

ORELLANA Jose

From: GEISLER Graeme
Sent: Wednesday, 14 June 2017 9:38 AM
To: PALM
Subject: Requesting views for Owners Consent (eLVAS Case 2017/002411) Email 1 of 2
Attachments: sara-idas-form-27-waterway-barrier-works.doc; sara-idas-form-1-application-details.doc; sara-idas-checklist-4-operational-work.doc; MSES Report.pdf; 20170524 Owners Consent Signed.pdf; sdap-response-template-v1-10-5-2.docx; sara-idas-form-23-tidal-works-and-development.doc; sdap-response-template-v1-10-10-1.docx; sara-idas-form-11-clearing-native-vegetation.doc; sara-idas-checklist-1-various-aspects-of-development.doc

GHD Pty Ltd on behalf of the Douglas Shire Council has submitted an application for owners consent for operational works including tidal.

The area of land is part of the Esplanades and Unallocated State Land (USL) of the Mossman and South Mossman Rivers, Mossman, part of the Road Reserve of Junction Road, Mossman, adjoining freehold lots are Lot 26 on Registered Plan 804231 and Lot 24 on Registered Plan 800895, Mossman Water Treatment Plant, Mossman.

The proposed works is the reconstruction of embankments on the Mossman and South Mossman Rivers and associated works.

I attach a covering email containing plans and documents supporting the application.

In terms of the MOA between our departments this matter is referred to your agency (EHP) for your comment.

Can you please provide your comments in accordance with the MOA by 12 July 2017.

Regards



Graeme Geisler
Administration Officer
State Land Asset Management | North Region
Department of Natural Resources and Mines

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65 Brodie St | Hughenden Qld 4821
PO Box 5318 Townsville Qld 4810

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DEPARTMENT OF NATURAL RESOURCES AND MINES

Application form Contact and Land Details Part A

Application form requirements

1. **Part A:** Contact and land details will need to be completed.
2. **Part B:** Application specific form will need to be completed.
3. Payment of the prescribed application fee, if relevant. A refund of application fees will not be given. (Details of fees are available on the Department of Natural Resources and Mines (DNRM) website or from a regional DNRM office)
4. All parts of this application form need to be completed accurately, otherwise your application may be returned to you to complete.

Important information

All applications will be processed having regard to the requirements of the *Land Act 1994* and related legislation, approved policies and procedures and the requirements of all other agencies with an interest in the land.

All completed applications can be lodged with DNRM by sending information to the following email or postal addresses or in person at your local DNRM business centre.

Email:

SLAMlodgement@dnrm.qld.gov.au

If lodging an application via email the application form must be signed and details of payment method included in the email along with all relevant supporting documentation.

Post:

Department of Natural Resources and Mines
PO Box 5318
TOWNSVILLE QLD 4810

In terms of the *Right to Information Act 2009* interested parties may seek access to DNRM records and view relevant documents.

Information on this form, and any attachments, is being collected to process and assess your application under the *Land Act 1994*. The consideration of your application may involve consultation and if so details of your application may be disclosed to third parties. They will not be otherwise disclosed outside the department unless required or authorised by law.

Contact details

Lodger Details and Mailing Address

A lodger is only required when a solicitor, bank, consultant etc lodges the application on behalf of the applicant.

Full Name(s)		
Title	First name	Surname
Mrs	Kylie	Cauchi
Company name(s)		
GHD Pty Ltd		
Postal Address		
PO Box 819		
Cairns, QLD, 4870		
Phone number	(07) 4044 2209	Mobile phone
		e protection of an inc
Email		
Fax		

Applicant(s) Details and Mailing Address

If the applicant is a Corporation, either the
Australian Company number, Australian Registered Body number or the Australian Business number must be shown.

Full Name(s)		
Title	First name	Surname
Company name(s)		
Douglas Shire Council		
If a Corporation then record <input type="checkbox"/> ACN <input type="checkbox"/> ARBN <input checked="" type="checkbox"/> ABN		
		71 241 237 800
Postal Address	PO Box 723	
	Mossman, QLD, 4873	
Phone number	(07) 4099 9444 or 1800 026 318	Mobile phone
Email		
Fax	(07) 4089 2902	
Future correspondence should be sent to		
		<input checked="" type="checkbox"/> Lodger <input type="checkbox"/> Applicant

Details of land for which the application is being lodged

1. Select the type of land for which the application is being lodged.

<input type="checkbox"/> Permit	<input type="checkbox"/> Lease	
<input type="checkbox"/> Licence	<input checked="" type="checkbox"/> Unallocated State Land (USL)	go to 2
<input type="checkbox"/> Trust Land Reserve/Deed of Grant in Trust (DOGIT)	<input type="checkbox"/> Road	
<input type="checkbox"/> Other		

2. Enter the description of the land for which the application is being lodged. If this application concerns a road, enter the description of the land adjoining the road.

Schedule 1		
You must enter either the Lot on Plan or Title Reference of the land for which the application is being lodged.		
Lot	Plan	Title Reference
26	RP804231	
24	RP800895	
Esplanade in Mossman River		
Esplanade in Mossman Sth Rive		

go to 3

The details of the land can be found on a current copy of the Title or on your rates notice. If insufficient space, please add additional description as an attachment.

3. Enter additional details of the land

Dealing number

Tenure type Tenure number

Local Government

Other details of land location (optional)

Owner consent is sought for restoration of a section of Esplanade in Mossman and Mossman South River adjacent to Mossman Water Treatment Plant. The road is Junction Road Reserve and adjoins freehold land of Lot 26 on RP804231 and Lot 24 on RP800895.

go to 4

4. Have you participated in a pre-lodgement meeting with the department? Yes go to 5 No

5. Provide details of pre-lodgement meeting. (optional)
(If there is insufficient space, please lodge as an attachment)

Request for pre-lodgement submitted to SARA. Reference SPL-1216-035975.
Pre-lodgement advice received 1st February 2017.
MyDAS Application Reference SDA-0117-036630.

Departmental Officers contact details and any reference number should be included if known.

THIS FORM MUST BE ACCOMPANIED BY THE RELEVANT PART B APPLICATION FORM.



DEPARTMENT OF NATURAL RESOURCES AND MINES

Application for owners consent to development applications

Part B

Application form requirements

1. This application is for owners consent to a development application.
2. Read the *Application for owners consent to a development application* fact sheet that includes application restrictions.
3. Payment of the prescribed application fee, if relevant.
(Details of fees are available on the Department of Natural Resources and Mines (DNRM) website or from a regional DNRM office)
4. Any additional information to support the application.
5. **Part A:** Contact and details of land will need to be completed and submitted with your application.
6. If all parts of the application form are not filled out correctly, it may be returned to you to complete.

Important information

Section 263 of the *Sustainable Planning Act 2009* (SPA) requires the Department of Natural Resources and Mines (DNRM) to provide owners consent to a development application relating to some state land.

Where owners consent is required for specific state land, the application is to be made only by, or on behalf of, the person who:

- holds or will hold the appropriate tenure or interest e.g. lessee, sublessee, trustee of trust land, trustee lessee, grantee of an easement; or
- if no tenure is required by DNRM, the person who will occupy the land.

Consideration to providing owners consent to a development application will only be given by DNRM where the:

- applicant holds a tenure or interest in state land that supports the proposed development
- applicant has accepted an offer for a tenure or interest in state land that supports the proposed development
- proposed development does not require tenure or interest in state land e.g. a tidal work for public purposes such as a power line, public boat ramp.

It is a mandatory requirement of the SPA that development applications be lodged on IDAS form 1: Application details, with all necessary other forms or attachments included.

Development under the SPA includes reconfiguration of a lot. Reconfiguration of a lot held under a *Land Act 1994* tenure is not assessed under the provisions of the SPA e.g. subdivision of a lease, including a freeholding lease, issue of a trustee lease of a reserve - you will need to make the relevant application to deal with the land under the Land Act. However, an exception is for a deed of grant in trust in some circumstances e.g. for a trustee lease with a term of more than 10 years, a development application under SPA may also be required.

Information on this form, and any attachments, is being collected to process and assess your application under the *Land Act 1994*. The consideration of your application may involve consultation and if so details of your application may be disclosed to third parties. They will not be otherwise disclosed outside the department unless required or authorised by law.

1. Is the development application for reconfiguration of a lot as outlined below held under *Land Act 1994* tenure? Yes No go to 2

An application can not be considered

Reconfiguration of land administered under the *Land Act 1994* e.g. subdivision of a lease, including a freeholding lease, issue of a trustee lease of a reserve, is not assessed under the provisions of the SPA - you will need to make the relevant application to deal with the land under the Land Act. However, for a deed of grant in trust in some circumstances eg. for a trustee lease with a term of more than 10 years, a development application under SPA may also be required.

A copy of the IDAS Form 7 must accompany this application.

2. Is your development for tidal works for a structure e.g. a jetty, pontoon or boat ramp for residential use adjoining private land outside of a canal and not within a declared fish habitat area? Yes No go to 3

Your application must be lodged with the Department of Environment and Heritage Protection

If the proposed development is for a structure such as a jetty, pontoon or boat ramp for residential use adjoining private land outside of a canal, the Environmental business unit of Department of Environment and Heritage Protection gives owners consent. No owners consent is required for development applications for tidal works within a canal, as defined under the *Coastal Protection and Management Act 1995*.

If your application is for tidal works partly or wholly within a declared fish habitat area under the *Fisheries Act 1994*, it is recommended that you contact the Department of Agriculture, Fisheries and Forestry in the first instance.

A copy of the IDAS Form 23 must accompany this application.

3. Is this application for a material change of use on State land for quarry material administered under the Forestry Act 1959? Yes No go to 4

Your application must be lodged with the Department of Agriculture, Fisheries and Forestry

You will need to contact Forest Products in the Department of Agriculture, Fisheries and Forestry in the first instance.

A copy of the IDAS Form 5 must accompany this application.

4. Owners consent is required to be given by DNRM for land listed below. If you require owners consent for a development application for quarry materials or any state resources \ not listed below, you will need to contact the relevant Queensland Government department administering the resource.

Please select the following if applicable to your development application:

- a lease (including a freeholding lease) reserve or deed of grant in trust under the *Land Act 1994* where DNRM acts on behalf of the state as the lessee or trustee of the land go to 5
- a lease under the *Land Act 1994* (including a freeholding lease) reserve or deed of grant in trust if the lessee or trustee is not or does not represent the state go to 5
- strategic port land under the *Transport Infrastructure Act 1994*, other than freehold land go to 5
- a permit to occupy or licence under the *Land Act 1994* go to 5
- land held in fee simple by the state where DNRM administers the freehold on behalf of the state go to 5
- unallocated state land under the *Land Act 1994* including land below high water mark —other than as outlined in question two of this application form go to 5
- a road (other than a state-controlled road) or stock route go to 5

5. Is the applicant the holder of a tenure or a secondary interest in the state land e.g. lessee or sublessee of a *Land Act 1994* lease, trustee of a reserve or deed of grant in trust, grantee of an easement? Yes go to 9 No go to 6

6. Has an application for appropriate tenure been made? Yes go to 7 No
 An application can not be considered—refer below

Owners consent where tenure is required for the development may not be given unless DNRM has made an offer and you have accepted that offer. If you have already applied for an appropriate tenure, you will need to wait until you have received an offer from DNRM. If you have not already applied for tenure, you will need to do so.

In limited situations, tenure may not be required particularly for public tidal works, and you may wish to discuss your application with DNRM before applying for tenure.

7. Provide details of the application for appropriate tenure, including DNRM reference. (If there is insufficient space, please lodge as an attachment) go to 8

8. Has DNRM made an offer that has been accepted? Yes go to 9 No
 An application cannot be considered

If you have already applied but are awaiting an offer, or have been made an offer and have not yet accepted, consideration to providing owners consent will be made when the appropriate tenure requirements are in place.

9. Have you made a previous application for owners consent? Yes go to 10 No go to 12

10. Was this application refused? Yes go to 11 No go to 12

11. Has there been any change in circumstances from the previous application, which may lead to this application being accepted for further consideration? Yes go to 12 No go to 13

12. Provide details of any additional information to support the application. (optional)
(If there is insufficient space, please lodge as an attachment) go to 13

Additional information includes aerial site map and riverbank revetment drawings, se

Attachments

The following will need to be lodged with your application for it to be considered. If this information is not submitted, your application will be returned.

13. Tick the box to confirm the attachments for part of the application.

Application fee

Copy of the Development Application and all other necessary Forms being –

- original IDAS Form 1
- if you are making an application to reconfiguring a lot – IDAS form 7
- if you are making an application for Material Change of Use – IDAS Form 5
- if you are making an application for Tidal Works – IDAS Form 23;
- sketches/plans of existing and proposed improvements proposed to be lodged with the assessment manager.

Note – the department does not generally require the full development application, such as engineer drawings, but will require as much of the development application clearly showing the proposed development .

Details of application for tenure or road closure (if relevant) e.g. department reference

If the applicant is acting on behalf of a person that holds or will hold the tenure, or if no tenure is required, the person who will be occupying the state land, a letter from that person advising you are acting for and on behalf of them is required.

If the development application relates to a secondary interest in the state land e.g. sublease, trustee lease etc., a letter from the lessee, trustee etc. as relevant that they support the application will also be required.

It is recommended that any attached plans, sketches or maps be of A4 or A3 size. Your application will not be considered, unless all parts of this application form are completed accurately. In this instance your application may be returned to you for completion.

Declaration

I certify that I have read the information which forms part of this application and the information I have provided is true and accurate.

Signature of applicant (or their legal representative)

SCOTT, HAHNE - PROJECT ENGINEER, DOUGLAS SHIRE COUNCIL

judice the protection of an individuals

Date:

24 / 5 / 2017

If applicant, section 142 of the *Land Act 1994* states a person is eligible to apply for, buy or hold land under the *Land Act 1994* if the person is an adult, that is, 18 years of age or over.

If the legal representative of the applicant is signing as the applicant then the legal representative's full name must be printed immediately below the signature.

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Queensland Government

Department of Environment and Heritage Protection

Environmental Reports

Matters of State Environmental Significance

Area of Interest: Longitude: 145.3782 Latitude: -16.4503

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Environmental Reports - General Information

The Environmental Reports portal provides for the assessment of selected matters of interest relevant to a user specified location, or area of interest (AOI). All area and derivative figures are relevant to the extent of matters of interest contained within the AOI unless otherwise stated. Please note, if a user selects an AOI via the "Central co-ordinates" option, the resulting assessment area encompasses an area extending for a 2km radius from the point of interest.

All area and area derived figures included in this report have been calculated via reprojecting relevant spatial features to Albers equal-area conic projection (central meridian = 146, datum Geocentric Datum of Australia 1994). As a result, area figures may differ slightly if calculated for the same features using a different co-ordinate system.

Figures in tables may be affected by rounding.

The matters of interest reported on in this document are based upon available state mapped datasets. Where the report indicates that a matter of interest is not present within the AOI (e.g. where area related calculations are equal to zero, or no values are listed), this may be due either to the fact that state mapping has not been undertaken for the AOI, that state mapping is incomplete for the AOI, or that no values have been identified within the site.

The information presented in this report should be considered as a guide only and field survey may be required to validate values on the ground.

Please direct queries about these reports to: Planning.Support@ehp.qld.gov.au

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Assessment Area Details

The following table provides an overview of the area of interest (AOI) with respect to selected topographic and environmental values.

Table 1: Summary table, AOI details

Area of Interest	145.3782,-16.4503 with 2 kilometre radius
Size (ha)	1256.6
Local Government(s)	DOUGLAS SHIRE
Bioregion(s)	Wet Tropics
Subregion(s)	Daintree - Bloomfield
Catchment(s)	Mossman

Refer to **Map 1** for locality information.

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Matters of State Environmental Significance (MSES)

MSES Categories

Queensland's State Planning Policy (SPP) includes a biodiversity State interest that states:

'The sustainable, long-term conservation of biodiversity is supported. Significant impacts on matters of national or state environmental significance are avoided, or where this cannot be reasonably achieved; impacts are minimised and residual impacts offset.'

The MSES mapping product is a guide to assist planning and development assessment decision-making. Its primary purpose is to support implementation of the SPP biodiversity policy. While it supports the SPP, the mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations. Similarly, the SPP biodiversity policy does not override or replace specific requirements of other Acts or regulations.

The SPP defines matters of state environmental significance as:

- Protected areas (including all classes of protected area except coordinated conservation areas) under the *Nature Conservation Act 1992*;
- Marine parks and land within a 'marine national park', 'conservation park', 'scientific research', 'preservation' or 'buffer' zone under the *Marine Parks Act 2004*;
- Areas within declared fish habitat areas that are management A areas or management B areas under the Fisheries Regulation 2008;
- Threatened wildlife under the *Nature Conservation Act 1992* and special least concern animals under the Nature Conservation (Wildlife) Regulation 2006;
- Regulated vegetation under the *Vegetation Management Act 1999* that is:
 - Category B areas on the regulated vegetation management map, that are 'endangered' or 'of concern' regional ecosystems;
 - Category C areas on the regulated vegetation management map that are 'endangered' or 'of concern' regional ecosystems;
 - Category R areas on the regulated vegetation management map;
 - Regional ecosystems that intersect with watercourses identified on the vegetation management watercourse and drainage feature map;
 - Regional ecosystems that intersect with wetlands identified on the vegetation management wetlands map;
- Strategic Environmental Areas under the *Regional Planning Interests Act 2014*;
- Wetlands in a wetland protection area of wetlands of high ecological significance shown on the Map of Referable Wetlands under the Environmental Protection Regulation 2008;
- Wetlands and watercourses in high ecological value waters defined in the Environmental Protection (Water) Policy 2009, schedule 2;
- Legally secured offset areas.

Refer to **Appendix 1** for a description of MSES categories.

MSES Values Present

The MSES values that are present in the area of interest are summarised in the table below:

Table 2: Summary of MSES present within the AOI

MSES Criteria 1 - STATE CONSERVATION AREAS	0.0 ha	0.0%
1.1 Protected Areas	0.0 ha	0.0%
1.2 Marine Parks	0.0 ha	0.0%
1.3 Fish Habitat Areas	0.0 ha	0.0%
MSES Criteria 2 - WETLANDS AND WATERWAYS - area features	0.0 ha	0.0%
MSES Criteria 2 - WETLANDS AND WATERWAYS - linear features	0.0 km	Not applicable
2.1 High Ecological Significance wetlands on the map of Referable Wetlands	0.0 ha	0.0%
2.2 High Ecological Value (HEV) wetlands	0.0 ha	0.0%
2.2 High Ecological Value (HEV) waterways **	0.0 km	Not applicable
2.3 Strategic Environmental Areas (SEA)	0.0 ha	0.0%
MSES Criteria 3 - SPECIES	219.6 ha	17.5%
3.1 Threatened species and Iconic species	219.6 ha	17.5%
MSES Criteria 4 - REGULATED VEGETATION - area features	238.6 ha	19.0%
MSES Criteria 4 - REGULATED VEGETATION - linear features	29.5 km	Not applicable
4.1 Vegetation Management Regional Ecosystems and Remnant Map *	238.6 ha	19.0%
4.2 Vegetation Management Wetland Map *	0.0 ha	0.0%
4.3 Vegetation Management Watercourse Map **	29.5 km	Not applicable
MSES Criteria 5 - OFFSET AREAS	0.0 ha	0.0%
5.1 Legally secured offset areas	0.0 ha	0.0%
Total MSES (criteria 1.1, 1.2, 1.3, 2.1, part of 2.2, 2.3, 3.1, 4.1, 4.2 and 5.1) calculated for area features only	311.6 ha	24.8%

Please note that the area and percent area figures in the table above will not necessarily add up to the "Total MSES" figures due to overlapping values.

*The total extent area of regulated vegetation (Criteria 4.1) may be overestimated due to the presence of dominant and/or subdominant non-regulated regional ecosystems in mixed patches of vegetation, i.e. the total area of mixed vegetated patches is included irrespective of whether the patch consists only partly of endangered, of concern or wetland regional ecosystems.

**The total linear extent of watercourses may be overestimated in some instances, as both banks (rather than the centreline) of waterbodies and larger watercourses where present are mapped by the State, increasing the extent of linear features.

Additional Information with Respect to MSES Values Present

Criteria 1 - State Conservation Areas

1.1 Protected Areas

(no results)

1.2 Marine Parks

(no results)

1.3 Fish Habitat Areas

(no results)

Refer to **Map 2 - MSES Criteria 1 - State Conservation Areas** for an overview of the relevant MSES.

Criteria 2 - Wetlands and Waterways

2.1 High Ecological Significance wetlands on the Map of Referable Wetlands

(no results)

2.2 High Ecological Value (HEV) wetlands

(no results)

2.2 High Ecological Value (HEV) waterways

(no results)

2.3 Strategic Environmental Areas

(no results)

Refer to **Map 3 - MSES Criteria 2 - Wetlands and Waterways** for an overview of the relevant MSES.

Criteria 3 - Species

3.1 Threatened species and Iconic species

Threatened and/or iconic species habitat within the AOI (derived from records/essential habitat mapping)

(no results)

**NCA E or V - Endangered or Vulnerable status under the NCA; VMA ehab - VMA essential habitat; Iconic - Iconic species.*

To request a species list for an area, or search for a species profile, access Wildlife Online at:

<https://www.qld.gov.au/environment/plants-animals/species-list/>

Koala bushland habitat

(no results)

Dugong areas

(no results)

Refer to **Map 4 - MSES Criteria 3 - Species** for an overview of the relevant MSES.

Criteria 4 - Regulated Vegetation

4.1 Endangered and Of Concern regional ecosystems and Category R Regulated Vegetation

Regulated Vegetation Description	Regional Ecosystem Patch	VMA status
Cat R	None	None
rem_end	7.3.17	E-dom
rem_end	7.3.23a	E-dom
rem_oc	7.3.28a	O-dom
rem_oc	7.3.10a	O-dom
rem_oc	7.3.25a	O-dom
rem_oc	7.1.4a	O-dom
rem_oc	7.11.16a	O-dom
rem_oc	7.11.18g	O-dom
rem_oc	7.11.44	O-dom
rem_end	7.3.40	E-dom

For further information relating to regional ecosystems in general, go to:

<https://www.qld.gov.au/environment/plants-animals/plants/ecosystems/>

For a more detailed description of a particular regional ecosystem, access the regional ecosystem search page at:

<https://environment.ehp.qld.gov.au/regional-ecosystems/>

4.2 Vegetation Management Wetlands

(no results)

Wetlands datasource

Not applicable

4.3 Watercourses shown on the Vegetation Management Watercourse and Drainage Feature Map

A vegetation management watercourse is mapped as present

Watercourses datasource

Vegetation Management Watercourse Map

Refer to **Map 5 - MSES Criteria 4 - Regulated Vegetation** for an overview of the relevant MSES.

Criteria 5 - Offset Areas

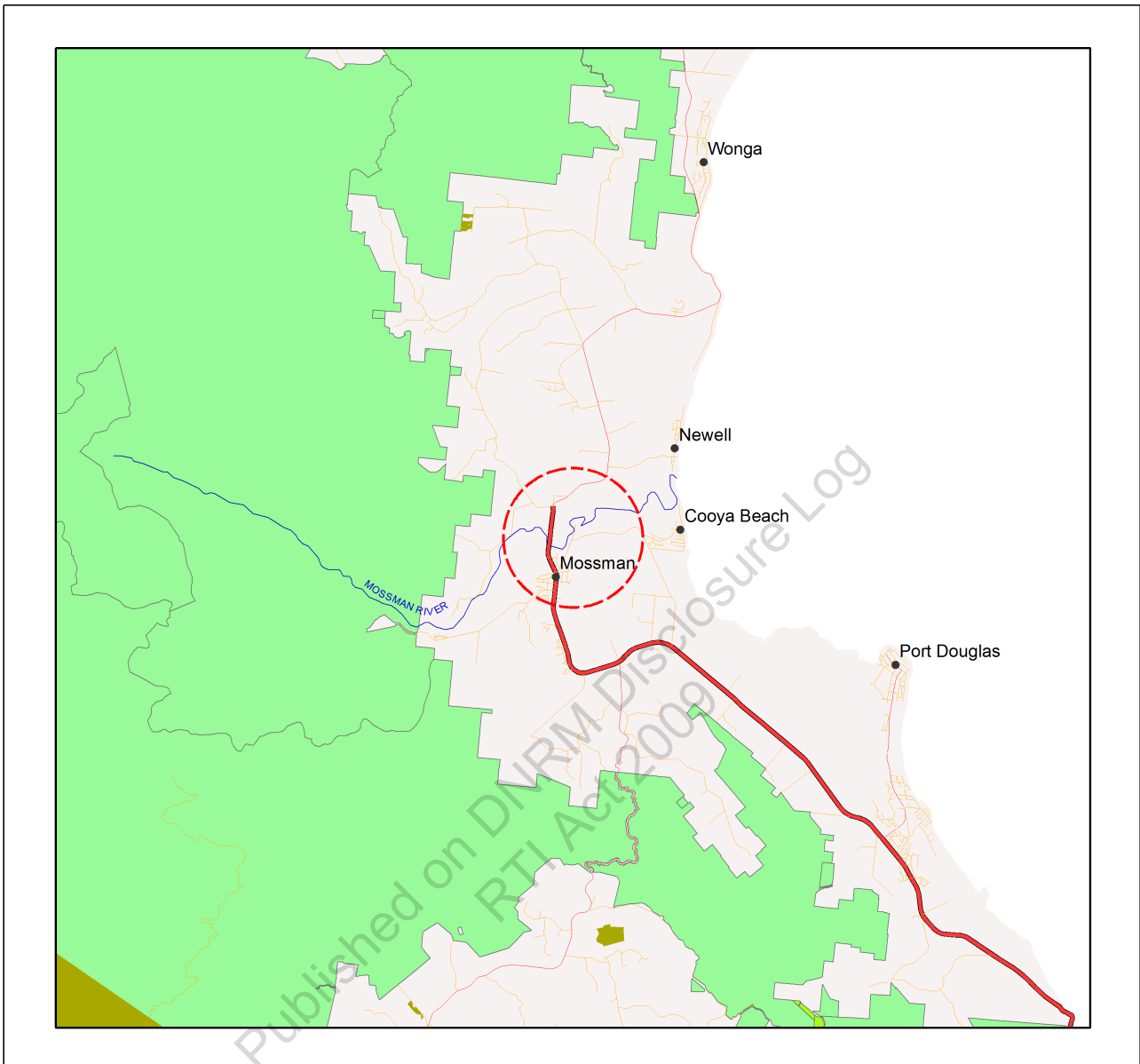
5.1 Legally secured offset areas

(no results)

Refer to **Map 6 - MSES Criteria 5 - Offset Areas** for an overview of the relevant MSES.

