

# Additional information to the draft environmental impact statement

May 2016



THIS PAGE IS LEFT INTENTIONALLY BLANK

# Executive summary

The Queensland Coordinator-General has reviewed the submissions received on the draft environmental impact statement (EIS) for the Lower Fitzroy River Infrastructure Project (Project).

Proponents for the Project, the Gladstone Area Water Board (GAWB) and SunWater Limited (SunWater), have been notified that in accordance with section 34A(2) of the *State Development and Public Works Organisation Act 1971* (Qld) that the draft EIS is not accepted as the final EIS (advice dated 6 November 2015). The Coordinator-General has advised that additional information is required in order to complete his evaluation. An EIS Submission Analysis Register (submissions register) has been provided by the Coordinator-General.

This report provides additional information to the draft EIS (additional information report) and addresses comments contained within the submissions register.

Following public notification, this report together with the draft EIS will be provided by the proponents to the Coordinator-General as the revised draft EIS. The Coordinator-General will consider whether the revised draft EIS will be taken to be the final EIS on which he will undertake his evaluation.

Thirty-seven (37) submissions were received by the Coordinator-General on the draft EIS. The submissions are summarised as follows:

- Ten submissions reflect 'no comment' or a positive comment
- Twelve submissions from regulatory agencies
- Eleven submission from landholders/rural producers
- Three submissions from special interest groups
- One submission from a private individual.

Thirty-two (32) submissions are considered by the Coordinator-General to be properly made. Nonetheless, the Coordinator-General has accepted all written submissions.

Submissions received on the draft EIS have been categorised into the following themes, each of which is addressed in detail in this report and within technical appendices as necessary and appropriate:

- Legislation, regulatory frameworks and Project approvals
- Land-related impacts (including land use, tenure and landholder compensation)
- Aquatic ecology
- Terrestrial fauna
- Surface water resources
- Water quality
- Noise and vibration
- Transport

- Facilitated development and consequential impacts.

A revised draft environmental management plan and a revised set of Project commitments are included with this report.

No changes to the description of the Project have been made by the proponents from that described in the draft EIS. Submissions received in relation to the draft EIS have not resulted in changes to the Project description or altered Project design elements nor significantly increased or altered the nature of the potential impacts.

Additional assessments with regard to the Project have been undertaken in order to address new legislation and/or policy initiatives introduced by the Commonwealth and State governments during and since the development of the draft EIS. The assessments are as follows:

- Assessment of the Project on *Elseya albagula* (white-throated snapping turtle) and additional commitments regarding mitigation, management and offsets in relation to impacts on both the *Rheodytes leukops* (Fitzroy River turtle) and the white-throated snapping turtle
- Great Barrier Reef water quality impacts in association with targets set in the Reef 2050 Long-term Sustainability Plan (Commonwealth of Australia 2015)
- Assessment of the Project's benefit to agricultural development and associated consequential impacts arising as a result of 42,000 ML/a of high priority water potentially being available to facilitate agricultural development.

Engagement with stakeholders remains an important component to managing and monitoring the potential impacts and opportunities of the Project. Stakeholder consultation has and will continue following the completion of the EIS and into the Project development phase.

GAWB and SunWater remain committed to the development of the Project and the avoidance, mitigation and management of environmental impacts arising.



# Table of contents

Glossary and abbreviations .....	viii
1. Introduction .....	1
1.1 Environmental impact assessment process .....	1
1.2 Finding your submission .....	1
1.3 Report structure .....	10
1.4 Project description .....	11
1.5 Project changes .....	12
2. Consultation .....	15
2.1 Overview .....	15
2.2 Project stakeholders .....	15
2.3 Draft EIS consultation .....	21
2.4 Additional information consultation activities .....	28
2.5 Future consultation .....	32
2.6 Consultation related submissions .....	33
3. Legislation, regulatory frameworks and project approvals .....	34
3.1 Environmental offsets .....	34
3.2 Water resource planning .....	39
3.3 Water supply and safety .....	39
3.4 Community infrastructure designation .....	42
4. Land .....	44
4.1 Land mapping updates .....	44
4.2 Land use and tenure .....	44
5. Fitzroy River turtle and white-throated snapping turtle .....	61
5.1 Environmental management .....	61
5.2 Offsets .....	62
5.3 Turtle nesting habitat .....	62
6. Terrestrial fauna .....	75
6.1 Red goshawk .....	75
6.2 Powerful owl .....	84
6.3 Yellow chat (Dawson) .....	94
7. Surface water resources .....	96
7.1 Water allocation security objectives .....	96
7.2 Environmental flow objectives .....	97
7.3 Integrated quantity and quality model .....	98

7.4	Flow regime and analysis .....	100
7.5	Stream gauges.....	136
8.	Water quality .....	137
8.1	Water quality data and parameters.....	137
8.2	Reef 2050 assessment .....	139
9.	Noise and vibration .....	148
10.	Transport.....	149
10.1	Bruce Highway/Atkinson Road and Capricorn Highway/Third Street intersections upgrades.....	149
10.2	Road and river crossings .....	150
11.	Consequential impacts.....	153
11.1	Background.....	153
11.2	Approach.....	154
11.3	Agricultural development options.....	155
11.4	Land use and generated pollutant runoff .....	157
11.5	Potential impacts.....	164
12.	Environmental management plan .....	175
13.	Project commitments.....	176
14.	Conclusion.....	177
15.	References .....	178

## Table index

Table 1-1	Find your submission .....	2
Table 1-2	Report structure .....	10
Table 2-1	Project stakeholders .....	16
Table 2-2	Summary of local government, State agency and key stakeholder briefings.....	23
Table 2-3	Summary of community information sessions .....	25
Table 2-4	Technical advisory agency meetings.....	31
Table 3-1	Significant residual impact assessment.....	36
Table 6-1	Summary of red goshawk survey effort .....	78
Table 6-2	Significant residual impact assessment for red goshawk .....	82
Table 6-3	Powerful owl habitat requirements summary.....	85
Table 6-4	Significant residual impact assessment for the powerful owl.....	92
Table 7-1	Flow analysis locations .....	102

Table 7-2	Modelled mean annual flow .....	104
Table 7-3	Modelled median annual flow .....	104
Table 7-4	Percentage of time of low (zero) flows – base case and developed case at IQQM4 .....	110
Table 7-5	Percentage of time of low (zero) flows – base case and developed case at IQQM2 .....	111
Table 7-6	Percentage of time of low (zero) flows – base case and developed case at IQQM1 .....	112
Table 7-7	Median and average seasonal base case and developed case flows at IQQM4 .....	124
Table 7-8	Comparison of base case and developed case flows per season at IQQM4 .....	125
Table 7-9	Median and mean seasonal base case and developed case flows at IQQM2 .....	128
Table 7-10	Comparison of base case and developed case flows per season at IQQM2 .....	129
Table 7-11	Median and average seasonal base case and developed case flows at IQQM1 .....	132
Table 7-12	Comparison of base case and developed case at IQQM1 .....	133
Table 8-1	Assessment of Project impacts against the Reef 2050 water quality targets .....	141
Table 8-2	Assessment of potential facilitated development against water quality targets .....	144
Table 10-1	Impacts on Foleyvale Crossing (2 year ARI event) .....	151
Table 11-1	ALUM land use classes for potential facilitated agricultural development scenario .....	160
Table 11-2	Generated runoff factors for TSS, TN and TP (adapted from Bartley and Speirs 2010) .....	161
Table 11-3	Total monitored loads – NRM regions and catchments .....	163
Table 11-4	Monitored load – Fitzroy NRM area (Fitzroy Catchment) .....	163
Table 11-5	Modelled pollutant loads .....	164
Table 11-6	Pollutant loads – existing and facilitated agricultural development scenario land uses .....	166
Table 11-7	Comparison of changed land use pollutant loads relative to monitored and modelled catchment loads .....	168
Table 11-8	Existing pressures and assessment of potential consequential agricultural impacts .....	169

# Figure index

Figure 1-1	Project location .....	13
Figure 2-1	Draft EIS community information session consultation material .....	26
Figure 3-1	Revised draft EIS Figure 9-1 Fitzroy WRP plan area .....	40
Figure 4-1	Revised draft EIS Figure 5-8 Regional geology .....	45
Figure 4-2	Revised draft EIS Figure 5-23 Eden Bann Weir exploration permits for minerals.....	47
Figure 4-3	Agricultural land as mapped within the watercourse cadastre .....	49
Figure 4-4	Agricultural land as mapped within named watercourse areas .....	50
Figure 4-5	Agricultural land as mapped within the existing Eden Bann Weir Stage 1 impoundment .....	51
Figure 4-6	Agricultural land as mapped within reserve tenure.....	52
Figure 4-7	Agricultural land as mapped within mining lease tenure .....	53
Figure 4-8	Agricultural land as mapped within the 1 in 5 year AEP event flood level.....	54
Figure 4-9	Agricultural land mapped for the new Eden Bann Weir access track.....	56
Figure 5-1	Eden Bann Weir Stage 3 storage levels during the Fitzroy River turtle nesting period .....	64
Figure 5-2	Eden Bann Weir Stage 3 storage levels during the white-throated snapping turtle nesting period .....	65
Figure 5-3	Rookwood Weir Stage 2 storage levels during the Fitzroy River turtle nesting period .....	66
Figure 5-4	Rookwood Weir Stage 2 storage levels during the white-throated snapping turtle nesting period .....	67
Figure 5-5	Percentage of daily flows over the Eden Bann Weir spillway during the Fitzroy River turtle nesting season .....	71
Figure 5-6	Percentage of daily flows over the Eden Bann Weir spillway during the white- throated snapping turtle nesting season.....	72
Figure 5-7	Percentage of daily flows over the Rookwood Weir spillway during the Fitzroy River turtle nesting season .....	73
Figure 5-8	Percentage of daily flows over the Rookwood Weir spillway during the white- throated snapping turtle nesting season.....	74
Figure 6-1	Potential red goshawk foraging habitat.....	76
Figure 6-2	Potential red goshawk nesting habitat .....	80
Figure 6-3	Potential powerful owl foraging habitat .....	87
Figure 6-4	Potential powerful owl nesting habitat .....	90
Figure 6-5	Yellow chat (Dawson) distribution and habitat.....	95

Figure 7-1	Gauging stations and flow assessment locations within and near to Project areas .....	101
Figure 7-2	Daily flow duration curve – Wattlebank (IQQM Node 002) .....	105
Figure 7-3	Daily flow duration curve – end of system (IQQM Node 249) .....	106
Figure 7-4	Annual flow hydrograph at IQQM1 .....	114
Figure 7-5	Annual flow preceding and post low flow year 1892.....	115
Figure 7-6	Annual flow preceding and post low flow years 1901/1902.....	116
Figure 7-7	Annual flow preceding and post low flow years 1915/1916 and 1919.....	117
Figure 7-8	Annual flow preceding and post low flow year 1935.....	118
Figure 7-9	Annual flow preceding and post low flow year 1945.....	119
Figure 7-10	Annual flow preceding and post low flow years 1964/1965 and 1969.....	120
Figure 7-11	Annual flow preceding and post low flow years 1987 and 1993.....	121
Figure 7-12	Annual flow preceding and post low flow year 2002.....	122
Figure 11-1	Eden Bann Weir project area existing land use and potential development areas .....	158
Figure 11-2	Proposed Rookwood Weir project area exiting land use and potential development areas .....	159
Figure 11-3	Great Barrier Reef Catchment Loads Monitoring Program areas .....	162
Figure 11-4	Fitzroy NRM region modelling areas .....	165

## Appendices

Appendix A – EIS Submission Analysis Register
Appendix B – Consultation material
Appendix C – Connectivity
Appendix D – Revised Project commitments
Appendix E – Fitzroy River turtle and white-throated snapping turtle species management program
Appendix F – Revised draft environmental management plan
Appendix G – Offset proposal for the Fitzroy River turtle and white-throated snapping turtle
Appendix H – Daily flow duration curves
Appendix I – Sensitivity analysis (wet and dry years) daily flow duration curves

## Glossary and abbreviations

Acronym/abbreviation	Term
AATOC	Average annual time of closure
AEP	Annual exceedance probability
AHD	Australian Height Datum
Al	Aluminium
ALP	Australian Labor Party
ALUM	Australian Land Use Management
AMTD	Adopted middle thread distance
ARI	Average recurrence interval
CCC	Capricorn Conservation Council
CEO	Chief Executive Officer
CID	Community Infrastructure Designation
Cu	Copper
DAF	Department of Agriculture and Fisheries (Qld)
DAFF	Department of Agriculture, Fisheries and Forestry (Qld) (former)
DEHP	Department of Environment and Heritage Protection (Qld)
DETE	Department of Education, Training and Employment (Qld) (former)
DEWS	Department of Energy and Water Supply (Qld)
DHPW	Department of Housing and Public Works (Qld)
DNRM	Department of Natural Resources and Mines (Qld)
DNPSR	Department of National Parks, Sports and Racing (Qld)
DoE	Department of the Environment (Cth)
DSD	Department of State Development (Qld)
DSITI	Department of Science, Information Technology and Innovation (Qld)
DSITIA	Department of Science, Information Technology and Innovation and the Arts (Qld) (former)

Acronym/abbreviation	Term
DTMR	Department of Transport and Main Roads (Qld)
EB1	Eden Bann Weir base case
EB2	Eden Bann Weir Stage 2
EB3	Eden Bann Weir Stage 3
EIS	Environmental Impact Statement
EFOs	Environmental Flow Objectives
EMP	Environmental management plan
EO Act	<i>Environmental Offsets Act 2014</i> (Qld)
EO Regulation	Environmental Offsets Regulation 2014
EOI	Expressions of Interest
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPM	Exploration permit for minerals
EPP Noise	Environmental Protection Policy (Noise) Policy 2008
ERA	Environmentally relevant activity
FBA	Fitzroy Basin Association
Fe	Iron
FIA	Failure Impact Assessment
FIIS	Fitzroy Industry Infrastructure Study
Fitzroy ROP	Fitzroy Basin Resource Operations Plan (2011 and 2014)
Fitzroy WRP	Water Resource (Fitzroy Basin) Plan 2011
FSL	Full supply level
FRW	Fitzroy River Water
GAWB	Gladstone Area Water Board
GBR	Great Barrier Reef
GBRWhA	Great Barrier Reef World Heritage Area
LSC	Livingstone Shire Council



Acronym/abbreviation	Term
IDAS	Integrated Development Assessment System
IQQM	Integrated Quality and Quantity Model
LNP	Liberal National Party
Mn	Manganese
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 (Wildlife) Regulation 2006
NRM	Natural resource management
NWIDF	National Water Infrastructure Development Fund
OCG	Office of the Coordinator-General
PDA	Potential development area
Project	The Lower Fitzroy River Infrastructure Project
QFES	Queensland Fire and Ambulance Service
QLUMP	Queensland Land Use Mapping Program
QPS	Queensland Police Service
RDA	Regional Development Australia
Reef 2050 Plan	Reef 2050 Long-term Sustainability Plan
REs	Regional Ecosystems
RL	Reduced Level
ROP	Resource operations plan
RRC	Rockhampton Regional Council
RWQPP	Reef Water Quality Protection Plan
RW1	Rookwood Weir Stage 1
RW2	Rookwood Weir Stage 2
SDAP	State development assessment provisions



Acronym/abbreviation	Term
SDPWO Act	<i>State Development and Public Works Organisation Act 1971</i>
SMP	Species management program
Submissions register	EIS Submission Analysis Register
SunWater	SunWater Limited
SP Act	<i>Sustainable Planning Act 2009 (Qld)</i>
SP Regulation	Sustainable Planning Regulation 2009
SRI Guideline - SP Act	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)
TEC	Threatened ecological community
TOC	Time of closure
TN	Total Nitrogen
TP	Total Phosphorus
TSS	Total Suspended Solids
WASOs	Water Allocation Security Objectives
WQIP	Water Quality Improvement Plan
WQT	Water Quality Target
WRP	Water resource plan
WSSR Act	<i>Water Supply (Safety and Reliability) Act 2008 (Qld)</i>

THIS PAGE IS LEFT INTENTIONALLY BLANK

# 1. Introduction

## 1.1 Environmental impact assessment process

The draft environmental impact statement (EIS) for the Lower Fitzroy River Infrastructure Project (Project) being assessed under Part 4 of the *State Development and Public Works Organisation Act 1971* (SDPWO Act) was released for public and advisory agency comment from 18 July 2015 to 31 August 2015. Thirty-seven submissions were received by the Coordinator-General on the draft EIS.

The Coordinator-General has reviewed the submissions received on the draft EIS (Section 2.3.7) and notified the Gladstone Area Water Board (GAWB) and SunWater Limited (SunWater) as joint proponents for the Project that in accordance with section 34A(2) of the SDPWO Act, the draft EIS is not accepted as the final EIS. The Coordinator-General has advised that additional information is required in order to complete his evaluation. An EIS Submission Analysis Register (submissions register) has been provided by the Coordinator-General and is included in Appendix A.

This report provides additional information to the draft EIS (additional information report) and addresses comments contained within the submissions register.

Following public notification, this report together with the draft EIS will be provided by the proponents to the Coordinator-General as the revised draft EIS. The Coordinator-General will consider whether the revised draft EIS will be taken to be the final EIS on which he will undertake his evaluation.

## 1.2 Finding your submission

Each submission made is identified by a unique submission identification number as indicated in the submissions register (Appendix A). As applicable, the submissions register provides a cross-reference to each chapter and/or appendix of the additional information report within which a response to the submission is made.

Table 1-1 lists each submitter in alphabetical order with the corresponding submission number and provides an overview as to the nature of the submission (or topic covered in the submission) and references where in this additional information report the submission is addressed.

