

EMERGENCY ACTION PLAN — PETER FAUST DAM (ID 340)

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Approved by the delegate of the Chief Executive,
Department of Local Government, Water and Volunteers
until 8 March 2029

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Emergency activation quick reference

The Emergency Action Plan (EAP) for Peter Faust Dam covers dam hazards evaluated within Sunwater's Dam Safety Management Program. Use the following table to select the relevant section of the EAP that deals with the dam hazard.

Note: The Dam Safety Technical Decision Maker (DSTDM) or Flood Operations Decision Maker (FODM) is responsible for the decision to activate the EAP. The Incident Coordinator (IC) will coordinate the EAP under the direction of the DSTDM or FODM. Should the IC be uncontactable, the Local Event Coordinator (LEC) or Dam Duty Office (DDO) is responsible for the coordination of the EAP under the direction of the DSTDM or FODM.

Table 1: Emergency activation quick reference

Dam Hazards and section numbers	Activation Levels			
	Alert	Lean Forward	Stand Up	Stand Down
Activation triggers for dam hazards				
Flood operations See <i>section 5</i>	Storage at FSL EL 85.60 m AHD and rising	Storage at EL 87.08 m AHD (flood of record—March 2011)	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	Storage at EL 85.70 m AHD (100 mm above FSL) and falling with no forecast increase in EL in the next five days
Piping: embankment, foundation, or abutments See <i>section 6</i>	Increasing leakage through an embankment, the foundations, or abutments	Increasing leakage through an embankment, the foundations, or abutments with cloudy water	Piping condition has been established by DSTDM	Risk assessment has determined that failure risk has reduced
Earthquake See <i>section 7</i>	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity less than 5 MMI	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity greater than or equal to 5 MMI, OR - Intensity less than 5 MMI and change detected during surveillance inspection	- Earthquake confirmed (by DSTDM) or felt in the area, AND - A possible failure path has been identified	Risk assessment has determined that failure risk has reduced
Terrorist threat/ activity or high energy impact See <i>section 8</i>	Not applicable	Not applicable	- Possible terrorist activity noticed at dam or threat received - Large explosion heard/observed at dam (e.g. bomb explosion, aircraft hit) - Failure in progress or likely due to impact or explosion - Sufficient water in storage to create a dam hazard	Risk assessment has determined that failure risk has reduced

CONTINUED NEXT PAGE: EMERGENCY ACTIVATION QUICK REFERENCE

Emergency activation quick reference – Other Emergency Situations

The EAP for Peter Faust Dam covers one other emergency situation evaluated within Sunwater’s Dam Safety Management Program. Use the following table to select the relevant section of the EAP that deals with the other emergency situation.

Note: The Dam Safety Technical Decision Maker (DSTDM) or Flood Operations Decision Maker (FODM) is responsible for the decision to activate the EAP. The Incident Coordinator (IC) will coordinate the EAP under the direction of the DSTDM or FODM. Should the IC be uncontactable, the Local Event Coordinator (LEC) or Dam Duty Office (DDO) is responsible for the coordination of the EAP under the direction of the DSTDM or FODM.

Table 1 (continued): Emergency activation quick reference

Other Emergency Situations and section numbers	Activation level		
	Communications failure – dam site (DDO)	Communications failure – local area (LEC/ORR)	Communications failure – Brisbane (IC/DSTDM)
	Site managed (DDO - becomes LEC/ORR)	Brisbane coordinated by Incident Coordinator (IC)	Locally coordinated by Local Event Coordinator (LEC/ORR)
Activation triggers for other emergency situations			
Communications failure See section 9	Unable to communicate to or from dam site	Unable to communicate to or from local area	Unable to communicate to or from Sunwater Brisbane



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g., taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



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Document control

Authorisation of document

Position/role	Signature	Date
EAP Program Manager Prepared for submission		23/04/2026
Principal Engineer – Dam Safety Compliance — Approved for submission		24/04/2026
Head of Dam Safety — Approved for submission		24/04/2026
EGM – Engineering and Asset Management (or delegate) — Dam Owner Authorising Officer		24/04/2026

Document revision history

Issue	Date	Prepared by	Reason for change	Ref. no
2	February 2008		Substantial review of Peter Faust Dam Emergency Action Plan to reflect Sunwater Management structure and updated inundation maps.	
3	October 2011		Significant changes to all sections of Peter Faust Dam Emergency Action Plan to reflect current Sunwater Management structure and other changes.	
4	October 2015		New Emergency Action Plan developed at expiry of 3E approval. Issued for consultation with Relevant Disaster Management groups.	HB # 1723409
5	September 2016		Updates to contact details and Emergency Alert section.	HB # 2023274
6	October 2017		New Emergency Action Plan with minor amendments including contact list updates.	HB # 2086319
7	October 2018		Revised and reviewed Emergency Action Plan developed at expiry of approval. Also includes: updates that reflect the Water Legislation (Dam Safety) Amendment Act 2017, implementation of changes to Sunwater management structure, new event management roles and addition of new Emergency Activation section (Other Emergency Situations).	HB # 2086319
7.1	September 2019		Amended contacts and associated sections, e.g., Organisation chart & Controlled Copy Holders list. Updated Downstream Notification map. Minor error corrections and other non-substantive changes.	HB # 2473244
7.2	September 2020		Amended contacts and associated sections, e.g., Organisation chart & Controlled Copy Holders list. Minor error corrections and other non-substantive changes.	HB # 2569977
7.3	September 2021		Amended contacts and associated sections, e.g., Organisation chart & Controlled Copy Holders list. Minor error corrections and other non-substantive changes such as removing Comprehensive Risk Assessments description (2.9) and simplifying FODM role in Activation triggers (5.2.1) including removing para 5.2.2.	HB # 2653238
7.4	September 2022		Amended contacts and associated sections. Minor error corrections and other non-substantive changes. The Chemical Hazard section has been removed as it is not a Dam Safety Hazard and is dealt with in other more relevant documents.	HB # 2726204
8.0	March 2023		Amendments to Document Control and section 3, including PAR and dam specifications. Appendix B Inundation maps updated. Amended emergency action levels throughout EAP to comply with AWS	# 2743892
8.1	September 2023		format. Various non-substantive changes such as minor error corrections and formatting. Chemical spill hazard removed from Section 1.3. Emergency alert updated to comply with AWS in Appendix A.	# 2809742
8.2	September 2024		Non-substantive updates as part of Annual Safety Statement. Minor error corrections and readability improvements.	# 2865450
9.0	August 2025		Full substantive review pending expiry	# 2909513

Controlled document distribution list

Copy No.	Position	Location
1.	Storage Operator	Sunwater, Peter Faust Dam
2.	Operations Manager — Burdekin Whitsunday	Sunwater, Clare
3.	General Manager - North	Sunwater, Townsville
4.	Operations Centre	Sunwater, Brisbane

NOTE: Communication information for each 'Controlled Copy Holder' is attached in Appendix A

Electronic document distribution list

Printed electronic copies are considered uncontrolled copies.

Note: Communication information for each Electronic Copy holder is contained in Appendix A.

1. References, abbreviations, and definitions

1.1 References/associated documents

Ref.	Document title	Reference/Location
A	Water Act 2000 (Qld)	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2000-034
B	Water Regulation 2016 (Qld)	https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2016-0216
C	Water Supply (Safety and Reliability) Act 2008 (Qld)	https://www.legislation.qld.gov.au/view/whole/pdf/inforce/current/act-2008-034
D	Water Supply (Safety and Reliability) Regulation 2021 (Qld)	https://www.legislation.qld.gov.au/view/pdf/asmade/sl-2021-0106
E	Disaster Management Act 2023 (Qld)	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2003-091
F	Professional Engineers Act 2002 (Qld)	https://www.legislation.qld.gov.au/view/pdf/inforce/2013-09-23/act-2002-054
G	Dam Safety Management Guideline (Qld)	https://www.resources.qld.gov.au/__data/assets/pdf_file/0007/78838/dam-safety-management.pdf
H	Emergency Action Plan for Referable Dam Guideline	https://www.resources.qld.gov.au/__data/assets/pdf_file/0018/84015/eap-guideline.pdf
I	Guidelines on Flood Capacity for Dams	Guidelines on Flood Capacity for Dams (Nov 2025) - HARDCOPY - ANCOLD
J	Guidelines on Consequence Categories for Dams (ANCOLD, 2012)	ANCOLD ISBN: 978-0-9808192-5-0 https://ancold.org.au/product/guidelines-on-the-consequence-categories-for-dams-october-2012/
M	Guideline for Failure Impact Assessment of Water Dams (DNRME 2018)	https://www.resources.qld.gov.au/__data/assets/pdf_file/0005/78836/guidelines-failure-impact-assessment.pdf
N	Queensland Interim State Disaster Management Plan	https://www.disaster.qld.gov.au/__data/assets/pdf_file/0031/528448/Interim-State-Disaster-Management-Plan.pdf
O	Interim Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline	https://www.disaster.qld.gov.au/__data/assets/pdf_file/0032/359465/Interim-QPPRR-Disaster-Management-Guideline.pdf
P	Queensland Rainfall and River Conditions	https://www.bom.gov.au/qld/flood/index.shtml?ref=hdr
Q	Work Health and Safety Act 2011 (Qld)	https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2011-018
R	Work Health and Safety Regulation 2011 (Qld)	https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2011-0240
S	Sunwater Strategic Event Procedure	Sunwater internal document
T	Dam Safety Management Program (DSMP) Procedure	Sunwater internal document
U	Standing Operating Procedure (SOP) 12 – Dam Logbooks	Sunwater internal document
V	Fatigue Management Standard	Sunwater internal document
W	Peter Faust Comprehensive Risk Assessment 2022	Sunwater internal document
X	Sunwater Peter Faust Dam Operation and Maintenance Manual	Sunwater internal document
Y	Sunwater Peter Faust Dam Safety Condition Schedule	Sunwater internal document
	Sunwater Operations Peter Faust Dam — Hazard Management Toolkit (HMT)	Sunwater internal document

1.2 Abbreviations and acronyms

AEP	Annual Exceedance Probability	Max. OL	Maximum Operating Level
AHD	Australian Height Datum	MMI	Modified Mercalli Intensity
AMTD	Adopted Mean Thread Distance	O&M	Operation & Maintenance
ANCOLD	Australian National Committee on Large Dams	OB	Observation Bore
		OC	Operations Centre
AWS	Australian Warning System	OCDO	Operations Centre Duty Operator
CEO	Chief Executive Officer	OM	Operator Maintainer
CRA	Comprehensive Risk Assessment	OMGR	Operations Manager
CTG	Counter Terrorism Group	OS	Operations Supervisor
D/S	Downstream	ORR	Owner's Regional Representative
DCF	Dam Crest Flood	PAR	Population at Risk
DCL	Dam Crest Level	PDSE	Principal Dam Safety Engineer
DDC	District Disaster Coordinator	PFRM	Predictive Flood Routing Model
DDMG	District Disaster Management Group	PLL	Probable Loss of Life
DDMP	District Disaster Management Plan	PMF	Probable Maximum Flood
DDO	Dam Duty Officer	PMP	Probable Maximum Precipitation
DDS	Director Dam Safety	PMPF	Probable Maximum Precipitation Flood
DLGWV	Department of Local Government, Water and Volunteers	QDMC	Queensland Disaster Management Committee
DSR	Dam Safety Regulator	QPS	Queensland Police Service
DSSC	Dam Safety Surveillance Coordinator	RB	Right Bank
DSTDM	Dam Safety Technical Decision Maker	RC	Regional Council
EAP	Emergency Action Plan	RCC	Roller Compacted Concrete
EA	Emergency Alert	ROC	Regional Operations Centre
EER	Emergency Event Report	RPEQ	Registered Professional Engineer of Queensland
EGMO	Executive General Manager Operations		
EL	Elevation Level	RSL	Reduced Supply Level
EMC	Emergency Management Coordinator	SCADA	Supervisory Control and Data Acquisition
FCL	Fixed Crest Level	SCTN	Security and Counter Terrorism Network
FODM	Flood Operations Decision Maker	SDCC	State Disaster Coordination Centre
FSL	Full Supply Level	SDF	Sunny Day Failure
GM	General Manager	SES	State Emergency Service
HMT	Hazard Management Toolkit	SMS	Short Message Service
IC	Incident Coordinator	SMT	Sunwater Media Team
IFHC	Incremental Flood Hazard Category	SO	Standby Operator
IGEM	Inspector-General Emergency Management	SOM	Senior Operator Maintainer
		SOP	Standing Operating Procedure
KML	Keyhole Markup Language (file type)	SRT	Strategic Response Team
LB	Left Bank	SSO	Senior Storage Operator
LDC	Local Disaster Coordinator	SWL	Storage Water Level
LDMG	Local Disaster Management Group	U/S	Upstream
LDMP	Local Disaster Management Plan		
LEC	Local Event Coordinator		

1.3 Business terms and definitions

The meaning of terms used in this section are set out in accordance with relevant legislation or as defined by operator requirements.

Term	Definition
Australian Warning System (AWS)	The AWS is a national approach to information and warnings for hazards like bushfire, flood, storm, cyclone, extreme heat and severe weather.
Dam hazard	Means a reasonably foreseeable situation or condition that may: • cause or contribute to the failure of the dam, if the failure may cause harm to persons or property, OR • require an automatic or controlled release of water from the dam, if the release of the water may cause harm to persons or property. Note: Various dam failure modes have been referred to as <i>hazards</i> in this document e.g. piping.
Dam hazard event	Means an event arising from a dam hazard if: • persons or property may be harmed because of the event, AND • a coordinated response, involving 2 or more of the following relevant entities, is unlikely to be required; each local group and district group for the EAP, each local government whose area may be affected, the Chief Executive, another entity the owner of the dam considers appropriate, AND • a coordinated response, involving 2 or more of the following relevant entities, is unlikely to be required; each local group and district group for the EAP, each local government whose area may be affected, the Chief Executive, another entity the owner of the dam considers appropriate, AND • the event is not an emergency event.
Disaster management plan (DMP)	Of a district group or local government, means the group's or local government's disaster management plan under the Disaster Management Act 2003 (Qld).
District group (DDMG)	For an emergency action plan (EAP), means a district group established under the Disaster Management Act 2003 (Qld), section 22 whose disaster district under that Act could, under the plan, be affected by a dam hazard.
Emergency Alert (EA)	The emergency alert (EA) system is a national telephone warning system administered in Queensland by the Queensland Police Service. The EA system provides emergency authorities with a rapid mass notification service to deliver preformatted messages via landline and mobile telephones within a defined geographic area.
Emergency event	Means an event arising from a dam hazard if: persons or property may be harmed because of the event, AND any of the following apply: • a coordinated response, involving 2 or more of the following relevant entities, is likely to be required; each local group and district group for the EAP, each local government whose area may be affected, the Chief Executive, another entity the owner of the dam considers appropriate, OR • the event may arise because of a disaster situation declared under the Disaster Management Act, OR • an entity performing functions under the State disaster management plan may, under that plan, require the owner of the dam to give the entity information about the event.
Local group (LDMG)	For an EAP, means a local group established under the Disaster Management Act 2003 (Qld), section 29 whose local government area could, under the plan, be affected by a dam hazard.
Notice response	A dam owner's written response to a notice following an assessment of an EAP by a local government or district group.
Referable dam	A dam, or a proposed dam after its construction, will be a referable dam if: • a failure impact assessment of the dam, or the proposed dam, is carried out under the Act, AND • the assessment states the dam has, or the proposed dam after its construction will have, a category 1 or category 2 failure impact rating, AND • the Chief Executive has, under section 349 of the Act, accepted the assessment. Also, a dam is a referable dam if: • under section 342B of the Act, the owner of a dam is given a referable dam notice and, before the effective day for the notice, does not give the Chief Executive a failure impact assessment for the dam, AND • the Chief Executive has not, under section 349 of the Act, accepted a failure impact assessment of the dam.

Term	Definition
Relevant entity	Means each of the following under the EAP for the dam: - the persons who may be affected, or whose property may be affected, if a dam hazard event or emergency event were to happen for the dam, e.g., the owners of parcels of farmland adjacent to the dam or residents of a township - each local group and district group for the EAP - each local government whose local government area may be affected if a dam hazard event or emergency event were to happen - the Chief Executive - another entity the owner of the dam considers appropriate e.g., the Queensland Police Service.
Emergency event	Means each of the following under the EAP for the dam: - the persons who may be affected, or whose property may be affected, if a dam hazard event or emergency event were to happen for the dam, e.g., the owners of parcels of farmland adjacent to the dam or residents of a township - each local group and district group for the EAP - each local government whose local government area may be affected if a dam hazard event or emergency event were to happen - the Chief Executive - another entity the owner of the dam considers appropriate e.g., the Queensland Police Service.
Other relevant terms and definitions	
Activation levels	The four levels of EAP activation are: Alert: A heightened level of vigilance and preparedness due to the possibility of an event in the area of responsibility. Some action may be required, and the situation should be monitored by staff capable of assessing and preparing for the potential threat. Lean Forward: An operational state prior to 'Stand Up', characterized by a heightened level of situational awareness of a disaster event (either current or impending) and a state of operational readiness. Disaster coordination centres are on standby – prepared but not activated. Stand Up: The operational state following 'Lean Forward', where resources are mobilized, personnel are activated, and operational activities commenced. Disaster coordination centres are activated. Stand Down: Transition from responding to an event back to normal core business and/or continuance of recovery operations. There is no longer a requirement to respond to the event and the threat is no longer present. The movement through these levels of activation is not necessarily sequential. It should be applied with flexibility and adaptability and be tailored to the location and event. Triggering one of these levels of activation may not necessarily mean a similar activation of LDMGs or DDMGs.
AWS Warning Levels	The three AWS warning levels are: Advice: The first warning level of the Australian Warning System meaning an incident has started but there is no immediate danger. Stay up to date in case the situation changes. Watch and Act: The second warning level of the Australian Warning System meaning there is a heightened level of threat. Conditions are changing – you need to start taking action now to protect you and your family. Emergency: The third and highest warning of the Australian Warning System meaning lives may be in danger and action should be taken immediately. NOTE: These AWS warning levels do not change the Activation Levels of the EAP and are intended for external public-facing information only.
Bureau of Meteorology flood level classifications	The three levels of flooding are: Minor flooding: Causes inconvenience. Low-lying areas next to water courses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas removal of stock and equipment may be required. Moderate flooding: In addition to the above, the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be affected above the floor level. Evacuation of flood affected areas may be required. In rural areas removal of stock is required. Major flooding: In addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.

Term	Definition
Concurrent Flooding	Flood flows downstream of a dam that are not a result of dam outflows, for instance those from adjacent catchments or from the sea, and which occur in the same period as downstream releases or flooding from the dam.
Dam crest level (DCL)	The dam crest level: for an embankment dam, is the lowest point of the embankment crest for a concrete dam, is the level of the non-overflow section of the dam, excluding handrails and parapets if they cannot store water against them for a concrete faced rockfill dam, is the lowest point of the crest structure
Dam crest flood (DCF)	Flood event which, when routed through the storage with the storage initially at full supply level, results in a still water in the storage, excluding wind and wave effects, that reaches: • the lowest point of the embankment crest (for embankment dams) • the level of the non-overflow section of the dam, excluding handrails and parapets if they do not store water against them (for concrete dams) • the lowest point of the crest structure or a point on a wave wall if it is designed to take the corresponding water load (for concrete faced rockfill dams).
Dam failure	Dam failure is the physical collapse of all or part of a dam or the uncontrolled release of any of its contents.
Downstream releases	Downstream releases are outflows from the dam made through appurtenant structures such as spillways or outlet works that are in accordance with the design of the dam.
Earthquake	A sudden release of energy in the earth's crust or upper mantle, usually caused by movement along a fault plane or by volcanic activity, resulting in the generation of seismic waves that can be destructive. The potential consequences of an earthquake include: - settlement, sliding, or overturning of monoliths in the dam wall - initiation of seepage lines in the foundations or abutments that could lead to piping damage and potential inoperability of appurtenant works.
Flood release	A flood release from a dam occurs when catchment inflows raise the storage level above the Full Supply Level (FSL) resulting in a discharge from the spillway of the dam.
Piping	Internal scour caused by the water flow and seepage that occurs through earth dams, dam foundations, or dam abutments. The internal scour can lead to the formation of a pipe, which can lead to a failure of the dam.
Plane strike or other impact	The impact of a plane, meteorite, or other high energy item on or in close vicinity of a dam that could damage the dam structure or create a wave that could overtop the dam.
Probable maximum flood (PMF)	The flood resulting from probable maximum precipitation coupled with catchment conditions that are optimal for generating maximum runoff. It is a hypothetical flood estimate relevant to a specific catchment whose magnitude is such that there is negligible chance of it being exceeded.
Probable maximum precipitation (PMP)	The theoretical greatest depth of precipitation for a given duration that is, based on meteorological methods of maximisation, physically possible over a particular catchment area.
Probable maximum precipitation flood (PMPF)	The flood resulting from the probable maximum precipitation coupled with typical catchment conditions.
Stability, main embankment	High foundation pore pressure peaks may reduce the Factor of Safety against slip circle failure to an unacceptable level.
'Sunny day' failure (SDF)	A dam failure event that occurs without a wet weather event.
Terrorist activity	A deliberate attempt to damage or fail a dam.

2. Introduction

2.1 Context

Under the *Water Supply (Safety and Reliability) Act 2008* (the Act), the owner of a referable dam must have an approved EAP for the dam. Referable dams, by definition, would put lives at risk if they were to fail.

This EAP has been prepared in accordance with Chapter 4 of the Act. The content requirements for EAPs are contained in section 352 H of the Act.

Summary of legal requirements – Section 352H

Section 352 H (1) of the Act requires that the EAP must identify each dam hazard for the dam and for each of these dam hazard types (e.g. flood operations):

1. identify the area likely to be affected by a dam hazard event or emergency event arising from the dam hazard; and
2. identify each circumstance that indicates a material increase in the likelihood of the dam hazard event or emergency event happening; and
3. state when and how the owner of the dam plans to warn persons who may be harmed, or whose property may be harmed by an event caused by the dam hazard, if one happens, and/or there is a material increase in the likelihood of an occurrence, including the order of priority in which the persons or categories of persons are to be warned; and
4. state when and how the owner plans to notify the relevant entities for the dam, if a dam hazard event or emergency event happens or, there is a material increase in the likelihood of such an occurrence, including the order of priority in which the relevant entities are to be notified; and
5. state the actions the owner of the dam plans to take in response to a dam hazard event or emergency event.

In accordance with section 352 H (2) of the Act, the EAP may provide for the dam owner to make arrangements with a relevant entity for warnings to be given by the relevant entity on behalf of the dam owner in appropriate circumstances.

Section 352 H A of the Act states that before giving the Chief Executive an EAP, the owner of the dam must give a copy of the plan to each local government whose area may be affected by a dam hazard identified in the plan; and each district group for the plan.

Section 352 H B of the Act states that the local government must assess the EAP for consistency with its disaster management plan. In its assessment, the local government must consult with the local district group for the plan.

Within 30 business days of receiving the EAP, the local government must give the owner of the dam a notice, which states whether it considers the plan is consistent with its disaster management plan; and if not, give reason why it considers the EAP is not consistent. The EAP must include any such notices, provided to the owner of the dam by a local government (or district group); and any responses which the owner gives to these notices. Section 352 H (1) further stipulates that an EAP must include any other relevant matter prescribed by regulation.

The local government whose areas may be affected by a dam hazard for Peter Faust Dam have been determined as **Whitsunday Regional Council (WRC)** & **Mackay Regional Council (MRC)**. Sunwater has provided both councils with a copy of the draft EAP for assessment.

Section 352 H C of the Act states that a district group may review the EAP for consistency with its disaster management plan. The district group for Peter Faust Dam is **Mackay District Disaster Management Group (DDMG)**. Sunwater has provided the DDMG with a copy of the draft EAP for review.

Note: Sunwater has attempted to write the EAP to cope with all reasonably foreseeable emergency situations. However, there is considerable uncertainty about how any emergency might develop and progress. Factors such as the weather, the location, the mechanics, and the rate and size of any actual failure can considerably affect any resulting flood discharges. Therefore, a significant number of assumptions have had to be made in compiling sections of the EAP. Some variation in outcome should be expected where the event differs from the assumed behaviour.

2.2 Purpose

The purpose of this EAP is to:

- enable the dam owner and the LDMG to respond to dam hazard events or dam emergency events in a timely and effective manner
- minimise the risk of harm to persons or property if a dam hazard event or emergency event for the dam happens
- identify dam hazards that could occur at Peter Faust Dam and the area likely to be affected for each hazard
- prescribe emergency actions taken by the dam owners and operating personnel in identifying and responding to dam hazards and notifying relevant entities.

It is possible for more than one dam hazard to exist at Peter Faust Dam at the one time. In such a circumstance, it may be necessary to act on the actions within separate sections simultaneously.

The focus of this EAP is the management of dam hazards at Peter Faust Dam by the owner of the dam (Sunwater) and the communication and notification of dam hazards to the LDMGs, DDMGs and broader community. However, the EAP sits within the broader emergency response framework. This EAP has been assessed and considered to be consistent with the Whitsunday and Mackay Local Disaster Management Plans.

2.3 Scope

The Peter Faust Dam EAP covers:

- dam hazards evaluated within Sunwater's Dam Safety Management Program
- details about the dam that are relevant to a dam hazard
- identification of circumstances that indicates a material increase in the likelihood of a dam hazard event and/or emergency event happening
- triggers for activation of a tiered response to dam hazard event and/or emergency event
- alignment of the EAP trigger levels for flood with the Australian Warning System (AWS) warning levels
- roles and responsibilities in responding to a dam hazard event and/or emergency event
- notification, warning, and communication protocols
- inspection, monitoring, and reporting protocols during emergencies
- other relevant information that may assist with identifying the area affected by a dam hazard event and/or emergency event, and the management of such hazards.

2.4 Sunwater training

Sunwater trains its staff in the implementation of this document several times a year. Additional training is undertaken at each dam site in the months leading up to the wet season.

Onsite EAP training includes walkthroughs of changes, scenario training and a Q&A session to assess the knowledge and competency of attendees. The training is presented to relevant Sunwater staff (DDOs and LECs) and disaster management stakeholders. DSTDM, FODM and IC information sessions are carried out once a year with the same walkthrough of changes and Q&A, but this is not specific to any one dam. New Sunwater employees in these various roles also have a walkthrough of the EAP.

2.5 Principles used in developing this EAP

The LDMGs have principal carriage of managing any disaster situation within the community, with the support of the district and state groups.