Maps

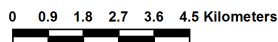
Map 1 - Location



Locality Map

Legend

- 2 kilometre buffer
- Towns
- Highway
- Connector
- Street/Local Road
- National Park (Scientific)
- National Park
- National Park (CYPAL)
- Conservation Park
- Resources Reserve
- Forest Reserve
- State Forest
- Timber Reserve
- Nature Refuges
- Lakes and Reservoirs
- Major rivers/creeks
- Queensland



This product is projected into:
GDA 1994 Queensland Albers

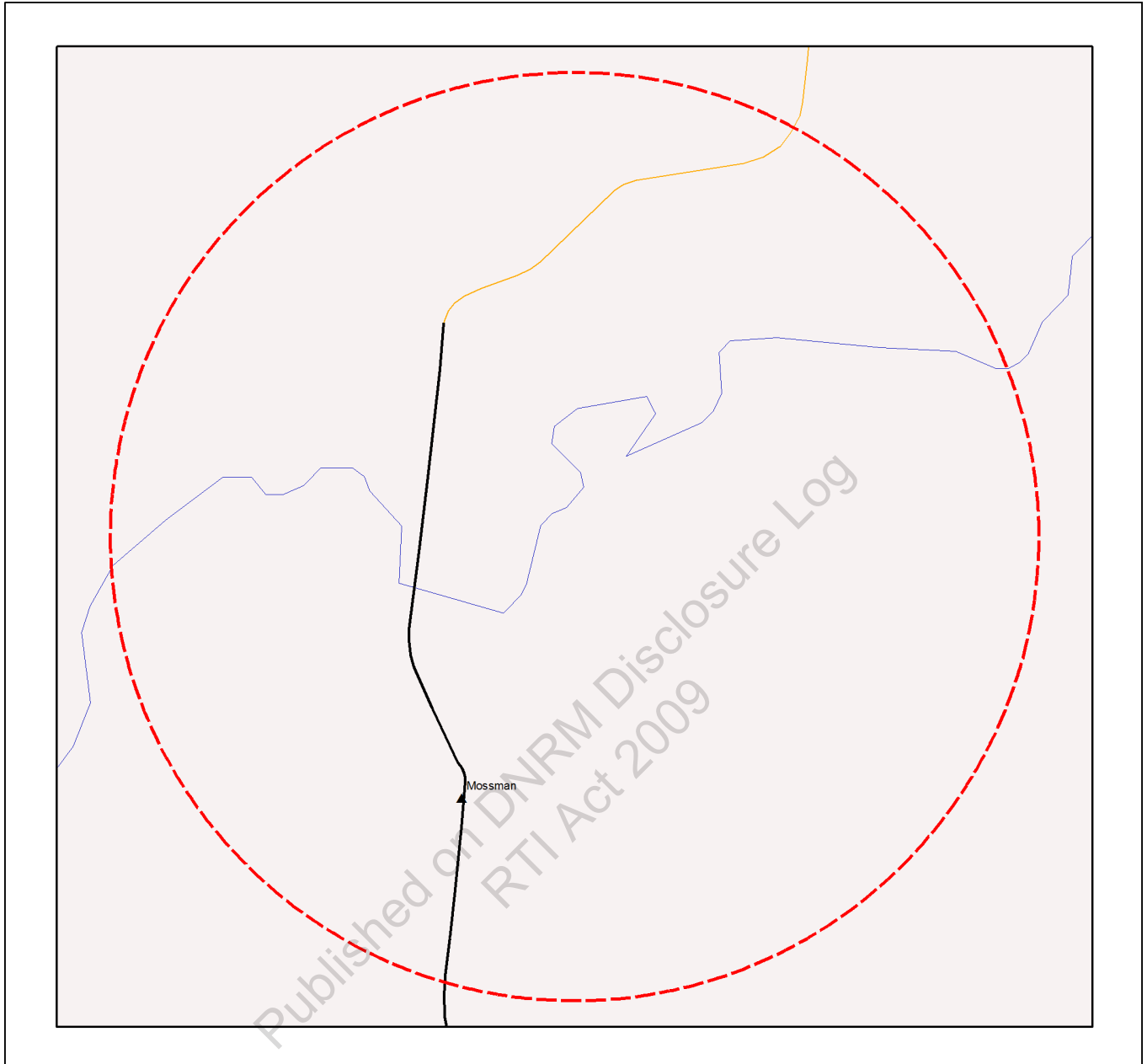
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Map 2 - MSES Criteria 1 - State Conservation Areas

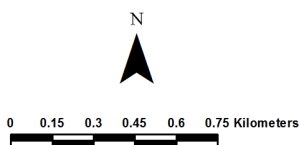


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MSES Criteria 1- State Conservation Areas

Area of Interest

-  2 kilometre buffer
-  Towns
-  Freeways/Highways
-  Secondary roads
-  Major rivers/creeks
-  MSES Protected area
-  MSES Declared fish habitat area
-  MSES Marine park

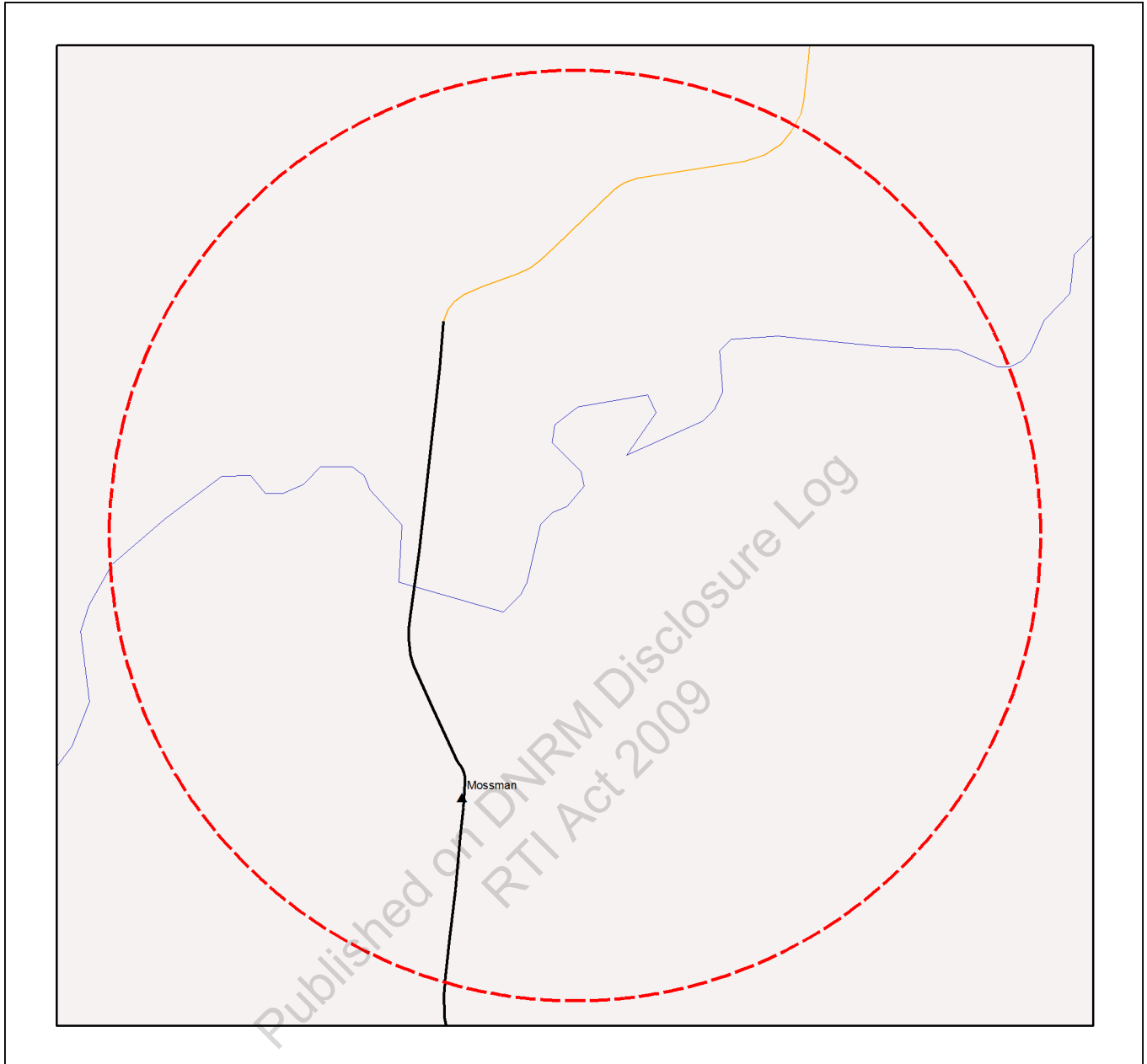


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Map 3 - MSES Criteria 2 - Wetlands and Waterways

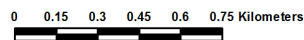


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MSES Criteria 2 - Wetlands and Waterways

Area of Interest

- 2 kilometre buffer
- Towns
- Freeways/Highways
- Secondary roads
- Major rivers/creeks
- MSES - High ecological value waters (watercourses)
- MSES - Strategic environmental area (designated precinct)
- MSES - High ecological value waters (wetland)
- MSES - High ecological significance wetlands

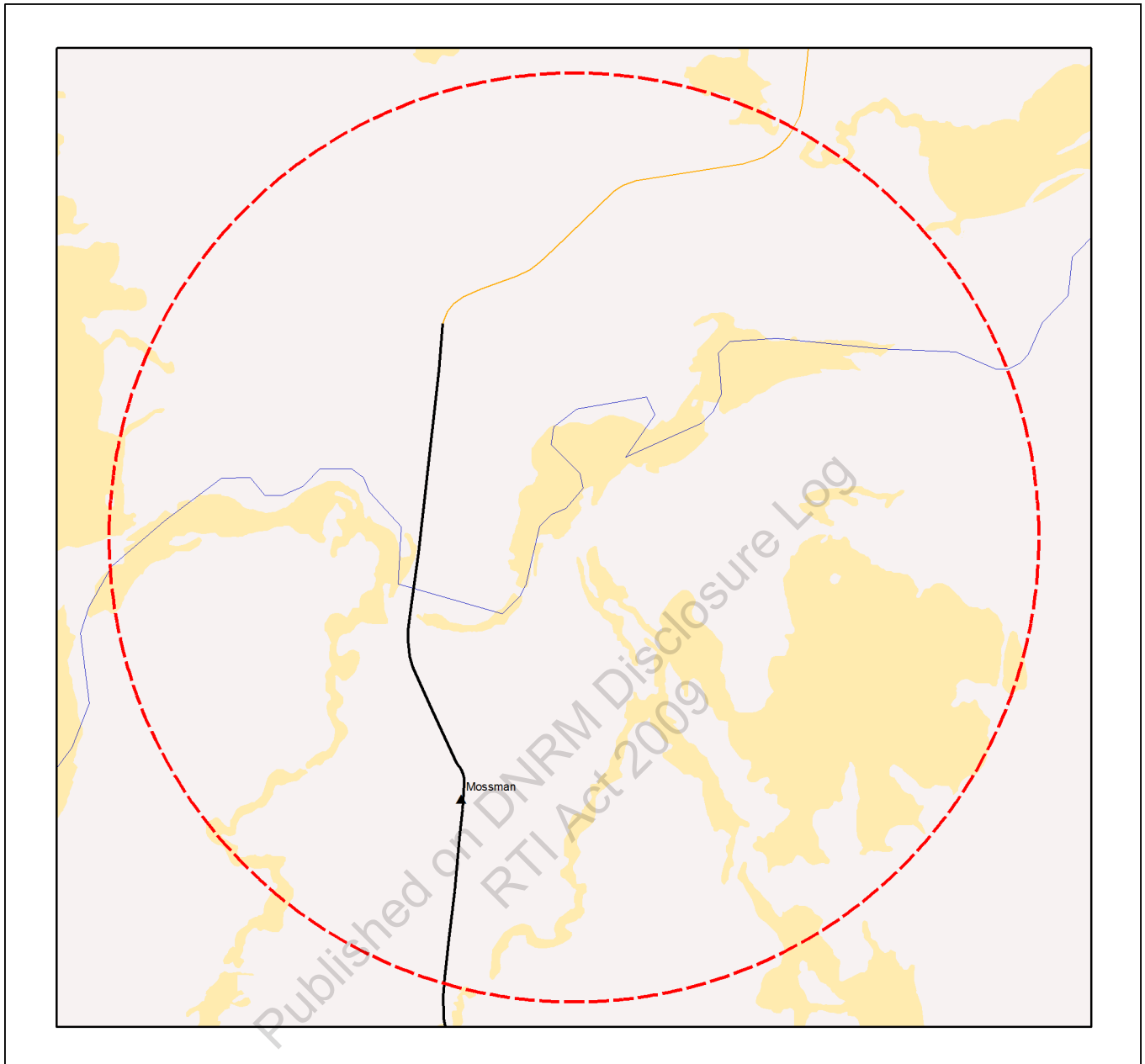


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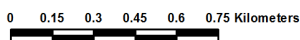
Map 4 - MSES Criteria 3 - Species



MSES Criteria 3 - Species

Area of Interest

-  2 kilometre buffer
-  Towns
-  Freeways/Highways
-  Secondary roads
-  Major rivers/creeks
-  MSES - Wildlife habitat

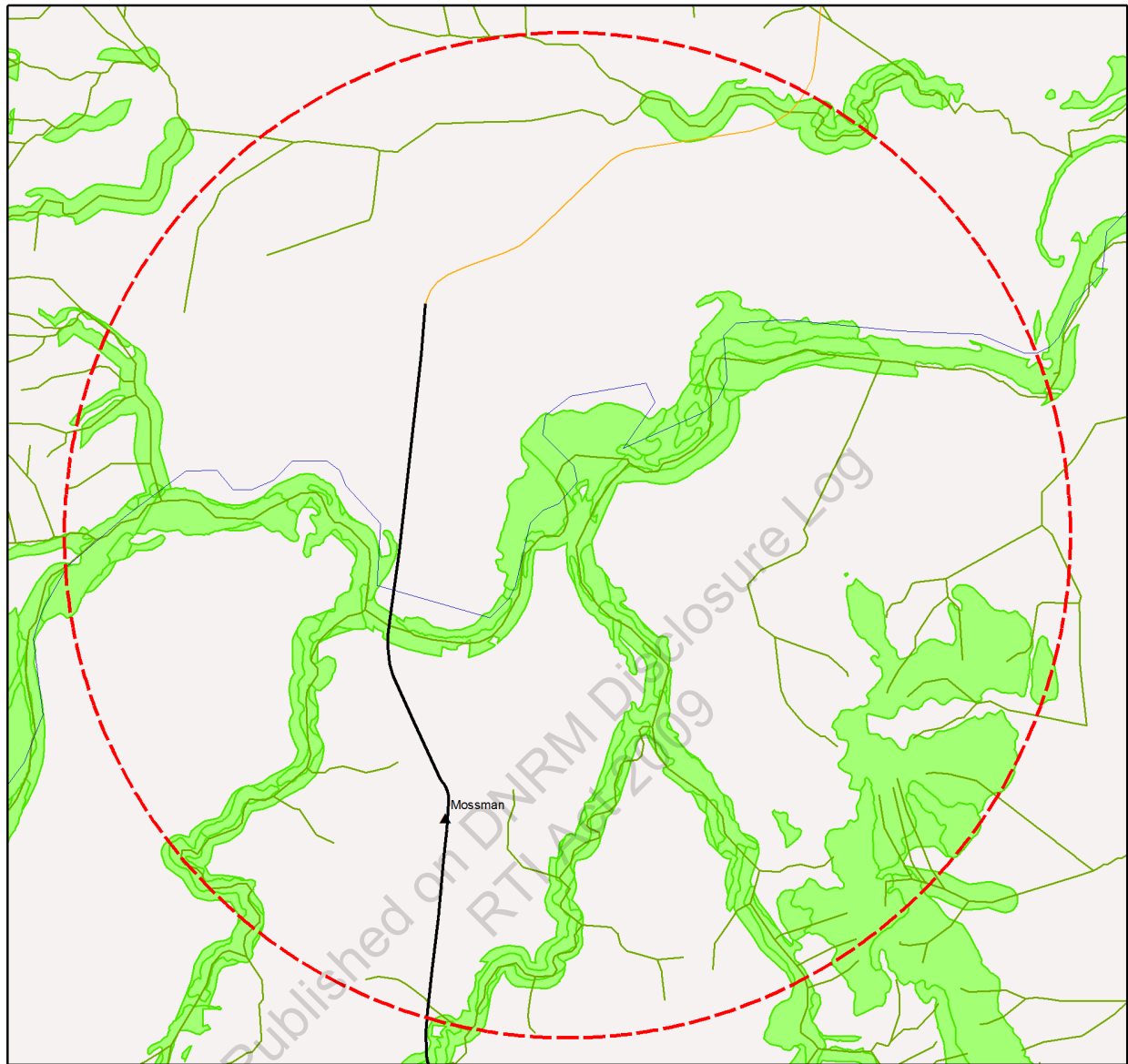


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




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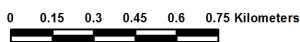
Map 5 - MSES Criteria 4 - Regulated Vegetation



MSES Criteria 4 - Regulated Vegetation

Area of Interest

-  2 kilometre buffer
-  Towns
-  Freeways/Highways
-  Secondary roads
-  Major rivers/creeks
-  MSES - Regulated vegetation (intersecting a watercourse)
-  MSES - Regulated vegetation

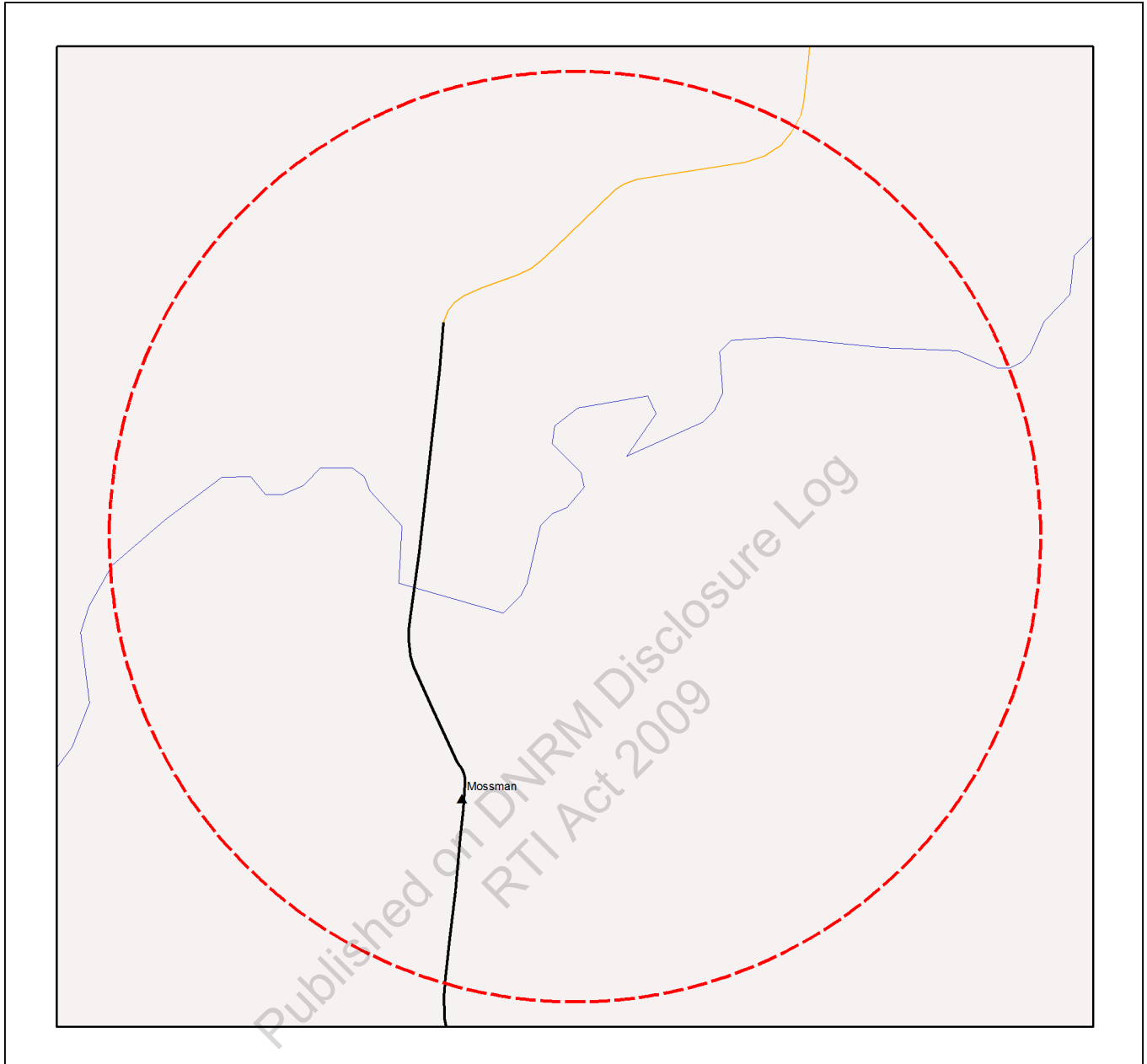


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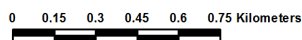
Map 6 - MSES Criteria 5 - Offset Areas



MSES Criteria 5 - Offset Areas

Area of Interest

-  2 kilometre buffer
-  Towns
-  Freeways/Highways
-  Secondary roads
-  Major rivers/creeks
-  MSES - Legally secured offset area

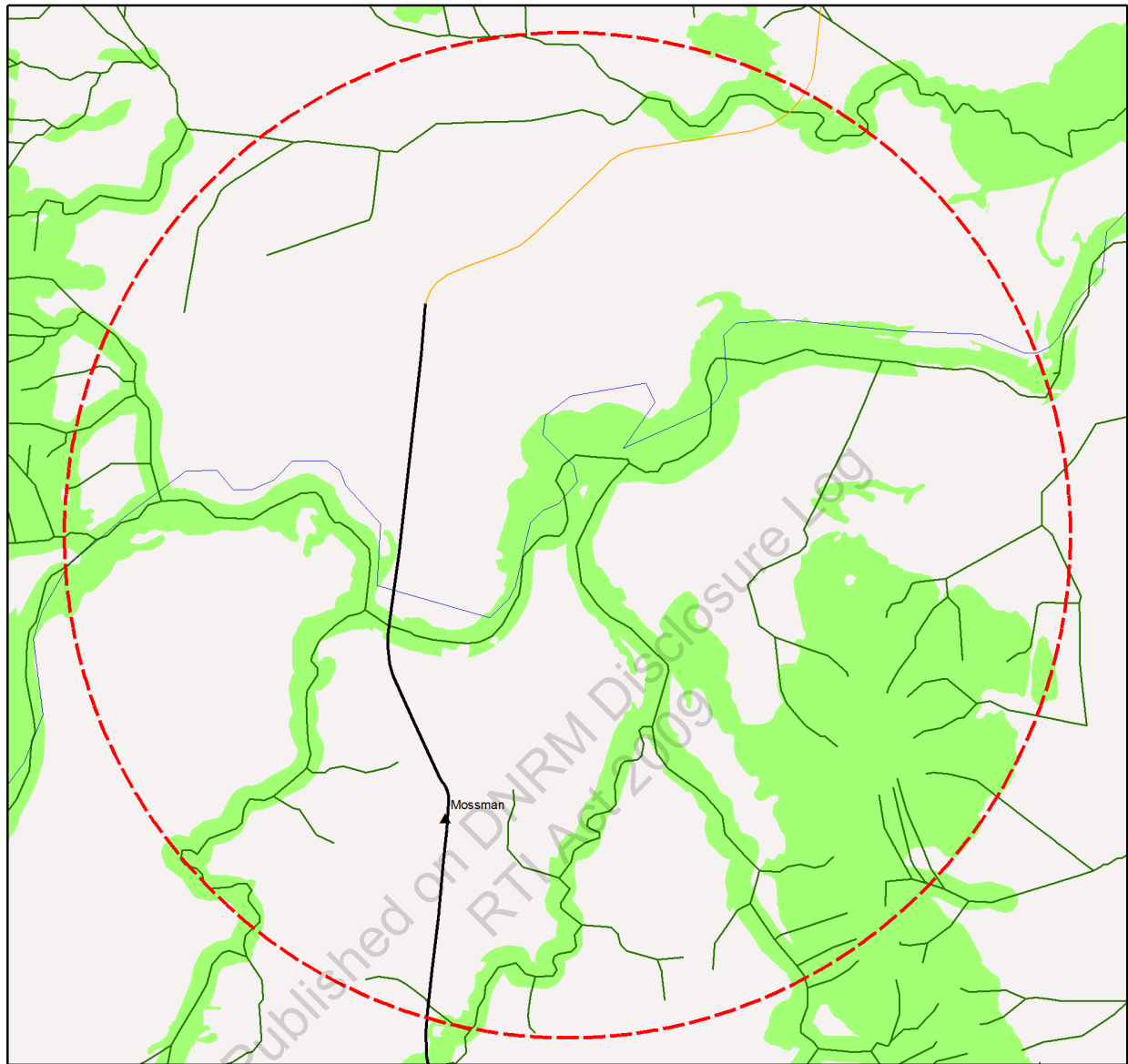


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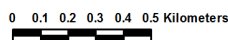
Map 7 - Matters of State Environmental Significance



Matters of State Environmental Significance

Area of Interest

-  2 kilometre buffer
-  Towns
-  Freeways/Highways
-  Secondary roads
-  Major rivers/creeks
-  Matters of State Environmental Significance (watercourses)
-  Matters of State Environmental Significance (areas)



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Appendices

Appendix 1 - Matters of State Environmental Significance (MSES) Criteria

Feature Name	Description
1.1 Protected Areas (NCA)	Protected areas under the <i>Nature Conservation Act 1992</i> , except coordinated conservation areas.
1.2 Marine Parks (MPA)	The following State marine parks zones under the <i>Marine Parks Act 2004</i> : <ul style="list-style-type: none"> - Marine National Park zone; - Marine Conservation Park zone; - Scientific Research zone; - Preservation zone; - Buffer zone.
1.3 Fish Habitat Areas (FA)	The following areas under the <i>Fisheries Act 1994</i> including: All fish habitat areas.
2.1 'High Ecological Significance' wetlands on the Map of Referable Wetlands	All natural wetlands that are 'High Ecological Significance' (HES) on the Map of Referable Wetlands. Exclude: any amendments to the Map of Referable Wetlands.
2.2 High Ecological Value (HEV) wetlands and waterways (EP Act)	Natural wetlands and waterways that occur in HEV (maintain) freshwater and estuarine areas under the Environmental Protection (Water) Policy.
2.3 Strategic Environmental Areas (RPI Act)	Designated precinct areas under the <i>Regional Planning Interests Act 2014</i> .
3.1 Threatened species and Iconic species (NCA)	Habitat for: Threatened wildlife under <i>Nature Conservation Act 1992</i> including: 'Endangered' and 'Vulnerable' species. Special least concern animals under the <i>Nature Conservation Act 1992</i> including: Koala (outside SEQ); Echidna and Platypus.
4.1 Vegetation Management Regional Ecosystem and Remnant Map (VMA)	Include VMA 'Endangered' and 'Of Concern' remnant (Category A and B) and high value regrowth (Category C) REs and Category R (GBR regrowth watercourse) areas from the Regulated Vegetation Management Map.
4.2 Vegetation Management Wetland Map (VMA)	Wetlands that are lakes and swamps shown on the Vegetation Management Wetlands Map.
4.3 Vegetation Management Watercourse and Drainage Feature Map (VMA)	Watercourses shown on the Vegetation Management Watercourse and Drainage Feature Map.
5.1 Legally secured offset areas (VMA, EP Act, SPA, TIA, EA)	Offset areas legally secured under a covenant, conservation agreement or development approval condition.

