submissions raised/included issues/matters that were not directly relevant to whether or not the action is a 'controlled action'. These issues/matters are outlined below but are not discussed further and include:

- The proponent, and all associated companies, be required to disclose its full environmental compliance record both in Australia and overseas for the public to fully understand the compliance history of the Adani group.
- Rigid measures, controls and monitoring programs are made mandatory to minimise negative impacts to the greatest extent possible and to a degree made acceptable by the agreement of independent experts.
- The measures are supervised by the Department (and independent experts where appropriate) to ensure the measures are being appropriately implemented and all conditions are being complied with.
- Works associated with the proposed action be stopped immediately if it is found unacceptable impacts are occurring.
- The proposal should not be approved if it is considered that the minimisation or remediation of negative impacts cannot be achieved or maintained.
- New coal mines, including the CCMP and associated NGWSWI project, should not go ahead and money should be invested in renewable energy.
- The project will have social and economic impacts, including:
  - loss of long-term job opportunities and subsequent unemployment during the postconstruction of the CCMP and associated activities;

- long-term impacts of coal mining on future generations, including as a result of climate change and global warming; and
- o impacts on culturally sensitive areas and Traditional Owners.

Public submissions - received outside of public comment period

As at 30 November 2019, a total of 193 public submissions were received on the referral outside of the public comment period. These public submissions raised the same matters to public submissions that were received in the public comment period. These public submissions have been considered and addressed in the preparation of this brief. In other words, the Department considered and addressed all public comments that were received by the Department up until 30 November 2019.

#### **Comments from Commonwealth Ministers**

By letter dated 16 September 2019, the following ministers were invited to comment on the referral:

- Senator the Hon Bridget McKenzie, Minister for Agriculture
- The Hon Ken Wyatt AM MP, Minister for Indigenous Australians
- The Hon Karen Andrews MP, Minister for Industry, Science and Technology
- The Hon Michael McCormack MP, Minister for Infrastructure, Transport and Regional Development
- Senator the Hon Matt Canavan, Minister for Resources and Northern Australia

On 27 September 2019, the Department of Industry, Innovation and Science responded on behalf of the Minister for Industry, Science and Technology (Attachment E), noting it:

- has no objections to the proposed action, subject to any comments from Geoscience Australia; and
- is supportive of sustainable development of coal mining projects subject to the proponent obtaining relevant State and Commonwealth environmental approvals.

On the same date, Geoscience Australia (GA) responded (<u>Attachment E</u>), noting that should the Department assess whether the proposed action falls within the definition of the water trigger, there is potential for the proposed action to impact on groundwater resources.

Comments from GA included the following:

- The pipeline is unlikely to have a significant impact on groundwater resources for the majority of its extent due to the shallow depth of excavation and relatively small disturbance footprint.
- Watercourse crossings should warrant assessment on a case-by-case basis to ensure surface and groundwater resources are not significantly impacted by the proposed action.
- The enlargement of Belyando Junction Dam has the potential to impact on the localised groundwater resources.
- If operation of the flood harvesting infrastructure is considered as part of this referral, harvesting floodwaters has the potential to impact recharge to groundwater systems at various scales, which subsequently may be significant to water resources or waterdependent flora and fauna.

- The potential for climate change (e.g. changes to rainfall patterns) to impact on flood frequency should be assessed. If flood frequency declines, harvesting floodwater may represent extraction of a more significant proportion of the floodplain water balance.
- Groundwater-dependent ecosystem (GDE) mapping shows ecosystems reliant on groundwater are present throughout the project site and areas that will be impacted by flood harvesting operations. It appears that impacts on GDEs are not considered in the referral.

GA also notes there is confusion regarding the nature of the referred action, in particular what constitutes the operation of the action. GA notes the proponent has not referred the water extraction component but considers that referring the operational component of the action would allow the assumptions and methods used in the proponent's investigations to be independently assessed.

The Department notes the views of GA regarding the possible application of the water trigger and considers this matter has been addressed in the water resources section below. If you agree to the Department's recommendation, the Department will consider the views raised by GA regarding the potential impacts of flood harvesting during the assessment process.

On 30 September 2019, the Department of Agriculture responded on behalf of the Minister for Agriculture, noting that there are two registered Native Title claims associated with the land to be traversed. Further, the Department of Agriculture advised it has no comments from a portfolio perspective on whether the proposed action may have significant impacts on matters of national environmental significance protected under the EPBC Act (Attachment E).

No comments were received from the Minister for Indigenous Australians and the Minister for Infrastructure, Transport and Regional Development in response to that invitation.

## Comments from State/Territory Ministers

By letter dated 16 September 2019, the delegated contact for the Hon Leeanne Enoch MP, Queensland Minister for Environment and the Great Barrier Reef, Minister for Science and Minister for the Arts, was invited to comment on the referral.

On 24 September 2019, the Queensland Department of Environment and Science responded on behalf of the Hon Leeanne Enoch MP, noting the proposed action will not be assessed using the EIS process in Chapter 3 of the *Environmental Protection Act 1994* (Qld) (Attachment E).

Further, the Queensland Department of Environment and Science notes the Queensland Department of State Development, Manufacturing, Infrastructure and Planning has advised that the proposed action is not currently being assessed as a coordinated project under Part 4 of the State Development and Public Works Organisation Act 1971 (Qld) and is not likely to be assessed under this process in the future.

## SECTION 74A - REFERRAL OF A LARGER ACTION

Section 74A(1) of the EPBC Act states that if the Minister (or delegate) is satisfied the action that is the subject of the referral is a component of a larger action, the Minister (or delegate) may decide not to accept the referral. This is a discretionary decision and, as such, you are not obliged to exercise the power.

The Environment Protection and Biodiversity Conservation Act 1999 (Cth) Policy Statement: Staged Developments—Split referrals: Section 74A of the EPBC Act (Attachment J) states that "[a] referred action that is part of a larger action can be refused only if there is a reasonable basis for doing so. ... The key question for the Minister is: does the splitting of the project reduce the ability to achieve the objects of the Act?"

Section 74A(2) of the EPBC Act states that, if the Minister (or delegate) decides not to accept a referral under section 74A of the EPBC Act, they:

- must give a written notice of the decision to the person who referred the proposed action and the person who is proposing to take the action; and
- may, under section 70 of the EPBC Act, request that the person proposing to take the action, refer the larger action to the Minister (or delegate).

Related projects - CCMP (EPBC 2010/5736)

The Department notes that public submissions expressed the view that because the proposed action will supply water to the CCMP then the referred action should be considered part of a larger action under section 74A of the EPBC Act (e.g. 'Front Line Action on Coal Inc.' and 'Environment Council of Central Queensland Inc.') (Attachment D), namely the proposed action is part of the larger action of the CCMP. For the reasons below, the Department's view is that the NGWSWI project is not part of a larger action comprising the CCMP.

Section 74A only applies to a referred action if that action is a component of a larger action that same legal person (either a natural person or an organisation) proposes to take. The proponent has stated in its referral that the proposed action is not a part of a staged development (or a component of a larger project) (Section 1.15, <a href="Attachment A">Attachment A</a>). The referral states that while the NGWSWI project is related to the CCMP (EPBC 2010/5736), it is nevertheless a distinct project because the NGWSWI project has different proponents, will require a separate financial investment decision, and will require separate applications for State and local government approvals.

Having regard to these factors, i.e. that the NGWSWI project is being undertaken by a different proponent and requires a separate financial investment decision and separate State and local government approvals, the Department considers the NGWSWI project is not part of a larger action including the CCMP itself.

Accordingly, the Department considers section 74A of the EPBC Act does not apply.

## Stage B pipeline

Construction of the pipeline is to occur in two 'stages', namely Stage A and Stage B (Attachment A). The Stage A pipeline is part of this referral, however the Stage B pipeline has not been referred. The Department has considered whether the proposed action is part of a larger action comprising the 'Stage B pipeline', that is, the pipeline connecting the Stage A pipeline to the CCMP (and potentially other users). The referral states that the footprint of the Stage B pipeline falls entirely within the rail corridor of the North Galilee Basin Rail Project (EPBC 2013/6885), which has already been subject to EPBC Act assessment. The referral further states that no additional impacts will occur as a result of the construction of Stage B pipeline within that rail corridor.

The Department is satisfied that the co-location of the Stage B pipeline within the approved rail corridor means there will be no new or additional impacts than those assessed for the rail corridor (i.e. the vegetation will be cleared for the rail corridor and no additional vegetation will need to be cleared for the pipeline).

The Department considers that the Stage B component of the pipeline would not meaningfully increase the impacts to any MNES.

Accordingly, the Department recommends that you do not exercise your powers under section 74A of the EPBC Act to reject the referral.

The Department notes that some public submissions raised that the referred action should be considered part of a larger action under section 74A of the EPBC Act (<u>Attachment D</u>). In particular, some of the public submissions noted that the referral states that the NGWSWI project may supply water to other mines in the surrounding region in future (e.g. 'Front Line Action on Coal Inc.', and 'Environment Council of Central Queensland Inc.').

The referral notes the possibility that the NGWSWI project could supply additional resource-extraction projects in the region, but states that at this stage there are no water supply agreements executed for such projects. Further, the current State Government approved water licence for the NGWSWI project is conditioned to supply the CCMP only (Appendix A to Attachment A).

Based on the information before it, the Department considers a NGWSWI project that supplies water to a range of additional users to be hypothetical and speculative. Accordingly, the Department does not consider that the NGWSWI project is part of a larger action comprising the supply of water to other mines in the surrounding region.

The Department notes that in accordance with section 74A(4) of the EPBC Act, if you agree to accept the referral, you must give written notice of the decision to the person proposing to take the action and publish in accordance with the EPBC Regulations, a copy or summary of the decision. The Department has included written notice in the letter to the person proposing to take the action (<u>Attachment I</u>). The EPBC Regulations do not specify that publication is required.

## SECTION 527E - OTHER IMPACTS

In considering the proposed action, the Department notes that several public submissions argue the proposed action will facilitate other actions that are likely to have impacts on matters protected under Part 3 of the EPBC Act (<u>Attachment D</u>). In particular, public submissions raise the potential of other impacts arising from taking the proposed action. These potential impacts include downstream, cumulative, consequential, facilitated, direct and indirect impacts from the proposed action. Some of the potential impacts that were cited in public submissions include potential impacts to Ramsar wetlands, listed migratory species, world heritage properties, national heritage places, the Great Barrier Reef Marine Park, Commonwealth marine areas and on a water resource.

## Impacts associated with the CCMP

Some public submissions state that the impacts of the CCMP on matters protected by Part 3 of the EPBC Act are indirect consequences (or impacts) of the NGWSWI project (e.g. 'Front Line Action on Coal Inc.'). The Department notes in this context, that the impacts of an action include the indirect consequences of that action as defined by section 527E(1)(b) and, where applicable, section 527E(2) of the EPBC Act.

In relation to those public submissions, the Department notes that the referred action is related to the CCMP, and the water will be used as part of mining operations at the CCMP (e.g. in dust suppression, coal washing and processing and long wall mining equipment cooling water). The water will also be used for other purposes, such as for potable water supply. In a general sense, the NGWSWI project will supply a necessary input into the CCMP.

The Department also notes that the NGWSWI project was conceived as an alternative to the water harvesting component of the CCMP. The CCMP, as approved, included water harvesting, storage and supply infrastructure for extracting 12.5 GL from the Belyando River. However, further investigations established that a different water extraction location would provide greater security and reliability in terms of water supply, leading to the proposal of the NGWSWI project.

These developments were driven by demand of water for the CCMP. The Department is of the view that the CCMP is not dependent on the NGWSWI project because an alternative source of water supply is potentially available (i.e. the infrastructure approved as part of the CCMP).

In light of these factors, the Department considers, on balance, that it is the demand of the CCMP for water that has facilitated the NGWSWI project; the NGWSWI project will be constructed and operated to meet a demand created by the CCMP. For these reasons, the Department is of the view that the impacts associated with the CCMP are not indirect impacts of the proposed action, as defined by sections 527E(1)(b) and (2) of the EPBC Act, because the proposed action does not facilitate, to a major extent, the CCMP.

## Impacts on greenhouse gas emissions

In regards to the public submissions concerning greenhouse gas emissions, the Department notes that greenhouse gas emissions and climate change is not a controlling provision and is therefore not a protected matter under Part 3 of the EPBC Act. However, greenhouse gas emissions from the taking of an action may be considered where those emissions are likely to result in a 'significant impact' on a protected matter having regard to the Department's Significant Impact Guidelines 1.1 (2013).

The proposed action is to construct and operate the NGWSW! project to supply water to the CCMP. The proposed action does not involve the burning of coal overseas, but rather the harvesting, storage and use of water. The greenhouse gas emissions from the referred action are likely to result from the clearing of vegetation and excavation works with machinery and operation of the water pumps. It is the Department's view that the greenhouse gases that are emitted from these activities are not likely to have a significant direct or indirect impact on a protected matter under Part 3 of the EPBC Act.

A number of public submissions also state that the proposed action will contribute to climate change as a result of greenhouse gas emissions from the burning of coal extracted from the CCMP (e.g. submission from 's47F | I'). The public submissions did not explain how the impacts of these emissions constitute indirect consequences of the proposed action in the terms required by section 527E(2) of the EPBC Act. Based on the information available to the Department about the connection between the NGWSWI project, the CCMP and the proposed combustion of the coal, the Department is not satisfied that the end use combustion of coal mined from the CCMP is facilitated, to a major extent, by the NGWSWI project.

### Downstream impacts

Several public submissions (<u>Attachment D</u>) and Geoscience Australia (<u>Attachment E</u>) note that the referred action is uncertain in relation to the water harvesting aspects and Stage B pipeline. The Department notes that the referral states that the referred action includes the operation of the infrastructure (i.e. water harvest) and later excludes the water harvesting component (Section 1.2, <u>Attachment A</u>). Public submissions also raise concerns about impacts that are likely to occur as a direct result of water harvesting (e.g. 'Business Services of Coast and Country Inc.').

The Department notes in this context, that the impacts of an action include the direct and indirect consequences of that action as defined by sections 527E(1)(a) and (b) and, where applicable, section 527E(2) of the EPBC Act.

Given that the intention of the NGWSWI project is to supply water to the CCMP, the Department is satisfied that the harvesting of the water is a necessary consequence of the proposed action and given the circumstances surrounding the proposed action, the downstream impacts resulting from the water harvesting should be assessed as part of the proposed action.

Several submissions note that the proposed action is likely to facilitate cumulative hydrological impacts on water resources in the Galilee Basin by facilitating the development of other coal mines (e.g. Alpha North, China Stone and Alpha West) by providing a reliable source of surface water (e.g. 'Australian Conservation Foundation'). The Department notes that the referral indicates the possibility that the NGWSWI project could supply additional resource-extraction projects in the region, but states that at this stage there are no water supply agreements executed for such projects. Further, the current State Government approved water licence for the NGWSWI project is conditioned to supply the CCMP only (Appendix A to Attachment A).

As indicated above, the Department considers the NGWSWI project will supply water to other mines in the surrounding region to be hypothetical and speculative.

The Department also notes that the changes to downstream flow regimes are an impact resulting from the proposed action and, if you agree to the Department's recommendation, these impacts are proposed to be assessed because of its likely downstream impacts on listed threatened species and communities (section 18 and section 18A).

## RECOMMENDED DECISION:

Under section 75 of the EPBC Act, you must decide whether the action that is the subject of the proposal referred 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.

In making a decision under section 75 of the EPBC Act about the proposed action, you must consider the public comments received:

- in response to the invitation under section 74(3) for anyone to give the Minister comments on whether the proposed action is a controlled action; and
- · within the public comment period.

The public comments received within the public comment period are at Attachment D.

The Department recommends you decide the proposal is a controlled action because the action is likely to have significant impacts on listed threatened species and communities. These impacts are discussed respectively below. For the same reasons, the Department recommends you decide the controlling provisions for the proposed action are section 18 and section 18A.

## PROTECTED MATTERS THAT ARE CONTROLLING PROVISIONS:

## Listed threatened species and communities (s18 & s18A)

The Department's Environment Reporting Tool (ERT) identifies a total of 24 listed threatened species and 2 threatened ecological communities may occur within 50 km of the proposed action (<u>Attachment B</u>). The Department notes the referral considered protected matters within a 20 km radius of the NGWSWI project site (Appendix D to <u>Attachment A</u>) and identified 21 listed threatened species and 3 threatened ecological communities.

Further, several public submissions considered that the proposed action also presented a risk to the vulnerable Greater Glider (*Petauroides volans*) (e.g. 'Business Services of Coast and Country Inc.') (<u>Attachment D</u>). This species was identified in the proponent's ERT report and considered in its environmental assessment (<u>Attachment A</u>), though the referral concludes that

an impact is unlikely due to a lack of suitable habitat and the proposed action occurring at the edge of the species known distribution.

The Department notes that there is also the potential for the proposed action to impact additional listed threatened species, including the critically endangered Northern Hairy-nosed Wombat (*Lasiorhinus krefftii*) and endangered Bridled Nail-tail Wallaby (*Onychogalea fraenata*) (e.g. 'Business Services of Coast and Country Inc.' and 'Bob Brown Foundation') (<u>Attachment D</u>). Based on the information available to the Department, including the referral, the Department's Wylie Tool, and the SPRAT database, the Department does not consider that the proposed action is likely to significantly impact these species.

Based on the location of the proposed action, likely habitat present in the area of the proposed action, and the nature and scale of the potential impacts, the Department considers that impacts potentially arise in relation to the following matters.

## Ornamental Snake (Denisonia maculata) - Vulnerable

## Species information

The Ornamental Snake occurs within the Brigalow Belt Bioregion and prefers habitat within or close to habitat favoured by its prey (i.e. frogs). The species is known to prefer woodlands and open forests, including Brigalow TEC and communities dominated by Coolabah (*E. coolabah*), associated with moist areas (particularly gilgai mounds and depressions on land zone 4), deep-cracking alluvial soils with high clay contents and microhabitat features (i.e. logs, woody debris and leaf litter). The soil cracks on gilgai mounds are used by the species as refuge habitat during dry periods.

The Department considers important habitat for the species as a surrogate for important populations due to the low detectability of the species and lack of population information. The Department's *Draft Referral guidelines for the nationally listed Brigalow Belt reptiles* (2011) (BBR Guidelines) identifies known important habitat for the Ornamental Snake as gilgai depressions and mounds, and the connective habitat between gilgai and other suitable habitats.

#### Proposed action area

The referral states targeted surveys for the Ornamental Snake were undertaken on the project site from February-March 2019, in accordance with the survey methods specified for the species in the BBR Guidelines. Two individuals were recorded at trap sites along the boundary of Nairana National Park in regrowth gidgee habitat on cracking clay soils with gilgai formations (Attachment A).

The referral notes the Ornamental Snake was recorded during field surveys for nearby projects in the vicinity of the project site (<u>Attachment A</u>). One individual was recorded during 2013 surveys approximately 6 km south-west of the junction of Stage A and Stage B pipelines. Eight individuals were recorded during 2014 surveys approximately 4 km west of the Stage B pipeline.

The referral notes that large tracts of suitable habitat occur along the Stage A pipeline to the south of the Belyando River and along the edge of Nairana National Park, where the species was recorded during site surveys. The Stage A pipeline also passes through cracking clay soils at the southern extent of its length, although gilgai formations were only patchily observed (Attachment A).

#### Potential impacts

The proponent considers the proposed action will result in the clearance of up to 66.71 ha of important habitat for the Ornamental Snake, as assessed under the BBR Guidelines (Attachment A). The Department generally agrees with the proponent's habitat assessment. The

referral notes that there is a low potential for construction activities to impact on the breeding cycle of the species.