Sunwater will aim to inform and support the LDMGs in the local area.

The LDMGs will be the principal voice on all communication to the community during a disaster situation in most circumstances except those where imminent dam failure is likely and time is critical.

During a dam failure event that occurs with little or no warning, Sunwater will undertake the following actions to ensure the community is informed as soon as possible:

- provide timely advice to the LDMGs.
- notify immediately D/S residents via SMS.
- contact the SDCC to request an EA throughout the Peter Faust Dam emergency polygon.

During a flood event, the LDMGs will take the lead role in notifying all relevant persons. Sunwater will support the LDMGs by undertaking the following actions to ensure the community is informed as soon as possible:

- maintain an up-to-date list of immediate D/S residents of the Peter Faust Dam. The D/S limit is shown in the plan in Appendix B2 by the zone labelled *Limit of D/S notification area*.
- provide the LDMGs with a copy of the list of residents (immediately D/S) annually for inclusion in the LDMGs SMS alert system.
- provide timely advice to the LDMGs.

Sunwater will independently inform and support the local DDMGs.

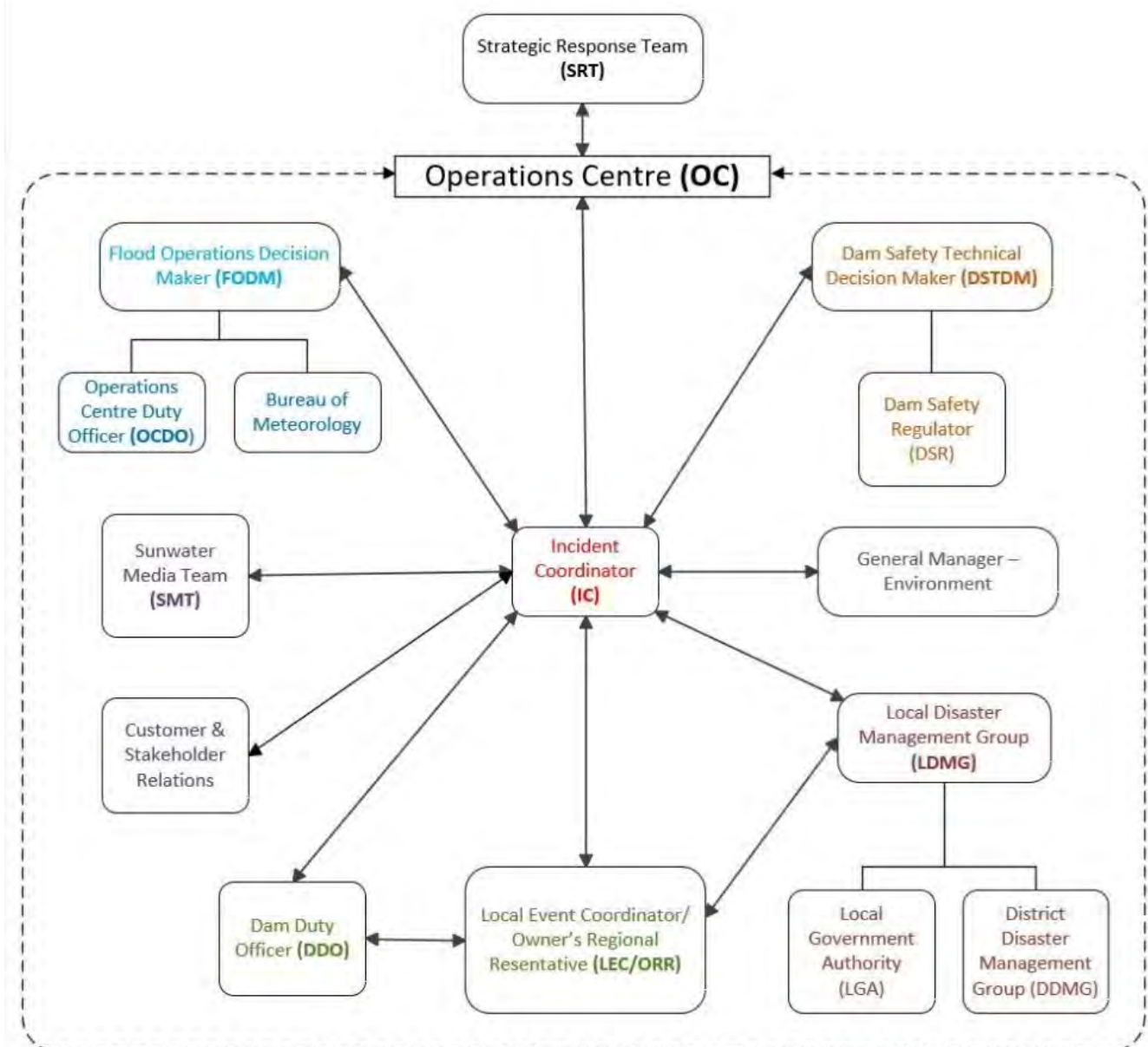
2.6 Fatigue Management Standard

Sunwater has a Fatigue Management Standard. This document recognises fatigue as an important workplace hazard and has identified and outlined control processes to mitigate the risk of fatigue impaired HSE incidents. A copy of Sunwater's Fatigue Management Standard can be provided upon request.

2.7 Dam hazard management within Sunwater

The Sunwater hazard management framework generally utilises the organisation's hierarchy and in-house experts as illustrated in Figure 1 below.

Figure 1: Sunwater emergency response organisation



2.8 Community information

Sunwater with the assistance of local councils will ensure community education around messaging and impacts of the EAP and its related events is undertaken and continually improved.

Sunwater currently provides information externally to customers, D/S residents and the community in a range of methods or channels in relation to dam hazards and emergency situations. Individuals can access information through Facebook, the Sunwater web page (sunwater.com.au), Sunwater Community App (sunwater.com.au/community/sunwater-app/) and at several regional show/field days across regional Queensland where Sunwater may have stalls and information available. This engagement provides the community with tools to assist in self-management during emergencies.

In the event of an activation of this EAP, immediate D/S residents will be notified via short message service system (SMS) in accordance with the actions listed in Table 8, Table 13, Table 17 and Table 21.

In the event of an emergency event or when otherwise required, Sunwater and the affected local government also have the use of the National Emergency Alert System to send a voice message and SMS. This service is provided by Telstra and managed by the SDCC. The process Sunwater follows is documented in Appendix A8.

A copy of all Sunwater approved EAPs are available to the public on the Sunwater website:

<https://www.sunwater.com.au/community/preparing-for-emergencies/emergency-management/>

These copies are redacted to protect people's personal information.

2.9 Lessons learnt

Sunwater carries out lessons learnt workshops as part of its post event management. These lessons learnt can result in changes to the EAP. These are captured and if applicable to this document are implemented at the earliest opportunity and are made available in the next EAP update to the regulator as part of Sunwater's continual improvement of its EAPs. The lessons learnt actions if relevant are provided to stakeholders, such as the LDMGs, DDMGs, other dam owners and the Department of Local Government, Water and Volunteers (DLGWV) as appropriate.

3. Dam details

3.1 General dam information

Location: The dam is located about 25 km west of Proserpine town.

Catchment: The catchment area is 270km².

Storage capacity: The storage capacity at FSL is 491,400 ML.

Construction: Peter Faust Dam is a zoned, earth and rock-fill embankment dam with a central clay core. It was built in 1990 on the Proserpine River at AMTD 57.7km.

The dam's spillway is located on the right abutment. The spillway and chute are fully concreted and has a flip bucket and plunge pool at the bottom of the spillway.

Specification: The table below lists general specifications of Peter Faust Dam.

Table 2: Peter Faust Dam specifications

Peter Faust Dam	
Latitude	−20.366094 N
Longitude	148.38323 E
Stream and AMTD	Proserpine River AMTD 57.7 km
Dam type	Zoned earth and rock fill embankment, rock faced on both the upstream and downstream faces
Full Supply Level (FSL)	EL 85.60 m AHD
Historical recorded maximum storage (March 2011)	EL 87.08 m AHD
Storage capacity at FSL	491,490 ML
Storage area at FSL	4325 ha
Catchment Area	270 km ²
Minimum Operation Level	EL 53.10 m AHD
Dead Storage	970 ML
Embankment crest length	534 m
Embankment crest width	10 m
Height of Dam (from lowest general foundation level)	51 m
Dam Crest Level (DCL)	EL 94.30 m AHD (nominal) EL 94.45 m AHD (actual) EL 94.45 m AHD (including camber) EL 94.23 m AHD (surveyed 2014)
Spillway type	Un-gated, reinforced concrete ogee crest spillway chute, flip bucket and pre-excavated plunge pool
Spillway crest level	EL 85.60 m AHD
Spillway design capacity (at DCL)	2201 m ³ /s at EL 94.45 m AHD (2022 CRA)
Spillway crest length	38.90 m
Outlet works	Inlet tower, diversion conduit, valve house and outlet structure
Main conduit details	200 m long, single barrel DIA 2400 mm RC/MSCL conduit

Peter Faust Dam	
Outlet Branch Lines	Two 1200 mm pipelines branching from the main conduit into the Valve House
Guard valves	Two DIA 1200 mm butterfly valves, one on each outlet pipe
Regulating valves	Two DIA 750 mm cone valves, one on each outlet pipe
Outlet Capacity	20 m ³ /s through both 750 mm cone valves 92 m ³ /s through diversion conduit at FSL

All levels are to Australian Height Datum (AHD).

3.2 Population at risk

The 2022 Comprehensive Risk Assessment (CRA 2022) (ref v) indicated the total PAR of Peter Faust Dam under Sunny Day Failure (SDF) is 3113 and the total PAR for the Flood Failure (PMF) is 4398. This classifies this storage as a 'Category 2' referable dam under the *Water Supply (Safety and Reliability) Act 2008* (the Act), (ref c) with a consequence category of 'Extreme' for both SDF and flood failure scenarios.

3.3 General Arrangement

The general arrangement drawings are in APPENDIX B.

3.4 Emergency inspections and monitoring

Peter Faust dam has been designed to conform to modern design standards, so that its failure is highly unlikely. To maintain the dam in a safe condition and detect any dam hazard, as soon as it begins to develop, or becomes apparent, the following is applicable to Peter Faust Dam.

3.4.1 Inspections

Emergency inspections are undertaken as outlined in the DDO hazard actions table in the sections below. Routine, Annual, Comprehensive and Special inspections are determined by the Dam Safety Management Program (DSMP) Procedure (Ref P) or as directed by the DSTDM.

4. Roles and responsibilities

Roles and responsibilities	Position holder
Owner (Sunwater) - Liaise with the Board and Minister - Activate Sunwater Strategic Response and Business Continuity Plans, if required - Ensure necessary resources are available to manage any dam hazard and emergency events - Maintain an up-to-date list of immediate D/S residents of Peter Faust Dam (Appendix A4). The downstream limit is indicated in the drawing in Appendix B2 by the zone labelled Limit of downstream notification area - At all times, aim to provide timely advice and support to the LDMGs in the affected local government areas and the DDMGs in the affected disaster districts - During a dam hazard event that occurs with little or no warning, undertake the following actions to ensure the community is informed as soon as possible: - notify the residents listed in the EAP via SMS - contact SDCC to request an EA as detailed in the EA request and threat detection polygon - Where a dam hazard event occurs with adequate time to warn D/S residents, notify the residents listed in the EAP via SMS (unless otherwise agreed with the LDMGs) - Record communications, notifications and observations as required	CEO EGM Operations EGM Engineering & Asset Management
Owner's Head Office Representative - Authorise the issuing of EAPs, SOPs and O&M Manuals and Amendments - Facilitate Dam Safety Training Courses for OS, DDO, LEC, OC and other staff as appropriate and ensure that all staff required to undertake Dam Safety work are trained and accredited - Ensure that risks identified in CRAs or other technical reports undertaken in relation to dam safety are included in the EAP - Ensure visual inspections and instrumentation monitoring frequencies conform to ANCOLD Guidelines - Ensure all Dam Safety work orders, work instructions and lesson learned outcomes are fully implemented. - Ensure requirements of the Dam Condition Schedule are met - Ensure the work instructions are correct and the Operating Logs, SOPs, Data Books, and EAPs are reviewed annually as per the Condition Schedule - Undertake and prepare the 5-yearly Comprehensive Inspection Reports with suitably qualified personnel within the time specified in the Condition Schedule and that work orders are created for recommendations and work is undertaken as required - Undertake Annual Inspections and prepare reports within the time frames specified in the Condition Schedule and that work orders are created for recommendations and work is undertaken as required - Review the Dam Safety Instrumentation Database and evaluate data to verify the structural integrity of the dams on a regular basis and maintain a spread sheet for verification for audit and quality control - Record communications, notifications and observations as required	Head of Dam Safety GM Asset Management
Owner's Regional Representative (ORR) - Liaise with the Storage Supervisor/Operator Maintainer - Arrange dam specific training and accreditation for relevant staff - Ensure competent, trained and accredited personnel operate the storages - Ensure necessary resources are available to manage any dam hazard and emergency event - Undertake the role of LEC as required - Ensure all work orders, work instructions and lesson learned outcomes are fully implemented. - Record communications, notifications and observations as required	GM North OS
Strategic Response Team (SRT) - Facilitate the assessment, escalation and notification and management of strategic response and recovery for a high or extreme risk, or impact, event - Initial and ongoing assessment of event status and requirements - Development, and revision of, strategic objectives based on requirements - Identifying, managing, and monitoring strategic risks - Monitor media and stakeholder/customer impacts - Managing/overseeing event communications including media, stakeholder, customer and internal communications - Record communications, notifications and observations as required	Various ELT members as per SRT roster

Roles and responsibilities	Position holder
Technical Advisor - Analyse the situation and provide expert technical advice - Discuss issue with peers and other technical experts and make sound decisions to mitigate the risk - Determine response to incidents and emerging issues - Record communications, notifications and observations as required	GM Environment
Dam Safety Technical Decision Maker (DSTDM) - Responsible for the decision to activate the EAP for dam safety hazards - Maintain current RPEQ accreditation - Analyse the situation and provide expert technical advice in relation to Dam Safety - Discuss dam hazard with peers and other technical experts and make sound decisions to mitigate the risk - Determine response to incidents and emerging issues - Issue warning on dam failure and advise on protective measures - Ensure the EAP is implemented appropriately and carry out the DSTDM role as required - Liaise with DSR as required - Record communications, notifications and observations as required	Various personnel as per OC roster
Flood Operations Decision Maker (FODM) - Responsible for the decision to activate the EAP for flood hazards - May pre-emptively activate the EAP in accordance with available hydrology forecast information in accordance with the OC Procedure - Maintain current RPEQ accreditation - Provide hydrological advice in relation to predicted and actual dam outflows including assessment of weather and flood warnings, and other related matters as identified in the OC Procedure (Sunwater internal document) - Ensure the EAP is implemented appropriately and carry out the FODM role as required - Record communications, notifications and observations as required	Various personnel as per OC roster
Operations Centre Duty Officer (OCDO) - Assist the FODM in identifying if a flood is imminent and record modes of operation as directed by the FODM - Extract data relative to the event from available sources - Assist the FODM by utilising this data in predictive flood models - Liaise with the FODM and IC to update current flood risk information - Record communications, notifications and observations as required	Various personnel as per OC roster
Sunwater Media Team (SMT) - Analyse sensitive issues, discuss with the Owner and issue media releases - Handle public and customer comments (including social media) and advise the Owner if necessary - Liaise with the IC and other Sunwater personnel to ensure timely and accurate information is provided to government agencies, Shareholding Ministers - Issue D/S resident AWS messages - Record communications, notifications and observations as required	Various personnel as per Media Team roster
Incident Coordinator (IC) - Maintain overall responsibility for the coordination of the EAP - Notify LDMG/s, or council/s if LDMG not at Emergency Warning level, of intent to use the Emergency Alert (EA) - Ensure the EAP is coordinated appropriately and carry out the IC role as required - Record communications, notifications and observations as required	Various personnel as per OC roster
Local Event Coordinator (LEC) - Should DSTDM or FODM be uncontactable, the Local Event Coordinator (LEC) is responsible for coordinating the EAP until such a time as the relevant decision maker can activate the EAP. - Liaise with the Local Disaster Coordinator or proxy - Coordinate the EAP, when necessary, including when the IC is not available or unable to be contacted - Ensure the EAP is implemented appropriately and carry out the LEC role as required - If the IC loses all communications during a dam hazard, then as a fail-safe position, the LEC may assume the duties and responsibilities of the IC - Record communications, notifications and observations as required	Various personnel as per LEC roster

Roles and responsibilities	Position holder
Dam Duty Officer (DDO) - Should the DSTDM, FODM or LEC be uncontactable, DDO is responsible for coordinating the EAP until such a time as the relevant decision maker can activate the EAP - Complete accreditation to operate and maintain relevant storage - Coordinate the EAP, when necessary, such as when both the IC and LEC are not available or are unable to be contacted - Ensure the EAP is implemented appropriately and carry out the DDO role as required - Take direction from the DSTDM and liaise with the IC as requested - Arrange immediate site inspection and make informed assessment of the situation - Escalate any issue not covered in the EAP or where actions are not clear - If the IC and LEC lose all communications during a dam hazard, then as a fail-safe position, the DDO may assume the duties and responsibilities of the IC - Record communications, notifications and observations as required	SOM SSO OM
Council Councils have legislated local government functions, as per Section 80 of the <i>Disaster Management Act 2003</i> (Qld). These include: - ensure it has a disaster response capability - approve its local disaster management plan - Ensure information about an event or a disaster in its area is promptly given to the DDC for the disaster district in which area it is situated - perform other functions given to the local government under the Act and as per Section 352HB of the Water Supply (Safety and Reliability) Act 2008 (Qld): - must assess (in consultation with its LDMG) the EAP for consistency with the Local Disaster Management Plan - is responsible for messaging to the community when LDMG is at Stand Up activation level	Whitsunday Regional Council Mackay Regional Council
Disaster Management Groups/Personnel - (In addition to requirements outlined in the <i>Disaster Management Act</i> (2003)). LDMG - As per IGEM review recommendation, work together with Sunwater and the councils to ensure community education around messaging and impacts of EAP related events is undertaken and continually improves - Work with the Council/s and Sunwater to ensure the EAP is regularly exercised - Identify and coordinate the use of resources and support services that may be required for an EAP event, noting that for safety events unique to the dam Sunwater will approach councils to initiate - During a dam hazard event, providing they are at Emergency Warning level, the LDMGs in the affected local government areas will take the lead role in notifying the broader community - Identify and provide advice to DDMG/s about support services required by the LDMG/S to manage an EAP event - Provide reports and make recommendations to the relevant DDMG about matters relating to EAP events	LDMG QPS DDMG SCTN Coordinator
QPS Work with dam owner and LDMG/S to ensure Emergency Alert polygons are prepared, stored and tested at the State Watch Desk	
DDMG May review the EAP for consistency with the District Disaster Management Plan	
Security and Counter Terrorism Network (SCTN) Identifies areas of concern during the preparation of disaster plans and provides advice during counter terrorism emergency events	
Dam Safety Regulator (DSR) - Liaise with relevant Minister on necessary actions. - Approve this document as required under legislation - Liaise with Chief Executive as required in administering (regulating) the Act (ref A)	DDS

5. Dam Hazard—flood operations

5.1 Overview

The emergency action described in this section (dam hazard—flood operations) relates to:

- a dam hazard where natural catchment inflows fill Peter Faust Dam to FSL EL 85.60 m AHD and the rate of inflow exceeds the capacity of the outlet works. The spillway will then discharge water downstream into the Proserpine River. These flood flows can create a dam hazard event. Inflows will also cause the storage to temporarily rise to above the FSL of the storage.
- Note:
 - the greater the rate of inflow, the higher the storage will rise.
 - the higher the storage level rises, the greater the loads on the dam structure.
 - although unlikely, the greater the loading, the higher the likelihood of a dam failure.
 - typically, the level of surveillance is increased during flood operations (refer tables in this section).

Table 3 provides the Bureau of Meteorology flood classification triggers for Peter Faust Dam, described as:

- As the rate of discharge increases, there will be an impact on low-level road crossings of the Proserpine River and other infrastructure in the river such as pump sites.
- When the storage height exceeds minor flood level (3.5 m over the spillway) EL 89.1 m AHD, low-lying areas next to water courses are inundated. Minor roads may be closed, and low-level bridges submerged. In urban areas, inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas, removal of stock and equipment may be required.
- When the storage height exceeds major flood level (8.0 m over the spillway) EL 93.6 m AHD, in addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.

Table 3: Flood classification triggers

	Flood classification level	Depth over spillway (m)	Storage elevation (m AHD)
Example of Flood Level Classification	Major	8.00	93.6
	Moderate	6.00	91.6
	Minor	3.50	89.1

Source: Bureau of Meteorology

The following table shows historical floods experienced at Peter Faust Dam.

Table 4: Historical floods experienced at Peter Faust Dam

Flood rank	Date	Peak height (EL)	Peak height (m over crest)
1	March 2011	87.08	1.48
2	December 2010	86.54	0.94
3	February 2011	86.31	0.71
4	March 2012	86.08	0.48
5	March 2013	85.64	0.04

5.2 Emergency actions

For the emergency action tables in this section, each activation level incorporates its own actions as well as those of all lower levels, except where any lower level actions have been superseded.

5.2.1 Activation triggers

Table 5: Flood emergency activation trigger summary

EAP Flood Activation Trigger	Trigger Summary	AWS
Alert	Storage at FSL EL 85.60 m AHD and rising	ADVICE
Lean Forward	Storage at EL 87.08 m AHD (flood of record—March 2011)	
Stand Up 1	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	WATCH AND ACT
Stand Up 2	- Storage above EL 94.23 m AHD (allowing for wave action), OR - As advised by the DSTDM	EMERGENCY
Stand Down	Storage at EL 85.70 m AHD and falling with no forecast increase in EL in the next five days	ADVICE

While this EAP is not activated until Peter Faust Dam reaches FSL EL 85.60 m AHD, Sunwater, Mackay and the Whitsunday Regional Councils and their respective LDMGs will work cooperatively and will endeavour to share intelligence of any rainfall event as and when either organisation becomes aware of a situation that could result in the activation of the EAP.

To ensure consistent community messaging, WRC and MRC higher level of emergency communications overrides the Sunwater AWS levels.

The Stand Up 1 trigger equates to a discharge of about 450 m³/s and rising which corresponds to a water level of 3.2 m over the spillway. If the reservoir continues to rise the bridge over Petters Creek located 4.2 km downstream of the dam will soon be inundated, cutting off access to the residents living on the southern side of Pioneer River between the dam and the bridge.

The activation of Stand Up 2 requires consideration of wave action. For example, if the gauge reading was forecast to reach 1 m below the dam crest level and the DDO reported 1 m high waves, Stand Up 2 will be triggered. Furthermore, the DSTDM may also trigger this activation if there are any dam safety concerns as the storage approaches dam crest level.