The Queensland Government's "Method for mapping - matters of state environmental significance for use in land use planning and development assessment" can be downloaded from:

<http://www.ehp.qld.gov.au/land/natural-resource/method-mapping-mses.html>.

Appendix 2 - Source Data

The datasets listed below are available on request from:

<http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>

- Matters of State environmental significance
- Matters of State environmental significance drainage lines
- Boundaries of the Great Barrier Reef Marine Park

Note: MSES mapping is a regional-scale representation of the definition for MSES under the State Planning Policy (SPP). The compiled MSES mapping product is a guide to assist planning and development assessment decision-making. Its primary purpose is to support implementation of the SPP biodiversity policy. While it supports the SPP, the mapping does not replace the regulatory mapping or environmental values specifically called up under other laws or regulations. Similarly, the SPP biodiversity policy does not override or replace specific requirements of other Acts or regulations.

MSES mapping is not based on new or unique data. The primary mapping product draws data from a number of underlying environment databases and geo-referenced information sources. MSES mapping is a versioned product that is updated generally on a twice-yearly basis to incorporate the changes to underlying data sources. Several components of MSES mapping made for the current version may differ from the current underlying data sources. To ensure accuracy, or proper representation of MSES values, it is strongly recommended that users refer to the underlying data sources and review the current definition of MSES in the State Planning Policy, before applying the MSES mapping.

Underlying data sources used to develop individual releases of compiled MSES mapping include, but are not limited to:

- Regulated vegetation including:

- Regulated Regional Ecosystems and Regrowth
- Regulated Essential habitat
- Regulated Wetlands
- Regulated Watercourses and Drainage
- Former Regrowth

- Queensland Wetland Mapping (v3)

- Essential Habitat Mapping

- Protected Areas

- Marine Parks

- Fish Habitat Areas

- Strategic Environmental Areas

- The Map of Referable Wetlands:

- Wetland Protection Areas (HES wetlands in the GBR)
- Wetland Management Areas (contains other HES wetlands)

Datasets reflective of the above matters can be downloaded via the Queensland Spatial Catalogue:

<http://qldspatial.information.qld.gov.au/catalogue/custom/index.page>

Appendix 3 - Acronyms and Abbreviations

AOI	- Area of Interest
EHP	- Department of Environment and Heritage Protection
EP Act	- <i>Environmental Protection Act 1994</i>
EPP	- Environmental Protection Policy
GDA94	- Geocentric Datum of Australia 1994
GEM	- General Environmental Matters
GIS	- Geographic Information System
MSES	- Matters of State Environmental Significance
NCA	- <i>Nature Conservation Act 1992</i>
RE	- Regional Ecosystem
SPP	- State Planning Policy
VMA	- <i>Vegetation Management Act 1999</i>

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Schedule 3 Assessable Development Checklist 1—Various aspects of development

(Sustainable Planning Act 2009 version 3.3 effective 3 August 2015)

This checklist applies to the carrying out of various aspects of development, as specified in the Sustainable Planning Regulation 2009, Schedule 3, Part 1, Table 5.

You may complete this checklist as part of your development application. The checklist will:

- help you identify whether you need to make a development application for the proposed development
- help you identify the relevant Integrated Development Assessment System (IDAS) form you need to complete as part of your application
- assist in identifying the assessment manager or referral agency for development that is assessable development under schedule 3 of the Sustainable Planning Regulation 2009.

If your development involves a material change of use, reconfiguring a lot, operational work or building work, it is recommended you complete the relevant checklists: *Checklist 2—Material change of use*, *Checklist 3—Reconfiguring a lot*, *Checklist 4—Operational work*, or *Checklist 5—Building work*.

If you are unsure how to answer any questions on this checklist, phone or visit your local government, or go to the Department of Infrastructure, Local Government and Planning's (DILGP) website at www.dilgp.qld.gov.au.

All terms used in this checklist have the meaning given in the *Sustainable Planning Act 2009* or the Sustainable Planning Regulation 2009.

Part 1—General questions

1.1 Is any part of the proposed development intended to be carried out on a Queensland heritage place under the *Queensland Heritage Act 1992*?

<input checked="" type="checkbox"/> No	• Continue to question 1.2
<input type="checkbox"/> Yes	• Complete part 2 of this checklist

1.2 Does the proposal involve development on a local heritage place?

<input checked="" type="checkbox"/> No	• Continue to question 1.3
<input type="checkbox"/> Yes	• Complete part 3 of this checklist

1.3 Is any part of the development on strategic port land or airport land (other than development for a material change of use that is inconsistent with the land use plan for the strategic port land or airport land mentioned in the Sustainable Planning Regulation 2009, Schedule 3, Part 1, Table 2, item 3 or 4)?

<input checked="" type="checkbox"/> No	• End of checklist – A development permit is not required for this aspect of development under Sustainable Planning Regulation 2009, Schedule 3, Part 1, Table 5
<input type="checkbox"/> Yes	• Complete part 4 of this checklist

Part 2—Queensland heritage place

2.1 Do any of the following apply to the proposal?

The proposed development is only ongoing maintenance or minor work permitted by a general	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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exemption certificate issued under section 75 of the <i>Queensland Heritage Act 1992</i> .	
An exemption certificate has been issued under the <i>Queensland Heritage Act 1992</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No
The proposed development is liturgical development under section 78 of the <i>Queensland Heritage Act 1992</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No
The work is being carried out by the state.	<input type="checkbox"/> Yes <input type="checkbox"/> No
The work is being carried out in a priority development area.	<input type="checkbox"/> Yes <input type="checkbox"/> No
The development is mentioned in schedule 4 of the Sustainable Planning Regulation 2009.	<input type="checkbox"/> Yes <input type="checkbox"/> No

- If you answered **no** to all of the above, a development permit is required and this application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency against the *Queensland Heritage Place State Code* in the SDAP.
- Your application must include *IDAS form 3—Queensland heritage place*.
- If you answered **yes** to any of the above, a development permit is not required. End of part 2 of this checklist.

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 5, item 2
- Sustainable Planning Regulation 2009, schedule 7, table 2, item 19

Part 3—Local heritage place

3.1 Do any of the following apply to the proposal?

The development is building works to be carried out by or on behalf of the state, a public sector entity or a local government	<input type="checkbox"/> Yes <input type="checkbox"/> No
The development is for public housing	<input type="checkbox"/> Yes <input type="checkbox"/> No
The development is to be carried out by the state on land designated for community infrastructure under the <i>Sustainable Planning Act 2009</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No
The development is mentioned in schedule 4 of the Sustainable Planning Regulation 2009.	<input type="checkbox"/> Yes <input type="checkbox"/> No
The local heritage place is on an airport lessee's airport land under the <i>Airports Assets (Restructuring and Disposal) Act 2008</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No

- If you answered **no** to all of the above, a development permit is required and your application to the local government, as assessment manager, must include *IDAS form 4—Local heritage place*.
- If you answered **yes** to any of the above, a development permit is not required.

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 5, item 3
- Sustainable Planning Regulation 2009, schedule 3, part 2, table 1, item 1
- *Airports Assets (Restructuring and Disposal) Act 2008*, section 54

Part 4—Strategic port land or airport land

4.1 Does the land use plan for the strategic port land or airport land state that the development is assessable development?

<input checked="" type="checkbox"/> No	• A development permit is not required for this aspect of development; end of this checklist.
--	---

<input type="checkbox"/> Yes	<ul style="list-style-type: none"> • A development permit is required and your application may include, where applicable: <ul style="list-style-type: none"> • for a material change of use—<i>IDAS form 5—Material change of use assessable against a planning scheme</i> • for building or operational work—<i>IDAS form 6—Building or operational work assessable against a planning scheme</i> • for reconfiguring a lot—<i>IDAS form 7—Reconfiguring a lot</i> • The assessment manager will either be the local government or the port authority or DILGP.
------------------------------	--

Section reference:

- Sustainable Planning Regulation 2009, schedule 3, part 1, table 5, items 6 and 7

Privacy—Please refer to your assessment manager for further details on the use of information recorded in this checklist.

Disclaimer:

While DILGP believes that the information contained on this checklist and provided as part of this process will be of assistance to you, it is provided on the basis that you will not rely on the information. It is your responsibility to make your own enquiries regarding the interpretation and application of the applicable legislation to your circumstances.

To the full extent permitted by law, DILGP expressly disclaims all liability (including but not limited to liability for negligence) for errors or omissions of any kind or for any loss (including direct and indirect losses), damage or other consequence which may arise from your reliance on this process and the information contained on this checklist.

OFFICE USE ONLY

Date received		Reference numbers	
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The Sustainable Planning Act 2009 is administered by DILGP. This checklist and all other required application materials should be sent to your assessment manager and any referral agency.

Schedule 3 Assessable Development Checklist 4— Operational work

(Sustainable Planning Act 2009 version 4.5 effective 5 December 2016)

This checklist only applies when the development application seeks approval for operational work. Before completing this checklist, please complete *Checklist 1—Various aspects of development*.

You may complete this checklist as part of your development application. The checklist will:

help you identify whether you need to make a development application for the proposed development

help you identify the relevant Integrated Development Assessment System (IDAS) form you need to complete as part of your application

assist in identifying the assessment manager or referral agency for development that is assessable development under schedule 3 of the Sustainable Planning Regulation 2009.

If your development involves reconfiguring a lot, building work or material change of use, it is recommended you complete *Checklist 2—Material change of use*, *Checklist 3—Reconfiguring a lot*, or *checklist 5—Building work*, where relevant.

If you are unsure of any answers to questions, phone or visit your local government, or go to the Department of Infrastructure, Local Government and Planning's website at www.dilgp.qld.gov.au.

All terms used in this checklist have the meaning given in the *Sustainable Planning Act 2009* or the Sustainable Planning Regulation 2009.

Part 1—General questions

1.1 Is the operational work clearing native vegetation on:

- freehold land
- indigenous land
- any of the following under the *Land Act 1994*:
 - land subject to a lease
 - a road
 - trust land, other than indigenous land
 - land subject to a licence or permit?

- | | |
|---|-----------------------------------|
| <input type="checkbox"/> No | Continue to question 1.2 |
| <input checked="" type="checkbox"/> Yes | Complete part 2 of this checklist |

1.2 Is any of the proposed operational work associated with reconfiguring a lot and the reconfiguration is also assessable development?

- | | |
|--|-----------------------------------|
| <input checked="" type="checkbox"/> No | Continue to question 1.3 |
| <input type="checkbox"/> Yes | Complete part 3 of this checklist |

1.3 Does any of the proposed operational work involve taking or interfering with:

- water from a watercourse, lake or spring, or from a dam constructed on a watercourse or lake
- artesian water as defined under the *Water Act 2000*, schedule 4
- subartesian water

<input checked="" type="checkbox"/> No	Continue to question 1.4
<input type="checkbox"/> Yes	Complete part 4 of this checklist

1.4 Is the operational work the construction of a dam, or carried out in relation to a dam, and, because of the works, the dam must:

- be failure impact assessed, and
- the accepted failure impact assessment for the referable dam states the dam has a category 1 or category 2 failure impact rating?

<input checked="" type="checkbox"/> No	Continue to question 1.5
<input type="checkbox"/> Yes	A development permit is required and this application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Referable dams state code</i> in the SDAP. <ul style="list-style-type: none"> - You must complete <i>IDAS form 16 - Referable dams</i> - Continue to question 1.5 as other parts of this checklist may also apply

1.5 Is any of the proposed operational work tidal works?

<input type="checkbox"/> No	Continue to question 1.6
<input checked="" type="checkbox"/> Yes	Complete part 5 of this checklist

1.6 Is any of the operational work proposed to be carried out completely or partly within the coastal management district?

<input type="checkbox"/> No	Continue to question 1.7
<input checked="" type="checkbox"/> Yes	Complete part 6 of this checklist

1.7 Is any of the proposed operational work for constructing or raising waterway barrier works as defined under the *Fisheries Act 1994*?

<input type="checkbox"/> No	Continue to question 1.8
<input checked="" type="checkbox"/> Yes	Complete part 7 of this checklist

1.8 Is any of the proposed operational work to be carried out completely or partly within a declared fish habitat area as defined under the *Fisheries Act 1994*?

<input checked="" type="checkbox"/> No	Continue to question 1.9
<input type="checkbox"/> Yes	Complete part 8 of this checklist

1.9 Is any of the proposed operational work removing, destroying or damaging marine plants as defined under the *Fisheries Act 1994*?

<input checked="" type="checkbox"/> No	Continue to question 1.10
--	---------------------------

<input type="checkbox"/>	Yes	Complete part 9 of this checklist
--------------------------	-----	-----------------------------------

1.10 Does the proposal involve operational works that are high impact earthworks in the Great Barrier Reef Wetland Protection Area?

<input checked="" type="checkbox"/>	No	Continue to question 1.11
<input type="checkbox"/>	Yes	Complete part 10 of this checklist

1.11 Does the proposal involve operational works that are the construction or modification of a levee?

<input checked="" type="checkbox"/>	No	End of checklist
<input type="checkbox"/>	Yes	Complete part 11 of this checklist

Part 2—Clearing native vegetation

2.1 Do any of the following apply?

The clearing is on premises to which structure plan arrangements apply.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
The clearing is clearing, or for another activity or matter, mentioned in schedule 24, part 1 of the Sustainable Planning Regulation 2009.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
The clearing is mentioned in schedule 24, part 2 of the Sustainable Planning Regulation 2009, as clearing for the particular land.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

If you answered **yes** to any of the above, this aspect of your operational work is not assessable development
 If you answered **no** to ALL of the above, continue to question 2.2

2.2 Is the proposed vegetation clearing for a relevant purpose under the *Vegetation Management Act 1999*, section 22A for one or more of the following?

A project declared to be a coordinated project under the <i>State Development and Public Works Organisation Act 1971</i> , section 26	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Necessary to control non-native plants or declared pests	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
To ensure public safety	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
For relevant infrastructure and the clearing cannot reasonably be avoided or minimised	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
A natural and ordinary consequence of other assessable development for which a development approval was given under the repealed <i>Integrated Planning Act 1997</i> , or a development application was made under that Act, before 16 May 2003 and is outside an area declared to be a declared area part 2, division 4, subdivision 2 of the <i>Vegetation Management Act 1999</i> .	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
For fodder harvesting outside an area declared to be a declared area part 2, division 4, subdivision 2 of the <i>Vegetation Management Act 1999</i> .	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
For thinning	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
For clearing of encroachment	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
For an extractive industry outside an area declared to be a declared area part 2, division 4, subdivision 2 of the <i>Vegetation Management Act 1999</i>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
For necessary environmental clearing	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

For high value agriculture clearing	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For irrigated high value agriculture clearing	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The Minister responsible for administering the <i>Vegetation Management Act 1999</i> is satisfied the development applied for is a for special indigenous purpose under the <i>Cape York Peninsula Heritage Act 2007</i> outside an area declared to be a declared area part 2, division 4, subdivision 2 of the <i>Vegetation Management Act 1999</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If you answered **no** to ALL of the above, then the clearing is not for a relevant purpose and this aspect of the development is prohibited development. If this is the only aspect of vegetation clearing then that is the end of part 2 of this checklist, otherwise continue to question 2.3

If **yes** to any of the above, continue to question 2.3

2.3 Is the proposed vegetation clearing associated with a material change of use or reconfiguring a lot for which referral is required in relation to clearing vegetation under schedule 7, table 3, item 10 and table 2, item 4 of the Sustainable Planning Regulation 2009?

<input checked="" type="checkbox"/> No	<p>The proposed operational work for clearing native vegetation is assessable development and a development permit is required</p> <p>This application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Queensland vegetation management state code</i> in the State Development Assessment Provisions (SDAP)</p> <p>You must complete <i>IDAS Form 11—Clearing native vegetation</i></p> <p>End of part 2 of this checklist</p>
<input type="checkbox"/> Yes	<p>This aspect of development is assessable development</p> <p>The chief executive of DILGP may be a concurrence agency for the application (see schedule 7, table 2, item 4 and table 3, item 10 of the Sustainable Planning Regulation 2009) and will assess the application against the <i>Queensland vegetation management state code</i> in the SDAP</p> <p>If DILGP is a concurrence agency for the application, you must refer a copy of your application to DILGP</p> <p>End of part 2 of this checklist</p>

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 1

Sustainable Planning Regulation 2009, schedule 7, table 2, item 4 and schedule 7, table 3, item 10

Vegetation Management Act 1999, section 22A

Part 3—Operational work for reconfiguring a lot

3.1 Is any part of the operational work for reconfiguring a lot in a priority development area?

<input checked="" type="checkbox"/> No	Continue to question 3.2
<input type="checkbox"/> Yes	<p>This aspect of the development is not assessable development</p> <p>End of part 3 of this checklist</p>

3.2 Do all of the following apply:

- the land is in the area of a local government that, under the *South East Queensland Water (Distribution and Retail Restructuring) Act 2009*, is a participating local government for a distributor–retailer
- the participating local government is the assessment manager
- the development application is made before 1 March 2014

<input type="checkbox"/> No	This aspect of the development is assessable development and you will need a development permit The local government will be the assessment manager for the application End of part 3 of this checklist
<input checked="" type="checkbox"/> Yes	This aspect of the development is assessable development and you will need a development permit The local government will be the assessment manager for the application and the distributor–retailer (or SARA) will be a concurrence agency for the application. End of part 3 of this checklist

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 2

Sustainable Planning Regulation 2009, schedule 7, table 2, item 47

Part 4—Taking or interfering with water

4.1 Is the proposed operational work to be carried out in a priority development area or on premises to which structure plan arrangements apply?

<input checked="" type="checkbox"/> No	Continue to question 4.2
<input type="checkbox"/> Yes	This aspect of development is not assessable development and does not require a development permit End of part 4 of this checklist

4.2 Does any of the proposed operational work involve taking or interfering with water from a watercourse, lake or spring or from a dam constructed on a watercourse or lake?

<input type="checkbox"/> No	End of part 4 of this checklist
<input checked="" type="checkbox"/> Yes	Continue to question 4.3

4.3 Are the proposed works for any of the following purposes?

Taking water from a watercourse, lake or spring in an emergency situation for a public purpose or fighting a fire destroying, or threatening to destroy, a dwelling house	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Taking water from a watercourse, lake or spring if: the water is taken by the owner of land adjoining the watercourse, lake or spring the water is taken for domestic purposes or stock purposes	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Taking water from a watercourse, lake or spring for camping purposes or for watering travelling stock	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Using a water truck to pump water	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If **no** to all of the above, continue to question 4.4

If **yes** to any of the above, this aspect of development does not require a development permit.

- If this is the only aspect of taking or interfering with water proposed then that is the end of part 4 of this checklist
- If there are other aspects of taking or interfering with water proposed, continue to question 4.4

4.4 Are the proposed works self-assessable development under schedule 3, part 2, table 4, item 1 of the Sustainable Planning Regulation 2009?

<input checked="" type="checkbox"/> No	Go to question 4.5
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<input type="checkbox"/> Yes	<p>This aspect of development is self-assessable development and must comply with any relevant self-assessable code</p> <p>If the proposal involves more than one aspect of operational work for taking or interfering with water, and the other aspect is not self-assessable development, then continue to question 4.5</p>
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4.5 Is the work for taking or interfering with artesian or sub-artesian water?

<input checked="" type="checkbox"/> No	Continue to question 4.6
<input type="checkbox"/> Yes	<p>A development permit is required and this application will be assessed by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Sustainable management of water resources state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 12—Taking or interfering with artesian or sub-artesian water</i></p> <p>If this is the only aspect of taking or interfering with water proposed, then that is the end of part 4 of this checklist</p> <p>If there are other aspects of taking or interfering with water proposed, then continue to question 4.6</p>

4.6 Is the work for a water pump?

<input checked="" type="checkbox"/> No	Continue to question 4.7
<input type="checkbox"/> Yes	<p>A development permit is required and this application will be assessed by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Sustainable management of water resources state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 13—Watercourse pump</i></p> <p>If this is the only aspect of taking or interfering with water proposed, then that is the end of part 4 of this checklist</p> <p>If there are other aspects of taking or interfering with water proposed, then continue to question 4.7</p>

4.7 Is the work for water storage (other than for a dam requiring failure impact assessment)?

<input checked="" type="checkbox"/> No	Continue to question 4.8
<input type="checkbox"/> Yes	<p>A development permit is required and this application will be assessed by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Sustainable management of water resources state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 14—Water storage</i></p> <p>If this is the only aspect of taking or interfering with water proposed, then that is the end of part 4 of this checklist</p> <p>If there are other aspects of taking or interfering with water proposed, then continue to question 4.8</p>

4.8 Is the work for gravity diversion from a watercourse?

<input checked="" type="checkbox"/> No	Continue to question 4.9
<input type="checkbox"/> Yes	<p>A development permit is required and this application will be assessed by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Sustainable management of water resources state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 15—Gravity diversion from a watercourse</i></p> <p>If this is the only aspect of taking or interfering with water proposed, then that is the end of part 4 of this checklist</p> <p>If there are other aspects of taking or interfering with water proposed, then continue to question 4.9</p>

4.9 Is the work for a watercourse diversion?

<input checked="" type="checkbox"/> No	Continue to question 4.10
<input type="checkbox"/> Yes	<p>A development permit is required and this application will be assessed by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Sustainable management of water resources state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 17—Watercourse diversion</i></p> <p>If this is the only aspect of taking or interfering with water proposed, then that is the end of part 4 of this checklist</p> <p>If there are other aspects of taking or interfering with water proposed, then continue to question 4.10</p>

4.10 Is the work for other work for taking or interfering with water?

<input type="checkbox"/> No	End of part 4 of this checklist
<input checked="" type="checkbox"/> Yes	<p>A development permit is required and this application will be assessed by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Sustainable management of water resources state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 21—Other work in a watercourse</i></p> <p>End of part 4 of this checklist</p>

Part 5—Tidal work

5.1 Is the proposed tidal work any of the following:

Excluded work	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work that is self-assessable development under schedule 3, part 2, table 4, item 8 of the Sustainable Planning Regulation 2009	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work carried out in a priority development area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work carried out on premises to which structure plan arrangements apply	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If **no** to all of the above, continue to question 5.2.

If **yes** to any of the above, this aspect of development is not assessable development and a development permit is not required.

5.2 Is any of the proposed tidal work prescribed tidal work?

<input type="checkbox"/> No	<p>This application requires assessment by the chief executive of DILGP as assessment manager or concurrence against the <i>Tidal works, or development in the coastal management district state code</i> in the SDAP</p> <p>You must complete <i>IDAS form 23—Tidal works and development within the coastal management district</i></p> <p>End of part 5 of this checklist</p>
<input checked="" type="checkbox"/> Yes	<p>You must complete <i>IDAS form 23—Tidal works and development within the coastal management district</i></p> <p>This application requires assessment by the local government as assessment manager and the chief executive of DILGP will be a concurrence agency for the application; you must refer a copy of the application to DILGP</p> <p>End of part 5 of this checklist</p>

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 5

Sustainable Planning Regulation 2009, schedule 7, table 2, items 13 to 18

Part 6—Coastal management

6.1 Is the proposed operational work any of the following:

Excluded works	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work that is self-assessable development under schedule 3, part 2, table 4, item 8 of the Sustainable Planning Regulation 2009	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work carried out in a priority development area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work carried out on premises to which structure plan arrangements apply	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If **no** to all of the above, continue to question 6.2

If **yes** to any of the above, this aspect of development is not assessable development and a development permit is not required. End of part 6 of this checklist.

6.2 Is the proposed operational work for any of the following?

Interfering with quarry material as defined under the <i>Coastal Protection and Management Act 1995</i> on state coastal land above high-water mark	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Disposing of dredge spoil or other solid waste material in tidal water	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Constructing an artificial waterway	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Removing or interfering with coastal dunes on land, other than State coastal land, that is in an erosion prone area as defined in the <i>Coastal Protection and Management Act 1995</i> and above high-water mark	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If you answered **no** to all of the above, a development permit is not required for this aspect of development and that is the end of part 6 of this checklist

If you answered **yes** to any of the above,

- This application may require assessment by the chief executive of DILGP as assessment manager or concurrence agency against the *Tidal works, or development in the coastal management district state code* in the SDAP
- You must complete *IDAS form 23—Tidal works and development within the coastal management district*
- End of part 6 of this checklist

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 5

Sustainable Planning Regulation 2009, schedule 7, table 2, items 13 to 18

Part 7—Waterway barrier works

7.1 Is the proposed operational work any of the following:

Work that is self-assessable development under schedule 3, part 2 of the Sustainable Planning Regulation 2009	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Work carried out on premises to which structure plan arrangements apply	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If **no** to all of the above,

- A development permit is required for this aspect of development. This application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency against the *Constructing or raising waterway barrier works in fish habitats state code* in the SDAP
- You must complete *IDAS form 27—Waterway barrier works*
- End of part 7 of this checklist

If **yes** to any of the above, this aspect of development is not assessable development and a development permit is not required. End of part 7 of this checklist.

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 6

Sustainable Planning Regulation 2009, schedule 3, part 2

Sustainable Planning Regulation 2009, schedule 7, table 2, item 29

Part 8—Declared fish habitat area

8.1 Is the operational work reasonably necessary for any of the following?

<p>The maintenance of existing structures, including for example the following structures, if the structures were constructed in compliance with all the requirements under any Act relating to a structure of that type: boat ramps, boardwalks, drains, fences, jetties, roads, safety signs, swimming enclosures and weirs powerlines or associated powerline infrastructure.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Educational or research purposes relating to the declared fish habitat area</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Monitoring the impact of development on the declared fish habitat area</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>The construction or placement of structures, including for example, safety signs, swimming enclosures and aids to navigation, if: the impact on the area is minor the structures are constructed in compliance with all the requirements, under any Act relating to a structure of that type.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Public benefit works, including, for example, the construction of runnels for mosquito control, the removal of Lyngbya and seed collection for site rehabilitation, if the impact on the area is minor</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>

If **yes** to any of the above, a permit is not required for this aspect of development but the proposed work must comply with any applicable self-assessable codes. End of part 8 of this checklist.

If **no** to all of the above:

- A development permit is required and this application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency, against the *Development in or adjacent to a declared fish habitat area state code* in the SDAP
- You must complete *IDAS form 27—Waterway barrier works*
- End of part 8 of this checklist

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 7

Sustainable Planning Regulation 2009, schedule 3, part 2, table 4, item 3

Sustainable Planning Regulation 2009, schedule 7, table 2, item 26

Part 9—Removal, destruction or damage of a marine plant

9.1 Is the proposed operational work any of the following?

For reconfiguring a lot that is assessable development under table 3, item 1, if there is a development permit in effect for the reconfiguration	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For a material change of use that is assessable development, if there is a development permit in effect for the change of use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Self-assessable development under schedule 3, part 2 of the Sustainable Planning Regulation 2009	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Carried out in a priority development area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Carried out on premises to which structure plan arrangements apply	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If **yes** to any of the above, this aspect of development is not assessable development and no development permit is required. End of part 9 of this checklist.

If **no** to all of the above, continue to question 9.2

9.2 Is the proposed operational work any of the following?

Specified works in the area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Operational work that is a necessary and unavoidable part of installing or maintaining works or infrastructure required to support other development for which a development permit or compliance permit is not required or, if a development application or a request for compliance assessment is required, the permit is held or has been applied for.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

If **no** to all of the above, this aspect of development is prohibited development and a development application cannot be made. End of part 9 of this checklist.