Table 1-1 Find your submission

Submitter	Submission number	Topic	Additional information report section reference
Australian Heritage Council	024.01	Impacts on the Great Barrier Reef (GBR)	8.2 Reef 2050 Assessment 12 Environmental management plan
Capricorn Conservation Council (CCC)	029.01, 09.03 – 029.04, 029.06, 029.09, 029.13-26	Commentary on Project feasibility, rationale and assessment of alternatives, economic feasibility of the Project and agricultural development, facilitated agricultural development impacts, impacts of the Project and dams and weirs in general on flows, flora and fauna and ecosystem functions (including downstream freshwater and marine environments) and biodiversity, climate change, land use and sustainable development.	Appendix A
	029.02	Agricultural development	11 Consequential impacts
	029.05	Climate change	7.3 Integrated quality and quantity model
	029.07, 029.29	Flora	3.4 Community infrastructure designation 8.2 Reef 2050 assessment 11 Consequential impacts
	029.08	Aquatic fauna	5 Fitzroy River turtle and white-throated snapping turtle 12 Environmental management plan
	029.12	Amphibians	8.2 Reef 2050 assessment 11 Consequential impacts
Department of Agriculture and Fisheries (Qld) (DAF) – Fisheries Queensland	007.01, 007.02	Fish passage and river crossing – comments on application requirements noted	Appendix A
	007.03, 007.09	Fish salvage and handling and fish monitoring	12 Environmental management plan 13 Project commitments

Submitter	Submission number	Topic	Additional information report section reference
	007.04	Fishway maintenance	12 Environmental management plan 13 Project commitments
	007.05, 007.07	Legislation reference, offsets	3.1 Environmental offsets 3.1.1 Corrections
DAF – Agriculture, Reef and Best Practice Management Programs	007.06	Water quality – comments noted	Appendix A
DAF – Biosecurity Queensland	007.10, 007.11	Weed and pest management	12 Environmental management plan
DAF - Agriculture	007.12	Agriculture	4.2.1 Agricultural land classes
	007.13	Water availability for agriculture	2.6 Consultation related submissions
Department of Education and Training (Qld) (DETE) (including Training and Skills Investment)	012.01, 030.01, 030.02	Traffic, workforce and procurement – comments noted	Appendix A
Department of Energy and Water Supply (Qld) (DEWS)	037.01, 037.02	Water allocation security objectives (WASOs) and operational arrangements	13 Project commitments
	037.03; 037.04; 037.05; 037.06; 037.07; 037.08, 037.09, 037.10	Legislation and failure impact assessment (FIA)	3.3 Water use and safety
Department of Environment and Heritage Protection (Qld) (DEHP)	028.01	Reference to code of practice	12 Environmental management plan
	028.02, 028.03, 028.04	Water quality objectives, metals	8.1 Water quality data
	028.05	Operational rules and water releases	7.2.2 Weir operating strategy 13 Project commitments
	028.06	Consultation on the Integrated Quantity and Quality Model (IQQM) methodology	7.3 Integrated quantity and quality model
	028.07	Air quality objectives	12 Environmental management plan
	028.08, 028.09, 028.10	<i>Erythrorichis radiates</i> (red goshawk)	6.1 Red goshawk

Submitter	Submission number	Topic	Additional information report section reference
	028.11, 028.12, 028.13, 028.14	Noise and vibration	9 Noise and vibration
	028.15	<i>Ninox strenua</i> (powerful owl)	6.2 Powerful owl
	028.16	Legislation	5.1 Environmental management
	028.17, 028.19, 028.22, 028.23	<i>Elseya albagula</i> (white-throated snapping turtle) and <i>Rheodytes leukops</i> (Fitzroy River turtle) offsets	5.2 Offsets
	028.18	Connectivity offsets	3.1.1 Connectivity
	028.20	Impacts on the GBR	8.2 Reef 2050 Assessment 12 Environmental management plan
	028.21	Cumulative and consequential impacts	8.2 Reef 2050 Assessment 11 Consequential impacts
	028.24, 028.25	Brigalow ( <i>Acacia harpophylla</i> dominant and co-dominant) (Brigalow) threatened ecological community (TEC) and <i>Eucalyptus raveretiana</i> (black ironbox) offsets	13 Project commitments
	028.26	Fitzroy River turtle species management program (SMP)	5.1 Environmental management 12 Environmental management plan 13 Project commitments
	028.27	Turtle passage and design	5.1 Environmental management 12 Environmental management plan 13 Project commitments
Department of Infrastructure, Local Government and Planning (Qld) – Planning Group	015.01	No comments made	Appendix A

Submitter	Submission number	Topic	Additional information report section reference
Department of National Parks, Sport and Racing (Qld) (DNPSR)	020.01, 020.02	Inundation of State forest	4.2.3 Aricia State Forest 13 Project commitments
Department of Natural Resources and Mines (Qld) (DNRM)	032.01, 032.02	Land mapping	4.1 Land mapping updates
	032.03, 032.04	Gauging stations	7.5 Stream gauges
	032.05	Regulations - comments noted	Appendix A
	032.06	Sub-catchment areas	3.1.1 Water resource planning
	032.07, 032.08	WASOs	7.1 Water allocation and security objectives
	032.09	Environmental flow objectives (EFOs)	7.2 Environmental flow objectives
	032.10, 032.11	Flow regime, water entitlements	7.1 Water allocation and security objectives 13 Project commitments
	032.12	Land tenure	13 Project commitments
	032.13	Landholder compensation	4.2.2 Land use and productivity 13 Project commitments
	032.14	Vegetation management	3.4 Community infrastructure designation
Department of Housing and Public Works (Qld) – Government Employee Housing and Housing Services and the Queensland Government Accommodation Office	005, 018.01	No comments made	Appendix A
Department of State Development (Qld) (DSD) – Policy and Legislation Coordination	001	No comments made	Appendix A
DSD – Major Projects Office	003	No comments made	Appendix A
DSD – Regional Services	017.01, 017.02	Project rationale – comments noted	Appendix A



Submitter	Submission number	Topic	Additional information report section reference
	017.03	Infrastructure	2.6 Consultation related submissions 4.2.1 Agricultural land classes
	017.04	Recruitment and procurement	2.6 Consultation related submissions 12 Environmental management plan
	017.05	Local business	2.6 Consultation related submissions 12 Environmental management plan
Department of the Environment (Cth) (DoE)	021.01, 021.27, 028.28	Modelling, corrections – comments noted	Appendix A
	021.02, 021.08	Flow modelling	7.4.1 Modelled flow statistics
	021.03, 021.13, 021.14	Impacts during low flow periods	7.4.2 Analysis for periods of low flow and antecedent conditions
	021.04	Future climate scenarios	7.3 IQQM
	021.05, 021.09	Future operations and demands, EFOs	7.2.2 Weir operating strategy
	021.06	Sensitivity analysis of flow duration curves	7.4.4 Sensitivity analysis
	0.21.07	Flow duration curves	7.4.1 Modelled flow statistics
	021.10, 021.12, 021.15	Impacts on the GBR	8.2 Reef 2050 Assessment
	021.11, 021.24	Facilitated impacts	8.2.1 Assessment of facilitated development against water quality targets 11 Consequential impacts
	021.16, 021.17	<i>Epthianura crocea macgregori</i> (yellow chat (Dawson))	6.3 Yellow chat (Dawson)
	021.18, 021.22, 021.26	Fitzroy River turtle impact avoidance and mitigation measures.	5.1 Environmental management
	021.19, 021.21, 021.23	Flow related impacts to the Fitzroy River turtle	5.1 Environmental management 7.4.2 Analysis for periods of low flow and antecedent conditions 7.4.3 Analysis of seasonal daily impact



Submitter	Submission number	Topic	Additional information report section reference
Department of Transport and Main Roads (Qld) (DTMR)	021.20, 021.21	Nest inundation upstream and downstream of weirs	5.3.2 Turtle nesting upstream 5.3.3 Turtle nesting downstream
	021.25, 021.26	Offsets for the Fitzroy River turtle	5.2 Offsets
	019.01	Traffic counts	13 Project commitments
	019.02,	Intersection upgrade	10.1.1 Traffic impact assessments 13 Project commitments
	019.03	Timing of intersection upgrades	10.1.2 Construction schedule
Fitzroy Basin Association (FBA)	019.04	Foleyvale Crossing	10.2 Foleyvale Crossing
	011.03, 011.06, 011.07, 01.18, 011.20, 011.22, 011.24, 011.25	Species, fish passage, aquatic habitat, animal habitat, environmental management, cumulative impacts, vegetation – comments noted	Appendix A
	011.01, 011.02, 011.04, 011.19, 011.26	Offsets - remnant vegetation and fragmentation	3.4 Community infrastructure designation 3.1.1 Connectivity
	011.05, 011.08, 011.09, 011.10, 011.11, 011.12, 011.13, 011.28, 011.29, 011.30	Aquatic ecology – white-throated snapping turtle	5 Fitzroy River turtle and white-throated snapping turtle 12 Environmental management plan 13 Project commitments
	011.17, 011.27	Terrestrial fauna	6.1 Red goshawk 6.2 Powerful owl
	011.23, 011.31	Consequential or facilitated development	8.2.1 Assessment of facilitated development against water quality targets 11 Consequential impacts
Private submitter 1	006.01	Flow regime methodology	5.3 Turtle nesting habitat 7.2.2 Weir operating strategy 7.4 Flow regime analysis
	006.02	Flow regime methodology and EFOs	
Private submitter 2	009.01	Comments noted	Appendix A

Submitter	Submission number	Topic	Additional information report section reference
Private submitter 3	010.01	General comment	Appendix A
Private submitter 4	013.01, 013.02	Land use	4.2.2 Land use and productivity 13 Project commitments
Private submitter 5	014.01	Land use	4.2.2 Land use and productivity 13 Project commitments
Private submitter 6	016.01, 016.02, 016.03, 016.04, 016.05, 016.08	Land and property	4.2.2 Land use and productivity 13 Project commitments
	016.06	Environmental management	4.2.2 land use and productivity 13 Project commitments
	016.07	Land access – comments noted	Appendix A
	016.08	Water entitlements	7.1 Water allocation and security objectives 13 Project commitments
Private submitter 7	022.01	Property access and productivity	4.2.1 Agricultural land classes 4.2.2 Land use and productivity 13 Project commitments
Private submitter 8	023.01	Localised flooding	4.2.2 Land use and productivity
Private submitter 9	026.01, 026.02	Land access, inundation and flooding impacts	4.2.2 Land use and productivity
Private submitter 10	027.01, 027.02	Land access, inundation and flooding impacts	4.2.2 Land use and productivity
Private submitter 11	033	Land use and productivity impacts	4.2.2 Land use and productivity 13 Project commitments
Private submitter 12	034	Adequacy of consultation	2.6 Consultation related submissions 4.2.2 Land use and productivity 13 Project commitments
Private submitter 13	035.01	Property access	4.2.2 Land use and productivity 10.2.1 Foleyvale Crossing 13 Project commitments
	035.02	Infrastructure – comments noted	Appendix A

Submitter	Submission number	Topic	Additional information report section reference
Private submitter 14	036.01	Water allocation viability	4.2.2 Land use and productivity 7.1 Water allocation and security objectives 13 Project commitments
	036.02	Water resources – comments noted	Appendix A
Public Safety Business Agency (Qld)	025.01	Bushfire hazard mitigation	12 Environmental management plan
Queensland Ambulance Service	004.01	Hazard and risk	Appendix A
Queensland Fire and Emergency Services (QFES)	025.02	Hazard, risk, health and safety legislation and management	12 Environmental management plan
	025.03	Traffic management – comments noted	Appendix A
	025.04	Emergency services – comments noted	Appendix A
Queensland Treasury (Hazardous Industries and Chemicals Branch Office of Industrial Relations)	002	No comments made	Appendix A
Rockhampton Regional Council (RRC)	008.01, 008.02, 08.06, 008.07	Surface water resources, weed and pest management - comments noted	Appendix A
	008.03	Water quality monitoring	12 Environmental management plan
	008.04	Fitzroy Barrage fishway operation	7.3 Integrated quantity and quality model
	008.08	Economics and stakeholder engagement	2.6 Consultation related submissions
WWF – Australia	031.01, 031.05A	Not applicable	Appendix A
	031.02, 031.07A, 031.08A	GBR World Heritage values	8.2 Reef 2050 assessment 12 Environmental management plan
	031.03, 031.06A, 037.07A	Facilitated development and consequential impacts	11 Consequential impacts
	031.04	Greenhouse gas – comments noted	Appendix A

### 1.3 Report structure

Submissions received on the draft EIS and included in the submissions register are discussed in Section 2.3.7 and presented in Appendix A.

This report addresses submissions relative to key themes and issues that align with environmental values and potential impacts identified in the draft EIS as described in Table 1-2.

Table 1-2 Report structure

Chapter	Title	Description
1	Introduction	Provides an overview of the EIS process and reporting provided.
2	Consultation	Provides a summary of the consultation activities undertaken for the draft EIS and the additional information phases as well as information regarding future and ongoing consultation proposed for the Project.
3	Legislation, regulatory frameworks and project approvals	Provides responses to comments and clarifications relative to the Commonwealth and State regulatory frameworks.
4	Land	Provides responses to comments and clarifications regarding topography, geology and soils and land use and tenure (including landholder compensation)
5	Fitzroy River turtle and white-throated snapping turtle	Provides responses to comments and clarifications regarding the listing of white-throated snapping turtle and flow regimes impacting on Fitzroy River turtle and white-throated snapping turtle habitat
6	Terrestrial fauna	Provides responses to comments and clarifications regarding red goshawk, powerful owl and yellow chat (Dawson)
7	Surface water resources	Provides responses to comments and clarifications regarding the regulatory framework, modelling methods, flow regimes and operational strategies
8	Water quality	Provides responses to comments and clarifications regarding assessment against the GBR water quality targets (WQTs)

Chapter	Title	Description
9	Noise and vibration	Provides responses to comments and clarifications regarding regulations and noise sources
10	Transport	Provides responses to comments and clarifications regarding regulations and commitments for traffic management and transport infrastructure
11	Consequential impacts	Provides responses and clarifications to comments regarding facilitated development
12	Environmental management plan	A revised draft environmental management plan (EMP)
13	Project commitments	Revised Project commitments

#### 1.4 Project description

The Project comprises the construction and operation of a raised Eden Bann Weir and construction and operation of Rookwood Weir on the Fitzroy River, Central.

Key Project components include the following:

- Eden Bann Weir
  - Eden Bann Weir Stage 2 (EB2) – a raise of the existing Eden Bann Weir Stage 1 full supply level (FSL) 14.5 m Australian Height Datum (AHD) to a FSL 18.2 m AHD and associated impoundment of the Fitzroy River
  - Eden Bann Weir Stage 3 (EB3) – the addition of 2 m high flap gates to achieve FSL 20.2 m AHD and associated impoundment of the Fitzroy River.
- Rookwood Weir
  - Rookwood Weir Stage 1 (RW1) – a new build to FSL 45.5 m AHD, a saddle dam and associated impoundment of the Fitzroy, lower Mackenzie and lower Dawson rivers
  - Rookwood Weir Stage 2 (RW2) – the addition of 3.5 m high flap gates to achieve FSL 49.0 m AHD and associated impoundment of the Fitzroy, lower Mackenzie and lower Dawson rivers.
- Aquatic fauna passage infrastructure, namely fish locks and a turtle bypass, at each weir
- Any combination of the above stages.

The Project is expected to be staged, with sequencing and timing dependant on a number of demand triggers including existing and new consumers, drought conditions and security of supply requirements.

Other infrastructure components associated with the Project include:

- Augmentation to and construction of access roads (public and private) to and from the weir sites for construction and operations and upgrades to intersections

- Construction of low level bridges in areas upstream of weir infrastructure that will be impacted by the impoundments, specifically at Glenroy, Riverslea and Foleyvale crossings
- Installation of culverts at Hanrahan Crossing downstream of Rookwood Weir to facilitate access during operational releases
- Relocation of existing and/or installation of new gauging stations
- Removal and decommissioning of existing low level causeways and culverts at river crossings described above
- Water supply for construction will be sourced directly from the river and will not require the construction of additional water supply infrastructure.

Figure 1-1 shows the Project location.

## 1.5 Project changes

No changes to the description of the Project have been made by the proponents from that described in the draft EIS. It is considered that submissions received in relation to the draft EIS have not required changes to the Project description or Project design elements nor significantly increased or altered the nature of the potential impacts as described in the draft EIS.

Additional assessments with regard to the Project have been undertaken in order to address new legislation and/or policy initiatives introduced by the Commonwealth and State governments during and since the development of the draft EIS. The assessments are as follows:

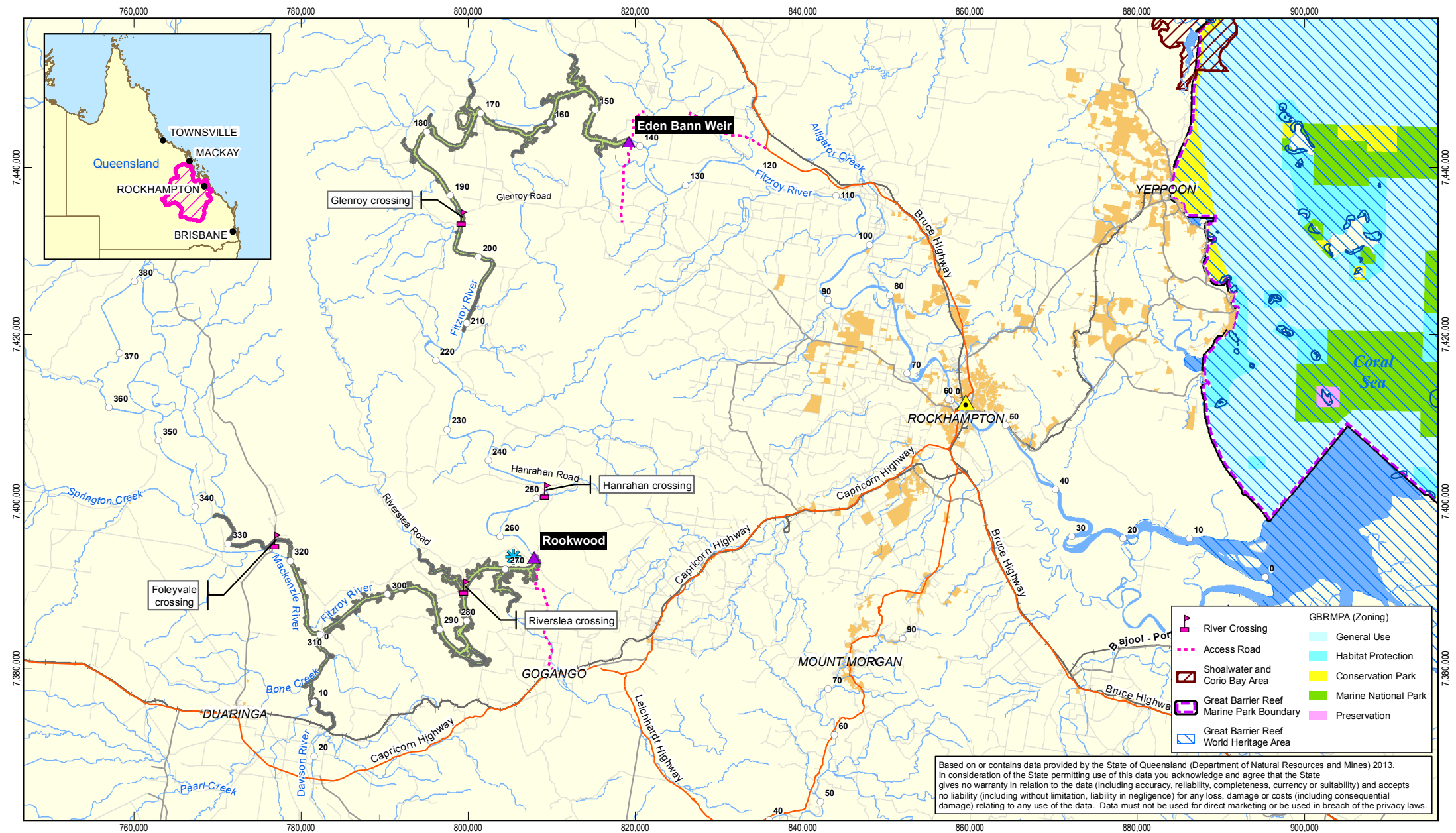
- Assessment of the Project on the white-throated snapping turtle and further commitments regarding mitigation, management and offsets in relation to impacts on both the Fitzroy River turtle and the white-throated snapping turtle
- Water quality impacts on the GBR in recognition of targets set in the Reef 2050 Long-term Sustainability Plan (Reef 2050 Plan) (Commonwealth of Australia 2015)
- Assessment of the Project's benefit to agricultural development and associated consequential impacts arising as a result of 42,000 ML/a of high priority water being potentially available to facilitate agricultural development.

