

LOWER FITZROY RIVER INFRASTRUCTURE PROJECT

Appendix C Connectivity



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Glossary and abbreviations

Acronym/abbreviation	Term
CID	Community Infrastructure Designation
EIS	Environmental Impact Statement
EO Act	<i>Environmental Offsets Act 2014</i> (Qld)
EO Regulation	Environmental Offsets Regulation 2014
EP Act	<i>Environmental Protection Act 1994</i> (Qld)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ERA	Environmentally relevant activity
MLES	Matter of local environmental significance
MP Act	<i>Marine Parks Act 2004</i> (Qld)
MNES	Matters of national environmental significance
MSES	Matters of State environmental significance
NC Act	<i>Nature Conservation Act 1992</i> (Qld)
NC Regulation	Nature Conservation (Administration) Regulation 2006
Project	The Lower Fitzroy River Infrastructure Project
REs	Regional Ecosystems
SDAP	State development assessment provisions
SP Act	<i>Sustainable Planning Act 2009</i> (Qld)
SPRP	State planning regulatory provision

1. Regulatory framework

1.1 Environmental Offsets Act 2014

Under a number of existing Queensland laws, offsets may be required for certain developments where there is an unavoidable impact on significant environmental values.

Environmental offsets are governed by an environmental offsets framework that includes:

- *Environmental Offsets Act 2014* (Qld) (EO Act)
- Environmental Offsets Regulation 2014 (EO Regulation), which provides details of the prescribed activities regulated under existing legislation and prescribed environmental matters to which the Act applies
- Queensland Environmental Offsets Policy (current version 1.1, December 2014).

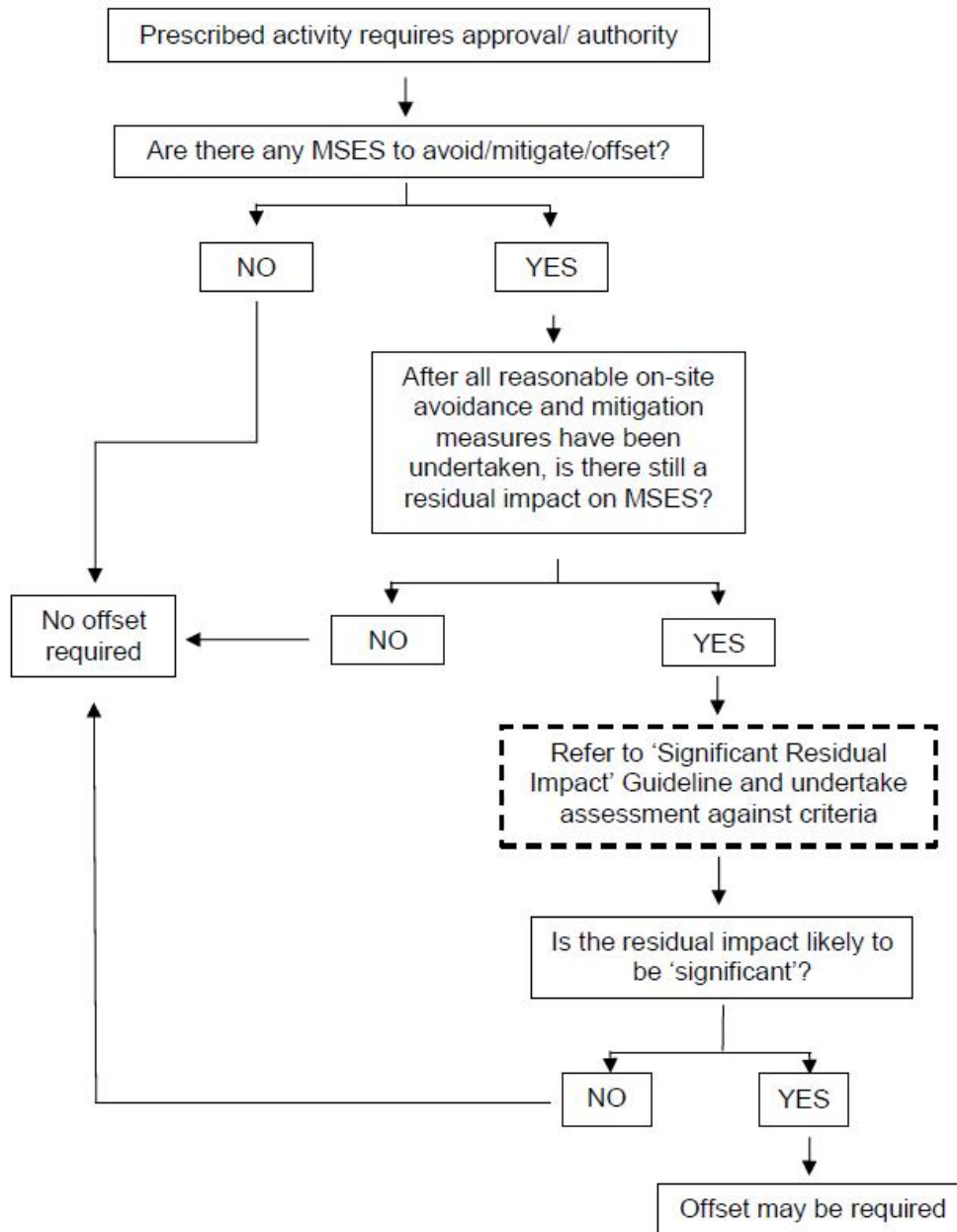
In addition, offsets are governed through the Commonwealth under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) environmental offsets policy for significant impacts on matters of national environmental significance (MNES).