If **yes** to any of the above:

- A development permit is required and this application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency against the *Removal, destruction or damage of marine plants state code* in the SDAP
- You must complete *IDAS form 26—Marine plants and declared fish habitat areas*
- End of part 9 of this checklist.

Section reference:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 8

Sustainable Planning Regulation 2009, schedule 3, part 2

Sustainable Planning Regulation 2009, schedule 7, table 2, item 30

Part 10—Great Barrier Reef Wetland Protection Areas

11.1 Is the proposed operational work for a domestic housing activity only?

<input checked="" type="checkbox"/> No	Continue to question 10.2
<input type="checkbox"/> Yes	A development permit is not required for this aspect of development and this is the end of the checklist

10.2 Is the proposed operational work the natural and ordinary consequence of a material change of use or reconfiguring a lot for which the state was a concurrence agency under schedule 7, table 3, item 21A or table 2, item 43A of the Sustainable Planning Regulation 2009?

<input checked="" type="checkbox"/> No	Continue to question 10.3
<input type="checkbox"/> Yes	A development permit is not required for this aspect of development and this is the end of the checklist

10.3 Is the proposed operational work associated with government supported transport infrastructure or electricity infrastructure?

<input checked="" type="checkbox"/> No	A development permit is required and this application requires assessment by the chief executive of DILGP as assessment manager or concurrence agency against the <i>Wetland protection area state code</i> in the SDAP. You must complete <i>IDAS form 33—Great Barrier Reef Wetland protection area</i> End of part 10 of this checklist
<input type="checkbox"/> Yes	A permit is not required for this aspect of development but the proposed work must comply with any applicable self assessable code End of part 10 of this checklist

Part 11—Construction or modification of a levee

11.1 Will the proposed operational work result in any of the following off-property impacts:

A change to the flow path of overland flow water where it enters or exits the property	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
An increase in the velocity of flood flow beyond the boundaries of the property	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
An increase in flooded area beyond the boundaries of the property	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
An increase in flood height beyond the boundaries of the property	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If **no** to all of the above this development is categorised as a Category 1 levee and must comply with any applicable self-assessable code – end of this checklist
If **yes** to any of the above continue to question 11.2

11.2 Will the proposed operational work result in any of the following impacts:

An increase in flood height above the floorboards in an occupied building that results in 3 or more people being affected	<input type="checkbox"/> Yes <input type="checkbox"/> No
An increase in flood velocity above the floorboards in an occupied building that results in 3 or more people being affected	<input type="checkbox"/> Yes <input type="checkbox"/> No

If **no** to all of the above:

- This is categorised as a Category 2 levee and is subject to code assessment
- A development permit is required and this application requires assessment by the local government as assessment manager against the applicable code for the construction or modification of a levee
- You must complete *IDAS form 20—Construction or modification of a levee*.
- End of this checklist.

If **yes** to any of the above:

- This is categorised as a Category 3 levee and is subject to impact assessment
- A development permit is required and this application requires assessment by the local government as assessment manager against the applicable code for the construction or modification of a levee
- This application will require assessment by the chief executive of DILGP as concurrence agency against the *Particular levees state code* in the SDAP
- You must complete *IDAS form 20—Construction or modification of a levee*.
- End of this checklist.

Section references:

Sustainable Planning Regulation 2009, schedule 3, part 1, table 4, item 11

Sustainable Planning Regulation 2009, schedule 7, table 2, item 48.

Privacy—please refer to your assessment manager for further details on the use of information recorded in this form

Disclaimer:

While the Department of Infrastructure, Local Government and Planning (DILGP) believes that the information contained on this checklist and provided as part of this process will be of assistance to you, it is provided on the basis that you will not rely on the information. It is your responsibility to make your own enquiries regarding the interpretation and application of the applicable legislation to your circumstances.

To the full extent permitted by law, DILGP expressly disclaims all liability (including but not limited to liability for negligence) for errors or omissions of any kind or for any loss (including direct and indirect losses), damage or other consequence which may arise from your reliance on this process and the information contained on this checklist.

OFFICE USE ONLY

Date received

Reference numbers

The Sustainable Planning Act 2009 is administered by DILGP. This checklist and all other required application materials should be sent to your assessment manager and any referral agency.

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IDAS form 1—Application details

(Sustainable Planning Act 2009 version 4.3 effective 5 December 2016)

This form must be used for **ALL** development applications.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete this form (*IDAS form 1—Application details*)
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form and any other IDAS form relevant to your application must be used for development applications relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994* and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

PLEASE NOTE: This form is not required to accompany requests for compliance assessment.

Mandatory requirements

Applicant details (Note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Name/s (individual or company name in full)

Douglas Shire Council

For companies, contact name

Scott Hahne, Project Engineer

Postal address

PO Box 723

Mossman

Suburb

State

Queensland

Postcode

4873

Country

Australia

Contact phone number

07 4099 9415

Mobile number (non-mandatory requirement)

protection of an in

Fax number (non-mandatory requirement)

07 4098 2006

Email address (non-mandatory requirement)

scott.hahne@douglas.qld.gov.au

Applicant's reference number (non-mandatory requirement)

Application SDA-0117-036630
Pre-Lodgement SPL-1216-035975

1. What is the nature of the development proposed and what type of approval is being sought?

Table A—Aspect 1 of the application (If there are additional aspects to the application please list in Table B—Aspect 2.)

- a) What is the nature of the development? (Please only tick one box.)
- Material change of use Reconfiguring a lot Building work Operational work
- b) What is the approval type? (Please only tick one box.)
- Preliminary approval under s241 of SPA Preliminary approval under s241 and s242 of SPA Development permit
- c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

Application SDA-0117-036630
Pre-Lodgement SPL-1216-035975

The river banks of the Mossman River on the northern boundary of the Mossman Wastewater Treatment Plant (MWTP) and the South Mossman River on the southern boundary of the MWTP have been subject to ongoing instability and slope failure due to the slopes regressing over the past ten years. During and following significant rainfall events, slip scarps have been encroaching site boundary fences and buried services. Future progression of observed bank instability may place key MWTP structures at risk of serviceability loss or structural failure.

Approximately 75 m of embankment on the South Mossman River and 70 m of embankment on the Mossman River systems are required to be reconstructed utilising geotech fabric and rockfill as has been used on the recent NDRAA works to stabilise the banks of the Daintree River.



South Mossman river bank collapsing beneath boundary fence, adjacent the oxidation ditch and lagoon.

d) What is the level of assessment? (Please only tick one box.)

Impact assessment Code assessment

Table B—Aspect 2 of the application (If there are additional aspects to the application please list in Table C—Additional aspects of the application.)

a) What is the nature of development? (Please only tick one box.)

Material change of use Reconfiguring a lot Building work Operational work

b) What is the approval type? (Please only tick one box.)

Preliminary approval under s241 of SPA Preliminary approval under s241 and s242 of SPA Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

d) What is the level of assessment?

Impact assessment Code assessment

Table C—Additional aspects of the application (If there are additional aspects to the application please list in a separate table on an extra page and attach to this form.)

Refer attached schedule Not required

2. Location of the premises (Complete Table D and/or Table E as applicable. Identify each lot in a separate row.)

Table D—Street address and lot on plan for the premises or street address and lot on plan for the land adjoining or adjacent to the premises (Note: this table is to be used for applications involving taking or interfering with water.) (Attach a separate schedule if there is insufficient space in this table.)

- Street address **and** lot on plan (All lots must be listed.)
- Street address **and** lot on plan for the land adjoining or adjacent to the premises (Appropriate for development in water but adjoining or adjacent to land, e.g. jetty, pontoon. All lots must be listed.)

Street address					Lot on plan description		Local government area (e.g. Logan, Cairns)
Lot	Unit no.	Street no.	Street name and official suburb/locality name	Post-code	Lot no.	Plan type and plan no.	
i)			Junction Rd Reserve, Mossman & South Mossman River Esplanade Reserves.	4873			Douglas Shire Council
ii)					24	RP800895	Douglas Shire Council
iii)					26	RP804231	Douglas Shire Council

Planning scheme details (If the premises involves multiple zones, clearly identify the relevant zone/s for each lot in a separate row in the below table. Non-mandatory)

Lot	Applicable zone / precinct	Applicable local plan / precinct	Applicable overlay/s
i)	N/A esplanade/road reserve		

ii)			
iii)			

Table E—Premises coordinates (Appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay.) (Attach a separate schedule if there is insufficient space in this table.)

Coordinates (Note: place each set of coordinates in a separate row)				Zone reference	Datum	Local government area (if applicable)
Easting	Northing	Latitude	Longitude			
E326818	N9190504	16°27'05"	145°22'37"	MGA Zone 55	<input checked="" type="checkbox"/> GDA94 <input type="checkbox"/> WGS84 <input type="checkbox"/> other	Douglas Shire Council

3. Total area of land on which the development is proposed (indicate square metres)

2,350 m² on South Mossman River (revetment works disturbance area – max 94 m in length and 25 m in width)
 1,980 m² on Mossman River (revetment works disturbance area – max 90 m in length and 22 m in width)
 Total: 4,330 m²

4. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm etc.)

Vacant Land.
 Road Reserve and River Esplanade along Junction Road adjacent to Mossman Water Treatment Plant.

5. Are there any current approvals (e.g. a preliminary approval) associated with this application? (Non-mandatory requirement)

No Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

6. Is owner's consent required for this application? (Refer to notes at the end of this form for more information.)

No
 Yes—complete either Table F, Table G or Table H as applicable

Table F	
Name of owner/s of the land	
I/We, the above-mentioned owner/s of the land, consent to the making of this application.	
Signature of owner/s of the land	
Date	

Table G	
Name of owner/s of the land	
<input checked="" type="checkbox"/> The owner's written consent is attached or will be provided separately to the assessment manager.	

Table H	
Name of owner/s of the land	
<input type="checkbox"/> By making this application, I, the applicant, declare that the owner has given written consent to the making of the application.	

7. Identify if any of the following apply to the premises (Tick applicable box/es.)

- Adjacent to a water body, watercourse or aquifer (e.g. creek, river, lake, canal)—complete Table I
- On strategic port land under the *Transport Infrastructure Act 1994*—complete Table J
- In a tidal water area—complete Table K
- On Brisbane core port land under the *Transport Infrastructure Act 1994* (No table requires completion.)
- On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* (no table requires completion)
- Listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* (no table requires completion)

Table I	
Name of water body, watercourse or aquifer	
Mossman River and South Mossman River.	

Table J	
Lot on plan description for strategic port land	Port authority for the lot

Table K	
Name of local government for the tidal area (if applicable)	Port authority for the tidal area (if applicable)

8. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water etc)

- No Yes—ensure the type, location and dimension of each easement is included in the plans submitted

9. Does the proposal include new building work or operational work on the premises? (Including any services)

- No Yes—ensure the nature, location and dimension of proposed works are included in plans submitted

10. Is the payment of a portable long service leave levy applicable to this application? (Refer to notes at the end of this form for more information.)

- No—go to question 11 Yes

10a. Has the portable long service leave levy been paid? (Refer to notes at the end of this form for more information.)

- No
- Yes—complete Table L and submit, with this application, the local government/private certifier’s copy of the accepted QLeave form

Table L

Amount paid	Date paid (dd/mm/yy)	QLeave project number (6 digit number starting with A, B, E, L, P or S)

11. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the *Sustainable Planning Act 2009*?

- No
- Yes—please provide details below

Name of local government	Date of written notice given by local government (dd/mm/yy)	Reference number of written notice given by local government (if applicable)
Douglas Shire Council		

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12. List below all of the forms and supporting information that accompany this application (Include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application)

Description of attachment or title of attachment	Method of lodgement to assessment manager
IDAS Form 1, Form 21, Form 23, Form 26, Form 27 and Form 33.	Online
IDAS Checklist No. 1, Checklist No. 4.	Online
SDAP responses Module 10 & Module 5.2.	Within Supporting Doc
Douglas Shire Council MWTP Environmental Approvals Supporting Report.	Online
Douglas Shire Council MWTP Remedial Works EMP.	Online

13. Applicant's declaration

By making this application, I declare that all information in this application is true and correct (Note: it is unlawful to provide false or misleading information)

Notes for completing this form

- Section 261 of the *Sustainable Planning Act 2009* prescribes when an application is a properly-made application. Note, the assessment manager has discretion to accept an application as properly made despite any non-compliance with the requirement to provide mandatory supporting information under section 260(1)(c) of the *Sustainable Planning Act 2009*

Applicant details

- Where the applicant is not a natural person, ensure the applicant entity is a real legal entity.

Question 1

- Schedule 3 of the Sustainable Planning Regulation 2009 identifies assessable development and the type of assessment. Where schedule 3 identifies assessable development as "various aspects of development" the applicant must identify each aspect of the development on Tables A, B and C respectively and as required.

Question 6

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application. If a development application relates to a state resource, the application is not required to be supported by evidence of an allocation or entitlement to a state resource. However, where the state is the owner of the subject land, the written consent of the state, as landowner, may be required. Allocation or entitlement to the state resource is a separate process and will need to be obtained before development commences.

Question 7

- If the premises is listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* it may be necessary to seek compliance assessment. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Question 10

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the Building and Construction Industry (Portable Long Service Leave) Regulation 2013.

Question 10a

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and construction industry notification and payment forms can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481.

Privacy—The information collected in this form will be used by the Department of Infrastructure, Local Government and Planning (DILGP), assessment manager, referral agency and/or building certifier in accordance with the processing and assessment of your application. Your personal details should not be disclosed for a purpose outside of the IDAS process or the provisions about public access to planning and development information in the *Sustainable Planning Act 2009*, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

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Date received Reference numbers

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To Council. I have been engaged as the private certifier for the building work referred to in this application

Date of engagement	Name	BSA Certification license number	Building classification/s

QLEAVE NOTIFICATION AND PAYMENT (For completion by assessment manager or private certifier if applicable.)

Description of the work	QLeave project number	Amount paid (\$)	Date paid	Date receipted form sighted by assessment manager	Name of officer who sighted the form

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 11—Clearing native vegetation

(Sustainable Planning Act 2009 version 3.2 effective 6 July 2015)

This form must be used for development applications that involve the clearing of native vegetation.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application
- include the relevant application fee, noting that referral agency fees (where applicable) are to be paid to the referral agency.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the *Sustainable Planning Regulation 2009*.

Mandatory requirements

1. What type of development is proposed?

- Operational work for clearing vegetation made assessable under Schedule 3 of the *Sustainable Planning Regulation 2009*
- Material change of use of the premises
- Reconfiguring a lot

2. What type of approval is being sought?

- Development permit
- Preliminary approval
- Both—provide details below

Mandatory supporting information

3. Confirm that the following mandatory supporting information accompanies this application

For ALL applications	Confirmation of lodgement	Method of lodgement
A property vegetation management plan including as defined under the <i>Vegetation Management Act 1999</i> schedule. Note: A property vegetation management plan must show the matters prescribed in section 11 of the <i>Vegetation Management Regulation 2012</i> .	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	

For ALL applications	Confirmation of lodgement	Method of lodgement
A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
Written confirmation that the chief executive of the Department of Natural Resources and Mines is satisfied the proposed clearing is for a relevant purpose under the <i>Vegetation Management Act 1999</i> , section 22A.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
For applications for a material change of use or reconfiguring a lot		
The following additional detail to be included in the property vegetation management plan: <ul style="list-style-type: none"> • details of the location and extent of: <ul style="list-style-type: none"> - infrastructure, including buildings, fences, roads and electrical, telecommunication or sewerage services; and - firebreaks and fire management lines; and • details of the way the proposed clearing complies with the relevant part(s) of the SDAP. 	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	

Notes for completing this form

- The Department of Natural Resource and Mines (DNRM) website contains a comprehensive range of information about the *Vegetation Management Act 1999*.
- Question 3 for operational work applications —Under the *Vegetation Management Act 1999*, the proposed vegetation clearing is only for a relevant purpose if the applicant satisfies the chief executive of the DNRM that the development applied for is one of the purposes listed in section 22A of that Act.

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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Date received

Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 23—Tidal works and development within the coastal management district

(Sustainable Planning Act 2009 version 3.1 effective 3 August 2015)

This form must be used for development applications for:

- operational work that is tidal works (including prescribed tidal works) or operational work within the coastal management district (mentioned in the Sustainable Planning Regulation 2009, schedule 7, table 2, item 13)
- material change of use that requires referral under the Sustainable Planning Regulation 2009, schedule 7, table 3, item 5 because it involves:
 - operational work carried out completely or partly in the coastal management district; or
 - building work carried out completely or partly in the coastal management district that is the construction of a new premises with a gross floor area (GFA) of at least 1000m² or the enlargement of the GFA of an existing premises by more than 1000m²
- reconfiguring a lot that requires referral under the Sustainable Planning Regulation 2009, schedule 7, table 2, item 14 because the land is situated completely or partly in the coastal management district or the reconfiguration is in connection with the construction of a canal
- building work that requires referral under the Sustainable Planning Regulation 2009, schedule 7, table 1, item 11 because it is on land completely or partly seaward of a coastal building line.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

Notes for completing this form

For all development applications you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Coastal Management and Protection Act 1995*, the *Coastal Protection and Management Regulation 2003*, the *Sustainable Planning Act 2009* (SPA) or the *Sustainable Planning Regulation 2009*.

Mandatory requirements

1. Confirm the following mandatory requirements accompany this application	Confirmation of lodgement	Method of lodgement
Written description of the proposal, including a report that addresses any relevant policies.	<input checked="" type="checkbox"/> Confirmed	

2. What is the nature of the work or development proposed by the application? (Tick all applicable boxes.)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Operational work—complete table A | <input type="checkbox"/> Material Change of Use—complete table B |
| <input type="checkbox"/> Reconfiguring a Lot—complete table C | <input type="checkbox"/> Building Work—complete table D |

Table A—Operational Work

Does the operational work involve the following? (Tick all applicable boxes.)

- a) Tidal works as defined under the *Coastal Protection and Management Act 1995* (e.g. basins, breakwater, bridges, boat ramps, decks and boardwalks, docks, dockyards, groynes, jetties, marinas, pipelines, pontoons, powerlines, seawalls, slips, training walls, wharves and the reclamation of land under tidal water)?

No Yes

If yes, what is the purpose?

Riverbanks adjacent to the Mossman Wastewater Treatment Plant (MWTP) have been subject to ongoing instability and slope failure due to the slopes regressing over the past ten years. During and following significant rainfall events, slip scarps have been encroaching site boundary fences and buried services. Future progression of observed bank instability may place key MWTP structures at risk of serviceability loss or structural failure.

- Private purpose (e.g. private pontoon)
 Another purpose (e.g. commercial marina)

Does the tidal works also require resource allocation under the *Coastal Protection and Management Act 1995*?

No Yes

If applicable what is the estimated value of the proposed works?

- b) Interfering with quarry material as defined under the *Coastal Protection and Management Act 1995* (e.g. excavating or moving sand, gravel or any other earth material on state coastal land such as roads, esplanades, parks or unallocated state land) on state coastal land above high-water mark.

No Yes

If yes, which of the following?

- Works for coastal management purpose involving beach nourishment, dune fencing, revegetation of dunal areas with endemic native plants, or stinger net enclosures.
 For purposes directly related to the provision of lifesaving or rescue services by a volunteer community organisation.
 For other purposes (please state below).

Riverbank Stabilisation Works

If applicable what is the estimated value of the proposed works?

\$1,039,000 

- c) Disposing of dredge spoil or other solid waste material in tidal water?

No Yes

If applicable what is the estimated value of the proposed works?

- d) Constructing an artificial waterway?

No Yes

If applicable what is the length of the waterway?

- e) Removing or interfering with coastal dunes on land, other than state coastal land, that is in an erosion prone area as defined in the *Coastal Protection and Management Act 1995* and above high water mark (e.g. lowering dune vegetation on freehold and leasehold land)?

No Yes

If applicable what is the estimated value of the proposed works?

Table B—Material change of use
a) Does the material change of use involve the following? (Tick all applicable boxes.)
<input type="checkbox"/> Operational work carried out completely or partly in the coastal management district
b) Does the material change of use involve building work carried out completely or partly in the coastal management district that is:
<input type="checkbox"/> the construction of new premises with a gross floor area of at least 1000 m ²
<input type="checkbox"/> the enlargement of the gross floor area of existing premises by more than 1000 m ²

Table C—Reconfiguring a lot
a) Does the reconfiguring a lot involve the following? (Tick all applicable boxes.)
<input type="checkbox"/> Land situated completely or partly in the coastal management district
<input type="checkbox"/> The construction of a canal
b) How many lots will be created?
<input type="text"/>

Table D—Building work
a) Is the building work on land completely or partly seaward of the coastal building line under the <i>Coastal Protection and Management Act 1995</i> ?
<input type="checkbox"/> No <input type="checkbox"/> Yes

3. Is the tidal works located within a local government tidal area? (Tick all applicable boxes)
<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes—provide details below

Local government: Douglas Shire Council
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Mandatory supporting information

4. Please provide the following information	Confirmation of lodgement	Method of lodgement
For all applications		
A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
For applications involving operational work that is tidal works		
A copy of the certificate of title for the land (including tidal land) that would abut or adjoin the proposed works.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
Plans showing: <ul style="list-style-type: none"> the real property description and boundaries of the land (including tidal land) that would abut or adjoin the proposed works the proposed works (including existing works to be removed) in relation to relevant tidal planes (e.g. mean high water springs) the slope angles of the beds and banks of the tidal area and the finished levels of the proposed works. 	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
For tidal work that will occupy a navigable waterway provide a water allocation area plan providing evidence that the proposed work will not prejudice the access rights of adjoining property owners.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
Details of the largest vessel, if any, to be moored at the structure.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	

For prescribed tidal works, details of how the proposed work addresses the IDAS code for prescribed tidal work in the Coastal Protection and Management Regulation 2003, schedule 4A.	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
If applicable, certification that the design of tidal works is suitable for intended use, signed by a Registered Professional Engineer of Queensland (or equivalent).	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
For applications involving material change of use		
Plans certified by a registered professional engineer of Queensland (RPEQ) or a registered surveyor showing: <ul style="list-style-type: none"> the real property description and boundaries of the land the proposed works in relation to the location of the coastal management district and coastal hazards. 	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
For applications involving reconfiguring a lot		
Plans certified by a registered surveyor showing: <ul style="list-style-type: none"> the real property description and boundaries of the land The location of the coastal management district and coastal hazards in relation to the land being reconfigured Any land being surrendered as a separate lot on the plan of subdivision. 	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
For applications involving building works seaward of a coastal building line		
Plans certified by a registered professional engineer of Queensland (RPEQ): <ul style="list-style-type: none"> the real property description and boundaries of the land the proposed works in relation to the location of the coastal building line. 	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	

Notes for completing this form

- Please ensure all applicable fees are paid, noting that referral agency fees are to be paid to the Department of Environment and Heritage Protection.
- For an application requiring referral to the Department of Transport and Main Roads (DTMR), it is recommended that the applicant contact DTMR to ensure that required information for assessment of the application is provided.

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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Date received

Reference numbers

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 27—Waterway barrier works

(Sustainable Planning Act 2009 version 3.2 effective 3 August 2015)

This form must be used for development applications for operational work that is the constructing or raising of waterway barrier works.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA), the Sustainable Planning Regulation 2009, the *Fisheries Act 1994* or the Fisheries Regulation 2008.

Mandatory requirements

1. Has a Fish Movement Exemption Notice been issued for the proposed work?

- Yes – submit with this application, a copy of the Fish Movement Exemption Notice for the proposed work.
- No – submit with this application, details of how the proposed work provides for adequate fish movement.

2. What is the nature of the proposed work? (Tick all applicable boxes.)

- | | |
|---|---|
| <input type="checkbox"/> Construction of a new waterway barrier/s | <input type="checkbox"/> Raising an existing waterway barrier/s |
| <input type="checkbox"/> Temporary waterway barrier/s | <input type="checkbox"/> Permanent waterway barrier/s |
| <input checked="" type="checkbox"/> Partial waterway barrier/s | <input type="checkbox"/> Bank to bank waterway barrier/s |

3. What is the type of the proposed work? (Tick all applicable boxes.)

- Dam, weir or a barrage (complete section 4)
- Culvert (complete section 5)
- Causeway (complete section 6)
- Bridge pylon (abutments or pile foundations) (complete section 6)
- Flow control structure such as a floodgate (complete section 6)
- Pollution control device such as trash rack or a boom gate (complete section 6)
- Levee bank across a waterway (complete section 6)
- Other—please specify (e.g. groyne, construction platform, sediment curtain, causeway) (complete section 6)

Number of barriers

Number of barriers

<p>River banks adjacent to the Mossman Wastewater Treatment Plant (MWTP) have been subject to ongoing instability and slope failure due to the slopes regressing over the past ten years. During and following significant rainfall events, slip scarps have been encroaching site boundary fences and buried services. Future progression of observed bank instability may place key MWTP structures at risk of serviceability loss or structural failure. Approximately 75 m of embankment on the South Mossman River and 70 m of embankment on the Mossman River systems are required to be reconstructed utilising geotech fabric and rockfill as has been used on the recent NDRAA works to stabilise the banks of the Daintree River. The works will consist of placing of rock fill on the banks of the Mossman and South Mossman Rivers laterally and will include the toe of the rock fill intruding into the bed of the rivers. It is estimated that the rock fill toe of the South Mossman River revetment wall will extend into the bed of the river varying from the base of the bank (i.e. not into the river bed) to a maximum of 2.8m.</p> <p>The rock fill toe of the revetment wall on the Mossman River will extend to a maximum of 1m into the bed of the river. These rock fill toe extensions provide only a partial barrier with the toe drowned out entirely during all flow events.</p>	<p>4: 2 permanent: revetment wall on South Mossman and Mossman Rivers. 2 temporary silt curtains installed during construction (1 for each revetment works site)</p>
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4. Constructing a new or raising an existing dam, weir, barrage, bund wall, coffer dam or other similar structures

The application is seeking approval for: new barrier raising of an existing barrier

Briefly describe the type of barrier proposed (i.e. dam, weir, tidal barrage, etc.)

Waterways barrier 1: Mossman River. The toes of the revetment wall will extend into the beds of the Mossman River to a maximum of 1m. The toe of the revetment walls will provide a partial waterways barrier (permanent). During construction instream silt curtains will be used to mitigate the migration of sediments from the worksites. These silt curtains will encompass the works area, but will not extend bank to bank. These silt curtains are estimated to be in place for the duration of construction for a period of between 3 to 6 weeks and will comprise a temporary waterways barrier. Where practical during stand down periods of construction these silt curtains may be removed.

For a temporary barrier (i.e. in place less than 12 months), how many days will the barrier be in place?

21 to 42 days	days
---------------	------

Will the barrier extend across the waterway from bank to bank?

Yes

No – how long is the proposed barrier (across the waterway)?
 – how wide is the waterway (bank to bank)?

N/A	metres
	metres

What is the purpose of the proposed barrier? (E.g. creating a new or increasing the capacity of the existing water storage, maintenance work, etc.)

The permanent partial barriers comprise the toes of the revetment walls proposed for the Mossman River bank stabilisation works. The revetment wall is located on the north west of the Mossman WWTP and is to secure the riverbank from further erosion, and mitigate the risk to undermining the infrastructure of the Mossman waste water treatment plan located on the tops of the respective banks.