### 1.5.1 Fitzroy River turtle and white-throated snapping turtle

GAWB and SunWater have engaged with the Office of the Coordinator-General (OCG) and DEHP in developing suitable management, impact mitigation and offset measures in relation to potential Project effects on the Fitzroy River turtle and white-throated snapping turtle including the following considerations as addressed in Section 5:

- Water quality
- Aquatic habitat loss
- Nesting habitat loss
- Turtle passage.



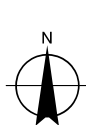


1:600,000 (at A4)

0 5 10 15 20

Kilometres

Map Projection: Universal Transverse Mercator  
Horizontal Datum: Geocentric Datum of Australia (GDA94)  
Grid: Map Grid of Australia 1994, Zone 55



#### LEGEND

- AMTD (km)
- ▲ Weir Location
- ▲ Fitzzy Barrage
- ▲ Saddle dams
- Highway
- Major Road
- Streets (Local)
- Access Road
- ▨ Fitzzy Basin
- ▨ Urbanised Area
- ▨ Rookwood Weir Stage 2 impoundment
- ▨ Eden Bann Weir Stage 2 impoundment
- ▨ Eden Bann Weir Stage 3 impoundment



Gladstone Area Water Board, SunWater Job Number 41-29212  
Lower Fitzroy River Infrastructure Project Revision J  
Date 03 Mar 2016

Project locality plan

Figure 1-1

G:\41\29212\GIS\Maps\MXD\41\_29212\_026\_Rev\_A.mxd

Copyright: This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was produced. Unauthorised use of this document in any way is prohibited. © 2016.

© 2016. While GHD has taken care to ensure the accuracy of this product, GHD, DNRM, SUNWATER, GBRMPA and GA make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD, DNRM, SUNWATER, GBRMPA and GA cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason. \*Please see Appendix for important copyright information.

Data Source: © Copyright Commonwealth of Australia (Geoscience Australia): Places, Waterways, Weir Locations - 2008; DNRM: Railways, Roads, RAMSAR Wetlands, World Heritage Area - 2010; © Copyright Commonwealth of Australia (GBRMPA) Zoning, Boundary - 2011. Created by: MS \*See Appendix for disclaimers and copyrights.

Level 9, 145 Ann Street Brisbane QLD 4000 Australia T +61 7 3316 3000 F +61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

### 1.5.2 Reef 2050 Plan

The potential direct Project impacts on Reef 2050 plan targets have been assessed (Section 8.2.2). Similarly potential indirect impacts arising from development that may potentially be facilitated by the Project (urban, industrial and agricultural development) have been assessed (Section 8.2.1).

### 1.5.3 Agricultural development

Since preparation of the draft EIS, Government policy initiatives with regard to agricultural development have gained momentum with commitments made in the White Paper on Developing Northern Australia (Commonwealth of Australia 2015) being implemented.

In particular, the establishment of the National Water Infrastructure Development Fund (NWIDF) seeks to implement the commitments made the White paper to improve regional water security.

In this, the NWIDF has made \$50 million available and has called for Expressions of Interest (EOI) for feasibility studies. At a State level, EOIs are being coordinated by DEWS.

The Commonwealth will make a further \$450 million available to construct water infrastructure in partnership with State and Territory governments and the private sector.

The Project is recognised as a key component to development in Central Queensland and is acknowledged as an opportunity to progress Government policy and stimulate economic growth. EOIs for feasibility study funding have been made with regard to the Project.

Further discussion has therefore been presented within this additional information report regarding agricultural development opportunities and benefits that may arise within the general region of the Project. An assessment of the potential impacts as a result of this facilitation of agricultural development has also been undertaken (Section 11).



## 2. Consultation

### 2.1 Overview

In accordance with the terms of reference and as presented in the draft EIS (Volume 3, Appendix F), a consultation plan was developed to guide the delivery of the EIS consultation activities. The consultation plan identified:

- A framework for the implementation of consultation and communication activities
- Key stakeholders including government, industry and community
- Roles and responsibilities for communication and consultation
- Communication protocols
- Reporting and feedback arrangements.

The public consultation program commenced in late 2008 and was phased in line with key EIS milestones, namely:

- Phase 1: Scoping and planning (October 2008 – August 2009)
- Phase 2: Draft EIS development (August 2009 – November 2014)
- Phase 3: Public exhibition and release of the draft EIS (the subject of this report) (July – August 2015)
- Phase 4: Evaluation and EIS finalisation (including the preparation of additional information) (current).

### 2.2 Project stakeholders

A stakeholder database (using stakeholder management software, namely Consultation Manager<sup>®</sup>) has been maintained for the Project to record all the contacts and the consultation undertaken with the Commonwealth, State and local governments and the regulatory agencies, the community, the key stakeholders and the affected landholders. The stakeholder database has been, and will continue to be, progressively updated and used to monitor and record enquiries, issues and team responses across all Project interfaces.

Stakeholders identified for draft EIS consultation (Phase 3) and for the preparation of additional information (Phase 4) are detailed in Table 2-1.

Table 2-1 Project stakeholders

Stakeholder category	Stakeholder (non-exhaustive) <sup>1</sup>
<b>Internal stakeholders</b>	
Project partners	<ul style="list-style-type: none"> <li>• SunWater and GAWB Boards</li> <li>• SunWater and GAWB Executive Management Teams</li> <li>• Project Control Group (comprising proponents Chief Executive Officers (CEOs) or General Managers and representatives of the Project Technical Committee)</li> <li>• Project Technical Committee (comprising representatives of the proponents and GHD)</li> </ul>
GHD and sub-consultants	<ul style="list-style-type: none"> <li>• Project Manager</li> <li>• Engineering, environmental and social assessment teams</li> <li>• Consultation team</li> <li>• Sub-consultants or contractors of GHD</li> </ul>
<b>Commonwealth government</b>	
Departmental ministers	<ul style="list-style-type: none"> <li>• The Hon Greg Hunt MP, Minister for the Environment</li> <li>• The Hon Barnaby Joyce MP, Deputy Prime Minister [current] and Minister for Agriculture and Water Resources</li> <li>• The Hon Warren Truss MP, Deputy Prime Minister and Minister for Infrastructure and Regional Development [former]</li> <li>• The Hon Christopher Pyne MP, Minister for Industry, Innovation and Science [current]</li> <li>• The Hon Ian Macfarlane MP, Minister for Industry [former]</li> <li>• The Hon Josh Frydenberg MP, Minister for Resources, Energy and Northern Australia</li> <li>• Senator the Hon Nigel Scullion, Minister for Indigenous Affairs</li> </ul>
Elected representatives	<ul style="list-style-type: none"> <li>• Ms Michelle Landry MP, Federal Member for Capricornia (Liberal National Party) (LNP)</li> <li>• Ken O'Dowd MP, Federal Member for Flynn, (LNP)</li> <li>• Senator Matthew Canavan (LNP)</li> </ul>
Government departments and authorities	<ul style="list-style-type: none"> <li>• Department of Agriculture and Water Resources</li> <li>• DoE</li> <li>• Department of Infrastructure and Regional Development</li> <li>• Great Barrier Reef Marine Park Authority</li> <li>• Regional Development Australia (RDA) (Fitzroy and Central West)</li> </ul>
<b>Queensland government</b>	
Premier and departmental ministers	<ul style="list-style-type: none"> <li>• The Hon Anastacia Palaszczuk MP, Premier [current]; The Hon Campbell Newman MP, Premier [former]</li> <li>• The Hon Dr Anthony Lynham MP, Minister for State Development and Minister for Natural Resources and Mines [current]; The Hon Jeff Seeney MP, Deputy Premier and Minister for State Development, Infrastructure and Planning [former]; The Hon Tim Nicholls MP, Treasurer and Minister for State Development and Trade [former]; The Hon Andrew Cripps MP, Minister for Natural Resources and Mines [former]</li> <li>• The Hon Dr Steven Miles MP, Minister for Environment and Heritage Protection and Minister for National Parks and the Great Barrier Reef [current]; The Hon Andrew Powell, Minister for Environment and Heritage Protection [former]</li> </ul>

Stakeholder category	Stakeholder (non-exhaustive) <sup>1</sup>
	<ul style="list-style-type: none"> <li>• The Hon Mark Bailey MP, Minister for Energy and Water Supply [current]; The Hon Mark McArdle MP, Minister for Energy and Water Supply [former]</li> <li>• The Hon William Byrne MP, Minister for Agriculture and Fisheries and Minister for Sport and Racing [current]; The Hon John McVeigh MP, Minister for Agriculture, Fisheries and Forestry [former]</li> <li>• The Hon Steve Dickson MP, Minister for National Parks, Recreation, Sport and Racing</li> <li>• The Hon Shannon Fentiman MP, Minister for Multicultural Affairs [current]</li> <li>• The Hon Curtis Pitt MP, Treasurer, Minister for Aboriginal and Torres Strait Islander Partnerships [current]</li> <li>• The Hon Glen Elmes MP, Minister for Aboriginal and Torres Strait Islander and Multicultural Affairs [former]</li> </ul>
Elected representatives	<ul style="list-style-type: none"> <li>• Mr Glenn Butcher MP, member for Gladstone (Australian Labor Party) (ALP) [current]; Mrs Elizabeth Cunningham MP, member for Gladstone (Independent) [former]</li> <li>• Mr Lachlan Millar MP, member for Gregory (LNP) [current]; Mr Vaughan Johnson MP, member for Gregory (LNP) [former]</li> <li>• Mrs Brittany Lauga MP, member for Keppel (ALP) [current]; Mr Bruce Young MP, member for Keppel (LNP) [former]</li> <li>• Mr James (Jim) Pearce MP. Member for Mirani (ALP) [current]; Mr Ted Malone MP, member for Mirani (LNP) [former]</li> <li>• The Hon William Byrne MP, member for Rockhampton (ALP)</li> </ul>
State departments and authorities	<ul style="list-style-type: none"> <li>• Department of Aboriginal and Torres Strait Islander Partnerships [current]; Department of Aboriginal and Torres Strait Islander and Multicultural Affairs<sup>2</sup> [former]</li> <li>• DAF [current]; Department of Agriculture, Fisheries and Forestry (DAFF)<sup>2</sup> [former]</li> <li>• Department of Communities, Child Safety and Disability Services [current]; Department of Community Safety [former]</li> <li>• Department of Education and Training [current]; DETE [former]</li> <li>• DEWS<sup>2</sup></li> <li>• DEHP<sup>2</sup></li> <li>• Department of Health</li> <li>• Department of Housing and Public Works (DHPW)</li> <li>• Department of Infrastructure, Local Government and Planning [current]; Department of Local Government [former]</li> <li>• Department of National Parks, Sport and Racing (DNPSR) [current]; Department of National Parks, Recreation, Sport and Racing [former]</li> <li>• DNRM<sup>2</sup></li> <li>• Department of Police, Fire and Emergency Services, including the Queensland Police Service (QPS)</li> <li>• Department of Science, Information Technology and Innovation [current] (DSITI); Department of Science, Information Technology and Innovation and the Arts (DSITIA)<sup>2</sup> [former]</li> <li>• DSD including the OCG [current]; Department of State Development, Infrastructure and Planning (including the OCG) [former]</li> <li>• DTMR</li> <li>• Department of Tourism, Major Events, Small Business and Commonwealth Games</li> </ul>

Stakeholder category	Stakeholder (non-exhaustive) <sup>1</sup>
	<ul style="list-style-type: none"> <li>Department of Treasury [current]; Department of Treasury and Trade [former]</li> </ul>
<b>Local government</b>	
RRC	<ul style="list-style-type: none"> <li>Mayor Cr Margaret Strelow, Planning and Development Committee</li> <li>Cr Cherie Rutherford, Deputy Mayor [current], Division 5, Parks and Recreation Committee (Division 5 incorporates the Eden Bann and Rookwood weirs project areas)</li> <li>Cr Rose Swadling, Division 1, Community Services Committee [current], Division 9, Chair - Communities Committee [former]</li> <li>Cr Neil Fisher, Division 2 [current], Division 10 [former], Chair - Business Enterprise Committee</li> <li>Cr Tony Williams, Division 3 [current], Infrastructure Committee [current], Deputy Mayor [former] and Division 8 [former]</li> <li>Cr Ellen Smith, Division 4, Chair - Health and Compliance Committee</li> <li>Cr Drew Wickerson, Division 6</li> <li>Cr Stephen Schwarten, Division 7</li> <li>Cr Glenda Mather, Civil Operations – Roads [former]</li> <li>Cr Greg Belz, Division 6, Water Committee [former]</li> <li>Mr Evan Pardon, CEO</li> <li>Mr Bob Holmes, General Manager Regional Services</li> <li>Mr Nimish Chand, Manager, Fitzroy River Water (FRW) – a commercialised business unit of RRC and owner and operator of the Fitzroy Barrage</li> <li>Mr Jason Plumb, Coordinator Treatment and Supply, FRW</li> <li>Mr Martin Crow, Manager Engineering Services</li> <li>Mr Bruce Russell, Senior Infrastructure Planning Engineer [former]</li> <li>Mr Angus Russel, Coordinator, Strategic Infrastructure Planning, Regional Services</li> <li>Mr Cecil Barnard, Manager Planning Assessment Operations [former]</li> <li>Mr Russell Claus, Planning Manager [current]</li> <li>Ms Tarnya Fitzgibbon, Coordinator Development Assessment</li> <li>Mr Rick Palmer, Manager Economic Development</li> </ul>
Livingstone Shire Council (LSC)	<ul style="list-style-type: none"> <li>Mayor Cr Bill Ludwig</li> <li>Mr Justin Commons, CEO</li> <li>Cr Graham Scott, Planning and Strategic Infrastructure</li> <li>Cr Tom Wyatt, Sport, Recreation, Parks and Community Facilities</li> <li>Cr Adam Belot, Water, Waste Management and the Environment and Council's representative to the Local Marine Advisory Committee</li> <li>Cr Nigel Hutton, Administration and Finance, Youth Development and the Arts; Council's representative to the Regional Arts Development Fund committee</li> <li>Cr Jan Kelly, Community Development and Support</li> <li>Cr Glenda Mather, Civil Operations - Roads</li> <li>Mr Dan Toon, Director Infrastructure Services</li> <li>Mr Brett Bacon, Director Community and Planning</li> </ul>
Central Highlands Regional Council	<ul style="list-style-type: none"> <li>Mayor Cr Kerry Hayes [current]</li> <li>Deputy Mayor Cr Gail Godwin-Smith [current]</li> <li>Mayor Peter Maguire [former]</li> <li>Deputy Mayor Cr Gail Nixon [former]</li> </ul>

Stakeholder category	Stakeholder (non-exhaustive) <sup>1</sup>
	<ul style="list-style-type: none"> <li>Mr Scott Mason, CEO</li> <li>Mr Luke Lankowski, Manager Development Services [former]</li> <li>Mr Bill Wilkinson, Executive Manager Disaster Management</li> <li>Mr Michael Paker, Acting General Manager Infrastructure and Utilities</li> <li>Mr Jason Akers, Manager Infrastructure</li> </ul>
Woorabinda Aboriginal Shire Council	<ul style="list-style-type: none"> <li>Mayor Shane Wilkie [current]</li> <li>Mayor Terrence Munns (Snr) [former]</li> <li>Cr William Gulf, Deputy Mayor [former]</li> <li>Mr Ron Smith, CEO</li> <li>Cr Dermid Stower [former]</li> </ul>
Gladstone Regional Council	<ul style="list-style-type: none"> <li>Mayor Matt Burnett [current][formerly Deputy Mayor]</li> <li>Mayor Gail Sellers [former]</li> <li>Cr Chris Trevor, Deputy Mayor [current]</li> <li>Mr Stuart Randle, CEO</li> </ul>
<b>Community and business</b>	
Directly affected landholders and tenement holders	<ul style="list-style-type: none"> <li>At Eden Bann Weir and the proposed Rookwood Weir site</li> <li>Affected by inundation associated with the existing and proposed raised Eden Bann Weir</li> <li>Inundation associated with the proposed Rookwood Weir</li> <li>Land accommodating associated infrastructure such as access roads and river crossings</li> </ul>
Local residential areas	<ul style="list-style-type: none"> <li>Eden Bann Weir area</li> <li>Gogango</li> <li>Rookwood area</li> </ul>
Environmental groups	<ul style="list-style-type: none"> <li>Australian Marine Conservation Society</li> <li>Capricorn Coast Alliance</li> <li>CCC</li> <li>FBA</li> <li>Fitzroy River and Coastal Catchments Inc.</li> <li>Fitzroy River Fish Stocking Association</li> <li>Greening Australia Queensland</li> <li>Queensland Conservation Council</li> <li>The Wilderness Society Queensland</li> <li>Wildlife Preservation Society of Queensland</li> </ul>
Business / Industry / Peak bodies	<ul style="list-style-type: none"> <li>AgForce Queensland</li> <li>Capricornia Chamber of Commerce Inc [current]; Rockhampton Chamber of Commerce [former]</li> <li>The Gap Dam Committee</li> <li>Gladstone Chamber of Commerce</li> <li>Central Queensland Local Government Association</li> <li>Consortium for Integrated Resources Management</li> <li>Co-operative Research Centre for Catchment Hydrology</li> <li>Co-operative Research Centre for Coastal Zone, Estuary and Waterway Management</li> </ul>

Stakeholder category	Stakeholder (non-exhaustive) <sup>1</sup>
	<ul style="list-style-type: none"> <li>Central Queensland Beef Research Committee</li> <li>Gladstone Area Promotion and Development Ltd</li> <li>Meat and Livestock Australia</li> <li>Rockhampton Regional Development</li> <li>RDA (Fitzroy and Central West)</li> <li>Growing Central Queensland Initiative (a collaborative project between the DSD, DAF and DNRM and RDA (Fitzroy and Central West) and RRC)</li> </ul>
Community groups (interest groups and community service organisations)	<ul style="list-style-type: none"> <li>Coorumburra Rural Enterprises (Darumbal/BBKY, leases Coorumburra Station from Marlborough Nickel)</li> <li>Duaringa Road Users Group</li> <li>Rural Fire Brigade Gogango</li> <li>Rural Fire Brigade Morinish</li> <li>Fitzroy Elders – The Fitzroy Basin Elders Committee</li> <li>Woorabinda Aboriginal Shire Council/Woorabinda Pastoral Company (owns Foleyvale and Stoney Creek stations)</li> </ul>
Recreational groups	<ul style="list-style-type: none"> <li>Capricorn Tag and Release Sportfishing club Inc</li> <li>Capricornia Bushwalkers Inc</li> <li>Central Queensland Amateur Fishing Clubs Association</li> <li>Country Women's Association (North Rockhampton Branch)</li> <li>Fitzroy Canoe Club Inc</li> <li>Fitzroy Motor Boat Club Inc</li> <li>Frenchville Fishing Club</li> <li>Queensland Canoeing</li> <li>Rocky Outrigger Canoe Club</li> <li>Rockhampton Water Skiing and Power Boat Club</li> </ul>
Aboriginal parties for the Project area	<ul style="list-style-type: none"> <li>Darumbal</li> <li>Gangulu</li> <li>Ghungalu</li> <li>Kangoulou</li> <li>Jetimarala</li> </ul>
Health and educational institutions	<ul style="list-style-type: none"> <li>Rockhampton Hospital</li> <li>Hillcrest Private Hospital</li> <li>Mater Private Hospital</li> <li>Gogango State School</li> </ul>
Utility service providers	<ul style="list-style-type: none"> <li>Ergon Energy</li> <li>Telstra</li> <li>Optus</li> <li>FRW</li> </ul>
Gladstone Fitzroy Pipeline Project	<ul style="list-style-type: none"> <li>Clough Diversified United Joint Venture - engineering and construction advice</li> <li>Arup - owners engineer and EIS consultant</li> <li>Bayley Wiley Holt - communications consultants</li> <li>RLMS – land acquisition and landholder consultants</li> </ul>

<sup>1</sup> As at May 2016 (including current and former positions where applicable); <sup>2</sup> including as the Department of Natural Resources and Water and the Department of Environment and Resource Management.