5.2.2 Emergency action roles

Table 6 to Table 10 specify emergency actions for the following roles:

- Dam Duty Officer (DDO)
- Local Event Coordinator (LEC)
- Incident Coordinator (IC)
- Dam Safety Technical Decision Maker (DSTDM)
- Flood Operations Decision Maker (FODM)

Table 6: Flood operations—DDO emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Storage at FSL EL 85.60 m AHD and rising	Storage at EL 87.08 m AHD (flood of record—March 2011)	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	- Storage above EL 94.23 m AHD (allowing for wave action), OR - As advised by the DSTDM	Storage at EL 85.70 m AHD and falling with no forecast increase in EL in the next five days
Actions	- Inspect the dam daily (or as instructed by the DSTDM) and photograph/video and record using the approved forms and send to IC & DSTDM. Attention should be given to: - visual inspection of flow patterns over spillway and dissipater for evidence of scouring including tailwater D/S - inspection of embankment for leaks, deformation, and erosion - obvious signs of seepage - Report any unusual readings or observations to the DSTDM and IC as soon as practical - Undertake site preparations (if not already complete) including but not limited to: - check fuel - check operations of sump pump - check communication systems (including back up radio, satellite, phones and internet) - Monitor catchment conditions - Record the Storage Level twice daily (or as instructed by the DSTDM) using gauge boards and confirm accuracy of gauging station - Record rainfall daily - Record all communication - Update Operating Log as per SOP 12	- As per previous activation level, AND - Inspect the dam six hourly (or as instructed by the DSTDM) and photograph/video and record using the approved forms and send to IC & DSTDM	As per previous activation level	- As per previous activation level, AND - If instructed by DSTDM remotely inspect the dam six hourly (or as instructed by the DSTDM) and photograph/video and record using the approved forms and send to IC & DSTDM	- Return to routine surveillance activities and frequencies - Inspect the dam and photograph any damage identified during the event - Forward ALL EER material to IC email as required - Update Operating Log as per SOP 12
Notifications	- IC - SO - LEC/ORR	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS	ADVICE		WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

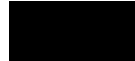


Table 7: Flood operations—LEC emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Storage at FSL EL 85.60 m AHD and rising	Storage at EL 87.08 m AHD (flood of record—March 2011)	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	- Storage above EL 94.23 m AHD (allowing for wave action), OR - As advised by the DSTDM	Storage at EL 85.70 m AHD and falling with no forecast increase in EL in the next five days
Actions	- Liaise with the DDO and IC regarding current situation with the dam - Phone Whitsunday Holiday Parks - Lake Proserpine to advise of the current situation - Phone LDMGs, DDMG and QPS to advise of current situation with the dam, its status, storage level, any known issues, road closures and to standby for further updates - Record all communication - Develop/implement staff roster NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with IC and agree communication responsibilities, if LDMG 1 is stood up - Ensure all abnormal observations or damage has been reported to DSTDM and IC	- As per previous activation level - Phone or attend meeting with LDMGs, DDMG and QPS to describe current situation and discuss the likelihood of reaching Stand Up 2 and the need to activate an EA	As per previous activation level	- Forward all EER material to IC email as required - Return to routine activities
Notifications	- IC - DDO - LDMG 1 - LDMG 2 - DDMG - QPS - Whitsunday Holiday Parks – Lake Proserpine	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS	ADVICE		WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

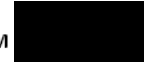


Table 8: Flood operations—IC emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Storage at FSL EL 85.60 m AHD and rising	Storage at EL 87.08 m AHD (flood of record—March 2011)	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	- Storage above EL 94.23 m AHD (allowing for wave action), OR - As advised by the DSTDM	Storage at EL 85.70 m AHD and falling with no forecast increase in EL in the next five days
Actions	- Obtain catchment conditions from the DDO - Send notifications to nominated parties in the notifications list below - Liaise with Sunwater Media on- call, FODM and/or DSTDM to send appropriate Advice flood message (refer to Annexe A for sample message) - Phone D/S residents without mobiles - Record all communication NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with LEC and agree communication responsibilities, if LDMG 1 is stood up - Ensure all abnormal observations or damage has been reported to DSTDM - When approaching EL 93.00 m AHD ensure staff are relocated to a safe location	- As per previous activation level, AND - Liaise with Sunwater Media on- call, FODM and/or DSTDM to send appropriate Watch & Act flood message (refer to Annex A for sample message) - Set up Teams meeting for pre- Stand Up 2: LDMGs, DDMG, QPS, SDCC, SRT, SMT, FODM, OCDO, DSTDM, or nominated representatives - Discuss potential major flood level forecast - Attend meeting, record decisions and associated actions - Prepare EA Request Form as instructed in Appendix A8 in consultation with LDMGs if time permits	- As per previous activation level, AND - Liaise with the DSTDM to confirm dam failure is in progress - Email Stand Up 1 meeting attendees, confirm dam failure in progress and agreed actions in progress - Liaise with Sunwater Media on- call, FODM and/or DSTDM to send appropriate Emergency message (refer Annexe A for sample message) - Issue EA Request Form and phone and email to SDCC	- Liaise with Sunwater Media on- call, FODM and/or DSTDM to send appropriate Advice message (refer to Annexe A for sample message) - Phone LDMG, DDMG and QPS and advise EAP has been deactivated - Compile EER and deliver to DSR if required - Return to routine activities
Notifications	- DDO - FODM - DSTDM - LEC/ORR - SMT - SRT - CEO - D/S residents	As per previous activation level	- As per previous activation level NOTE: To ensure consistent community messaging, WRC and MRC higher level of emergency communications overrides the Sunwater AWS levels.	- As per previous activation level, AND - SDCC	Inform all previously notified contacts of Stand Down
AWS	ADVICE		WATCH AND ACT	EMERGENCY	ADVICE

ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

Table 9: Flood operations—DSTDM emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Storage at FSL EL 85.60 m AHD and rising	Storage at EL 87.08 m AHD (flood of record—March 2011)	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	- Storage above EL 94.23 m AHD (allowing for wave action), OR - As advised by the DSTDM	Storage at EL 85.70 m AHD and falling with no forecast increase in EL in the next five days
Action	- Provide technical advice to DDO and IC as needed - Review surveillance reports and determine if any additional responses are required - Record all communication - Notify DSR of EAP activation	As per previous activation level	As per previous activation level	- As per previous activation level, AND - Instruct IC to issue EA to SDCC	- Forward all EER material to IC email as required - Return to routine activities
Notifications	- DDO - IC - DSR	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of stand down
AWS	ADVICE		WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 10: Flood operations—FODM emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Storage at FSL EL 85.60 m AHD and rising	Storage at EL 87.08 m AHD (flood of record—March 2011)	Storage at EL 88.8 m AHD and rising (inundation of bridge over Petters Creek possible)	- Storage above EL 94.23 m AHD (allowing for wave action), OR - As advised by the DSTDM	Storage at EL 85.70 m AHD and falling with no forecast increase in EL in the next five days
Action	- Provide technical advice to DDO, DSTDM and IC as needed - Confirm with IC that trigger conditions have been met and direct IC to coordinate the EAP activation - Inform IC of any EAP decisions - Review SDCC reports and determine if any additional responses are required - Undertake inflow assessment as per the OC Procedure and update as necessary - Update and issue Status Updates if required - Record all communication and decisions made	As per previous activation level	As per previous activation level	As per previous activation level	- Forward all EER material to IC email as required - Return to routine activities
Notifications	- IC - DDO	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of stand down
AWS	ADVICE		WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



6. Dam Hazard—piping: embankment, foundation, or abutments

6.1 Overview

The emergency action described in this section relates to a potential dam hazard due to a piping condition through the embankment (main dam or saddle dams), foundations, or dam abutment. An early indicator of a piping condition can be an increase in seepage or a new area of seepage. If the seepage water is cloudy or has become cloudy, this may indicate that material is being transported and a pipe is being established.

If a pipe is established and progresses, then a dam failure may result. If a potential pipe is detected early, remedial repairs maybe possible in the form of constructing a filter and weighting zone over the pipe exit if safe to do so.

The area likely to be affected by this dam is described as:

- If dam failure does not occur, then there will not be any area affected
- If dam failure does occur, then the maximum area affected area is the level shown on the maps in APPENDIX B3 - Drawing 6

Notes: Definitions for Concurrent Flooding and Downstream Releases are provided in Section 1.3

6.1.1 Assessment of circumstances that indicate an increase in the likelihood of piping

An increase in seepage or a new area of seepage could indicate an increase likelihood of piping. This circumstance is the trigger for the Alert status for piping.

Cloudy seepage water could indicate an increase likelihood of piping. This circumstance is the trigger for the Lean Forward status for piping.

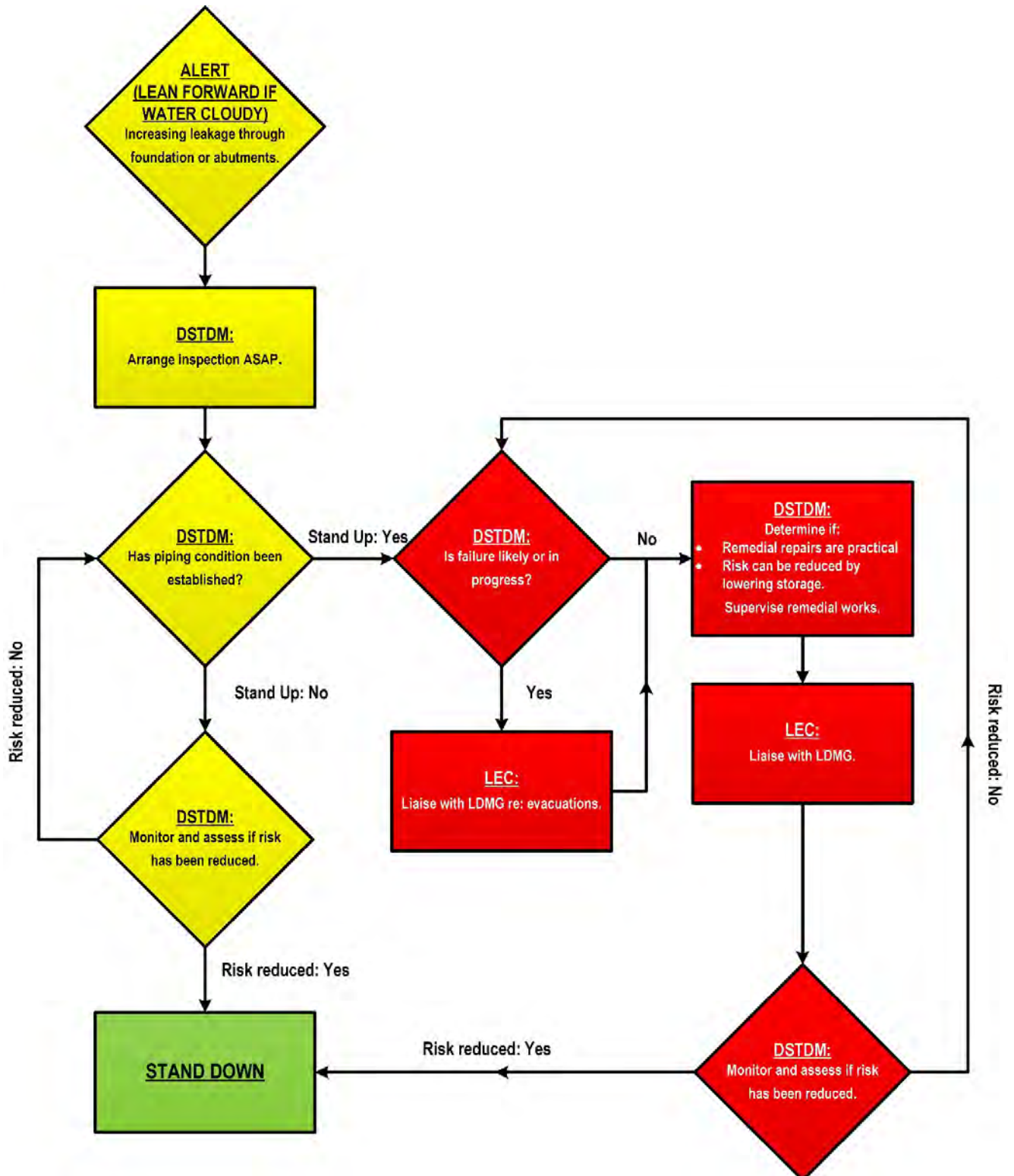
6.2 Emergency action roles

Table 11 to Table 14 specify emergency actions for the following roles:

Dam Duty Officer (DDO)

- Local Event Coordinator (LEC)
- Incident Coordinator (IC)
- Dam Safety Technical Decision Maker (DSTDM).

Figure 2: Piping: embankment, foundation, or abutments decisions flowchart



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Table 11: Piping: embankment, foundation, or abutments—DDO emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Increasing leakage through the embankment, the foundations, or abutments	Increasing leakage through the embankment, the foundations, or abutments with cloudy water	Piping condition has been established by DSTDM	- Failure in progress or likely due to piping, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that piping risk has reduced
Actions	- Monitor flows every six hours (or as otherwise instructed by the DSTDM) until a decreasing trend is observable, or as communicated by the IC - Photograph/video the piping from a safe point and record using the approved forms in HMT and send to IC and DSTDM - Update Operating Log as per SOP 12 - Record all communication	As per previous activation level	- As per previous activation level, AND - Support/supervise remedial works as required - Lower the storage, if directed - Close any affected roads (if not already closed by others) - Maintain surveillance of area immediately D/S of dam (if safe to do so) and move on any members of the public - Evacuate office and staff housing	- As per previous activation level, AND - Ensure remedial works cease and plant and personnel have been moved to a safe location - Vacate the immediate vicinity of the piping condition - Record/photograph the piping damage and/or dam failure from a safe point	- Inspect the dam for any damage and photograph any damage identified during the event - Forward all EER material to IC email as required - Update Operating Log as per SOP 12 - Return to routine activities
Notifications	- DSTDM - IC - SO - LEC/ORR	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



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Table 12: Piping: embankment, foundation, or abutments—LEC emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Increasing leakage through the embankment, the foundations, or abutments	Increasing leakage through the embankment, the foundations, or abutments with cloudy water	Piping condition has been established by DSTDM	- Failure in progress or likely due to piping, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that piping risk has reduced
Actions	- Liaise with the DDO and IC regarding current situation with the dam. - Phone LDMGs, DDMG and QPS to advise of current situation with the dam, its status, storage level, any known issues, road closures and to standby for further updates - Record all communication - Develop/implement staff roster NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with IC and agree communication responsibilities, if LDMG 1 is stood up	- As per previous activation level, AND - Phone Whitsunday Holiday Parks – Lake Proserpine to advise of the current situation - Phone or attend meeting with LDMGs, DDMG and QPS to advise of current situation with the dam as confirmed piping, current storage level, any known issues, discuss potential road/bridge closures and discuss the likelihood of reaching Stand Up 2 and the need to activate an EA	As per previous activation level	- Forward information for EER to IC email - Return to routine activities
Notifications	- DDO - IC - LDMG 1 - LDMG 2 - DDMG - QPS	As per previous activation level	- As per previous activation level, AND - Whitsunday Holiday Parks – Lake Proserpine	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Peter Faust — i9.0



Table 13: Piping: embankment, foundation, or abutments—IC emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Increasing leakage through the embankment, the foundations, or abutments	Increasing leakage through the embankment, the foundations, or abutments with cloudy water	Piping condition has been established by DSTDM	- Failure in progress or likely due to piping, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that piping risk has reduced
Actions	- Record all communication - Liaise with the DDO and DSTDM regarding current situation with the dam. - Send notifications to nominated parties in the notifications list below NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with LEC and agree communication responsibilities, if LDMG 1 is stood up - Investigate availability of machinery and materials (if insufficient stockpiles available) - Place machinery operators on standby if directed by DSTDM	- As per previous activation level, AND - Liaise with Sunwater Media on- call, LDMG/s and DSTDM to send appropriate Watch & Act dam failure message (refer to Annexe B for sample message) - Phone D/S residents without mobiles - Set up Teams meeting for pre- Stand Up 2: LDMGs, DDMG, QPS, SDCC, SRT, SMT, FODM, OCDO, DSTDM, or nominated representatives - Attend meeting, record decisions and associated actions - Mobilise resources to undertake remedial works if directed by DSTDM - Prepare EA Request Form as instructed in Appendix A8	- As per previous activation level, AND - Liaise with the DSTDM to confirm that dam failure is in progress - Confirm that remedial works have ceased if directed by the DSTDM and plant and personnel have been moved to a safe location - Liaise with Sunwater Media on- call, LDMGs, and DSTDM to send appropriate Emergency message (refer to Annexe B for sample message) - Phone D/S residents without mobiles - Issue EA Request Form and phone and email to SDCC as directed by the DSTDM	- Compile EER and deliver to DSR if required - Liaise with Sunwater Media on- call, LDMGs, and DSTDM to send appropriate Advice message (refer to Annexe B for sample message) - Phone LDMGs, DDMG and QPS and advise risk assessment has determined that piping risk has reduced, and EAP has been deactivated - Return to routine activities
Notifications	- DSTDM - DDO - LEC/ORR - SMT - SRT - CEO	As per previous activation level	- As per previous activation level, AND - D/S residents - SDCC	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



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Table 14: Piping: embankment, foundation, or abutments—DSTDM emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	Increasing leakage through the embankment, the foundations, or abutments	Increasing leakage through the embankment, the foundations or abutments with cloudy water	Piping condition has been established	- Failure in progress or likely due to piping, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that piping risk has reduced
Action	- Arrange an inspection of the dam to assess its condition as soon as possible, when safe to do so - Determine if piping condition has been established - Confirm with IC that trigger conditions have been met and direct IC to coordinate the EAP activation - Monitor situation and assess risks - Record all communication - Notify DSR of EAP activation	As per previous activation level	- As per previous activation level, AND - Assess risk and determine if failure likely or in progress - Determine if remedial repairs are practical - Determine if risks can be reduced by lowering storage - Supervise remedial repairs (if applicable). Supervise means provide technical oversight to the work. It does not necessarily mean on-site supervision. - Monitor situation and assess risks	- As per previous activation level, AND - Instruct the IC to issue the EA Request form - Liaise with the IC and advise on need to recommend evacuations	- Forward information for EER to IC email - Return to routine activities
Notifications	- DDO - IC - DSR	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of stand down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



7. Dam Hazard—earthquake

7.1 Overview

The emergency action described in this section relates to a potential dam hazard due to an earthquake causing damage to the dam embankment (main dam or saddle dams), foundations, dam abutment, or spillway. Damage could take the form of cracking or slumping of the embankment, deformation or land slip, or increased seepage.

A confirmed earthquake is defined as an earthquake alert received from Geoscience Australia that advises an earthquake has occurred with an intensity ≥ 3.0 MMI at the dam.

If damage does occur, then a dam failure may result. If damage is detected early, remedial repairs may be possible depending on the nature of the damage.

The area likely to be affected by this dam hazard is described as:

- If dam failure does not occur, then there will not be any area affected
- If dam failure does occur, then the maximum area affected area is the level shown by the SDF line on the maps in Appendix B5

Note: Definitions for *Concurrent Flooding* and *Downstream Releases* are provided in Section 1.3

7.2 Emergency action roles

Table 15 to Table 18 specify emergency actions for the following roles:

- Dam Duty Officer (DDO)
- Local Event Coordinator (LEC)
- Incident Coordinator (IC)
- Dam Safety Technical Decision Maker (DSTDM).

Figure 3: Earthquake decisions flowchart

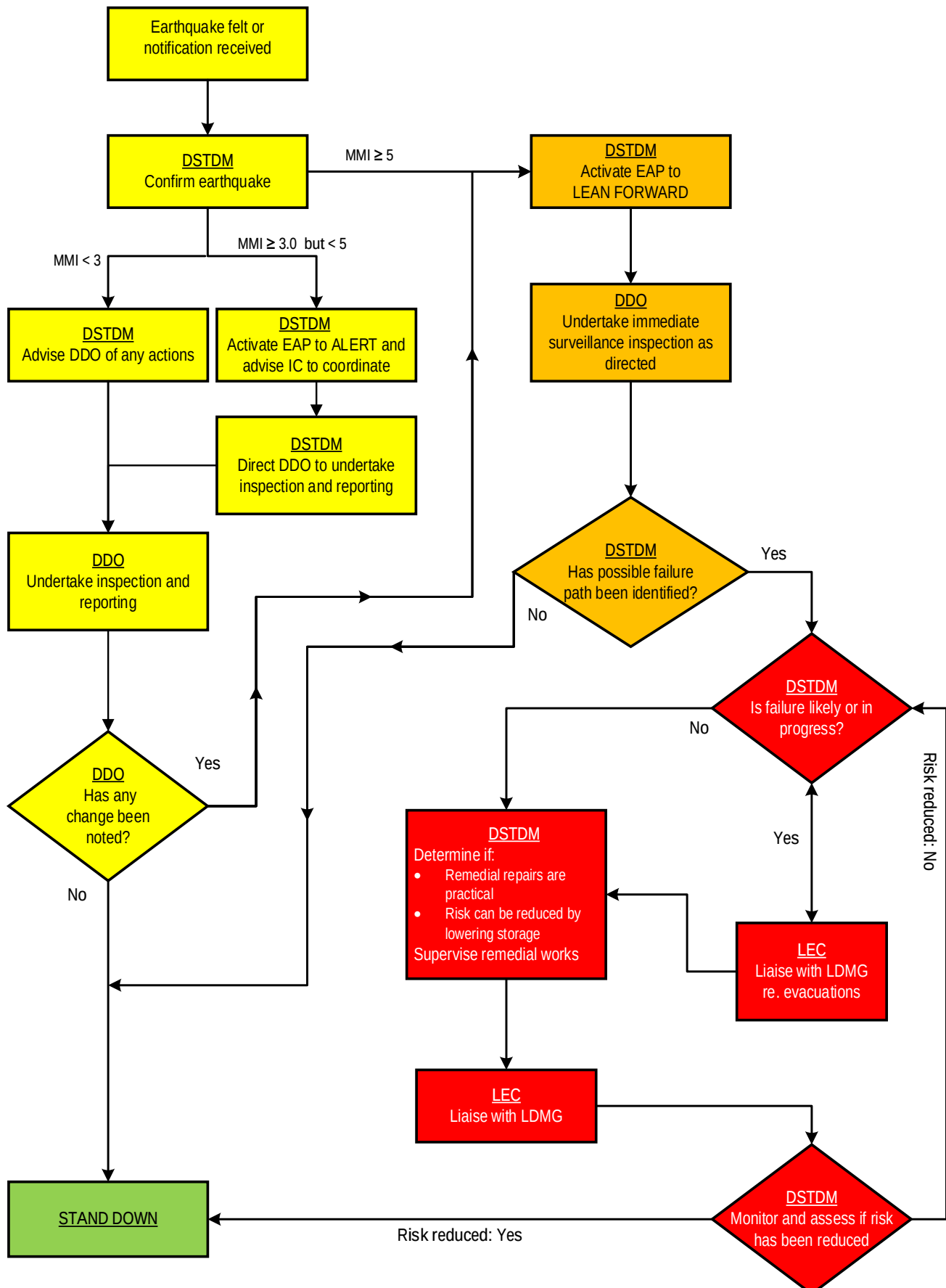


Table 15: Earthquake—DDO emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity less than 5 MMI	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity greater than or equal to 5 MMI, OR - Intensity less than 5 MMI and change detected during surveillance inspection	- Earthquake confirmed (by DSTDM) or felt in the area, AND - A possible failure path has been identified	- Failure in progress or likely due to earthquake, AND - Sufficient water in storage to create a dam hazard	Risk assessment has been determined the earthquake risk has reduced
Actions	- If an earthquake is felt in the area, the DDO is to contact the DSTDM as soon as reasonably practicable - If an earthquake is confirmed by the DSTDM, the DSTDM will direct the DDO to carry out inspection of the dam and associated structures - A record of all inspections, including photographs, videos and condition reports (using the approved forms) is to be sent to DSTDM for review as soon as reasonably practical - The condition report must include, at a minimum, records of instrumentation readings, leaks, deformation, erosion, structural damage and any observed uncontrolled releases - The DDO is to update Operating Log as per SOP 12 - Record all communication	- As per previous activation level, AND - Repeat the inspection as directed by the DSTDM	- As per previous activation level, AND - Support/supervise remedial work as directed by the DSTDM - Lower the storage if directed by the DSTDM - Liaise with IC regarding potential road closure - Maintain surveillance of area immediately D/S of dam (if safe to do so) and move on any members of the public - Vacate the immediate vicinity of the embankment	- As per previous activation level, AND - Ensure remedial works cease and plant and personnel have been moved to a safe location - Record/photograph the earthquake damage and/or dam failure from a safe point	- Inspect the dam for any damage and photograph any damage identified during the event as directed by the DSTDM - Forward all EER material to IC email as required - The DDO is to update Operating Log as per SOP 12 - Return to routine activities
Notifications	- DSTDM - IC - LEC/ORR	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 16: Earthquake—LEC emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity less than 5 MMI	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity greater than or equal to 5 MMI, OR - Intensity less than 5 MMI and change detected during surveillance inspection	- Earthquake confirmed (by DSTDM) or felt in the area, AND - A possible failure path has been identified	- Failure in progress or likely due to earthquake, AND - Sufficient water in storage to create a dam hazard	Risk assessment has been determined the earthquake risk has reduced
Actions	- Phone LDMGs, DDMG and QPS to advise of current situation with the dam, its status, storage level, any known issues, road closures and to standby for further updates - Record all communication NOTE: IC to do all LEC external notification until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with IC and agree communication responsibilities, if LDMG 1 is stood up	- As per previous activation level, AND - Phone Whitsunday Holiday Parks – Lake Proserpine to advise of the current situation - Phone or attend meeting with LDMGs, DDMG and QPS to advise possible earthquake damage to dam, current storage level, any known issues, discuss any potential road/bridge closures and discuss the likelihood of reaching Stand Up 2 and the need to activate an EA	As per previous activation level	- Forward all EER material to IC email as required - The LEC is to return to routine activities
Notifications	- DDO - IC - LDMG 1 - LDMG 2 - DDMG - QPS	As per previous activation level	- As per previous activation level, AND - Whitsunday Holiday Parks – Lake Proserpine	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 17: Earthquake—IC emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity less than 5 MMI	- Earthquake confirmed (by DSTDM) or felt in the area, AND - Intensity greater than or equal to 5 MMI, OR - Intensity less than 5 MMI and change detected during surveillance inspection	- Earthquake confirmed (by DSTDM) or felt in the area, AND - A possible failure path has been identified	- Failure in progress or likely due to earthquake, AND - Sufficient water in storage to create a dam hazard	Risk assessment has been determined the earthquake risk has reduced
Actions	- When advised by the DSTDM that an earthquake has occurred with an intensity of ≥ 3.0 MMI at the dam, the IC is to coordinate the EAP to ALERT - Send notifications to nominated parties in the notifications list below - Advise the DSTDM when all notifications have been sent - Record all communications NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with LEC and agree communication responsibilities, if LDMG 1 is stood up - Investigate availability of machinery and materials (if insufficient stockpiles available) - Place the machinery operators on standby if directed to do so by the DSTDM	- As per previous activation level, AND - Liaise with Sunwater Media on-call, LDMGs, and DSTDM to send appropriate Watch & Act dam failure message (refer to Annexe B for sample message) - Phone D/S residents without mobiles - Coordinate resources to undertake remedial works if directed by the DSTDM - Set up Teams meeting for pre- Stand Up 2: LDMGs, DDMG, QPS, SDCC, SRT, SMT, FODM, OCDO, DSTDM, or nominated representatives - Attend meeting, record decisions and associated actions - Prepare EA Request Form as instructed in Appendix A8 - Mobilise resources to undertake remedial works if directed by DSTDM	- As per previous activation level, AND - Liaise with the DSTDM who is to confirm that a failure of the dam is in progress - Confirm that any remedial works have ceased if directed to do so by the DSTDM and the plant and personnel have been moved to a safe location - Liaise with Sunwater Media on-call, LDMGs and DSTDM to send appropriate Emergency message (refer to Annexe B for sample message) - Phone D/S residents without mobiles - Issue EA Request Form and phone and email to SDCC as directed by the DSTDM	- Liaise with Sunwater Media on-call, LDMGs and DSTDM to send appropriate Advice message (refer to Annexe B for sample message) - Phone LDMG, DDMG and QPS and advise EAP has been deactivated - Complete all internal and external notifications - Compile EER and deliver to DSR if required
Internal notifications	- DDO - DSTDM - SMT - SRT - CEO	As per previous activation level	- As per previous activation level, AND - SDCC - Head of Resilience - D/S residents	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 18: Earthquake—DSTD emergency action

Activation level	Alert	Lean Forward	Stand Up 1	Stand Up 2	Stand Down
Activation trigger	- Earthquake confirmed (by DSTD) or felt in the area, AND - Intensity less than 5 MMI	- Earthquake confirmed (by DSTD) or felt in the area, AND - Intensity greater than or equal to 5 MMI, OR - Intensity less than 5 MMI and change detected during surveillance inspection	- Earthquake confirmed (by DSTD) or felt in the area, AND - A possible failure path has been identified	- Failure in progress or likely due to earthquake, AND - Sufficient water in storage to create a dam hazard	Risk assessment has been determined that failure risk has reduced
Action	- If an earthquake is confirmed, the DSTD is to confirm with the IC that trigger conditions have been met and direct the IC to coordinate the EAP activation - If an earthquake is confirmed, the DSTD will direct the DDO to carry out inspections of the dam and associated structures - Notify the DSR of the EAP activation level - Monitor situation at the dam and associated structures and continue to assess the risks - Record all communications	- As per previous activation level, AND - Review all surveillance inspections undertaken at the dam and assess its condition as soon as possible - Determine if there are possible failure paths from reported damage	- As per previous activation level, AND - Arrange an inspection of the dam and the associated structures and assess the condition as soon as possible, when safe to do so - Assess risk and determine if failure likely or in progress - Determine if remedial repairs are practical - Determine if risks can be reduced by lowering storage (if the storage is required to be drawn down, then the DSTD needs to assess the maximum rate of drawdown based on the latest available data and provide the necessary advice in writing to IC and DDO) - Provide technical support and oversight of any remedial repairs (if applicable)	- As per previous activation level, AND - Instruct the IC to Complete EA Request Form	- Forward all EER material to IC email as required - Return to routine activities
Notifications	- DDO - IC - DSR	As per previous activation level	As per previous activation level	As per previous activation level	Inform all previously notified contacts of stand down
AWS			WATCH AND ACT	EMERGENCY	ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTD
FODM



8. Dam Hazard—terrorist threat/activity or high energy impact

8.1 Overview

The emergency action described in this section relates to a potential dam hazard due to a terrorist threat or activity or a high energy impact on the dam such as a plane crash or meteorite.