The temporary partial waterways barrier will comprise the instream silt curtains that will be in place during construction. These curtains will not extend from bank to bank, but will encircle the banks works areas only.

4. Constructing a new or raising an existing dam, weir, barrage, bund wall, coffer dam or other similar structures

The application is seeking approval for: new barrier raising of an existing barrier

Briefly describe the type of barrier proposed (i.e. dam, weir, tidal barrage, etc.)

Waterways barrier 2: South Mossman River. The toes of the revetment wall will extend into the bed of the MSouth Mossman River by a maximum of 2.8m. The toes of the revetment wall will provide a partial waterways barrier (permanent). During construction instream silt curtains will be used to mitigate the migration of sediments from the worksites. These silt curtains will encompass the works area, but will not extend bank to bank. These silt curtains are estimated to be in place for the duration of construction for a period of between 3 to 6 weeks and will comprise a temporary waterways barrier. Where practical during stand down periods of construction these silt curtains may be removed.

For a temporary barrier (i.e. in place less than 12 months), how many days will the barrier be in place?

21 to 42 days	days
---------------	------

Will the barrier extend across the waterway from bank to bank?

Yes
 No – how long is the proposed barrier (across the waterway)?
 – how wide is the waterway (bank to bank)?

N/A	metres
	metres

What is the purpose of the proposed barrier? (E.g. creating a new or increasing the capacity of the existing water storage, maintenance work, etc.)

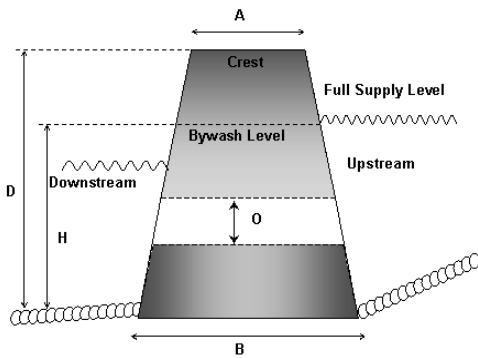
The permanent partial barriers comprise the toe of the revetment walls proposed for the South Mossman River bank stabilisation works. The revetment wall is located on the south-west side of the Mossman WWTP and is to secure the riverbank from further recession, and mitigate the risk to undermining the infrastructure of the Mossman waste water treatment plan located on the tops of the bank.

The temporary partial waterways barriers will comprise the instream silt curtains that will be in place during construction. These curtains will not extend from bank to bank, but will encircle the banks works areas only.

What are the details of the proposed construction materials? (E.g. earth, concrete, rock fill, steel, timber, sand, etc.)

Please refer to the attached Design Report (GHD 2017) for details of construction materials and construction generally. Construction materials will be reinforced rock fill with geotextile.

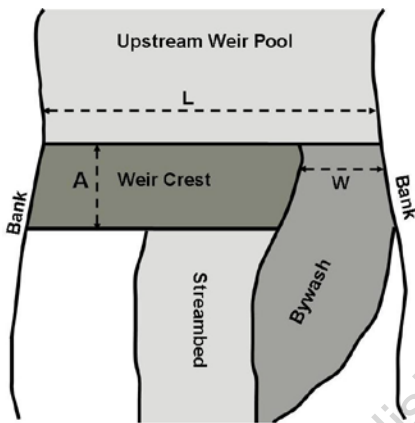
In reference to the diagrams below, provide the following details of the proposed barrier:



- total crest height (D)
- thickness (A) of crest
- height of spillway / bywash (H)
- width of spillway / bywash inlet (W)
- base width (B)
- internal diameter (O) of outlet pipe/works and discharge capacity
- length of wall (L)
- distance of backup from barrier wall at full supply level
- volume of storage.
- If raising an existing waterway barrier:
 - additional height above existing crest
 - method of raising (e.g. capping crest, inflatable bag, gates etc.).

	metres
	metres
	metres
	metres
	metres
	milli-metres
	metres
	metres
	mega-litres

Cross section of barrier



Aerial view of waterway

Published on RTI Act 2009

Does the application involve more than one barrier addressed by this section?

- Yes - generate another section 4 response for each barrier and submit with the application.
- No - if the application involves another type of barrier identified in section 3, go to the relevant section identified.
- if the application does not involve another type of barrier identified in section 3, go to section 7.

5. Constructing a new or modifying (including maintenance and replacement of) an existing culvert

- What is the nature of the proposed work?
- Construction of a new culvert
 - Maintenance of an existing culvert
 - Replacement of an existing culvert

What is the purpose of the proposed culvert?

For a temporary barrier (i.e. in place less than 12 months), how many days will the culvert be in place? days

Will the culvert extend across the waterway from bank to bank?

Yes

No - how long is the proposed culvert (across the waterway)?

metres

- how wide is the waterway (bank to bank)?

metres

What type of culvert is proposed?

Box culvert

Arch culvert

Pipe culvert

Combination culvert

Other—please specify:

In reference to the diagrams below, provide the following details of the proposed culvert.

How many culvert cells are there?

What is the upstream downstream culvert cell length?

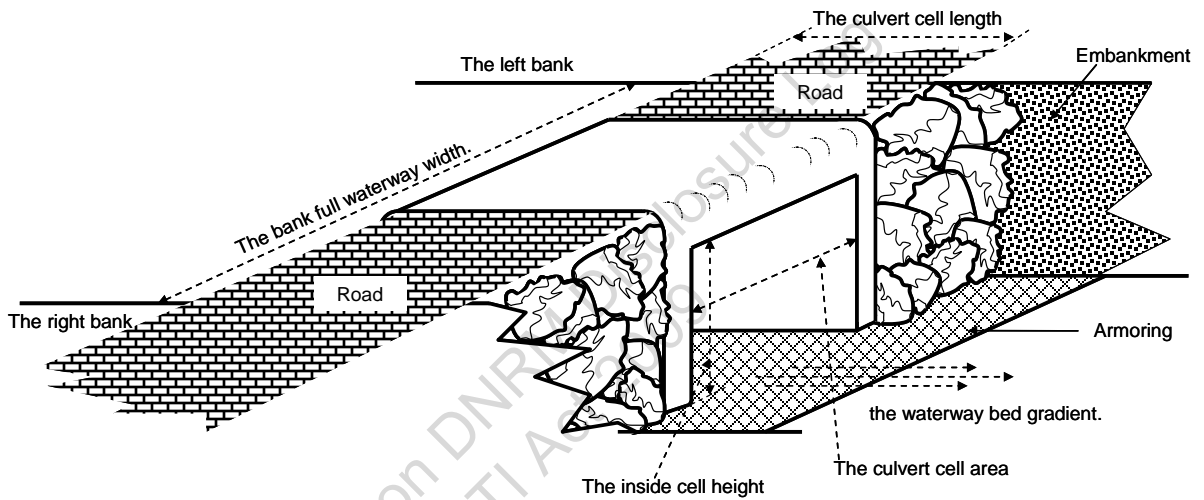
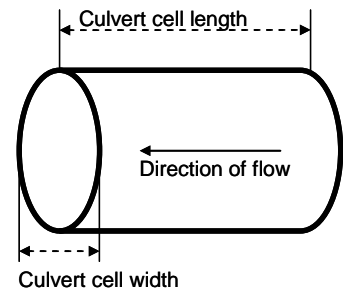
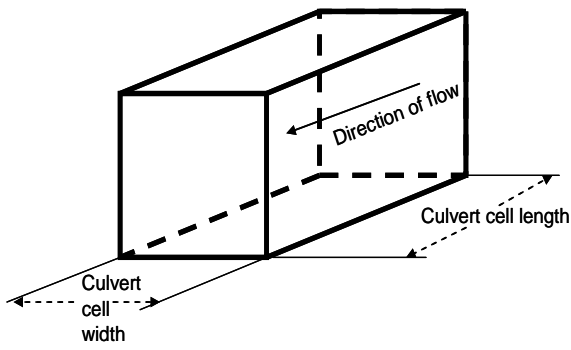
metres

What is the inside cell width of each culvert (or diameter of pipe culvert)?

metres

What is the internal height within the culvert cell?

metres



Does the application involve more than one culvert?

- Yes - generate another section 5 response for each culvert and submit with the application.
- No - if the application involves another type of barrier identified in section 3, go to the relevant section identified.
- if the application does not involve another type of barrier identified in section 3, go to section 7.

6. Constructing a new or modifying (including maintenance and replacement) an existing waterway barrier except those listed in sections 4 and 5.

What is the nature of the proposed work?

- Construction of a new barrier
- Replacement of an existing barrier
- Maintenance of an existing barrier

Briefly describe the proposed barrier.

For a temporary barrier (i.e. in place less than 12 months), how many days will the barrier be in place? days

Will the barrier extend across the waterway from bank to bank?

Yes

No - how long is the proposed barrier (across the waterway)?

- how wide is the waterway (bank to bank)?

metres

What is the purpose of the proposed barrier?

What is the maximum height of the proposed barrier above the existing bed level? metres

What are the proposed construction materials? (E.g. earth, concrete, rock fill, steel, timber, sand, etc.)?

Does the barrier follow the natural gradient of the bed level?

Yes

No

Does the application involve more than one barrier under this section?

Yes - generate another section 6 response for each barrier and submit with the application.

No - go to section 7.

Mandatory supporting information

7. Confirm the following mandatory supporting information accompanies this application.

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
Location details for all applications		

<p>A scale map/sketch plan of the site and the neighbouring area identifying:</p> <ul style="list-style-type: none"> the site of the proposed works on the waterway the names of the waterway and the catchment in which the waterway is located stream order where the (site) waterway joins with another, more major waterway (or coastal waters) downstream other easily identifiable geographical features adjacent to the proposed works the limit and area of impounded waters (upstream weir pool) at full supply level (if relevant). 	<input checked="" type="checkbox"/> Confirmed	
GPS coordinates and zone references of the works site (GDA94 preferred).	<input checked="" type="checkbox"/> Confirmed	
Photographs of the site and the waterway upstream and downstream of the works site.	<input checked="" type="checkbox"/> Confirmed	
A scale plan showing the limit of and area of impounded waters at full supply level.	<input checked="" type="checkbox"/> Confirmed	
Details of the proposed development for all applications		
Justification and the benefits of the proposed waterway barrier works.	<input checked="" type="checkbox"/> Confirmed	
Assessment of lesser impact alternatives and reasons for the proposed waterway barrier.	<input checked="" type="checkbox"/> Confirmed	
Details of the proposed waterway barrier.	<input checked="" type="checkbox"/> Confirmed	
Details of the structure and management of the impoundments.	<input checked="" type="checkbox"/> Confirmed	
Details of the proposed maintenance program on the waterway barrier after construction.	<input checked="" type="checkbox"/> Confirmed	
A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	
Details of the waterway for all applications		
A scaled plan showing a cross-section of the stream profile at the proposed location.	<input checked="" type="checkbox"/> Confirmed	
Description of the stream morphology at the proposed location, and up to 1 km upstream and downstream (e.g. width and depth of stream, stream bed substrate types, bank stability, presence of pools, rifle runs, sand bars, etc.).	<input checked="" type="checkbox"/> Confirmed	
Description of the riparian habitats at and adjacent to the proposed location (e.g. Intact native vegetation, presence of weeds and other disturbances).	<input checked="" type="checkbox"/> Confirmed	
<p>Description of the stream hydrology (e.g. flood frequency and height, altered flow regimes due to existing waterway barriers)</p> <ul style="list-style-type: none"> <i>Note: for most applications involving permanent waterway barriers on larger waterways, specific data on stream hydrology and flood levels will be required.</i> 	<input checked="" type="checkbox"/> Confirmed	

<p>Description of likely changes to stream hydrology resulting from construction of the proposed barrier.</p> <ul style="list-style-type: none"> <i>Note: for most applications involving permanent waterway barriers on larger waterways, the results of hydrological modelling will be required to show expected changes to flow characteristics, particularly velocity, at different water levels, expected headwater/tail water differences at different water levels, and frequency, timing and duration of drown-out of the proposed structure.</i> 	<input checked="" type="checkbox"/> Confirmed	
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Aquatic ecology details for all applications

<p>Description of the aquatic ecology at, and adjacent to, the proposed location, including instream fauna and flora, fish assemblages, and endangered or vulnerable fish species.</p>	<input checked="" type="checkbox"/> Confirmed	
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<p>Description of likely impacts on fish movements as a result of construction of the waterway barrier, with reference to expected changes instream hydrology.</p>	<input checked="" type="checkbox"/> Confirmed	
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<p>Description of likely impacts on both riparian and aquatic habitats as a result of construction of the waterway barrier, including impacts due to the expected changes instream hydrology.</p>	<input checked="" type="checkbox"/> Confirmed	
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<p>Description of any proposed disturbances to riparian and aquatic habitats associated with construction activities (e.g. site access for machinery and personnel, material laydown areas, potential turbidity or other water quality impacts).</p>	<input checked="" type="checkbox"/> Confirmed	
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Details of the construction for all applications

<p>Scaled drawings of the proposed waterway barrier works.</p>	<input checked="" type="checkbox"/> Confirmed	
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<p>If a fishway is proposed, scaled drawings of the fishway and details of proposed operation and maintenance of the fishway.</p>	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
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<p>Time frame for construction of the proposed barrier.</p>	<input checked="" type="checkbox"/> Confirmed	
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Mitigation details for all applications

<p>Description of any design features of the proposed waterway barrier that will help to mitigate the impacts of the structure on fish movements.</p>	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> Not applicable	
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<p>Description of all measures that will be implemented during the construction period to mitigate the impacts of construction on aquatic habitats.</p>	<input checked="" type="checkbox"/> Confirmed	
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<p>Description of all measures that will be undertaken at the completion of construction activities to restore the site to its previous condition or better.</p>	<input checked="" type="checkbox"/> Confirmed	
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For applications relating to section 5 of this form (separate information to be provided for each barrier)

<p>Culvert design information including:</p> <ul style="list-style-type: none"> whether the invert of the culvert is above, at or below waterway bed levels size, angle, numbers and position of any baffles along the inner walls of the culverts details of the culvert cell bed (bed material, rocks to aid fish passage, riffle, smooth concrete or roughness, baffles, etc) whether there will be a low flow channel culvert in any multi-cell culverts 	<input type="checkbox"/> Confirmed	
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<ul style="list-style-type: none"> detail on whether the culvert base gradient is less than, the same as or more than the natural gradient of the waterway bed. 		
For applications relating to section 6 of this form (separate information to be provided for each barrier)		
All dimensions of the barrier	<input type="checkbox"/> Confirmed	
Detailed drawings of the barrier design	<input type="checkbox"/> Confirmed	
The operational requirements of the barrier	<input type="checkbox"/> Confirmed	
Details of any aprons, embankments or other erosion control methods	<input type="checkbox"/> Confirmed	
The specific structural inclusions to improve fish passage across the barrier	<input type="checkbox"/> Confirmed	

Privacy—please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

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RTI Act 2009

5.2 Constructing or raising waterway barrier works in fish habitats state code

Response column key:
 Achieved
 P/S Performance solution
 N/A Not applicable

Table 5.2.1: Operational work

Performance outcomes	Acceptable outcomes	Response	Comment
All assessable waterway barrier works			
<p>PO1 The development will not increase the risk of mortality, disease or injury or compromise the health and productivity of fisheries resources.</p>	<p>AO1.1 The development ensures that one or more of the following is achieved:</p> <ol style="list-style-type: none"> (1) the waterway barrier works includes a fish way that adequately provides for the movement of fish across the barrier works, or (2) the movement of fish across the waterway barrier works is, adequately provided for in another way, or (3) the height of the waterway barrier works allows enough water to flow across the barrier works to adequately provide for the movement of fish across the barrier works, or (4) the waterway barrier works is intended to exist only for a temporary period, and the level of disruption to fish movement in the area is acceptable, or (5) it is not necessary or desirable, for the best management, use, development or protection of fisheries resources or fish habitats, for the waterway barrier works to provide for the movement of fish across the barrier works. <p>And</p>	<input checked="" type="checkbox"/>	<p>The works will consist of placing of rock fill on the banks of the Mossman and South Mossman Rivers laterally and will include the toe of the rock fill intruding into the bed of the rivers. It is estimated that the rock fill toe of the South Mossman River revetment wall will extend into the bed of the river varying from the base of the bank (i.e. not into the river bed) to a maximum of 2.8m.</p> <p>The rock fill toe of the revetment wall on the Mossman River will extend to a maximum of 1m into the bed of the river. These rock fill toe extensions provide only a partial barrier with the toe drowned out entirely during all flow events.</p> <p>The proposed construction will continue to allow fish passage upstream and downstream of the development and will not have any quantifiable impact on fisheries resources.</p>
	<p>AO1.2 Suitable habitat conditions, such as water and sediment quality, will be maintained to sustain the health and condition of fisheries resources within all fish habitats.</p> <p>And</p>	<input checked="" type="checkbox"/>	<p>During construction there will be a risk of increased turbidity as a result of earthworks, and degradation of water quality which will impact on local fish habitats. Erosion and sediment controls including instream silt curtains will be implemented to mitigate the impacts of sediment on local water quality. These impacts are expected to be temporary and reversible i.e. post construction there will be no ongoing impacts from the works on fish habitats. Other aspects, e.g. potential for fuel spills and other potential water quality impacting issues will be addressed with the implementation of an EMP for construction.</p> <p>A water quality monitoring program will be established during the construction period to ensure that water quality objectives for the maintenance of habitat conditions</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO1.3 Cumulative effects of waterway barrier works do not impede fish movements, and will not affect reproductive success, health or mortality by depleting fish energy reserves.</p> <p>And</p>	<input checked="" type="checkbox"/>	<p>conductive to sustaining the health and condition of fisheries resources.</p> <p>The revetment works will not have any cumulative effect on fish movement. The Mossman River comprises an anastomosing reach of up to 230m wide containing three channels, all of which provide for low flow conditions. There is a stream gauge on the Mossman River (531063) upstream of this reach and observation from the station indicate the Mossman River always maintains a base low flow, even during the dry season. The revetment works on the Mossman River (on the north-west side of the WWTP) partially extend onto the bed of the anabranch closest to the toe of the WWTP bank. Flow velocity calculations as part of the design criteria have identified that these works would not result in a measurable increase in low flow velocities at this point. At higher flows there will be no impacts and catadromous fish (and others in general) will not have to expend any additional energy reserves in migrating/moving upstream.</p> <p>The South Mossman River revetment works (on the south-east side of the WWTP) will extend to a maximum of 3m into the bed of the river. Flow velocities on the South Mossman River are largely determined by downstream tidal influences, although at this location direct tidal fluctuations are absent, and limited to no discernible slope gradient. At low flow events (i.e. dry season) the river may have no determinable flow on a flood or neap tide, with flows only on an outgoing tide. It is anticipated that constriction of the river bed by the revetment works will increase flows up to 20% above the low flow. While this represents a significant flow increase based on percentage, in practical flow terms this is still a very low flow. At higher flows the impact of the revetment wall on flow velocities will be negligible. Functional fish groups observed (and known to occur) within this reach include eels, grunters, gobies/gudgeons, barramundi. Swimming/velocity data (Pusey <i>et al</i> 1995, Pusey and Kennard 1994, Bishop <i>et al</i> 2001) indicate that these groups have a very wide range of flow habitats, with migration occurring outside of low flow periods (i.e lead up to the wet season), during periods when the revetment wall will not have a significant impact on flow velocities. The revetment does not impose any constraint on fish species in terms of depleting energy resources for breeding.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO1.4 Fish will not become trapped or stranded as a result of development.</p> <p>Or</p> <p>AO1.5 Risks of fish stranding occurring have been identified and are demonstrably manageable.</p>	N/A	The revetment wall is parallel to and adjacent the main river flow and does not provide any obstacle that would trap or strand fish.
<p>PO2 Development maintains or enhances the community access to fisheries resources and fish habitats, through for example fishing access and linkages between commercial fisheries and infrastructure, services and facilities.</p>	<p>AO2.1 The development does not impact on existing infrastructure or access required by commercial or recreational fishing.</p>	N/A	<p>Works are not near a public or commercial fishing boat ramp or access. Works are adjacent to MWTP.</p> <p>Recreational fishing can still occur on the Mossman and South Mossman Rivers as with current situation.</p>
<p>PO3 Development that has the potential to impact on the operations and productivity of commercial or recreational fisheries mitigates any adverse impacts due to adjustment of fisheries.</p> <p>Editor's note: The Guideline on fisheries adjustment provides advice for proponents on relevant fisheries adjustment processes and is available by request from the Department of Agriculture and Fisheries.</p>	<p>AO3.1 Affected fisheries and the impacts on those fisheries are identified.</p> <p>And</p> <p>AO3.2 Fair and reasonable compensation to commercial fishers is determined.</p> <p>And</p> <p>AO3.3 The impact of the development on commercial fisheries and recreational fishers is mitigated.</p>	N/A	The project is not anticipated to impact on commercial or recreational fisheries.
<p>PO4 When the purpose of a waterway barrier is no longer relevant, or the design life of the structure is complete and the structure is not intended to be re-lifted, the waterway barrier will be removed.</p>	<p>AO4.1 At the end of the viable operation of the development, the waterway barrier (and where appropriate any fish way) will be removed from the waterway and fish habitats and fish passage will be reinstated to previous or better levels.</p> <p>Or</p> <p>AO4.2 If the barrier remains in place, fish passage provision in accordance with the approved design and operation is maintained as long as the barrier remains.</p>	<input checked="" type="checkbox"/>	<p>The revetment wall will be a permanent bank structure to provide ongoing protection to the Mossman WWTP. Post construction any structure used within the waterway (i.e. the floating work platform) will be removed.</p>
<p>PO5 Development demonstrates appropriate rights and an overriding public need for the development, including consideration of any impacts</p>	<p>AO5.1 The development is supported by a statutory instrument (for example, regional plans made under the Act, Shoreline Erosion Management Plan (SEMP), coordinated project approval under the State Development and Public Works Organisation Act 1971),</p>	P/S	<p>Riverbank stabilisation works are essential maintenance works to failed sections of the Mossman and Mossman South Rivers adjacent to MWTP.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
<p>beyond the footprint of the constructed development.</p> <p>Editor's note: For example, dams and weirs affect fish habitats up and downstream from the structure by pooling and restricting water flows.</p>	<p>and the impact on fish habitats have been properly considered.</p> <p>And</p>		A Development Approval is being sought, along with the required permitting as per advices from DILGP.
	<p>AO5.2 The following can be demonstrated:</p> <p>(1) tenure is held for the land directly abutting the waterway where the works will be carried out and has the applicant has full riparian access rights on both sides of the barrier</p> <p>(2) tenure has been granted over the area of work, or</p> <p>(3) resource allocation or resource entitlement has been granted for the resource being developed.</p> <p>And</p>		<p>Owners consent has been sought as part of the Development Application.</p> <p>The works will not require an Allocation of Quarry Material.</p> <p>Project is being conducted by Douglas Shire Council.</p>
	<p>AO5.3 Development is for public infrastructure.</p> <p>Or</p>	<input checked="" type="checkbox"/>	As per AO5.4
	<p>AO5.4 Development is for public infrastructure for which there is no alternative viable route that does not require waterway barrier works.</p> <p>Or</p>	<input checked="" type="checkbox"/>	MWTP requires bank stabilisation to secure infrastructure from breaches and system failures, including the collapse of infrastructure into the South Mossman River. There are no feasible alternatives to the development.
	<p>AO5.5 Development is for a legitimate public health or safety issue and the applicant is an entity or acting on behalf of an entity.</p>	<input checked="" type="checkbox"/>	Riverbank erosion is adjacent to MWTP. Boundary fences to the STP are now collapsing. This is a public health and safety hazard due to the close proximity of treatment lagoons, oxidation ditch and clarifier to the South Mossman River bank crest and the very high risk of potential collapse of infrastructure into the river. In many instances much of the existing infrastructure is less than 10m from the failing fence/eroding banks.
<p>PO6 Development minimises stream crossings.</p>	<p>AO6.1 Where multiple waterway barrier works are demonstrated to be essential, these are located a minimum of 100 metres apart (including existing structures).</p>	N/A	Riverbank stabilisation works. Ongoing riverbank erosion on a section of the Mossman River and a separate section of the South Mossman River adjacent to MWTP. Revetment works are not on the same watercourse.
<p>PO7 Development avoids non-essential hardening or unnatural modification of channels.</p>	<p>AO7.1 The development does not involve the channelisation of meandering waterways.</p> <p>And</p>	N/A	No modification to the existing channels are proposed. The proposed hardening of the river banks is essential to the revetment stabilisation works.
	<p>AO7.2 Where channels need to be significantly modified, the development simulates natural watercourses by including meanders, pools, riffles, shaded and open sections, deep and shallow sections, and different types</p>	N/A	Channels will not be modified. Works proposed are to the existing riverbanks.

Performance outcomes	Acceptable outcomes	Response	Comment
	of substrata. Natural features such as rock outcrops and boulders are retained or recreated.		
PO8 Impacts on water quality in declared fish habitat areas are minimised.	AO8.1 Development involves erosion and sediment control measures. Editor's note: Erosion and sediment control should be in accordance with the Best practice erosion and sediment control guidelines, International Erosion Control Association Australasia, 2008.	N/A	Not a declared fish habitat area. A suitably qualified person shall prepare an EMP will be implemented with environmental aspects addressed such as erosion and sediment control and water quality. The EMP will be developed in accordance with IECA guidelines, with regard to the site specific factors encountered at the works sites.
PO9 Development resulting in drainage or disturbance of acid sulfate soil is managed to prevent impacts on fisheries resources and fish habitats.	AO9.1 Run-off and leachate from disturbed or oxidised acid sulfate soils is contained, treated and not released to a waterway or other fish habitat in accordance with the Queensland acid sulfate soils technical manual: Soil management guidelines, Department of Natural Resources and Mines, 2002.	P/S	The site revetment works will occur at LAT 1.58m to vary the channel bed for wall stabilisation. It will then extend above HAT1.78m to the existing fenceline of MWTP. Acid sulfate soils will be addressed in the approved contractor EMP as a requirement, in the event that acid sulfate soils are exposed as part of the riverbank stabilisation works on the Mossman and Mossman South Rivers. Reference: QASS Technical Manual – Soil Management Guidelines v4.0.
All development – environmental offsets			
PO10 Impact to fish passage or legally secured offset areas for fish passage is avoided, or mitigated and an environmental offset is provided for any significant residual impact.	AO10.1 Residual impact to fish passage or legally secured offset areas for fish passage, including the fisheries resources and fish habitat they contain, is comprehensively and accurately documented to demonstrate that impact is avoided or, where this cannot be achieved, that impacts are minimised. Or	<input checked="" type="checkbox"/>	It is not considered that there will be an impact to fish passage as a result of these works. As a result it is not anticipated that there will be any residual impact to fish passage and thus it is not anticipated that an environmental offset is required.
	AO10.2 Where residual impact to fish passage or legally secured offset areas for fish passage, including the fisheries resources and fish habitats they contain, is accurately documented and it cannot be demonstrated that impact can be reasonably avoided or minimised, an environmental offset is provided for any significant residual impact. Editor's note: Applications for development should identify whether there is likely to be a significant residual impact and a need for an environmental offset having regard to Section 3.8 (Waterway providing for fish passage) of the Significant Residual Impact Guideline and the relevant Queensland Environmental Offsets Policy.	N/A	As per AO10.1
Incorporation of fish ways			

Performance outcomes	Acceptable outcomes	Response	Comment
PO11 Where the waterway barrier works will be a barrier to fish movement, provisions are made for adequate fish movement by incorporating a fish way or fish ways for the works.	No acceptable outcome is prescribed.	<input checked="" type="checkbox"/>	It is not anticipated that fish movement will be impacted by the riverbank stabilisation works. Therefore any further fish ways do not need to be provided.
PO12 Any fish way proposed as part of the development is demonstrated to be a feasible and reliable solution that will provide adequate fish passage. Editor's note: Further information about the importance of fish passage and design considerations can be found in the book From sea to source: International guidance for the restoration of fish migration highways.	AO12.1 A person or entity that is suitably qualified and experienced in fish passage biology and fish way design and delivery demonstrates and verifies that any fish way design will provide adequate fish passage. And	N/A	No fishways are proposed.
	AO12.2 Development uses a fish way design that has been successfully implemented under similar conditions (such as flows and fish communities) and has been demonstrated to provide adequate fish passage through actual scientific monitoring. And	N/A	No fishways are proposed.
	AO12.3 Development provides for the installation of monitoring equipment, such as traps and lifting equipment, access for monitoring, and a monitoring program of sufficient rigour to: (1) demonstrate the success of the fish way and fish passage at the site (2) provide the basis for optimising operation of the works and fish way. And	N/A	No fishways are proposed.
	AO12.4 The fish way design maximises flexibility for future adjustments that may be needed once in place. And	N/A	No fishways are proposed.
	AO12.5 The owner or operator demonstrates the means and commitment to promptly rectify any faults found in the fish way during commissioning, monitoring and operation, if these lead to inadequacies in the fish movement that are provided. And	N/A	No fishways are proposed.
	AO12.6 Any tailwater control structures such as a gauging weir, rock bar or stream crossings are fitted with a fish way or designed to allow fish passage. And	N/A	No fishways are proposed.