The proponent also considers that it is unlikely this important habitat will retain the necessary characteristics to support the species following completion of construction (i.e. clearance) and subsequent vegetation rehabilitation activities. With consideration of the BBR Guidelines, the proponent concludes the proposed action may be considered to have a 'significant residual impact' on the Ornamental Snake (Attachment A).

In addition to habitat clearance and fragmentation, the referral states the proposed action has the potential to impact on MNES through trenching activities, vehicle strike, changes in downstream hydrology and water quality, dust, weeds and pests, noise and fire.

The Department considers there is the potential for indirect impacts on gilgai formations, and other important habitat, within and downstream of the project site due to changes in hydrological regimes. The Office of Water Science (OWS) notes the presence of Brigalow TEC downstream of the water extraction point, and that changes to the flow regime of the Suttor River have the potential to impact riparian vegetation and Brigalow TEC that may be habitat for threatened species (Attachment C), including the Ornamental Snake.

Avoidance and mitigation measures, and rehabilitation

The proponent has proposed a number of general avoidance, mitigation and management measures in Section 4.1 at <a href="Attachment A">Attachment A</a> and in the Construction Environmental Management Plan (Appendix J to <a href="Attachment A">Attachment A</a>). The measures include avoidance of remnant vegetation, pre-clearance surveys by fauna spotter/catchers, minimising the time the trench is open, daily trench inspections, trench fauna ramps, erosion and sediment control measures, weed and pest management, and vehicle speed limits.

Further, the proponent has committed to the rehabilitation of the Stage A pipeline corridor (except a 10 m access track for maintenance purposes) using local native grass species as groundcover. Topsoil stripped during construction will be stockpiled, then respread after backfill is completed. Surface restoration works will be undertaken progressively as the pipeline installation work advances (Attachment A). However, the proponent notes that it is uncertain whether the rehabilitated pipeline alignment will develop the landforms suitable for the species (i.e. gilgai, soil cracking) and be accessible to the species (Attachment A). The Department agrees with this assessment.

#### Conclusion

Based on the information available, the Department considers there is a real chance or possibility the proposed action will adversely affect up to 66.71 ha of habitat critical to the survival of the Ornamental Snake (i.e. areas that are necessary for foraging and breeding activities) in the form of important gilgai habitat. The Department therefore considers the proposed action is likely to have a significant impact on the vulnerable Ornamental Snake.

## Other listed species

On the basis of all the information available to the Department (including the ERT, the referral, the Wylie Tool and the SPRAT database), the Department considers there is a real chance or possibility the proposed action will significantly impact on the following:

Southern Black-throated Finch (Poephila cincta cincta) – Endangered

The referral states the species was not recorded during the February-March 2019 surveys, but three other finch species were recorded. Two 'finch dam site/habitat assessment site' sites were surveyed at the extreme western end of the Stage B pipeline component over 40 km away from

the Stage A pipeline component. (<u>Attachment A</u>). However, the Department notes the 2019 surveys within and around the project site were largely targeted at detecting the presence of the Ornamental Snake.

As specified in the background paper for the Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta) (2009), the Department notes no targeted water source watching (i.e. Belyando River, Belyando Junction Dam and pools at the proposed intake pump) and no targeted searches in woodland and grasslands surrounding the water sources were undertaken in the project site. The Department notes some public submissions raised the inadequacy of the proponent's targeted surveys, in accordance with relevant guidelines, for the Southern Black-throated Finch in the project site (e.g. 'Business Services of Coast and Country Inc.') (Attachment D).

The Department notes the species is known to occur in the region based on database records and surveys undertaken for nearby projects (2012, 2013 and 2014). The referral notes there are several records within 10 km of the western boundary of the Stage B pipeline component (Attachment A) which is over 40 km away from the Stage A component. The proponent does not consider that the project site contains an 'important area' for the Black-throated Finch, based on the Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta) (2009), with an extensive population in the CCMP project site.

The referral notes a maximum of 19.48 ha of suitable habitat will be cleared (<u>Attachment A</u>). The referral states that habitat considered suitable for the species within and downstream of the project site is *E. camaldulensis* or *E. tereticornis* open forest to woodland fringing drainage lines (i.e. riparian vegetation) and grassy woodlands. The referral notes that the Belyando Junction Dam and pools present in the project site may provide additional water sources for the species.

Noting the lack of targeted surveys within and near the disturbance footprint for the proposed action, the Department considers there is the potential for the endangered Southern Black-throated Finch to be present and using suitable breeding and foraging habitat, which will be impacted from clearance and habitat fragmentation. The Department considers there is a real chance or possibility the proposed action will significantly impact on the endangered Southern Black-throated Finch.

• Squatter Pigeon (Southern) (Geophaps scripta scripta) - Vulnerable

The Squatter Pigeon (Southern) is known to occur within the project site and surrounding region, based on 2019 surveys and surveys undertaken for nearby projects in 2013 and 2015/2016. The proponent considers the project site is not in an area of an important population for the Squatter Pigeon (Southern) as it is north of the Carnarvon Ranges where the species remains common and is considered to be distributed as a single, continuous sub-population (as defined in the SPRAT database) (Attachment A).

The referral notes approximately 131.14 ha of potentially suitable habitat will be cleared, mostly within the Stage A pipeline construction corridor. This habitat includes native woodland and riparian vegetation, and in cleared land near permanent water sources.

The Department notes the habitat assessment for the Squatter Pigeon (Southern) ('good', 'moderate' and 'unsuitable') is inconsistent with the SPRAT database (i.e. consideration of potential suitable breeding, foraging and dispersal habitat). As such, the impacts associated with the habitat clearance may be an underestimation. The Department considers there is a real chance or possibility the proposed action will significantly impact on the vulnerable Squatter Pigeon (Southern).

 Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) – Vulnerable

The referral notes Koala scats and scratches were identified along the Suttor River and in nearby Coolabah woodland during the 2019 surveys, although targeted surveys for the Koala were not undertaken. The species was heard in two locations within 2 km of the Stage B pipeline in 2017, and was observed 24 km south of the Stage B pipeline in 2011 (Attachment A).

The referral notes a maximum of 22.37 ha of suitable habitat will be cleared. Based on application of the Koala Habitat Assessment Tool in the *EPBC Act referral guidelines for the vulnerable Koala* (2014), the proponent determined that habitat in the project site is critical to the survival of the Koala (score of '7' of 10) (<u>Attachment A</u>). The proponent considers there is abundant suitable habitat for the species in the region adjacent to and surrounding the proposed action in the form of native woodland and riparian vegetation. However, the referral notes the project will bisect large tracts of vegetation along the Belyando River which provides a regional fauna corridor (Attachment A).

The Department agrees with the Koala Habitat Assessment Tool scoring apart from 'Recovery value' attribute which should be '+1' at a minimum because the proposed action is clearing riparian vegetation. The Department considers riparian vegetation, and maintaining its quality, extent and connectivity, is important in the recovery of the inland population of the Koala because it provides a habitat refuge during drought and extreme heat. The Department considers there is a real chance or possibility the proposed action will significantly impact on the vulnerable Koala.

## Other listed species and communities – downstream impacts

The proponent has undertaken an assessment to identify the presence of EPBC Act listed threatened species and ecological communities, and their habitat, up to 40 km downstream of the proposed extraction point to Lake Dalrymple (Burdekin Dam) (Attachment A). This assessment involved the use of Queensland vegetation mapping and aerial imagery with some limited on-site habitat assessments in April 2019. Based on this assessment, the proponent considers that habitat for the Ornamental Snake, Squatter Pigeon (Southern), Southern Black-throated Finch, Koala, Waxy Cabbage Palm (Livistona lanuginosa), Bluegrass (Dicanthium setosum), and Brigalow TEC potentially occur downstream of the proposed extraction point.

The proponent has undertaken modelling to determine potential impacts of the annual extraction of up 12.5 GL from the Suttor River on downstream water users and environmental receptors, including MNES (Attachment A). The proponent concluded that MNES will not be consistently subject to a reduction in future flood inundation as a result of the water extraction and should there be any such impacts, they will be negligible and of short duration. As such, the proponent considers the licenced water take is unlikely to have any significant impact on downstream MNES.

Advice from the OWS notes the flood modelling approach was suitable but additional scenarios can always be run (Attachment C). However, the OWS advice states that changes to the flow regime of the Suttor River have the potential to impact on riparian vegetation that may provide habitat for EPBC Act listed threatened species and communities. Further, the OWS notes that Brigalow TEC, which provides suitable habitat for the Ornamental Snake, has been identified to be present downstream of the water extraction point. These potential impacts would be most likely to occur when flows are close to the pass flow trigger of 2,592 ML/day, which could reduce the volume and extent of downstream water availability (Attachment C).

Further, the Department notes public submissions, such as from 'Business Services of Coast and Country Inc', raised several issues with the proponent's modelling (<u>Attachment D</u>). These

are in addition to those raised by Geoscience Australia (addressed in the Ministerial comments section above) and include:

- a lack of assessment of modelled climate change scenarios (longer drought periods, reduction in localised rainfall events, increased number of days above average temperature and changes to seasonal rainfall events);
- a lack of assessment of the impact of water extraction on the Scartwater Aggregation when the Suttor River is at the cusp of both the Adani licenced water extraction threshold (2,592 ML/day) and the flow point of the Scartwater Aggregation to allow inundation;
- the current modelling does not provide suitable modelling and data outputs related to low flow periods of the Suttor River; and
- inadequate assessment of impacts on downstream MNES and their habitat due to inadequate surveys of MNES and their habitat, including of semi-permanent pools within the Suttor River and of the Scartwater Aggregation.

The public submissions also raise insufficiencies with the proponent's water assessment provided to the Queensland Government for the water licence process. The Department notes the assessment and allocation of water licences is regulated by the Queensland Government.

As such, on the basis of all the information available (including the ERT, the referral, the Wylie Tool and the SPRAT database, and the public comments), the Department considers there is a real chance or possibility the water extraction associated with the proposed water harvest infrastructure will significantly impact on the following:

- Brigalow (Acacia harpophylla dominant and co-dominant) threatened ecological community (Brigalow TEC) – Endangered
- Ornamental Snake (Denisonia maculata) Vulnerable
- Southern Black-throated Finch (Poephila cincta cincta) Endangered
- Squatter Pigeon (Southern) (Geophaps scripta scripta) Vulnerable
- Koala (*Phascolarctos cinereus*) (combined populations of Qld, NSW and the ACT) Vulnerable
- Waxy Cabbage Palm (Livistona lanuginosa) Vulnerable
- Bluegrass (Dicanthium setosum) Vulnerable

## Conclusion

For these reasons, the Department considers sections 18 and 18A are controlling provisions for the proposed action.

## PROTECTED MATTERS THAT ARE NOT CONTROLLING PROVISIONS:

A water resource, in relation to a large coal mining development or coal seam gas development (s24D and s24E)

A number of public submissions received on the referral (<u>Attachment D</u>) consider the proposed action should be assessed under the water trigger because it is designed to facilitate extraction of coal from the CCMP and, as such, should be treated as a 'large coal mining development' as defined under section 24D of the EPBC Act, or an action that 'involves' large coal mining development.

#### Legislation

Sections 24D and 24E of the EPBC Act apply to an action that 'involves' large coal mining development. The EPBC Act defines 'large coal mining development' as:

any coal mining activity that has, or is likely to have, a significant impact on water resources (including any impacts of associated salt production and/or salinity):

- (a) in its own right; or
- (b) when considered with other developments, whether past, present or reasonably foreseeable developments.

## Meaning of 'coal mining activity'

For an action to be a 'large coal mining development', the action must be a 'coal mining activity'. Neither 'coal mining activity', nor any of its constituent parts, is defined in the EPBC Act.

The Department notes the ordinary and natural meaning of 'mining' is 'the action, process or industry of extracting ores, etc., from mines' (*Macquarie Dictionary online*, defn 1). 'Coal mining' therefore refers to the process of extracting coal from a mine. The Department further notes that 'activity' commonly refers to 'state of action, doing' (*Macquarie Dictionary online*, defn 1).

Having regard to the ordinary meanings of 'coal mining' and 'activity', and the statutory context in which 'coal mining activity' is found, the Department considers that the phrase 'coal mining activity', in its statutory context, refers to an activity which forms part of the process of extracting coal from a mine.

## Meaning of 'involve'

Sections 24D and 24E apply to actions that 'involve' large coal mining development. The Department considers that 'involves', in this context, means that some part of the action must comprise a 'large coal mining development' as defined in the EPBC Act, but it does not need to wholly comprise 'large coal mining development'.

The proposed action is not a 'large coal mining development', nor does it involve 'large coal mining development'

The proposed action consists of the construction and operation of infrastructure that will supply an input (i.e. water) to a mining operation, being the CCMP. The water supplied to the operators of the CCMP will be used as part of the extractive process, such as cooling the cutting surfaces or mining equipment and dust suppression but also for other purposes, including equipment maintenance. However, the mining of coal from the CCMP forms part of a different action, which is being undertaken by a different proponent.

In the Department's view, while the proposed action will provide water that will be used in the extractive process, the NGWSWI project is being carried out as an activity distinct from the process of extracting coal from a mine. The extraction of coal does not form part of the proposed action. Consequently, the proposed action is not a coal mining activity, nor does it 'involve' coal mining activity.

For these reasons, the Department considers the proposed action is not a large coal mining development, nor does it involve large coal mining development and, therefore, that sections 24D and 24E are not controlling provisions for the proposed action. Given this, the possible impacts of the proposed action on a water resource are not relevant in this instance.

## Listed migratory species (s20 and s20A)

The Department notes several of the public submissions raised concerns that the proposed action has the potential to impact on listed migratory species, and their habitat (e.g. 'Business Services of Coast and Country Inc' and 'Environment Council of Central Queensland Inc.') (Attachment D). These concerns include:

- no assessment of in-stream permanent water holes, which provide refugium to migratory species, in the Belyando, Mistake Creek and Suttor River have been undertaken;
- many natural wetlands and water-related features, including Queensland 'High Ecological Significance' wetlands and the Scartwater Aggregation, are located downstream of the extraction point and provide habitat and food source for migratory species;
- the survey effort (both in duration and seasonality) downstream of the project site for migratory species, and their habitat is inadequate; and
- a number of migratory species were not assessed by the proponent as identified in its ERT, including the Australian Painted Snipe (Rostratula australis), Curlew Sandpiper (Calidris ferruginea), Fork-tailed Swift (Apus pacificus), Oriental Cuckoo (Cuculus optatus), Latham's Snipe (Gallinago hardwickii), Osprey (Pandion cristatus), and Yellow Wagtail (Motacilla flava).

Public submissions also raised potential impacts to the habitat of listed migratory species not identified in the Department's ERT, including the Satin Flycatcher (*Myiagra cyanoleuca*), White-throated Needletail (*Hirundapus caudacutus*), Barn Swallow (*Hirundo rustica*), Southern Giant Petrel (*Macronectes giganteus*) and Little Tern (*Sternula albifrons*).

As at 6 December 2019, the Department notes some of the identified species in the public submissions, including the Australian Painted Snipe, Great Egret (*Ardea modesta*), Cattle Egret (*Ardea ibis*) and Rainbow Bee-eater (*Merops ornatus*) are not listed as 'migratory' under the EPBC Act.

The public submission from the 'Business Services of Coast and Country Inc' also noted the proponent's water assessment provided to the Queensland Government for the water licence process did not assess impacts to migratory species (<u>Attachment D</u>). The Department notes the assessment and allocation of water licences is regulated by the Queensland Government.

The ERT indicates a total of 10 listed migratory species may occur within 50 km of the proposed action (<u>Attachment B</u>). The Fork-tailed Swift was observed on the project site in the 2019 survey, and the Gull-billed Tern (*Gelochelidon nilotica*) and White-throated Needletail have been observed in earlier surveys of the project site and broader area (<u>Attachment A</u>). The proponent also considers that the Latham's Snipe could potentially occur on site.

The Department notes that listed migratory species may use terrestrial habitat in and around the project site and downstream to the headwaters of the Burdekin Dam, including the Belyando River, riparian vegetation, wetlands and other water-related features. The Department further notes the Burdekin Dam is regulated under Queensland legislation, including the *Water Act 2000* (Qld) and the *Water Plan (Burdekin Basin) 2007* (Qld), and water is sourced from a catchment of approximately 130,000 km². The headwaters of the regulated Burdekin Dam is approximately 70 km downstream of the project site.

Impacts upstream of the Burdekin Dam

The proponent considers that there is little habitat suitable for migratory wetland bird species within, adjacent to, or near the project site, other than the existing Belyando Junction Dam. The referral notes the nearest wetland listed in the Directory of Important Wetlands of Australia is the

Scartwater Aggregation, approximately 50 km downstream of the project site. As discussed below, the nearest Ramsar listed wetland is approximately 244 km north of the project site.

The proponent also notes that MNES will not be consistently subject to a reduction in future flood inundation as a result of the water extraction and should there be any such impacts, they will be negligible and of short duration. Further, the modelling assessment concluded that water extraction will have an insignificant effect on the filling of the Scartwater Aggregation (Appendix H to Attachment A). The proponent also states that the licenced water take is unlikely to have any significant impact on downstream MNES (Attachment A).

Further, an application for the water licence in the Burdekin River catchment is assessed against the objectives of the *Burdekin Basin Resource Operations Plan 2009* (Qld) and the *Water Plan (Burdekin Basin) 2007* (Qld), relating to criteria for adequate environmental flows and water allocation for potable and agricultural purposes. The Department notes this assessment requires consideration of environmental receptors including, in this case, the Belyando River and Scartwater Aggregation (also known as the Scartwater Lagoon). The Department notes the proponent's modelling assessment concluded that the water extraction will have an insignificant effect on Scartwater Aggregation. The Department also notes that submissions raised concerns regarding the modelling and impacts on matters protected under Part 3 of the EPBC Act (see 'Listed threatened species and communities' section above).

In considering potential impacts of the proposed action on listed migratory species above Burdekin Dam, the Department notes the nature of the proposed action (Attachment A), the advice from the Wetlands Section which states that the closest Ramsar listed wetland is in a different catchment to the proposed action (Attachment C), the absence of significant sites (such as Ramsar listed wetlands), the use of a broad variety of habitats by listed migratory species (as specified in the SPRAT database) and the amount of habitat available outside and downstream of the project site.

In considering all of the information above, the Department is of the view that the proposed action will not lead to a substantial modification, destruction or isolation of an area of important habitat for a listed migratory species. For this reason the Department considers that a significant impact on a listed migratory species above Burdekin Dam is unlikely.

#### Impacts downstream of Burdekin Dam

The Department notes that the same reasons for an unlikely significant impact upstream of the Burdekin Dam also apply to impacts at and downstream of the Burdekin Dam. In addition, the Department notes that the Burdekin Dam regulates the water flows beneath the dam (i.e. the dam operators elect when and how much water is to be released from the dam). Therefore, it is unlikely that the proposed action will have a significant impact downstream of the Burdekin Dam on a listed migratory species given the regulated flows of water from the Burdekin Dam.

In considering all impacts to listed migratory species, the Department considers the proposed action is unlikely to:

- modify, destroy or isolate an area of important habitat for a listed migratory species; or
- seriously disrupt the lifecycle (breeding, feeding, migration or resting behaviour) of an ecologically significant proportion of the population of a migratory species.

Therefore, the Department considers the proposed action is unlikely to have a significant impact on a listed migratory species. For these reasons, the Department considers sections 20 and 20A are not controlling provisions for the proposed action.

## OTHER PROTECTED MATTERS THAT ARE NOT CONTROLLING PROVISIONS:

## Ramsar Wetlands (s16 & s17B)

The Department notes that a public submission received from '\$47F1 s47F1' considered that potential impacts on the Doongmabulla Springs could affect downstream Ramsar wetlands (<u>Attachment D</u>). The ERT did not identify any Ramsar listed wetland of international importance within, adjacent to or downstream of the project site (Attachment B).

