

## H DEPARTMENT OF THE ENVIRONMENT, WATER, HERITAGE AND THE ARTS (DEWHA) CROSS-REFERENCE TABLE

**Table H-1 DEWHA cross-reference table**

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
Appendix C and Appendix Q	Environmental Impact Statement (EIS) commitments in Appendix C should be consistent with those in the Environmental Management Plans (EMPs)	Review commitments	Commitments within the EMPs have been updated since the release of the EIS to reflect those outlined in Appendix C of the EIS.
Appendix Q – Planning Environmental Management Plan (PEMP)	The PEMP refers to elements of the Northern Pipeline Interconnector Stage 1	The PEMP should be amended where necessary to reflect the project as described in the EIS	The PEMP has been updated since the release of the EIS and reflects this change.
Appendix Q	Consideration should be given to elements of the EMPs for the operational phase of the project, especially with reference to management of potential indirect consequences of the Stage 2 Water Supply Strategy		Noted
	The EIS indicates that the facility sites selected for the project can accommodate future facilities which may be required to utilise the bi-directional bulk flow capacities of the pipeline	A more complete description of these additional works should be provided	Refer to Supplementary Environmental Impact Statement (SEIS) Section 3.1 – Northern Flow Direction
EIS (p. 57)	Indicate if the future facilities infrastructure is to be constructed as part of the proposed construction phase	Details should be provided regarding location of this additional infrastructure, potential impacts on listed threatened species, and any additional mitigation measures proposed	Refer to SEIS Section 3.1 – Northern Flow Direction

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
<p>Appendix H-4, Appendix L</p> <p>EIS</p> <p>Tables 3.27, 3.28 and 3.29</p>	<p>Several waterway crossings are no longer relevant and several new waterway crossing locations are now proposed</p>	<p>Provide finalised crossing locations and detailed investigations at crossings points</p>	<p>Appendix H-4 of the EIS, a consultant's report (Hydrobiology), includes impact assessment for waterway crossing locations associated with two alternative corridor routes (as both were under investigation at the time the consultant was engaged to undertake the study). The information from this report which is relevant to the currently proposed crossing locations has been included in impact assessment provided in Section 3.3 (Nature Conservation) and Appendix D (Matters of National Environmental Significance) of the EIS.</p> <p>Please note that the reports in Appendix H of the EIS are reference documents, and the relevant information within these reports has been included in the above mentioned sections as appropriate.</p> <p>Final waterway crossing locations are presented in Figures 3.12 to 3.14 (Land Tenure) on pp. 145–149 and Figure 3.22 (Surface Waters in the Study Area) on p. 219 of the EIS. In addition, any corridor route refinements accepted since publishing the EIS are presented in Appendix F of the SEIS.</p> <p>Refer to Section 4.2.10 – Construction Methodology (specifically the section on waterways), Appendix J and Appendix I-2 of the SEIS for further information on waterway crossings.</p>

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
Appendix D (p. 46)	Indicates that the preferred corridor crossing location of Six Mile Creek (Left Branch) may be close to identified deep pools	Clarify the location of these pools and the likelihood of Mary River Cod occurring	<p>Note that Appendix H-4 (I) Figure 1.1 (p. 64) of the EIS maps the presence of habitat features along the study reaches of Six Mile Creek Left Branch and Anabranche. This figure does not map the presence of deep pools within proximity to the proposed crossing location.</p> <p>Although deep pool habitat may be located downstream of the proposed Left Branch waterway crossing, the Mary River Cod may utilise habitat within the Left Branch, particularly during high flow periods.</p> <p>Further aquatic habitat investigation will be conducted as part of the Aquatic Habitat Monitoring Program.</p>
EIS – Table 3.29	Indicates that the proposed crossing point over the Left Branch of Six Mile Creek requires further detailed investigation to identify a crossing point where potential impacts on listed species will be minimised	Provide results of these investigations, including a rationale for crossing location and potential for impact on <i>Xanthostemon oppositifolius</i> (Southern Penda) and <i>Maccullochella peelii mariensis</i> (Mary River Cod).	<p>The currently proposed corridor has been selected as it minimises impacts on both <i>X. oppositifolius</i> and Mary River Cod by crossing Six Mile Creek (including the Left Branch and Anabranche) at existing disturbed locations. Figure H.1 of this Appendix shows the three crossing locations of Six Mile Creek and specifies the existing disturbance type.</p> <p>Further detailed flora field surveys will be undertaken to establish the location of <i>X. oppositifolius</i> individuals which will require translocation and monitoring.</p> <p>A monitoring program is currently being developed which will include monitoring of aquatic habitat important to the Mary River Cod (and other aquatic species). Measures/indicators for assessing and managing potential impacts on aquatic habitat will be established under the EMPs, relating to both the construction and operational phases of the project.</p>
	EIS notes the presence of <i>Cabomba Caroliniana</i> (Cabomba) at Lake Macdonald	Indicate what measures will be taken to ensure that investigatory and construction works do not result in increased infestations of <i>Cabomba Caroliniana</i>	The Weed and Disease Management Plan will be updated to include mitigation measures for avoiding the spread of <i>Cabomba Caroliniana</i> .