Impacts on MNES have been dealt with in the draft environmental impact statement (EIS). Connectivity is not an MNES and as such Commonwealth related impacts and offsets are not discussed further herein.

Figure 1-1 provides an overview as to how environmental offsets are triggered in accordance with the EO Act.

1.2 Prescribed activities

In order for environmental offsets to apply a prescribed activity needs to be defined and an impact realised on a prescribed matter. Prescribed activities are defined in Schedule 1 of the EO Regulation and presented in Table 1-1. Prescribed activities identified for the Lower Fitzroy River Infrastructure Project (Project) are also presented in Table 1-1.



Source: extracted from the Significant Residual Impact Guideline for matters of state environmental significance and prescribed activities assessable under the *Sustainable Planning Act 2009* (Qld) (SP Act) (Queensland Environmental Offsets Policy, December 2014). The same process applies to activities assessable under the *Nature Conservation Act 1992* (Qld) (NC Act), *Environmental Protection Act 1994* (Qld) (EP Act) and *1994 Marine Parks Act 2004* (Qld) (MP Act).

Figure 1-1 Application process in determining environmental offset requirements under the Queensland Environmental Offset Framework

Table 1-1 Prescribed activities

Queensland authority ¹ type	Prescribed activity (Schedule 1, EO Regulation)	Project component
Not applicable	Item 1 A resource activity	The Project is not a resource activity
Development permit for a material change of use for an environmentally relevant activity (ERA)	Item 2 Prescribed ERA under the EP Act.	
ERA 16 Extractive and screening activities		Weir and bridges
ERA 8 Chemical storage (diesel, etc.)		Weir and bridges
ERA 47 Timber milling and wood chipping		Weir
Not applicable	Item 3 Carrying out of works authorised under the MP Act in a marine park:	The Project does not comprise works authorised under the MP Act or within a marine park
Not applicable	Item 4 An activity conducted under an authority granted, made, issued or given under the NC Act, s34, s35, s38, s42AD or s42AE in a protected area	The Project does not comprise activities within a protected area and does therefore not require an authority
Permit to clear native plants. Applies to clearing of endangered, vulnerable and near threatened species only.	Item 5 Taking a protected plant under a clearing permit (item 5), specifically 'taking a protected plant within the meaning of the NC Act under a protected plant clearing permit granted under the Nature Conservation (Administration) Regulation 2006 (NC Regulation), s15 in an area outside a protected area'	The draft EIS reports that there are no conservation significant flora species that have a high potential to occur in the Project footprint (Volume 1 Chapter 6). Isolated individuals at worst within weir, bridge and inundation footprints.
	Item 6 Development for which an offset may be required under the State development assessment provisions (SDAP) (item 6):	
Development permit for a material change of use for a prescribed ERA	Item 6(a) - SDAP module 4 (ERAs)	Weir and bridges

¹ 'Authority' under the EO Act means an agreement under another Act or a licence, permit or other authority under the other Act – Schedule 2, EO Act.