## 2.3 Draft EIS consultation

The Coordinator-General released the draft EIS for public and agency review and comment on 18 July 2015.

To provide opportunities for public and agency involvement and education and to encourage and facilitate active consultation, the following consultation activities have been undertaken with regard to the draft EIS:

- Public notification
- Public exhibition of the draft EIS
- Distribution of a Project Update
- Regulatory agency briefings
- Community information sessions
- Stakeholder meetings
- Monitoring and maintenance of the project's email, 1800 free call number and website.

### 2.3.1 Public notification

Public notices announcing the release of the draft EIS were in national, regional and local newspapers (Appendix B):

- The Weekend Australian (18-19 July 2015)
- The Courier Mail (18 July 2015)
- The Rockhampton Morning Bulletin (18 July 2015).

In accordance with the s32 of the SDPWO Act, the notification provided information on:

- Where the draft EIS was available for inspection
- Where a copy of the draft EIS could be obtained
- How 'properly made' submissions about the draft EIS could be made to the Coordinator-General
- The submission period, set by the Coordinator-General, during which submissions could be made.

### 2.3.2 Public exhibition

A period of 30 business days (20 July 2015 – 31 August 2015) was set by the Coordinator-General as the submission period for the draft EIS. During this period the draft EIS was publically exhibited and was available to view at the following venues:

- Emerald Library, 44 Borilla Street, Emerald, Queensland
- Gogango State School, 10 Wills Street, Gogango, Queensland
- National Library of Australia, Parkes Place, Canberra, Australian Capital Territory
- Rockhampton Regional Library (Southside), 230 Bolsover Street, Rockhampton, Queensland

- State Library of Queensland, Cultural Centre, Stanley Place, South Bank, Brisbane, Queensland
- Woorabinda Aboriginal Shire Council Offices, 112 Munns Drive, Woorabinda, Queensland
- Yeppoon Library, John Street, Yeppoon, Queensland.

An online version of the draft EIS was available at

- <http://www.statedevelopment.qld.gov.au/lower-fitzroy>.

Electronic copies of the draft EIS were available free of charge on request and hard copies were available for purchase.

GAWB's CEO, on behalf of the Project, provided further Project information during an ABC Breakfast radio (Capricornia) interview held 28 July 2015.

### 2.3.3 Project Update

A Project Update (Winter 2015) (Appendix B) was distributed to a range of stakeholders including Federal and State elected representatives and State and Local Government agencies, interest groups (conservation, business), landholders and rural producers and other interested parties registered on the Project's database (Table 2-1).

The Project Update (Winter 2015) provided information on:

- Where to get a copy of the draft EIS
- How to make a 'properly made' submission on the draft EIS
- When and where community information sessions on the draft EIS would be held.

In addition to providing elected representatives with the Project Update, offers for individual briefings were provided. No project briefings were requested during the public exhibition period.

### 2.3.4 Stakeholder briefings

Briefings to local, State and Commonwealth government agencies have been ongoing since the Project's inception and were continued through the draft EIS public exhibition period and the preparation of the additional information. Further, the Project team meets at least monthly with the OCG, with invited DoE representatives and State agency representatives attending these meetings as necessary.

Ongoing engagement with other stakeholders is on an 'as needs' basis utilising the communication tools and channels established for the Project and described in Section 2.3.6.

During the public exhibition period, Project briefings were provided to local government and State government departments, industry bodies and community and environmental groups as described in Table 2-2.



Table 2-2 Summary of local government, State agency and key stakeholder briefings

Location	Date	Description	Attendees
Rockhampton	13 July 2015	RRC <ul style="list-style-type: none"> <li>Release of the draft EIS</li> <li>Project description, benefits and impacts</li> </ul>	Mayor, CEO and Councillors
Rockhampton	13 July 2015	RDA <ul style="list-style-type: none"> <li>Implications for agricultural development in the region</li> </ul>	Board
Yeppoon	14 July 2015	LSC <ul style="list-style-type: none"> <li>Release of the draft EIS</li> <li>Project description, benefits and impacts</li> </ul>	Mayor, CEO and Councillors
Woorabinda	15 July 2015	Woorabinda Aboriginal Shire Council <ul style="list-style-type: none"> <li>Release of the draft EIS</li> <li>Project description, benefits and impacts</li> </ul>	CEO
Rockhampton	6 August 2015	Woorabinda Aboriginal Shire Council <ul style="list-style-type: none"> <li>Inundation and flooding modelling</li> </ul>	CEO
Rockhampton	6 August 2015	CCC <ul style="list-style-type: none"> <li>Consultation on the draft EIS</li> <li>Key topics: connectivity and habitat loss</li> </ul>	
Rockhampton	7 August 2015	RRC and FRW <ul style="list-style-type: none"> <li>Water resource modelling</li> <li>Water allocations</li> <li>Water quality</li> </ul>	Managers and staff
Rockhampton	7 August 2015	RDA (Growing Central Queensland Initiative) and DAF <ul style="list-style-type: none"> <li>Consultation on the draft EIS</li> <li>Key topics: agricultural development and economic productivity, implications for agricultural development in the region, impacts on land use</li> </ul>	Project officers
Yeppoon	8 August 2015	FBA <ul style="list-style-type: none"> <li>Consultation on the draft EIS</li> <li>Key topics: agricultural development, fish passage and the Fitzroy River turtle</li> </ul>	CEO
Brisbane	11 August 2015	Commonwealth and State government advisory agencies <ul style="list-style-type: none"> <li>Release of the draft EIS</li> <li>Project description, benefits and impacts</li> </ul>	DoE, OCG, DEHP, DSITI, DETE, DTMR, DHPW, Public Safety Business Agency, QPS, DNRM, DNPSR, DAF, DSD

Location	Date	Description	Attendees
Alton Downs	19 August 2015	AgForce Queensland (Central region) <ul style="list-style-type: none"> <li>• Presentation on Project background and description</li> <li>• Consultation on the draft EIS</li> <li>• Submission process and future project development</li> <li>• Key topics: flooding, land use and compensation</li> </ul>	Landholders and rural producers (Eden Bann Weir Project area) (in the order of 30 attendees)
Duaringa	20 August 2015	AgForce Queensland (Central region) <ul style="list-style-type: none"> <li>• Presentation on Project background and description</li> <li>• Consultation on the draft EIS</li> <li>• Submission process and future project development</li> <li>• Key topics: flooding, land use and compensation</li> </ul>	Landholders and rural producers (proposed Rookwood Weir Project area) (in the order of 40 attendees)
Rockhampton	25 August 2015	The Gap Dam Committee <ul style="list-style-type: none"> <li>• Presentation on Project background and description</li> <li>• Consultation on the draft EIS</li> <li>• Submission process and future project development</li> </ul>	Members

### 2.3.5 Community information sessions

Four community information sessions were held during the public exhibition period. The community information sessions were publically notified through advertisements in the Rockhampton Morning Bulletin on the following dates:

- Wednesday, 29 July 2015
- Saturday, 1 August 2015.

The community information sessions were also notified in the Project Update (Winter 2015) and on the Project website (Appendix B).

A summary of the community information sessions is provided in Table 2-3.

The community information sessions were based on a 'walk through' format allowing people to 'drop in' over a two to three hour period to talk to members of the Project team and review information and maps relating to the Project and the draft EIS. Posters presenting Project information were displayed at each venue as shown in Figure 2-1 and are included in Appendix B. Project factsheets summarising key Project components and potential impacts, mitigation and management measures and offset proposals were available to stakeholders and included in Appendix B.

Table 2-3 Summary of community information sessions

Location	Venue	Date and Time	Attendance	Areas of interest
Rockhampton	Rockhampton Regional Library (Southside) Fitzroy Room 230 Bolsover Street, South Rockhampton	Wednesday 5 August 2015 4 pm – 7 pm	5	<ul style="list-style-type: none"> <li>General project information</li> <li>Landholder impacts</li> </ul>
Gogango	Gogango Hall Wills St, Gogango	Thursday 6 August 2015 4 pm – 7 pm	16	<ul style="list-style-type: none"> <li>General project information</li> <li>Landholder impacts</li> <li>Business opportunities</li> </ul>
Yeppoon	Yeppoon Community Centre Rooms A and B 80 John Street, Yeppoon	Friday 7 August 2015 4 pm – 7 pm	1	<ul style="list-style-type: none"> <li>General project information</li> </ul>
Rockhampton	North Rockhampton State High School Hospitality Trade Training Centre Berserker Street, North Rockhampton	Saturday 8 August 2015 10 am – 12 pm	1	<ul style="list-style-type: none"> <li>General project information</li> </ul>
<b>Total attendees</b>			<b>23</b>	



Draft EIS poster display



Draft EIS poster display



Draft EIS poster display



Draft EIS poster display



Draft EIS Project factsheets



Draft EIS and Project factsheets

Figure 2-1 Draft EIS community information session consultation material

### 2.3.6 Project communication tools

The Project consultation comprised of activities that targeted consultation with key stakeholders and provided the wider community with the opportunity to participate and provide feedback on the Project. The Project consultation program utilised the following communication tools:

- Project updates (Appendix B)
- Project contacts
  - A Project-specific email address - [fitzroyweirs@ghd.com.au](mailto:fitzroyweirs@ghd.com.au)
  - A free call telephone line - 1800 423 213
  - Reply Paid postal address - Lower Fitzroy River Infrastructure Project, Reply Paid 668, Brisbane QLD 4001
  - Website - [www.fitzroyweirs.com.au](http://www.fitzroyweirs.com.au) (Appendix B)
- Consultation Manager stakeholder database
- Media monitoring.

### 2.3.7 Submissions on the draft EIS

In accordance with s34 of the SDPWO Act, during the submission period for the draft EIS, any person, group or organisation could make a submission to the Coordinator-General about the draft EIS.

Submissions on the draft EIS were able to be made as follows:

- Online: <http://haveyoursay.dsd.qld.gov.au/coordinatorgeneral/lower-fitzroy>
- Email: [lowerfitzroy.infrastructureproject@coordinatorgeneral.qld.gov.au](mailto:lowerfitzroy.infrastructureproject@coordinatorgeneral.qld.gov.au)
- Post: Project manager—Lower Fitzroy River Infrastructure Project  
Coordinated Project Delivery  
Office of the Coordinator-General  
PO Box 15517  
City East Qld 4002 Australia
- Fax: +61 7 3452 7486.

Submissions on the draft EIS closed at 5 pm on 31 August 2015.

Thirty-seven (37) submissions were received by the Coordinator-General on the draft EIS and were subsequently provided to the proponents. The submissions are summarised as follows:

- Ten submissions reflect 'no comment' or a positive comment
- Twelve submissions from regulatory agencies
- Eleven submission from landholders/rural producers
- Three submissions from special interest groups
- One submission from a private individual.



Thirty-two (32) submissions are considered to be properly made. The Coordinator-General has however accepted all written submissions even if the submission was not properly made in accordance with s34 (3) of the SDPWO Act.

The submissions register is located in Appendix A. As described in Section 1.1, the Coordinator-General has notified the proponents that responses are required to all submissions, excluding nil and positive responses.

Submissions received on the draft EIS have been categorised into the following themes, each of which is addressed in detail in sections that follow and within technical appendices appropriate:

- Legislation
- Land-related impacts (including land use and tenure)
- Aquatic ecology
- Terrestrial fauna
- Surface water resources
- Water quality
- Noise and vibration
- Transport
- Offsets.

As described in Section 1, this report provides responses to the submissions made on the draft EIS with appropriate cross-references within both the report and the submissions register to allow a submitter to find the relevant response.

## 2.4 Additional information consultation activities

Following the submission of the draft EIS to the OCG for public display and during the period of preparation of additional information (as presented in this report), the following consultation activities have been undertaken:

- Public notification
- Public exhibition of the draft EIS
- Distribution of a Project Update (November 2015)
- Stakeholder engagement (technical advisory agency meetings, specifically DoE and DEHP and engagement with local, State and Commonwealth government (RRC, Water forum, RDA Growing Central Queensland initiative))
- Monitoring and maintenance of the project's Consultation Manager<sup>®</sup> stakeholder database, email, 1800 free call number and website.

### 2.4.1 Public notification

In accordance with s34B of the SDPWO Act the Coordinator-General advised the proponents that the additional information to the draft EIS must be publicly notified allowing stakeholders to make submissions on the additional information.

At the time of writing, notifications had not been confirmed but are expected to comprise of advertisements in the national, regional and local newspapers. The notifications will advise of the release of the additional information for public and agency comment.

In accordance with the s32 of the SDPWO Act the notification will provide information on:

- Where the additional information will be available for inspection
- Where a copy of the additional information can be obtained
- How 'properly made' submissions about the additional information can be made to the Coordinator-General
- The submission period, as set by the Coordinator-General, during which submissions can be made.

#### 2.4.2 Public exhibition

Any person, group or organisation can make a submission on the additional information to the OCG under s34 of the SDPWO Act. Any submissions which are properly made submissions must be accepted by the Coordinator-General and considered in evaluating the revised draft EIS.

A properly made submission must:

- Be made in writing
- Be received on or before the last day of the submission period
- Be signed by each person who makes the submission
- State the name and address of each person who makes the submission
- State the grounds of the submission and the facts and circumstances relied on in support of those grounds.

A person wishing to make a submission about the additional information EIS should also:

- Clearly state the matter(s) of concern or interest and list points to help with clarity
- Reference the relevant section(s) of the additional information report
- Ensure the submission is legible.

The Coordinator-General may also accept submissions which are not properly made. However, only properly made submissions will trigger rights to appeal against a decision about a development application for the project under the *Sustainable Planning Act 2009* (Qld) (SP Act). Any submission accepted by the Coordinator-General may be amended by written notice given to the Coordinator-General during the submission period, or may be withdrawn at any time before a decision is made about the EIS.



Any submissions regarding the additional information to the draft EIS should be addressed to:

The Coordinator-General

EIS Project Manager – Lower Fitzroy River Infrastructure Project

Coordinated Project Delivery

Office of the Coordinator-General Box 15517

City East QLD 4002

Tel: (07) 3452 7482 Fax: (07) 3220 6502

Email: [LowerFitzroy.InfrastructureProject@coordinatorgeneral.qld.gov.au](mailto:LowerFitzroy.InfrastructureProject@coordinatorgeneral.qld.gov.au)

Website: [www.statedevelopment.qld.gov.au/lower-fitzroy](http://www.statedevelopment.qld.gov.au/lower-fitzroy)

The additional information will be on public display for a period of 21 business days. All submissions must be received prior to the completion of the public display period.

#### 2.4.3 Project updates

A Project Update was distributed to stakeholders (Table 2-1) in November 2015 (Appendix B). The Project Update (November 2015) provided feedback to stakeholders with regard to the draft EIS public exhibition process undertaken and the submissions received. The Project Update also provided an overview of the EIS process going forward, including the requirement to prepare the additional information to the draft EIS and future opportunities to comment.

It is expected that a further Project Update will be distributed to coincide with the release and public exhibit of the additional information as described in Sections 2.4.1 and 2.4.2, respectively.

#### 2.4.4 Stakeholder engagement

During the preparation of additional information the OCG facilitated meetings with technical advisory agencies, specifically DoE, DEHP, DSITI and DAF. The objective of the meetings with these agencies was to allow the opportunity for the proponents to seek clarifications regarding the submissions made by these agencies to the draft EIS.

Table 2-4 summarises technical advisory agency meetings held.

Project proponents were invited to attend the Fitzroy Water Workshop held in Rockhampton on 28 October 2015. The workshop was hosted by Federal Member for Capricornia Michelle Landry, Federal Member for Flynn Ken O'Dowd and Rockhampton-based Senator Matt Canavan and was open to the public. On behalf of the Project, SunWater's Mr Russell Paton (Manager Asset Delivery) provided an overview of the Project and took questions from the floor.