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Appendix H-1, Appendix H-3 and Appendix H-4	Clarify all proposed final crossing locations in the Mary River/Six Mile Creek catchments in relation to the study areas considered in the EIS	Revise the assessment of potential impacts of waterway crossings on listed threatened terrestrial and aquatic species and resultant management actions	<p>Only minor changes to the corridor route have been made since publishing the EIS. Figure H.1 (below) highlights these changes, with the EIS corridor in yellow, and the current corridor in red. The Six Mile Creek crossing locations presented in the EIS are all within the current corridor route.</p> <p>Appendices H-1, H-3 and H-4 of the EIS are specialist consultants' reports and may refer to both current and previous corridor options.</p> <p>It should be noted that Appendix D (Matters of National Environmental Significance) and Section 3.3 (Nature Conservation) of the EIS assess the potential terrestrial and aquatic impacts associated with the Six Mile Creek waterway crossings. The impact assessment in these sections is based on relevant findings within the specialist consultants' reports in Appendix H of the EIS.</p> <p>Further detail is provided within the SEIS at Section 4.2.4 – Matters of National Environmental Significance and Section 4.2.10 – Construction Methodology.</p>
	Further investigations of the food plant <i>Carronia multiseppalea</i> for <i>Phyllodes imperialis</i> (southern species) (Pink Underwing Moth)	The conclusions in Table D7 should be confirmed or amended as a result of further studies	<p>Noted.</p> <p>Paragraph 2 on p. 30 of Appendix D of the EIS states that <i>Carronia multiseppalea</i> (larval food plant for <i>Phyllodes imperialis</i>) was recorded in gullies near Nobels Road, Eudlo. The recorded location of the vine at Nobels Road will not be directly affected by the NPI Stage 2 project.</p> <p>Undertaking further flora survey was listed in Appendix D of the EIS as a potential mitigation measure; although, provided erosion and control measures are implemented, no direct or significant impacts are expected for <i>P. imperialis</i> or suitable habitat.</p>

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
	The EIS concludes that impacts on <i>Cyclopsitta diophthalma</i> (Coxen's Fig Parrot) are unlikely based on the infrequent occurrence of <i>Ficus spp.</i>	More information to be provided to support this conclusion	<p>The NPI Stage 2 corridor route has been selected to avoid clearing of intact or remnant riparian vegetation in the first instance, by maximising the use of existing cleared or disturbed areas.</p> <p>Where clearing of riparian vegetation is required, sensitive area plan investigations have been undertaken to establish the presence of suitable habitat or food resources (ie mature <i>Ficus spp.</i>). During these investigations, North Maroochy River and Petrie Creek, although disturbed/cleared at the crossing location, were identified as having potential food resources for frugivorous birds (such as Coxen's Fig Parrot) in adjacent areas (see Appendix I-1, I-2 and I-3 of the SEIS for more details on sensitive areas).</p> <p>Impacts on areas which provide habitat for protected species or other important ecological functions (such as important food resources) will be minimised and managed through the EMPs; specifically, the NNA Sensitive Area Plan.</p> <p>For further details on the likelihood of occurrence of Coxen's Fig Parrot refer to the following appendices within the EIS: Appendix H-1 (p. 21); Appendix H-2 (p. 16); Appendix K (p. 18).</p>
Appendix D (p. 21)	Section D.4.5 and D 4.3	These sections need to be reviewed and amended where necessary	Refer to Appendix D – Errata of the SEIS