Queensland authority ¹ type	Prescribed activity (Schedule 1, EO Regulation)	Project component
Development permit for operational works for constructing or raising waterway barrier works	Item 6(b) - SDAP module 5 (fisheries resources)	Weir
Operational work for clearing native vegetation. Not applicable	Item 6(c) – SDAP module 8 (native vegetation clearing)	Seeking and obtaining a community infrastructure designation (CID) for the Project provides and exemption for the requirement for operational works to clear native vegetation and as such module 8 is not applicable. This would apply to all Project footprints.
Operational work for work within a coastal management district Not applicable	Item 6(d) – SDAP module 10 (coastal protection)	The Project is not within a coastal management district
Operational work for a wetland protection area. Not applicable	Item 6(e) - SDAP module 11 (wetland protection and wild river areas)	No wetland protection areas and no wild rivers associated within the Project footprint. A wetland protection area is located within 100 m to 350 m of the upstream extent of the inundation area associated with Rookwood Weir.
Development permit for the removal of quarry material (dredging) in a watercourse	Not applicable	A development permit is required for the removal of quarry material from a watercourse if an allocation notice is required under the <i>Water Act 2000</i> . Subject to separate environmental assessment and approval (prior to construction)
Not applicable	Item 7 Development for which an environmental offset may be required under any of the following: (a) a local planning (b) a State planning regulatory provision (SPRP) within the meaning of the SP Act	CID will exempt the Project from local planning instruments. SPRPs do not apply to the Project.

Queensland authority ¹ type	Prescribed activity (Schedule 1, EO Regulation)	Project component
Development permit for operational work which is taking or interfering with water in a watercourse, lake or spring	Not applicable	Weir
Operational work for particular dams	Not applicable	Eden Bann Weir
Reconfiguration of a lot	Not applicable	A development permit is required for obtaining new tenure over or reconfiguring parcels of land.

1.3 Prescribed environmental matters

An offset condition may only be imposed on an authority for a significant residual impact on a prescribed environmental matter. Prescribed environmental matters include:

- A matter of State environmental significance (MSES) listed in schedule 2 of the EO Regulation
- An accredited MNES
- A matter of local environmental significance (MLES), as described in section 10(1)(c) of the EO Act.

As discussed assessment of impacts and offsets for MNES are dealt with separately.

No MLES are defined for the Project area.

MSES as defined in Schedule 2 of the EO Regulation² include:

- Item 2 regulated vegetation
 - Prescribed regional ecosystems (REs) (endangered and of concern), wetland RE, essential habitat, watercourse RE) are present within Project areas
- Item 3 connectivity areas
 - Prescribed REs (mapped category B vegetation) are present within Project areas
- Item 4 Wetlands and watercourses
 - Not applicable
 - Applies to wetland protection areas, wetlands and/or watercourse of high ecological value
 - A wetland or watercourse in high ecological value waters is only a prescribed matter for the purposes of the following prescribed activity—a prescribed ERA under the EP Act
 - No wetland protection areas within Project footprint
 - Prescribed ERA 16 applies to watercourses within the Project footprint
- Item 5 Designated precinct in a strategic environmental area
 - Not applicable
 - No strategic environmental areas within Project footprint

² Item 1 in the EO Regulation provides definitions.

- Item 6 Protected wildlife habitat
 - High risk areas flora survey trigger areas for endangered or vulnerable wildlife are mapped for the Project footprint
 - Assessment concludes that there is a low probability for endangered and/or vulnerable species to be recorded within the Project footprints
 - Habitat for an animal that is endangered, vulnerable or a special least concern animal is present within Project footprint
- Item 7 Protected area
 - Not applicable
 - No protected areas within Project footprint
- Item 8 Highly protected zones of State marine parks
 - Not applicable
 - No State marine parks within Project footprint
- Item 9 Fish habitat areas
 - Not applicable
 - No declared areas under the *Fisheries Act 1994* within Project footprint
- Item 10 Waterway providing for fish passage
 - Waterway does provide for fish passage
- Item 11 Marine plants
 - Not applicable
 - No marine plants within Project footprint
- Item 12 Legally secured offsets
 - Not applicable
 - No legally secured offset areas within the Project footprint

MSES considered relevant to the prescribed activities for the Project are presented in Table 1-2.