The Department notes that the nearest Ramsar wetland is the Bowling Green Bay Ramsar site, located approximately 244 km north of the project site. The second nearest Ramsar site is the Shoalwater and Corio Bay Ramsar site, located approximately 370 km south-east of the project site. The Wetlands Section advice further notes the proposed action is not located in the catchment of either Ramsar site (Attachment C).

Based on the nature of the proposed action and its potential impacts, the location of the proposed action within a different catchment to a Ramsar site and the distance from the nearest Ramsar site, the Department considers the proposed action is unlikely to have a significant impact on the ecological character of a Ramsar wetland.

For these reasons, the Department considers that sections 16 and 17B are not controlling provisions for the proposed action.

## World Heritage properties (s12 & s15A)

The Department notes potential impacts on the values of a World Heritage property, in particular the Great Barrier Reef World Heritage Area (GBRWHA) were raised in public submissions (<u>Attachment D</u>). In particular, the public submissions raised potential impacts from greenhouse gas emissions and potential direct downstream impacts arising from the proposed action and as a result of the operation of the CCMP. In regards to potential impacts from greenhouse gas emissions and the CCMP, the Department has considered this issue in the 'Section 527E – Other Impacts' section above.

In regards to potential direct downstream impacts, the ERT did not identify any World Heritage properties located within or adjacent to the project site (Attachment B). The Department notes that the GBRWHA is located approximately 300 km downstream of the project site, where the Burdekin River discharges into the Great Barrier Reef. The Department considers an impact downstream of the Burdekin Dam as a result of the water extraction is unlikely due to the size of the Burdekin River catchment and the regulated flow of water from the Burdekin Dam. As such, the Department considers any downstream impact from the Burdekin Dam as a result of the proposed action is unlikely.

Based on the information contained in the referral, the nature and scale of the proposed action and its potential impacts, the presence of the regulated Burdekin Dam between the proposed action and the coast, and the downstream distance to the coast, the Department considers the proposed action is unlikely to have a significant impact on the world heritage values of a World Heritage property.

For these reasons, the Department considers that sections 12 and 15A are not controlling provisions for the proposed action.

## National Heritage places (s15B & s15C)

The Department notes potential impacts on the values of a National Heritage place, in particular the Great Barrier Reef were raised in public submissions (<u>Attachment D</u>). In particular, the public submissions raised potential impacts from greenhouse gas emissions and potential direct downstream impacts arising from the proposed action and as a result of the operation of the CCMP. In regards to potential impacts from greenhouse gas emissions and the CCMP, the Department has considered this issue in the 'Section 527E – Other Impacts' section above.

The ERT did not identify any National Heritage places located within or adjacent to the project site (Attachment B). The Department notes that the nearest National Heritage place is the Great Barrier Reef National Heritage Place which is located approximately 300 km downstream of the project site, where the Burdekin River discharges into the Great Barrier Reef. The Department considers an impact downstream of the Burdekin Dam as a result of the water extraction is unlikely due to the size of the Burdekin River catchment and the regulated flow of water from the Burdekin Dam. As such, the Department considers any downstream impact from the Burdekin Dam as a result of the proposed action is unlikely.

Based on the information contained in the referral, the nature and scale of the proposed action and its potential impacts, the presence of the regulated Burdekin Dam between the proposed action and the coast, and the downstream distance to the coast, the Department considers the proposed action is unlikely to have a significant impact on the national heritage values of a National Heritage place.

For these reasons, the Department considers that sections 15B and 15C are not controlling provisions for the proposed action.

## Commonwealth marine environment (s23 & s24A)

The proposed action does not occur in a Commonwealth marine area. The nearest Commonwealth marine area is approximately 310 km downstream of the project site, where the Burdekin River discharges at the coast.

The Department considers an impact downstream of the Burdekin Dam as a result of the water extraction is unlikely due to the size of the Burdekin River catchment and the regulated flow of water from the Burdekin Dam. As such, the Department considers any downstream impact from the Burdekin Dam as a result of the proposed action is unlikely.

Based on the information contained in the referral, the nature and scale of the proposed action and its potential impacts, the presence of the regulated Burdekin Dam between the proposed action and the coast, and the downstream distance to the coast, the Department considers the proposed action is unlikely to have a significant impact on the environment in a Commonwealth marine area.

For these reasons, the Department considers that sections 23 and 24A are not controlling provisions for the proposed action.

Commonwealth action (s28)	The referring party is not a Commonwealth agency. For this reason, the Department considers that section 28 is not a controlling provision for the proposed action.
Commonwealth land (s26 & s27A)	The proposed action is not being undertaken on Commonwealth land.  The nearest Commonwealth land is approximately 150 km north of the proposed action.
	Based on the information contained in the referral, the nature and scale of the proposed action and its potential impacts, and the distance to the nearest Commonwealth land, the Department considers the proposed action is unlikely to have a significant Impact on the environment on Commonwealth land.  For these reasons, the Department considers that sections 26 and 27A are not controlling provisions for the proposed action.
Nuclear action (s21 & s22A)	The proposed action does not meet the definition of a nuclear action as defined in the EPBC Act. For this reason, the Department considers that sections 21 and 22A are not controlling provisions for the proposed action.
Great Barrier Reef Marine Park (s24B & s24C)	The Department notes potential impacts on the Great Barrier Reef were raised in public submissions (Attachment D). In particular, the public submissions raised potential impacts from greenhouse gas emissions and potential direct downstream impacts arising from the proposed action and as a result of the operation of the CCMP. In regards to potential impacts from greenhouse gas emissions and the CCMP, the Department has considered this issue in the 'Section 527E – Other Impacts' section above.
	The proposed action is not being undertaken in the Great Barrier Reef Marine Park. Further, the proposed action is located within the Burdekin River catchment, approximately 300 km upstream of where the Burdekin River discharges into the Great Barrier Reef. The Department considers an impact downstream of the Burdekin Dam as a result of the water extraction is unlikely due to the size of the Burdekin River catchment and the regulated flow of water from the Burdekin Dam. As such, the Department considers any downstream impact from the Burdekin Dam as a result of the proposed action is unlikely.
	Based on the information contained in the referral, the nature and scale of the proposed action and its potential impacts, the presence of the regulated Burdekin Dam between the proposed action and the coast, and the downstream distance to the coast, the Department considers the proposed action is unlikely to have a significant impact on the environment in the Great Barrier Reef Marine Park.  For these reasons, the Department considers that sections 24B and 24C
Commonwealth	are not controlling provisions for the proposed action.  The proposed action is not being undertaken outside the Australian
Heritage places overseas (s27B & s27C)	jurisdiction as defined in the EPBC Act. For this reason, the Department considers that sections 27B and 27C are not controlling provisions for the proposed action.

## ASSESSMENT APPROACH:

If you agree that the action is a controlled action, you must also decide on the approach for assessment in accordance with section 87 of the EPBC Act. The Department recommends that the proposed action be assessed by preliminary documentation (requiring further information).

The matters for consideration in making a decision on assessment approach are outlined in section 87(3) of the EPBC Act and summarised in the table below. Under section 87(5) of the EPBC Act, you may decide on an assessment on preliminary documentation only if you are satisfied, having considered the matters in section 87(3), that the approach will enable an informed decision to be made about whether or not to approve the taking of the proposed action for the purposes of each controlling provision.

In this case, the Department considers the number and complexity of potential impacts are low and locally confined. This view is based on an analysis of the location of MNES, the number of matters likely to be impacted, the scale of the proposed action, and potential impacts from the proposed action, as outlined at <u>Attachment A</u> and summarised above.

The Department notes information about the potential impacts of the proposed action has been provided through the referral. While additional information and analysis is required to assess the potential impacts of the proposed action, such information could be obtained by a request under section 95A of the EPBC Act.

As such, the Department considers assessment by preliminary documentation is an appropriate method of assessment for the proposed action. It will provide sufficient information about the potential impacts of the proposed action, and proposed mitigation and management measures, to enable an informed decision to be made about whether to approve the proposed action for the purposes of each controlling provision.

For these reasons, the Department considers the relevant impacts of the proposed action should be assessed by assessment on preliminary documentation. The Department recommends seeking additional information to inform the assessment. An additional information request will be provided to the proponent following payment of the Stage 1 fee invoice.

In making your decision, you must consider the matters summarised in the table below:

Matter to be considered	Comment
Information relating to the action given to the Minister in the referral of the proposal to take the action – s87(3)(a)	The referral is at Attachment A.
Any other information about the impacts of the action considered relevant (including information in a report on the impacts of the action 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) – s87(3)(b)	Other relevant information is discussed in the Department's advice on relevant impacts of the proposed action contained in this referral decision brief. Relevant information is also contained in the OWS advice and Wetlands Section advice (Attachment C), comments from Commonwealth Ministers and Geoscience Australia (Attachment E) and the public comments (Attachment D).
Any comments received from a State or Territory minister relevant	There was one comment received from the Queensland Department of Environment and Science in response to an invitation under s74(2) of the EPBC Act for the

to deciding the appropriate assessment approach – s87(3)(c)	referral (Attachment E). Assessment under the bilateral agreement is not available for the proposed action.
Guidelines (if any) published under s87(6), and matters (if any) prescribed in the regulations – s87(3)(d) and (e)	No guidelines have been made and no regulations have been prescribed.
Minister may decide on an Accredited Assessment if certain requirements are met – s87(4)	Assessment by an accredited assessment process is not recommended.

## OTHER MATTERS FOR DECISION-MAKING:

## Significant impact guidelines

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), Significant impact guidelines for the endangered black-throated finch (southern) (Poephila cincta cincta) (2009) 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 the proposed action. Adequate information is available for decision-making for the proposed action.

## Precautionary principle

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.

As explained above, the Department considers there is a real chance or possibility that the proposed action will have a significant impact on a number of listed threatened species and one ecological community.

In relation to the other relevant MNES, the Department considers there is sufficient scientific information to conclude that the proposed action does not present a threat of serious or irreversible environmental damage to those matters.

In light of the above, the Department notes that the application of the precautionary principle does not affect the recommended decision that the proposed action is a controlled action with section 18 and section 18A as controlling provisions.

#### **Bioregional Plans**

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. There is no bioregional plan that is relevant to your decision.

#### Management Plans for Commonwealth Reserves

In accordance with section 362(2) of the EPBC Act, the Commonwealth or a Commonwealth agency must not perform its functions or exercise its powers in relation to a Commonwealth reserve inconsistently with a management plan that is in operation for the reserve. There is no Commonwealth reserve management plan that is relevant to your decision.

## Cost Recovery

The fee schedule (with justifications) for your consideration is at <u>Attachment F</u>. The fee schedule (without justifications) at <u>Attachment G</u> 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.

Declan O'Connor-Cox Acting Assistant Secretary

Environmental Approvals Division

Ph: (02) 6274 s22

## **ATTACHMENTS**

A: Referral documentation

A1: Correspondence between the Department and Adani (dated 4 September 2019)

B: Environmental Reporting Tool (ERT) Reports (dated 2 December 2019)

C: Line area advice (Office of Water Science and Wetlands Section)

D: Public comments (hard copy)

D1: Invitation to provide public comment (dated 16 September 2019)

E: Ministerial comments

F: Fee schedule (with justifications)

G: Fee schedule (without justifications)

H: Decision notice - FOR SIGNATURE

I: Letters to the proponent and other relevant parties - FOR SIGNATURE

J: Environment Protection and Biodiversity Conservation Act 1999 (Cth) Policy Statement: Staged Developments—Split referrals: Section 74A of the EPBC Act

#### s22

From: EPBC Referrals

Sent: Wednesday, 20 November 2019 2:49 PM

To: s2

Subject: FW: 2019/8508 North Galilee Water Scheme Water Infrastructure Project, north-west of

Clermont, Qld - draft resubmission request [SEC=OFFICIAL]

Importance: High

From: s47F @cdmsmith.com]

Sent: Wednesday, 4 September 2019 4:16 PM

To: EPBC Referrals

Cc: Hamish Manzi ; Andrew McNee ; s22 ; s47F

Subject: FW: 2019/8508 North Galilee Water Scheme Water Infrastructure Project, north-west of Clermont, Qld -

draft resubmission request [SEC=OFFICIAL]

Importance: High

Hi,

Further to your email requesting additional information and updates to referral 2019/8508, amendments have been made to the submission and this has been formally relodged in the portal.

Below is a response table stating how each question/issue has been addressed. Please note that CDM Smith was unable to remove the original versions of the documents that were amended and updated. As such, new versions were uploaded with the ending '\_updated'. Could you please ensure these are the versions utilised in the referral.

A signed version of the signatures and declaration section in the resubmitted referral will be forward once the document is received from the Department.

Kind regards

s47F

## **Department Question / Issue**

#### 1.2:

Paragraph 2 discusses the components of the action, with the 'Stage B pipeline' wholly located within the footprint of the Carmichael Coal Project rail corridor.

The Department requests that you clarify and confirm that the scope of this referral is limited to the construction and operation of the Stage A pipeline and the Water Infrastructure. Please also provide further information as to whether the referred action is a standalone action. Please also note that any other actions you plan to undertake that are not part of this referral must have approval, or that you have documentation to support your self-assessment that you are not required to refer that component.

Within paragraph 3, the Department would prefer that the reference to (refer Section 1.9) be moved to show NGWS EPBC Act Environmental Assessment (refer Section 1.9) to ensure that the reader understands they are looking for an attachment to the referral and not to section 1.9 within the referral itself.

#### Response

The referral is limited to the construction and operation of the Stage A pipeline and the Water Infrastructure. Minor text changes made to Section 1.2.

Additional text has been added upfront into Section 1.1 stating the following:

The NGWS Project is related to another action (proposed by Adani Mining Pty Limited) in the area, being the Carmichael Coal Mine and Rail Project (CCP) (EPBC 2010/5736). The NGWS will provide a secure and reliable water supply under a commercial agreement to the operators of the CCP. Nevertheless, The Action is separate and distinct from the CCP action. In addition to having different proponents, The Action will require:

- A separate financial investment decision; and
- Separate applications for State and local government approvals.

Change to the location of the Section 1.9 reference made.

Regarding inclusion of the water take, the following text has been added into the end of Section 1.2:

It is not expected that any MNES will be consistently subject to a reduction in future flood inundation from the NGWS water offtake, and as such any impacts, should there be any, will be negligible and of short duration. As such there is not considered to be any significant residual impact on MNES

Paragraphs 7 and 8 discuss the water take that will be facilitated by the action and the water licence granted by Queensland DNRME. Reference is made: whilst the extraction of water does not form a component of The Action as referred, this analysis has been included to inform an understanding and assessment of potential impacts to MNES fauna and flora consequentially resulting from the licensed water extraction.	from the water take. Therefore, this component has been excluded from the referred action (see Section 4 of the attached Environmental Assessment report).
Please note that if the water take facilitated by this project is likely to have impacts to protected matters, we would recommend that you include your assessment of those impacts in the referral.	
1.6: The response states Total overall work (or Referral) area = 623.63 ha. Please confirm that this is for only the action as clarified – the Water Infrastructure and Stage A Pipeline. If this area includes the Stage B pipeline not subject to this referral, please update this figure accordingly. Given that your referral discusses earlier approvals within the scope of the action, it may also be more clear to state Total referral area – Water Infrastructure and Stage A	Section 1.6 has been updated to clarify:  Total referral area – Water Infrastructure and Stage A pipeline = 623.63  ha. The area does not include Stage B.
pipeline = xxxx ha.  1.7.2: The present response states Refer to table in Section 1.5. This is an invalid response. Please provide a descriptive response such as multiple lots within the Galilee Basin area or across XX ha/over XX km between X and X.	Updated to state: Multiple lots within the Galilee Basin area
1.11: You have provided a start date of 10/2019 and an end date of 10/2020. This is inconsistent with the description provided in the scope: to construct and operate the water infrastructure and pipeline. Please amend the estimated dates to reflect the scope of the action to be undertaken.	To remove any confusion or inconsistencies the dates in Section 1.11 has been amended to align with the operational life of the project. As per below:  Construction of the Action will commence last quarter 2019 / first quarter 2020. The Action will service the CCP and as such the infrastructure life is up to 60 years, however, the infrastructure may be repurposed for other uses post this period.  Note – while The Action is therefore anticipated to operate for 60 years (2079), the dropdown option in the referral portal only allows up to 2069.
1.13: A table has been inserted within the response to this question and it has not translated well within the form. Please remove the table and present the information in a manner that is made clear for the reader.	Therefore, the date of 2069 has been entered.  Updated. Table removed and inserted as text.
<b>2.4.1:</b> Within the impacts to the Ornamental Snake, you have referenced the <i>BBR Guidelines</i> . Please fully expand this acronym the first time it is used within the document.	Updated.
3.7: The final sentence states Further details specifically on flora and fauna current conditions are presented in Section 3.1. For clarity, please add the name of the relevant attachment to this sentence.	Text added to clarify that it refers to Section 3.1 of the referral (not referencing an attachment)
<b>3.9:</b> As per the comment made above regarding the table within 1.13, the table within 3.9 is also problematic. Please amend to make the information clear for the reader.	The table previously included in 3.9 has been removed and the information presented within has been converted to text.
When you have answered <b>yes</b> to the question of significance at 2.4.2, and a response of <b>yes</b> is recorded at 5.1.4 there is generally no requirement to provide a response to 5.2, as you have already indicated that the action may have significant impacts to a protected matter. However, you have argued within 5.2 that impacts to the Ornamental Snake are not significant, but have then included that 'an OMP will be established should these	The consideration of whether the impact is 'significant' in Section 2.4.2 has been amended to align with the impact assessment outcome (i.e. not considered a significant impact).  The conclusion of likelihood of significant impact on threatened species in Section 5.1.4 has been changed to align with the impact assessment outcomes (i.e. not likely to constitute a significant impact).  The reasons for considering the impact not to be significant in Section 5.2
impacts be considered significant under the EPBC Act.	have been retain. Similarly, the discussion of impact assessment results in

It is acceptable to the Department that you state your belief that the action is not a controlled action, however the information provided at 2.4.1, 2.4.2, 5.1.4 and 5.2 <b>must</b> be in agreement with each other – i.e., not be contradictory in any way.	Section 2.4.1 has been retained as the basis for considering the project not to have a significant impact.
At present, we are not in a position to be able to validate the referral application due to the inconsistencies contained within. Please amend the information within the referral application to rectify the noted contradictions.	
6.4.1: The present response states: This referral will be formally withdrawn. The Department requests that you amend the language to indicate that the 2018/8191 referral has formally been withdrawn, noting that this referral will not be published for comment until after the withdrawal notice for 2019/8191 has been published to our website.	Amended
7.1: Please list the primary reference sources used to prepare your referral application within this table, after which you may direct the reader to the full list of reference sources within your attachments. Please note that both the reliabilities and uncertainties should be succinctly addressed within the table, with uncertainties being listed as none, none known or known (with a relevant descriptor) as appropriate to the source. Reliability could be simply addressed using one of the descriptors already provided within your present response, appropriate to each source.	This has been updated so that only those sources directly referenced in the referral have been uploaded to the portal.
9.2.4: You have provided the contact email:  reception.australia@adani.com.au [Change to reception.bne@adani.com.au ]  The Department requests that you provide by email, other appropriate contact methods – and persons if relevant – so that the Department can communicate with you in a timely manner whenever required. The alternate contacts are not for publication with the referral, but to facilitate ease of contact for the assessment of your project.	HamishManzi Head - Environment & Sustainability  E s47F P Offices47F  As per the request, these details are only for internal DotEE use to enable direct communication and not to be distributed externally as part of the referral public notification.
Appendix_A_Approvals.pdf	Appendix A has been amended to remove references to lots, property
State_Approvals.pdf Site details within these attachments mention \$47F \$47F and \$47F their street address and lot on plan. Irrespective of whether or not these documents are already publicly available under another legislation, the Department requests that you redact or remove this personal information from the documents to preserve the privacy of those individuals as your project undergoes EPBC processes.	addresses and owners. These have been replaced with the statement:
Appendix_J_CEMP.pdf	Appendix J has been amended to correct error source reference.
Page 1-1, section 1 of the CEMP contains the	
line 'error – reference source not found'.	
If the information intended in this section	
forms part of the evidence to support	
statements made within the referral document, please correct this error and upload the	

Kind regards

amended attachment.

s47F
Senior Environmental Consultant
CDM Smith

m: +61s47F | s47F @cdmsmith.com

From: EPBC Referrals [mailto:EPBC.Referrals@environment.gov.au]

Sent: Thursday, 22 August 2019 12:56 PM

To: s47F @cdmsmith.com' s47F @cdmsmith.com>; s47F @cdmsmith.com' s47F @cdmsmith.com>
Cc: EPBC Referrals@environment.gov.au>; Hamish Manzi s47F @adani.com.au>; Andrew

McNee <<u>Andrew.McNee@environment.gov.au</u>>; s22 <u>@environment.gov.au</u>>; s22

s22 @environment.gov.au>

Subject: FW: 2019/8508 North Galilee Water Scheme Water Infrastructure Project, north-west of Clermont, Qld -

draft resubmission request [SEC=OFFICIAL]

Good afternoon s47F and s47F

The Department has reviewed your application, and unfortunately it does not meet the requirements to be considered a valid referral under the EPBC Act. To be considered valid, the Department requires additional information on the proposed action. This information is outlined below. To assist you, I have grouped the further information required by Section.