The vulnerability of Peter Faust Dam to a terrorist attack is low.

The area likely to be affected by this dam hazard is described as:

- if dam failure does not occur, then there will not be any area affected
- if dam failure does occur, then the maximum area affected area is the level shown by the SDF line on the maps in Appendix B3

Notes: Definitions for Concurrent Flooding and Downstream Releases are provided in Section 1.3

8.1.1 Assessment of circumstances that indicate an increase in the likelihood of terrorist activity or high energy impact

Advice from authorities of a specific risk to water infrastructure is a circumstance that could indicate increased likelihood a terrorist threat. If this were specific enough to name a dam, this circumstance would trigger Emergency Warning activation level.

8.2 Emergency action roles

Table 19 to Table 22 specify emergency actions for the following roles:

- Dam Duty Officer (DDO)
- Local Event Coordinator (LEC)
- Incident Coordinator (IC)
- Dam Safety Technical Decision Maker (DSTDM).

Figure 4: Terrorist threat/activity or high energy impact decisions flowchart

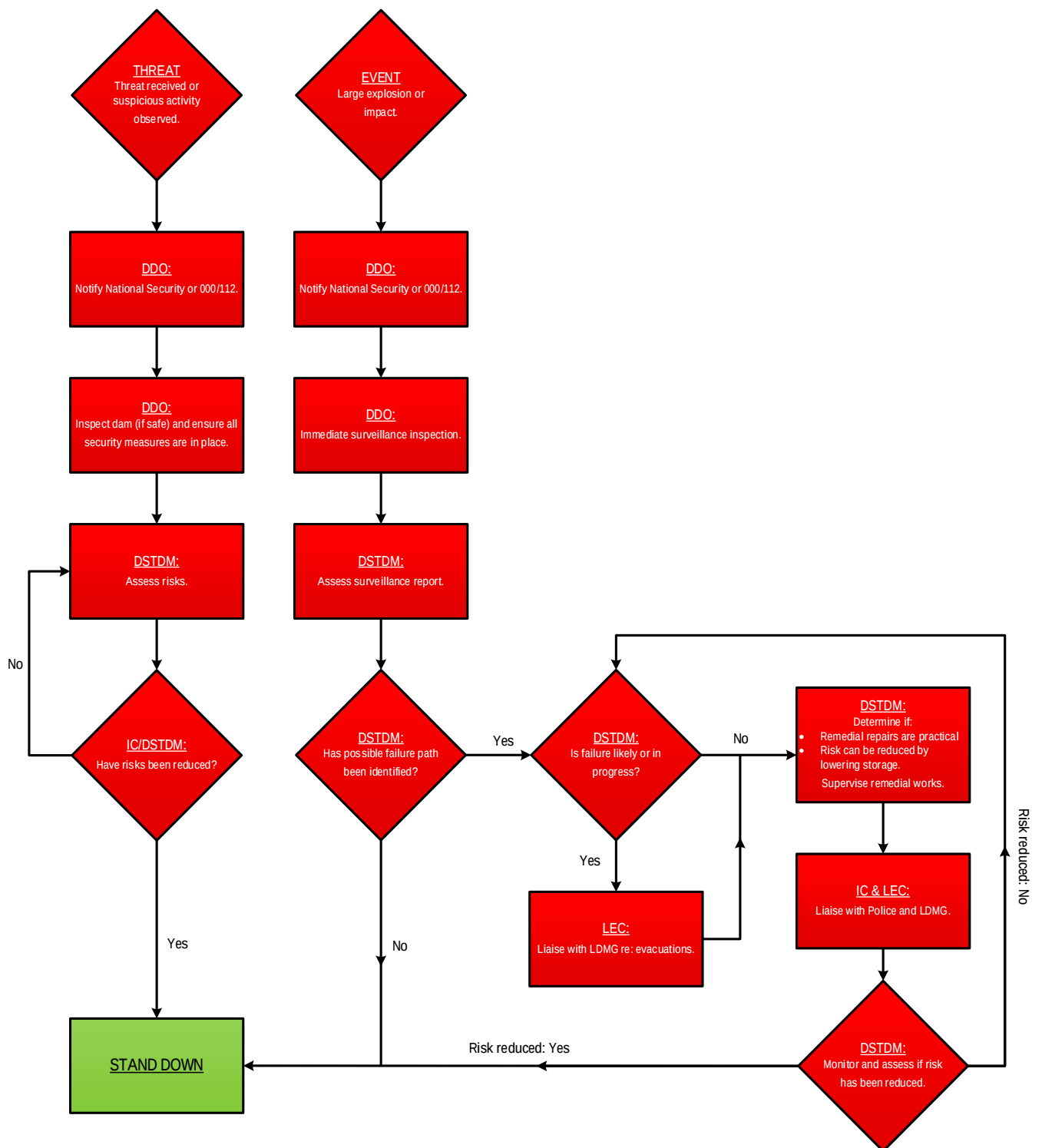


Table 19: Terrorist threat/activity or high energy impact—DDO emergency action

Activation level	Alert/Lean Forward	Stand Up 1	Stand Up 2	Stand Up 3	Stand Down
Activation trigger	Not applicable	THREAT - Possible terrorist activity/suspicious behaviour noticed at the dam, OR - Threat received	EVENT Large Explosion heard/observed at dam (e.g. bomb explosion, aircraft hit)	RESPONSE - Failure in progress or likely due to impact or explosion, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that failure risk has reduced
Actions	Not applicable	In an emergency call 000. - Record all communication - If any suspicious behaviour noticed, contact DSTDM for advice. If instructed by DSTDM, or if threat received, complete the following: - Inspect dam (if safe) and ensure all security measures in place (locked gates, etc.) - Photograph/video suspicious items from a safe point and record using approved forms and send to IC & DSTDM - If Police appoint Incident Manager, support and follow instructions - Close any affected roads as directed and move on any members of the public. - Update Operating Log as per SOP 12	- As per previous activation level, AND - Undertake surveillance inspect dam (if safe) - Vacate the immediate vicinity of the affected area	- As per previous activation level, AND - Lower reservoir level, if directed	- Forward all EER material to IC email as required - Update Operating Log as per SOP 12 - Return to routine activities
Notifications	Not applicable	#000 Emergency - DSTDM - IC - LEC/ORR - SO	As per previous activation level	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			EMERGENCY		ADVICE

 **ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO**
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

Table 20: Terrorist threat/activity or high energy impact—LEC emergency action

Activation level	Alert/Lean Forward	Stand Up 1	Stand Up 2	Stand Up 3	Stand Down
Activation trigger	Not applicable	THREAT - Possible terrorist activity/suspicious behaviour noticed at the dam, OR - Threat received	EVENT Large explosion heard/observed at dam (e.g. bomb explosion, aircraft hit)	RESPONSE - Failure in progress or likely due to impact or explosion, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that failure risk has reduced
Actions	Not applicable	- If Police appoint Incident Manager support and follow instructions - Monitor situation and assess risks - Phone LDMGs, DDMG, QPS, CTG and describe the situation: - What is the event? (dam safety risk, security threat, impact, explosion, etc.) - What is the status? (Received/noted terrorist threat) - Discuss any potential road/bridge closures - LDMGs to activate LDMP - Record all communication NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with DDO, IC, and LDMGs regarding potential for evacuations	As per previous activation level	- Forward all EER material to IC email as required - Return to routine activities
Internal notifications	Not applicable	- DDO - IC - LDMG 1 - LDMG 2 - DDMG	As per previous activation level	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			EMERGENCY		ADVICE



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 21: Terrorist threat/activity or high energy impact—IC emergency action

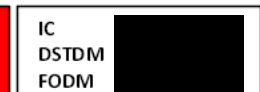
Activation level	Alert/Lean Forward	Stand Up 1	Stand Up 2	Stand Up 3	Stand Down
Activation trigger	Not applicable	THREAT - Possible terrorist activity/suspicious behaviour noticed at the dam, OR - Threat received	EVENT Large explosion heard/observed at dam (e.g. bomb explosion, aircraft hit)	RESPONSE - Failure in progress or likely due to impact or explosion, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that failure risk has reduced
Actions	Not applicable	- Record all communication - Send notifications to nominated parties in the notifications list below - If Police appoint Incident Manager support and follow instructions - Contact National Security - Prepare EA Request Form as instructed in Appendix A8 NOTE: IC to do all LEC external notifications until LDMG 1 is stood up	- As per previous activation level, AND - Liaise with Sunwater Media on- call, LDMGs and DSTDM to send appropriate Emergency dam failure message (refer to Annexe B for sample message) - Phone downstream residents without mobiles - Issue EA Request Form and phone and email to SDCC as directed by the DSTDM - Mobilise resources to undertake remedial works if directed by DSTDM	- As per previous activation level, AND - Liaise with the DSTDM to confirm that dam failure is in progress	- Compile EER and deliver to DSR if required - Liaise with Sunwater Media on- call, LDMGs and DSTDM to send appropriate Advice dam failure message (refer to Annexe B for sample message) - Phone LDMG, DDMG and QPS and advise EAP has been deactivated - Return to routine activities
Notifications	Not applicable	- DDO - DSTDM - LEC/ ORR - SMT - SRT - Head of Resilience - CTG - QPS - CEO	- As per previous activation level, AND - D/S residents - SDCC	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			EMERGENCY		ADVICE

 **ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO**
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

Table 22: Terrorist threat/activity or high energy impact—DSTDM emergency action

Activation level	Alert/Lean Forward	Stand Up 1	Stand Up 2	Stand Up 3	Stand Down
Activation trigger	Not applicable	THREAT - Possible terrorist activity/suspicious behaviour noticed at the dam, OR - Threat received	EVENT Large explosion heard/observed at dam (e.g. bomb explosion, aircraft hit)	RESPONSE - Failure in progress or likely due to impact or explosion, AND - Sufficient water in storage to create a dam hazard	Risk assessment has determined that failure risk has reduced
Action	Not applicable	- Record all communication - Assess risks - Confirm with IC that trigger conditions have been met and direct IC to coordinate the EAP activation - Notify DSR of EAP activation	- As per previous activation level, AND - Arrange an inspection of the dam and assess its condition as soon as possible, when safe to do so - Assess risk and determine if failure likely or in progress - Determine if remedial repairs are practical - Determine if risks can be reduced by lowering storage (if the storage is required to be drawn down, then the DSTDM needs to assess the maximum rate of draw down based on latest available data and advise in writing to IC and DDO) - Supervise remedial repairs (if applicable). Supervise means provide technical oversight to the work. It does not necessarily mean on-site supervision. - Monitor situation (including instrumentation data if available) and assess risks - Instruct the IC to Complete EA Request Form	As per previous activation level	- Forward all EER material to IC email as required - Return to routine activities
Notifications	Not applicable	- IC - DDO - SRT - DSR	- As per previous activation level, AND - LEC/ORR	As per previous activation level	Inform all previously notified contacts of Stand Down
AWS			EMERGENCY		ADVICE



9. Other emergency situation—communications failure

9.1 Overview

The emergency action described in this section (Other Emergency Situation—Communications Failure) relates to either:

- an emergency situation where all means of communication at the dam site have been lost.
- an emergency situation where all means of communication with the local area have been lost.
- an emergency situation where all means of communication with Brisbane site have been lost.

This section specifies actions and provides guidance for the three situations.

9.2 Emergency actions

Due to the large number of different possible scenarios, the table below only covers the most common or likely conditions.

9.2.1 Activation triggers

Table 23: Communications failure emergency activation trigger summary

Communications failure – dam site	• Unable to communicate to or from dam site (usually affects DDO)
Communications failure – local area	• Unable to communicate to or from local area (likely to affect LEC/ORR)
Communications failure – Brisbane	• Unable to communicate to or from Sunwater Brisbane (could affect DSTDM or FODM & will affect IC)

9.2.2 Assessment of circumstances that indicate the likelihood of communications failure escalating the activation level of a current Dam Hazard

The Operations Centre Duty Officer (OCDO) will assess the weather and flood warnings on a daily basis in accordance with the OC Guideline. The OCDO will escalate to the FODM any warnings that have the potential to cause a significant communications failure.

The on-call IC will escalate to the FODM any local intelligence on conditions that could increase the probability of a significant communications failure.

The FODM will determine whether it is reasonably likely that there will be a significant communications failure within the subsequent 24 hours and assess the likely effect on current dam hazards. If required, the FODM will instruct the IC to escalate the activation level of any current dam hazards.

9.2.3 Emergency action roles

Table 24 to Table 28 specify emergency actions for the following roles:

- Dam Duty Officer (DDO)
- Local Event Coordinator (LEC)
- Incident Coordinator (IC)
- Dam Safety Technical Decision Maker (DSTDM)
- Flood Operations Decision Maker (FODM)

Table 24: Communications failure—DDO emergency action

Activation level	Communications failure – local area	Communications failure – Brisbane
Activation trigger	Unable to communicate to local area including LEC or ORR	Unable to communicate to Sunwater Brisbane including IC or DSTDM or FODM
Actions	- As much as practicable, assume the role of LEC - Continue tasks in accordance with any other current Emergency Action - Every hour attempt communications noting the following: - Mobile phone - try texting instead of voice, much higher probability of success - Satellite phone - needs to access open sky unless external antenna fitted - Social media - e.g. Facebook - Record all communication and attempts via Operating Log entries as per SOP 12 and communications log if EAP event is current	- Determine if LEC is in communication and if not, assume the LEC role as much as is practicable - Continue tasks in accordance with any other current Emergency Action - Every hour, attempt communications noting the following: - Mobile phone - try texting instead of voice, much higher probability of success - Satellite phone - needs to access open sky unless external antenna fitted - Social media - e.g. Facebook - Record all communication and attempts via Operating Lo entries as per SOP 12 and communications log if EAP event is current
Notifications	- IC - SO	- LEC/ORR - SO



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 25: Communications failure—LEC emergency action

Activation level	Communications failure – dam site	Communications failure – Brisbane
Activation trigger	Unable to communicate to Dam Site	Unable to communicate to Sunwater Brisbane including IC or DSTDM or FODM
Actions	- Every hour, attempt communications noting the following: - Mobile phone - try texting instead of voice, much higher probability of success - Satellite phone - needs to access open sky unless external antenna fitted - Social media – e.g. Facebook - Record all communication and attempts - Describe current situation with dam communications and estimated time to restore communications, if known - Assume that the DDO is carrying out LEC role at site as much as practicable - As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action	- Every hour, attempt communications noting the following: - Mobile phone - try texting instead of voice, much higher probability of success - Satellite phone - needs to access open sky unless external antenna fitted - Social media - e.g. Facebook - Record all communication and attempts - Describe current situation with dam communications and estimated time to restore communications, if known - Liaise with the DDO and assume IC role - As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action
Notifications	- IC - DSTDM - FODM - SO - LDMG 1 - LDMG 2 - DDMG - QPS	- DDO - DSTDM - FODM - SO - LDMG 1 - LDMG 2 - DDMG - QPS



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



Table 26: Communications failure—IC emergency action

Activation level	Communications failure – dam site	Communications failure – local area
Activation trigger	• Unable to communicate to Dam Site	• Unable to communicate to local area including LEC and ORR
Actions	• Every hour, attempt communications noting the following: ○ Mobile phone - try texting instead of voice, much higher probability of success ○ Satellite phone - needs to access open sky unless external antenna fitted ○ Social media - e.g. Facebook • Record all communication and attempts • Describe current situation with dam communications and estimated time to restore communications, if known • As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action	• Every hour, attempt communications noting the following: ○ Mobile phone - try texting instead of voice, much higher probability of success ○ Satellite phone - needs to access open sky unless external antenna fitted ○ Social media - e.g. Facebook • Record all communication and attempts • Liaise with the DDO and carry out functions of the LEC as much as practicable • As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action
Notifications	• LEC/ORR • DSTDM • FODM • SO • LDMG 1 • LDMG 2 • DDMG • QPS	• DDO • DSTDM • FODM • SO • LDMG 1 • LDMG 2 • DDMG • QPS



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

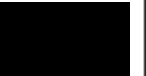


Table 27: Communications failure—DSTDM emergency action

Activation level	Communications failure – dam site	Communications failure – local area
Activation trigger	Unable to communicate to Dam Site	Unable to communicate to local area including LEC and ORR
Actions	- Provide technical advice to IC/LEC as needed - Record all communication - As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action	- Provide technical advice to IC as needed - Record all communication - Assume that the DDO is assisting IC with LEC role - As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action
Notifications	- IC - LEC/ORR - CEO - DSR	- IC - DDO - CEO - DSR



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM

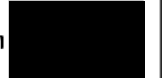


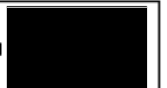
Table 28: Communications failure—FODM emergency action

Activation level	Communications failure – dam site	Communications failure – local area
Activation trigger	• Unable to communicate to Dam Site	• Unable to communicate to local area including LEC and ORR
Actions	• Record all communication • As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action	• Record all communication • Assume that the DDO is assisting IC with LEC role • As much as is practicable, continue other tasks associated with the role in accordance with any other current Emergency Action
Internal notifications	• IC • LEC/ORR • DSTDM	• IC • DDO • DSTDM



ALL ACTION MUST BE TAKEN WHEN IT IS SAFE TO DO SO
e.g. taking photographs/video, dam inspections, instrument readings

IC
DSTDM
FODM



APPENDIX A NOTIFICATION AND COMMUNICATION LISTS

- A1 Sunwater regional notification list
- A2 Sunwater Brisbane notification list
- A3 External notification list
- A4 D/S resident notification list
- A5 D/S irrigators notification list
- A6 Other reference contacts
- A7 Emergency alert polygon
- A8 Dam failure emergency alert request

APPENDIX A1. SUNWATER REGIONAL NOTIFICATION LIST

Notification group	Name	Phone business	Phone mobile	Email
DDO/SO	Storage Operator 1			
	Operations Coordinator			
	Satellite phone			
LEC/ORR	Operations Manager — Burdekin, Whitsunday (Clare Office) 2			
	General Manager — North (Clare Office) 3			

NOTE: Controlled EAP copy holders shown numbered (e.g. **2**) and shaded grey.

APPENDIX A2. SUNWATER BRISBANE NOTIFICATION LIST

Notification group	Name		Phone	Email
IC	Incident Coordinator		[REDACTED]	[REDACTED]
DSTDM	Dam Safety Technical Decision Maker		[REDACTED]	[REDACTED]
FODM	Flood Operations Decision Maker		[REDACTED]	[REDACTED]
OC	Sunwater Operations Centre (24/7)	4	[REDACTED] [REDACTED]	N/A
SMT	Sunwater Media Team		[REDACTED]	[REDACTED]
SRT	Strategic Response Team		[REDACTED]	[REDACTED]
SCADA	SCADA On-Call		[REDACTED] (Option 2)	[REDACTED]
24-Hour Sunwater contact line			[REDACTED]	[REDACTED]
Emergency Action Plan enquiries			N/A	[REDACTED]
Name/title		Mobile	Phone	Email
[REDACTED] – Acting CEO		[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]—EGMO		[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]—EGM E&AM		[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]—General Manager, Environment		[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED] – Head of Resilience		[REDACTED]	[REDACTED]	[REDACTED]

APPENDIX A3. EXTERNAL NOTIFICATION LIST

The contacts and information listed in the table below are accurate as at 16 February 2026. Sunwater maintains a dynamic register of external contacts to account for personnel changes in the roles identified. When undertaking notification actions, the on-duty IC will refer to the dynamic register to ensure the correct contact is notified.

Notification group	Contact order	Name	Phone business	Phone mobile	Phone A/H	Email/ address
LDMG 1 (Whitsunday Regional Council)	1	Disaster Management Coordinator and Local Recovery Coordinator			(24 hrs)	(Electronic copy only)
	2	Local Disaster Coordinator and Director Infrastructure			(24 hrs)	
	3	CEO			(24 hrs)	
LDMG 2 (Mackay Regional Council)	1	Local Disaster Coordinator Director – Infrastructure and Operations				(Electronic copy only)
	2	Deputy Local Disaster Coordinator Executive Officer				
	3	Deputy Local Disaster Coordinator Director Corporate Services				
	4	Emergency Management Coordinator				
	5	Chair Mayor – Mackay Regional Council				
DDMG (Mackay)	1	Executive Officer (XO)				(Electronic copy only)
	2	District Disaster Coordinator				
		Deputy District Disaster Coordinator				

Notification group	Contact order	Name	Phone business	Phone mobile	Phone A/H	Email/ address
QPS	N/A	Police Communications Centre (Mackay Police)	██████████ (24-hours)			(Electronic copy only) ██
	N/A	██████████ Officer in Charge – Proserpine Police	██████████	██████████	██████████ (24-hours)	(Electronic copy only) ████████████████████
Triple Zero	N/A	Note: For emergencies (time critical) this should be the first number called in all instances.	000	N/A	000	N/A
EMC	1	██████████ Emergency Management Coordinator		██████████		████████████████████
SDCC	1	24/7 Watch Desk	██████████	██████████	██████████	████████████████████
CTG	1	National Security Hotline	1800 123 400	N/A	1800 123 400	N/A
	2	██████████ Central Region SCTN Operations Leader Security and Counter-Terrorism Command Queensland Police	██████████	██████████	██████████	████████████████████
DSR	1	DLGWV Incident Hotline	1300 596 709 (24-hours)			
	2	██████████ Regulation and Operational Support Dam Safety Department of Local Government, Water & Volunteers		██████████	██████████	████████████████████ ████████████████████ ████████████████████
BUREAU OF METEOROLOGY		Senior Flood Forecaster	██████████			████████████████████ ████████████████████
Whitsunday Holiday Park		████████████████████ Owner/ Manager	██████████		██████████	████████████████████

APPENDIX A4. D/S RESIDENTS' NOTIFICATION LIST IN ORDER OF NOTIFICATION

Number	Lot and Plan	Address	Suburb	Postcode	Council
1.			Lake Proserpine	4800	Whitsunday Regional Council
2.			Lake Proserpine	4800	Whitsunday Regional Council
3.			Lake Proserpine	4800	Whitsunday Regional Council
4.			Crystal Brook	4800	Whitsunday Regional Council
5.			Mount Pluto	4800	Whitsunday Regional Council
6.			Lake Proserpine	4800	Whitsunday Regional Council
7.			Crystal Brook	4800	Whitsunday Regional Council
8.			Crystal Brook	4800	Whitsunday Regional Council
9.			Crystal Brook	4800	Whitsunday Regional Council
10.			Crystal Brook	4800	Whitsunday Regional Council
11.			Crystal Brook	4800	Whitsunday Regional Council
12.			Crystal Brook	4800	Whitsunday Regional Council
13.			Crystal Brook	4800	Whitsunday Regional Council
14.			Crystal Brook	4800	Whitsunday Regional Council
15.			Crystal Brook	4800	Whitsunday Regional Council
16.			Crystal Brook	4800	Whitsunday Regional Council
17.			Crystal Brook	4800	Whitsunday Regional Council
18.			Crystal Brook	4800	Whitsunday Regional Council
19.			Crystal Brook	4800	Whitsunday Regional Council
20.			Crystal Brook	4800	Whitsunday Regional Council
21.			Crystal Brook	4800	Whitsunday Regional Council
22.			Crystal Brook	4800	Whitsunday Regional Council
23.			Crystal Brook	4800	Whitsunday Regional Council

24.		Crystal Brook	4800	Whitsunday Regional Council
25.		Crystal Brook	4800	Whitsunday Regional Council
26.		Crystal Brook	4800	Whitsunday Regional Council
27.		Crystal Brook	4800	Whitsunday Regional Council
28.		Crystal Brook	4800	Whitsunday Regional Council
29.		Crystal Brook	4800	Whitsunday Regional Council
30.		Crystal Brook	4800	Whitsunday Regional Council
31.		Crystal Brook	4800	Whitsunday Regional Council
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36.		Crystal Brook	4800	Whitsunday Regional Council
37.		Crystal Brook	4800	Whitsunday Regional Council
38.		Crystal Brook	4800	Whitsunday Regional Council
39.		Crystal Brook	4800	Whitsunday Regional Council
40.		Crystal Brook	4800	Whitsunday Regional Council
41.		Mount Pluto	4800	Whitsunday Regional Council
42.		Crystal Brook	4800	Whitsunday Regional Council
43.		Crystal Brook	4800	Whitsunday Regional Council
44.		Mount Pluto	4800	Whitsunday Regional Council
45.		Crystal Brook	4800	Whitsunday Regional Council
46.		Crystal Brook	4800	Whitsunday Regional Council
47.		Crystal Brook	4800	Whitsunday Regional Council
48.		Crystal Brook	4800	Whitsunday Regional Council

49.		Crystal Brook	4800	Whitsunday Regional Council
50.		Mount Pluto	4800	Whitsunday Regional Council
51.		Mount Pluto	4800	Whitsunday Regional Council
52.		Crystal Brook	4800	Whitsunday Regional Council
53.		Crystal Brook	4800	Whitsunday Regional Council
54.		Crystal Brook	4800	Whitsunday Regional Council
55.		Mount Pluto	4800	Whitsunday Regional Council
56.		Mount Pluto	4800	Whitsunday Regional Council
57.		Mount Pluto	4800	Whitsunday Regional Council
58.		Crystal Brook	4800	Whitsunday Regional Council
59.		Crystal Brook	4800	Whitsunday Regional Council
60.		Crystal Brook	4800	Whitsunday Regional Council
61.		Mount Pluto	4800	Whitsunday Regional Council
62.		Mount Pluto	4800	Whitsunday Regional Council
63.		Mount Pluto	4800	Whitsunday Regional Council
64.		Crystal Brook	4800	Whitsunday Regional Council
65.		Mount Pluto	4800	Whitsunday Regional Council
66.		Crystal Brook	4800	Whitsunday Regional Council
67.		Mount Pluto	4800	Whitsunday Regional Council
68.		Mount Pluto	4800	Whitsunday Regional Council
69.		Mount Pluto	4800	Whitsunday Regional Council
70.		Crystal Brook	4800	Whitsunday Regional Council
71.		Mount Pluto	4800	Whitsunday Regional Council
72.		Mount Pluto	4800	Whitsunday Regional Council
73.		Crystal Brook	4800	Whitsunday Regional Council