Table 1-2 Prescribed environmental matters for MSES

Queensland authority ³ type	Prescribed activity (Schedule 1, EO Regulation)	Project component	MSES (Schedule 2, EO Regulation)
Development permit for a material change of use for an ERA			
ERA 16 Extractive and screening activities	Item 2 Prescribed ERA under the EP Act.	Weir and bridges	Item 3 Connectivity areas Item 4 Wetlands and watercourses Item 6 Protected wildlife habitat (flora and fauna)

³ 'Authority' under the EO Act means an agreement under another Act or a licence, permit or other authority under the other Act – Schedule 2, EO Act.

Queensland authority ³ type	Prescribed activity (Schedule 1, EO Regulation)	Project component	MSES (Schedule 2, EO Regulation)
ERA 8 Chemical storage (diesel, etc.)	Item 2 Prescribed ERA under the EP Act.	Weir and bridges	Item 3 Connectivity areas Item 6 Protected wildlife habitat (flora and fauna)
ERA 47 Timber milling and wood chipping	Item 2 Prescribed ERA under the EP Act.	Weir	Item 3 Connectivity areas Item 6 Protected wildlife habitat (flora and fauna)
Not applicable	Item 3 Carrying out of works authorised under the MP Act in a marine park. Not applicable.	The Project does not comprise works authorised under the MP Act or within a marine park	Not applicable
Not applicable	Item 4 An activity conducted under an authority granted, made, issued or given under the NC Act, s34, s35, s38, s42AD or s42AE in a protected area. Not applicable.	The Project does not comprise activities within a protected area and does therefore not require an authority	Not applicable
Permit to clear native plants. Applies to clearing of endangered, vulnerable and near threatened species only.	Item 5 Taking a protected plant under a clearing permit (item 5), specifically 'taking a protected plant within the meaning of the NC Act under a protected plant clearing permit granted under the NC Regulation, s15 in an area outside a protected area' Not applicable.	The draft EIS reports that there are no conservation significant flora species that have a high potential to occur in the Project footprint (Volume 1 Chapter 6). Isolated individuals at worst within weir, bridge and inundation footprints.	Item 3 Connectivity areas Item 6 protected wildlife habitat (flora) considered Not applicable
	Item 6 Development for which an offset may be required under SDAP (item 6):		
Development permit for a material change of use for a prescribed ERA	Item 6(a) - SDAP module 4 (ERAs)	Weir and bridges	Item 3 Connectivity areas Item 4 Wetlands and watercourses Item 6 Protected wildlife habitat (flora and fauna)

Queensland authority ³ type	Prescribed activity (Schedule 1, EO Regulation)	Project component	MSES (Schedule 2, EO Regulation)
Development permit for operational works for constructing or raising waterway barrier works	Item 6(b) - SDAP module 5 (fisheries resources)	Weir	Item 10 Waterway providing for fish passage
Operational work for clearing native vegetation. Not applicable	Item 6(c) – SDAP module 8 (native vegetation clearing) Not applicable	Seeking and obtaining a CID for the Project provides and exemption for the requirement for operational works to clear native vegetation and as such module 8 is not applicable. This would apply to all Project footprints.	Item 3 Connectivity areas considered Item 6 Protected wildlife habitat considered Not applicable
Operational work for work within a coastal management district Not applicable	Item 6(d) – SDAP module 10 (coastal protection) Not applicable	The Project is not within a coastal management district	Not applicable
Operational work for a wetland protection area. Not applicable	Item 6(e) - SDAP module 11 (wetland protection and wild river areas) Not applicable	No wetland protection areas and no wild rivers associated within the Project footprint. A wetland protection area is located within 100 m to 350 m of the upstream extent of the inundation area associated with Rookwood Weir.	Item 4 Wetlands and watercourses considered Not applicable
Development permit for the removal of quarry material (dredging) in a watercourse	Not defined.	A development permit is required for the removal of quarry material from a watercourse if an allocation notice is required under the <i>Water Act 2000</i> . Subject to separate environmental assessment and approval (prior to construction)	Item 4 Wetlands and watercourses considered Item 6 Protected wildlife habitat (fauna) considered