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
EIS p.12 and p.100	The fact that an environmental impact assessment was undertaken as part of the Queensland water resource planning process does not automatically lead to the conclusion that the water supply strategy will have no impacts on MNES	Proponent needs to consider the potential impacts of what appears to be a doubling of historical extraction at Coles Crossing on threatened species	<p>Refer to Section 3.3.1 – Environmentally Sensitive Areas (pp. 171–178) and 3.3.4 – Aquatic Flora and Fauna (pp. 199–200) of the EIS which outline the impact assessment methodology undertaken for aquatic species.</p> <p>Potential impacts for aquatic species as a result of the proposed water supply strategy (ie transport of 'spare capacity' water of existing allocations under the <i>Water Resource (Mary Basin) Plan 2006</i>) considered the environmental flow objectives (EFOs) outlined in the Mary Basin WRP and the aquatic species impact assessment presented in Appendix H-5 of the EIS. This approach to impact assessment provides a greater level of confidence in determining the magnitude of impacts on aquatic species (and important habitat) as a result of the extraction of water from the Mary River during operation of the NPI Stage 2.</p> <p>Appendix H-5 of the EIS assessed the potential impacts on aquatic species within the project area associated with the abstraction of 40 ML/day from the Mary River (at the Coles Crossing offtake) which would be sought under new entitlements (ie not currently authorised under the Mary Basin WRP and therefore not included in the WRP impact assessment process).</p>
Executive Summary (p. 12)	A clear and unambiguous description of the proposed water supply strategy presented in the EIS is required	A description of the existing infrastructure at the Mary River extraction point, and confirmation that the facilities have the capacity to limit the daily volume extraction	<p>The two pump stations at the extraction point will be direct-on-line 800 kW pump units that are physically capable of pumping 19–20 ML/d.</p> <p>Refer to SEIS Section 4.2.3 – Water Allocations – Mary River Catchment (NPI Stage 2 Operating Framework)</p>
EIS (pp. 14, 27, 47 and 100)		Clarification on the use of terminology such as 'existing utilised entitlements'	While the announced allocations have been at 100% for the last few years, only approximately 3600 ML/a have been extracted. This is clarified further within the EIS document.

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EIS (p. 98)		Provide supporting evidence for the historical levels of water extraction claimed	Refer to SEIS Section 4.2.3 – Water Allocations – Mary River Catchment  Up to 55% of the 6500 ML/a allocation (approximately 3600 ML/a) has been utilised by the (previous) Noosa Shire Council to supply local urban demand since the allocation was authorised in 2000.
		Clarify the extraction rate of up to 18 ML/day, when it appears that extraction of up to 40 ML/day is possible with the existing infrastructure	This has been amended since the EIS, clarified within Section 2.4.3 of the EIS document. Infrastructure is not capable of providing more than 19–20 ML/d.  Refer to SEIS Section 4.2.3 – Water Allocations – Mary River Catchment (NPI Stage 2 Operating Framework)
		Clarify relevance of Borumba Dam water allocation information	Borumba Dam provides releases to the Mary River upstream of the Coles Crossing offtake. With announced allocations increasing over the year to 100%, this assumes that flows in the Mary River are sufficient to allow full use of the allocation while still meeting the environmental objectives defined in the <i>Water Resource (Mary Basin) Plan 2006</i> .  Refer to SEIS Section 4.2.3 – Water Allocations – Mary River Catchment
		Clarify where Noosa water supply will be sourced from if the water supply strategy described in the EIS is to be implemented	Refer to SEIS Section 4.2.3 – Water Allocations – Mary River Catchment