74.		Mount Pluto	4800	Whitsunday Regional Council
75.		Mount Pluto	4800	Whitsunday Regional Council
76.		Crystal Brook	4800	Whitsunday Regional Council
77.		Crystal Brook	4800	Whitsunday Regional Council
78.		Crystal Brook	4800	Whitsunday Regional Council
79.		Mount Pluto	4800	Whitsunday Regional Council
80.		Crystal Brook	4800	Whitsunday Regional Council
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83.		Crystal Brook	4800	Whitsunday Regional Council
84.		Crystal Brook	4800	Whitsunday Regional Council
85.		Mount Pluto	4800	Whitsunday Regional Council
86.		Mount Pluto	4800	Whitsunday Regional Council
87.		Mount Pluto	4800	Whitsunday Regional Council
88.		Crystal Brook	4800	Whitsunday Regional Council
89.		Crystal Brook	4800	Whitsunday Regional Council
90.		Foxdale	4800	Whitsunday Regional Council
91.		Foxdale	4800	Whitsunday Regional Council
92.		Foxdale	4800	Whitsunday Regional Council
93.		Mount Pluto	4800	Whitsunday Regional Council
94.		Mount Pluto	4800	Whitsunday Regional Council
95.		Foxdale	4800	Whitsunday Regional Council
96.		Crystal Brook	4800	Whitsunday Regional Council
97.		Foxdale	4800	Whitsunday Regional Council

APPENDIX A5. OTHER REFERENCE CONTACTS

Title/name	Phone business	Phone mobile	Phone A/H	Email/Address
Corporate Communications team (Mackay Regional Council)				
██████████	██████████	██████████		████████████████████
██████████	██████████			████████████████████
Pollution Hotline	1300 130 372			
Explosives Hotline	1300 739 868		██████████ (General Enquiries)	
State Emergency Service (SES)	132 500			
Title/name	Phone number/call sign/mobile number			Comment
Stream gauging stations				
Peter Faust Dam Headwater	██████████ (SMS to send: WDATA)			Storage Level Recorder
Peter Faust Dam Tailwater	██████████ (SMS to send: WDATA)			Discharge Flow Recorder
Title/name	Radio call sign/frequency			
2-way Radio (Peter Faust Dam)				
Peter Faust Dam ██████████	Call sign: Peter Faust Dam Operator (in the event of phone line failure)			

APPENDIX A6. : EMERGENCY ALERT POLYGON

Drawing 1 Threat Direction Polygon 249585

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Document: S:\BW Asset Delivery\SW-BW Service Delivery\WRSW-38-01-05-01 EAP Mapping\Drawings\acMap\ Emergency Alerts\249585-B.mxd
Printed: 26/06/2023

MAP PRODUCED BY:
ASSET DELIVERY
TEL. (07)3120 0000

REVISION	PMF AREA UPDATED			REMARKS
	B	A		
26/06/23				
23/01/18				
DATE				

MGH
MB
PSD
OKD

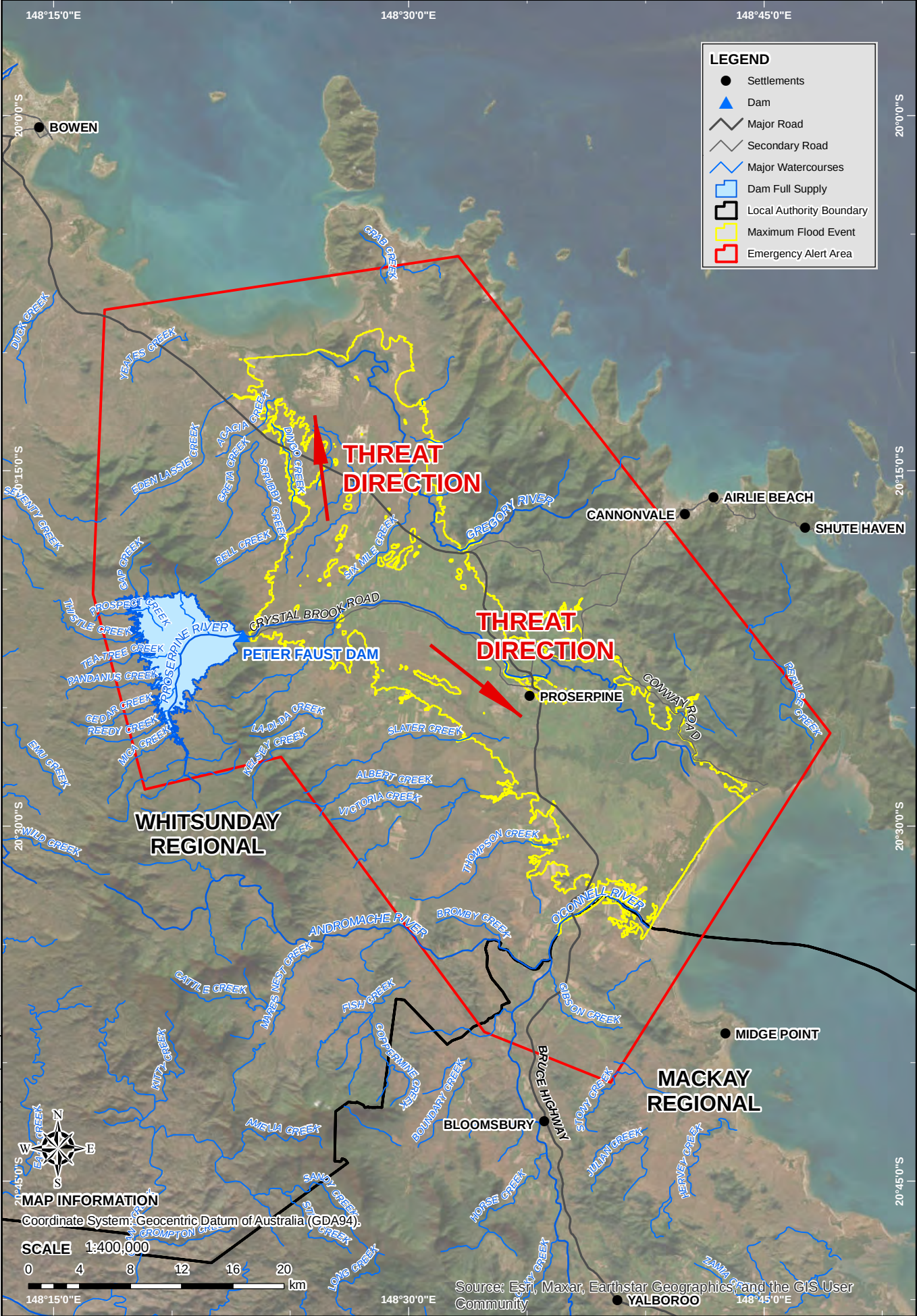
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0 4 8 12 16 20 km

DRAWN	DESIGNED
ES	
CHECKED	CHECKED
CP	
APPROVED	
M. HUGHES	
26/06/2023	

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ACN 131 034 985

PETER FAUST DAM
EMERGENCY ACTION PLAN
EMERGENCY ALERT AREA

CONTRACT NUMBER	
DRAWING NUMBER	REV.
249585	B
SHEET 1 OF 1	
DATE JUNE 2023	



APPENDIX A7. DAM FAILURE EMERGENCY ALERT REQUEST**Queensland Emergency Alert request guidelines**

An Emergency Alert request form should be completed, if required (see Sections 5 to 8 for actions) and sent to the SDCC to activate the Peter Faust Dam Emergency Polygon.

Instructions

1. Emergency Alert request forms are not to be used UNLESS an Emergency Event has been declared.
2. Print off the Queensland Emergency Alert request form on the following page.
3. Telephone the SDCC on [REDACTED] or [REDACTED] and tell them your intention to use the Emergency Alert for an Emergency Event for Peter Faust Dam.
4. A Polygon for this dam is stored on the Disaster Management Portal. Ask the SDCC operative to locate the polygon. It will be a KML file called *Peter_Faust_Dam_Emergency_Polygon*.
5. Give them your phone number, confirm their name, and end the call after advising the form will be sent shortly.
6. Send filled out Emergency Alert request form to SDCC emails: [REDACTED]. The form MUST be sent from a Sunwater email address and come from an authorised Sunwater employee.
7. Phone back SDCC to check the message has been sent and ask for email confirmation.
8. Create a record to advise of completion of EA campaign.

The following text is a copy of that contained in the prefilled Emergency Alert request:

Filename:	Voice Message:	SMS:
Peter_Faust_Dam_Emergency_Polygon	Flood emergency warning from Sun Water. People downstream of the Proserpine River and the Proserpine community must leave immediately. Peter Faust Dam possible failure/is failing . Major flooding is happening now. Water in the Proserpine River is rising fast. Your life is at risk. Go now to a safe place away from the flood. Get full warnings and what you should do at Whitsunday Regional Council, or visit disaster dot whitsunday ... r ... c dot qld dot gov dot a u , and Mac-aye Regional Council, or visit disaster dot mac-aye dot qld dot gov dot a u or call triple 0 if your life is in danger.	FLOOD EMERGENCY WARNING from Sunwater. People downstream of the Proserpine River and the Proserpine community must LEAVE IMMEDIATELY. Peter Faust Dam possible failure/is failing . Major flooding is happening now. Water in the Proserpine River is rising fast. Your life is at risk. Go now to a safe place away from the flood. Get full warnings and what you should do at Whitsunday Regional Council, or visit disaster.whitsundayrc.qld.gov.au/ and Mackay Regional Council, or visit disaster.mackay.qld.gov.au/ Call 000 if your life is in danger.

The following page contains a pre-filled copy of the Peter Faust Dam Emergency Alert Request form

 Queensland Government	PHONE THE SDCC WATCH DESK [REDACTED] – ADVISE EA IS BEING DEVELOPED	
	EMERGENCY ALERT REQUEST	
	Location of Alert: Peter Faust Dam (e.g. Suburb, Town)	Date:
LGA/Agency requesting:		Time:
Requesting Officer (e.g. Disaster Coordinator/Incident Controller) Name: Agency/Position:		Telephone: (SDCC Watch Desk may telephone you)
Email:		
Advised LDC/LDMG: ☐ YES DDC/DDMG: ☐ YES Neighbouring LDMG/LGA: ☐ YES ☐ N/A		
Send Alert	Immediately: ☐ YES	Scheduled: ☐ YES Date & Time / / : hrs
Event Type	☐ Cyclone ☐ Storm Tide ☐ Flash Flood ☐ Flood ☐ Bushfire ☐ Fire Incident ☐ Smoke / Toxic Plume ☐ Chemical Spill ☐ Tsunami (Sent as Location Based Text Message ONLY) ☒ Other (please specify): Catastrophic Dam Failure	
Distributed by: (Channel)	☒ Voice ☒ SMS – Location Based ☐ SMS – Service Address Based (Landline only) (Location of phone at time of distribution) (Registered billing address)	
Message Severity	☒ Emergency Warning (Activates SEWS) ☐ Watch & Act ☐ Advice	
Threat Direction Required? (e.g. Dam Spill)	☐ YES ☐ N/A	Threat location indicated on map? ☒ YES Only For Emergency Warning Voice & Service Address SMS ☐ N/A
EA Messaging Filename (Doc, Pdf):		Polygon Filename, (Kml, Kmz, Gml, GeoJSON): Number of polygons ____ (if multiple, attach list in order of priority)
Supplied via: ☒ DM Portal ☐ Email ☐ Verbal ☐ Other Other (please specify):		Supplied via: ☒ DM Portal ☐ Email ☐ Verbal ☐ Other Other (please specify):
Voice: Type or handwriting, max 4000 characters incl. spaces. (Ideally message should be < 450 characters)		
Flood emergency warning from Sun Water. People downstream of the Proserpine River and the Proserpine community must leave immediately. Peter Faust Dam possible failure/is failing. Major flooding is happening now. Water in the Proserpine River is rising fast. Your life is at risk. Go now to a safe place away from the flood. Get full warnings and what you should do at Whitsunday Regional Council, or visit disaster dot whitsunday ... r ... c ... dot qld dot gov dot a u, and Mac-aye Regional Council, or visit disaster dot mac-aye dot qld dot gov dot a u or call triple 0 if your life is in danger.		
SMS: Type or handwriting, use capitals for clarity, max 612 characters incl. spaces. (Ideally should be < 160 characters incl. spaces)		
FLOOD EMERGENCY WARNING from Sunwater. People downstream of the Proserpine River and the Proserpine community must LEAVE IMMEDIATELY. Peter Faust Dam possible failure/is failing. Major flooding is happening now. Water in the Proserpine River is rising fast. Your life is at risk. Go now to a safe place away from the flood. Get full warnings and what you should do at Whitsunday Regional Council, or visit disaster.whitsundayrc.qld.gov.au/ and Mackay Regional Council, or visit disaster.mackay.qld.gov.au/ Call 000 if your life is in danger.		
Remove EA from websites:	☐ 12 hrs ☐ 24 hrs ☐ 48 hrs ☐ Specify Date & Time: ☐ Check back in 12 hrs: ☐ Replace previous EA message / / : hrs Contact #: _____	
Requesting Officer:		Signature: Date: / /
Send to [REDACTED] and telephone [REDACTED] to confirm receipt		
FOR USE BY SDCC		
EA Request Form completed by: SDCC Watch Desk ☐ Requesting Officer ☐		
Notification of any delays provided to Requestor: ☐ YES ☐ NO		
EA User Name: Signature: Date: / /		Emergency Alert No: EMS EA Campaign Report ID:
Authorising Officer Name: Signature: Date: / /		
Report provided to Requestor on EA outcomes: ☐ YES ☐ NO		
The EA Manual, EA Quick Reference Guide, EA Request Form Template are available at: www.disaster.qld.gov.au		

APPENDIX B DRAWINGS AND MAPS

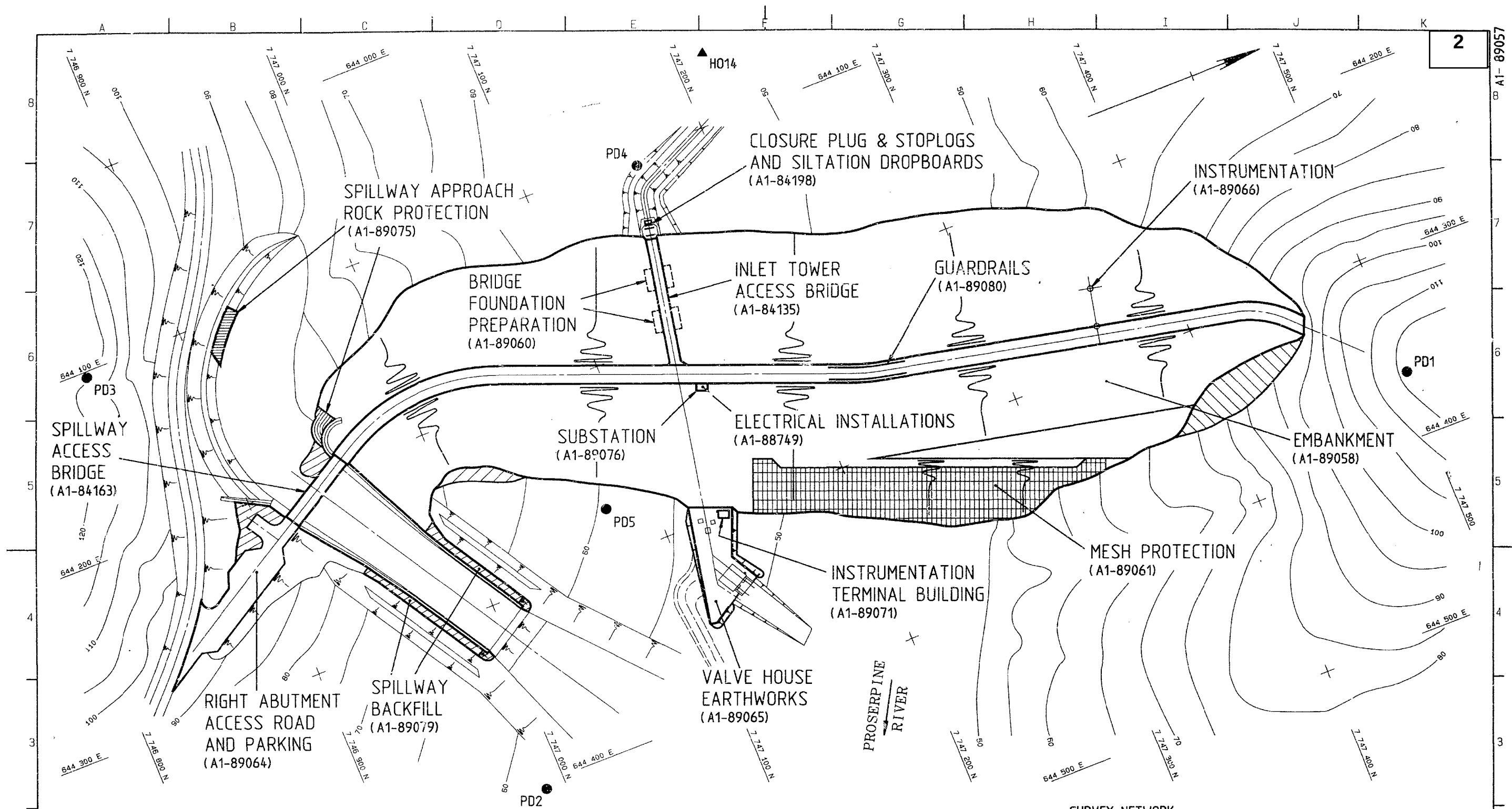
- B1 Drawings
- B2 Flood impact—downstream
- B3 Inundation maps
- B4 Locality plan
- B5 Catchment area

NOTE: Actual levels may differ from those shown in flood inundation maps due to variations in assumptions made in the models to actual flood events.

APPENDIX B1 DRAWINGS

Drawing 2 Peter Faust Dam General Arrangement

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2
A1-89057

Levels on this drawing are in metres
based on PM 206629 = EL 94.431 m (AHD Registered)

- NOTES
- 1 LEVELS DATUM: AHD
 - 2 AZIMUTH DATUM: AMG ORIENTATED AT CENTRE OF CONSTRUCTION AREA
 - 3 CO-ORDINATES ARE PLANE CO-ORDINATES AT MEAN ELEVATION 75 METRES AHD (DERIVED)
 - 4 CONTOUR INFORMATION OBTAINED FROM P: METRIC
BASE PLAN A1-85478

SURVEY NETWORK

ADJUSTED COORDINATES				ABSOLUTE ERROR ELLIPSES		
STN	EASTING	NORTHING	EL	MAJOR	MINOR	ORIENTATION
PD1	644 364.337	7 747 501.462	115.922	0.0	0.0	90°
PD2	644 403.503	7 746 989.561	58.564	4.2mm	3.3mm	141°
PD3	644 103.200	7 746 844.862	117.516	0.0	0.0	90°
PD4	644 106.331	7 747 160.721	54.668	3.3mm	2.9mm	121°
PD5	644 273.944	7 747 075.465	59.438	2.9mm	2.1mm	27°
H014	644 061.88	7 747 215.69	50.987	-	-	-

* BENCH MARK (DATUM)

REVISION					SCHEDULE	A1-88749	AREA SERVICES-CABLEWAYS - ARRANGEMENT	SCALES	RATIOS BEFORE REDUCTION	DESIGN	DRAFTING	Water Resources Commission	PETER FAUST DAM - CONSTRUCTION	GENERAL ARRANGEMENT	CONTRACT NUMBER 2592														
						A1-84198	CLOSURE PLUG & SILTATION DROPBOARDS																						
						A1-84163	SPILLWAY BRIDGE - ARRANGEMENT																						
						A1-84135	INLET TOWER BRIDGE - ARRANGEMENT																						
DATE						ZONE		1:1000	0 50 100 METRES	EXECUTED	DRAFTING	RECOMMENDED	APPROVED	DATE 22.2.85	A1-89057														
REMARKS						CKD																							
						PSD																							

APPENDIX B2 FLOOD IMPACT—DOWNSTREAM

Flood Impact Mapping

The plan indicates the downstream notification area for outflows from Peter Faust Dam.

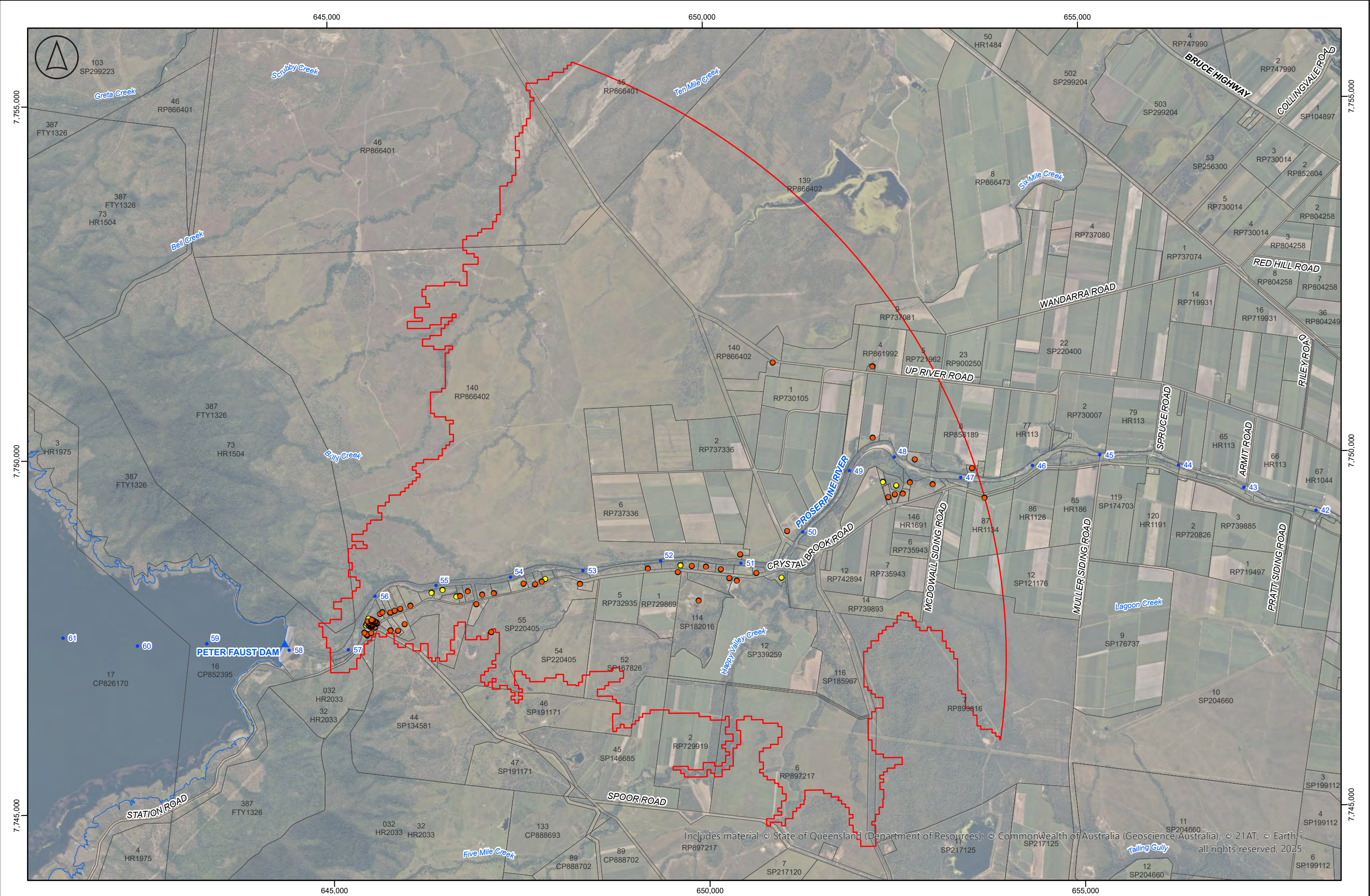
Drawing 3 Downstream Notification Area 250720

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Document: S:\BW_WaterResources\GIS_Data\SW_PeterFaustDam_EAP2025\Drawings\ArcMap\250720-E.pagx
Date Exported: 26/09/2025 2:45 PM

Map Produced By:



REVISION					
26/09/25	E	UPDATED DS NOTIFICATION AREA	AM	MGH	
DATE		REMARKS	CKD	PSD	

MAP INFORMATION
GDA 1994 MGA Zone 55.
Areas further downstream will become progressively more impacted by other rainfall and inflows that occur downstream of the dam (not shown here).
Scale @A3: 1:50,000
0 1,000 2,000 m

● PAR - Dam Failure

● PAR - No Dam Failure

● AMTD (Markers)

Limit of Downstream Notification Area

Peter Faust Dam FSL

DRAWN	DESIGNED
HS	
CHECKED	CHECKED
AM	
APPROVED	
M.G. HUGHES	
26/09/25	RPEQ: 18351

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PETER FAUST DAM
DOWNSTREAM NOTIFICATION AREA

CONTRACT NUMBER	
DRAWING NUMBER	REV.
250720	E
SHEET 1	
DATE SEPTEMBER 2025	

APPENDIX B3 INUNDATION MAPS

Drawings:

- Key Map
- Sunny Day Failure (SDF)
- Probable Maximum Flood (PMF)

Disclaimer: Every effort has been made to ensure the currency of the flood inundation maps reproduced in this EAP. However, as the maps have been extracted from external sources, their accuracy cannot be guaranteed. Please refer to the Local Disaster Management Plan for the most current information.