Performance outcomes	Acceptable outcomes	Response	Comment
	AO12.7 Any existing in-stream structure downstream of the proposed waterway barrier works, which increases the barrier effect to fish passage through changes in flow characteristics, is fitted with adequate fish passage facilities.	N/A	No fishways are proposed.
PO13 Lateral (upstream and downstream) and longitudinal fish movement is provided for.	AO13.1 More than one fish way is provided, for example, to provide up and downstream fish passage or to provide fish passage under a range of flow regimes.	N/A	No fishways are proposed.
PO14 Any fish way is be capable of operating whenever there is flow in the waterway (inflow or release), the dam is above dead storage level, and the fish way will be operational for as long as the waterway barrier is in position.	AO14.1 The operational range of a fish way is sufficient having regard to the hydrology of the site and the fish movement characteristics (in particular timing of movements in relation to seasons and hydrographs). And	NA	No fishways are proposed.
	AO14.2 The lower operational range of the fish way is down to at least 0.5 metres below minimum headwater drawdown level (dead storage or minimum off-take level, whichever is lower) and to at least 0.5 metres below minimum tail water level at the site. And	N/A	No fishways are proposed.
	AO14.3 Upstream and downstream fish ways will be operated whenever there are inflows into the impoundment or release out of the impoundment, and during overtopping events. And	N/A	No fishways are proposed.
	AO14.4 All releases are directed firstly through the fish way as a priority over the outlet works, with the fish way being operated whenever a release is made through it, regardless of whether the release volume is less than the optimal minimum release for fish way operation. And	N/A	No fishways are proposed.
	AO14.5 The fish way is designed such that non-operation duration (for example, less than two weeks) and incidents due to maintenance issues (for example, siltation, debris, breakdowns, sourcing of parts) are minimised. And	N/A	No fishways are proposed.
	AO14.6 Fish ways are monitored and maintained to ensure that the fish way is operational at all times.	N/A	No fishways are proposed.

Performance outcomes	Acceptable outcomes	Response	Comment
PO15 Any fish way, and all associated componentry are designed to be durable, reliable and adequately protected from damage from high flow and flood events, to prevent or minimise non-operation.	AO15.1 Development ensures that mechanisms are in place to ensure that operational issues in fish ways are promptly rectified for the life of the fish way. And	N/A	No fishways are proposed.
	AO15.2 The quality of materials and components for construction of the fish way are appropriate for the intended service life of the fish way.	N/A	No fishways are proposed.
PO16 Any fish way is located in a position and manner that maximise the attraction and movement of fish, while also enabling access for monitoring, maintenance and operating purposes.	AO16.1 Modelling demonstrates, by showing the likely flow patterns and adjacent to the fish way entrance that the location of the fish way entrance is optimal for fish attraction across the operational range of the fish way. And	N/A	No fishways are proposed.
	AO16.2 Outlet works are adjacent to the fish way, but are positioned and designed so as not to interfere with fish access and attraction to the fish way entrance during outlet releases. And	N/A	No fishway or outlet works being provided.
	AO16.3 Spillway overtopping flows initiate and terminate adjacent to the fish way or are directed parallel to the fish way entrance. And	N/A	No fishways are proposed.
	AO16.4 Spillway flows are transferred to fish way releases as soon as possible during a flow recession. And	N/A	No fishways are proposed.
	AO16.5 There is a continuous attraction flow at all times at the fish way entrance when the fish way is operating. And	N/A	No fishways are proposed.
	AO16.6 Attraction flow velocities are sufficient and variable to attract the whole fish community. And	N/A	No fishways are proposed.
	AO16.7 Appropriate light levels are maintained at fish way entrances. And	N/A	No fishways are proposed.
	AO16.8 Additional means of fish attraction are included in the fish way design if appropriate.	N/A	No fishways are proposed.

Performance outcomes	Acceptable outcomes	Response	Comment
	And		
	AO16.9 The fish way entrance is accessible under all flow conditions within its operating range. And	N/A	No fishways are proposed.
	AO16.10 Fish attracted to the spillway are able to access the fish way without having to swim back downstream. And	N/A	No fishways are proposed.
	AO16.11 Water supply for the fish ways and attraction flows are sourced from surface quality water or equivalent quality water. And	N/A	No fishways are proposed.
	AO16.12 There are adequate holding chamber dimensions for the fish biomass (for lock, lift, trap and transfer type fish ways). And	N/A	No fishways are proposed.
	AO16.13 The fish way has adequate hydraulic conditions for all fish within and throughout the fish ways.	N/A	No fishways are proposed.
PO17 The seasonal and flow-related biomass of the fish community at the location of the waterway barrier works has been surveyed, and has been catered for in the design of the fish way.	AO17.1 The fish way design, operation and capacity will avoid or acceptably minimise failure to pass any members of the fish community, for example, due to size, class or swimming ability. And	N/A	No fishways are proposed.
	AO17.2 Future increases in fish biomass are quantified and catered for in the design of the fish way (for example, in capacity or flexibility of operation).	N/A	No fishways are proposed.
PO18 Fish ways and other means of fish passage at waterway barrier works cater for the whole fish community taking into account species, size classes, life-stages and swimming abilities.	AO18.1 The seasonal and flow-related composition of the fish community at the location of the waterway barrier works is well understood and catered for. And	N/A	No fishways are proposed.
	AO18.2 The fish way design, operation and capacity will avoid or acceptably minimise any delays in fish movement.	N/A	No fishways are proposed.
PO19 Development does not increase the risk of mortality, disease or injury, or	AO19.1 All pathways providing fish passage at a proposed waterway barrier works are safe for fish to pass. And	N/A	No fishways are proposed.

Performance outcomes	Acceptable outcomes	Response	Comment
compromise the health and productivity in fish.	<p>AO19.2 Fish passage will not adversely impact on the wellbeing of fish.</p> <p>And</p>	N/A	No fishways are proposed.
	<p>AO19.3 The designs of all components of waterway barriers, including but not limited to spillway, stilling basin, apron and dissipation structures, are developed and implemented with safe downstream fish passage as a key design consideration.</p> <p>Note: A stepped spillway (including sheet pile weirs) is not an acceptable solution as high mortalities and injuries to fish have been associated with such designs.</p> <p>And</p>	N/A	No fishways are proposed.
	<p>AO19.4 There is adequate minimum tailwater depth at the toe of the spillway (for example, stilling basin) at commencement to spill (for example, 30 per cent of the head difference).</p> <p>And</p>	N/A	No spillway to be constructed.
	<p>AO19.5 Intake and outlet works adjacent to the waterway barrier are screened or otherwise designed and placed to prevent fish passing through or becoming trapped in these works.</p> <p>And</p>	N/A	No intake or outlets works proposed.
	<p>AO19.6 Intake screen dimensions are such that small fish are not drawn through the outlet works and velocities are low enough that fish are not impinged or entrained on the screens.</p> <p>And</p>	N/A	No intake or outlets works proposed.
	<p>AO19.7 The fish way exit is located so as to avoid entrainment in any outlet work screens and avoid fish being washed back over the spillway during overtopping.</p> <p>And</p>	N/A	No fishway to be installed.
	<p>AO19.8 Cover is provided for fish moving from the exit.</p> <p>And</p>	N/A	Natural cover from vegetation along the banks of Mossman and South Mossman Rivers.
	<p>AO19.9 Fish exit upstream and downstream fish ways at the water level over the full range of tailwater and headwater levels.</p> <p>And</p>	N/A	No fishway to be installed.

Performance outcomes	Acceptable outcomes	Response	Comment
	AO19.10 Trash and debris are excluded from the upstream fish way exit and downstream fish way entrance with designs that ensure that fish can access the exits and entrances, and that the fish way(s) are not blocked or damaged by trash or debris. And	N/A	No fishways are proposed.
	AO19.11 Adequate minimum depth is maintained through the fish way. And	N/A	No fishways are proposed.
	AO19.12 The risk of fish kills arising from the works are minimised (for example, through entrapment of fish upstream or between works). And	N/A	No fishways are proposed.
	AO19.13 Contingency plans in case of mechanical or electrical failure of fish ways are in place. And	N/A	No fishways are proposed.
	AO19.14 The fish way design, operation and capacity will avoid or acceptably minimise predation within and upon the fish community using the fish way.	N/A	No fishways are proposed.
Inherent barrier design and provision of fish passage			
PO20 Fish passage is provided for: (1) in the inherent design of the waterway barrier works (2) over the in-situ life of the barrier in that position through adequate construction and maintenance of the barrier.	AO20.1 Development avoids or minimises loss of, or modification to, fish habitat. And	<input checked="" type="checkbox"/>	Barrier works are riverbank stabilisation works only with a floating platform used to house the excavator during earthworks. Fish habitat is expected to be minimally impacted.
	AO20.2 The drownout characteristics of the waterway barrier allow for adequate fish passage at the site. And	N/A	
	AO20.3 At drownout, the conditions at the barrier are such that: (1) the tailwater and headwater levels across the weir are essentially equal (2) velocities are sufficiently low for fish passage (e.g. 0.3 metres/second) at or close to the edge of the spillway crest (3) the weir is fully submerged to a sufficient depth to allow for fish passage, and for the species and size	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>classes of fish moving through the site to cross the weir</p> <p>(4) to the degree that provides for adequate fish passage at the site.</p> <p>And</p>		
	<p>AO20.4 The frequency, timing and duration of drownout conditions are adequate for the movement requirements of the fish community moving past the barrier.</p> <p>And</p>	N/A	
	<p>AO20.5 Delays to fish passage when there are flows in the system but no fish passage in the rising hydrograph are accurately defined for the design, and avoided or limited to a maximum of three days.</p> <p>And</p>	N/A	
	<p>AO20.6 In assessing whether the inherent barrier design provides adequate fish passage, impacts on lateral and longitudinal fish movement are considered.</p>	N/A	
PO21 The use of floodgates is avoided or minimised.	<p>AO21.1 There is an overriding need for new floodgates, and other alternatives are unviable.</p> <p>And</p>	N/A	Floodgates are not being installed as part of the works. Riverbank stabilisation / revetment only.
	<p>AO21.2 Hydraulic conditions through the floodgates are adequate for fish passage.</p> <p>And</p>	N/A	
	<p>AO21.3 Floodgates are designed and operated as (tidally activated) automatic floodgates.</p> <p>And</p>	N/A	
	<p>AO21.4 The invert of the floodgate is at bed level.</p> <p>And</p>	N/A	
	<p>AO21.5 Floodgates allow for fish passage over an adequate duration of the tidal cycle.</p> <p>And</p>	N/A	
	<p>AO21.6 The operation of the floodgate will not result in impacts on water quality that may impact on fish or fish habitat.</p>	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
<p>PO22 Waterway barriers that are bridges are designed, constructed and maintained to provide adequate fish passage for the site and:</p> <p>(1) fish passage is provided for the life of the crossing</p> <p>(2) hydraulic conditions (depth, velocities and turbulence) from the downstream to the upstream limit of the structure allow for fish passage of all fish attempting to move through the crossing at all flows up to the drownout of the structure.</p> <p>Editor's note: For guidance on when a bridge is and is not considered to be waterway barrier work see the Department of Agriculture, Fisheries and Forestry 2014 fact sheets Maintaining Fish Passage in Queensland: What is a Waterway Barrier Work? What is not a Waterway Barrier Work?</p>	<p>AO22.1 A bridge that is designed to allow adequate fish passage is preferentially installed to a culvert.</p> <p>And</p>	N/A	No bridges are part of riverbank stabilisation works on the Mossman and South Mossman Rivers adjacent to the MWTP.
	<p>AO22.2 In-stream bridge structures such as piles are minimised.</p> <p>And</p>	N/A	
	<p>AO22.3 Bridge support piles are not constructed within the low-flow channel or so that they constrict the edges of the low-flow channel.</p> <p>And</p>	N/A	
	<p>AO22.4 Bridge abutments do not extend into the waterway beyond the toes of the banks.</p> <p>And</p>	N/A	
	<p>AO22.5 Bank revetment works do not extend into the waterway beyond the toes of the banks.</p> <p>And</p>	<input checked="" type="checkbox"/>	RPEQ certified engineering drawings provided.
	<p>AO22.6 Permanent access or erosion control structures within the main channel adjacent to the bridge are set at or below bed level, roughened to approximately simulate natural bed conditions, and maintained so that there are no drops in elevation at their edges or joins with the stream bed.</p>	N/A	As per AO22.5
<p>PO23 Waterway barriers that are culverts provide adequate fish passage for the site, and:</p> <p>(1) fish passage is provided for the life of the crossing</p> <p>(2) hydraulic conditions (depth, velocities and turbulence) from the downstream to the upstream limit of the structure allow for fish passage of all fish attempting to move through the crossing at all flows up to the drownout of the structure.</p> <p>Editor's note: For guidance see the Department of Agriculture, Fisheries and Forestry 2014 Fact Sheet Maintaining Fish</p>	<p>AO23.1 Culverts are only installed where the site conditions do not allow for a bridge.</p> <p>And</p>	N/A	No culverts apply to these works.
	<p>AO23.2 The combined width of the culvert cell apertures are equal to 100 per cent of the main channel width.</p> <p>And</p>	N/A	No culverts apply to these works.
	<p>AO23.3 The culvert crossing and associated erosion protection structures are installed at no steeper gradient than the waterway bed gradient.</p> <p>And</p>	N/A	No culverts apply to these works.
	<p>AO23.4 For the life of the culvert crossing, relative levels of the culvert invert, apron and scour protection and the stream bed are kept so that there are no drops in elevation at their respective joins.</p>	N/A	No culverts apply to these works.

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Passage in Queensland: What is a Waterway Barrier Work?	And		
	AO23.5 The base of the culvert is: (1) buried a minimum of 300 millimetres to allow bed material to deposit and reform the natural bed on top of the culvert base, or (2) the base of the culvert is the stream bed, or (3) the base of the culvert cell is roughened throughout the culvert floor to approximately simulate natural bed conditions. And	N/A	No culverts apply to these works.
	AO23.6 The outermost culvert cells incorporate roughening elements such as baffles on their bankside sidewalls. And	N/A	No culverts apply to these works.
	AO23.7 Roughening elements are installed on the upstream wingwalls on both banks to the height of the upstream obvert or the full height of the wingwall. And	N/A	No culverts apply to these works.
	AO23.8 Roughening elements provide a contiguous lower velocity zone (no greater than 0.3 metres/second) for at least 100 millimetres width from the wall through the length of the culvert and wingwalls. And	N/A	No culverts apply to these works.
	AO23.9 In-stream scour protection structures are roughened throughout to approximately simulate natural bed conditions. And	N/A	No culverts apply to these works.
	AO23.10 Culvert alignment to the stream flow minimises water turbulence. And	N/A	No culverts apply to these works.
	AO23.11 There is sufficient light at the entrance to and through the culvert so that fish are not discouraged by a sudden descent into darkness. And	N/A	No culverts apply to these works.

Performance outcomes	Acceptable outcomes	Response	Comment
	AO23.12 The depth of cover above the culvert is as low as structurally possible, except where culverts have an average recurrence interval (ARI) greater than 50 years. And	N/A	No culverts apply to these works.
	AO23.13 For culvert crossings designed with a flood immunity >ARI 50, fish passage is provided up to culvert capacity. And	N/A	No culverts apply to these works.
	AO23.14 Adequate design (for example, culvert aperture) and maintenance measures are in place for the life of the crossing to keep crossings clear of blockages through a regular inspection program in order to retain fish passage through the crossing. And	N/A	
	AO23.15 Crossings within the bed and banks do not incorporate culverts.	N/A	No culverts apply to these works.
PO24 Waterway crossings other than bridges or culverts provide adequate fish passage for the site and: <ul style="list-style-type: none"> (1) fish passage is provided for the life of the crossing (2) hydraulic conditions (depth, velocities and turbulence) from the downstream to the upstream limit of the structure allow for fish passage of all fish attempting to move through the crossing at all flows up to the drownout of the structure. <p>Editor's note: For guidance on when a waterway crossing is not considered to be waterway barrier work see the Department of Agriculture, Fisheries and Forestry 2014 fact sheet Maintaining Fish Passage in Queensland: What is not a Waterway Barrier Work?</p>	AO24.1 The crossing is built at or below bed level so that the surface of the crossing is no higher than the stream bed at the site. And	N/A	No waterway crossing proposed.
	AO24.2 For the life of the crossing, relative levels of the crossing, any bed erosion or scour protection and the stream bed are kept so that there are no drops in elevation at their respective joins. And	N/A	No waterway crossing proposed.
	AO24.3 The crossing and associated erosion protection structures are installed at no steeper gradient than the waterway bed gradient. And	N/A	No waterway crossing proposed.
	AO24.4 The crossing and associated erosion protection structures are roughened throughout to approximately simulate natural bed conditions. And	N/A	No waterway crossing proposed.
	AO24.5 The lowest point of the crossing is installed at the level of the lowest point of the natural stream bed (pre-construction), within the footprint of the proposed crossing.	N/A	No waterway crossing proposed.

Performance outcomes	Acceptable outcomes	Response	Comment
	And		
	AO24.6 There is a height difference from the lowest point of the crossing to the edges of the low flow section of the crossing to channel water into the low flow section. And	N/A	No waterway crossing proposed.
	AO24.7 The level of the remainder of the crossing is no higher than the lowest point of the natural stream bed outside of the low flow channel.	N/A	No waterway crossing proposed.
PO25 All waterway barriers are designed, constructed and maintained to provide adequate fish passage for the site and fish passage is provided for the life of the barrier.	AO25.1 Hydraulic conditions (depth, velocities and turbulence) from the downstream to the upstream limit of the structure allow for fish passage of all fish attempting to move through the barrier at all flows up to the drownout of the structure. And	N/A	No waterways barriers to be installed. Riverbank revetment works only.
	AO25.2 Aperture size of openings (for example, at screens or trash racks) ensures adequate fish passage. And	N/A	No waterway crossing proposed.
	AO25.3 Hydraulic conditions are such that adequate fish passage is provided. And	N/A	No waterway crossing proposed.
	AO25.4 Flows across, or releases out of, the structure are such that adequate fish passage is provided in terms of timing, frequency and duration, as well as water volume and depth. And	N/A	No waterway crossing proposed.
	AO25.5 Water quality across the barrier allows for fish passage.	N/A	No waterway crossing proposed.
Temporary waterway barrier works			
PO26 The temporary waterway barrier works will exist only for a temporary period and cause a minimal and acceptable disruption to fish movement in the area, during the period of installation. Editor's note: Code for self assessable development Temporary waterway barrier works (WWBW02), Department of Employment, Economic Development and	AO26.1 Temporary waterway barrier works can be in place at a given site for no more than 12 months. And	N/A	The works periods are planned for between 3 to six weeks and the use of temporary water barrier works in the form of instream silt curtains will not extend beyond the construction phase.
	AO26.2 In tidal waters, to ensure significant impacts on upstream and downstream habitats are avoided, the temporary waterway barrier works will not completely block the waterway for more than three weeks, unless steps taken to ensure water exchange occurs (such as	N/A	The project will not be undertaken in tidal waters. The proposed instream silt curtains will encircle the actual works areas at the base of the banks and revetment works areas and not extend bank to bank. The floating work platform will not impeded fish passage however this platform will be

Performance outcomes	Acceptable outcomes	Response	Comment
Innovation, 2010 and the GIS data layer 'Queensland Waterways for Waterway Barrier Works' provide guidance on the length of time that a temporary barrier may be acceptable in particular streams.	breaching of the bund or pumping water), to prevent upstream marine plants and benthos being submerged in freshwater, or the barrier is sufficiently permeable. And		within the silt curtain. During stand-down periods or periods of inactivity, where practical and feasible the silt curtains will be temporarily removed.
	AO26.3 Delays to fish movement are avoided at times when fish are known to be undertaking upstream spawning migrations, even on very small or zero flow events or river rises. Waterway barrier works are scheduled out of this period, or other provision for fish movement is made (for example, the use of a partial barrier, periodic barrier, stream diversion or fish way). And	N/A	Functional fish groups observed (and known to occur) within this reach include eels, grunters, gobies/gudgeons, barramundi. Data on these groups (Pusey <i>et al</i> 1995, Pusey and Kennard 1994, Bishop <i>et al</i> 2001) indicate that these groups have a very wide range of flow habitats, with migration occurring outside of low flow periods (i.e lead up to the wet season). Construction will extend between 3 to 6 weeks and will occur during dry season flows when the majority of the fish groups do not migrate. The proposed instream silt curtains will encircle the actual works areas at the base of the banks and revetment works areas and not extend bank to bank. The floating work platform will not impeded fish passage however this platform will be within the silt curtain. During stand-down periods or periods of inactivity, where practical and feasible the silt curtains will be temporarily removed.
	AO26.4 Where there are species at the site that require downstream movement during works, provisions are made to allow those species to move downstream. And	N/A	As above.
	AO26.5 Water diversion around the site or through the barrier is implemented if the barrier is in position for more than four weeks, and there is any flow in the system for the purpose of ensuring that vegetation die-off, decomposition and associated reduction in water quality does not become an issue upstream of the barrier, in areas where there is more than 30 per cent coverage of terrestrial grasses within the ponded area. And	N/A	No water diversions will be required, river flows will not be impacted by temporary waterways barriers (i.e. instream silt curtains).
	AO26.6 Where there are aquatic macrophytes immediately downstream of the barrier and those macrophytes would ordinarily be submerged or partially submerged, water will need to be passed across the barrier at all times to avoid their desiccation. And	N/A	Works will not impede river flows nor have any impact on the total volume of water passage downstream. No impacts on aquatic macrophytes are anticipated.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO26.7 On removal of a temporary barrier, full movement for fish is reinstated.</p> <p>And</p> <p>AO26.8 On removal of a temporary barrier, the waterway bed and banks are returned to their original profile and stability, so that long-term fish movement at the site is not compromised.</p>	N/A	
<p>PO27 Fish movement is required past temporary waterway barrier works where the duration of the barrier is greater than that allowed for under the code for self assessable development Temporary waterway barrier works (WWBW02), Department of Agriculture, Fisheries and Forestry, April 2013.</p> <p>Editor's note: Code for self assessable development Temporary waterway barrier works (WWBW02), Department of Agriculture, Fisheries and Forestry, April 2013 and the GIS data layer 'Queensland waterways for waterway barrier works' provide guidance on the acceptable length of time that a temporary barrier may remain in place in particular streams.</p>	<p>AO27.1 Development provides for adequate fish movement through the incorporation of a fish way or fish ways for the works.</p> <p>And</p>	N/A	The instream silt curtains will not extend from bank to bank of the channels, and will encircle the works areas only and not obstruct the entire channel. In this manner the fish movement will continue to occur around the instream silt curtain. During periods of stand down or cessation of construction activity the silt curtains may be with drawn where practical.
	<p>AO27.2 The barrier:</p> <ol style="list-style-type: none"> (1) is a partial barrier (2) does not constrict the area or flows of a low flow channel (3) all work will be completed (and the barrier removed) during low flows when the flow will be contained wholly within a low flow channel. This would require a predictable flow regime where the likelihood of flow events during the works is very small (for example a 1 in 20 year probability). <p>And</p>	N/A	The proposed instream silt curtains constitute a temporary waterways barrier to fish passage and is a partial barrier that does not extend across the banks of the waterways. These will not constrict flows. The duration of the installation of this temporary barrier is allowed for under WWBW02 for the Mossman and South Mossman Rivers.
	<p>AO27.3 The barrier is opened periodically every five days for at least 48 hours to allow fish movement and water exchange.</p> <p>And</p>	N/A	The instream silt curtains will not extend from bank to bank of the channels, and will encircle the works areas only and not obstruct the entire channel.
	<p>AO27.4 Fish movement is provided for via a stream diversion.</p>	N/A	The instream silt curtains will not extend from bank to bank of the channels, and will encircle the works areas only and not obstruct the entire channel.
<p>PO28 Erosion control elements of the temporary waterway barrier works do not impact on fish passage.</p>	<p>AO28.1 The use of gabions is avoided to prevent fish entrapment on receding flows.</p>	N/A	Gabions are not being used, the only temporary waterways barrier will be the instream silt curtains which will not entrap fish.
<p>PO29 Fish passage is not necessary or desirable, for the best management, use,</p>	<p>AO29.1 It is demonstrated through an appropriate level of scientifically designed and executed fish survey by a</p>	N/A	Existing fish passage will be maintained during construction and post works period.