Table 2-4 Technical advisory agency meetings

Location	Date	Description	Attendees
Canberra	29 September 2015	<ul style="list-style-type: none"> <li>Consultation and clarification of DoE's submission on the draft EIS</li> <li>Key issues: consequential effects and facilitated development and assessment of the Project impacts with consideration of the Reef 2050 Plan</li> </ul>	DoE Director, Major Projects and Project officers DoE Office of Water Science DoE Heritage Branch OCG
Brisbane	22 October 2015	<ul style="list-style-type: none"> <li>Consultation and clarification of DEHP's submission on the draft EIS</li> <li>Key topics: air quality, noise impacts and management measures, water quality, aquatic ecology (Fitzroy River turtle and white-throated snapping turtle), terrestrial fauna, connectivity</li> </ul>	DEHP assessment officers DSITI assessment officers OCG
Brisbane	22 December 2015	<ul style="list-style-type: none"> <li>Consultation and clarification with regard to potential impacts and benefits of the Project in relation to agricultural land classes</li> </ul>	DAF OCG
Brisbane	22 December 2015	<ul style="list-style-type: none"> <li>Consultation and clarification regarding the implementation, use and applicability of the Landscape Fragmentation and Connectivity tool</li> </ul>	DEHP OCG
Canberra/Brisbane	26/02/2016	<ul style="list-style-type: none"> <li>Consequential assessment methodology</li> </ul>	DoE Director, Major Projects and Project officers OCG

Ongoing engagement with other stakeholders has been on an 'as needs' basis utilising the communication tools and channels established for the Project and described in Section 2.4.5. Stakeholder engagement included:

- Members of the public
- AgForce Queensland – Central region
- RRC and FRW
- The Growing Central Queensland Initiative.

#### 2.4.5 Project communication tools

Ongoing Project consultation has comprised of activities as described in Section 2.3.6.

During the preparation of the additional information, an extensive review of the Consultation Manager<sup>®</sup> stakeholder database was undertaken including:

- Updates to reflect changes in government
- Updates to identify changes to land ownership in the area directly affected by the Project
- Emails, letters and phone calls to stakeholders to verify contact details.

## 2.5 Future consultation

Engagement with stakeholders is an important component to managing and monitoring the potential impacts and opportunities of the Project. Stakeholder consultation will continue throughout all future phases of the Project.

The Project is likely to be staged, with sequencing and timing dependent on a number of demand triggers including existing and new consumers, drought conditions and security of supply requirements. As discussed in the draft EIS (Volume 1, Chapter 1 Introduction), the Project will be implemented by way of a flexible strategy to allow for the potential rapid delivery of water to meet anticipated future demands, when triggered.

Investigations and preparations, including the EIS, are currently being carried out for the Project to facilitate construction of the Project within three years of a 'trigger' decision to proceed by the proponents. Whilst it is not yet known when the trigger for this Project will occur, the proponents will continue to consult with the landholders and the key stakeholders to ensure that they remain informed of the progress of the Project and are adequately prepared for the development to proceed when triggered.

Outlined below is a framework for maintaining an open dialogue with the landholders and key stakeholders throughout this 'holding period' until the Project is triggered.

### 2.5.1 Stakeholder engagement

A Stakeholder Engagement Plan will be prepared that focuses on building the relationships established during the EIS consultation and maintaining the lines of communication during the 'holding period' and until such time as a Project trigger is realised.

The engagement undertaken and the relationships developed during the EIS stage of the project and the conditions of approval received from the Coordinator-General will inform development of the Stakeholder Engagement Plan.

The proponents will work with stakeholders to develop suitable communication methods. It is intended that contact with landholders in particular, as well as other stakeholders, will be coordinated and a single point of contact provided.

The following communication tools and techniques may be included in the Stakeholder Engagement Plan as necessary and applicable:

- Maintain and regularly update the project website – [www.fitzroyweirs.com.au](http://www.fitzroyweirs.com.au).
- Maintain 1800 telephone number for the duration of the Project
- Maintain a project email address
- Maintain the Consultation Manager® stakeholder database (or similar) with stakeholder details, correspondence and interactions
- Produce Project Updates at least annually and distribute to the community and the key stakeholders. The Project Updates will provide information regarding the status of the Project and how further information may be obtained
- Develop communication protocols to identify the standards and the guidelines relating to the stakeholder interactions, the land access and any other relevant issues as they arise.

## 2.6 Consultation related submissions

### **Submission**

DAF – Agriculture, DSD Regional Services and RRC commented in submissions (007.13, 017.03 - 017.04, 008.08, respectively) on the need for continued engagement with the RRC and RDA regarding the potential availability and use of water for agricultural development. Continued engagement with stakeholders addresses comments received from CCC (029.01) regarding the project's rationale and demand estimates.

### **Response**

Sections 2.3 and 2.4 describe engagement with DAF, RRC and RDA during the development of the draft EIS and preparation of additional information, respectively. As described in Section 2.5 the proponents have and continue to engage and explore opportunities with local and regional stakeholders.

### **Submission**

One private submission (Private submitter 12 (034)) was received regarding the adequacy of consultation in relation to the draft EIS.

### **Response**

The Consultation Report included in the draft EIS (Volume 3, Appendix F) details the consultation undertaken during the development of the draft EIS (Phase 1 and Phase 2 described in Section 2.1 above).

Sections 2.3 and 2.4 detail the consultation undertaken during and after public notification of the draft EIS, including notification of the release of the draft EIS for public and agency comment and opportunities for stakeholders to review the draft EIS and attend Project briefings and make contact with the Project team (Phase 3 as described in Section 2.1 above). Consultation activities proposed during Phase 4 are also described in Section 2.5.

THIS PAGE IS LEFT INTENTIONALLY BLANK

### 3. Legislation, regulatory frameworks and project approvals

#### 3.1 Environmental offsets

##### *Submissions*

Submissions relating to environmental offsets in general include corrected references, the need to assess the requirement for offsets against the Significant Residual Impacts Guidelines for alteration of fisheries habitat and potential offset requirements for fish habitat and connectivity. Environmental offsets in relation to the Fitzroy River turtle and white-throated snapping turtle are addressed separately in Section 5.2. The following submissions are addressed in this section:

- DAF (007.05, 007.07, 007.08)
- DEHP (028.18)
- FBA (011.04, 011.26).

##### *Response*

#### 3.1.1 Corrections

It is noted that the current version of the Queensland Environmental Offset Policy is Version 1.1, dated December 2014.

It is noted that financial offset payments for State-required offsets are managed by DEHP in accordance with Part 11, Division 1 of the *Environmental Offsets Act 2014* (Qld) (EO Act).

#### 3.1.2 Waterway barrier works and fish passage

Under the Queensland environmental offsets framework, in order for environmental offsets to apply, a prescribed activity needs to be defined and an impact realised on a prescribed matter.

Under Section 9 of the EO Act, a prescribed activity is an activity that is the subject of an authority under another Act for which an offset condition may be imposed and that is prescribed under a regulation as defined in Schedule 1 of the Environmental Offsets Regulation 2014 (EO Regulation).

A prescribed environmental matter is any of the following as defined in Schedule 2 of the EO Regulation:

- A matter of national environmental significance (MNES) as defined under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- A matter of State environmental significance (MSES) as identified in the EO Regulation
- A matter of local environmental significance as identified by a local planning instrument.

In relation to waterway barriers, the following applies for the Project:

- The Queensland authority required under the SP Act is a development permit for operational works for constructing or raising waterway barrier works

- The prescribed activity is 'development for which an offset may be required under the State development assessment provisions (SDAP)', specifically SDAP module 5 (fisheries resources) (EO Regulation Schedule 1, Item 6(b))
- The prescribed matter is a waterway providing for fish passage (EO Regulation, Schedule 2, Item 10).

The non-statutory guideline *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)* (DSDIP 2014) (SRI Guideline - SP Act) applies to development made assessable under the SP Act. For the Project this applies to operational works for constructing or raising waterway barrier works (as defined in the Sustainable Planning Regulation 2009 (SP Regulation), Schedule 3, Part 1, Table 4, Item 6).

The draft EIS (Volume 3, Appendix X) details the fish passage infrastructure proposed for the Project in order to mitigate impacts on fish passage. It is considered that assessment, analysis, mitigation, management and monitoring proposed in relation to fish passage infrastructure at a raised Eden Bann Weir and a new weir at Rookwood satisfies performance objectives as defined in SDAP Module 5 Fisheries resources (V1.5) 5.2: Constructing or raising waterway barrier works in fish habitats state code.

Similarly, an assessment against the SRI Guideline – SP Act criteria has been undertaken to determine the significance of the residual impact as described in Table 3-1. It is considered that the Project is unlikely to have a significant residual impact on a waterway providing for fish passage and, consequently offsets are not proposed in this regard.

Separately, aquatic habitat offsets in relation to the Fitzroy River turtle and white-throated snapping turtle are proposed in accordance with the EO Act and Queensland Environmental Offset Policy. A financial offset is proposed and has been calculated using the Queensland Government's financial settlement offset calculator. The aquatic habitat impact area (for the upper limit of Project development that is Eden Bann Weir Stage 3 and Rookwood Weir Stage 2) as applied to the financial settlement offset calculator is 942.2 ha.

It is considered that the offsets proposed in this manner will benefit a range of aquatic species.



Table 3-1 Significant residual impact assessment

SRI Guideline – SP Act criteria	Project response
An action is LIKELY to have a significant residual impact on a waterway providing for fish passage if the action will result in:	
(a) a permanent modification to the volume, depth, timing, duration or flow frequency of the waterway;	<p>The operation of weirs is predicted to result in a change to the downstream flow regime between the Eden Bann Weir and the Fitzroy Barrage. Water flows are predicted to increase during the dry season resulting in a decrease in the frequency and duration of no flow periods.</p> <p>The operation of the weirs is also likely to result in a reduction in the frequency and magnitude of small – medium downstream flood flows.</p> <p>The increase in flows during the dry season has the potential to improve the quality of aquatic habitat downstream by reducing the duration and severity of pool isolation and prolonging the presence of flowing riffles zones and runs. The operation strategy of the weirs will be dictated by the objectives set in the Water Resource (Fitzroy Basin) Plan 2011 (Fitzroy WRP) and subordinate (Fitzroy Basin Resource Operations Plan 2014 (Fitzroy ROP), inclusive of EFOs.</p> <p>The operational strategy will aim to minimise environmental impacts as a result of the water infrastructure and will mimic natural flow conditions as much as possible.</p> <p>Flow analysis indicates that flows downstream of the Fitzroy Barrage will not be significantly impacted by the Project.</p>
(b) permanent modification or fragmentation of fish habitat including but not limited to in stream vegetation, snags and woody debris, substrate, bank or riffle formation necessary for breeding and/or survival of native fish species;	<p>Unmitigated, habitat fragmentation and loss of connectivity as a result of restricting movement upstream and downstream may impact the ability of fish species to migrate within the freshwater environment.</p> <p>The design of Eden Bann Weir and Rookwood Weir include fishways that adequately provide for the movement of fish upstream and downstream across the weirs.</p> <p>Fishway design has been undertaken in accordance with the then Department of Department of Employment, Economic Development and Innovation (Queensland Fisheries) Design Process criteria.</p> <p>Fish lock arrangements will facilitate upstream and downstream movement at low and high reservoir levels, provide passage for most flows and cater for small and large bodied fish.</p>
(c) the mortality or injury of fish species; OR	The structural components of the weirs and associated works are designed to avoid and/or minimise risks of aquatic fauna injury and

SRI Guideline – SP Act criteria	Project response
	mortality.
(d) works that permanently reduce the level of fish passage provided in a tidal waterway or a waterway identified as a major high risk waterway for waterway barrier works, to a level that would increase stress on fish populations.	The provision of fish passage infrastructure as proposed for the Project will adequately provide for the movement of fish upstream and downstream of Eden Bann Weir and Rookwood Weir and maintain continuity of passage throughout the Project area and the Fitzroy River. The Project will not impede fish movement or adversely impact on reproductive success, fish health or mortality.
Notwithstanding the above, an action is UNLIKELY to have a SRI on a waterway providing for fish passage if:	
(a) measures have been put in place to provide equal or better fish passage for the waterway during construction and operation activities; AND	Not applicable as the design life of the weirs is in the order of 100 years.
(b) the waterway is restored to its existing condition immediately on completion of the works; OR	Not applicable as the design life of the weirs is in the order of 100 years.
(c) for works that permanently alter existing fish passage, equal or better passage will be provided immediately on completion of the works.	<p>The proposed lock arrangement at Eden Bann Weir proposed is considered suitable for the purpose of fish passage as:</p> <ul style="list-style-type: none"> <li>• It is in a configuration known to work</li> <li>• The addition of a right bank fish lock at Eden Bann Weir will improve on current passage efficiency above spilling flows. Currently fish are attracted to the right bank spillway section of the weir, and as there is no passage, become stranded as tailwater levels drop</li> <li>• New fish locks at Eden Bann Weir cover between 96.6 per cent and 100 per cent of the seasonal flow range and the increase in coverage across the seasons is generally improved</li> <li>• New fish locks at Eden Bann Weir reduce average wait days per occurrence from an approximate 11 days under the existing situation to seven days. This is particularly beneficial and important as it is considered possible that some species will wait up to 7 days for passage</li> <li>• Fish locks at Rookwood Weir will provide for between 89.4 per cent and 99.8 per cent of flows across the seasons</li> </ul>

SRI Guideline – SP Act criteria	Project response
	<ul style="list-style-type: none"> <li>• The average number of waiting days per event is estimated at 10 for Rookwood Weir</li> <li>• The fish locks cater for small and large-bodied fish</li> <li>• The fish locks provide upstream and downstream passage</li> <li>• The fish locks can be shut down in large floods to maximize operation following flood.</li> </ul>

### 3.1.1 Connectivity

Potential Project impacts on prescribed matter connectivity (as defined in schedule 2 of the EO Regulation) are discussed in detail in Appendix C.

Based on the assessment provided in Appendix C it is considered that, in accordance with the environmental offsets framework, the connectivity area need only be considered relative to areas within which prescribed environmentally relevant activities (ERAs) will be undertaken for the Project. Prescribed ERAs for the Project are limited to the construction footprints only and do not apply to the Project footprint as a whole and largely exclude the inundation areas.

It is considered that, for authorities currently known to be required 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 resulting in additional flora surveys), it is considered that the clearing would be for a localised and defined area and not for the Project footprint as a whole.

## 3.2 Water resource planning

### **Submissions**

A submission from DNRM (032.06) requests changes to Figure 7-1 of the draft EIS to reflect the sub-catchment areas as defined in Schedule 2 of the Fitzroy WRP.

### **Response**

Figure 3-1 shows the sub-catchment areas.

## 3.3 Water supply and safety

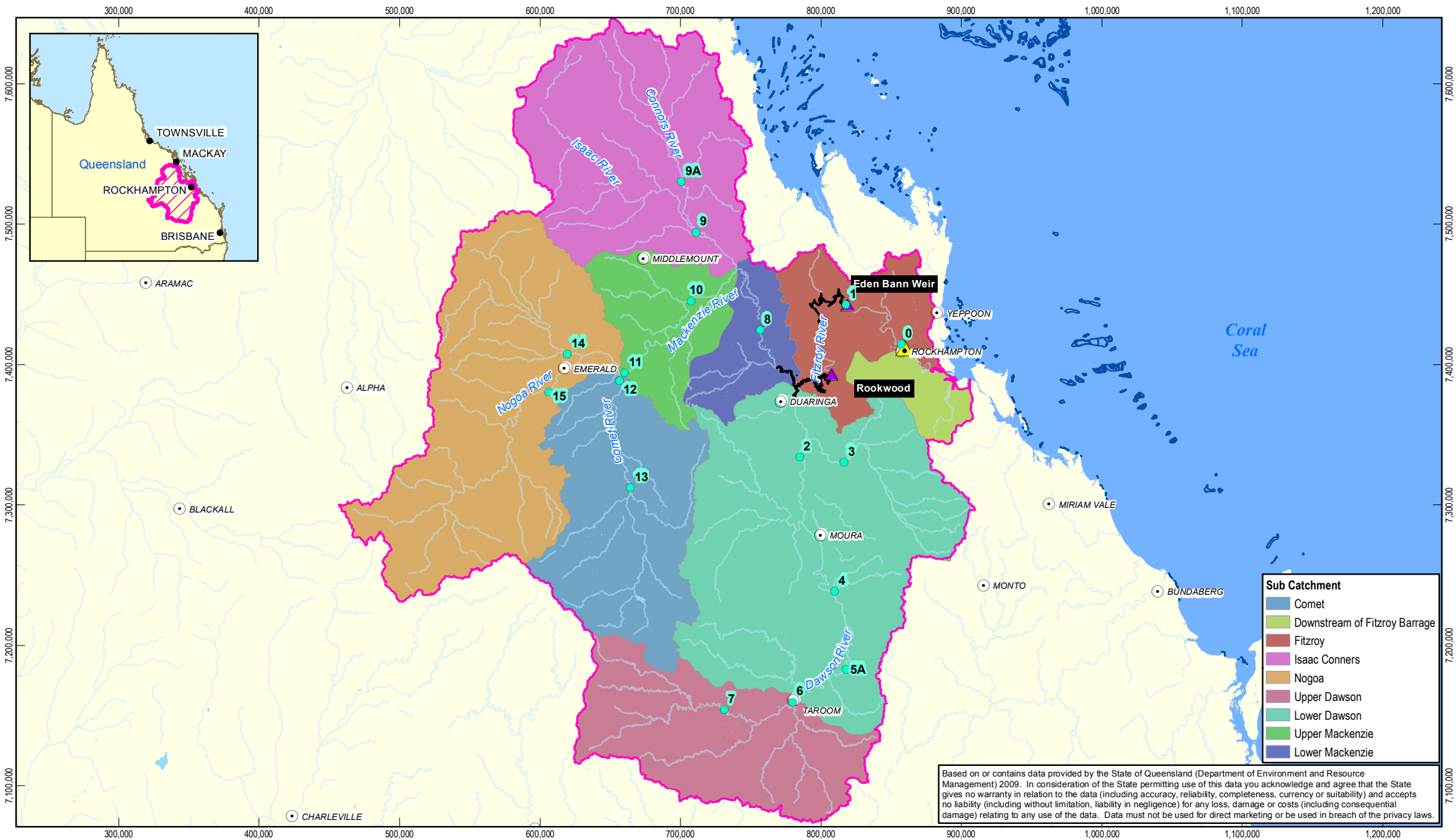
### **Submissions**

Submissions from DEWS relating to the *Water Supply (Safety and Reliability) Act 2008* (Qld) (WSSR Act) include corrected references and terminology and clarification on the process for referable dam determination (037.03; 037.04; 037.05; 037.06; 037.07; 037.08, 037.09, 037.10).

### **Response**

In regard to the referable dam determination, the SP Act establishes the Integrated Development Assessment System (IDAS), a framework for assessment of development applications. IDAS integrates the requirements for development assessment for a number of acts including the WSSR Act. Chapter 4, Part 1 of the WSSR Act deals with referable dams.

It is noted that section 340 of the WSSR Act regarding referable dams does not apply to the raising of Eden Bann Weir to Stage 2 or constructing Rookwood Weir to Stage 1 as they are weirs that do not have variable flow control structures on their crests, i.e. no gates are proposed. The provisions of the WSSR Act apply only to the Project for raising Eden Bann Weir to Stage 3 and constructing Rookwood Weir to Stage 2 as gates are proposed for these stages.