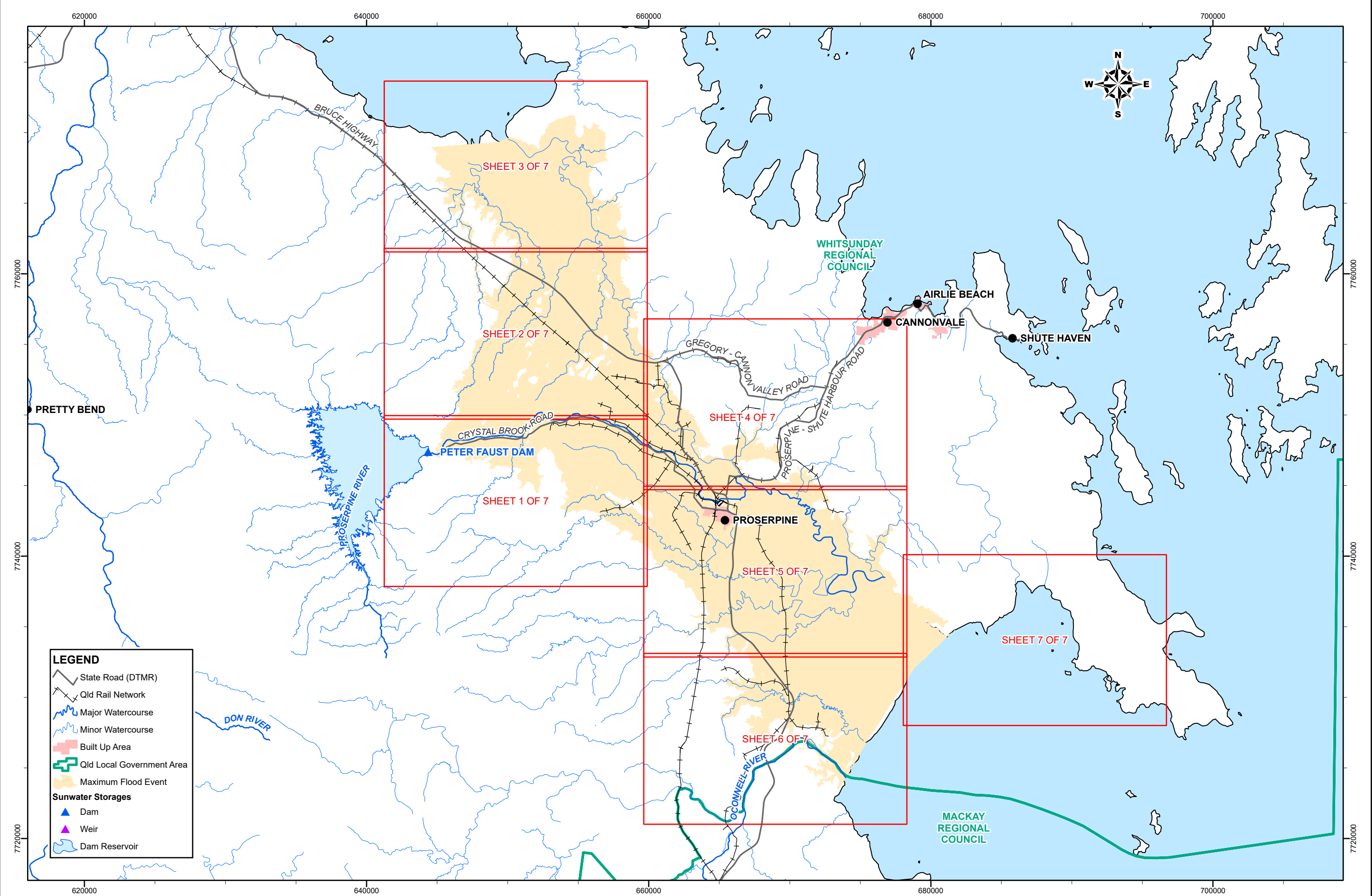
Drawing 4 Key Map 256930

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REVISION					
19/09/24	B	UPDATED SHEET NUMBERS	JS	MGH	
13/12/22	A	ISSUED FOR USE	LH	MGH	
DATE		REMARKS	CKD	PSD	

MAP INFORMATION
Projected Coordinate System: Mapping Grid of Australia (MGA2020), Zone 55.
DRAWING REFERENCE
256931 - Sunny Day Failure
256932 - Probable Maximum Flood

SCALES (A3 SIZE)
0 2.5 5 7.5 10 12.5 km 1:250,000

DRAWN IDH	DESIGNED
CHECKED	CHECKED LH
APPROVED M.G. HUGHES 13/12/2022	RPEQ: 18351


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PETER FAUST DAM DAM BREAK ANALYSIS 2022 INUNDATION PLANS KEYMAP		CONTRACT NUMBER
DRAWING NUMBER 256930	REV. B	
SHEET 1 OF 1		
DATE DECEMBER 2022		

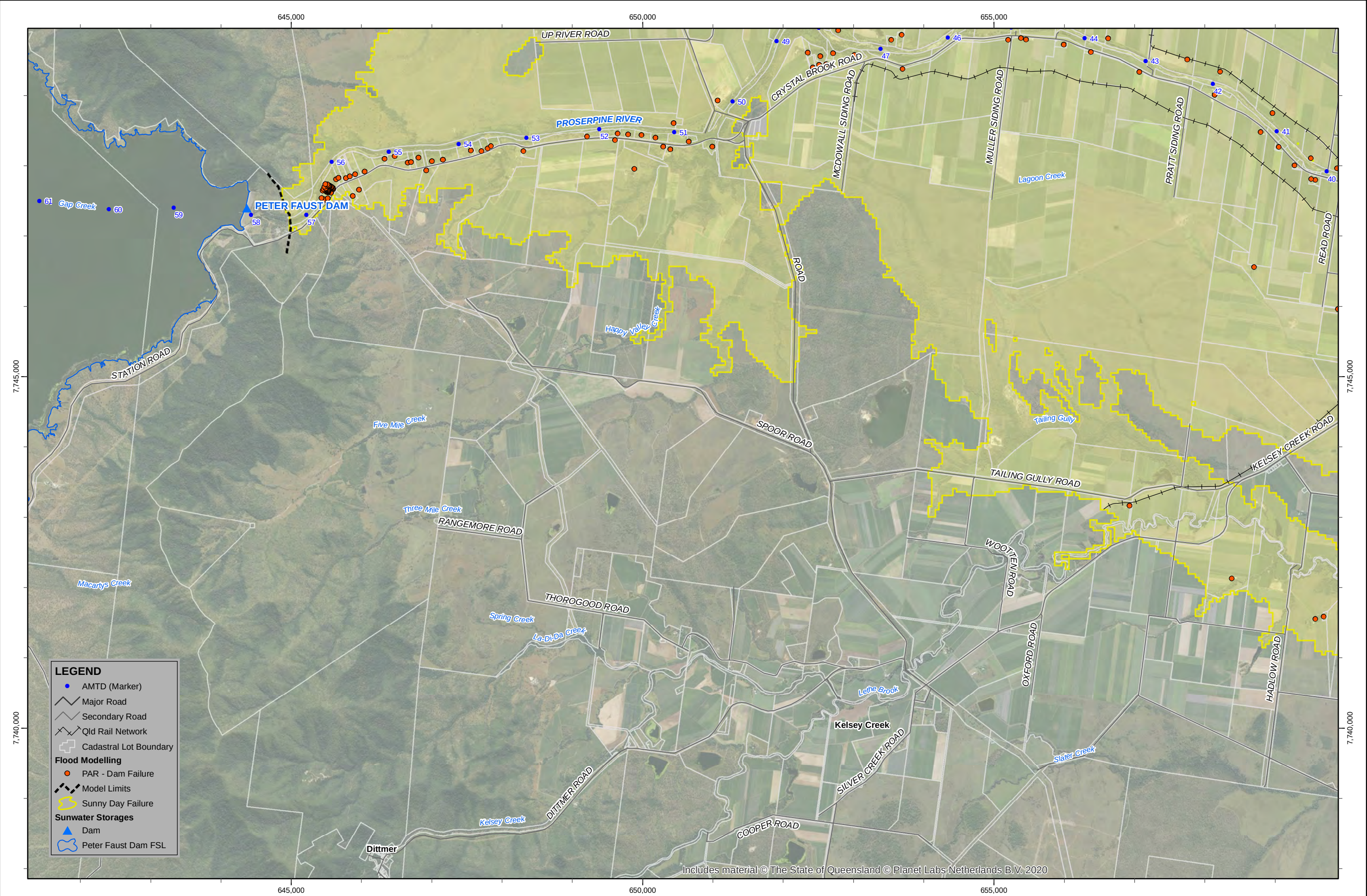
Drawing 5 Sunny Day Failure (SDF) 256931

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MAP PRODUCED BY:
WATER RESOURCES AND DAM SAFETY
TEL: (07) 5120 0000



REVISION					
13/12/22	A	ISSUED FOR USE	LH	MGH	
DATE		REMARKS	CKD	PSD	

MAP INFORMATION	
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.	
REFERENCE DRAWINGS	
256930 - Keymap	



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1:50,000	

DRAWN IDH	DESIGNED
CHECKED	CHECKED LH
APPROVED M.G. HUGHES 13/12/2022 RPEQ: 18351	

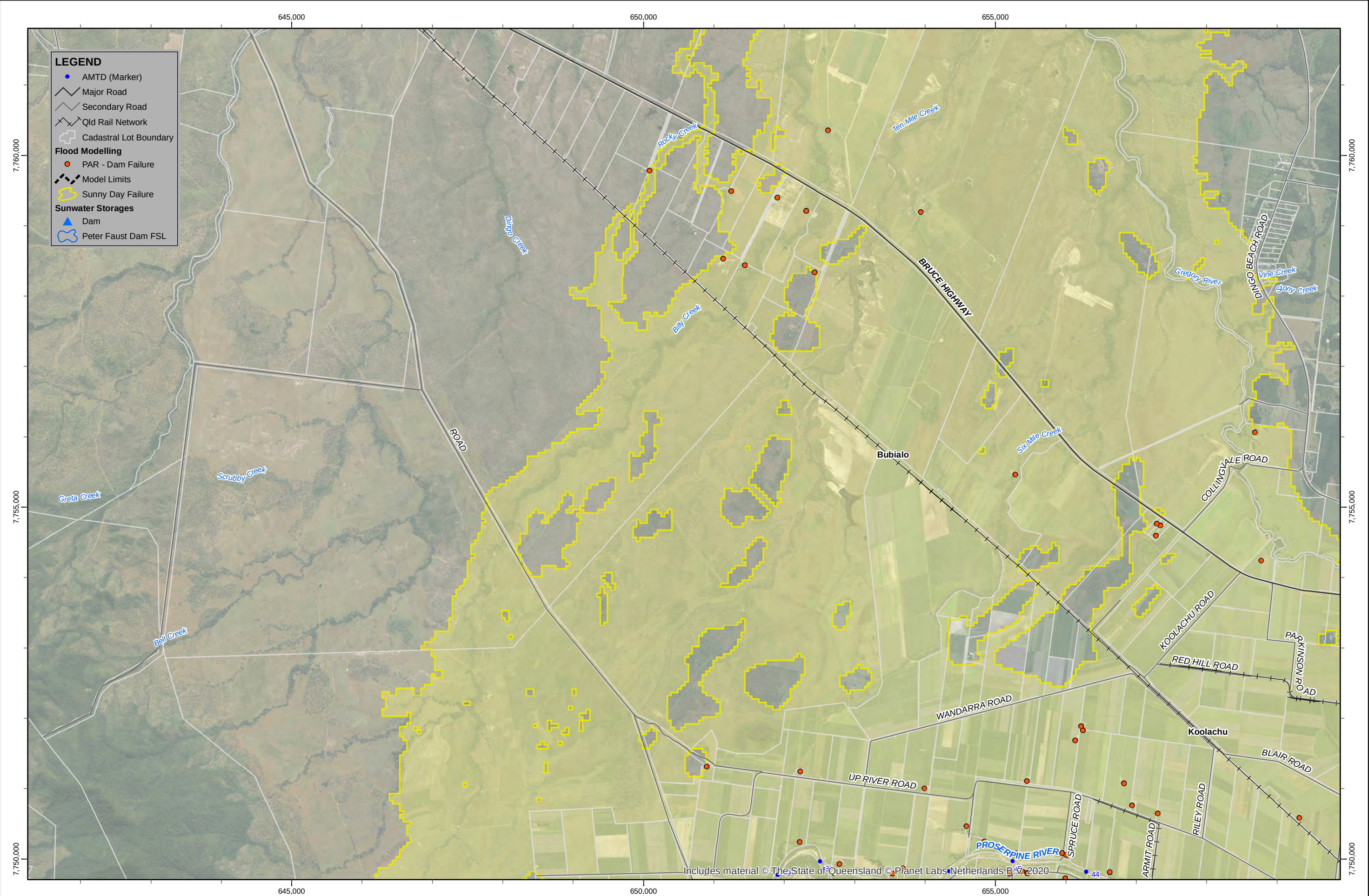
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PETER FAUST DAM DAM BREAK ANALYSIS 2022 SUNNY DAY FAILURE (PIPING FAILURE) INUNDATION PLAN	
CONTRACT NUMBER	
DRAWING NUMBER 256931	REV. A
SHEET 1 OF 7	
DATE DECEMBER 2022	

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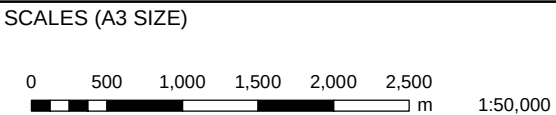
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REVISION					
13/12/22	A	ISSUED FOR USE	LH	MGH	
DATE		REMARKS	CKD	PSD	

MAP INFORMATION	
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.	
REFERENCE DRAWINGS	
256930 - Keymap	



DRAWN	DESIGNED
IDH	
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APPROVED	
M.G. HUGHES	
13/12/2022	
RPEQ: 18351	

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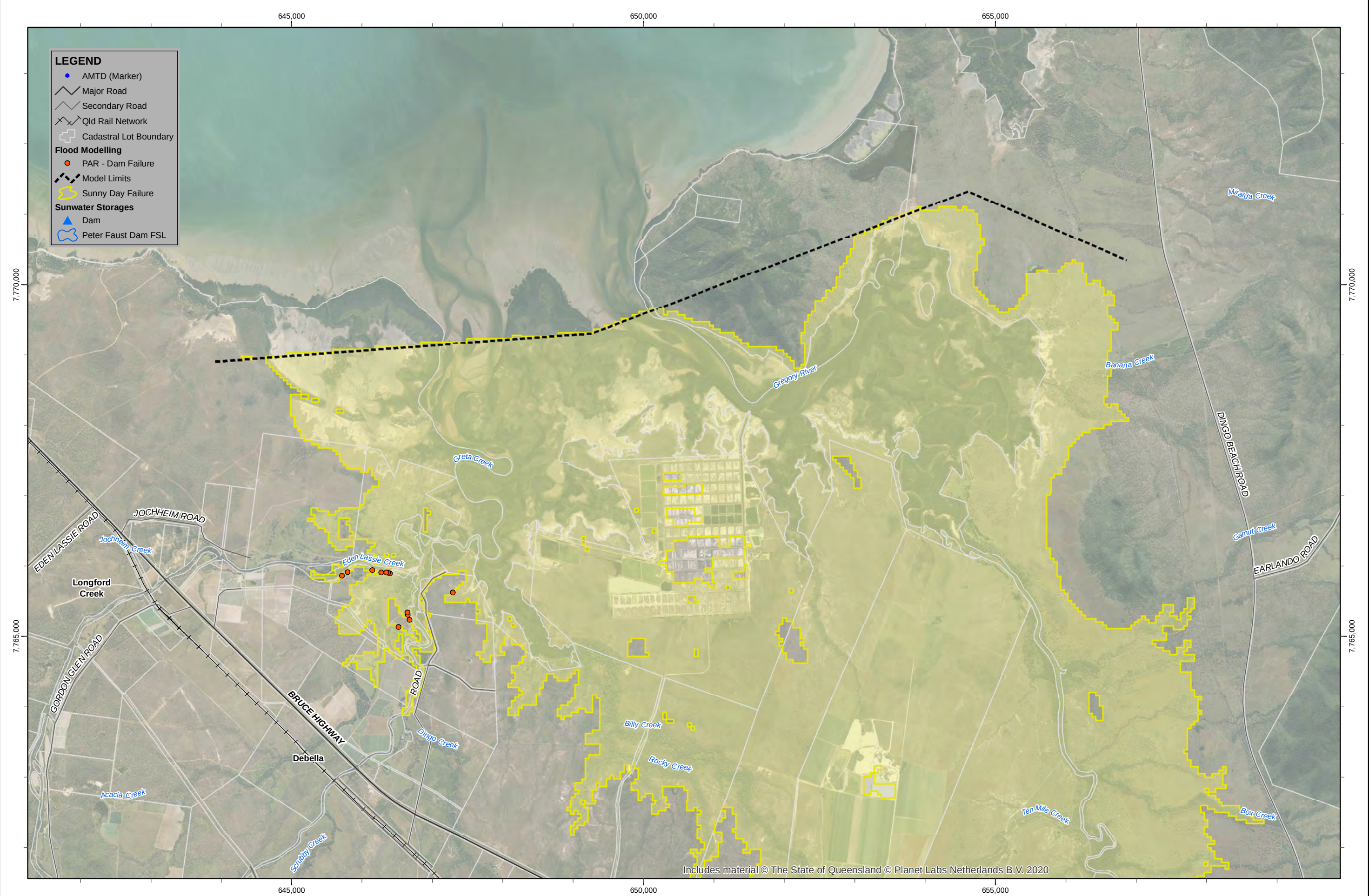
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PETER FAUST DAM DAM BREAK ANALYSIS 2022 SUNNY DAY FAILURE (PIPING FAILURE) INUNDATION PLAN	
CONTRACT NUMBER	
DRAWING NUMBER	REV.
256931	A
SHEET 2 OF 7	
DATE DECEMBER 2022	

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DATE		REMARKS	CKD	PSD	

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Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.	
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APPROVED M.G. HUGHES 13/12/2022 RPEQ: 18351	

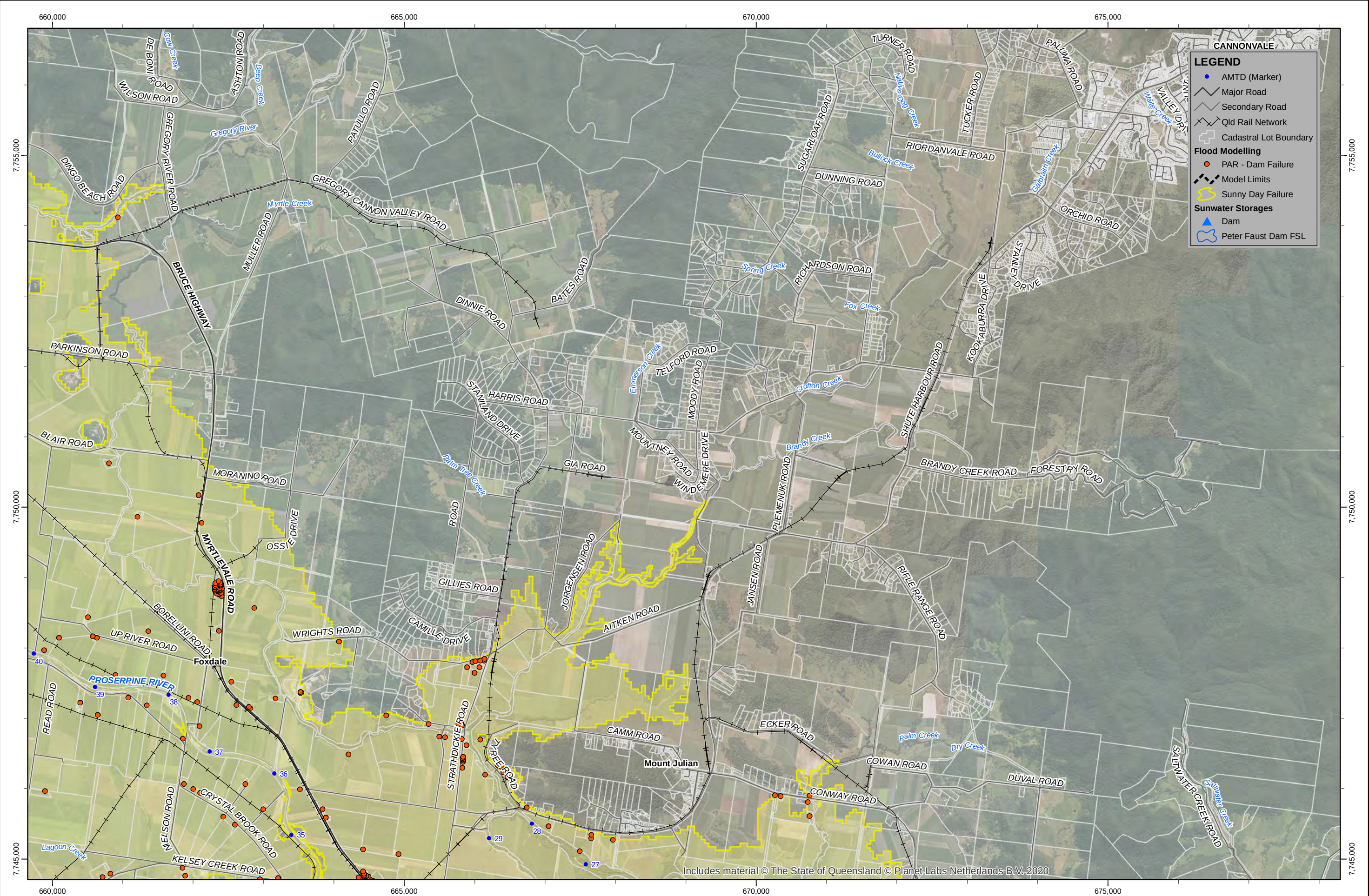


PETER FAUST DAM DAM BREAK ANALYSIS 2022 SUNNY DAY FAILURE (PIPING FAILURE) INUNDATION PLAN	
CONTRACT NUMBER	
DRAWING NUMBER 256931	REV. A
SHEET 3 OF 7	
DATE DECEMBER 2022	

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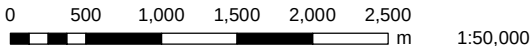
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Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.

REFERENCE DRAWINGS
256930 - Keymap



SCALES (A3 SIZE)



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13/12/2022	
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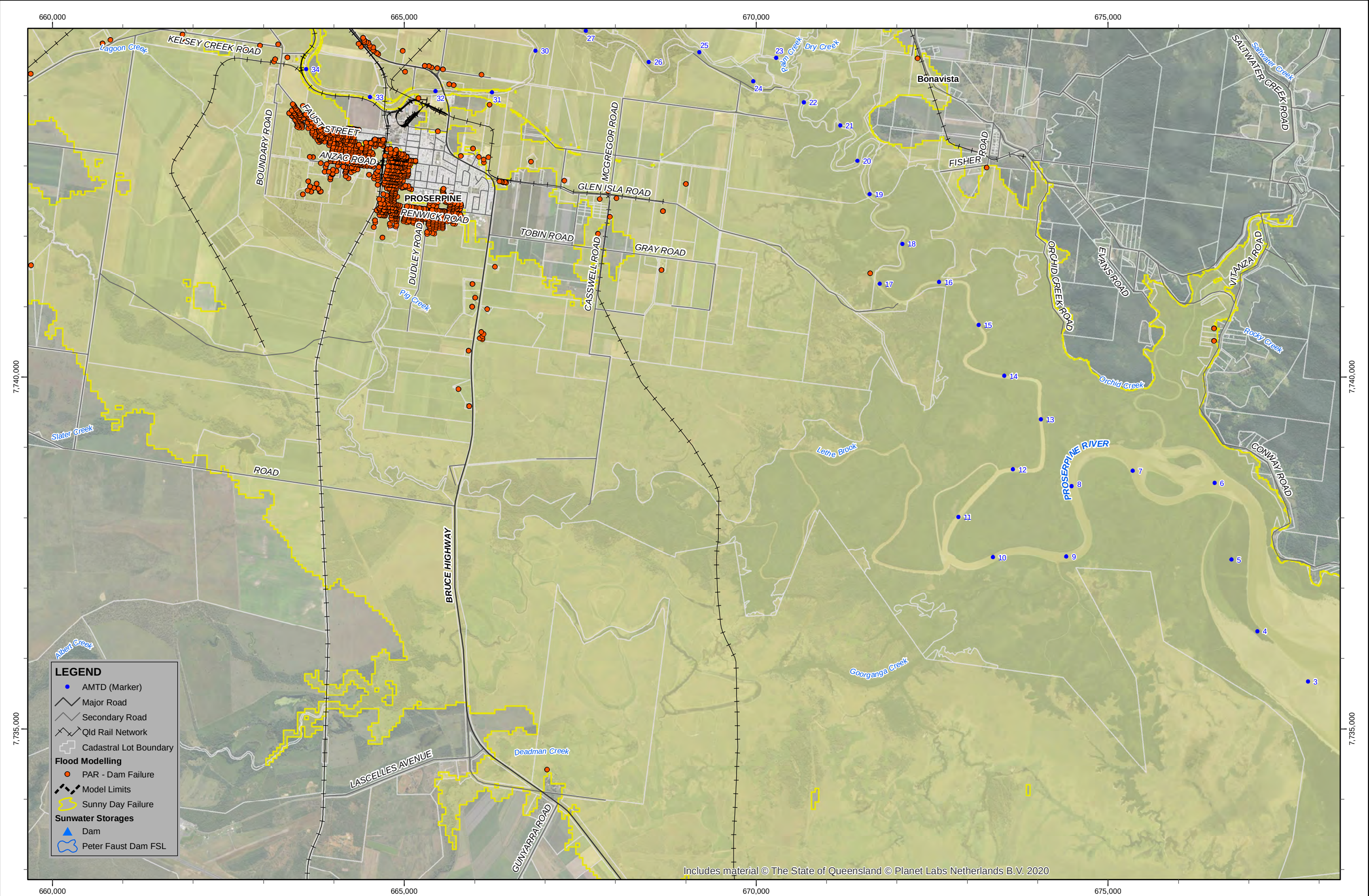
**PETER FAUST DAM
DAM BREAK ANALYSIS 2022
SUNNY DAY FAILURE
(PIPING FAILURE)
INUNDATION PLAN**

CONTRACT NUMBER	
DRAWING NUMBER	REV.
256931	A
SHEET 4 OF 7	
DATE DECEMBER 2022	

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REVISION					
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DATE		REMARKS		CKD	PSD

MAP INFORMATION	
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.	
REFERENCE DRAWINGS	
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1:50,000	

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M.G. HUGHES	
13/12/2022	
RPEQ: 18351	

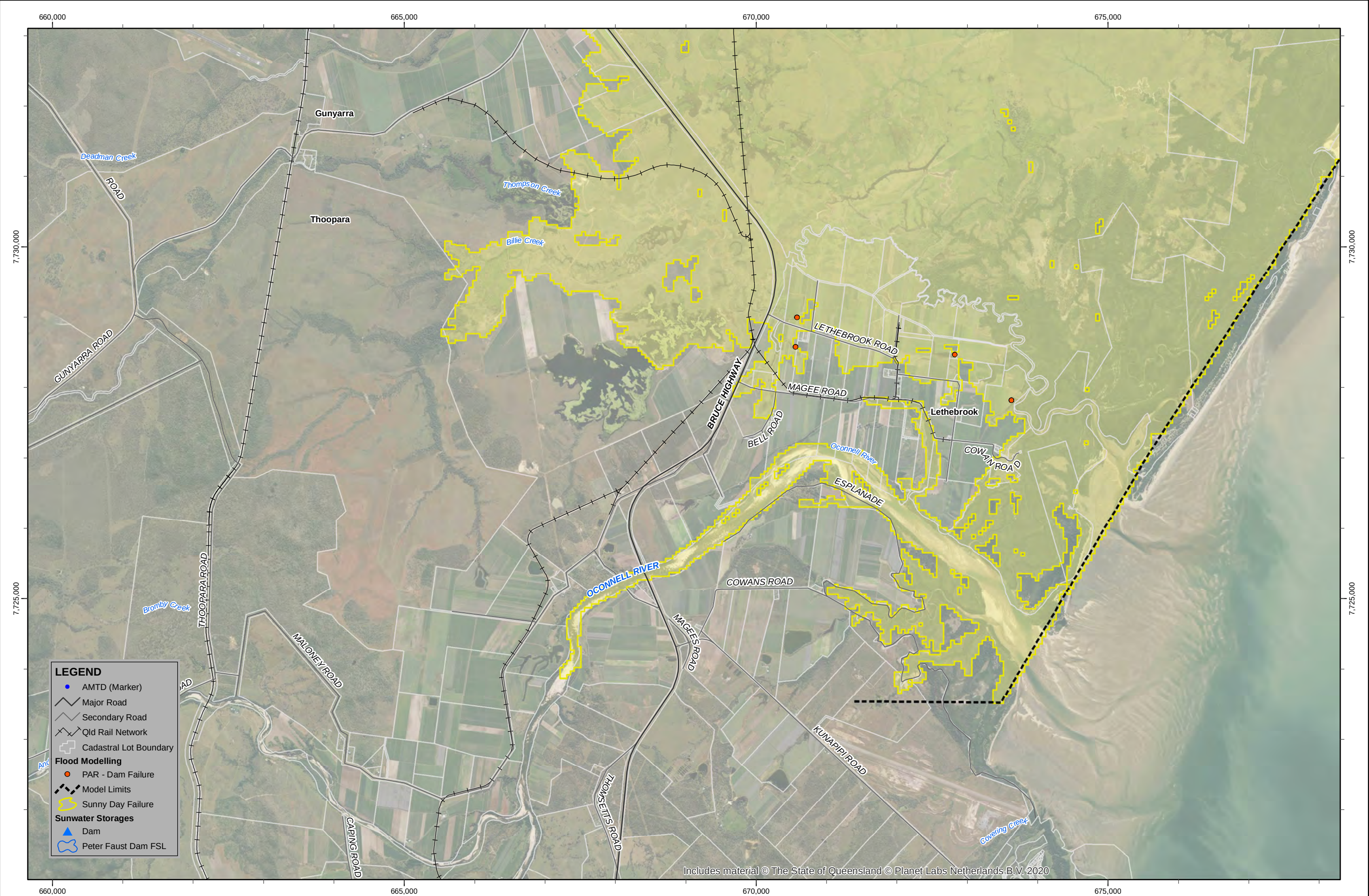


PETER FAUST DAM DAM BREAK ANALYSIS 2022 SUNNY DAY FAILURE (PIPING FAILURE) INUNDATION PLAN	
CONTRACT NUMBER	
DRAWING NUMBER	REV.
256931	A
SHEET 5 OF 7	
DATE DECEMBER 2022	

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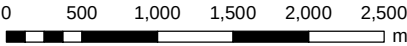
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DATE		REMARKS		CKD	PSD

MAP INFORMATION
Projected Coordinate System: Mapping Grid of Australia
(MGA2020) Zone 55.