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<p>development or protection of fisheries resources or fish habitats, for the temporary waterway barrier works to provide for the movement of fish across the barrier works.</p> <p>Editor's note: 'Other barriers' referred to in the Fisheries Act 1994 may be applied to existing natural barriers that preclude upstream fish movement. Provision of upstream fish movement at barrier works on the site of a waterfall that does not drownout is not necessary, providing that the works do not impact on climbing fish species (for example, with the installation of smooth surfaces or overhangs).</p>	<p>suitably qualified and experienced entity that there are no fish in the area during any flow regimes.</p> <p>And</p>		
	<p>AO29.2 The conditions at the site causing fish to be absent are not able to be remediated while the proposed barrier is in place.</p> <p>Or</p>	N/A	Existing fish passage will be maintained during construction and post works period.
	<p>AO29.3 There are other barriers in the area where the waterway barrier works is, or is to be, located which prevent movement of fish located in the area.</p> <p>And</p>	N/A	Existing fish passage will be maintained during construction and post works period.
	<p>AO29.4 Other barriers in the area of the waterway barrier works could not reasonably be expected to be modified or removed in the future to restore fish passage.</p> <p>And</p>	N/A	Existing fish passage will be maintained during construction and post works period.
	<p>AO29.5 Fish passage is not provided where this would introduce fish (including non-endemic fish or noxious fish) into an area where these species were not previously found, and this would be more detrimental to the existing fish community than the effect of the barrier.</p>	N/A	Existing fish passage will be maintained during construction and post works period.
Construction			
<p>PO30 The construction of waterway barrier works does not limit the movement or wellbeing of fish.</p>	<p>AO30.1 Work does not commence during times of elevated flows.</p> <p>And</p>	<input checked="" type="checkbox"/>	The works are proposed to be undertaken prior to the wet season 2017/2018 and works will not be undertaken during times of elevated flow. Contractor to comply with the EMP for duration of works.
	<p>AO30.2 Excavation work in unbunded tidal areas is to be scheduled to occur within two hours either side of low tide.</p> <p>And</p>	N/A	Works will not occur in tidal areas subject to tidal variability.
	<p>AO30.3 In-stream work is scheduled for the driest time of the year.</p> <p>And</p>	<input checked="" type="checkbox"/>	Works to occur prior to the 2017/2018 wet season and will extend over a period of 3 to 6 weeks.
	<p>AO30.4 In-stream construction is completed as quickly as possible to lessen the impact on fish and habitats, and timed to minimise conflict with fish migrations.</p> <p>And</p>	<input checked="" type="checkbox"/>	Functional fish groups observed (and known to occur) within this reach include eels, grunters, gobies/gudgeons, barramundi. Data on these groups (Pusey <i>et al</i> 1995, Pusey and Kennard 1994, Bishop <i>et al</i> 2001) indicate that these groups have a very wide range of flow habitats, with migration occurring outside of low flow periods (i.e lead up

Performance outcomes	Acceptable outcomes	Response	Comment
			to the wet season). Construction will extend between 3 to 6 weeks and will occur during dry season flows when the majority of the fish groups do not migrate.
	AO30.5 Routes for the developments are planned to minimise the impact on fish passage and fish habitat (for example, roads and railways minimise crossings and avoid crossings in environmentally sensitive areas).	<input checked="" type="checkbox"/>	Vehicle access to the works site is via Junction Road Reserve to the MWTP. No other road access to the riverbank works sites. Works to be conducted according to the Contractor EMP.
PO31 The development does not cause, or minimises direct or indirect disturbance to the bed and banks adjacent to the approved footprint of works.	AO31.1 Removal of stream-bank vegetation and disturbance to the natural banks and bed of the waterway is avoided or minimised. And	<input checked="" type="checkbox"/>	Removal of steam bank vegetation and disturbance to the natural bed of the waterway has been minimised to largest practical extent, taking into consideration the design parameters of the revetment walls to protect the Mossman WWTP infrastructure. Refer to attached drawings. A qualified botanist has assessed the vegetation to be removed and a revegetation program will be implemented at the end of construction that will aim to reinstate native vegetation to the revetment structure and surrounds.
	AO31.2 Disturbance to the outer bank of waterway beds during work and while gaining access is minimised. And	<input checked="" type="checkbox"/>	Access to the banks of the waterway will be via: a) access through the Mossman WWTP which is on the high point of the bank (for both the Mossman and South Mossman Rivers), and b) a floating work platform at the base of the bank will be installed on the South Mossman River. This will be accessed from an existing road (Cooya Beach Road) which crosses and is adjacent to the works area. No vegetation removal is required for access, with both sites being cleared.
	AO31.3 Heavy machinery is excluded from fragile areas and areas which host fisheries resources. And	<input checked="" type="checkbox"/>	Heavy machinery will be restricted to work platforms either on the South Mossman River (on a floating platform) or work from the top of the bank in cleared areas. No operation of heavy machinery within the bed of the rivers is proposed.
	AO31.4 After completion of the in-stream works, all areas of the bed and banks of the waterway that are outside of the approved permanent footprint of the works, and which have been disturbed as a result of the construction or raising of the waterway barrier works, are returned to their original profile and stabilised to promote regeneration of natural fish habitats. And	<input checked="" type="checkbox"/>	A qualified botanist has assessed the vegetation to be removed and a revegetation program will be implemented at the end of construction that will aim to reinstate native vegetation to the revetment structure and surrounds. Contractor to comply with EMP for waste management and leave the site in a clean and tidy state.

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	<p>AO31.5 By the completion of works, the profiles of the bed and banks are reinstated to natural stream profiles and stability.</p> <p>And</p>	<input checked="" type="checkbox"/>	No disturbance of the profiles of the bed and bank, other than the works areas for revetment walls, will be undertaken. A floating works platform will be used on the South Mossman River and a long arm excavator will be used from the top of the bank (within the WWTP) to access the banks of the Mossman River and top sections of the bank of the South Mossman River. Subsequently there is no requirement for machinery to access the bed of the rivers. Material excavated from the river beds for the revetment wall toe will be returned to the river beds in a manner that is retains the natural bed profile.
	<p>AO31.6 The waterway bed will be retained with natural substrate, or reconstructed with substrate comparable to the natural substrate size and consistency.</p> <p>And</p>	N/A	The existing natural substrate will remain. There are no proposals to replace or reconstruct the waterway bed. Excavation only is proposed for the toe of the revetment structures within the waterway bed. The revetment structures will consist of rock fill over geotextile fabric. Refer attached drawings.
	<p>AO31.7 Vegetation and cover will be rapidly re-established so that the native plant community at the site can recover or be enhanced (for example, by using native species).</p> <p>And</p>	<input checked="" type="checkbox"/>	Douglas Shire Council's own Revegetation Unit will be responsible for the implementation of the revegetation program. The program will begin immediately on cessation of construction works.
	<p>AO31.8 Fish habitats, including fisheries resource values, will be able to naturally regenerate to pre-works conditions.</p> <p>Editor's note: Monitoring of the success of fish habitat regeneration, within and adjacent to the work site, will be a development permit condition.</p>	PS	<p>As the revetment walls are intended to be permanent structures it is not expected that these areas of modified bank will regenerate to pre-works conditions. However the rock fill revetment walls will provide habitat resources that currently are not present at either works locations.</p> <p>The proposed revegetation program will include direct planting into earth filled voids within the rock fill revetment wall. It is expected that this regeneration will provide a high degree of habitat restoration and provide stimulus for further natural regeneration.</p>
Additional requirements for development within a strategic environmental area			
<p>PO32 Sediment and other polluting material must be captured during construction and operation of a waterway barrier.</p>	<p>AO32.1 During construction:</p> <p>(1) environmental safety measures such as silt curtains are used to capture sediments,</p> <p>(2) materials that are pollutants (such as debris, chemicals, or construction material) are not stored in</p>	<input checked="" type="checkbox"/>	<p>Contractor to operate within the requirements of the EMP which addresses erosion and sediment control, water quality and waste management.</p> <p>The works areas on both the Mossman and South Mossman River will employ silt curtains around the base of the work area to contain sediment. The deployment of these silt curtains and general construction operations will be</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>the stream bed, unless they are to be used immediately.</p> <p>And</p>		<p>assessed according to the flow of the water courses at the time and modified as required to minimise risk arising from sediment.</p> <p>No potential pollutants will be stored in the stream bed and their use and storage will be determined by the requirements of the EMP. Any such materials will be stored at depots on Council land, with the storage according to the MSDS for each substance and in accordance with the appropriate bund standards for that substance.</p>
	<p>AO32.2 After construction the stream bed and banks are protected to prevent erosion or slumping, by ensuring:</p> <p>(1) the waterway bed is lined with the original top soil retained during the construction</p> <p>(2) materials that are pollutants (such as debris, chemicals, or construction material) are removed from the location and appropriately treated and disposed of as waste outside the strategic environmental area – for example to a managed landfill</p> <p>(3) temporary barriers are removed after use and the natural materials either returned to their original location in the strategic environmental area, or if not taken from the strategic environmental area, appropriately treated and disposed of as waste outside the strategic environmental area – for example to a managed landfill.</p>	<input checked="" type="checkbox"/>	<p>The primary purpose of the revetment works is to prevent further erosion and slumping of the Mossman and South Mossman River banks adjacent the WWTP. This will be achieved with the construction of rock filled revetment works as proposed in the attached drawing.</p> <p>1) River bed material removed during construction works will be returned to the river bed over the toe of the rock fill works.</p> <p>2) Removal, treatment and management of potential pollutants post construction will be undertaken by the Contractor in accordance with the requirements of the EMP.</p> <p>3) All temporary barriers, including silt curtains and silt fences along the tops of the banks will be removed and disposed of according to the requirements of the EMP.</p>
<p>PO33 The works do not impede fish passage particularly during critical periods that are important for breeding, feeding, nursery and recruitment of indigenous fish species.</p>	<p>AO33.1 Works (except temporary works required for less than 20 business days) that are not drowned out regularly must contain a fish way, the design of which is approved by the Department of Agriculture and Fisheries.</p> <p>And</p>	N/A	<p>The works will not impede fish passage during critical breeding periods. Functional fish groups observed (and known to occur) within the rivers include eels, grunters, gobies/gudgeons, barramundi. Swimming/velocity data (Pusey <i>et al</i> 1995, Pusey and Kennard 1994, Bishop <i>et al</i> 2001) indicate that these groups have a very wide range of flow habitats, with migration occurring outside of low flow periods (i.e lead up to the wet season), during periods when the revetment wall will not have a significant impact on flow velocities. The revetment does not impose any constraint on fish species in terms of depleting energy resources for breeding. The construction works will take place during low flow periods in the dry season August to September/October when the majority of the observed and known fish taxa in these rivers are not migrating. The</p>

Performance outcomes	Acceptable outcomes	Response	Comment
			nature of the floating work platform and silt curtains are such that the majority of the South Mossman river passageway remains unobstructed and will not impede fish passage during the low flow construction period. For the Mossman River the instream silt curtains similarly will not be installed as barrier across the stream but will encircle the base of the works area, leaving the majority of the channel available for fish passage. It should also be noted that for the Mossman River the works will impede on only one of the three anabranches of the Mossman River in this reach, and the other branches (within a total river bed width of approximately 230m) will not be impacted at all by these construction works and passage for these channels will remain entirely unimpeded.
	AO33.2 Any fish way must be operational at all times except where natural flows would have prevented fish passage. And	N/A	No fishways are proposed.
	AO33.3 In the case of drought, any fish trapped in the impoundment must be rescued. And	N/A	No impoundment area in the works.
	AO33.4 Vegetation and cover is retained or replaced to pre-work levels and conditions. And	<input checked="" type="checkbox"/>	A contractor EMP will apply to the works. Revegetation of the area will occur after the 2017/2018 wet season when the area has had a chance to stabilise after works are completed.
	AO33.5 All works are constructed during periods when fish passage is least affected.	<input checked="" type="checkbox"/>	For the known and observed fish species references ((Pusey <i>et al</i> 1995, Pusey and Kennard 1994, Bishop <i>et al</i> 2001) the majority of the functional groups are migratory outside of the low flow periods of the year, and are most active during and following storm season post October. The program for construction is between 3 to six weeks, and will focus on the flow period August to September when fish passage is least affected.
PO34 Development avoids or minimises any adverse impacts on environmental values and water quality objectives for receiving waters (surface and groundwater) on site or leaving a site from pollutants.	AO34.1 Development demonstrates best practice environmental management to meet relevant environmental values and water quality objectives of the Environmental Protection (Water) Policy. Or	<input checked="" type="checkbox"/>	A water quality monitoring program will be established for the construction period. This will include a pre construction baseline, and an ongoing reactive monitoring protocol that will identify thresholds and triggers for action, including hold points for work activities. The Contractor will comply with EMP for the duration of the works for water quality and erosion and sediment control.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO34.2 All stormwater, wastewater, discharges and overflows leaving the site are:</p> <p>(1) treated to the quality of the receiving waters prior to discharge, or</p> <p>(2) reclaimed or re-used such that there is no export of pollutants to receiving waters.</p>	<input checked="" type="checkbox"/>	<p>Contractor to comply with EMP for the duration of the works with respect to stormwater discharge and waste management. This will include a rigorous erosion and sediment control plan (ESCP) prepared at to IECA guidelines.</p>

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10.1 Tidal works, or development in the coastal management district state code

Response column key:
 Achieved
P/S Performance solution
N/A Not applicable

Table 10.1.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
<p>PO1 Development in a coastal hazard area is compatible with the level of severity of the coastal hazard.</p>	<p>AO1.1 Development is located outside a high coastal hazard area unless it is:</p> <ul style="list-style-type: none"> (1) coastal-dependent development, or (2) compatible with inundation due to its nature or function, or (3) temporary, readily relocatable, or able to be abandoned, or (4) essential community service infrastructure, or (5) small- to-medium scale tourist development, or (6) redevelopment within an existing built-up urban area, or is redevelopment of built structures that cannot be relocated or abandoned. <p>And</p>	P/S	<p>The works are located within a coastal hazard area for high storm tide inundation and highly erosion prone area according to DILGP DA Mapping. Entirely within the CMD.</p> <p>These works are considered essential community service infrastructure. There is a high risk that ongoing erosion of the existing bank and risks to Mossman Wastewater Treatment Plant (MWTP) infrastructure, (a DSC local government asset) will occur should the remediation works not occur before the 2017 / 2018 Wet Season. Banks eroding on both the Mossman River and South Mossman Rivers have close to a vertical drop on both sides with slopes 60-80 degrees from horizontal. Erosion is continuing at both sites on these two river systems.</p>
	<p>AO1.2 Development referred to in AO1.1(6) avoids being located within a high coastal hazard area, or where this is not practicable, minimises the exposure of people and permanent structures to coastal hazard impacts.</p>	P/S	<p>The works are designed in accordance with relevant engineering standards that include calculations associated with the hydraulics of Mossman and South Mossman Rivers. The design aims to withstand hazard categories identified for this location and to minimise the potential of impacts to the banks and coastal zone.</p> <p>The works aim to remediate the eroding banks and provide protection from further erosion and to public infrastructure.</p>
<p>PO2 Development siting, layout and access in a coastal hazard area responds to potential inundation due to a defined storm tide event and minimises associated risks to personal safety and property.</p>	<p>AO2.1 Development within a coastal hazard area is located, designed, constructed and operated to maintain or enhance the community's resilience to a defined storm tide event by limiting the exposure of people and structures to associated impacts.</p> <p>And</p>	<input checked="" type="checkbox"/>	<p>The proposed revetments are on the banks of the Mossman and South Mossman Rivers and has been designed to match the adjacent bank profiles by an appropriately (RPEQ) qualified engineer.</p> <p>Site A & B is approximately 15m in length and 9m above river bed level requiring stabilisation within the river esplanade reserves.</p> <p>Benching of the bank is proposed in accordance with engineering standards to secure the armour rock that will be installed to withstand flows of up to 3 m/ second.</p> <p>Rockfill is to be employed as toe stabilisation to increase the restoring moment in circular slip failure analyses. Treatment involves cutback 1.5V:1.5H plus rockfill blanket with berm.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO2.2 Development mitigates any residual impacts from storm tide inundation in a coastal hazard area including by ensuring:</p> <ul style="list-style-type: none"> (1) habitable rooms of built structures are located above the defined storm tide event level and any additional freeboard level that would ordinarily apply in a flood prone area under a relevant planning scheme standard, or (2) a safe refuge is available for people within the premises during a defined storm tide event, or (3) at least one evacuation route remains passable for emergency evacuations during a defined storm tide event, including consideration of the capacity of the route to support the evacuation of the entire local population within a reasonably short timeframe (for example, 12 hours). <p>And</p>	☑	<p>The proposed revetment does not pose a risk to people in relation to storm surge events as formal access for the community has not been, and is not intended to be, provided at this location. MWTP employees would evacuate the site in the event of storm tide inundation.</p> <p>The main employee and visitor only access point is the access driveway from Junction Rd to MWTP, approximately 150m upstream to the south of the STP infrastructure.</p> <p>There is a risk should protective measures not be put in place prior to the 2017/2018 Wet Season, that further erosion will encroach into the Junction road reserve and Mossman and South Mossman River esplanade reserves causing potential damage to MWTP infrastructure and posing risks of infrastructure sliding into the South Mossman River (in particular).</p>
	<p>AO2.3 Development within a coastal hazard area is located, designed and constructed to ensure exposed structures can sustain flooding from a defined storm tide event.</p> <p>And</p>	☑	<p>The works are RPEQ approved designs in accordance with relevant engineering standards that include calculations associated with the hydraulics of the Mossman and South Mossman Rivers. Refer to attached drawings.</p> <p>The design aims to withstand that hazard categories for this location and minimise the potential of impacts to the coast. Refer attached drawings.</p>
	<p>AO2.4 Essential community service infrastructure is:</p> <ul style="list-style-type: none"> (1) located so that it is not inundated by a recommended storm tide event specified for that infrastructure, or (2) located and designed to ensure any components of the infrastructure that are likely to fail to function or may result in contamination when inundated by a storm tide (for example, electrical switch gear and motors, water supply pipeline air valves) are: <ul style="list-style-type: none"> (a) located above the peak water level for a recommended storm tide event, or (b) designed and constructed to exclude storm tide intrusions or infiltration (including by being located in the ground), or (c) able to temporarily stop functioning during a recommended storm tide event without causing 	P/S	<p>The remediation works are required as a result of ongoing bank scouring and are required to protect essential community infrastructure from ongoing scouring and storm tide events.</p> <p>Remediation works are required to protect the bank from further erosion that has a potential to occur as a result of subsequent wet seasons.</p> <p>There is a risk that further erosion will occur that will impact MWTP infrastructure causing it to fail or breach the existing oxidation ditch, clarifier or sludge lagoons located on a road reserve immediately adjacent to the riverbank esplanades.</p> <p>The oxidation ditch is only 8 metres from the inlet to the South Mossman River Bank and 10 metres at the highest point.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>significant adverse impacts to the infrastructure or the community.</p> <p>And</p>		The clarifier is only 9 metres to the river bank and the RAS well only 8 metres to the river bank. A sludge lagoon is located only 10m from the crest of the slope and an outfall pipeline is approximately 35m south.
	AO2.5 Emergency services infrastructure and emergency shelters, police facilities, and hospitals and associated facilities have an emergency rescue area above the peak water level for a recommended storm tide event.	N/A	N/A
PO3 Development directly, indirectly and cumulatively avoids an unacceptable increase in the severity of the coastal hazard, and does not significantly increase the potential for damage on the premises or to other premises.	AO3.1 Development avoids increasing the number of premises from which people would need to be evacuated to prevent death or injury from a defined storm tide event.	<input checked="" type="checkbox"/>	<p>Stabilising banks re adjacent to existing STP infrastructure on narrow road reserve and river bank esplanades.</p> <p>The development avoids an unacceptable increase in the severity of coastal hazards and does not increase the potential for damage on the premises or to other premises.</p>
<p>PO4 Development avoids the release of hazardous materials as a result of a natural hazard event.</p> <p>Editor's note: Applications should:</p> <p>(1) assess the risk of storm tide inundation releasing or otherwise exposing hazardous materials, including appropriate emergency planning and contingency measures.</p> <p>(2) applications are to be supported by a report certified by a Registered Professional Engineer of Queensland (RPEQ) that demonstrates this performance outcome will be achieved.</p>	<p>AO4.1 Development that involves the manufacture or storage of hazardous materials in bulk are designed to:</p> <p>(1) prevent the intrusion of waters from a defined storm tide event into structures or facilities containing the hazardous materials, or</p> <p>(2) ensure hazardous materials remain secured despite inundation, including secure from the effects of hydrodynamic forcing associated with wave action or flowing water.</p>	P/S	<p>Bank stabilisation is essential to prevent a possible breach from the oxidation ditch, clarifier or sludge lagoons 1 or 2 at MWTP of partially treated sewage and wastewater.</p> <p>RPEQ certified engineering plans to be implemented.</p> <p>Contractor to comply with EMP incorporating safe handling and storage of hazardous materials for revetment works.a</p>
PO5 Natural processes and the protective function of landforms and vegetation are maintained in coastal hazard areas.	<p>AO5.1 Development in an erosion prone area within the coastal management district:</p> <p>(1) maintains vegetation on coastal landforms where its removal or damage may:</p> <p>(a) destabilise the area and increase the potential for erosion, or</p> <p>(b) interrupt natural sediment trapping processes or dune or land building processes</p> <p>(2) maintains sediment volumes of dunes and near-shore coastal landforms, or where a reduction in sediment volumes cannot be avoided, increased risks to development from coastal erosion are mitigated by</p>	P/S	<p>Vegetation clearing will be required and limited to the project area. There will be an active revegetation program to reinstate vegetation and in the long term provide contiguity between adjacent riparian habitats. It is expected that vegetation in adjacent areas will encroach, and this will assist with re-colonisation.</p> <p>There are no dunes at this location. The bank contains natural in-situ soils, sands, silts and clay based on borehole data and available mapping.</p> <p>The project is to occur on the bank of the Mossman and South Mossman River esplanades, included in the Junction</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>location, design, construction and operating standards</p> <p>(3) minimises the need for erosion control structures or riverbank hardening through location, design and construction standards</p> <p>(4) maintains physical coastal processes outside the development footprint for the development, including longshore transport of sediment along the coast</p> <p>(5) reduces the risk of shoreline erosion for areas adjacent to the development footprint unless the development is an erosion control structure</p> <p>(6) reduces the risk of shoreline erosion for areas adjacent to the development footprint to the maximum extent feasible in the case of erosion control structures.</p> <p>And</p>		<p>Road reserve where MWTP is located. This work will provide batter protection to the banks from flows of up to 3m/ seconds generated during future wet seasons.</p> <p>The rock work will be restricted to the landslip and not extend into adjacent vegetated banks with the exception of tying the edges into the existing landform, as shown in the drawings. It is proposed that the works will match the batter profiles that exist either side of the landslip.</p> <p>A construction EMP will be implemented by the contractor to address critical Environmental Management elements; such as erosion and sediment control, stormwater management, water quality, noise and air quality, ecology and weed management, waste management, cultural heritage, wildlife and vegetation associated with the construction works.</p> <p>These works aim to minimise the risk of further erosion of the bank and provide protection to vegetation in adjacent areas.</p> <p>Debris will remain in situ to provide habitat for aquatic fauna and maintenance of fisheries values.</p>
	<p>A05.2 Development in a storm tide inundation area is located, designed, constructed and operated to:</p> <p>(1) maintain dune crest heights, or where a reduction in crest heights cannot be avoided, mitigate risks to development from wave overtopping and storm tide inundation</p> <p>(2) maintain or enhance coastal ecosystems and natural features, such as mangroves and coastal wetlands, between the development and tidal waters, where the coastal ecosystems and natural features protect or buffer communities and infrastructure from sea-level rise and impacts from storm tide inundation.</p> <p>And</p>	N/A	<p>Development is not on the shoreline nor located on coastal wetlands.</p> <p>However it is located within a high storm tide inundation area and erosion prone area as per the DILGP DA mapping.</p> <p>Contractor to adhere to EMP.</p>
	<p>A05.3 Redevelopment of built structures in the erosion prone area within a coastal management district:</p> <p>(1) avoids intensifying the use of the premises, or</p> <p>(2) demonstrates that any intensification of use will not result in an increase in the need for erosion control structures or riverbank hardening.</p>	<input checked="" type="checkbox"/>	<p>There will be no intensity to the scale of development that was here previously. This revetment wall will provide protection to the bank from the up to 3 m / second flows generated in the Mossman and South Mossman Rivers.</p> <p>Existing riverbank slips are worsening. Hence the need for erosion control via bank revetment works.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>And</p> <p>AO5.4 Development that is coastal protection work involves, in order of priority:</p> <ol style="list-style-type: none"> (1) beach nourishment undertaken in accordance with a program of beach nourishment works that source sediment of a suitable quality and type from outside the active beach system, or (2) the construction of an erosion control structure, where it is demonstrated that installing an erosion control structure is the only feasible option for protecting permanent structures from coastal erosion and those structures cannot be abandoned or relocated in the event of coastal erosion occurring. <p>Editor's note: Applications for coastal protection work should be supported by a report certified by a Registered Professional Engineer of Queensland (RPEQ) that demonstrates how the engineering solution sought by the work will be achieved.</p> <p>Editor's note: Applications for erosion control structures should demonstrate the consideration of beach nourishment techniques, and include a statement of why nourishment (in whole or part) has not been adopted as the preferred means of controlling the erosion risk.</p> <p>And</p> <p>AO5.5 Development involving reclamation:</p> <ol style="list-style-type: none"> (1) does not alter, or otherwise minimises impacts on, the physical characteristics of a waterway or the seabed near the reclamation, including flow regimes, hydrodynamic forces, tidal water and riverbank stability (2) is located outside the active sediment transport area, or otherwise maintains sediment transport processes as close as possible to their natural state (3) ensures activities associated with the operation of the development maintain the structure and condition of vegetation communities and avoid wind and water run-off erosion. <p>Editor's note: Applications for reclamation should be supported by a report certified by an RPEQ that demonstrates how the engineering solutions sought by the work will be achieved</p>	<p><input checked="" type="checkbox"/></p>	<p>The erosion control proposed is required to protect the bank and is required to be constructed prior to the 2017/2018 Wet Season.</p> <p>The protection has been designed to match the profile of the adjacent Mossman and South Mossman Riverbanks.</p> <p>The proposed will be limited to the existing disturbance footprint, a minor exception being the tying in of the edges into the existing landforms, as shown in the construction drawings that are RPEQ certified.</p>
	<p>AO5.5 Development involving reclamation:</p> <ol style="list-style-type: none"> (1) does not alter, or otherwise minimises impacts on, the physical characteristics of a waterway or the seabed near the reclamation, including flow regimes, hydrodynamic forces, tidal water and riverbank stability (2) is located outside the active sediment transport area, or otherwise maintains sediment transport processes as close as possible to their natural state (3) ensures activities associated with the operation of the development maintain the structure and condition of vegetation communities and avoid wind and water run-off erosion. <p>Editor's note: Applications for reclamation should be supported by a report certified by an RPEQ that demonstrates how the engineering solutions sought by the work will be achieved</p>	<p>N/A</p>	<p>There is no reclamation proposed.</p>
PO6 Erosion prone areas in a coastal management district are maintained as	AO6.1 Development locates built structures outside the part of the coastal management district that is the erosion	<input checked="" type="checkbox"/>	The stabilisation works is within the erosion prone area and the built structure proposed is to protect the bank from