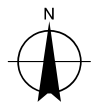


1:3,600,000 (at A4)

0 25 50 75 100

Kilometres

Map Projection: Universal Transverse Mercator  
Horizontal Datum: Geocentric Datum of Australia (GDA94)  
Grid: Map Grid of Australia 1994, Zone 55



#### LEGEND

- Weir
- Location
- Fitzroy Barrage
- Waterway (Major)
- Waterway (Minor)
- Fitzroy Catchment
- Lakes
- Impoundment area
- Surface water nodes



Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number 41-29212  
Revision E  
Date 03 Mar 2016

Fitzroy WRP plan area

Figure 3-1

G:\41\29212\GIS\Maps\MXD\41\_29212\_023\_Rev\_E.mxd

**Copyright:** This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was produced. Unauthorised use of this document in any way is prohibited. 2016.

© 2016. While GHD has taken care to ensure the accuracy of this product, GHD, DERM, SUNWATER, BOM and GA make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD, DERM, SUNWATER, BOM and GA cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason. \*Please see Appendix for important copyright information.

Data Source: © Copyright Commonwealth of Australia (Geoscience Australia): Places, Waterways (2007); Sunwater: Weir Locations - 2008; DNRm: Sub Catchment Water Resource (Fitzroy Basin) Plan 2011;

© Copyright Commonwealth of Australia (Bureau of Meteorology): WRP Schedule 5: Digitised surface water nodes (2011). Created by: A/JMS \*See Appendix for disclaimers and copyrights.

Level 9, 145 Ann Street Brisbane QLD 4000 Australia T +61 7 3316 3000 F +61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

Section 341 of the WSSR Act defines that a weir with variable flow control structures on its crest is referable if:

- A FIA is required; and
- The FIA has a category 1 or category 2 failure impact rating; and
- The chief executive accepts the FIA.

A FIA is an assessment certified under Chapter 4 Part 1 of the WSSR Act about the safety of a dam or weir, or a proposed dam or weir, and is used to determine the failure impact rating.

Section 346 of the WSSR Act explains that an existing dam or weir has, or a proposed dam or weir, after its construction will have, the following failure impact rating if a FIA (accepted by the chief executive) for the dam or weir, or the proposed dam or weir, after its construction, states that the population at risk<sup>1</sup> is:

- For a category 1 failure impact rating - two or more persons and not more than 100 persons
- For a category 2 failure impact rating - more than 100 persons.

In accordance with section 343 of the WSSR Act, a FIA was undertaken for Eden Bann Weir Stage 3 and Rookwood Weir Stage 2. Each of the weirs (with gates) will be more than 10 m high and with a storage capacity of more than 1,500 ML.

The results of the FIA undertaken for the Project show that:

- For the proposed Eden Bann Weir Stage 3, the estimated incremental population at risk due to a breach is greater than two for all scenarios considered
- For the proposed Rookwood Weir Stage 2, none of the properties identified as being potentially at risk are expected to be flooded by either the no-failure or the breach scenarios considered and the present estimate of incremental population at risk is less than two.

It is noted that the FIAs undertaken for the Project have not been assessed or accepted by the Chief Executive of DEWS however it is considered that:

- Eden Bann Weir Stage 3 has a minimum Category 1 failure impact rating and is expected to be considered a referable dam
- Rookwood Weir Stage 2 does not have a failure impact rating and is expected to be considered non-referable.

If the FIAs are accepted, DEWS will nominate the set periods of time at which ongoing FIAs will be required.

The proposed Eden Bann Weir Stage 3 and proposed Rookwood Stage 2 are both however assessable as particular dams pursuant to Schedule 3, Part 1, Table 4(4) of the SP Regulation. Evidence of the acceptance of the FIAs by the Chief Executive of DEWS will be required to be submitted with the development applications to be made for operational works for particular dams.

<sup>1</sup> Population at risk means the number of persons, calculated under the FIA guidelines, whose safety will be at risk if the dam, or the proposed dam after its construction, fails.



### 3.4 Community infrastructure designation

#### *Submissions*

A submission from DNRM (032.14) relates to exemptions under the SP Act for the clearing of native vegetation and the requirement for the Project to be assessed against the State vegetation management code. This section discusses the intention to seek designation of the land for the Project as a community infrastructure designation (CID) and the associated exemption for clearing of native vegetation. This section also provides clarification with regard to the FBA and CCC submissions (011.01, 011.02 and 011.19, 029.07 and 029.28, respectively) regarding requirements in relation to impacts on remnant vegetation.

#### *Response*

The Project is likely to seek designation of land by a Minister or local government for the Project as a CID in accordance with Chapter 5 of the SP Act. In order for this process to be undertaken, the development must satisfy a public benefit test and be defined as Community Infrastructure within Schedule 2 of the SP Regulation.

Water cycle management infrastructure is defined as Community Infrastructure in Schedule 2, Part 2 of the SP Regulation. The Minister or local government must be satisfied that the community infrastructure will:

- (a) Facilitate the implementation of legislation and policies about environmental protection or ecological sustainability; or
- (b) Facilitate the efficient allocation of resources; or
- (c) Satisfy statutory requirements or budgetary commitments of the State or local government for the supply of community infrastructure; or
- (d) Satisfy the community's expectations for the efficient and timely supply of the infrastructure.

Given that the Project seeks to avoid, mitigate, manage or offset environmental impacts, facilitates the efficient use of resources through securing regional water supplies and has been developed in consultation with Commonwealth, State and local governments, and community stakeholders, it is expected that the Project would satisfy a public benefit test.

It is also considered that preparation of the draft EIS and additional information to the draft EIS satisfies requirements with regard to designation in accordance with Section 207 of the SP Act seeking adequate environmental assessment. Furthermore, consultation undertaken for the EIS satisfies requirements for adequate public consultation and consideration of issues raised during public consultation.

The CID assessment process will be informed and supported by the EIS. If the Project is granted CID by the Minister or local government, the development will not require approval under the relevant local government planning schemes nor need to meet any scheme requirements.

It is noted that under Schedule 24 of the SP Regulation that land designated for community infrastructure mentioned in Schedule 2 of the SP Regulation (including water cycle management infrastructure) is considered exempt development (not assessable under Schedule 3, Part 1, Table 4, Item 1) for clearing of native vegetation. This exemption includes the Project. Therefore



the clearing of native vegetation is considered exempt development for the Project under a CID and will not require approval or assessment against the State vegetation management codes.

In general, this process facilitates the efficient provision of community infrastructure at the time work needs to commence.

## 4. Land

### 4.1 Land mapping updates

#### **Submissions**

Submissions from DNRM (032.01, 032.02) request minor changes to the following figures presented in the draft EIS (Volume 1, Chapter 5 Land):

- Figure 5-8 Regional geology
- Figure 5-23 Eden Bann Weir exploration permits for minerals.

#### **Response**

Figure 5-8 has been reproduced as Figure 4-1 in this report to show lithology and rock unit names in the legend.

Figure 5-23 has been reproduced as Figure 4-2 in this report with the label for exploration permit for minerals (EPM) 19439 moved for clarity.

### 4.2 Land use and tenure

#### 4.2.1 Agricultural land classes

#### **Submissions**


Submissions addressing agricultural land relate to potential impacts on Class A and B agricultural land and the benefits arising from the Project with regard to associated upgrades to infrastructure and improved water security infrastructure in relation to local and regional agricultural development. The following submissions are addressed in this section:


- CCC (029.06)
- DAF - Agriculture (007.12)
- DSD Regional Services (017.03, 017.04)
- Private submitter 7 (022.01).





## Geology legend:


### Map Symbol, Lithology, Age


 C, Siltstone. sandstone. conglomerate. limestone. mudstone, CARBONIFEROUS

 CPy, Granule to boulder polymictic conglomerate commonly with abundant granite and rhyolite clasts. felsic volcanoclastic sandstone. tuffaceous and carbonaceous siltstone and mudstone. dacitic to rhyolitic ignimbrite. breccia. minor coal, LATE CARBONIFEROUS - EARLY PERMIAN


 Cc, Sandstone. conglomerate. limestone. mudstone, CARBONIFEROUS


 Cg, Granodiorite. adamellite. granophyre. porphyry. tonalite. gabbro. monzonite, CARBONIFEROUS


 Cn, Siltstone. mudstone. sandstone. conglomerate. limestone, CARBONIFEROUS


 Cp, Acid tuff. sandstone. conglomerate. mudstone, CARBONIFEROUS


 Cmn, Mudstone. sandstone. conglomerate. limestone, CARBONIFEROUS


 Cvc, Felsic to mafic volcanic rocks; rhyolitic to andesitic flows. high-level intrusives. and volcanoclastic rocks including ignimbrite, DEVONIAN - CARBONIFEROUS


 DCc, Strongly deformed arenite. mudstone. chert and minor mafic volcanics; locally grades into mica schist. gneiss. amphibolite. quartzite, LATE DEVONIAN - CARBONIFEROUS


 DCr, Mudstone. sandstone. conglomerate. limestone. andesite, CARBONIFEROUS


 DCv, Acid to intermediate volcanics and associated sediments, DEVONIAN - CARBONIFEROUS


 Dbc, Andesitic tuff. sandstone. conglomerate. mudstone, DEVONIAN

 Dc, Basaltic to rhyolitic volcanoclastic sandstone and conglomerate (and minor lavas). siltstone. mudstone. chert. jasper and fossiliferous limestone, DEVONIAN


 Det, Siltstone. mudstone. tuff. limestone. andesite. basalt, DEVONIAN

 Dgmo, Biotite-hornblende tonalite. biotite granodiorite. hornblende quartz diorite, MIDDLE DEVONIAN


 Dud, Andesitic agglomerate. tuff and flows. rhyolite. sandstone. mudstone. conglomerate. limestone, DEVONIAN


 Jrz, Sandstone. mudstone. conglomerate, JURASSIC


 Kb, Basalt, CRETACEOUS


 Ki, Gabbro. leuco-diorite. quartz hornblende diorite. biotite-hornblende granodiorite. microgranite. rhyolite. trachyte, EARLY CRETACEOUS


 Kih, Trachyte plugs. basalt flows, LATE CRETACEOUS


 Ks, Mudstone. sandstone. siltstone. minor coal, EARLY CRETACEOUS


 Kx, Quartzose sandstone. green lithic sandstone. mudstone. conglomerate. carbonaceous shale and coal, EARLY CRETACEOUS


 PKgb, Leucocratic biotite granite. biotite-hornblende adamellite, LATE PERMIAN - EARLY CRETACEOUS


 PMzg, Granite. granodiorite. diorite. gabbro, PERMIAN - MESOZOIC


 PRgb, Hornblende-biotite granodiorite. hornblende tonalite. augite monzonite. quartz gabbro. granite, LATE PERMIAN - EARLY TRIASSIC


 PRgri, Grey medium-grained biotite-hornblende to hornblende-biotite granodiorite. grey to cream medium-grained biotite-hornblende tonalite to quartz diorite. locally xenolith-bearing, LATE PERMIAN - EARLY TRIASSIC


 Pb, Quartzose to lithic sandstone. siltstone. carbonaceous shale. minor coal and sandy coquinite, EARLY PERMIAN - LATE PERMIAN


 Pbm, Lithic sandstone. siltstone. mudstone. rare conglomerate, LATE PERMIAN


 Pc, Andesite (locally containing phenocrysts of hornblende. hypersthene). dacite. rhyolite. volcanic arenite siltstone and conglomerate. crystal-lithic tuff. crystal tuff. lithic tuff. vitric tuff; minor chert. intrusive breccia, EARLY PERMIAN


 Pd, Conglomerate. lithic sandstone and carbonaceous mudstone, LATE PERMIAN


 Pg, Adamellite. granodiorite, PERMIAN


 Pgkm, Biotite-hornblende granodiorite. hornblende tonalite. diorite, PERMIAN


 Pk, Siltstones. fine to coarse lithofeldspathic sandstones. intermediate to felsic intrusive and extrusive domes and volcanic breccias with lesser conglomerates, EARLY PERMIAN

 Pm, Mudstone. lithic sandstone. conglomeratic mudstone. conglomerate, LATE PERMIAN


 Pvr, Basalt and high-level mafic intrusives. minor rhyodacite lava. volcanoclastic breccia. lithic sandstone. siltstone and mudstone, EARLY PERMIAN


 Pw, Mudstone. slate. phyllite. siltstone. sandstone. conglomerate. limestone. volcanics, PERMIAN


 Pwj, Sandstone. siltstone. mudstone. coal. tuff. conglomerate, PERMIAN


 Pwy, Siltstone and shale with minor tuff and volcanoclastic sandstone and rare coal (lower part - Banana Formation); calcareous sandstone. mudstone and siltstone (upper part - Wiseman Formation), LATE PERMIAN


 Px, Serpentinite, PERMIAN


 Pzl, Chlorite-quartz phyllite. muscovite-plagioclase-quartz schist. marble. hornfels. amphibolite. gneiss. serpentinite, PALAEOZOIC


 Rgep, Layered olivine gabbro. augite troctolite. ferrigabbro. leucogabbro. magnetite bands, MIDDLE TRIASSIC


 Rr, Lithic sandstone. pebbly lithic sandstone. green to reddish brown mudstone and minor volcanoclastic pebble conglomerate (at base), TRIASSIC


 Rvn, Andesite. andesitic tuff. trachyandesite. andesitic to rhyolitic breccia. minor rhyolite, MIDDLE TRIASSIC

 SD, Spillite. keratophyre. trachyte flows. andesitic flows and tuff. agglomerate. siltstone. chert. fossiliferous limestone. marble, SILURIAN - DEVONIAN

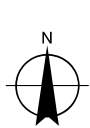
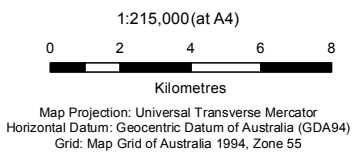
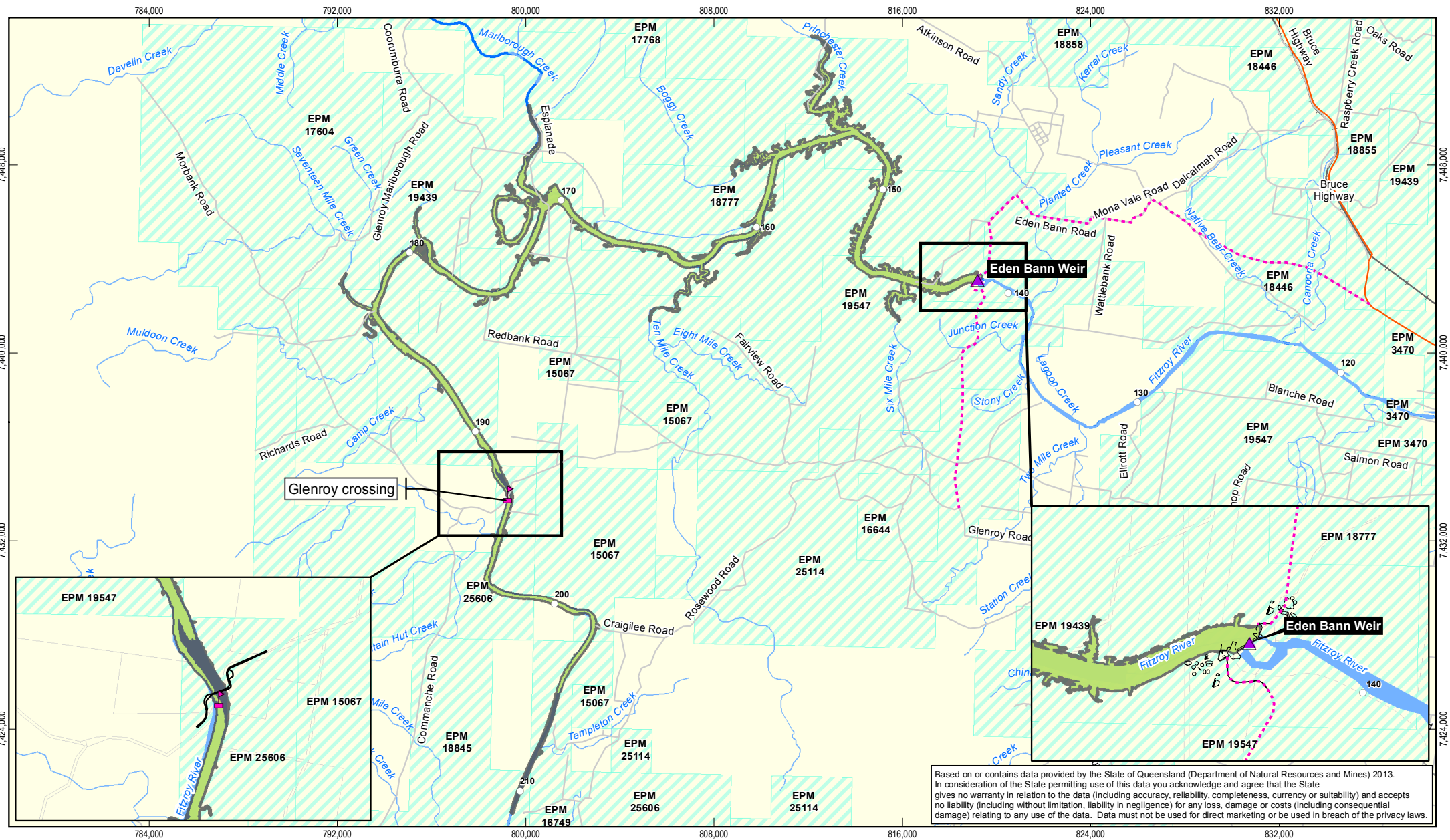
 SDh, Rhyolitic and dacitic tuff. rhyolite. andesite. siltstone. chert. limestone. sandstone, SILURIAN - EARLY DEVONIAN

 To, Mudstone. siltstone. oil shale. carbonaceous mudstone and sandstone; minor lignite. coal and limestone, EARLY TERTIARY

 Tu, Mudstone. sandstone. conglomerate. siltstone. oil shale. lignite. basalt, EARLY TERTIARY

 W, Water body. unspecified, WATER BODY





#### LEGEND

- River Crossing
- Access Road
- Weir Location
- AMTD (km)
- Highway
- Major Road
- Streets (Local)
- Waterway
- Property Boundary
- Eden Bann Weir Stage 2 impoundment
- Eden Bann Weir Stage 3 impoundment
- Mineral Exploration Permits Granted
- Construction Footprints



Gladstone Area Water Board, SunWater Job Number 41-29212  
Lower Fitzroy River Infrastructure Project Revision C  
Date 03 Mar 2016

### Revised draft EIS Figure 5-23 Eden Bann Weir exploration permits for minerals

Figure 4-2

G:\41\29212\GIS\Maps\MXD\41\_29212\_013\_Rev\_A.mxd

**Copyright:** This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was produced. Unauthorised use of this document in any way is prohibited. © 2016.