Please note that you will need to provide this information by re-submitting the application through Online Services. The Department is unable to accept changes/revisions to your submission outside of this system. I have attached a copy of the current application for your reference.

## Section 1 – Summary of your Proposed Action

#### 1.2:

Paragraph 2 discusses the components of the action, with the 'Stage B pipeline' wholly located within the footprint of the Carmichael Coal Project rail corridor.

The Department requests that you clarify and confirm that the scope of this referral is limited to the construction and operation of the Stage A pipeline and the Water Infrastructure. Please also provide further information as to whether the referred action is a standalone action. Please also note that any other actions you plan to undertake that are not part of this referral must have approval, or that you have documentation to support your self-assessment that you are not required to refer that component.

Within paragraph 3, the Department would prefer that the reference to (*refer Section 1.9*) be moved to show *NGWS EPBC Act Environmental Assessment (refer Section 1.9*) to ensure that the reader understands they are looking for an attachment to the referral and not to section 1.9 within the referral itself.

Paragraphs 7 and 8 discuss the water take that will be facilitated by the action and the water licence granted by Queensland DNRME. Reference is made: whilst the extraction of water does not form a component of The Action as referred, this analysis has been included to inform an understanding and assessment of potential impacts to MNES fauna and flora consequentially resulting from the licensed water extraction.

Please note that if the water take facilitated by this project is likely to have impacts to protected matters, we would recommend that you include your assessment of those impacts in the referral.

#### 1.6:

The response states Total overall work (or Referral) area = 623.63 ha. Please confirm that this is for only the action as clarified – the Water Infrastructure and Stage A Pipeline. If this area includes the Stage B pipeline not subject to this referral, please update this figure accordingly.

Given that your referral discusses earlier approvals within the scope of the action, it may also be more clear to state Total referral area – Water Infrastructure and Stage A pipeline = xxxx ha. **1.7.2:** The present response states Refer to table in Section 1.5. This is an invalid response. Please provide a descriptive response such as *multiple lots within the Galilee Basin area* **or** *across XX ha/over XX km between X and X.* 

#### 1.11:

You have provided a start date of 10/2019 and an end date of 10/2020. This is inconsistent with the description provided in the scope: to construct and operate the water infrastructure and pipeline. Please amend the estimated dates to reflect the scope of the action to be undertaken.

#### 1.13:

A table has been inserted within the response to this question and it has not translated well within the form. Please remove the table and present the information in a manner that is made clear for the reader.

## <u>Section 2 – Matters of National Environmental Significance</u>

#### 2.4.1:

Within the impacts to the Ornamental Snake, you have referenced the *BBR Guidelines*. Please fully expand this acronym the first time it is used within the document.

## <u>Section 3 – Description of the Project Area</u>

#### 3.7:

The final sentence states Further details specifically on flora and fauna current conditions are presented in Section 3.1. For clarity, please add the name of the relevant attachment to this sentence.

#### 3.9:

As per the comment made above regarding the table within 1.13, the table within 3.9 is also problematic. Please amend to make the information clear for the reader.

## <u>Section 5 – Conclusion on the likelihood of significant impacts</u>

#### 5.2:

When you have answered **yes** to the question of significance at 2.4.2, and a response of **yes** is recorded at 5.1.4 there is generally no requirement to provide a response to 5.2, as you have already indicated that the action may have significant impacts to a protected matter. However, you have argued within 5.2 that impacts to the Ornamental Snake are not significant, but have then included that 'an OMP will be established should these impacts be considered significant under the EPBC Act.

It is acceptable to the Department that you state your belief that the action is not a controlled action, however the information provided at 2.4.1, 2.4.2, 5.1.4 and 5.2 **must** be in agreement with each other – i.e., not be contradictory in any way.

At present, we are not in a position to be able to validate the referral application due to the inconsistencies contained within. Please amend the information within the referral application to rectify the noted contradictions.

## Section 6 – Environmental Record of the person proposing to take the action

#### 6.4.1:

The present response states: ... This referral <u>will be</u> formally withdrawn. The Department requests that you amend the language to indicate that the 2018/8191 referral **has formally been withdrawn**, noting that this referral will not be published for comment until after the withdrawal notice for 2019/8191 has been published to our website.

## Section 7 – Information sources

#### 7.1:

Please list the primary reference sources used to prepare your referral application within this table, after which you may direct the reader to the full list of reference sources within your attachments.

Please note that both the reliabilities and uncertainties should be succinctly addressed within the table, with uncertainties being listed as *none*, *none known* or *known* (with a relevant descriptor) as appropriate to the source. Reliability could be simply addressed using one of the descriptors already provided within your present response, appropriate to each source.

## <u>Section 9 – Contacts, signatures and declarations</u>

#### 9.2.4:

You have provided the contact email: reception.australia@adani.com.au

The Department requests that you provide by email, other appropriate contact methods – and persons if relevant – so that the Department can communicate with you in a timely manner whenever required. The alternate contacts are not for publication with the referral, but to facilitate ease of contact for the assessment of your project.

Person proposing the action – Declaratior	Person
---	--------

The Department notes that this declaration has not yet be declaration:	en completed. Hamish Man	zi must complete the following
I,, declare that to	o the best of my knowledge	the information I have given
on, or attached to the EPBC Act Referral is complete, current information is a serious offence. I declare that I am not take person or entity.	nt and correct. I understand	that giving false or misleading
Signature: Date:		
Note that Hamish is not required to complete the second publication subsequent <i>Proposed designated proponent – Declaration</i>		e has correctly completed the
From the resubmitted referral, please print the page conta have Hamish complete it, then scan and send to the Refer		the action – Declaration and
<u>Attachments</u>		
Appendix_A_Approvals.pdf		
State_Approvals.pdf		
Site details within these attachments mention s47F	and s47F	, their street address

#### Appendix\_J\_CEMP.pdf

Page 1-1, section 1 of the CEMP contains the line 'error – reference source not found'.

preserve the privacy of those individuals as your project undergoes EPBC processes.

If the information intended in this section forms part of the evidence to support statements made within the referral document, please correct this error and upload the amended attachment.

and lot on plan. Irrespective of whether or not these documents are already publicly available under another legislation, the Department requests that you redact or remove this personal information from the documents to

Noting the public interest in this project, it may be prudent to amend this error irrespective of its significance to the referral.

## <u>Other</u>

#### **Payment of Referral Fee:**

The Department notes that this project is subject to cost recovery and that the referral fee has not yet been paid. We are unable to further progress your application until this payment has been made.

## **Next steps**

Upon resubmission, the Department will review the information provided to ensure it meets the requirements for a valid referral. Once complete, the referral will be published online and made available for public comment and assessment by the Department. You will be notified when the referral is ready for publication, and be advised on the next steps in the process.

Please do not hesitate to contact Referrals Gateway via email or on 02 6274 2496 if you have any questions.

### Kind regards

Referrals Gateway | Assessments and Governance Branch Department of the Environment and Energy GPO Box 787, CANBERRA ACT 2601

Email: EPBC.Referrals@environment.gov.au | Web: www.environment.gov.au | Phone: 02 6274 2496

The Department acknowledges the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present



# **EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

2019/8508 NGWSWI Project, Stage A pipeline component - 50 km buffer

Report created: 02/12/19 15:56:25

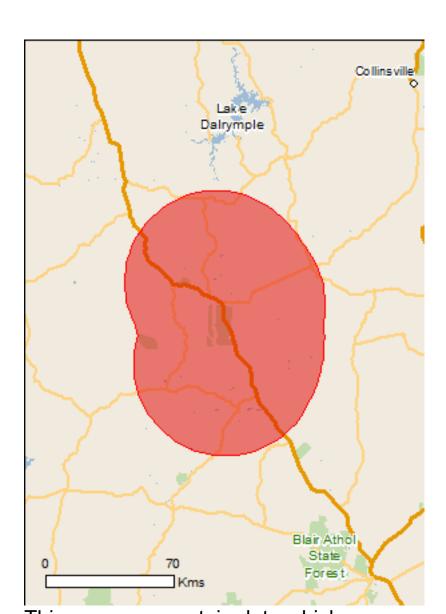
**Summary** 

**Details** 

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

**Caveat** 

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA Australia

Limited

# Summary

# Matters of National Environment Significance

World Heritage Properties:	None
National Heritage Places:	None
Ramsar Wetlands:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Threatened Ecological Communities:	2
Threatened Species:	20
Migratory Species:	10

# Other Matters Protected by the EPBC Act

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
<u>Listed Marine Species:</u>	16
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks	None

## Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	None
Invasive Species:	21
Nationally Important Wetlands:	2
EPBC Act Referrals:	11
Key Ecological Features (Marine)	None

# **Details**

### Matters of National Environmental Significance

Threatened Ecological Communities

Threatened Ecological Communities		[ Resource Information ]
For threatened ecological communities where the distriplans, State vegetation maps, remote sensing imagery community distributions are less well known, existing vegetation produce indicative distribution maps.	and other sources. Where	threatened ecological
Name	Status	Type of Presence
Brigalow (Acacia harpophylla dominant and co-	Endangered	Community known to occur
dominant) Poplar Box Grassy Woodland on Alluvial Plains	Endangered	within area Community likely to occur within area
Threatened Species		[ Resource Information ]
Name	Status	Type of Presence
BIRDS		Type of Freedines
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus		
Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
Geophaps scripta scripta		
Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat known to occur within area
Grantiella picta		
Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area
Neochmia ruficauda ruficauda		
Star Finch (eastern), Star Finch (southern) [26027]	Endangered	Species or species habitat likely to occur within area
Poephila cincta cincta		
Southern Black-throated Finch [64447]	Endangered	Species or species habitat likely to occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Tyto novaehollandiae kimberli		
Masked Owl (northern) [26048]	Vulnerable	Species or species habitat may occur within area
MAMMALS		
Dasyurus hallucatus		
Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat known to occur within area
Macroderma gigas		
Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area
Phascolarctos cinereus (combined populations of Qld,	NSW and the ACT)	
Koala (combined populations of Queensland, New	Vulnerable	Species or species habitat
South Wales and the Australian Capital Territory) [85104] PLANTS		may occur within area
Dichanthium queenslandicum		
King Blue-grass [5481]	Endangered	Species or species habitat may occur within area
<u>Dichanthium setosum</u>		
bluegrass [14159]	Vulnerable	Species or species habitat likely to occur

[ Resource Information ]

Name	Status	Type of Presence
		within area
<u>Livistona lanuginosa</u> Waxy Cabbage Palm [64581]	Vulnerable	Species or species habitat may occur within area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area
REPTILES		
Denisonia maculata		
Ornamental Snake [1193]	Vulnerable	Species or species habitat likely to occur within area
Egernia rugosa Yakka Skink [1420]	Vulnerable	Species or species habitat likely to occur within area
<u>Furina dunmalli</u>		
Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area
<u>Lerista allanae</u> Allan's Lerista, Retro Slider [1378]	Endangered	Species or species habitat may occur within area
Lerista vittata  Mount Cooper Striped Skink, Mount Cooper Striped Lerista [1308]	Vulnerable	Species or species habitat may occur within area
Migratory Species	(I EDDO A ( TI (	[ Resource Information ]
* Species is listed under a different scientific name on Name	the EPBC Act - Threatened Threatened	Type of Presence
Migratory Marine Birds	Thiodioned	Type of Freedings
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat likely to occur within area
Motacilla flava		
Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area

### Other Matters Protected by the EPBC Act

Listed Marine Species  Species is listed under a different scientific name on the EPBC Act - Threatened Species list. Name  Threatened Birds  Common Sandpiper [59309]  Actius hypoleucos  Common Sandpiper [59309]  Anseranas semipalmata Magpie Goose [978]  Anseranas semipalmata Magpie Goose [978]  Apus pacificus  Fork-tailed Swift [678]  Fork-tailed Swift [678]  Fork-tailed Swift [678]  Species or species habitat may occur within area  Ardea aba  Great Egret, White Egret [59541]  Ardea ibis  Cattle Egret [59542]  Cattle Egret [5954]  Cattle Egret	Other Matters Protected by the EPBC Act		
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Extra Information	
State and Territory Reserves	[ Resource Information ]
Name Blackwood	State QLD
Nairana	QLD
Wilandspey	QLD
Invasive Species	[ Resource Information
Weeds reported here are the 20 species of national sign that are considered by the States and Territories to pos	nificance (WoNS), along with other introduced plants e a particularly significant threat to biodiversity. The t, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from
Name	Status Type of Presence
Birds Columba livia	
Rock Pigeon, Rock Dove, Domestic Pigeon [803]	Species or species habitat likely to occur within area
Passer domesticus	
House Sparrow [405]	Species or species habitat likely to occur within area
Frogs Rhinella marina	
Cane Toad [83218]	Species or species habitat known to occur within area
Mammals	
Bos taurus  Demostic Cettle [16]	Charles ar angeles habitat
Domestic Cattle [16]	Species or species habitat likely to occur within area
Canis lupus familiaris	
Domestic Dog [82654]	Species or species habitat likely to occur within area
Equus caballus	
Horse [5]	Species or species habitat likely to occur within area
Felis catus	
Cat, House Cat, Domestic Cat [19]	Species or species habitat likely to occur within area
Lepus capensis	
Brown Hare [127]	Species or species habitat likely to occur within area
Mus musculus	Ou a sia a an an a sia a la abitat
House Mouse [120]	Species or species habitat likely to occur within area
Oryctolagus cuniculus	
Rabbit, European Rabbit [128]	Species or species habitat likely to occur within area
Rattus rattus	
Black Rat, Ship Rat [84]	Species or species habitat likely to occur within area
Sus scrofa	
Pig [6]	Species or species habitat likely to occur within area
Vulpes vulpes  Ped Foy Foy [19]	Ongolog an angele 1 110 (
Red Fox, Fox [18]	Species or species habitat likely to occur within area
Plants	
Acacia nilotica subsp. indica  Driedy Acacia (6106)	Ongoleo an en este de 1919
Prickly Acacia [6196]	Species or species habitat may occur within area

### Cryptostegia grandiflora

Rubber Vine, Rubbervine, India Rubber Vine, India
Rubbervine, Palay Rubbervine, Purple Allamanda

[18913]

Species or species habitat likely to occur within area

Hymenachne amplexicaulis

Hymenachne, Olive Hymenachne, Water Stargrass,

Species or species

Name	Status	Type of Presence
West Indian Grass, West Indian Marsh Grass [31754]		habitat likely to occur within area
Jatropha gossypifolia		
Cotton-leaved Physic-Nut, Bellyache Bush, Cotton-lea	f	Species or species habitat
Physic Nut, Cotton-leaf Jatropha, Black Physic Nut		likely to occur within area
[7507]		
<u>Lantana camara</u>		
Lantana, Common Lantana, Kamara Lantana, Large-		Species or species habitat
leaf Lantana, Pink Flowered Lantana, Red Flowered		likely to occur within area
Lantana, Red-Flowered Sage, White Sage, Wild Sage		
[10892]		
Parkinsonia aculeata		
Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse		Species or species habitat
Bean [12301]		likely to occur within area
Parthonium hyetorophorus		
Parthenium hysterophorus		
Parthenium Weed, Bitter Weed, Carrot Grass, False		Species or species habitat
Ragweed [19566]		likely to occur within area
Vachellia nilotica		
V donoma modod		

Nationally Important Wetlands	[ Resource Information ]
Name	State
Bingeringo Aggregation	QLD
Scartwater Aggregation	QLD

Species or species habitat likely to occur within area

Prickly Acacia, Blackthorn, Prickly Mimosa, Black

Piquant, Babul [84351]

### EPBC Act Referrals [Resource Information]

Further details about the referral or advice - including its current status if still active - are available in its PINK report; click on the title.

report; click on the title.			
Referral			
Title	Reference	Referral Outcome	Assessment Status
Galilee Coal Project including development of coal mine, 495km railway, port and	2008/4366	ACU	Clearly Unacceptable
Alpha Coal Project - Mine and Rail  Development	2008/4648	CA	Approval Decision Made
Establishment of Galilee Coal Mine and Associated Infrastructure	2009/4737	CA	Approval Decision Made
Carmichael Coal Mine and Rail Project	2010/5736	CA	Approval Decision Made
Central Queensland Integrated Rail Project	2012/6322	CA	Guidelines Finalised
Galilee Infrastructure Corridor Project	2012/6489	CA	Guidelines Finalised
North Galilee Basin Rail Project, Qld	2013/6885	CA	Approval Decision Made
Cooper to Abbot Point liquid natural gas (LNG) facility, Capling Project, QLD	2014/7175	CA	S89 - Awaiting Information
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	NCA	Referral Decision Made
Alpha North Coal Mine Project, Galilee Basin Qld	2018/8189	CA	Assessment Method Determined
North Galilee Water Scheme, 160km northwest of Clermont, Qld	2018/8191		Withdrawn

### Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- -Office of Environment and Heritage, New South Wales
- -Department of Environment and Primary Industries, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment, Water and Natural Resources, South Australia
- -Department of Land and Resource Management, Northern Territory
- -Department of Environment and Heritage Protection, Queensland
- -Department of Parks and Wildlife, Western Australia
- -Environment and Planning Directorate, ACT
- -Birdlife Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -South Australian Museum
- -Queensland Museum
- -Online Zoological Collections of Australian Museums
- -Queensland Herbarium
- -National Herbarium of NSW
- -Royal Botanic Gardens and National Herbarium of Victoria
- -Tasmanian Herbarium
- -State Herbarium of South Australia
- -Northern Territory Herbarium
- -Western Australian Herbarium
- -Australian National Herbarium, Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- -Forestry Corporation of NSW
- -Australian Tropical Herbarium, Cairns
- -eBird Australia
- -Australian Government Australian Antarctic Data Centre
- -Museum and Art Gallery of the Northern Territory
- -Australian Government National Environmental Science Program
- -Australian Institute of Marine Science
- -Reef Life Survey Australia
- -American Museum of Natural History
- -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
- -Tasmanian Museum and Art Gallery, Hobart, Tasmania
- -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