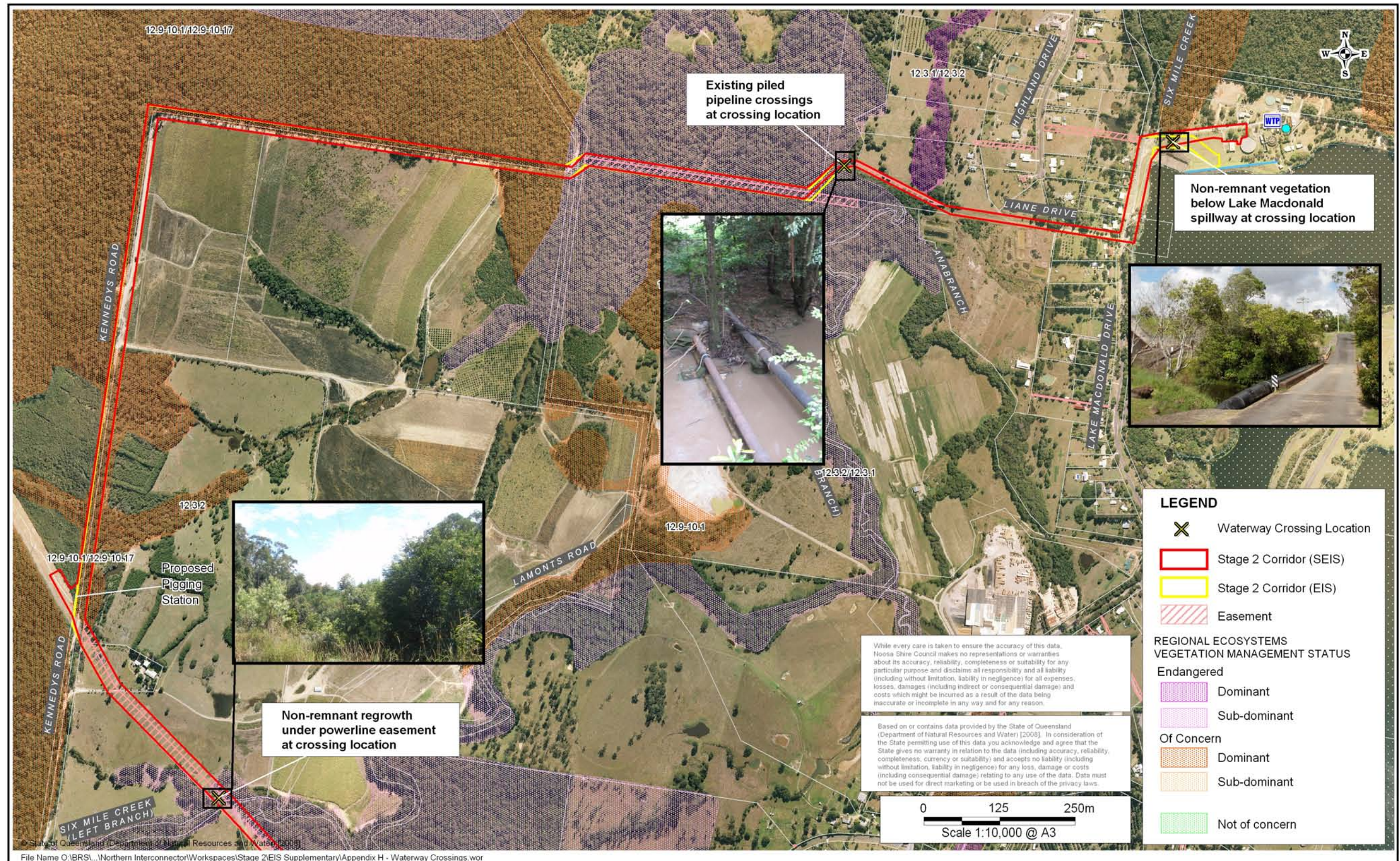
Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
Appendix H-5	<p>It is unclear if releases from Lake Macdonald would change under the proposed water supply strategy, and to what extent the conclusions of Appendix H-5 of the EIS regarding flow conditions in Six Mile Creek remain relevant</p>	<p>The proposed northerly transport of water should be discussed and potential impacts of any additional water extraction proposed should be considered</p>	<p>Appendix H-5 of the EIS is an assessment of aquatic MNES species and their habitat based on a previous water supply strategy for the NPI Stage 2 project. It has been included in the EIS as it contains relevant information on the presence, habitat requirements, and the potential impacts for MNES associated with the extraction of water from the Mary River.</p> <p>This is a consultant's report and is a reference document to the EIS.</p> <p>Appendix D and Section 3.3 (Nature Conservation) of the EIS present the information relevant to the current water supply strategy.</p> <p>Refer to Section 3.1 – Northern Flow Direction</p> <p>Refer to SEIS Section 4.2.3 – Water Allocations – Mary River Catchment (NPI Stage 2 Operating Framework)</p> <p>Water transported under the northern flow direction (NFD) scenario will be managed in accordance with the <i>Water Resource (Moreton) Plan 2007</i>. The volume of water supplied for NFD would not exceed the historical level of use for the water allocation, and would therefore not result in any additional impacts on matters of national environmental significance.</p> <p>The proportional storage rule under the Draft System Operating Plan stipulates that if the total combined volume of water held in storages on the Sunshine Coast (ie Baroon Pocket Dam, Ewen Maddock Dam, Cooloolabin Dam, Poona Dam and Wappa Dam) is less than 70%, the supply and transport of water in a southern direction (ie from the Sunshine Coast to the greater Brisbane region) will cease. Further, if combined storage levels on the Sunshine Coast reach 50% of capacity, water will be transported in a northern flow direction, from the greater Brisbane region to the Sunshine Coast via the NPI (QWC May 2009).</p>