Performance outcomes	Acceptable outcomes	Response	Comment
development free buffers, or where permanent buildings or structures exist, coastal erosion risks are avoided or mitigated.	prone area unless the development is listed under AO1.1 (1) – (4). And		further ongoing erosion. This is to preserve the current bank alignment as well as protecting local MWTP infrastructure that is at risk from bank recession. The engineering works are proposed to be undertaken prior to the 2017/2018 Wet Season.
	AO6.2 Small to medium scale tourist development is located outside the erosion prone area unless it is redevelopment. And	N/A	MWTP located on the adjacent Junction Road Reserve.
	AO6.3 Coastal-dependent development: (1) locates, designs and constructs relevant buildings or structures to withstand coastal erosion impacts, including by use of appropriate foundations, or (2) installs and maintains coastal protection works to mitigate adverse impacts to people and permanent structures from coastal erosion at the location. And	<input checked="" type="checkbox"/>	1) N/A 2) The works are a coastal protection measure to protect Mossman and Mossman South Riverbank esplanades from further scouring and encroachment within the MWTP site infrastructure located adjacent on Junction Road Reserve. The proposal includes restoration works for native vegetation and an active revegetation program will be undertaken.
	AO6.4 Development that is temporary, readily relocatable or able to be abandoned, or essential community service infrastructure: (1) locates built structures landward of an applicable coastal building line, or (2) where there is no coastal building line, locates habitable built structures landward of the alignment of adjacent habitable buildings, or (3) locates lifesaver towers or beach access infrastructure to minimise its impacts on physical coastal processes, or (4) where it is demonstrated that (1) or (2) is not reasonable and (3) does not apply: (a) locates built structures as far landward as practicable (b) uses layout design to minimise the footprint of the development that remains within the erosion prone area. And	N/A	N/A

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO6.5 Redevelopment of existing built structures not referred to in AO6.4, and excluding marine development:</p> <ul style="list-style-type: none"> (1) relocates built structures outside that part of the erosion prone area that is within the coastal management district, or (2) relocates built structures as far landward as practicable, and landward of an applicable coastal building line, or (3) where there is no coastal building line: <ul style="list-style-type: none"> (a) relocates built structures landward of the alignment of adjacent habitable buildings, or (b) uses layout design to minimise the footprint of the development that remains within the erosion prone area, or (c) provides sufficient space seaward of the development within the premises to allow for the construction of erosion control structures. <p>And</p>	N/A	N/A
	<p>AO6.6 Redevelopment of built structures in the erosion prone area within a coastal management district, which results in an intensification of use, mitigates the erosion threat to the development, having regard to:</p> <ul style="list-style-type: none"> (1) design and construction standards (2) installing and maintaining on-site erosion control structures within the premises if the development is not intended to be temporary. 	N/A	N/A
<p>PO7 Development avoids or minimises adverse impacts on coastal resources and their values, to the maximum extent reasonable.</p>	<p>AO7.1 Coastal protection work that is in the form of beach nourishment uses methods of placement suitable for the location that do not interfere with the long-term use of the locality of, or natural values within or neighbouring, the proposed placement site.</p> <p>And</p>	N/A	Site is located approximately 3.5 km upstream from the coastal fringe. Beach nourishment not proposed.
	<p>AO7.2 Marine development is located and designed to expand on or redevelop existing marine infrastructure unless it is demonstrated that it is not practicable to co-locate the development with existing marine infrastructure.</p> <p>And</p>	N/A	The stabilisation works is to occur in an area that was previously stabilised prior to riverbank erosion and scouring and is not in a marine environment. Previous revetment works have failed, and it not practical to rebuild the prior revetment works.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO7.3 Marine development:</p> <p>(1) relies on a natural channel of a depth adequate for the intended vessels, or</p> <p>(2) where there are no feasible alternative locations for the facility in the local area that do not require dredging for navigation channel purposes, development is located, designed and operated to minimise the need for capital and maintenance dredging for navigation channel purposes.</p> <p>And</p>	N/A	N/A
	<p>AO7.4 Development minimises dredging or the disposal of material in coastal waters during key biological events (such as fish aggregations or spawning) for species found in the area.</p> <p>And</p>	N/A	N/A. No dredging is required and disposal of material in coastal waters will be undertaken as part of this project.
	<p>AO7.5 Measures are to be incorporated as part of siting and design of the development to protect and retain identified ecological values and underlying ecosystem processes within or adjacent to the development site to the greatest extent practicable. This includes:</p> <p>(1) maintaining or restoring vegetated buffers between development and coastal waters to the extent practicable, unless the development is within ports or airports, or is marine development</p> <p>(2) maintaining or enhancing the connectivity of ecosystems in consideration of the cumulative effect of the development in addition to existing developed areas</p> <p>(3) retaining coastal wetlands, seagrass beds and other locally important feeding, nesting or breeding sites for native wildlife.</p> <p>And</p>	P/S	<p>The proposed works include active revegetation that seeks to re-establish vegetation on the bank. This will assist with restoring habitat in this location and providing contiguity with riparian flora in adjacent areas. Similar revegetation works have been undertaken in support of NDRRA revetment walls on the Daintree River.</p> <p>There is evidence in other locations on the Mossman and South Mossman Rivers that vegetation has successfully naturally re-colonised in areas that have had rock protection installed. It is likely that this will occur in addition to the active revegetation program proposed.</p> <p>The proposed works will not have a quantifiable impact on ecosystem connectivity along the Mossman and South Mossman River systems. The revegetation of the revetment walls will reinstate riparian vegetation and the instream works will not impose any restraints on fish passage.</p> <p>No coastal wetlands, seagrass beds or marine plants apply to this location.</p>
	<p>AO7.6 Measures are incorporated as part of siting and design of the development to maintain or enhance water quality to achieve the environmental values and water quality objectives outlined in the Environmental Protection (Water) Policy 2009.</p> <p>And</p>	P/S	Impacts to water quality, arising from suspended solids, are expected during construction. These aspects are expected to be temporary for the construction period only, and will be managed through the implementation of an Environmental Management Plan that will include erosion and sediment control as a key element. The Erosion and sediment

Performance outcomes	Acceptable outcomes	Response	Comment
			The works will provide long term benefits as protection to the bank will reduce the loss of sediment and erosion to the Mossman and South Mossman River water bodies.
	A07.7 Development avoids the disturbance of acid sulphate soils, or where it is demonstrated that this is not possible, the disturbance of acid sulphate soils is carefully managed to minimise and mitigate the adverse effects of the disturbance on coastal resources.	P/S	<p>Geotechnical investigations by suitably qualified personnel (Golders, 2007) have identified a low potential for sulphate soils as being present based on geotechnical investigations. The soils of the river bed and instream areas are primarily of unconsolidated active stream channel sediments with deep sandy profiles derived from transported material and do not support acid sulphate generating conditions.</p> <p>Soils of the upper banks on which the WWTP is situated are compromised of clay/loam/sandy soils derived from tenosols/rudosols and prone to erosion and do not present a significant acid sulphate generation risk when disturbed.</p> <p>The presence of acid sulphate soils will be carefully monitored during construction and the Contractor will be responsible for adhere to the EMP with respect to water quality, ASS and erosion and sediment control. EMP references Qld ASS Technical Manual – Soil Management Guidelines v4.0. Should high risk conditions be identified during construction, this represents a project hold point during which acid sulphate soil management plan will be prepared in accordance with the Qld ASS Technical Manual – Soil Management Guidelines v4.0.</p>
<p>PO8 Coastal protection work is undertaken only as a last resort where erosion presents an imminent threat to public safety or permanent structures.</p> <p>Editor's note: Applications for coastal protection work must be supported by a report certified by an RPEQ that demonstrates how the engineering solution sought by the work will be achieved.</p>	<p>A08.1 Coastal protection work is only undertaken to protect existing permanent structures from imminent adverse coastal erosion impacts, and the structures cannot reasonably be relocated or abandoned.</p> <p>And</p>	<input checked="" type="checkbox"/>	The works proposed are to protect the existing bank and DSC local government structures from the risk of further erosion during the 2017/2018 Wet Season.
	<p>A08.2 Coastal protection work to protect private structures is undertaken on private land to the maximum extent reasonable.</p> <p>And</p>	N/A	N/A Works are on Unallocated State Land adjacent to Junction Road Reserve and Mossman and South Mossman River Esplanades.
	<p>A08.3 Coastal protection work does not increase the coastal hazard risk for adjacent areas or properties.</p>	<input checked="" type="checkbox"/>	<p>The coastal hazard risk will not be increased, as the proposed works are designed to be consistent with the current batter and alignment of the banks of the Mossman and South Mossman Rivers.</p> <p>Works aim to stabilise the existing areas of erosion.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
<p>PO9 Development avoids adverse impacts on matters of state environmental significance, or where this is not reasonably possible, impacts are minimised and an environmental offset is provided for any significant residual impacts to matters of state environmental significance that are prescribed environmental matters.</p>	<p>AO9.1 Development:</p> <ol style="list-style-type: none"> (1) is set back from matters of state environmental significance (2) avoids interrupting, interfering or otherwise adversely impacting underlying natural ecosystem components or processes and interactions that affect or maintain the matters of state environmental significance, such as water quality, hydrology, geomorphology and biological processes, or (3) incorporates measures as part of its location and design to protect and retain matters of state environmental significance and underlying ecosystem processes within and adjacent to the development site to the greatest extent practicable. <p>Editor's note: Applications for development should identify any threatened species or their habitats, or threatened ecosystems that may be affected by the proposal. In particular, applications should identify and describe how the development avoids adverse impacts on any critical life stage ecological processes within or adjacent to the development area.</p>	<p><input checked="" type="checkbox"/></p>	<p>The MSES state database report (attached) has identified the following MSES at the works area:</p> <p>Criteria 1: State Conservation Areas</p> <p>1.1 Protected Areas. No protected areas are within or adjacent (within 2km) of the works area. No protected area will be affected by the works.</p> <p>1.2 Marine Parks. No marine parks are present or adjacent of the works area. The marine park (general use zone) is located 4.3km downstream of the works areas on the river banks. Key mitigation measures include undertaking bank stabilisation works during the dry season when river flows are low, and the installation of instream silt curtains during construction to minimise the risk of transported sediments.</p> <p>1.3 Fish Habitat Areas. No fish habitat areas are mapped within or adjacent to the proposed works areas on Mossman and South Mossman River.</p> <p>Criteria 2 – Wetlands and Waterways</p> <p>2.1 HES wetlands on Referable Wetlands Map. There are no High Ecological Significant wetlands present adjacent to or within the project area.</p> <p>2.2 HEV wetlands. There are no High Ecological Value wetlands present adjacent to or within the project area.</p> <p>2.3 Strategic Environmental Areas. There are no strategic environmental areas present adjacent to or within the project area.</p> <p>Criteria 3 – Species</p> <p>3.1 Threatened Species and Iconic species. The works area and buffer area was surveyed for protected flora species in accordance with the provisions of the NCA <i>Flora Survey Guidelines – Protected Plants</i> by an EHP accredited botanist. No protected flora species were identified and subsequently an application for an exemption for protected plant clearing permit has been prepared and will be lodged to EHP/PALM independent of this application. A Wildlife Online database search identified a number of special least concern fauna (32 of which 31 are migratory species), 2 endangered fauna species, 3 vulnerable species occurring within a 5km radius of the project site. this search radius included Mossman Gorge and the Daintree National Park 3km</p>

Performance outcomes	Acceptable outcomes	Response	Comment
			<p>west wherein most of the records were obtained. Ecological surveys (both terrestrial and aquatic) of the project works area were undertaken by a suitably qualified ecologist for this project. The project area has been heavily modified through previous clearing, introduction of exotic species, prior occupation and earth slips. No threatened or iconic species were located within the project area and it considered that that owing to the condition of the habitat available that any visitation would opportunistic and transient. Notwithstanding it is intended that rehabilitation works will be undertaken which will ultimately result in no net loss of vegetation habitat available at the project area.</p> <p>Criteria 4 Regulated Vegetation – area features:</p> <p>224.1ha of regulated vegetation are mapped within a 2km radius of the project area. However the project will impact on a total of 4,330 m² vegetation mapped as Non-Remnant under the Vegetation Management Supporting Map.</p> <p>Criteria 4 Regulated Vegetation – linear features:</p> <p>4.1 Vegetation Management Regional Ecosystems and Remnant Map: The vegetation to be removed comprises 4,330m² vegetation mapped as Non-Remnant under the Vegetation Management Supporting Map.</p> <p>4.2 Vegetation Management Wetland Map: There is no mapped wetland vegetation within or adjacent the project area.</p> <p>4.3 Vegetation Management Watercourse Map: 28km of regulated vegetation are mapped along watercourses within 2km radius of the project area. The project will require clearing of 2,350m² of mapped regulated Category R Reef regrowth watercourse vegetation on the South Mossman River and 1,980m² of mapped regulated Category R Reef regrowth watercourse vegetation on the Mossman River. A total of 4,330 m² vegetation mapped as Category R reef regrowth watercourse vegetation will be removed for the project. This vegetation will be reinstated following construction with a rehabilitation program that will be designed and implemented at the end of the construction phase to complement the works.</p>

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Performance outcomes	Acceptable outcomes	Response	Comment
			<p>Criteria 5 – Offset Areas</p> <p>5.2 Legally secured offset areas: there are no legally secure offset areas within or adjacent the project area.</p> <p>TOTAL MSES: 4,330m² vegetation mapped as Category R Reef regrowth watercourse vegetation.</p>
	<p>AO9.2 Where impacts cannot be reasonably avoided or minimised, an environmental offset is provided for any significant residual impact on matters of state environmental significance that are prescribed environmental matters caused by the development.</p> <p>Editor's note: Applications for development should identify anticipated losses, and outline what actions are proposed to be undertaken to offset the loss in accordance with the Significant Residual Impact Guideline and the relevant Queensland Environmental Offsets Policy.</p>	☑	Environmental offsets are not required for these works.
<p>PO10 Development maintains or enhances general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety.</p>	<p>AO10.1 Development adjacent to state coastal land or tidal water:</p> <p>(1) demonstrates that restrictions to public access are necessary for:</p> <p>(a) the safe or secure operation of development, or</p> <p>(b) the maintenance of coastal landforms and coastal habitat</p> <p>(2) separates residential, tourist and retail development from tidal water with public areas or public access facilities, or</p> <p>(3) maintains existing public access (including public access infrastructure that is in the public interest) through the site to the foreshore for:</p> <p>(a) pedestrians, via access points including approved walking tracks, boardwalks and viewing platforms, or</p> <p>(b) vehicles, via access points including approved roads or tracks.</p> <p>And</p>	☑	<p>Development is within the CMD.</p> <p>The proposed works are to provide protection to DSC local government MWTP infrastructure.</p> <p>Access is enabled for MWTP employees and visitors only. Access to MWTP is via the Junction Road Reserve site driveway, located approximately 150m to the south of the proposed works.</p> <p>Public access is not available to these sites.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO10.2 Development adjacent to state coastal land, including land under tidal water:</p> <p>(1) is located and designed to:</p> <p>(a) allow safe and unimpeded access to, over, under or around built structures located on, over or along the foreshore</p> <p>(b) ensure emergency vehicles can access the area near the development, or</p> <p>(2) minimises and offsets any loss of access to and along the foreshore within two kilometres of the existing access points, and the access is located and designed to be consistent with (1)(a) and (b).</p> <p>And</p>	<input checked="" type="checkbox"/>	<p>Access is enabled for MWTP employees and visitors only. Emergency vehicle access is via the Junction Road Reserve site access to MWTP located approximately 150m to the south of the proposed works.</p> <p>Site is not located along a foreshore but the Mossman and South Mossman Rivers.</p>
	<p>AO10.3 Any parts of private development that extend over tidal water are to be designed, constructed and used for marine access purposes only.</p>	N/A	N/A. Not private development.
<p>PO11 Private marine development avoids structures attaching to, or extending across, non-tidal state coastal land abutting tidal waters.</p>	<p>AO11.1 Private marine development and other structures such as decks or boardwalks for private use do not attach to, or extend across state coastal land that is situated above the high water mark.</p> <p>Editor's note: For occupation permits or allocations of State land, refer to the <i>Land Act 1994</i>.</p>	N/A	N/A
<p>PO12 Further development of artificial waterways avoids or minimises adverse impacts on coastal resources and their values, and does not contribute to:</p> <p>(1) an increase in the risk of flooding or erosion</p> <p>(2) degradation of water quality</p> <p>(3) degradation and loss of matters of state environmental significance (including, but not limited to, coastal wetlands, fish habitat areas and migratory species habitat).</p>	<p>AO12.1 The design, construction and operation of artificial tidal waterways maintains the tidal prism volume of the natural waterway to which it is connected.</p> <p>And</p>	N/A	N/A. No artificial waterways apply.
	<p>AO12.2 The design, construction and operation of artificial tidal waterways does not increase risk from flooding.</p> <p>And</p>	N/A	N/A
	<p>AO12.3 The design, construction and operation of an artificial waterway in connection with the reconfiguration of a lot ensures:</p> <p>(1) water inlet and outlets structures are of sufficient capacity to maintain the water quality within the waterway</p> <p>(2) water discharged from the artificial waterway protects the environmental values and water quality objectives of the receiving waters</p>	N/A	N/A

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>(3) dredged material is not disposed of in tidal water beyond the artificial waterway unless there is a beneficial reuse, e.g. beach nourishment.</p> <p>Editor's note: For more information on environmental values and water quality objectives see schedule 1 of the Environment Protection (Water) Policy 2009.</p> <p>And</p>		
	<p>AO12.4 The location of the artificial waterways avoids matters of state environmental significance, or does not result in any significant adverse impact on matters of state environmental significance.</p>	N/A	N/A
<p>PO13 Development does not involve reclamation of land below tidal water, other than for the purposes of:</p> <p>(1) coastal-dependent development, public marine development or community infrastructure</p> <p>(2) strategic ports, boat harbours or strategic airports and aviation facilities, in accordance with a statutory land use plan, where there is a demonstrated net benefit for the state or region and no feasible alternative exists</p> <p>(3) coastal protection work or work necessary to protect coastal resources or physical coastal processes.</p>	No acceptable outcome is prescribed.	N/A	N/A. No reclamation of land applies.

Table 10.1.2: Operational work

Performance outcomes	Acceptable outcomes	Response	Comment
<p>PO1 Tidal works that is private marine development does not result in adverse impacts to tidal land.</p> <p>Editor's note: In addressing this performance outcome, the applicant should comply with the performance criteria and acceptable standards set out in the Operational Policy Building and engineering standards for tidal works,</p>	<p>AO1.1 The location and design of tidal works that is private marine development:</p> <p>(1) is on private land abutting tidal water and used for property access purposes</p> <p>(2) occupies the minimum area reasonably required for its designed purpose</p> <p>(3) is not to be roofed or otherwise covered</p>	N/A	N/A. No private marine development applies.

Performance outcomes	Acceptable outcomes	Response	Comment
<p>Department of Environment and Heritage Protection, 2013.</p> <p>Editor's note: Applications should be supported by a report certified by an RPEQ to demonstrate compliance with this performance outcome.</p>	<p>(4) does not require the construction of coastal protection works, shoreline or riverbank hardening or dredging for marine access</p> <p>(5) does not adversely impact on public safety or public access and use of the foreshore.</p>		
<p>PO2 Development does not result in the disposal of material dredged from an artificial waterway into coastal waters, with the exception of:</p> <p>(1) reclamation works, or</p> <p>(2) coastal protection works, or</p> <p>(3) the maintenance of an existing artificial waterway and the at-sea disposal of material that has previously been approved for the waterway.</p>	<p>AO2.1 The design and construction of the artificial waterway includes onsite provisions for drying, re-handling and disposal of dredge material on site to facilitate the timely disposal to land or re-use.</p>	N/A	N/A. No dredge spoil as part of this revetment project.
<p>PO3 The design and construction of an artificial waterway maintains coastal landforms.</p>	<p>AO3.1 The design and construction of the artificial waterway provides for sand bypassing where this is necessary to prevent erosion of adjacent coasts and minimise sedimentation of the waterway.</p> <p>And</p>	N/A	N/A. No construction of artificial waterway.
	<p>AO3.2 Clean sand accumulating within an artificial waterway is returned to the active beach system, in preference to disposal on land.</p>	N/A	N/A
<p>PO4 Development that involves dredging includes and complies with a management plan that demonstrates how environmental impacts will be managed and mitigated, and how the requirements of the National assessment guidelines for dredging, Australian Government Department of the Environment, Water, Heritage and the Arts, 2009, will be met.</p>	<p>AO4.1 A management plan for the development:</p> <p>(1) directs the operation of the development</p> <p>(2) identifies disposal methods and disposal sites for the removed material for the construction and operational phases of the development</p> <p>(3) outlines how any adverse effects from extraction activities on sediment transport processes or adjacent coastal landforms will be mitigated or otherwise remediated by suitably planned and implemented beach nourishment and rehabilitation works.</p> <p>Editor's note: The suitability of the dredged sediment for ocean disposal is to follow the assessment of potential contaminants under the National assessment guidelines for dredging,</p>	N/A	N/A. No dredging is required.

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>Australian Government Department of the Environment, Water, Heritage and the Arts, 2009.</p> <p>And</p>		
	<p>AO4.2 For land based disposal of dredged material, any area used for storing, dewatering, drying or rehandling dredged material as outlined in the dredge management plan is:</p> <p>(1) of sufficient size for the projected volume of dredged material from relevant capital or maintenance dredging</p> <p>(2) protected from future development that would compromise the use of the area for its intended purpose of material storage and dewatering.</p> <p>And</p>	N/A	N/A
	<p>AO4.3 For at-sea disposal of suitable dredged material, the dredge management plan specifies that material is placed at a dredged material disposal site only if it is demonstrated that it is not feasible to:</p> <p>(1) dispose of the material above the high water mark, if the material is from maintenance works for an existing artificial waterway for which at-sea disposal was previously approved, or</p> <p>(2) keep the dredged material within the active sediment transport system for the locality, or</p> <p>(3) use the material for beach nourishment or another beneficial purpose.</p> <p>And</p>	N/A	N/A
	<p>AO4.4 For at-sea disposal of dredged material where the marine spoil disposal site is a retentive (i.e. non-dispersive) site, the disposal site identified in the dredge management plan has the capacity to hold and retain the material within its boundaries during construction and operation of the development.</p> <p>Editor's note: The use of dredged material for a beneficial purpose could include development of port or other marine facilities, use for construction or industrial purposes, or use to create or modify land or waters for an approved environmental outcome (such as creation of a bird roosting site). Further information about beneficial uses is contained in the National assessment guidelines for dredging, Australian Government Department of Environment, Water, Heritage and the Arts, 2009</p>	N/A	N/A

Performance outcomes	Acceptable outcomes	Response	Comment
Within a strategic environmental area: riparian and wildlife corridor functions			
PO5 Natural regeneration of any cleared or work area is facilitated wherever possible.	AO5.1 There is no impediments to the natural regeneration of native plant species in the area of clearing and works following completion of works.	<input checked="" type="checkbox"/>	<p>Active revegetation will be undertaken for the project. The project is to be undertaken prior to the 2017/2018 Wet Season and the revegetation will be undertaken in 2018 after the Wet Season.</p> <p>During the Wet Season the rocks will be allowed to settle as water velocities may achieve rates of up to 3 m/ second.</p> <p>The revegetation is to occur after the rocks have had a change to settle and when there are slower flows to provide plants an increased chance of survival.</p>
Within a strategic environmental area: hydrological processes			
PO6 Development avoids or minimises impacts on natural drainage lines or flow paths, during both construction and operation.	No acceptable outcome is prescribed.	<input checked="" type="checkbox"/>	Riverbank works to be conducted by the contractor with reference to the EMP and RPEQ approved design drawings for revetment works. Geotechnical, hydrological and ecological survey results are to be considered. The design of the structures have considered flow paths and drainage lines.
Within a strategic environmental area: water quality			
PO7 Development avoids or minimises any adverse impacts on environmental values and water quality objectives for receiving waters (surface and groundwater) from pollutants on site or leaving a site located in a strategic environmental area.	<p>AO7.1 Development demonstrates best practice environmental management to meet relevant environmental values and water quality objectives of the Environmental Protection (Water) Policy 2009.</p> <p>Or</p>	<input checked="" type="checkbox"/>	<p>There will be temporary disturbance, ie increases to turbidity and suspended sediments, to the water in the Mossman and Mossman South Rivers during revetment operational works.</p> <p>A water quality monitoring program, including a baseline assessment prior to construction, will be prepared and implemented by an appropriately qualified person. This monitoring program will identify threshold and trigger WQ parameters for actions, which will include hold points for construction.</p> <p>These works will be minimised wherever possible through implementation of the Contractor EMP, that will require measures to be in place to protect water quality and fisheries values. This will include such items as silt curtains, timing of works.</p> <p>Conditions of environmental approvals addressed within the Contractor EMP, will manage issues related to sediment control, stockpiling, re-fuelling of machinery and handling waste for the project.</p> <p>This aims to demonstrate best environmental practice to comply with the EPP(Water) 2009 and requirements in the environmental approval.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
	<p>AO7.2 All stormwater, wastewater, discharges and overflows leaving the site are:</p> <p>(1) treated to the quality of the receiving waters prior to discharge, or</p> <p>(2) reclaimed or re-used such that there is no export of pollutants to receiving waters.</p>	☑	<p>The contractor will minimise the chance of overland flow into the Mossman and South Mossman Rivers from the works site by diverting clean water around disturbed areas and treating contaminated water prior to any run-off.</p> <p>Contractor to adhere to EMP with respect to waste disposal, water quality and stormwater.</p>

Table 10.1.3: Reconfiguring a lot

Performance outcomes	Acceptable outcomes	Response	Comment
<p>PO1 Erosion prone areas in a coastal management district are maintained as development free buffers, or where permanent buildings or structures exist, coastal erosion risks are avoided or mitigated.</p>	<p>AO1.1 Land within the erosion prone area is surrendered to the State and dedicated as a reserve for beach protection, coastal management or environmental purposes, unless:</p> <p>(1) the development is in a port or is for coastal-dependent development, or</p> <p>(2) the surrender of the land will not enhance coastal management outcomes, for example, because there is already substantial development seaward of the lot.</p> <p>Editor's note: Land surrendered to the State for public use under AO1.1 is to be:</p> <p>(1) placed in a State land reserve for beach protection and coastal management purposes under the <i>Land Act 1994</i>, with local government as trustee, or</p> <p>(2) managed for beach protection and coastal management purposes under another management regime to the satisfaction of the chief executive administering the <i>Sustainable Planning Act 2009</i> and <i>Land Act 1994</i>, if it is demonstrated that AO1.1(1) cannot be reasonably achieved.</p> <p>(3) The <i>Land Act 1994</i> also includes provisions for voluntary land surrender for freehold land to the satisfaction of the chief executive administering the <i>Land Act</i>.</p>	N/A	<p>Works do not involve reconfiguring a lot nor works adjacent to a beachfront area.</p>
<p>PO2 Development maintains or enhances general public access to or along the foreshore, unless this is contrary to the protection of coastal resources or public safety.</p>	<p>AO2.1 Reconfiguring a lot that abuts the foreshore or tidal waters is designed to enhance public access if it involves the creation of 10 or more lots or the opening of a new road, unless it is for coastal-dependent development.</p>	N/A	<p>N/A. Works not within a foreshore.</p>

Performance outcomes	Acceptable outcomes	Response	Comment
PO3 Development in connection with a canal enhances public access to coastal waters.	AO3.1 The canal avoids intersecting with land or tidal land where the passage, use or movement of vessels in water could be restricted by the registered proprietor of the land. And	N/A	N/A. Works not connected to a canal.
	AO3.2 The area of the canal relating to the development is surrendered to the State as a public waterway. And	N/A	N/A
	AO3.3 The plans of subdivision for the canal are consistent with Requirements for plans of subdivision of an artificial waterway, Department of Environment and Heritage Protection, 2013.	N/A	N/A

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