# **EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

2019/8508 NGWSWI Project, Water Infrastructure component - 50 km buffer

Report created: 02/12/19 15:55:40

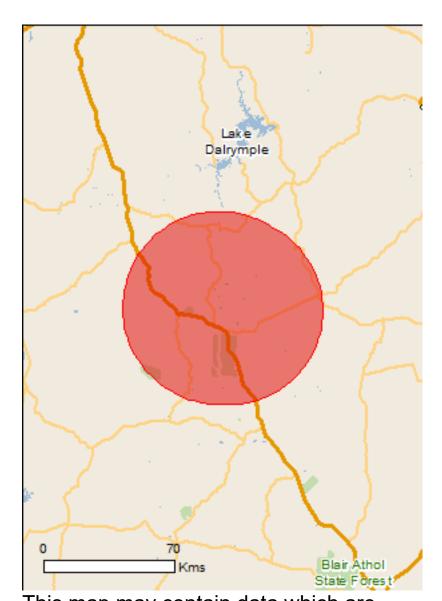
**Summary** 

**Details** 

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

**Caveat** 

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA Australia

Limited

# Summary

## Matters of National Environment Significance

World Heritage Properties:	None
National Heritage Places:	None
Ramsar Wetlands:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Threatened Ecological Communities:	2
Threatened Species:	19
Migratory Species:	10

# Other Matters Protected by the EPBC Act

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	16
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks	None

### Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	None
Invasive Species:	21
Nationally Important Wetlands:	2
EPBC Act Referrals:	9
Key Ecological Features (Marine)	None

# **Details**

### Matters of National Environmental Significance

Threatened Ecological Communities

Threatened Ecological Communities		[ Resource Information ]
For threatened ecological communities where the distriplans, State vegetation maps, remote sensing imagery community distributions are less well known, existing vegetation produce indicative distribution maps.	and other sources. Where	threatened ecological
Name	Status	Type of Presence
Brigalow (Acacia harpophylla dominant and co-	Endangered	Community known to occur
dominant) Poplar Box Grassy Woodland on Alluvial Plains	Endangered	within area Community likely to occur within area
Threatened Species		[ Resource Information ]
Name	Status	Type of Presence
BIRDS		Type of Freedines
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Erythrotriorchis radiatus		
Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area
Geophaps scripta scripta		
Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat known to occur within area
Grantiella picta		
Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area
Neochmia ruficauda ruficauda		
Star Finch (eastern), Star Finch (southern) [26027]	Endangered	Species or species habitat likely to occur within area
Poephila cincta cincta		
Southern Black-throated Finch [64447]	Endangered	Species or species habitat likely to occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Tyto novaehollandiae kimberli		
Masked Owl (northern) [26048]	Vulnerable	Species or species habitat may occur within area
MAMMALS		
Dasyurus hallucatus		
Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331]	Endangered	Species or species habitat known to occur within area
Macroderma gigas		
Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area
Phascolarctos cinereus (combined populations of Qld,	NSW and the ACT)	
Koala (combined populations of Queensland, New	Vulnerable	Species or species habitat
South Wales and the Australian Capital Territory) [85104] PLANTS		may occur within area
Dichanthium queenslandicum		
King Blue-grass [5481]	Endangered	Species or species habitat may occur within area
<u>Dichanthium setosum</u>		
bluegrass [14159]	Vulnerable	Species or species habitat likely to occur

[ Resource Information ]

Name	Status	Type of Presence
		within area
<u>Livistona lanuginosa</u> Waxy Cabbage Palm [64581]	Vulnerable	Species or species habitat may occur within area
Samadera bidwillii Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area
REPTILES		
Denisonia maculata		
Ornamental Snake [1193]	Vulnerable	Species or species habitat likely to occur within area
Egernia rugosa Yakka Skink [1420]	Vulnerable	Species or species habitat may occur within area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area
Lerista vittata Mount Cooper Striped Skink, Mount Cooper Striped Lerista [1308]	Vulnerable	Species or species habitat may occur within area
Migratory Species		[ Resource Information ]
* Species is listed under a different scientific name on	the FPBC Act - Threatened	
Name	Threatened	Type of Presence
Migratory Marine Birds		<b>71</b>
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat likely to occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandninar [50200]		Species or appoint habitat
Colidria couminate		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat
		may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area

### Other Matters Protected by the EPBC Act

Other Matters Protected by the EPBC Act		
Listed Marine Species		[ Resource Information ]
* Species is listed under a different scientific name or	the EPBC Act - Threatene	d Species list.
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat
		may occur within area
Anseranas semipalmata		
Magpie Goose [978]		Species or species habitat
Magpie Cocce [e10]		may occur within area
		may cood mam area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat
		likely to occur within area
Ardea alba		
Great Egret, White Egret [59541]		Species or species habitat
Great Egret, Write Egret [39341]		likely to occur within area
		intory to occur within area
Ardea ibis		
Cattle Egret [59542]		Species or species habitat
		may occur within area
O all alula a a constructa		
Calidris acuminata		0
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
		may occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat
	, ,	may occur within area
Calidris melanotos		0
Pectoral Sandpiper [858]		Species or species habitat
		may occur within area
Chrysococcyx osculans		
Black-eared Cuckoo [705]		Species or species habitat
• •		may occur within area
Gallinago hardwickii		
Latham's Snipe, Japanese Snipe [863]		Species or species habitat
		may occur within area
Haliaeetus leucogaster		
White-bellied Sea-Eagle [943]		Species or species habitat
		likely to occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat
		may occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat
		likely to occur within area
		•
Motacilla flava		
Yellow Wagtail [644]		Species or species habitat
		may occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat
		likely to occur within area
		,
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat
		may occur within area

Extra Information				
State and Territory Reserves	[ Resource Information ]			
Name Blackwood	State QLD			
Nairana	QLD			
Wilandspey	QLD			
Invasiva Spacias	[ Passures Information			
Weeds reported here are the 20 species of national sign that are considered by the States and Territories to post following feral animals are reported: Goat, Red Fox, Ca	Invasive Species  [Resource Information]  Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit,			
Name	Status Type of Presence			
Birds Columba livia				
Rock Pigeon, Rock Dove, Domestic Pigeon [803]	Species or species habitat likely to occur within area			
Passer domesticus				
House Sparrow [405]	Species or species habitat likely to occur within area			
Frogs Rhinella marina				
Cane Toad [83218]	Species or species habitat known to occur within area			
Mammals				
Bos taurus  Demostic Cattle [16]	Species or species habitat			
Domestic Cattle [16]	Species or species habitat likely to occur within area			
Canis lupus familiaris				
Domestic Dog [82654]	Species or species habitat likely to occur within area			
Equus caballus				
Horse [5]	Species or species habitat likely to occur within area			
Felis catus				
Cat, House Cat, Domestic Cat [19]	Species or species habitat likely to occur within area			
<u>Lepus capensis</u>				
Brown Hare [127]	Species or species habitat likely to occur within area			
Mus musculus	Consider an anasias habitat			
House Mouse [120]	Species or species habitat likely to occur within area			
Oryctolagus cuniculus				
Rabbit, European Rabbit [128]	Species or species habitat likely to occur within area			
Rattus rattus				
Black Rat, Ship Rat [84]	Species or species habitat likely to occur within area			
Sus scrofa				
Pig [6]	Species or species habitat likely to occur within area			
Vulpes vulpes  Pod Fox Fox [19]	Ongoine an angeles helitet			
Red Fox, Fox [18]	Species or species habitat likely to occur within area			
Plants				
Acacia nilotica subsp. indica  Prickly Acacia [6196]	Chasing or angular habitat			
Prickly Acacia [6196]	Species or species habitat may occur within area			

### Cryptostegia grandiflora

Rubber Vine, Rubbervine, India Rubber Vine, India
Rubbervine, Palay Rubbervine, Purple Allamanda

[18913]

Species or species habitat likely to occur within area

Hymenachne amplexicaulis

Hymenachne, Olive Hymenachne, Water Stargrass,

Species or species

		T (5
Name	Status	Type of Presence
West Indian Grass, West Indian Marsh Grass [31754]		habitat likely to occur within area
Jatropha gossypifolia		
Cotton-leaved Physic-Nut, Bellyache Bush, Cotton-leaf		Species or species habitat
Physic Nut, Cotton-leaf Jatropha, Black Physic Nut [7507]		likely to occur within area
<u>Lantana camara</u>		
Lantana, Common Lantana, Kamara Lantana, Large-		Species or species habitat
leaf Lantana, Pink Flowered Lantana, Red Flowered		likely to occur within area
Lantana, Red-Flowered Sage, White Sage, Wild Sage		
[10892] Parkinsonia aculeata		
		Species or species habitat
Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse Bean [12301]		likely to occur within area
Bean [12001]		intery to occur within area
Parthenium hysterophorus		
Parthenium Weed, Bitter Weed, Carrot Grass, False		Species or species habitat
Ragweed [19566]		likely to occur within area
Vachellia nilotica		
Prickly Acacia, Blackthorn, Prickly Mimosa, Black		Species or species habitat
Piquant, Babul [84351]		likely to occur within area
Nationally Important Wetlands		[ Resource Information ]
Name		State
Bingeringo Aggregation		QLD

Nationally Important Wetlands	[ Resource Information ]
Name	State
Bingeringo Aggregation	QLD
Scartwater Aggregation	QLD

#### EPBC Act Referrals [Resource Information]

Further details about the referral or advice - including its current status if still active - are available in its PINK

report; click on the title.			
Referral			
Title	Reference	Referral Outcome	Assessment Status
Galilee Coal Project including development of coal mine, 495km railway, port and	2008/4366	ACU	Clearly Unacceptable
Alpha Coal Project - Mine and Rail  Development	2008/4648	CA	Approval Decision Made
Carmichael Coal Mine and Rail Project	2010/5736	CA	Approval Decision Made
Central Queensland Integrated Rail Project	2012/6322	CA	Guidelines Finalised
Galilee Infrastructure Corridor Project	2012/6489	CA	Guidelines Finalised
North Galilee Basin Rail Project, Qld	2013/6885	CA	Approval Decision Made
Cooper to Abbot Point liquid natural gas (LNG) facility, Capling Project, QLD	2014/7175	CA	S89 - Awaiting Information
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	NCA	Referral Decision Made
North Galilee Water Scheme, 160km northwest of Clermont, Qld	2018/8191		Withdrawn

### Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- -Office of Environment and Heritage, New South Wales
- -Department of Environment and Primary Industries, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment, Water and Natural Resources, South Australia
- -Department of Land and Resource Management, Northern Territory
- -Department of Environment and Heritage Protection, Queensland
- -Department of Parks and Wildlife, Western Australia
- -Environment and Planning Directorate, ACT
- -Birdlife Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -South Australian Museum
- -Queensland Museum
- -Online Zoological Collections of Australian Museums
- -Queensland Herbarium
- -National Herbarium of NSW
- -Royal Botanic Gardens and National Herbarium of Victoria
- -Tasmanian Herbarium
- -State Herbarium of South Australia
- -Northern Territory Herbarium
- -Western Australian Herbarium
- -Australian National Herbarium, Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- -Forestry Corporation of NSW
- -Australian Tropical Herbarium, Cairns
- -eBird Australia
- -Australian Government Australian Antarctic Data Centre
- -Museum and Art Gallery of the Northern Territory
- -Australian Government National Environmental Science Program
- -Australian Institute of Marine Science
- -Reef Life Survey Australia
- -American Museum of Natural History
- -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
- -Tasmanian Museum and Art Gallery, Hobart, Tasmania
- -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

#### s22

From: s22

Sent: Tuesday, 3 December 2019 11:27 AM

**To:** \$22 ; \$22 ; \$22

Subject: FW: EPBC 2019/8508 Adani's North Galilee Water Scheme Water Infrastructure Project

[SEC=OFFICIAL]

Attachments: 2018-8191 Referral-Decision-Att C1-Advice-Wetlands Section.pdf

Importance: High

Follow Up Flag: Follow up Flag Status: Flagged

FYI

From: s22

Sent: Tuesday, 3 December 2019 10:46 AM

To: s22 Cc: s22

Subject: FW: EPBC 2019/8508 Adani's North Galilee Water Scheme Water Infrastructure Project [SEC=OFFICIAL]

Importance: High

His22

passed your email on to me as I head up the team responsible for coordinating EPBC Act referrals within the Wetlands Section.

I have scanned the revised referral document, and from my reading, the proposed development appears very similar to the earlier referred action (2018/8191) with the exception of the stage B pipeline, which has been removed from the new referral. As such, our previous advice, regarding potential impacts on the ecological character of the Shoalwater and Corio Bays; and the Bowling Green Bay Ramsar sites, stands.

In future, could you please ensure that all Ramsar EPBC-related emails are sent to our EPBC email address (<a href="mailto:RamsarEPBCadvice@environment.gov.au">RamsarEPBCadvice@environment.gov.au</a>)? That way my team will be able to action it, even if the relevant desk officer is away. Similarly, we would appreciate more time to respond in future.

Regards,

s22

s22

Assistant Director – Ramsar Domestic Implementation Wetlands Section | Commonwealth Environmental Water Office

Department of the Environment and Energy

p: 02 6274 s22 | e: s22 @environment.gov.au

s22

See wetland stories at: Wetlands Hot Topics

From: s22

Sent: Tuesday, 3 December 2019 7:08 AM

To: s22 @environment.gov.au>

Subject: FW: EPBC 2019/8508 Adani's North Galilee Water Scheme Water Infrastructure Project [SEC=OFFICIAL]

Importance: High

From: s22

Sent: Monday, 2 December 2019 5:28 PM

To: s22 @environment.gov.au>

Cc: s22 @environment.gov.au>; s22 @environment.gov.au>;

s22 ; s22 @environment.gov.au>

Subject: EPBC 2019/8508 Adani's North Galilee Water Scheme Water Infrastructure Project [SEC=OFFICIAL]

Importance: High

His22

My section is desperately trying to finalise the Controlled Action decision brief for the North Galilee Water Scheme Water Infrastructure Project (EPBC 2019/5808).

As a result of a court decision Adani withdrew their 2018/8191 project and referred their current project (EPBC 2019/8508) which can be found here.

In reviewing the current referral brief I noticed that the Wetlands section had provided comments on the previous referral (attached).

There are a number of changes to the current pipeline referral:

- They have not referred Part B of the pipeline (only part A which is 49km)
- They have not referred the extraction of the water.

Everything else remains substantially the same.

I would be incredibly grateful if you could review the comments provided on 2018/8191 and let me know if they are still applicable to 2019/8508, or if the Wetlands section has any additional comments. If at all possible (and I know I'm asking a lot!) I would be grateful if you could get back to me by 16:00 tomorrow (3/12/19).

I'm very happy to discuss tomorrow or you can call s22 s22 who are all cc'd into this email.

Thank you so much and many many apologies for the very tight turn around.

s22

s22

Acting Director

Queensland North Assessments | Assessments and Governance Branch Environment Approvals Division | Department of the Environment and Energy

PO Box 787, Canberra, ACT, 2601

Tel: 02 6274 s22 | Mob: s22

s22

The Department acknowledges the traditional owners of country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their elders both past and present.

#### COMMONWEALTH ENVIRONMENTAL WATER OFFICE

#### EPBC ACT REFERRAL ADVICE FROM WETLANDS SECTION

FOI 191205 Document 5a

REFERRAL: EPBC 2018/8191

DATE DUE: 29 JUNE 2018

#### NORTH GALILEE WATER SCHEME, QLD

#### Brief Description of Proposal

The proposed action involves the construction and operation of the North Galilee Water Scheme (NGWS) to supply water for the Carmichael Coal Mine and possible future resource extraction projects in the north Gallee Basin. The proposed action is in two stages and involves:

- Stage A The expansion of Belyando Junction Dam ( 2.2 GL to 10 GL capacity) and associated infrastructure including an intake channel and pump and 49 km of buried pipeline;
- Stage B A buried pipeline approximately 61 km long. There will be a series of smaller offtake pipelines that will provide water to associated infrastructure for the Carmichael Coal Mine including a proposed airport and accommodation village for mine workers.

Adani has received a flood harvesting licence under the Water Act 2000 (as granted by the Queensland Government) which allows for the extraction of up to 12.5 GL of water per year from river flows above 2,592 megalitres per day. The NGWS Project allows that licence to be effectively used and water delivered to the Carmichael Coal Mine. This extraction is from the Strategic Reserve of unallocated water in Sub-catchment E of the Burdekin Basin.

#### Issues Checklist

#### How far is the proposal from a Ramsar site?

The proposed action is located 370 km from the Shoalwater and Corio Bay Ramsar site and 244 km from the Bowling Green Bay Ramsar site. The proposed action is not located within the catchment of either Ramsar site.

#### Shoalwater and Corio Bays Area Ramsar site

The Shoalwater and Corio Bays Area Ramsar site is located on the Central Queensland Coast. The site is made up of two discontinuous areas, Shoalwater Bay section and Corio Bay section. The area contains a wide diversity of landscape types including undulating lowlands and hills, riverine plains, swamps, estuarine inlets, old beach ridges, dunes, sand beaches flanked by coastal cliffs, and intertidal sand and mudflats. The wetland types on the site include freshwater lagoons, swamps and streams, leading into marine, estuarine and intertidal wetlands.

The site is located in a zone where the temperate climate merges into tropical and sub-tropical climates. The climatic gradient, diversity of geomorphology and good condition of the site has resulted in a rich diversity of species. The site supports about 791 plant species and sub-species, 445 fish species, 22 frog species, 66 reptiles species, 226 birds species, 24 mammal species and 23 bat species.

The Shoalwater Bay area has been gazetted as a Defence Practice Area under the Defence Act 1903, and is used primarily for defence activities. Corio Bay is part of Queensland's Byfield National Park used primarily for conservation and recreation activities. The area is part of the traditional lands of the Darumbal people. The dune fields contain archaeological sites including shell middens, scatters of stone tools and dinner camp sites.

The Shoalwater and Corio Bays Area (Shoalwater Bay Training Area, in part - Corio Bay) Ramsar site meets six of the nine criteria:

Criterion 1: The Shoalwater and Corio Bays Area Ramsar site is in the North-east Coast Australian Drainage Division. It contains the largest area in central east Queensland of representative coastal, subcoastal and aquatic landscapes and ecosystems in a relatively undisturbed state. The area represents one of a very few large estuarine systems that retains a relatively undisturbed catchment.

Criterion 2: The Shoalwater and Corio Bays Area Ramsar site supports populations of the threatened Green Turtle, Flatback Turtle and Hawksbill Turtle and the endangered Loggerhead Turtle. The site also supports the *Environment Protection and Biodiversity Conservation Act* 1999 listed Dugong.

Criterion 3: The Shoalwater and Corio Bays Area contain a high diversity of freshwater, marine and estuarine fish species, with 445 species recorded. Eighteen species of mangroves occur in the area. There are at least 10 species of seagrass present, with seagrass beds extending to depths of 20m due to water clarity. The site is of special value as habitat for endemic fish species. The mangrove, tidal mudflats and saltflats are important habitats for local and migratory shorebirds, including 26 species protected under international migratory bird conservation agreements.

Criterion 4: This Ramsar site provides nesting sites for turtles and critical feeding areas for turtles and Dugongs. It also provides breeding sites for the Beach Stone-Curlew.

Criterion 5: The Shoalwater and Corio Bays Area Ramsar site supports over 20,000 waterbirds in summer.

Criterion 6: Six species of migratory shorebirds have been recorded in the Shoalwater and Corio Bays Area Ramsar site at numbers exceeding 1% of their population in the East Asian Australasian Flyway, including the Eastern Curlew, Whimbrel and Great Knot.