© 2016. While GHD has taken care to ensure the accuracy of this product, GHD, DERM, SUNWATER and GA make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD, DERM, SUNWATER, GBRMPA and GA cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unsuitable in any way and for any reason. \*Please see Appendix for important copyright information.

Data Source: © Copyright Commonwealth of Australia (Geoscience Australia): Places, Waterways (2007); Sunwater: Weir Locations - 2008; DNRM: Railways, Roads (2011), Mining Tenure (2015), DCDB (2014); © Copyright Commonwealth of Australia; GHD: Impoundment Area (2013) Created by: MS \*See Appendix for disclaimers and copyrights.

Level 9, 145 Ann Street Brisbane QLD 4000 Australia T +61 7 3316 3000 F +61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

## Response

Agricultural land Class A and Class B are considered to be the most productive agricultural land in Queensland with soil and land characteristics that allow successful crop and pasture production. The State Planning Policy seeks to protect this land for sustainable agricultural use.

Class A and Class B are defined as follows:

- Class A - crop land defined as land that is suitable for a wide range of current and potential crops with nil to moderate limitations to production
- Class B - limited crop land defined as land that: is suitable for a narrow range of current and potential crops; is marginal for current and potential crops due to severe limitations, but is highly suitable for pastures; and may be suitable for cropping with engineering and/or agronomic improvements.

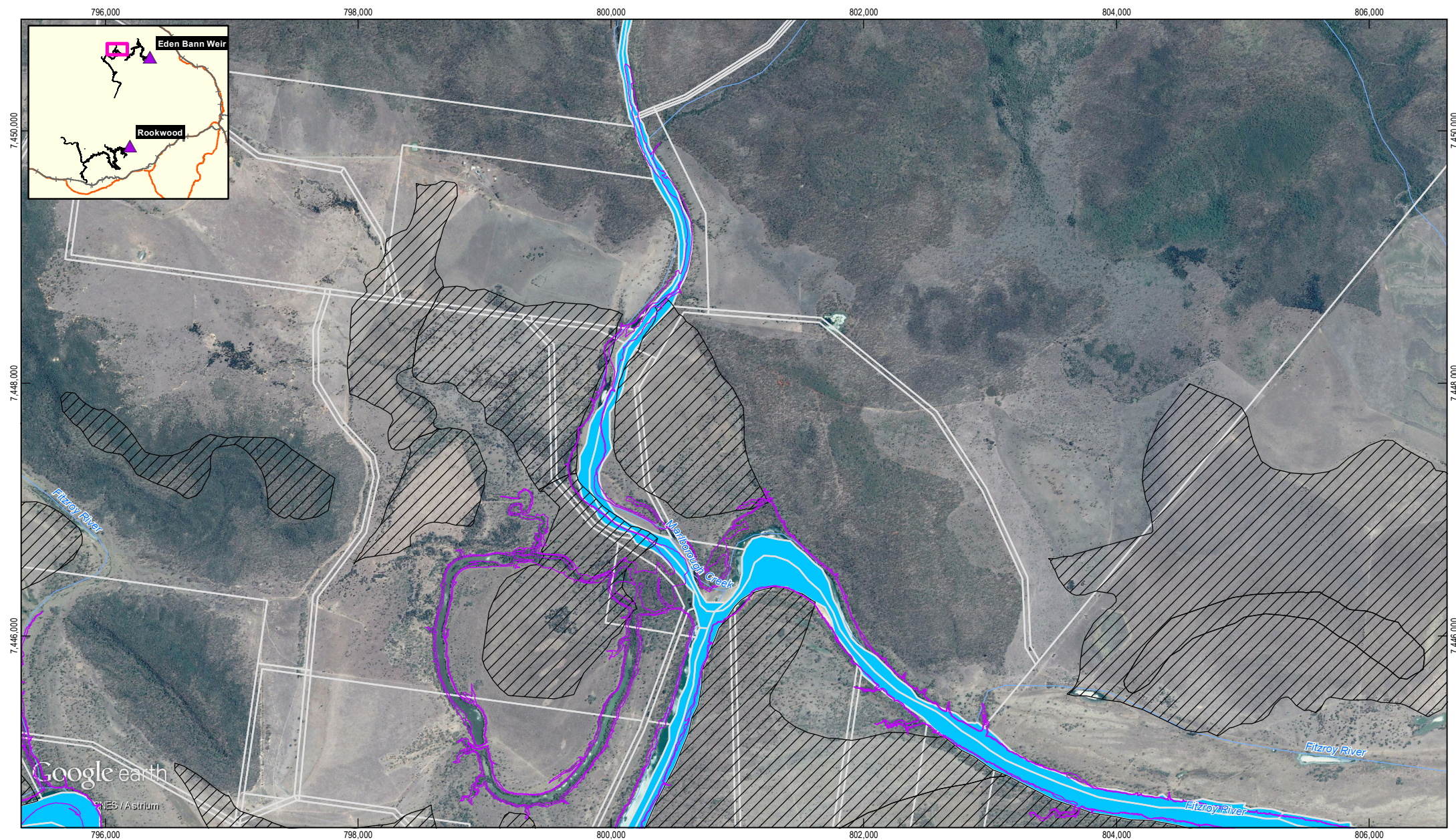
DAF has identified (based on existing State mapping) that in the order of 565 ha of Class A and Class B agricultural land is within the proposed Project impoundment areas. DAF also considers that there is the potential for some agricultural land to become fragmented as a result of the need for construction of a new access road to Eden Bann Weir (right bank).

A further review of the mapping relative to the Project has been undertaken in consultation with DAF (Agriculture). It has been calculated that in the order of 102 ha of agricultural land would potentially be impacted by the Project at its maximum extent (EB3 and RW2) through inundation.

Areas of mapped agricultural land were excluded from the quantification of potential Project impacts on Class A and Class B agricultural land. Explanations are provided and example areas are shown on figures validating the appropriateness of the exclusion, as follows:

- Agricultural land as mapped within the Fitzroy River, McKenzie River and Dawson River watercourses (Figure 4-3)
- Agricultural land mapped within named watercourse areas, including Marlborough Creek, Muldoon Creek and Gogango Creek (Figure 4-4)
- Agricultural land mapped within the extent of the existing Eden Bann Weir Stage 1 impoundment (Figure 4-5)
- Agricultural land as mapped within reserve tenures at river crossings (Figure 4-6). Road and causeway infrastructure already exist within these defined tenure areas and it is considered that its availability for agriculture production is already compromised
- Marlborough Nickel Pty Ltd's existing mining leases (Figure 4-7). While mining has not commenced and land is currently grazed it is considered that the granting of the MLs over the land has compromised its availability for agricultural production
- Agricultural land as mapped within the 1 in 5 year annual exceedance probability (AEP) flood event level. Aerial photography indicates and anecdotal evidence suggests that due to the frequent flood events experienced in the Project area that land clearing below the 1 in 5 year AEP event for cropping is uncommon (Figure 4-8).



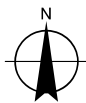


1:40,000 @ A4

0 500 1,000 1,500

Meters

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### LEGEND

- |                         |                                      |
|-------------------------|--------------------------------------|
| Agricultural Land Audit | Property Boundary                    |
| Class A                 | Watercourse                          |
| Class B                 | Eden Bann Weir Impoundment (Stage 3) |



Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number	41-29212
Revision	A
Date	04 Mar 2016

Agricultural land as mapped  
within the watercourse cadastre **Figure 4-3**

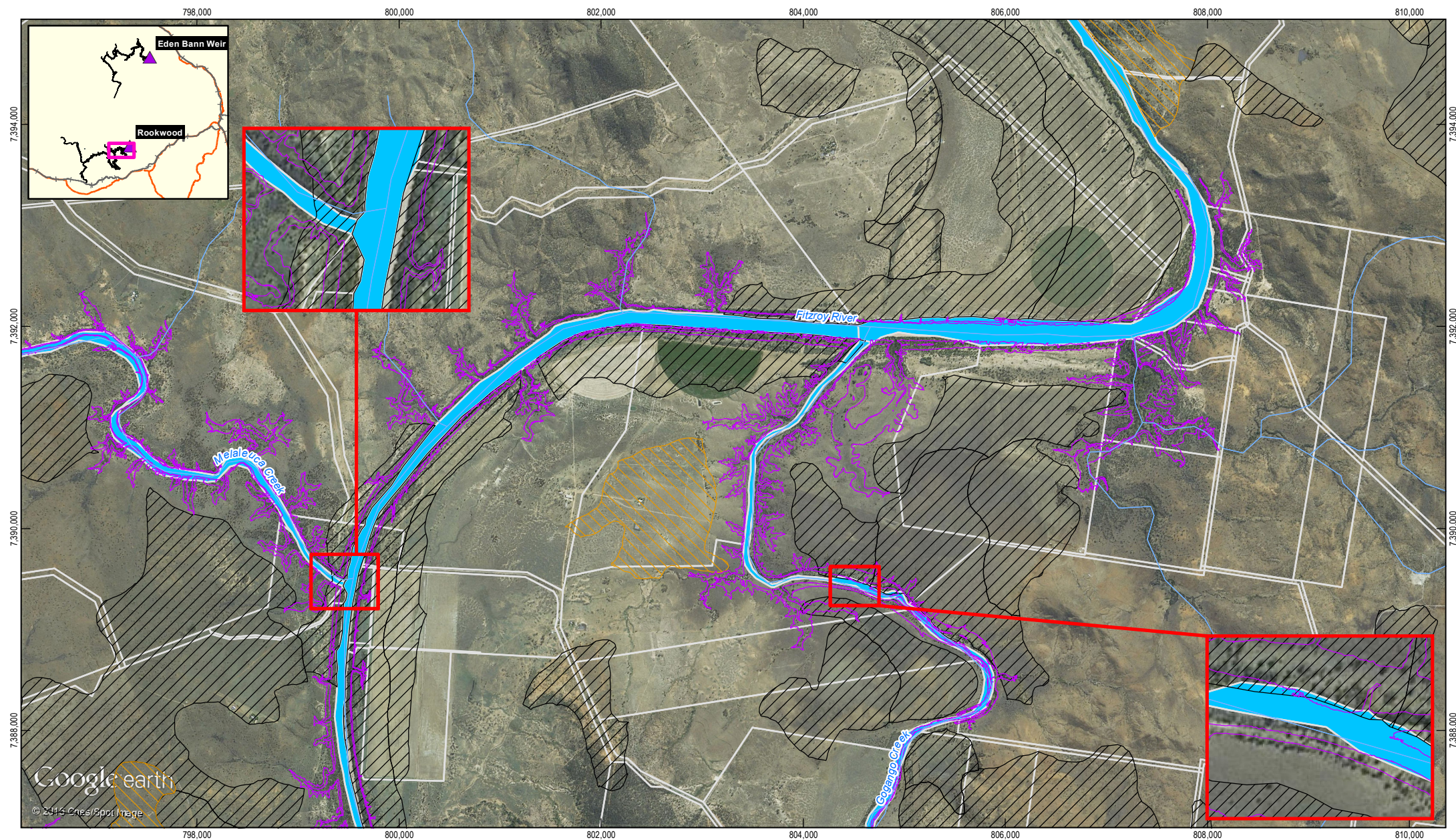
G:\41\29212\GIS\Maps\MXD\41\_29212\_015\_Rev\_A.mxd

© 2016. Whilst every care has been taken to prepare this map, GHD, Google Earth and Terranea make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: DNRM: Cadastre/2015; DAF: Ag Land Audit 2013, GE: Imagery downloaded 9/02/2016. Created by MS

145 Ann Street Brisbane QLD 4000 Australia T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com W www.ghd.com



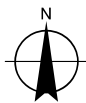


1:50,000 @ A4

0 500 1,000 1,500 2,000

Meters

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### LEGEND

Agricultural Land Audit	Property Boundary	Rookwood Weir Impoundment (Stage 2)
Class A	Watercourse	
Class B	Waterway	



Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number	41-29212
Revision	A
Date	04 Mar 2016

Agricultural land as mapped  
within named watercourse areas **Figure 4-4**

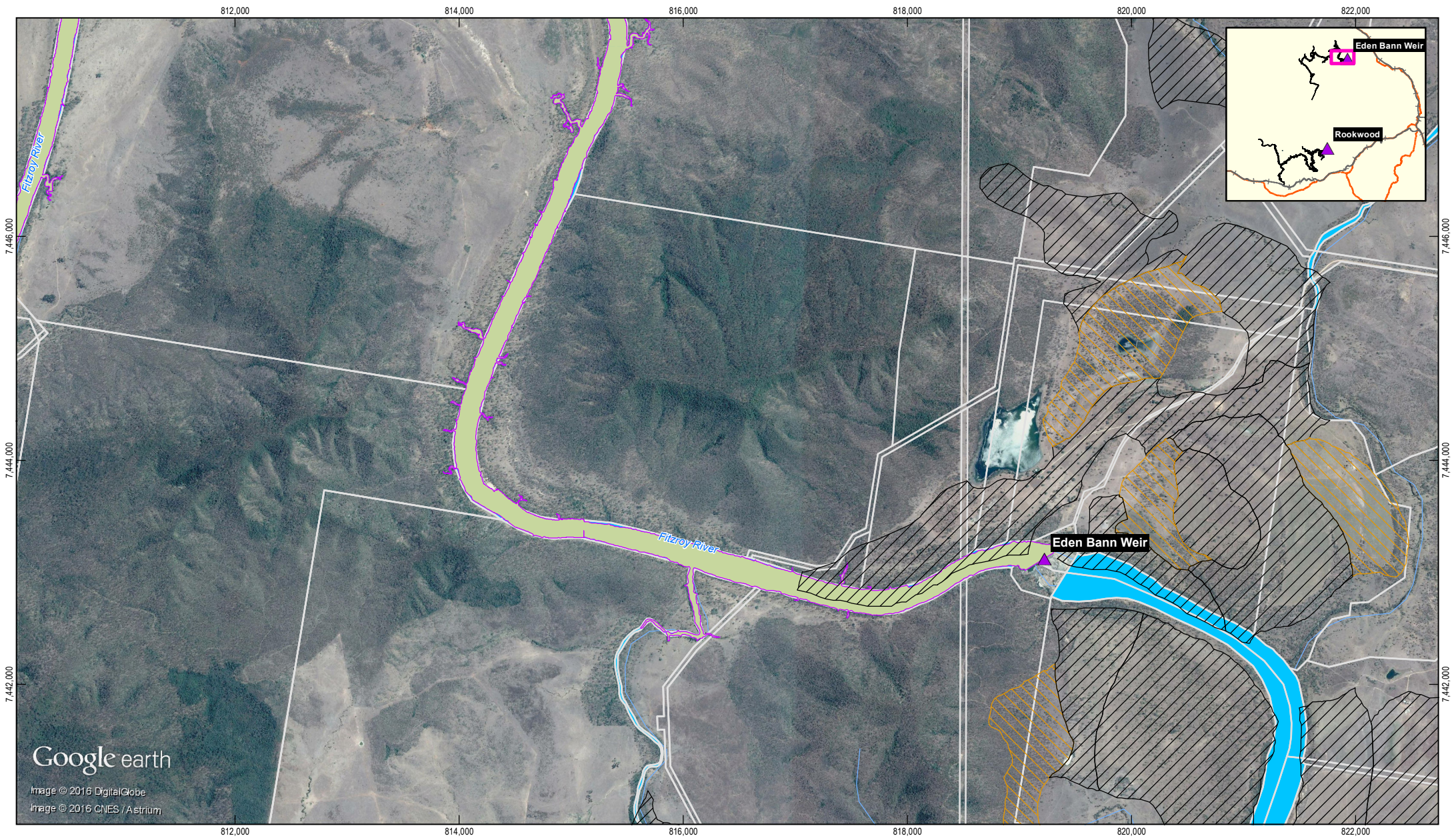
G:\41\29212\GIS\Maps\MXD\41\_29212\_016\_Rev\_A.mxd

145 Ann Street Brisbane QLD 4000 Australia T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

© 2016. Whilst every care has been taken to prepare this map, GHD, Google Earth and Terranea make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: DNRM: Watercourse/ 2010; Cadastre/2015; DAF: Ag Land Audit 2013, GHD: Impoundment area/2013; GE: Imagery downloaded 9/02/2016. Created by MS





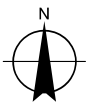
Google earth

Image © 2016 DigitalGlobe  
Image © 2016 CNES / Astrium

1:45,000 @ A4

0 500 1,000 1,500  
Meters

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### LEGEND

- ▲ Weir Site
- Property Boundary
- Agricultural Land Audit
- Watercourse
- Class A
- Eden Bann Weir Impoundment (Existing)
- Class B



Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number | 41-29212  
Revision | A  
Date | 04 Mar 2016

Agricultural land as mapped within the existing  
Eden Bann Weir Stage 1 impoundment

Figure 4-5

G:\41\29212\GIS\Maps\MXD\41\_29212\_017\_Rev\_A.mxd

145 Ann Street Brisbane QLD 4000 Australia T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

© 2016. Whilst every care has been taken to prepare this map, GHD, Google Earth and Terranea make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: GHD: Impoundment/2013; DNRM: Cadastre/2015; DAF: Ag Land Audit 2013, GE: Imagery downloaded 9/02/2016. Created by MS









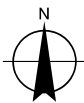
Google earth

© 2016 CNES/Spot Image  
Image © 2016 DigitalGlobe  
Image © 2016 CNES/Astrium

1:90,000 @ A4

0 1,000 2,000 3,000  
Meters

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### LEGEND

- |                         |                   |                       |
|-------------------------|-------------------|-----------------------|
| Agricultural Land Audit | Property Boundary | Eden Bann Weir        |
| Class A                 | Watercourse       | Impoundment (Stage 3) |
| Class B                 | Mining lease      |                       |



Gladstone Area Water Board



MAKING WATER WORK

Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number	41-29212
Revision	A
Date	04 Mar 2016