REFERENCE DRAWINGS
256930 - Keymap



SCALES (A3 SIZE)



1:50,000

DRAWN	DESIGNED
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CHECKED	CHECKED
	LH
APPROVED	
M.G. HUGHES	
13/12/2022	
RPEQ: 18351	

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**PETER FAUST DAM
DAM BREAK ANALYSIS 2022
SUNNY DAY FAILURE
(PIPING FAILURE)
INUNDATION PLAN**

CONTRACT NUMBER

DRAWING NUMBER	REV.
256931	A

SHEET 6 OF 7
DATE **DECEMBER 2022**

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Printed: Tuesday, 13/12/2022 02:47:56 PM

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REVISION					
13/12/22	A	ISSUED FOR USE		LH	MGH
DATE		REMARKS		CKD	PSD

MAP INFORMATION
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.

REFERENCE DRAWINGS
256930 - Keymap



SCALES (A3 SIZE)

0 500 1,000 1,500 2,000 2,500 m

1:50,000

DRAWN	DESIGNED
IDH	
CHECKED	CHECKED
	LH
APPROVED	
M.G. HUGHES	
13/12/2022	
RPEQ: 18351	

sunwater

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**PETER FAUST DAM
DAM BREAK ANALYSIS 2022
SUNNY DAY FAILURE
(PIPING FAILURE)
INUNDATION PLAN**

CONTRACT NUMBER	
DRAWING NUMBER	REV.
256931	A
SHEET 7 OF 7	
DATE	DECEMBER 2022

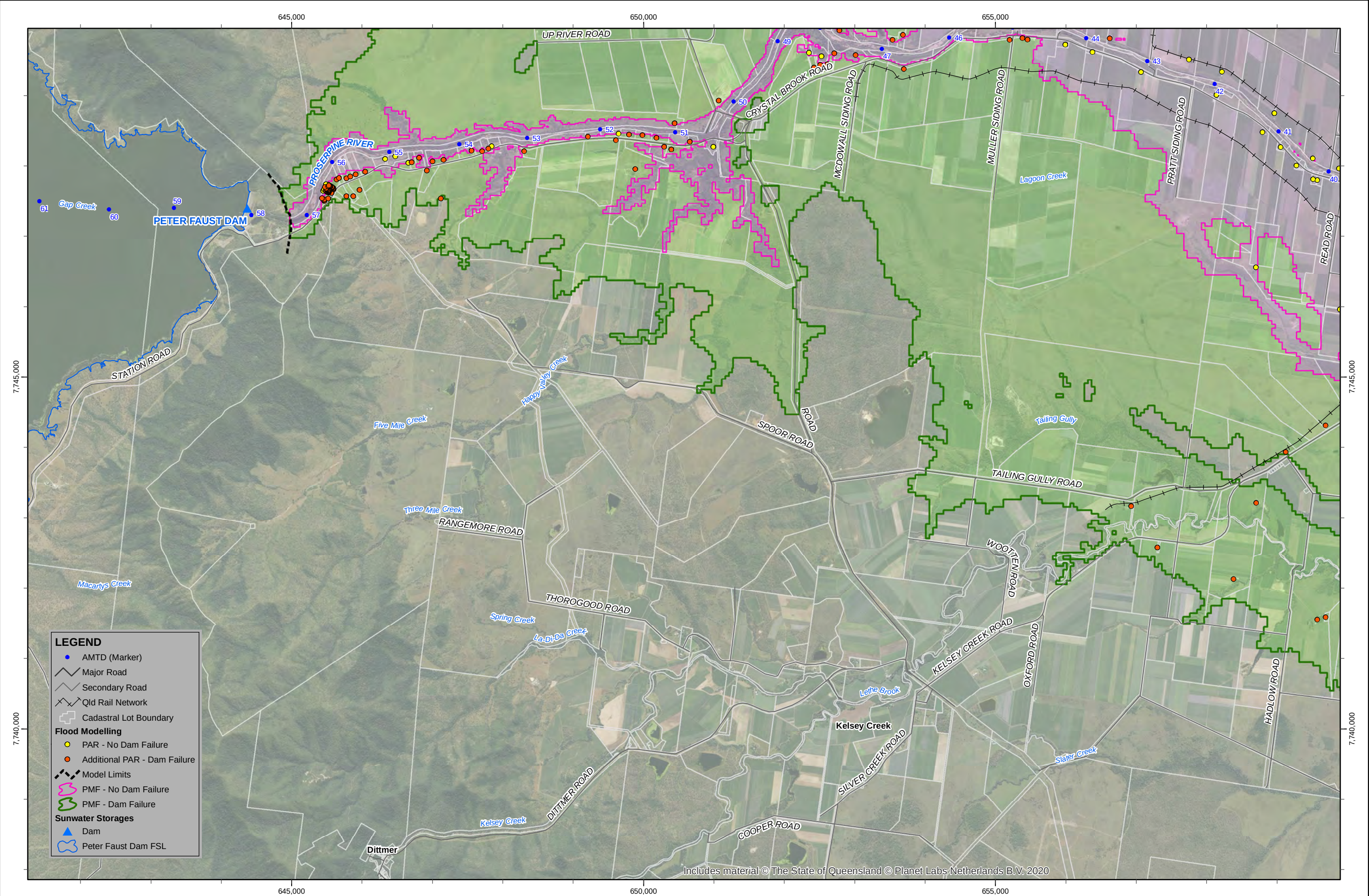
Drawing 6 Probable Maximum Flood (PMF) 256932

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MAP PRODUCED BY:
WATER RESOURCES AND DAM SAFETY
TEL: (07) 5120 0000



REVISION	DATE	BY	CHKD	REMARKS
13/12/22	A	ISSUED FOR USE	LH	MGH
			CKD	PSD

MAP INFORMATION	REFERENCE DRAWINGS
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.	256930 - Keymap



SCALES (A3 SIZE)
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1:50,000

DRAWN	DESIGNED
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	LH
APPROVED	
M.G. HUGHES	
13/12/2022	RPEQ: 18351

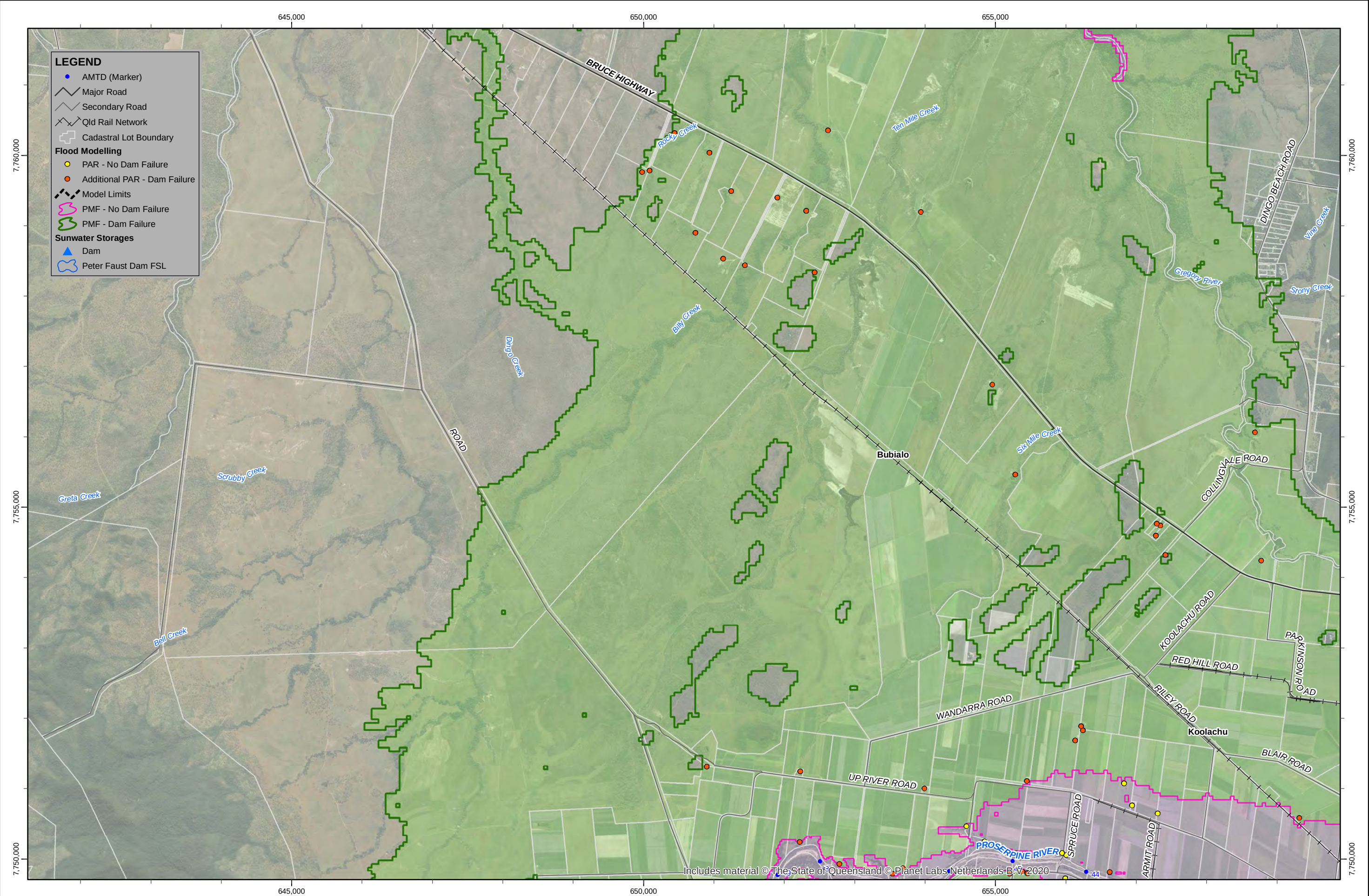
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PETER FAUST DAM DAM BREAK ANALYSIS 2022 PROBABLE MAXIMUM FLOOD (OVERTOPPING FAILURE) INUNDATION PLAN		CONTRACT NUMBER
DRAWING NUMBER	REV.	
256932	A	
SHEET 1 OF 7		
DATE		DECEMBER 2022

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MAP PRODUCED BY:
WATER RESOURCES AND DAM SAFETY
TEL: (07) 5120 0000



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DATE		REMARKS	CKD	PSD	

MAP INFORMATION
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.

REFERENCE DRAWINGS
256930 - Keymap



SCALES (A3 SIZE)

0 500 1,000 1,500 2,000 2,500 m

1:50,000

DRAWN
IDH

CHECKED
LH

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**PETER FAUST DAM
DAM BREAK ANALYSIS 2022
PROBABLE MAXIMUM FLOOD
(OVERTOPPING FAILURE)
INUNDATION PLAN**

CONTRACT NUMBER

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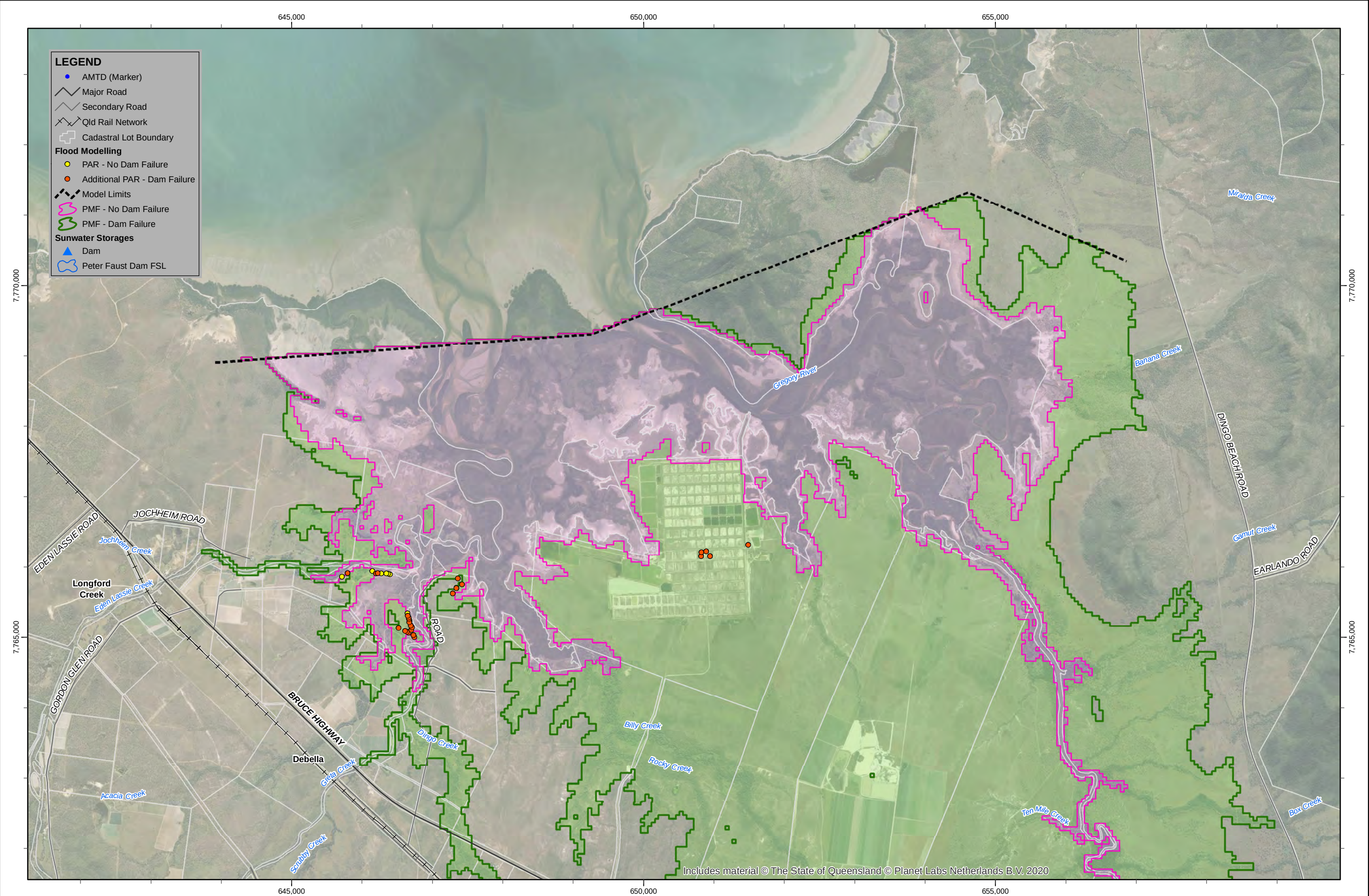
SHEET 2 OF 7

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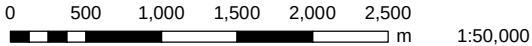
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DATE		REMARKS		CKD	PSD

MAP INFORMATION
Projected Coordinate System: Mapping Grid of Australia (MGA2020) Zone 55.

REFERENCE DRAWINGS
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SCALES (A3 SIZE)



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APPROVED M.G. HUGHES 13/12/2022 RPEQ: 18351	

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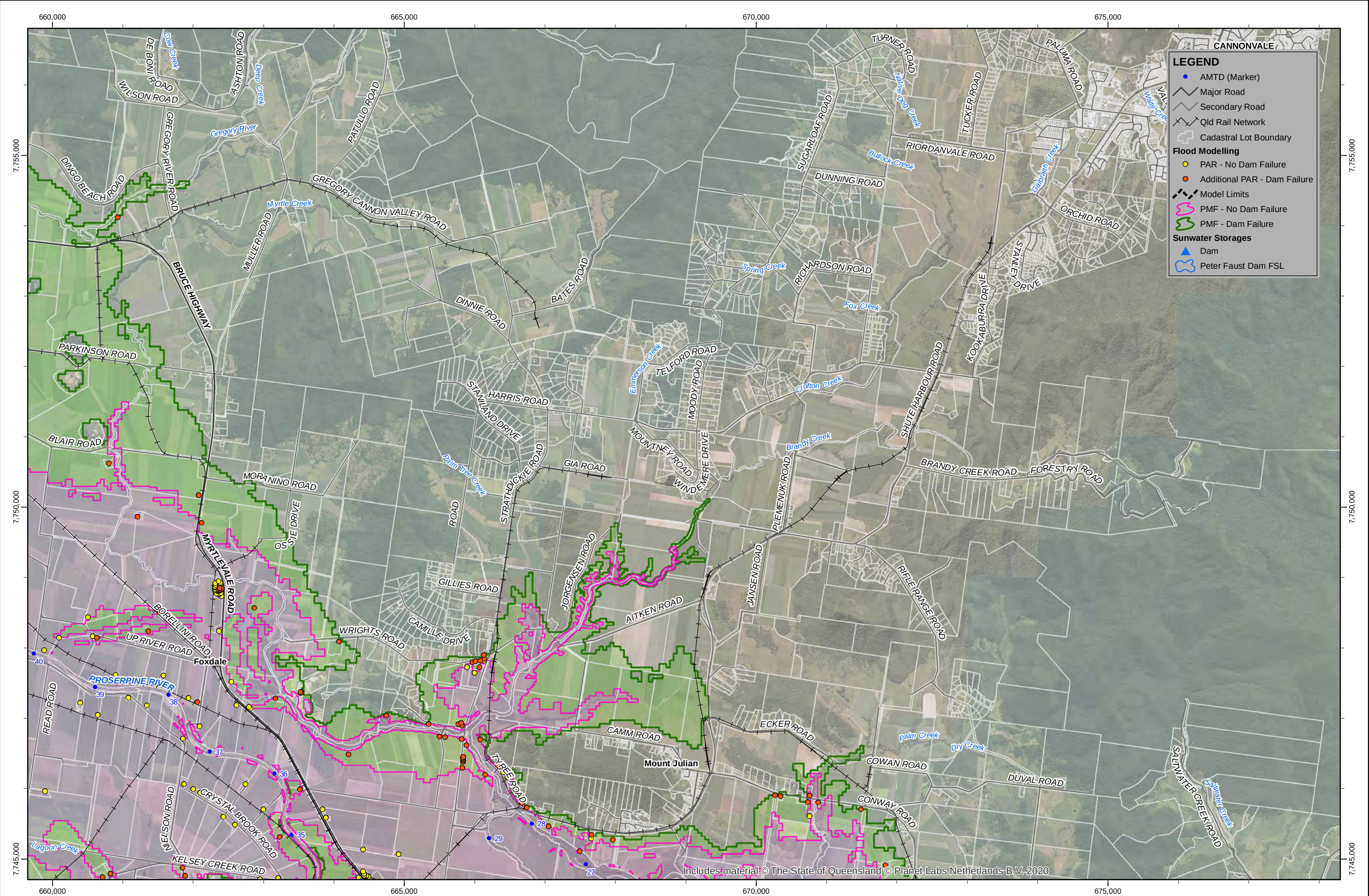
**PETER FAUST DAM
DAM BREAK ANALYSIS 2022
PROBABLE MAXIMUM FLOOD
(OVERTOPPING FAILURE)
INUNDATION PLAN**

CONTRACT NUMBER	
DRAWING NUMBER 256932	REV. A
SHEET 3 OF 7	
DATE DECEMBER 2022	

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DATE		REMARKS	CKD	PSD	

MAP INFORMATION
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REFERENCE DRAWINGS
256930 - Keymap



SCALES (A3 SIZE)

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**PETER FAUST DAM
DAM BREAK ANALYSIS 2022
PROBABLE MAXIMUM FLOOD
(OVERTOPPING FAILURE)
INUNDATION PLAN**

CONTRACT NUMBER

DRAWING NUMBER
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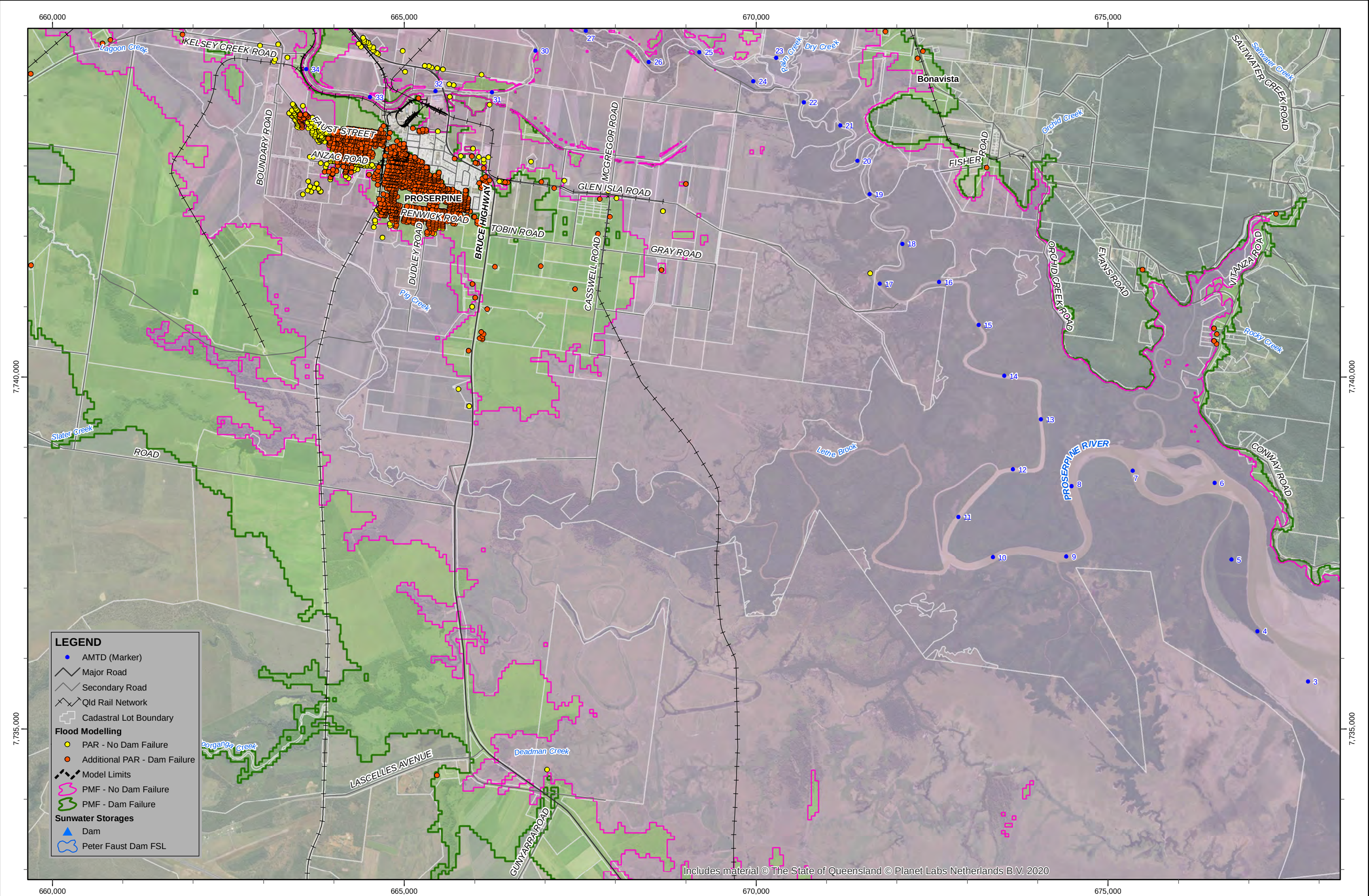
SHEET 4 OF 7