#### Bowling Green Bay

The Bowling Green Bay Ramsar site is located 21 km north-east of Ayr, Queensland. The site plays a major role in protection of this area from erosion by cyclones. A diverse complex of coastal wetland systems occur at the site including inter-tidal seagrass beds, mangrove woodlands and saline saltpan communities on the coast, and brackish to freshwater wetlands inland. Extensive areas of forest and woodland, and some closed forest, occur on the mountainous areas and the coastal dune system.

The site has unusually low rainfall for the region, with most rain falling in summer. The heavy storm rains of the summer wet season provide fresh water into the site, reducing the salinities of the shallow inshore marine areas, the surface soils of the saltpans and the mangrove areas. The Haughton River and many creeks feed into the wetland system. Groundwater is stored in two main aquifers that recharge from direct infiltration over the delta from rainfall, river flow and flood.

Of the 224 birds known to occur in the site, almost half are known to breed within it. The site is an important habitat for about fifty percent of the migratory species listed on international conservation agreements. The intertidal and subtidal seagrass beds provide feeding habitat for the nationally threatened Green Turtle and the internationally threatened Dugong. Barramundi breed in the freshwater swamps of the site. Saltwater Crocodiles also inhabit the site.

The Bowling Green Bay Ramsar site meets six of the nine criteria:

Criterion 1: The Bowling Green Bay Ramsar site is in the North-east Coast Australian

Drainage Division. It is a representative of many coastal and seasonal wetlands in the area, but it is particularly significant for its diversity and extent of wetland types.

Criterion 2: The Bowling Green Bay Ramsar site provides feeding grounds for the nationally vulnerable Green Turtle. The site also supports Dugong, listed on the International Union for Conservation of Nature Red List of threatened species as vulnerable. Saltwater Crocodiles also inhabit the site.

Criterion 3: Bowling Green Bay is particularly important for the abundance and diversity of bird species. The site regularly supports substantial numbers of all Australian waterbird groups, including post breeding populations of Brolgas and Magpie Geese.

Criterion 4: This Ramsar site is of special significance as breeding and feeding habitat for Brolgas and Magpie Geese.

Criterion 5: The Bowling Green Bay Ramsar site seasonally supports in excess of 20,000 waterbirds.

Criterion 6: The Bowling Green Bay Ramsar site is likely to seasonally support 1% of the total population of the Brolgas.

Is there a real chance or possibility that the proposed action will result in:

Issue	Υ	N
areas of the wetland being destroyed or substantially modified?		X
a substantial and measurable change in the hydrological regime of the wetland?		X
a substantial and measurable change in the physico-chemical status of the wetland?		Х
the habitat or lifecycle of native species dependent upon the wetland being seriously affected?		Х
an invasive species that is harmful to the ecological character of the wetland being established or encouraging the spread of existing invasive species?		Х

#### Issues to note

#### Potential impacts

#### Areas of the wetland being destroyed or substantially modified

The proposed action is located over 370 km from the Shoalwater and Corio Bay Ramsar site and 244 km from the Bowling Green Bay Ramsar site. The proposed action is not located within the same catchment of either Ramsar site. Therefore it is unlikely areas of the wetland will be destroyed or substantially modified.

#### A substantial and measurable change in the hydrological regime of the wetland

Shoalwater and Corio Bays are located in a region that experiences the highest tidal range on the eastern Australian coastal margin. Freshwater flows into the Ramsar site are highly variable in response to rainfall patterns. Most freshwater creeks in the Shoalwater Bay and Broome Head sections of the site are ephemeral. Sandy Creek and Water Park Creek maintain high levels of base flow throughout the year due to flow from Dismal Swamp and groundwater input from associated sand dunes. Freshwater inflow into the Corio Bay area is thought to be present through most years.

The movement of groundwater through the landscape is a critical process that sustains the wetlands of the Ramsar site. The groundwater resources of the Ramsar site are characterised by a mixture of fractured rock and primary porosity aquifers with flows that closely follow topography within the Shoalwater, Water Park Creek and Fitzroy River catchments.

Bowling Green Bay Ramsar site has unusually low rainfall for the region, with most rain falling in summer. The heavy storm rains of the summer wet season provide fresh water into the site, reducing the salinities of the shallow inshore marine areas, the surface soils of the saltpans and the mangrove areas. The Haughton River and many creeks feed into the wetland system. Since the catchment extends well into the hinterland of Bowling Green Bay, the Haughton River runs for 5-6 months of the year. During periods of extreme flooding it overflows northward directly into the Cromarty-Cleveland complex of swamps and floods out

into Cleveland Bay. Similarly, seasonal floodwaters from the Burdekin river overflow northward to discharge into Bowling Green Bay.

Groundwater is stored in two main aquifers that recharge from direct infiltration over the delta from rainfall, river flow and flood

The proposed action is located primarily within the Belyando Basin and partly within the Suttor Basin and extraction under the approved water licence will occur on the Suttor River, below the confluence with the Belyando River. This is in a separate catchment to both Ramsar sites. Therefore it is unlikely there will be a substantial and measurable change in the hydrological regime as a result of the proposed action.

#### A substantial and measurable change in the physico-chemical status of the wetland

Given the separation distance from the proposed action to both Ramsar wetlands, it is unlikely there will be a substantial and measurable change in the physico-chemical status of the wetland.

# The habitat or lifecycle of native species dependent on the wetland being seriously affected

Shoalwater and Corio Bay Ramsar site provides habitat such as extensive sea grass, intertidal flats and mangroves, which are important for a number of wetland-dependent species including fish, dugongs and turtles. In particular, the Ramsar site provides feeding and roosting habitat for migratory birds along the East Asian-Australasian Flyway and is listed as a Flyway network site. Key shorebird species include grey-tailed tattler, bar-tailed godwit, eastern curlew, whimbrel, terek sandpiper and Australian pied oystercatcher.

The site has unusually low rainfall for the region, with most rain falling in summer. The heavy storms during the summer wet season provide fresh water into the site, reducing the salinities of the shallow inshore marine areas, the surface soils of the saltpans and the mangrove areas. The Haughton River and many creeks feed into the wetland system. Groundwater is stored in two main aquifers that recharge from direct infiltration over the delta from rainfall, river flow and flood.

Bowling Green Bay provides important habitat for about fifty percent of the migratory species listed on international conservation agreements. The intertidal and subtidal seagrass beds provide feeding habitat for the nationally threatened Green Turtle and the internationally threatened Dugong.

Given the separation distance between the proposed action and both Ramsar site, the proposed action is unlikely to adversely affect habitat that is critical for a native species dependent on both Ramsar wetlands.

# An invasive species that is harmful to the ecological character of the wetland being established or encouraging of existing invasive species

Given the separation distance between the proposed action and Ramsar site it is unlikely the proposed action will further encourage the establishment of an invasive species that is harmful to the ecological character of the Shoalwater and Corio Bay Ramsar site and Bowling Green Bay Ramsar site.

#### Conclusion

On the basis of the available information, it is unlikely the proposed action will have an adverse impact on the ecological character of the Shoalwater and Corio Bay Ramsar site and the Bowling Green Bay Ramsar site.

Advice prepared by \$22

EACD Referral Officer: \$22

Cleared by: \$22 , Director: Wetlands Section

Signature: S22

Date: 2 73/7 2018

Cleared by: Mark Taylor, Assistant Secretary: Wetlands, Policy and Northern Basin Branch

Signature: . S47F

Date: 3 3 My 20 18

Attachments:

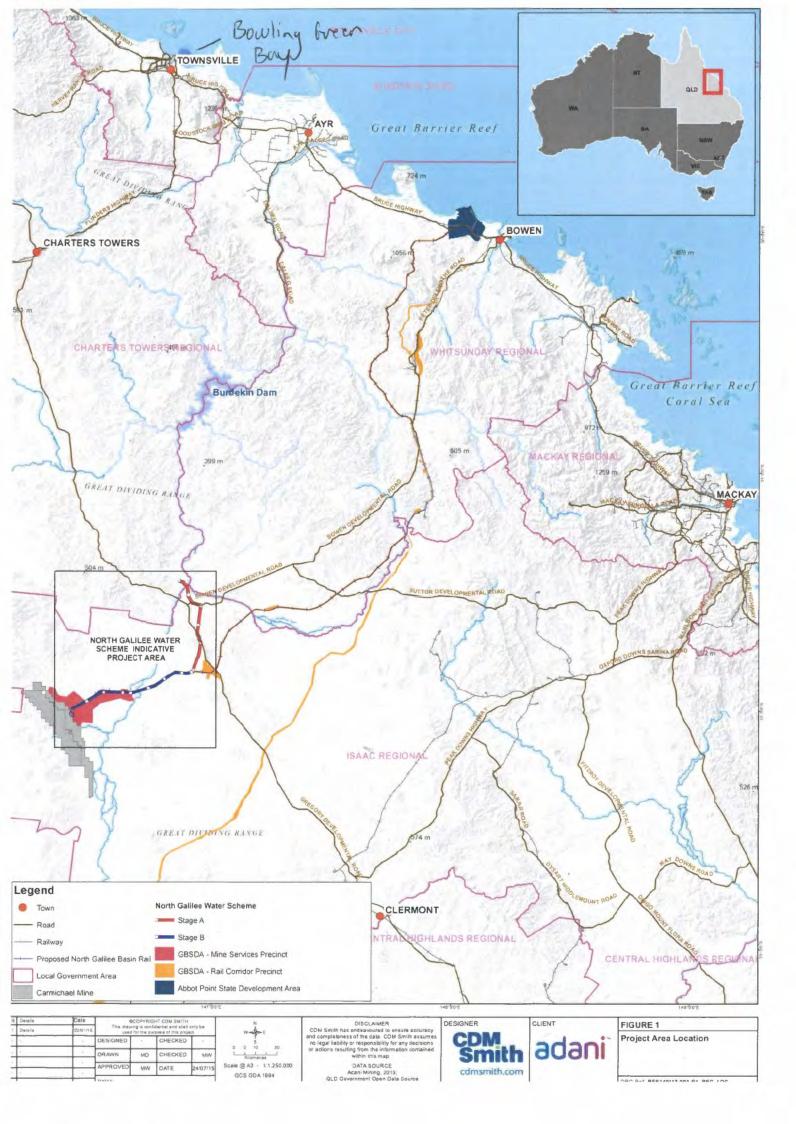
Attachment 1: Location of proposed action

Attachment 2: Location of Ramsar sites

Sources:

RIS

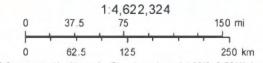
Referral Documentation





June 29, 2018

Water - Ramsar Wetlands



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#### OFFICE OF WATER SCIENCE ADVICE NORTH GALILEE WATER SCHEME WATER INFRASTRUCTURE, NEAR CLERMONT, QLD

Requesting section	Queensland Assessments North	Requesting officer	s22
Date of request	25/09/2019		
EPBC reference	EPBC 2019-8508	OWS reference	OWS 2019-046
Project assessment stage	Referral		
OWS contact officer	s22		
Cleared by	s22 Director / Senior Principal Research Scientist	Date of Advice	09/10/2019

The OWS provides technical advice for internal Departmental decision making and briefing purposes only. OWS advice should not be forwarded directly to external parties in the format provided. Please contact the OWS before providing the advice directly to an external source. The OWS does not speak for, and our response has not been endorsed by, the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development.

This document, prepared at the request of the Environmental Standards Division outlines the Office of Water Science's (OWS) technical advice on the Adani North Galilee Water Supply Scheme project.

Adani Infrastructure (Pty Ltd) proposes to construct and operate the North Galilee Water Scheme (NGWS) to provide a water supply under a commercial agreement to the operators of the Carmichael Coal Project and, potentially in the future, other resource-extraction projects in the northern Galilee Basin.

The proposal will harvest a portion of the flood waters from the Suttor River and pump it via a pipeline to a water storage dam for use in resource-extraction projects in the northern Galilee Basin.

The Queensland Government has already issued Adani a water licence to extract up to 12.5 gigalitres (GLs) of surface water a year. This is in addition to a groundwater licence to dewater the mine.

The proposal by Adani to establish water harvesting infrastructure in the Burdekin catchment, including a dam and a pipeline, was referenced in Adani's EIS for the Carmichael project in 2013. The current project referral is a change to the approved Carmichael project. It relates only to the proposed surface water supply requirements harvested from flood-waters from a

#### Office of Water Science

location on the Suttor River and Belyando River anabranch approximately 70 km downstream of the surface water extraction point in the approved action.

The referral confirms the presence of four EPBC Act listed threatened species - ornamental snake, squatter pigeon, koala and the black-throated finch - occurring in the project area and surrounds (CDM Smith, 2018). Brigalow, also EPBC Act listed, has been identified from desktop and field surveys to be present downstream of the offtake point. This Threatened Ecological Community (TEC) also provides suitable habitat for the ornamental snake. Changes to the flow regime with the Suttor River, have the potential to impact riparian vegetation that may also be habitat for other threatened species.

Question 1: What is the likely nature and extend of impacts (direct, indirect and consequential) on the downstream environment of the Suttor River, including on listed threatened species and communities?

- 1. OWS has previously provided advice on this proposed water scheme, OWS-2018-033 with the analysis provided in Attachment 2 remaining highly relevant.
- 2. OWS notes the following points from that advice in providing this updated advice.
  - a. Given the project is proposed at a location with a higher volume of annual flow, the overall effect of the proposed extraction on the river system is likely to be less pronounced. Further, the implementation of a 2,952 ML/day pass trigger and maximum extraction rate of 830 ML/day under the State water licence means that the maximum proportion of river flows that can be extracted by the proponent is 32 per cent, which is less than previously proposed.
  - b. The mean annual volume set aside under the water licence from the State's *Water Plan (Burdekin Basin) 2007* is 10,800 ML (10.8 GL) over the life of the project. The water is licenced to be extracted under the strategic reserve which has a total of 335 GL per year. Therefore, to adhere to an average of 10.8 GL, in some years the proponent will not be able to extract their full 12.5 GL allocation.
  - c. Potential impacts to MNES dependent on water from the Suttor River would be most likely to occur when flows are close to the operational volume set by the pass trigger (2,592 ML/day). At this flow volume the proponent can extract 830 ML daily, which is approximately 32 per cent of flow in the river (assuming a constant flow rate for the day). By adding the cumulative extraction rates of other licenced users, the extraction volume increases to 1,271 ML/day, meaning that approximately 49 per cent of flows can be extracted, of which Adani's licence makes up 53.2 per cent of the extractive use. During dry years, droughts or under a potentially reduced rainfall regime (given the 60 year length of the approved action) this volume of extraction could reduce the volume and extent of water available for any downstream MNES and other users.
- 3. Since previously submitting the proposal significant survey work has been conducted to identify listed species along the pipeline route. Downstream assessment of potential MNES habitat was done using the state vegetation mapping and aerial imagery with some limited on-site habitat assessment in April 2009 (CDM Smith 2019, pg. 102 and Appendix G). Flood modelling was conducted to assess these impacts and OWS considers the approach taken with the flood modelling to be suitable noting that additional scenarios can always be run.

#### Office of Water Science

- a. A number of areas of Brigalow TEC were identified. Flood modelling results (CDM Smith 2019 and Appendix F), based on three modelled years, indicates the total estimated reduction in flood extent of potential Brigalow TEC is 1.1% in 2001 (wet year) and 4.1% (dry year). The 'steady state' run (140 cumecs at St Ann's river gauge and maximum take by all users 14.71 cumecs as suggested by the Department) indicates a reduction of 3.3% (Table 3-8).
  - It is important to note that much of the Brigalow TEC is found in areas with a variety of other vegetation communities and this is identified as a percentage in the polygons modelled.
- b. Impacts on Waxy Cabbage Palms (0.4% reduction wet year and 3% dry year Table 3-17) and Bluegrass (2.3% wet year and 23.08% dry year Table 3-18).
- 4. Similar flood modelling was done to assess habitat reductions for the Ornamental Snake wet year 1.1% reduction and dry year 3% reduction (Table 3-10); Squatter Pigeon wet year 0.9% reduction and dry year 4.9% reduction (Table 3-12); Black-throated Finch wet year 0.5% reduction and dry year 3.1% reduction (Table 3-14); and Koala wet year 0.9% and dry year 4.4% (Table 3-16).
- 5. The Directory of Important Wetlands in Australia (DIWA) listed Scartwater Lagoon is located downstream of the offtake point. Additional analysis (Appendix H) was done to assess fill distribution and intervals for both pre-NGWS and post NGWS (2,592ML/d pass threshold) scenarios and used the same modelling to assess impacts on MNES described in paragraphs 3 & 4 and OWS considers the approach and assumptions used to be suitable.
  - a. This analysis indicates no impact to the annual reliability for a full fill event (>14,688ML/d); negligible change in the average number of fill days and a slight increase in the total number of days when the full fill threshold flow is not met.
    - This is because the majority of flow in the Suttor River, noting its highly ephemeral nature, does not reach the 2592ML/d NGWS flow trigger to allow extraction to occur.
- 6. The additional analysis done for Scartwater Lagoon (Appendix H), described in paragraph 5, provides a strong conceptual (and numerical) understanding of the flow regime in the Suttor River. There will be extended periods of time when there can be no extraction by the NGWS, which may impact on overall water availability. This is because the majority of time that water can be extracted would only coincide with events that would result in full lagoon flows to Scartwater Lagoon. See OWS advice (OWS-2018-033) Attachment 2 for further detail.

Water Assessment Information Portal (WAIP): for more information on water-related environmental impacts, please see the WAIP (accessible on the intranet via Home ⇒ Themes ⇒ Water ⇒ Water Assessment Information Portal).