Agricultural land as mapped  
within mining lease tenures

Figure 4-7

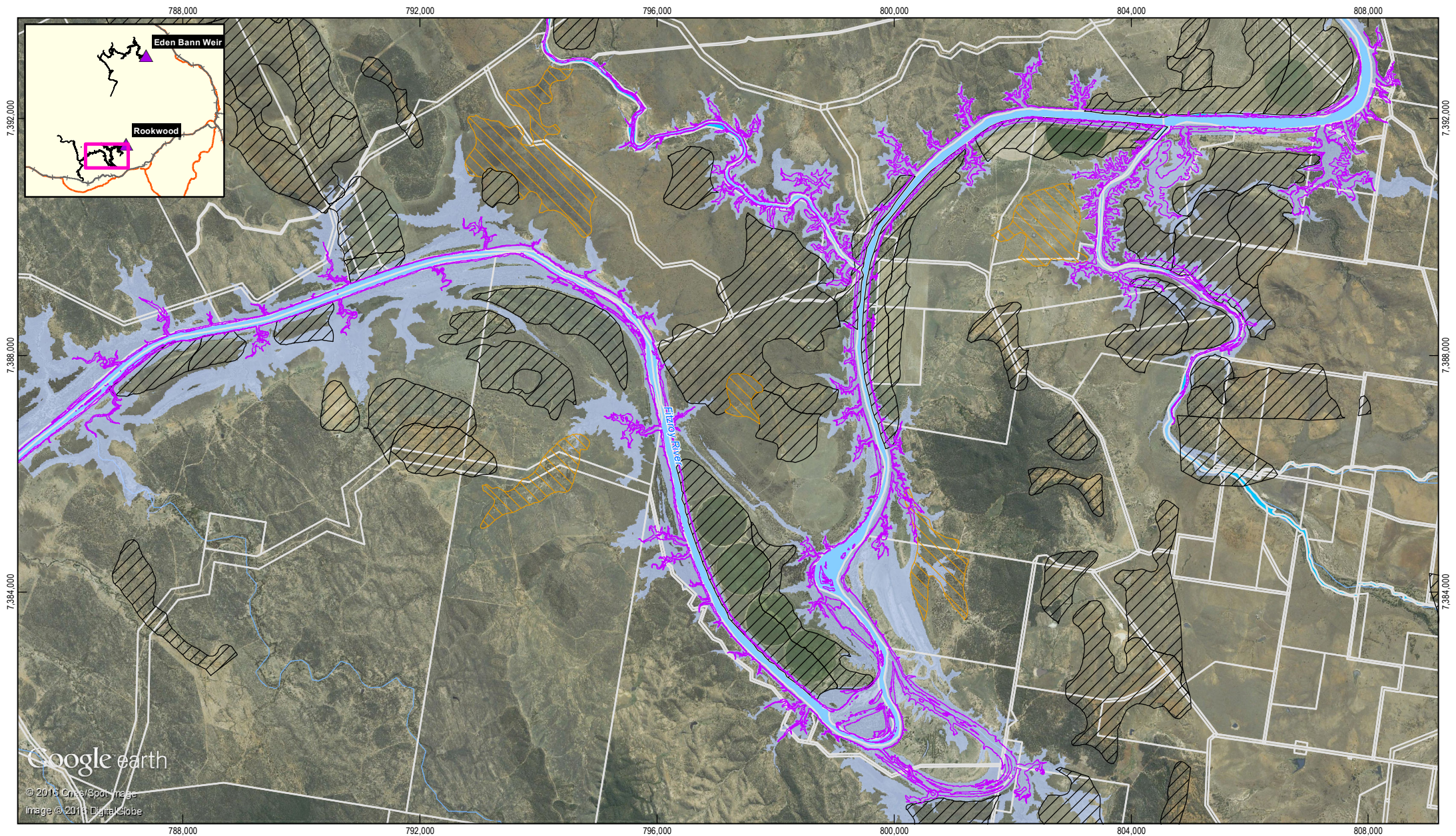
G:\41\29212\GIS\Maps\MXD\41\_29212\_019\_Rev\_A.mxd

145 Ann Street Brisbane QLD 4000 Australia T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

© 2016. Whilst every care has been taken to prepare this map, GHD, Google Earth and Terranea make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: GHD: Impoundment/2013; DNRM: Cadastre, Mining lease surface areas/2015; DAF: Ag Land Audit 2013, GE: Imagery downloaded 9/02/2016. Created by MS



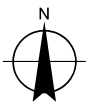


1:85,000 @ A4

0 1,000 2,000 3,000

Meters

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### LEGEND

- |                         |                         |                                     |
|-------------------------|-------------------------|-------------------------------------|
| Property Boundary       | Agricultural Land Audit | Rookwood Weir Impoundment (Stage 2) |
| 5 year ARI Flood Extent | Class A                 |                                     |
| - Pre Development       | Class B                 |                                     |
| Watercourse             |                         |                                     |



Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number 41-29212  
Revision A  
Date 04 Mar 2016

Agricultural land as mapped within  
the 1 in 5 year AEP event flood level

Figure 4-8

G:\41\29212\GIS\Maps\MXD\41\_29212\_020\_Rev\_A.mxd

145 Ann Street Brisbane QLD 4000 Australia T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com W www.ghd.com

© 2016. Whilst every care has been taken to prepare this map, GHD, Google Earth and Terranea make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: GHD: Flood Extent/2008, Impoundment/2013; DNRM: Cadastre/2015; DAF: Ag Land Audit 2013, GE: Imagery downloaded 9/02/2016. Created by MS



The location of the proposed new access road to Eden Bann Weir is not considered to fragment agricultural land such that it inhibits its potential for future use. The access road is proposed to comprise a track that traverses as far as is practicable already cleared areas (including potential co-location with an existing and cleared powerline easement). The track is proposed along the toe of a hill so as to reduce the need for further disturbance through excavation of the hillslope. The final location of the access track will however be subject further discussion and negotiation with the landholder. The proposed access track is shown on Figure 4-9.

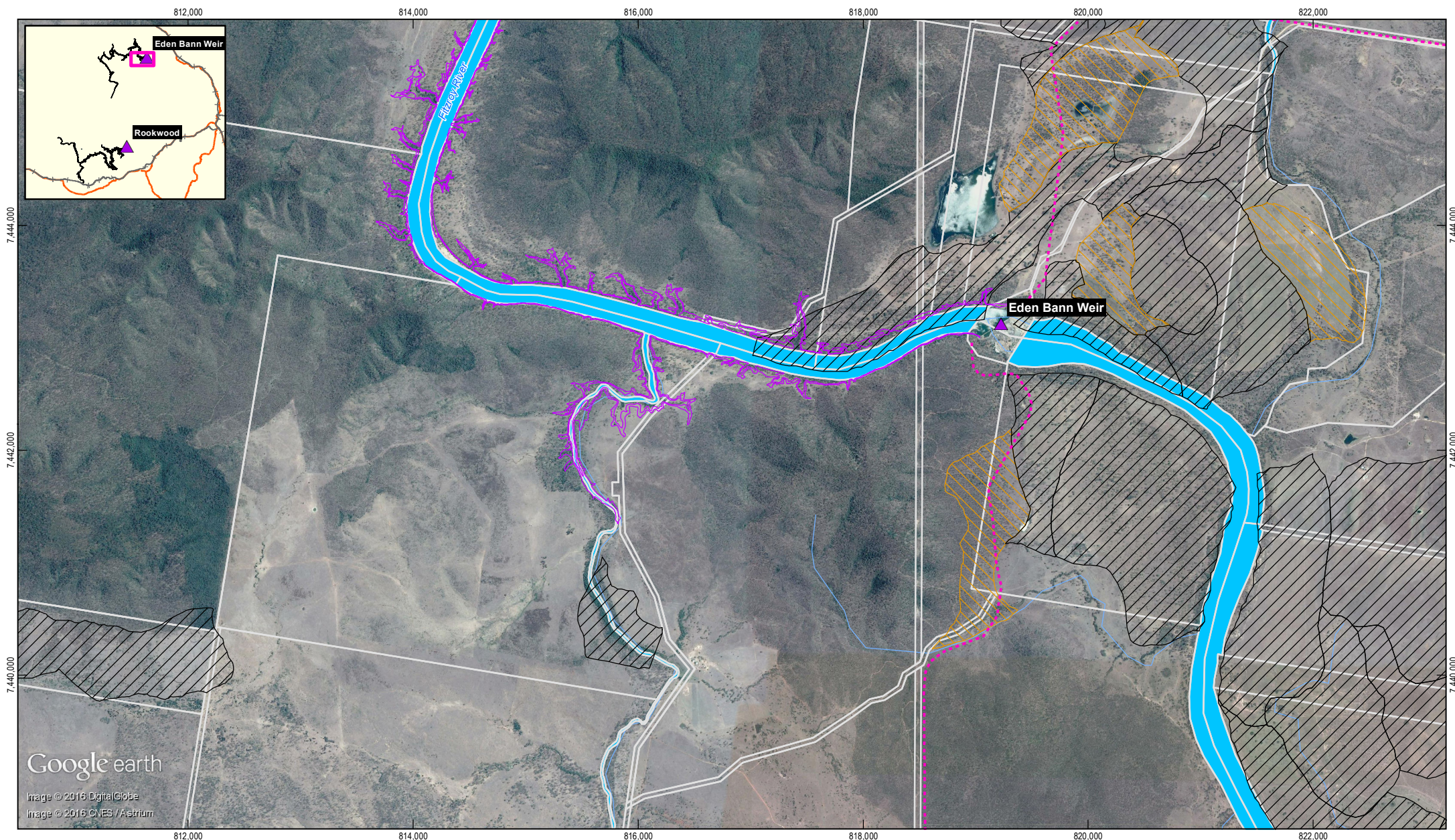
It is recognised that agricultural development has been identified as a priority for the Fitzroy region (RDA, 2014). Previous studies, including the Fitzroy Industry Infrastructure Study (FIIS) (GHD 2006) and the Queensland Agricultural Land Audit (DAFF 2013), have identified areas of suitable land for irrigated agricultural development which could be facilitated through the provision of water supply within the vicinity of the Project.

Road and river crossing upgrades associated with the Project's development provide further opportunity for regional growth. The Project has committed to upgrades of Glenroy Crossing, Riverslea Crossing and Foleyvale Crossing (relative to the Project development stage) that will significantly improve the hydraulic immunity of the crossings and improve trafficability of the wider transport network in the region for communities and agricultural producers (draft EIS Volume 1, Chapter 16 Transport). Road and river crossing upgrades have been considered in consultation with the DTMR, RRC and LSC. GAWB and SunWater are committed to further engagement with State agencies, Councils and others in this regard.

Project proponents continue to engage and share information with the Growing Central Queensland initiative (a collaborative project between the DSD, DAF and DNRM and RDA (Fitzroy and Central West) and RRC) regarding water supply opportunities in relation to agricultural development in the Fitzroy region and the Fitzroy Agricultural Corridor in particular.

In its own right and considering the opportunities for agricultural development presented by the Project, together with improvements to the transport network, the potential loss of 102 ha of agricultural land Class A and Class B is considered to be consistent with the assessment in the draft EIS that Project impacts on agricultural potential of land are limited and that no further mitigation or management is required.



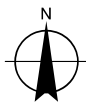


Google earth

Image © 2016 DigitalGlobe  
Image © 2016 CNES / Astrium

1:45,000 @ A4  
0 500 1,000 1,500  
Meters

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 55



#### LEGEND

- ▲ Weir Site
- Property Boundary
- Watercourse
- Eden Bann Weir Impoundment (Stage 3)
- Class A
- Class B
- Access Road



Gladstone Area Water Board, SunWater  
Lower Fitzroy River Infrastructure Project

Job Number	41-29212
Revision	A
Date	04 Mar 2016

Agricultural land mapped for the  
new Eden Bann Weir access track **Figure 4-9**

G:\41\29212\GIS\Maps\MXD\41\_29212\_021\_Rev\_A.mxd

145 Ann Street Brisbane QLD 4000 Australia T 61 7 3316 3000 F 61 7 3316 3333 E bnmemail@ghd.com W www.ghd.com

© 2016. Whilst every care has been taken to prepare this map, GHD, Google Earth and Terranea make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

Data source: GHD: Impoundment/2013; DNRM: Cadastre/2015; DAF: Ag Land Audit 2013, GE: Imagery downloaded 9/02/2016, GHD: Access track 2013. Created by MS



#### 4.2.2 Land use and productivity

##### *Submissions*

A number of submissions were received from individuals (primarily landholders in proximity to the Project) relating to potential land use, access and productivity impacts. This section addressed the following submissions:

- DNRM (032.13)
- Private submitter 4 (013.01, 013.02)
- Private submitter 5 (014.01)
- Private submitter 6 (016.01, 016.02, 016.03, 16.04, 16.05, 016.06, 16.08)
- Private submitter 8 (023.01)
- Private submitter 9 (026.01, 026.02)
- Private submitter 10 (027.01, 027.02)
- Private submitter 11 (033)
- Private submitter 14 (036.01).

##### *Response*

Land use and potential Project impacts on the use of rural land for rural purposes was addressed in the draft EIS (Volume 1, Chapter 5 Land, Section 5.5.3.2 and Volume 1, Chapter 18 Social impact assessment), including the intent by the proponents to enter into negotiations with impacted landholders with regard to specific impacts on their individual properties as per the revised Project commitments (Appendix D) (Section 13).

In order to address potential impacts on landholders' loss of land, loss of access to land, impacts to productivity and ability to access the river, the following factors will be taken into consideration when determining appropriate landholder compensation:

- The area of riparian land inundated and determined to be non-river/creek and within the proposed water storage easement and/or flood buffer (as informed through the proposed survey of high and low banks to determine the boundary of the riparian land)
- The loss of stock watering points
- The increased need for fencing to control stock movement and prevent stock losses
- The increased risk of stock losses due to the provision of more potential nesting places for crocodiles
- The cost of relocation of irrigation pumps due to higher standing water levels
- Changed weed and pest control management requirements.

The following mitigation measures would be implemented to reduce potential impacts on landholders:

- Regular communication with the stakeholders based on a Stakeholder Engagement Plan to be prepared for the Project (Section 2.5.1). Communication with stakeholders would include information on Project status, water allocations and management of key project impacts
- Development and implementation of a Project Land Access Strategy and associated protocols including consideration of:
  - Providing notice to landholders prior to accessing their property
  - Opening/closing of property gates
  - Developing and implementing a Weed and Pest Management Plan, a Noise Management Plan, an Air Quality Management Plan and a Traffic Management Plan where appropriate
  - Respecting any individual requests from the landholders about timing and considering other land-based activities
  - Limiting Project traffic movement to agreed tracks
  - Respecting appointment timing
  - Informing landholder as soon as possible of any changes to appointments.

The Project Land Acquisition Strategy will present measures addressing loss of land, compensation and potential impacts on existing and future water allocations. The emphasis of the strategy will be to secure land by agreement. The Land Access and Acquisition Strategy will include considerations for but not be limited to:

- Individual and specific landholder property impacts
- The statutory context for land acquisition
- Implications for securing land and rights to land
- Preference for acquisition by agreement
- Provision of financial assistance (to predetermined limits) to landholders for the purposes of land valuations and legal representation
- The process for acquiring land, the use of private land for project construction and quarrying on private land
- Timing of land acquisition and payment of compensation
- Grievance and dispute mechanisms including mediation.

Development and implementation of a Compensation Strategy that will include considerations for but not be limited to:

- Productivity impacts including temporary or permanent loss of land due to impoundment and easements, loss of viability of the business, time spent on project activities, loss of cattle due to project activities, weed spread due to project activities, loss of agricultural infrastructure such as pumps, costs of new fences and alterations to water allocation
- Loss of opportunistic river crossings
- Improved road access and flood immunity of identified river crossings

- Opportunities in relation to improved water security
- Grievance and dispute mechanisms including mediation.

Direct impacts (loss of land) on land are associated with the Project and addressed in the draft EIS include:

- Weir infrastructure footprints (including temporary construction areas)
- Weir inundation footprints (areas within river/creek bed and banks but outside of formal cadastre and/or land tenure/title boundaries). Inundation impacts are associated only with riparian land as there are no non-riparian properties likely to be impacted by inundation from the weirs
- Bridge (and approaches) infrastructure footprints (including temporary construction areas)
- Road and intersection upgrade footprints (including temporary construction areas).

In response to submission 013.02, it is clarified that the 500 m buffer referenced in the draft EIS (Volume 1, Chapter 5 Land, Section 5.4.1.1) is a nominal buffer applied to facilitate the assessment of potential impacts associated with any potentially contaminated land only within the vicinity of the river (e.g. from cattle dips). The 500 m buffer does not represent a loss of land or land take area.

In response to submission 016.03, property boundaries and riparian land boundaries will be surveyed in relation to high and low bank definitions in accordance with legislative requirements. Installation and replacement of any boundary markers will be done as per legal requirements and as negotiated with landholders. A water storage easement is proposed to be negotiated with landholders over riparian land inundated that is determined to be non-river/creek as a result of the high and low bank surveys. Title areas will be formally amended as necessary.

It is proposed that a flood buffer area will also be determined for the purposes of compensation negotiations (subject to high and low bank surveys and further flood modelling to be undertaken during detailed design). This buffer will address any incremental changes and impacts potentially associated with flood events (up to a 1 in 10 AEP event for Eden Bann Weir and a 1 in 20 AEP event for Rookwood Weir; above these AEP events the weirs cease to influence flooding).

#### 4.2.3 Aricia State Forest

##### **Submissions**

DNPSR submissions (020.01, 020.02) relate to inundation impacts on Aricia State Forest and the need for further consultation with DNPSR and DNRM in this regard.

##### **Response**

The extent of land lost in the Aricia State Forest through inundation by the Eden Bann Weir raising was calculated using the Project's GIS system and excluded the existing Eden Bann Weir Stage 1 Project footprint. Following the Project development trigger, high and low bank areas will be surveyed and defined to inform land acquisition requirements (Section 12).

The draft EIS (Volume 1, Chapter 5 Land, Section 5.5.3.1) reports that a water storage easement (or similar) will be negotiated for riparian land within the impoundment but outside of the watercourse.

DNPSR has advised that a water storage easement is a public utility easement under s362 and 369 of the *Land Act 1994*, which can be created for 'land upstream of the weir and within or outside the storage area at full supply'. However, a water storage easement cannot be authorised over Aricia State Forest due to s26(1A) of the *Forestry Act 1959* (Forestry Act), which states that land on State Forests must be used in accordance with provisions of the Forestry Act, which do not include easements of any kind. Easements for other public infrastructure can be authorised in State Forests through specific sections of other legislation. For example, sections in the *Electricity Act 1994* and *Petroleum and Gas (Production and Safety) Act 2004* override s26(1A) of the Forestry Act, thereby allowing easements for electrical or petroleum and gas pipelines to be authorised respectively. No such overriding legislation exists for water storage easements.

DNPSR consider that, given the area of Aricia State Forest will be permanently inundated by the Eden Bann Weir impoundment, revocation of the inundated area and a buffer area from the State Forest may be required. This will require resurveying of the boundary between the State forest and the watercourse, and may require compensation to be paid to DNPSR for the loss of the area. The Project proponents will continue to liaise with and undertake negotiations with DNPSR and DNRM to determine the most appropriate method of addressing the loss of land.

THIS PAGE IS LEFT INTENTIONALLY BLANK