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
	Management controls that will ensure the operation of the proposed pipeline does not indirectly result in adverse impacts on listed threatened species	Provide evidence in support of the conclusions regarding the impacts of the proposed water supply strategy on listed threatened species.	<p>Refer to Section 3.3 (Nature Conservation) and Appendix D (Matters of National Environmental Significance) of the EIS for impacts of the proposed water supply strategy on listed threatened species.</p> <p>Refer to Appendix K and Appendix H (consultant's reports) of the EIS for listed species within the project area.</p> <p>NNA has engaged Hydrobiology to assist in the development of aquatic habitat indicators and adaptive management triggers for EMPs. These indicators and trigger values will be monitored during the operational phase of NPI Stage 2.</p>
EIS (p.98) Appendix D (p. 36)	The discussion of the environmental assessment process relevant to the <i>Water Resource (Mary Basin) Plan (2006)</i> (Mary Basin WRP)	Amend to acknowledge that the impact of water extraction from the Mary River Basin on MNES has not previously been assessed under the EPBC Act	<p>Amended within EIS document.</p> <p>Refer to EIS Section 3.3.1 – Environmentally Sensitive Areas (Matters of National Environmental Significance) and Appendix D of the EIS</p>
Appendix H-5 and EIS (p. 178)	Conflicting information over impacts of the water extraction volumes from the Mary River for threatened species	Clarify	<p>Appendix H-4 of the EIS, Section 3.6.3 (pp. 55–59) provides a succinct summary of potential impacts on EPBC-listed aquatic species (with respect to the EPBC Act <i>Significant Impact Guidelines</i>).</p> <p>Please note that Appendix H-5 assesses the potential impacts associated with extraction of 40 ML/d from the Mary River (under new entitlements) rather than the currently proposed water supply strategy for NPI Stage 2 – operating under existing Mary Basin WRP water allocations.</p>