#### References

CDM Smith (2019). North galilee Water Scheme EPBC Act Environmental Assessment: Prepared to support a Commonwealth Referral for Water Harvest, Storage Infrastructure and the Belyando Pipeline

#### Office of Water Science

Appendix F – Steady State Flood Mapping on Regional Ecosystem Data (CDM Smith)

Appendix G – MNES Habitat Mapping (CDM Smith)

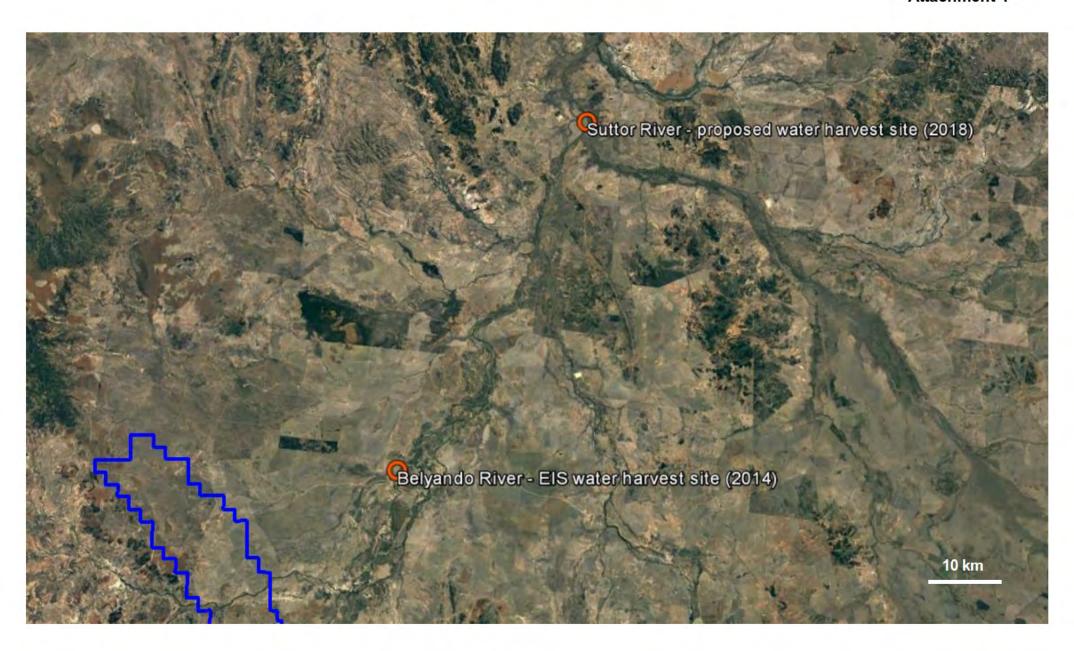
Appendix H – Scartwater Lagoon Fill Frequency Distribution and Interval Memo (CDM Smith)

#### Other documentation reviewed

Referral – North Galilee Water Scheme Water Infrastructure

Appendix I – Concept Erosion and Sediment Control Scheme (CDM Smith)

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**QLD DNRME WMDB - Production SQL** 

HYFLOW V180 Output 26/04/2018

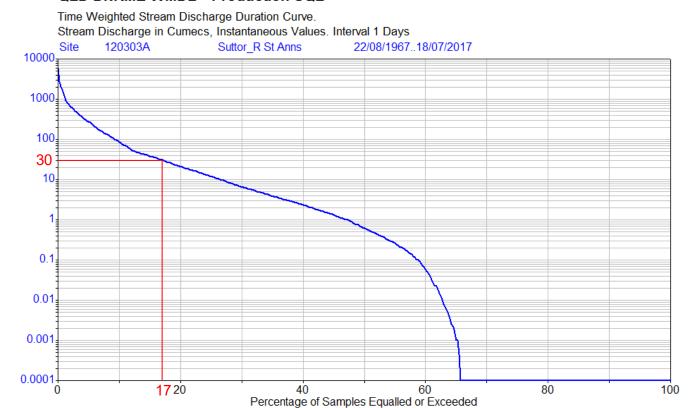


Figure 1: Discharge curve for Suttor River at St Anns Gauge (120303A) – Source: <a href="https://water-monitoring.information.qld.gov.au/">https://water-monitoring.information.qld.gov.au/</a> (120303A Suttor River a St Anns)

The proponent has a 2,592 ML/day pass trigger (Figure 1). This means that they can only extract surface water when flows in the Suttor River exceed this volume. The discharge curve for stream gauge 120303A (Suttor River St Anns) is measured in Cumecs (cubic metres per second). A flow volume of 2,592 ML/day is equivalent to approximately 30 Cumecs. Adani can therefore, on average, extract their proposed volume of water approximately 17 per cent of the time while the river flows.

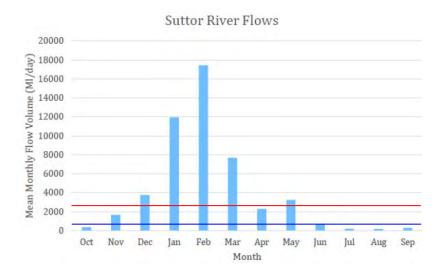


Figure 2: Mean daily flow each month, Suttor River (Source Adani, Response to request for further information, p. 7.

The 2,592 ML/day pass trigger is indicated by the red line (Figure 2). Individual flow events in the river may exceed the pass trigger for short periods of time, however the above graph shows that on average the proponent will only be able to extract water from the Suttor River for 5 months of the year. In the months where average flows are marginally higher than the pass trigger, potential impacts to downstream reaches of the river will be greater as a higher proportion of the total water will be extracted.

The dark blue line shows the proponent's water licence daily extraction allowance of 830 ML. During average flow conditions there will be four months of the year where average daily flows do not add up to the proponents total daily extraction limit. Given a maximum daily allowance of 830 ML and a pass trigger of 2,592 ML/day), the maximum amount of water that can be extracted at the minimum flow volume (set by the pass trigger) within the river is approximately 32.02 per cent. This leaves approximately 1,762 ML of water to flow down the river. This is therefore the greatest possible impact that this proposed project can have on percentage of river flows. At maximum extraction of 11,600 litres per second it would take approximately 12.4 days to extract 12.5 GL. The effect of this extraction is presented below, against the mean total flow per month at the St Anns Gauge. It is important to note that, if this level of extraction occurred the proponent would no longer be able to extract water for the rest of that year because their 12.5 GL entitlement would already be reached.

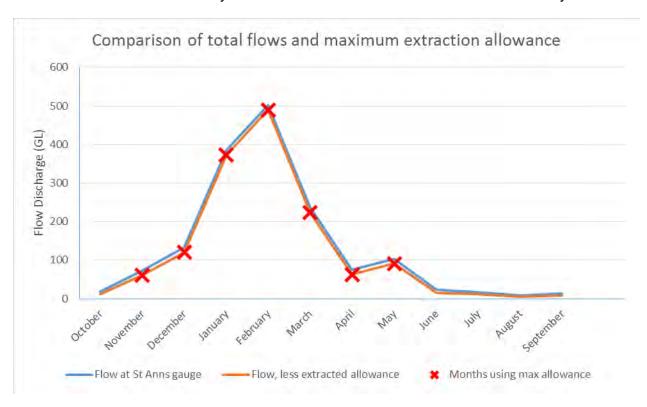


Figure 3: A comparison of mean monthly flows and the difference in mean monthly flows if the maximum allowed extraction were taken for that month. The crosses indicate that between November and May, in an average month, 12.5 GL would be available for extraction. October and June to September do not have sufficient flows on average to allow extraction of 12.5 GL to be extracted.

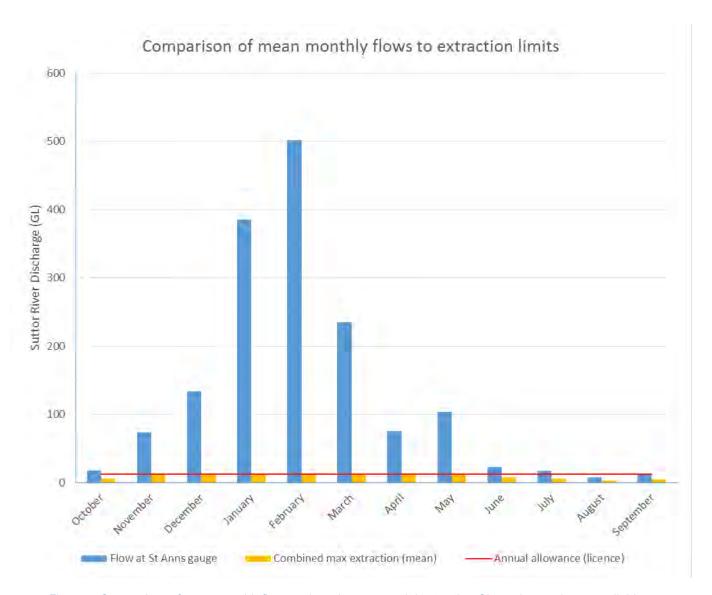


Figure 4: Comparison of mean monthly flows and maximum potential extraction. Shows the maximum available extraction as a proportion of mean total monthly flow through the St Anns gauge on Suttor River. Combined max extraction shows that even in months were total flows are greater than the volume set by the annual allowed extraction, the per cent of flow available to take does not necessarily reach the annual total.

The mean annual total flows within the Burdekin Basin, which includes the Belyando River System (and Suttor River), of 1,850 GL is measured well downstream. The extraction volume of 12.5 GL is slightly greater proportion of the flows near the extraction point. Mean annual flow at the St Anns (120303A) gauge is 1,493 GL. Adani's annual extraction licence allows extraction of 0.83 per cent of the mean total flow through the St Anns gauge.

It is generally not appropriate to consider annual average flows when assessing potential impacts to water courses, particularly where the water course has a clear seasonal flow regime (as is the case in the Belyando and Suttor Rivers). The below graph (Figure 5) presents a dry year with low flows through the St Anns Gauge. During this year, flows were above the Adani pass trigger for 883 hours (36.8 days), which is approximately 10 per cent of the year. At the allowed maximum extraction volume of 830 ML/day this year still has more than double the amount of flow over the pass trigger available for Adani to extract their allocated 12.5 GL (e.g. 36.8 days X 830 ML/day = 30.544 GL). During this period, Adani would have been able to extract their full 12.5 GL annual extraction during the December/January and June flow events. Maximum extraction (for Adani) during the March flow events would be 6.76 GL over a period of 6 days and 18 hours. Maximum extraction (for Adani) during the short (20 hours) flow event at the end of January would be 0.83 GL. These extraction volumes are based on the 11,600 L/sec rate and do not incorporate the cumulative effects of other

water extractors. The impact of this extraction on MNES would be most pronounced on the receding limb of the flow curve or at the extremities of the Suttor River or Belyando River anabranch.

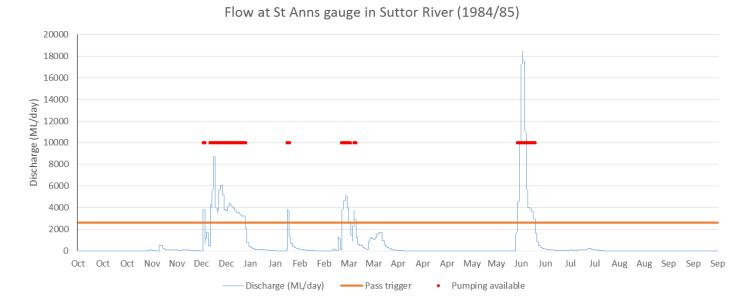


Figure 5: Measured flow in the Suttor River at St Anns Gauge (120303A) for the period 1 October 1984 to 30 September 1985 (these months used for consistency with other graphs provided by the proponent). Red lines indicate periods where flows in the river were above the pass trigger volume (2592 ML/day) and therefore pumping would be permitted under the extraction licence.

s22

Queensland North Assessments Section Assessments & Governance Branch Department of the Environment and Energy GPO Box 787 CANBERRA ACT 2601

Dear S22

I refer to the letter of 16 September 2019 from \$22 (Director, Referrals Gateway, Department of the Environment and Energy) to Senator the Hon. Bridget McKenzie, Minister for Agriculture, inviting comment on referral 2019/8508 North Galilee Water Scheme, near Clermont, Queensland, under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The Minister for Agriculture has asked me to reply on her behalf.

This referral relates to Adani Infrastructure Pty Ltd's proposal to construct and operate the North Galilee Water Scheme to provide a secure water supply to the operators of the Carmichael Coal Project located approximately 160 kilometres (km) north-west of Clermont in Central Queensland in the northern Galilee Basin.

The department notes the referral states that the proposal includes expanding the capacity of a dam at Belyando Junction Station from 2.2 gigalitres (GL) to 10 GL and constructing 48 km of pipeline. The disturbance and avoidance footprint is 623.63 hectares. The project occurs on land used primarily for cattle grazing including lease land, state land and freehold properties. There are two registered Native Title claims associated with the land to be traversed.

The department has no comments from a portfolio perspective on whether the proposed action may have significant impact(s) on any matters of national environmental significance protected under the EPBC Act.

Thank you for the opportunity to comment on referral EPBC 2019/8508.

Yours sincerely

s47F

Courtney Bryant A/g Assistant Secretary Climate & Resilience Policy Branch



September 2019



Department of Environment and Science

Ref 101/0003868-007

24 September 2019

s22

Director Queensland North Assessments Section Assessments and Governance Branch Department of the Environment and Energy GPO Box 787 CANBERRA ACT 2601

Dear s22

Invitation to comment on referral EPBC 2019/8508 - North Galilee Water Scheme Water Infrastructure, near Clermont, Qld

Thank you for your letter dated 16 September 2019 requesting advice on whether the above action will be assessed in a manner described in Schedule 1 of the Agreement between the Commonwealth of Australia and the State of Queensland (the Bilateral Agreement) developed under Section 45 of the Environment Protection and Biodiversity Conservation Act 1999.

I advise the proposal will not be assessed using the environmental impact statement (EIS) process in Chapter 3 of the *Environmental Protection Act 1994*.

The Department of State Development, Manufacturing, Infrastructure and Planning has advised that the proposal is not currently being assessed as a coordinated project under Part 4 of the State Development and Public Works Organisation Act 1971 and is not likely to be assessed under this process in the future.

Should you have any further enquiries, please contact me on telephone (07) 3330 5598.

Yours sincerely

s22

A/Director, Operational Support

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FOI 191205 Document 9



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Facsimile: +61 2 6249 9999 Web: www.ga.gov.au ABN 80 091 799 039

Resource Stewardship and Environment Section Resources Strategy Resources Division Department of Industry, Innovation and Science

26 September 2019

Attn: S22

Re: Invitation to comment on referral (EPBC 2019/8508) – North Galilee Water Scheme Water Infrastructure Project, Queensland

I refer to the request for comments dated 16 September 2019 on a referral for the North Galilee Water Scheme Water Infrastructure Project (the Project), located 160 km north-west of Clermont, Queensland. The Project is proposed by Adani Infrastructure Pty Ltd (the Proponent), a wholly owned subsidiary of Adani Enterprises Ltd. Geoscience Australia (GA) has reviewed the referral information, particularly as it relates to sections 24D and 24E (the water trigger) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), with attention to potential impacts to groundwater resources and other technical geoscience or geotechnical factors.

# Summary

The Proponent has self-assessed that the Project does not require consideration under Sections 24D and 24E of the EPBC Act, based on the definition of the 'water trigger'.

GA notes that there is potential for the project to directly impact groundwater resources and groundwater dependent ecosystems in localised areas and impact on recharge processes across larger areas. Should the Department of the Environment and Energy (DoEE) assess that the Project does fall within the definition of the water trigger, more information on the groundwater resources in the area and specific construction activities, particularly related to the dam enhancement and locations where the pipeline crosses watercourses, are needed to assess the significance of impacts on groundwater resources. GA notes that the referral only relates to construction of the Project, and that operation of the Project is not included. If the operation of the scheme is to be considered then an investigation of any predicted changes to climate patterns and resulting impacts on flood frequency and subsequent groundwater recharge is also required.

GA is unaware of any technical geoscience or geotechnical issues that would impact on the project.

Reference D2019-97435

## Background

The Proponent proposes to construct and operate the North Galilee Water Scheme (NGWS) to provide water supply under a commercial agreement to the operators of the Carmichael Coal Project (CCP). The NGWS is located approximately 160 kilometres (km) north-west of Clermont in Central Queensland.

The referral relates to the following two components of the Project:

1. Construction and operation of water harvest and storage infrastructure that will pump water from the river into an off-stream storage, and then supply water to the CCP via pipeline.

The main components of the harvest and storage infrastructure are:

- An intake pump station, diesel fuel tanks and intake channel from the Suttor River;
- Buried pipeline from the Suttor River to the Belyando Junction dam (construction corridor of 30 m for 3.8 km and a total of approximately 5.7 ha disturbance);
- Upgrade to the existing Belyando Junction 2.2 GL dam to a nominal 10 GL capacity. This
  requires an estimated footprint area of approximately 170 ha; and
- Associated infrastructure.
- 2. Stage A (Belyando) Pipeline and associated infrastructure construction.

The main components of this Stage are:

- The buried Belyando Pipeline located within a 30 m construction corridor along a 49 km route that crosses four minor watercourses and one major watercourse; and
- Associated infrastructure.

The Project also involves a third component, being the Stage B pipeline (and associated infrastructure) which is located wholly within the footprint of the Carmichael Coal Project rail corridor. The Proponent indicates that this component has already been considered under the EPBC Act assessment of referral number EPBC 2010/5736.

GA notes that there is some confusion within the referral about what the referral covers, for example in section 1.2 it is stated that "The action for which Adani is submitting a referral under the EPBC Act is for the construction and operation of the water harvest and storage infrastructure and the construction and operation of the Stage A pipeline components." However in the last paragraph of section 1.2 it is stated "the extraction of water does not form a component of The Action as referred...". The Proponent states that their analysis of water extraction shows "It is not expected that any MNES will be consistently subject to a reduction in future flood inundation from the NGWS water offtake, and as such any impacts, should there be any, will be negligible and of short duration.". GA considers that referring the operational component of the action would allow the assumptions and methods used in the Proponent's investigation to be independently assessed.

## Comments

The Proponent has self-assessed that the Project does not trigger consideration under Sections 24D and 24E of the EPBC Act (the 'water trigger') as they do not consider the Project is a coal mining activity or that it forms part of the process of extracting coal.

Reference D2019-97435 2

There is some ambiguity in the definitions provided in the *Significant Impact Guidelines*<sup>1</sup> for the water trigger, regarding what activities are covered by the trigger. If the DoEE interprets the Act such that the water trigger is a controlling provision for the Project, the following points should be considered in the assessment of the referral.

Based on the expected shallow depth of excavation and the relatively small disturbance footprint, GA considers that the pipeline is unlikely to have a significant impact on groundwater resources for the majority of its extent. The points at which the pipeline crosses minor and major watercourses warrant an assessment on a case by case basis to ensure surface and groundwater resources are not significantly impacted by the proposed works.

The enlargement of Belyando Junction Dam has the potential to impact on the groundwater resources in the local area, through the excavation of borrow pits and the construction of the dam embankments. Leakage from the dam has the potential to alter the local groundwater levels and flow directions. These impacts are unlikely to be significant at a regional scale.

If the operation of the flood harvesting infrastructure is considered as part of this referral, harvesting floodwaters has the potential to impact recharge to groundwater systems at a variety of scales. This impact may be significant to water resources or those flora and fauna that depend on them.

It does not appear that future changes to rainfall patterns are considered in the referral. The potential for climate change to impact on flood frequency should be assessed. If flood frequency declines, harvesting floodwaters, based on the current thresholds, may represent extraction of a more significant proportion of the floodplain water balance. This may constitute a significant impact on the water resource or dependant MNES.

Groundwater Dependent Ecosystems (GDEs) mapping from the Bureau of Meteorology shows that ecosystems with a high potential to be reliant on the surface or sub-surface presence of groundwater occur throughout the Project disturbance area and in the areas that will be impacted by the flood harvesting operations, however it appears that impacts on GDEs are not considered in the referral. Groundwater systems relied on by these ecosystems are likely to be dependent on floodwaters for recharge.

If you have any queries on this, please contact \$22 on \$22 or \$22 @ga.gov.au.

Kind regards,

s22

s22

A/g Director - Groundwater Advice and Data Section Groundwater Branch Environmental Geoscience Division Geoscience Australia

Reference D2019-97435 3

Commonwealth of Australia, 2013, Significant impact guidelines 1.3: Coal seam gas and large coal mining developments—impacts on water resources, http://www.environment.gov.au/system/files/resources/d078caf3-3923-4416-a743-0988ac3f1ee1/files/sig-water-resources.pdf.

## s22

From: s22

Sent: Friday, 27 September 2019 10:26 AM

To: \$22 ; \$22

Subject: FW: Invitation to comment on Referral - (EPBC 2019/8508) North Galilee Water Scheme

Water Infrastructure, near Clermont, Qld [DLM=For-Official-Use-Only]

Attachments: GA comments on the EPBC referral - North Galilee Water Scheme Water Infr....pdf

## FYI

From: EPBC [mailto:EPBC@industry.gov.au] Sent: Friday, 27 September 2019 9:48 AM

To: s22 Cc: EPBC

Subject: RE: Invitation to comment on Referral - (EPBC 2019/8508) North Galilee Water Scheme Water

Infrastructure, near Clermont, Qld [DLM=For-Official-Use-Only]

His22

The Department of Industry, Innovation and Science and Geoscience Australia have reviewed the relevant documents for this EPBC referral and have the following comments in addition to the attached comments from GA:

The Coal and Low Emissions Section has no objections to the proposed North Galilee Water Scheme Water Infrastructure Project, in the Bowen Basin in Central Queensland, subject to any required actions arising from Geoscience Australia's assessment.