DATE
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SCALES (A3 SIZE)	
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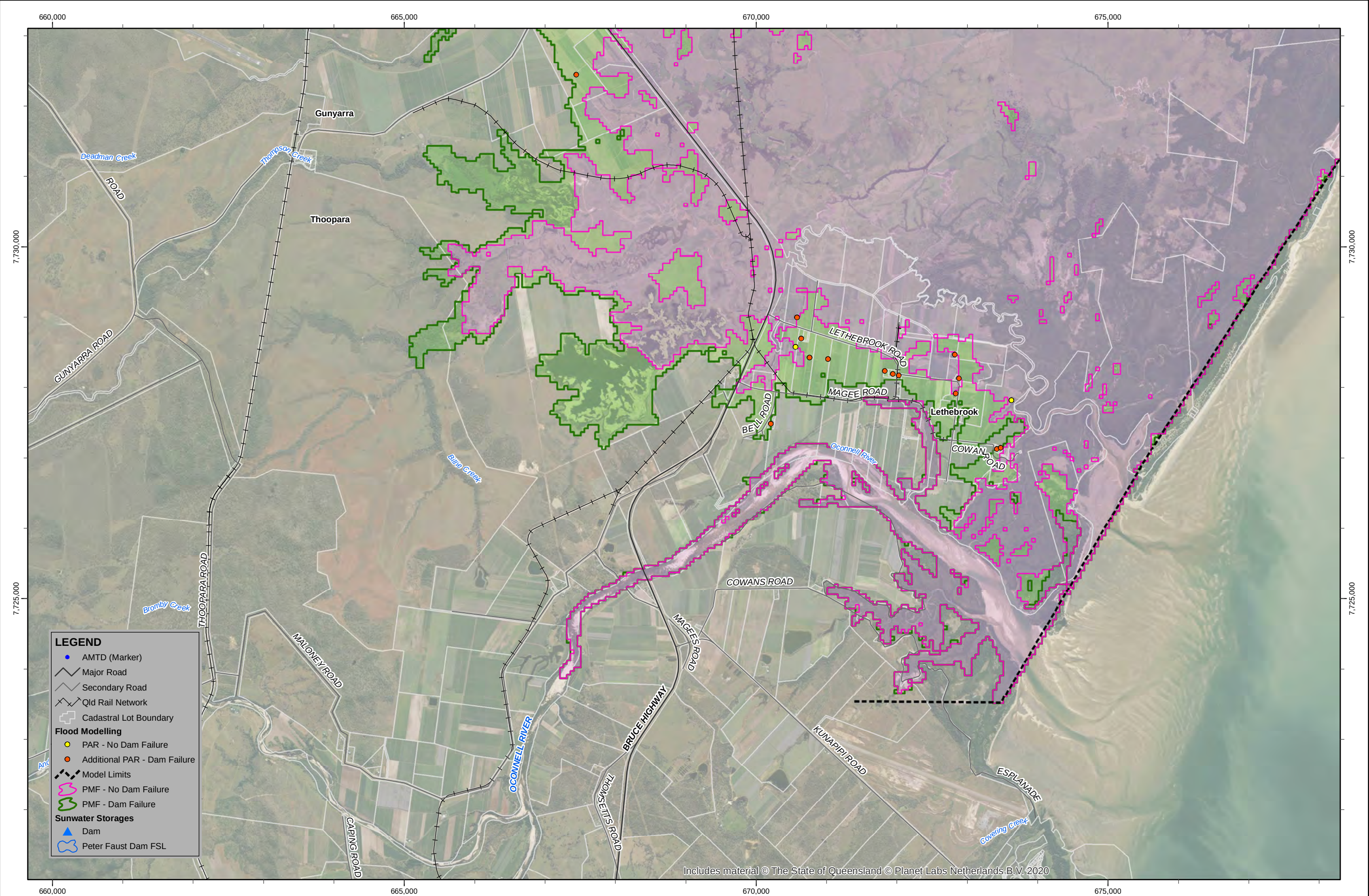
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CONTRACT NUMBER	
DRAWING NUMBER	REV.
256932	A
SHEET 5 OF 7	
DATE DECEMBER 2022	

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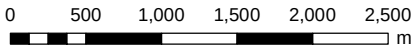
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DATE		REMARKS	CKD	PSD	

MAP INFORMATION
Projected Coordinate System: Mapping Grid of Australia
(MGA2020) Zone 55.

REFERENCE DRAWINGS
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SCALES (A3 SIZE)



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LEGEND

- AMTD (Marker)
- Major Road
- Secondary Road
- Qld Rail Network
- Cadastral Lot Boundary
- Flood Modelling**
 - PAR - No Dam Failure
 - Additional PAR - Dam Failure
- Model Limits
- PMF - No Dam Failure
- PMF - Dam Failure
- Sunwater Storages**
 - Dam
 - Peter Faust Dam FSL

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MAP INFORMATION

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REFERENCE DRAWINGS

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SCALES (A3 SIZE)

0 500 1,000 1,500 2,000 2,500 m

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APPROVED	
M.G. HUGHES	
13/12/2022	
RPEQ: 18351	

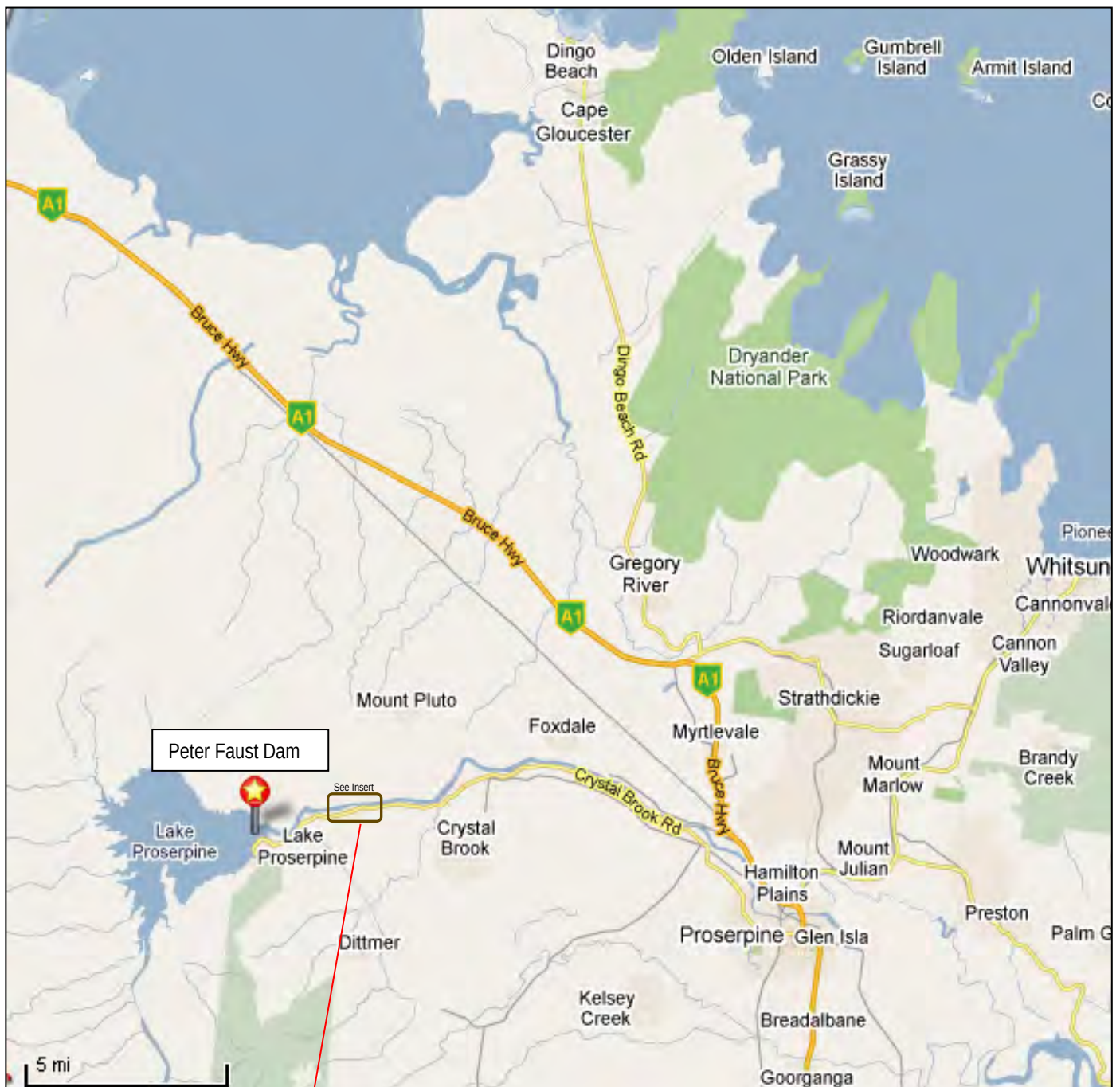
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DAM BREAK ANALYSIS 2022
PROBABLE MAXIMUM FLOOD
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CONTRACT NUMBER	
DRAWING NUMBER	REV.
256932	A
SHEET 7 OF 7	
DATE DECEMBER 2022	

APPENDIX B4 LOCALITY PLAN

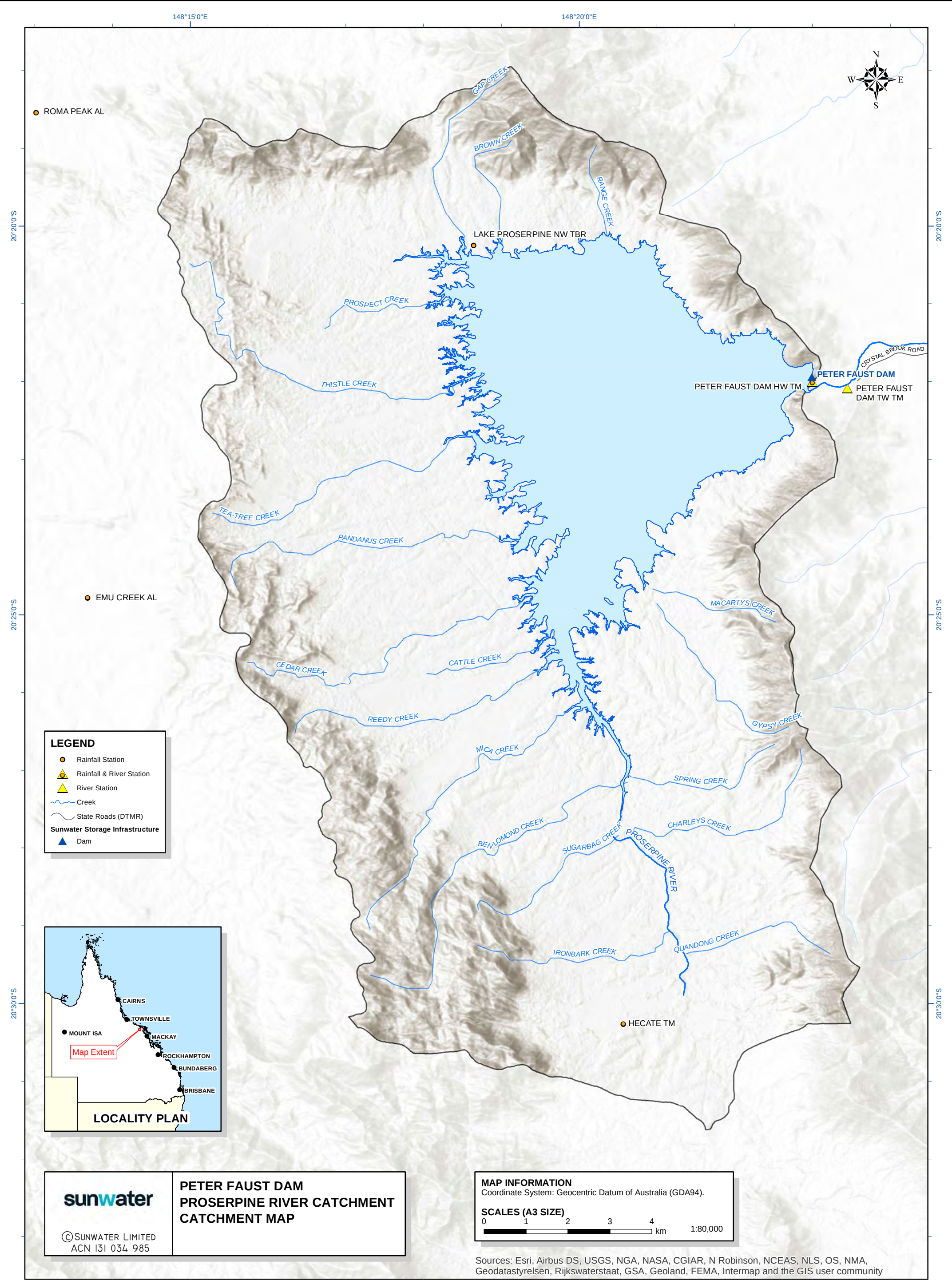
Drawing 7 Peter Faust Dam Locality Plan



APPENDIX B5 CATCHMENT AREA

Drawing 8 Declared Catchment Area Map 253511

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APPENDIX C EQUIPMENT AND TECHNICAL INFORMATION

- C1 List of equipment available during an emergency
- C2 Peter Faust Dam storage curve
- C3 Peter Faust Dam spillway rating curve

APPENDIX C1 LIST OF EQUIPMENT AVAILABLE DURING AN EMERGENCY

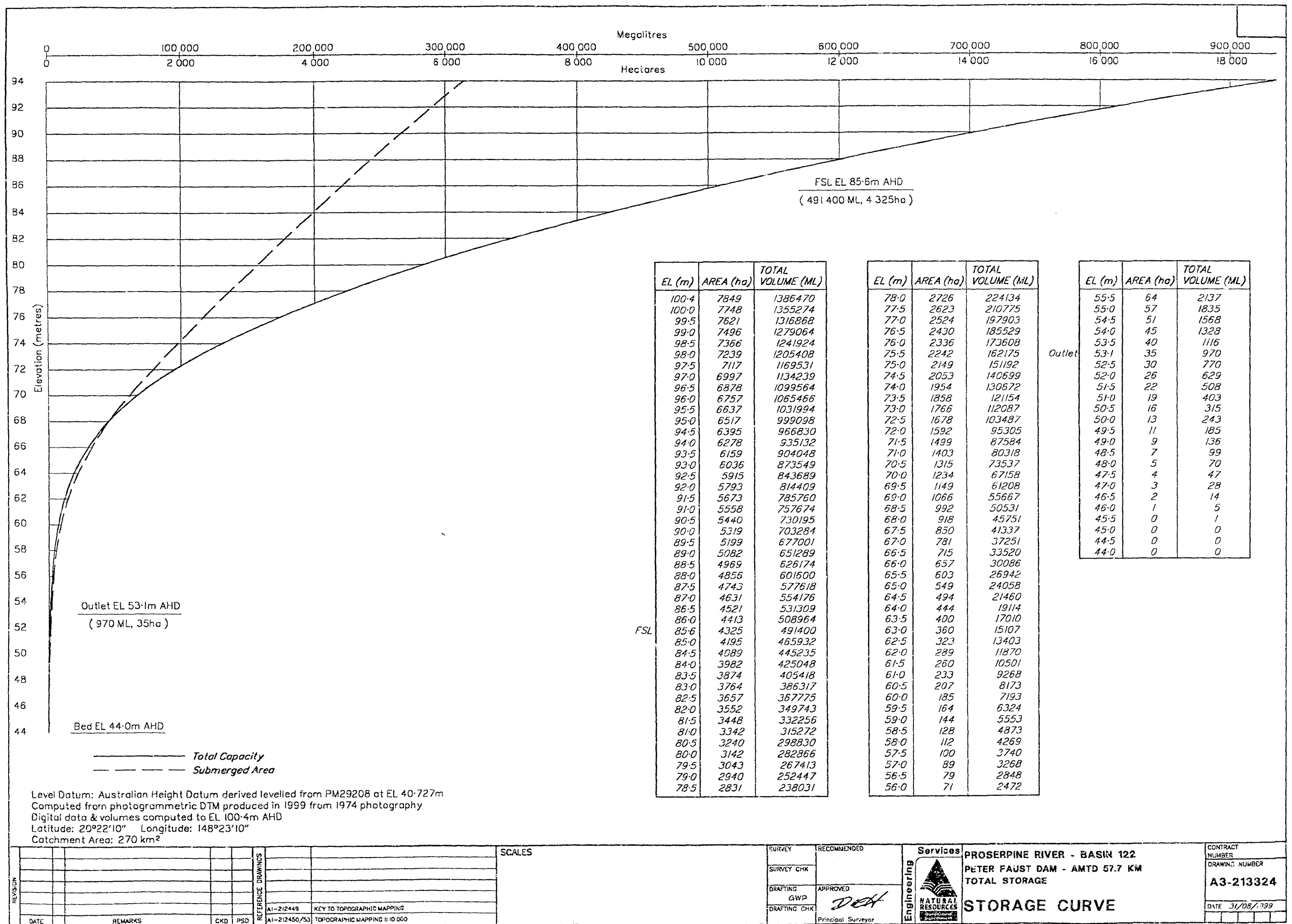
Name of equipment	No.	Owner	Contact name	Contact number	Depot
Heavy Plant	4				Crystalbrook
Crane Hire 20 Tonne Franna	1				Cannonvale
Toyota Hilux 4x4 Dual Cab Ute	1	Sunwater			Peter Faust Dam

Note: In addition to the above list, further resources can be accessed through Local, District, and State Disaster Management framework, when each Local Disaster Management Group is activated. See relevant pages in communication lists for contact details.

APPENDIX C2 PETER FAUST DAM STORAGE CURVE

Drawing 9 Peter Faust Dam storage curve

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213324 (tif)

APPENDIX C3 PETER FAUST DAM SPILLWAY RATING CURVE

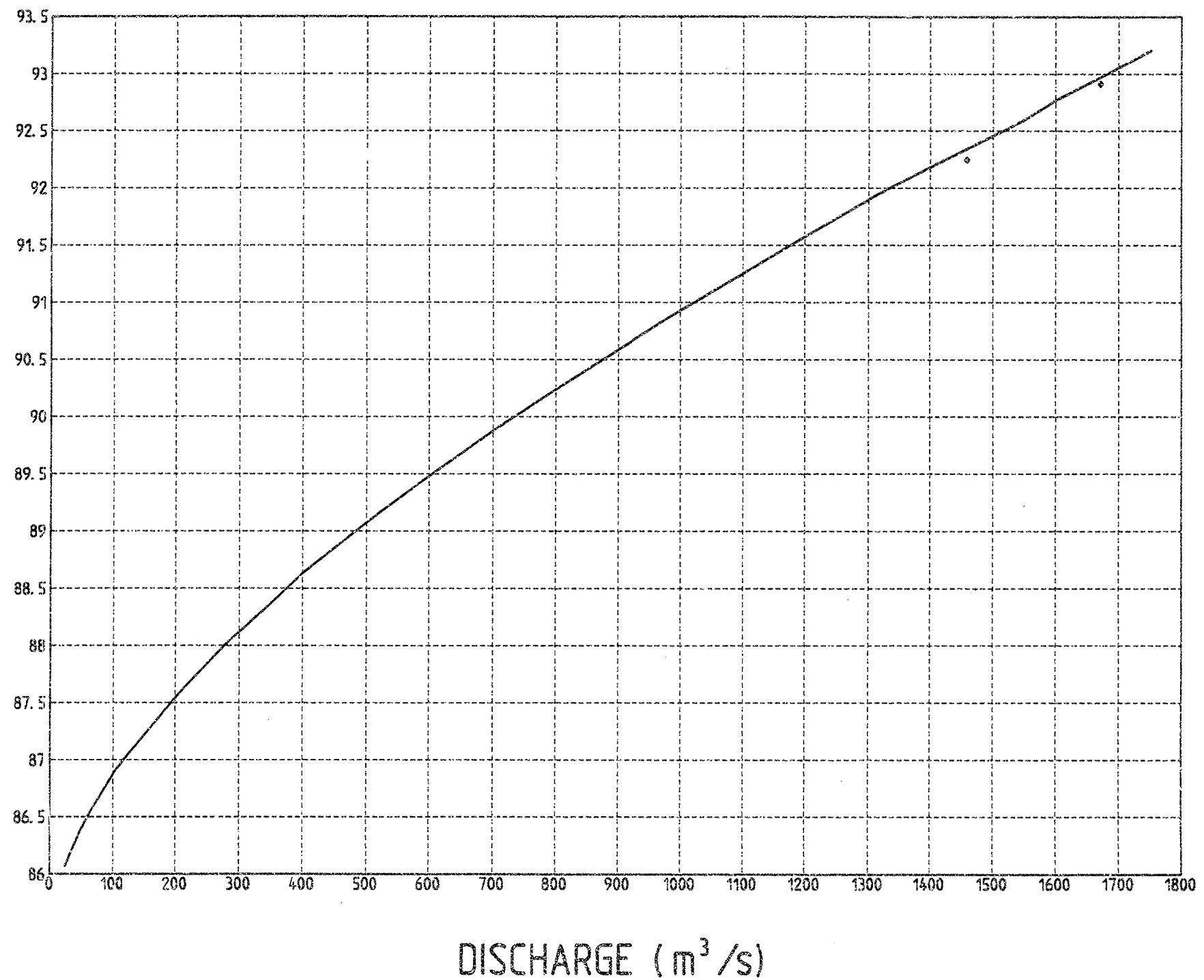
Drawing 10 Peter Faust Dam spillway rating curve

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HEADWATER RATING

ELEVATION (m)	DISCHARGE (m ³ /s)
86.07	22.87
86.35	44.22
86.54	62.35
86.66	75.89
86.90	105.24
86.92	101.19
87.63	212.50
88.04	283.34
88.36	348.10
88.64	400.72
89.08	500.90
89.48	599.10
89.89	703.29
90.29	814.60
90.58	897.58
90.84	971.45
91.23	1092.88
91.95	1315.50
92.24	1457.20
92.59	1548.30
92.77	1600.00
92.91	1669.70
93.20	1750.60

ELEVATION (m)



DISCHARGE (m³/s)

REVISION		DATE		REMARKS		ZONE		CHKD		PSD		DRAWING		SCHEDULE		SCALES		RATIOS BEFORE REDUCTION		 Water Resources		PROSERPINE DAM SPILLWAY RATING CURVE		CONTRACT DRAWING DRAWING NUMBER A3- 101613	
DATE		REMARKS		ZONE		CHKD		PSD		DRAWING		SCHEDULE		SCALES		RATIOS BEFORE REDUCTION		DRAFTING DR B.K. PREP CHK A.N. CHK SURV S.S. SUR		DESIGN DESIGNER SENIOR DESIGNER MANAGER CIVIL DESIGN		APPROVED DATE		CONTRACT DRAWING DRAWING NUMBER A3- 101613	

THINK SAFETY - WORK SAFELY

ANNEXE A. Peter Faust Dam – Flood Warning SMS Messages

Advice Stay informed 	Watch and Act Prepare to leave 	Emergency Leave immediately To be issued in consultation with council 	Advice Stay informed 
SMS ADVICE from Sunwater. Peter Faust Dam is likely to spill / spilling excess water into the Proserpine River. People downstream of the Proserpine River should STAY INFORMED. Water flows from Peter Faust Dam expected to remain within beds and banks of river / may contribute to widespread/ localised/ overland flooding . Expect increased river flows in 6-12 hours / later today/ overnight/ tomorrow . There is no danger yet. Call Triple Zero (000) if your life is in danger. Call the SES on 132500 for flood help. Get full warnings and what you should do at https://bit.ly/RecandSafety	FLOOD WATCH AND ACT from Sunwater. Excess water spilling from Peter Faust Dam into the Proserpine River has increased significantly. Water flows from Peter Faust Dam may contribute to dangerous/widespread overland flooding downstream. Residents from the dam to Petters Creek crossing may be cut off/isolated in the coming hours and unable to leave their properties safely if outflows continue/increase . Expect increased river flows in 6-12 hours / later today/ overnight/ tomorrow . People downstream of the Peter Faust Dam must PREPARE TO LEAVE in case the flood gets worse. Call Triple Zero (000) if your life is in danger. Call the SES on 132500 for flood help. Get full warnings and what you should do at https://bit.ly/RecandSafety	FLOOD EMERGENCY WARNING from Sunwater. People downstream of the Proserpine River and the Proserpine community must LEAVE IMMEDIATELY. Peter Faust Dam possible failure/is failing . Major flooding is happening now. Water in the Proserpine River is rising fast. Your life is at risk. Go now to a safe place away from the flood. Get full warnings and what you should do at Whitsunday Regional Council disaster.whitsundayrc.qld.gov.au/ and Mackay Regional Council disaster.mackay.qld.gov.au/ . Call 000 if your life is in danger.	ADVICE from Sunwater. Peter Faust Dam is continuing to spill/has stopped spilling excess water into Proserpine River. Peter Faust Dam has returned to regular operating conditions. Expect decreased river flows in timeframe. Stay informed.

ANNEXE B. Peter Faust Dam – Dam Failure SMS Messages

	Watch and Act Prepare to leave 	Emergency Leave immediately To be issued in consultation with council 	Advice Stand Down 
SMS	FLOOD WATCH AND ACT from Sunwater. People downstream of the Proserpine River and the Proserpine community must PREPARE TO LEAVE. Peter Faust Dam possible failure in the coming hours/ 6-12 hours/ later today/ overnight/ tomorrow which could lead to flooding. Call Triple Zero (000) if your life is in danger. Call the SES on 132500 for flood help. Get full warnings and what you should do at https://bit.ly/DamAlert	FLOOD EMERGENCY WARNING from Sunwater. People downstream of the Proserpine River and the Proserpine community must LEAVE IMMEDIATELY. Peter Faust Dam possible failure/is failing. Major flooding is happening now. Your life is at risk. Go now to a safe place away from the flood. Get full warnings and what you should do at disaster.whitsundayrc.qld.gov.au/ and Mackay Regional Council disaster.mackay.qld.gov.au/	ADVICE from Sunwater Peter Faust Dam has returned to regular operating conditions. Stay informed.