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
Appendix H-5	Possibility that reduced flows (as a result of water extraction in dry months) could restrict the movement of the Mary River Cod and the breeding cycle of Mary River Turtle and Lungfish.	Given that water extraction for a drought contingency plan is most likely to occur during already reduced flows, and that extraction rates of up to 40 ML/d appear possible, more consideration of the potential impacts is required	<p>The current water supply strategy for NPI Stage 2 is to transport 'spare capacity' water of a partially utilised allocation within the Upper Mary River Water Supply Scheme, authorised under the Mary Basin WRP. This allocation is for 6500 ML/a (equivalent to approximately 18 ML/d). Data supplied by the Queensland Department of Natural Resources and Water indicate that up to 55% of this allocation has been utilised previously by the (former) Noosa Shire Council to supply local urban demand since the allocation was authorised in 2000.</p> <p>The percentage of the water allocation available for extraction is announced monthly (or if the recorded flows change significantly) by DNRW (now DERM). Further, the extraction of water from Coles Crossing on the Mary River is limited by the capacity of existing infrastructure (eg pump station, existing pipeline and treatment facilities) to a maximum of 19-20 ML/d. Any upgrades to the existing facilities in order to extract additional water would be subject to an approvals process outside of the scope of the NPI Stage 2 project.</p> <p>SEIS Section 4.2.3 – Water Allocations – Mary River Catchment provides a detailed description of the project's water supply strategy and operating framework.</p> <p>Please note that Appendix H-5 presents impact assessment based on the <i>previous</i> water supply strategy (i.e. 40 ML/d of water from the Mary River sought through new entitlements under the Mary Basin WRP).</p>

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
Appendix H-5	Flow parameters at Home Park EFO node provide little information on the impact of the proposed water extraction at Coles Crossing	Clarify	<p>Appendix H-5 of the EIS assessed the potential impacts associated with the previous water supply strategy of 40 ML/d extraction from the Mary River under new entitlements.</p> <p>Under this water supply strategy, water would be extracted under a preferential harvesting arrangement in order to minimise impacts on downstream water use and ecological values.</p> <p>The first preference (as outlined in Section 2.1 of Appendix H-5) was to extract 40 ML/d when flow at the Coles Crossing offtake was above 90 ML/d and flow at the Homepark gauging station was above 20 ML/d.</p>
Appendix H-5	It is unclear how or if the currently proposed water supply strategy described in the EIS would lead to modification of flow in Six Mile Creek	Explain how the proposed water supply strategy will interact with management of Lake Macdonald and any likely changes to flow regimes in relation to listed threatened species	<p>The project will not extract water from Lake Macdonald and will therefore not have any direct impacts on the management of Lake Macdonald or flow regimes downstream in Six Mile Creek.</p> <p>SEIS Section 4.2.3 – Water Allocations – Mary River Catchment provides a detailed description of the project's water supply strategy and operating framework.</p>
Appendix D (pp. 41, 45 and 50)	It should be noted that monitoring does not represent mitigation, and it is currently unclear how any results of these programs would be used to manage any emergent impacts of water extraction	Demonstrate what actions will be implemented should adverse monitoring results be observed, and any other proposed controls that will be implemented to mitigate impacts on listed threatened species	<p>Refer to SEIS Section 4.2.4 – Matters of National Environmental Significance</p> <p>NNA has engaged Hydrobiology to assist in the development of aquatic habitat indicators and adaptive management triggers for EMPs. The Aquatic Habitat Monitoring Program will entail ongoing monitoring of these indicators during both the construction and operational phases of the project.</p>
	Additional information on the need for the project and the costs and benefits are required	An elaboration of the discussion on the alternative to the project should be provided	Refer to SEIS Section 4.2.6 – Justification for NPI Stage 2

Relevant section of the EIS	Describe the issue	Suggested solution/ request	Response
EIS (p. 29)		Clearly discuss the need for the project both in the short and long term.	Refer to SEIS Section 4.2.6 – Justification for NPI Stage 2
EIS (p. 33)	Confusion over completion dates for NPI Stage 2	Clarify and incorporate any changes to the water security planning, including changes to timeframes for delivery of various infrastructure since the EIS was prepared	Refer to SEIS Appendix D – Errata
EIS (p. 107) Appendix D (p. 4)	Discussion of water supply strategy should be incorporated into the need of the project section	Incorporate into the consideration of the need of the project	Noted
EIS (p. 31)		Provide further quantification of the anticipated costs and benefits of the project including a basis on which costs were estimated	Refer to SEIS Section 4.2.6 – Justification for NPI Stage 2



**Figure H.1  
SIX MILE CREEK WATERWAY CROSSING  
LOCATIONS**