We support the sustainable development of coal mining projects, and associated infrastructure, subject to proponents obtaining the relevant environmental approvals required by State and Commonwealth agencies.

If you have any questions regarding these comments, please do not hesitate to contact us.

## Kind regards

s22

s22

Resource Stewardship & Environment Section Resources Strategy | Resources Division

Department of Industry, Innovation & Science

Industry House
10 Binara Street, Canberra
GPO Box 2013, Canberra ACT 2601
Phone +61 2 6243 s22
ABN 46 252 861 927

http://www.industry.gov.au



For Official Use Only

From: EPBC Referrals [mailto:EPBC.Referrals@environment.gov.au]

Sent: Monday, 16 September 2019 11:54 AM

To: EPBC < EPBC@industry.gov.au>

**Cc:** EPBC Referrals < <u>EPBC.Referrals@environment.gov.au</u>>; s22

@environment.gov.au>

Subject: Invitation to comment on Referral - (EPBC 2019/8508) North Galilee Water Scheme Water Infrastructure,

near Clermont, Qld [SEC=OFFICIAL]

## Good morning

We are sending you the attached link to a referral received for consideration under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for your comments, as it falls within your area of interest: <a href="http://epbcnotices.environment.gov.au/invitations/">http://epbcnotices.environment.gov.au/invitations/</a>

Formal notification of this referral is attached to this email.

Any comment should be sent by 30 September 2019 via:

by letter s22
Queensland North Assessments Section
Assessments & Governance Branch
Department of the Environment and Energy
GPO Box 787
CANBERRA ACT 2601

by email s22 @environment.gov.au

Regards

Referrals Gateway Governance and Business Support Section

FOI 191205 Document 11



#### **EPBC Act Cost Recovery - Fee Schedule**

EPBC No: 2019/8508 Date of Fee Schedule: Nov. 22, 2019

Project title: North Galilee Water Scheme Water Infrastructure Project, near Clermont, central Queensland

Assessment method: Preliminary Documentation

#### Fee Schedule

STAGE FEES	Base fee	PART A PART B		Total	
STAGE FEES		Complexity costs (A-L, P)	Complexity costs (MNO)	Total	
Stage 1	\$2,074	\$4,035	\$0	\$6,109	
Stage 2	\$2,289	\$6,388	\$0	\$8,677	
Stage 3	\$852	\$6,725	\$10,982 (Estimate)	\$18,559 (Estimate)	
Stage 4	\$2,795	\$16,476	\$10,982 (Estimate)	\$30,253 (Estimate)	
TOTAL PROJECT COST	\$8,010	\$33,625	\$21,964 (Estimate)	\$63,599 (Estimate)	

#### Notes:

- For assessments by environmental impact statement If standard guidelines are used under Section 101A(2)(a) of the EPBC Act, the Stage 1 fee will not be applicable.
- For assessments by public environmental report If standard guidelines are used under Section 96B of the EPBC Act, the Stage 1 fee will not be applicable.
- If no further information is requested under section 95A of the EPBC Act, the Stage 1 and 2 fees will not be applicable.
- The Department advises applicants of the maximum liability for Part B complexity fees at the time of the assessment approach decision, based
  on the information provided in the referral documentation. Applicants have the opportunity to reduce the Part B complexity fees during the
  assessment process by improving the quality of information provided to the Department during Stage 2 of the assessment. These Part B
  complexity fees are confirmed when all the assessment documentation is provided in Stage 2, and are not payable until Stages 3 and 4 of the
  assessment.

#### Fee Breakdown

		COMPLEXITY	FEE
	CONTROLLING PROVISIONS		·
Part A Fees	Listed threatened species and ecological communities	High	
	Six species and one community require assessment Brigalow TEC, Koala, Ornamental Snal	ke, Squatter Pigeon	
	A (Southern), Bluegrass, Waxy Cabbage Palm and Southern Black-throated Finch. Direct important to the control of the control o		d but \$25,61
	consequential downstream impacts from water extraction are not well understood. Options to species are well understood.	o manage impacts on	
	Listed migratory species	None	<del></del> \$0
	Not applicable.		<del></del> ф0
	Wetlands of international importance	None	\$0
	Not applicable.		
	Environment of the Commonwealth marine area	None	<del></del> \$0
	Not applicable.		<u>—</u> ф0
	World heritage properties	None	\$0
	Not applicable.		ΨΟ
	National heritage places	None	\$0
	Not applicable.		ΨΟ
	Nuclear actions	None	\$0
	Not applicable.		ΨΟ
	Great Barrier Reef Marine Park	None	\$0
	Not applicable.		ΨΟ
	Water Resources	None	\$0
	Not applicable.		Ψ0
	Commonwealth Land/Commonwealth Agency/Commonwealth Heritage Places Overseas	None	\$0
	Not applicable.		ΨΟ
	NUMBER OF PROJECT COMPONENTS		
	K Number of project components	Moderate	\$8,010

		COMPLEXITY	FEE
	Impacts associated with vegetation clearance and trenching. Consequential downs harvest infrastructure.	tream impacts associated with water	er
	COORDINATION WITH OTHER LEGISLATION		
	Coordination with other legislation	Low	\$0
	The proposed action will not be assessed under the bilateral agreement with the Si	tate of Queensland.	\$0
	ADEQUACY OF INFORMATION AND CLARITY OF PROJECT SCOPE		
	Site surveys/Knowledge of environment	Moderate	
Part B Fees:	M Site surveys are complete for the trenching activities within the project site. Site sur downstream of the project site.	rveys are partially complete	\$10,982
stimate	Management measures (including mitigation and offsets)	Moderate	
to be confirmed prior to Stage 3)	N Suitable management measures are proposed but clarification is required for trenc not provided a commitment to offset.	hing activities. The proponent has	\$10,982
	Project scope	Low	
	O Dam upgrade to store flood water from the Suttor River and pipeline (Stage A) to tr B pipeline (and ultimately the Carmichael Coal Mine).	ansport extracted water to the Stag	e \$0
	EXCEPTIONAL CIRCUMSTANCES		
exceptional Fircumstances	Exceptional circumstances P N/A	False	\$0
TOTAL COMPLEX	ITY FEES (Estimate)		\$55,589
BASE FEE			\$8,010
TOTAL FEE (Estim	nate)		\$63,599

#### Potential fees for contingent and post-approval activities (if required)

The Department will notify you if a contingent activity fee is applicable due to an additional statutory step being required under the *Environment Protection and Biodiversity Conservation Act* 1999.

#### Post-approval fees

Evaluation of new Action Management Plan (per management plan) (\$2,690)

### **Contingent Fees**

Request additional information for referral or assessment approach decision (\$1,701)

Variation to the proposed action (\$1,353)

Reconsidera ion of the controlled action or assessment approach decision at the applicant's request (\$6,577)

Request additional information for approval decision (assessment on referral information, preliminary documentation or bilateral/accredited assessment) (\$1,701)

Request additional information for approval decision (assessment by environmental impact statement or public environment report) (\$7,476)

Variation of conditions (\$2,690)

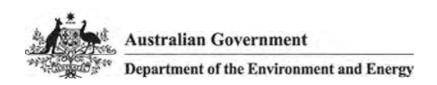
Variation of an action management plan under condi ions of approval (\$2,690)

Administrative variation of an action management plan under conditions of approval (\$710)

Transfer of approval to new approval holder (\$1,967)

Extension to approval expiry date (\$2,690)

FOI 191205 Document 12



#### **EPBC Act Cost Recovery - Fee Schedule**

EPBC No: 2019/8508 Date of Fee Schedule: Nov. 22, 2019

Project title: North Galilee Water Scheme Water Infrastructure Project, near Clermont, central Queensland

Assessment method: Preliminary Documentation

#### Fee Schedule

STAGE FEES	Base fee	PART A Complexity costs (A-L, P)	PART B Complexity costs (MNO)	Total
Stage 1	\$2,074	\$4,035	\$0	\$6,109
Stage 2	\$2,289	\$6,388	\$0	\$8,677
Stage 3	\$852	\$6,725	\$10,982 (Estimate)	\$18,559 (Estimate)
Stage 4	\$2,795	\$16,476	\$10,982 (Estimate)	\$30,253 (Estimate)
TOTAL PROJECT COST	\$8,010	\$33,625	\$21,964 (Estimate)	\$63,599 (Estimate)

#### Notes:

- For assessments by environmental impact statement If standard guidelines are used under Section 101A(2)(a) of the EPBC Act, the Stage 1 fee will not be applicable.
- For assessments by public environmental report If standard guidelines are used under Section 96B of the EPBC Act, the Stage 1 fee will not be applicable.
- If no further information is requested under section 95A of the EPBC Act, the Stage 1 and 2 fees will not be applicable.
- The Department advises applicants of the maximum liability for Part B complexity fees at the time of the assessment approach decision, based
  on the information provided in the referral documentation. Applicants have the opportunity to reduce the Part B complexity fees during the
  assessment process by improving the quality of information provided to the Department during Stage 2 of the assessment. These Part B
  complexity fees are confirmed when all the assessment documentation is provided in Stage 2, and are not payable until Stages 3 and 4 of the
  assessment.

### Fee Breakdown

		COMPLEXIT				
	CONTROLLING PROVISIONS					
	A Listed threatened species and ecological communities	High	\$25,61			
	B Listed migratory species	None	\$0			
	C Wetlands of international importance	None	\$0			
	D Environment of the Commonwealth marine area	None	\$0			
	E World heritage properties	None	\$0			
	F National heritage places	None	\$0			
Part A Fees	G Nuclear actions	None	\$0			
Part A rees	H Great Barrier Reef Marine Park	None	\$0			
	l Water Resources	None	\$0			
	J Commonwealth Land/Commonwealth Agency/Commonwealth Heritage Places Overseas	s None	\$0			
	NUMBER OF PROJECT COMPONENTS					
	K Number of project components	Moderate	\$8,010			
	COORDINATION WITH OTHER LEGISLATION					
	L Coordination with other legislation	Low	\$0			
	ADEQUACY OF INFORMATION AND CLARITY OF PROJECT SCOPE					
Part B Fees: estimate	M Site surveys/Knowledge of environment	Moderate	\$10,982			
(to be confirmed prior to Stage	9 3) N Management measures (including mi igation and offsets)	Moderate	\$10,982			
	O Project scope	Low	\$0			
Formational discount and	EXCEPTIONAL CIRCUMSTANCES					
Exceptional circumstances	P Exceptional circumstances	False	\$0			
TOTAL COMPLEXITY FEES (E	stimate)		\$55,589			
BASE FEE			\$8,010			
TOTAL FEE (Estimate)			\$63,599			

#### Potential fees for contingent and post-approval activities (if required)

The Department will notify you if a contingent activity fee is applicable due to an additional statutory step being required under the *Environment Protection and Biodiversity Conservation Act* 1999.

#### Post-approval fees

Evaluation of new Action Management Plan (per management plan) (\$2,690)

#### **Contingent Fees**

Request additional information for referral or assessment approach decision (\$1,701)

Variation to the proposed action (\$1,353)

Reconsidera ion of the controlled action or assessment approach decision at the applicant's request (\$6,577)

Request additional information for approval decision (assessment on referral information, preliminary documentation or bilateral/accredited assessment) (\$1,701)

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Variation of conditions (\$2,690)

Variation of an action management plan under condi ions of approval (\$2,690)

Administrative variation of an action management plan under conditions of approval (\$710)

Transfer of approval to new approval holder (\$1,967)

Extension to approval expiry date (\$2,690)

Mr Hamish Manzi Head of Environment and Sustainability Adani Infrastructure Pty Ltd GPO Box 2569 BRISBANE QLD 4001

Dear Mr Manzi

## Decision on referral North Galilee Water Scheme Water Infrastructure Project, near Clermont, Queensland

Thank you for submitting a referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This is to advise you of my decision about the referral of the proposed action to construct and operate the North Galilee Water Scheme Water Infrastructure Project in the Galilee Basin, Queensland. In accordance with section 74A of the EPBC Act, I have decided to accept the referral which I consider is not a component of a larger action.

As a delegate of the Minister for the Environment, I have decided under section 75 of the EPBC Act that the proposed action is a controlled action and, as such, it requires assessment and a decision about whether approval for it should be given under the EPBC Act. Please note this decision only relates to the potential for significant impacts on matters protected by the Australian Government under Chapter 2 of the EPBC Act.

The information I have considered indicates the proposed action is likely to have a significant impact on listed threatened species and communities (sections 18 and 18A). Based on the information available in the referral, the proposed action is likely to have a significant impact on the following matters of national environmental significance, but not limited to:

- Ornamental Snake (Denisonia maculata) Vulnerable
- Southern Black-throated Finch (Poephila cincta cincta) Endangered
- Squatter Pigeon (Southern) (Geophaps scripta scripta) Vulnerable
- Koala (Phascolarctos cinereus) (combined populations of Qld, NSW and the ACT)
   Vulnerable
- Brigalow (Acacia harpophylla dominant and co-dominant) threatened ecological community – Endangered
- Waxy Cabbage Palm (Livistona lanuginosa) Vulnerable
- Bluegrass (Dicanthium setosum) Vulnerable

I have also decided the proposed action will need to be assessed by preliminary documentation (further information required). A copy of the document recording these decisions is enclosed.

Each assessment approach requires different levels of information and involves different steps. All levels of assessment include a public consultation phase, in which any third parties can comment on the proposed action. Indigenous communities may also need to be consulted during the assessment process. For more information on how and when indigenous engagement should occur during environmental assessments, please refer to the indigenous engagement guidelines at: www.environment.gov.au/epbc/publications/engage-early.

Please note, under subsection 520(4A) of the EPBC Act and the *Environment Protection and Biodiversity Conservation Regulations 2000*, your assessment is subject to cost recovery. Please find attached a copy of the fee schedule for your proposal and an invoice for Stage 1. Fees will be payable prior to each stage of the assessment proceeding. Further details on cost recovery are available on the Department's website at: <a href="https://www.environment.gov.au/epbc/cost-recovery">www.environment.gov.au/epbc/cost-recovery</a>.

If you disagree with the fee schedule provided, you may apply under section 514Y of the EPBC Act for reconsideration of the method used to work out the fee. The application for reconsideration must be made within 30 business days of the date of this letter and can only be made once for a fee. Further details regarding the reconsideration process can be found on the Department's website at: <a href="https://www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process/refer-proposed-action">www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process/refer-proposed-action</a>.

Details on the assessment process for the proposed action and the responsibilities of the proponent are available on the Department's website at:

www.environment.gov.au/topics/environment-protection/environment-assessments.

Further, the Department has published an Environmental Impact Assessment Client Service Charter (the Charter) which outlines the Department's commitments when undertaking environmental impact assessments under the EPBC Act. A copy of the Charter can be found at: <a href="www.environment.gov.au/epbc/publications/index.html">www.environment.gov.au/epbc/publications/index.html</a>. The project manager will contact you shortly to discuss the assessment process.

While I have determined the proposed action will be assessed by preliminary documentation, further information will be required to be able to assess the relevant impacts of the proposed action. You should expect to receive a letter from the Department within 10 business days of the payment of Stage 1 fees, outlining the information required.

I have also written to the following parties to advise them of this decision:

Queensland Government	Department of Environment and Science
Commonwealth Government	Minister for Agriculture
	Minister for Industry, Science and Technology

## Minister for Resources and Northern Australia

You may elect under section 132B of the EPBC Act to submit a management plan for approval at any time before the Minister makes an approval decision of the proposed action under section 133 of the EPBC Act. If an election is made under section 132B of the EPBC Act, cost recovery will apply to the approval of any action management plans you submit.

Cost recovery does not apply to the approval of action management plans where you do not elect to submit an action management plan for approval under section 132B of the EPBC Act and the approval of the action management plan does not arise from a variation to the approval conditions that you have requested. Where you vary an approval condition and it results in you being required to submit an action management plan for approval, cost recovery will apply to the approval of the action management plan.

Please also note that once a proposal to take an action has been referred under the EPBC Act, it is an offence under section 74AA to take the action while the decision making process is on-going (unless that action is specifically excluded from the referral or other exemptions apply). Persons convicted of an offence under this provision of the EPBC Act may be liable for a penalty of up to 500 penalty units. The EPBC Act is available on line at: <a href="https://www.environment.gov.au/epbc/about/index.html">www.environment.gov.au/epbc/about/index.html</a>.

If you have any questions about the referral process or this decision, please contact the project manager, \$22 by email to \$22 @environment.gov.au, or telephone (02) 6274 \$223 and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

Andrew McNee

Assistant Secretary

Assessments and Governance Branch

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Senator the Hon Bridget McKenzie Minister for Agriculture Parliament House CANBERRA ACT 2600

Dear Minister

Decision on referral North Galilee Water Scheme Water Infrastructure Project, near Clermont, Queensland

This is to advise you of my decision under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) about the referral of the proposed action to construct and operate the North Galilee Water Scheme Water Infrastructure Project in the Galilee Basin, central Queensland.

As a delegate of the Minister for the Environment, I have decided under section 75 of the EPBC Act that the proposed action is a controlled action and, as such, it requires assessment and a decision about whether approval for it should be given under the EPBC Act.

The information I have considered indicates the proposed action is likely to have a significant impact on listed threatened species and communities (sections 18 & 18A). Please note this decision only relates to the potential for significant impacts on matters protected by the Australian Government under Chapter 2 of the EPBC Act.

I have also decided the proposed action will need to be assessed by preliminary documentation (further information required). A copy of the document recording these decisions is enclosed.

Questions about this decision can be directed to \$22 by email to \$22 Denvironment.gov.au, or telephone (02) 6274 \$22

Yours sincerely

Andrew McNee

Assistant Secretary

Assessments and Governance Branch

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s22

Director
Impact Assessment and Operational Support
Department of Environment and Science
GPO Box 2454
BRISBANE QLD 4001

Dear s22

Decision on referral North Galilee Water Scheme Water Infrastructure Project, near Clermont, Queensland

This is to advise you of my decision under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) about the referral of the proposed action to construct and operate the North Galilee Water Scheme Water Infrastructure Project in the Galilee Basin, central Queensland.

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Yours sincerely

Andrew McNee Assistant Secretary

Assessments and Governance Branch

Me

The Hon Karen Andrews MP
Minister for Industry, Science and Technology
Parliament House
CANBERRA ACT 2600

Dear Minister

Decision on referral North Galilee Water Scheme Water Infrastructure Project, near Clermont, Queensland

This is to advise you of my decision under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) about the referral of the proposed action to construct and operate the North Galilee Water Scheme Water Infrastructure Project in the Galilee Basin, central Queensland.

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I have also decided the project will need to be assessed by preliminary documentation (further information required). A copy of the document recording these decisions is enclosed.

Questions about this decision can be directed to \$22 , by email to \$22 @environment.gov.au, or telephone (02) 6274 \$22

Yours sincerely

Andrew McNee Assistant Secretary

Assessments and Governance Branch

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Senator the Hon Matt Canavan Minister for Resources and Northern Australia Parliament House CANBERRA ACT 2600

Dear Minister

Decision on referral North Galilee Water Scheme Water Infrastructure Project, near Clermont, Queensland

This is to advise you of my decision under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) about the referral of the proposed action to construct and operate the North Galilee Water Scheme Water Infrastructure Project in the Galilee Basin, central Queensland.

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I have also decided that the project will need to be assessed by preliminary documentation (further information required). A copy of the document recording these decisions is enclosed.

Questions about this decision can be directed to \$22 , by email to \$22 @environment.gov.au, or telephone (02) 6274 \$22

Yours sincerely

Andrew McNee Assistant Secretary

Assessments and Governance Branch

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