Queensland authority ³ type	Prescribed activity (Schedule 1, EO Regulation)	Project component	MSES (Schedule 2, EO Regulation)
Not applicable	Item 7 Development for which an environmental offset may be required under any of the following: (a) a local planning (b) a SPRP within the meaning of the SP Act Not applicable.	CID will exempt the Project from local planning instruments. SPRPs do not apply to the Project.	Not applicable
Development permit for operational work which is taking or interfering with water in a watercourse, lake or spring	Not defined.	Weir	Item 4 Wetlands and watercourses considered Item 10 Waterway providing for fish passage
Operational work for particular dams	Not applicable	Eden Bann Weir	Not applicable
Reconfiguration of a lot	Not applicable	A development permit is required for obtaining new tenure over or reconfiguring parcels of land.	Not applicable

1.4 Offset triggers

As indicated in the flowchart in Figure 1-1 the process in determining environmental offset requirements requires the identification of a prescribed activity for which there are impacts on MSES (or prescribed environmental matters).

Table 1-3 summaries Project authorities for which offsets need to be considered, that is a prescribed activity has the potential to impact on a MSES.

The significance of residual impacts on MSES is therefore required to be assessed in accordance with the *Significant Residual Impact Guideline for matters of state environmental significance and prescribed activities assessable under the Sustainable Planning Act 2009, Queensland Environmental Offsets Policy (December 2014)* for:

- Prescribed ERAs
- Works for constructing or raising waterway barrier works.

Table 1-3 Offset triggers

Queensland authority ⁴ type	Prescribed activity (Schedule 1, EO Regulation)	Project component	MSES (Schedule 2, EO Regulation)
Confirmed			
Development permit for a material change of use for ERA			
ERA 16 Extractive and screening activities	Item 2 Prescribed ERA under the EP Act.	Weir and bridges	Item 3 Connectivity areas Item 4 Wetlands and watercourses Item 6 Protected wildlife habitat (flora and fauna)
ERA 8 Chemical storage (diesel, etc.)	Item 2 Prescribed ERA under the EP Act.	Weir and bridges	Item 3 Connectivity areas Item 6 Protected wildlife habitat (flora and fauna)
ERA 47 Timber milling and wood chipping	Item 2 Prescribed ERA under the EP Act.	Weir	Item 3 Connectivity areas Item 6 Protected wildlife habitat (flora and fauna)
Development permit for a material change of use for a prescribed ERA	Item 6(a) - SDAP module 4 (ERAs)	Weir and bridges	Item 3 Connectivity areas Item 4 Wetlands and watercourses Item 6 Protected wildlife habitat (flora and fauna)
Development permit for operational works for constructing or raising waterway barrier works	Item 6(b) - SDAP module 5 (fisheries resources)	Weir	Item 10 Waterway providing for fish passage
Possible (low likelihood)			

⁴ 'Authority' under the EO Act means an agreement under another Act or a licence, permit or other authority under the other Act – Schedule 2, EO Act.

Queensland authority ⁴ type	Prescribed activity (Schedule 1, EO Regulation)	Project component	MSES (Schedule 2, EO Regulation)
Permit to clear native plants. Applies to clearing of endangered, vulnerable and near threatened species only.	Item 5 Taking a protected plant under a clearing permit (item 5), specifically 'taking a protected plant within the meaning of the NC Act under a protected plant clearing permit granted under the NC Regulation, s15 in an area outside a protected area' Not applicable.	The draft EIS reports that there are no conservation significant flora species that have a high potential to occur in the Project footprint (Volume 1 Chapter 6). Isolated individuals at worst within weir, bridge and inundation footprints.	Item 3 Connectivity areas Item 6 protected wildlife habitat (flora) considered Not applicable
Operational work for a wetland protection area. Not applicable	Item 6(e) - SDAP module 11 (wetland protection and wild river areas) Not applicable	No wetland protection areas and no wild rivers associated within the Project footprint. A wetland protection area is located within 100 m to 350 m of the upstream extent of the inundation area associated with Rookwood Weir.	Item 4 Wetlands and watercourses considered Not applicable

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2. Connectivity review

Based on the assessment provided above it is therefore considered that in accordance with the environmental offsets framework that connectivity areas need only be considered relative to areas within which prescribed ERAs will be undertaken.

It is considered that for authorities currently known to be required that there are no other prescribed activities defined for the Project that impact on connectivity areas as a MSES.

In the event that a permit to clear protected plants is triggered (following detailed design and potential changes to Project footprints) it is further considered that the clearing would be for a localised and defined area and not for the Project footprint as a whole.

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