Engineering Policy EP147

Road closure policy for wet weather and flooding

December 2022



Copyright

© The State of Queensland (Department of Transport and Main Roads) 2022.

Licence



This work is licensed by the State of Queensland (Department of Transport and Main Roads) under a Creative Commons Attribution (CC BY) 4.0 International licence.

CC BY licence summary statement

In essence, you are free to copy, communicate and adapt this work, as long as you attribute the work to the State of Queensland (Department of Transport and Main Roads). To view a copy of this licence, visit: https://creativecommons.org/licenses/by/4.0/

Translating and interpreting assistance



The Queensland Government is committed to providing accessible services to Queenslanders from all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Feedback

Please send your feedback regarding this document to: tmr.techdocs@tmr.qld.gov.au

Contents

| 1 | Policy statement | 1 |
|---|--|---|
| 2 | Definitions | |
| | Consultation | |
| 4 | References | |
| 5 | Objectives | |
| 6 | Benefits | |
| 7 | Scope | |
| | Applicability | |
| 9 | Road closure thresholds (including re-opening) | |
| _ | Road closure exceptions (including limited / restricted access) | |
| | - 11000 0103016 68660110113 111101001110 11111160 / 163111616U 066633/ | |

1 Policy statement

The Queensland Government's campaign *If it's flooded, forget it*, and more recently *don't get carried away – back it up*, are timely reminders for Queensland road users and the public about the dangers of wet weather and flooding on Queensland's state-controlled road (SCR) network: in particular, the dangers of floodwater, swift flowing water and to never enter floodwaters as only a small amount of water is required to wash a vehicle away.

Accordingly, Queensland road users and the public should:

- 1. drive with due care, to the condition of the road and be cognisant of previous experience
- 2. comply with road rules, road signage, directions from emergency and road workers and observe water depth markers, and
- 3. make use of traveller information services such as <u>QLDTraffic</u> to assist with planning their travel route or defer as appropriate.

In ensuring Queensland road users and the public are safe when using the SCR network and to prevent damage to road infrastructure, Transport and Main Roads may close a SCR. This policy outlines Transport and Main Roads' position on road closures due to wet weather and flooding.

2 Definitions

Terms, abbreviations and acronyms used in this policy are defined in Table 1.

Table 1 - Terms and definitions

| Term | Definition |
|------------------|--|
| <u>Austroads</u> | Association of Australian and New Zealand Road Transport and Traffic Authorities |
| SCR | State-controlled road: a road or route, or part of a road or route, declared a state-controlled road under section 24 <i>Transport Infrastructure Act 1994</i> (Qld) |

3 Consultation

This policy was initially developed in consultation with Transport and Main Roads Districts and Regions, Transport for New South Wales, Victoria Department of Transport (formerly VicRoads), Main Roads Western Australia and Department of Infrastructure and Transport South Australia (formerly Department of Planning, Transport and Infrastructure). Subsequent reviews or updates that do not represent material changes are not disseminated for consultation.

4 References

- Transport Infrastructure Act 1994 (Qld)
- Transport Operations (Road Use Management) Act 1995 (Qld)
- Transport and Main Roads Road Drainage Manual (refer Chapter 2, Section 2.5)
- Transport and Main Roads Strategic Plan 2019–2023
- Transport and Main Roads wet weather and flooding information sheet series (located under See also on Engineering Policies web page or contact TIManagement@tmr.qld.gov.au), and
- Commonwealth of Australia (Geoscience Australia) Australian Rainfall and Runoff: A Guide to Flood Estimation 2019.

5 Objectives

Following the Queensland Floods Commission of Inquiry in March 2012, Transport and Main Roads has taken considered action to make the SCR network a safer place for Queensland road users and the public during wet weather and flooding, including developing this policy. Accordingly, the objectives of this policy are to:

- provide guidance on when any SCR impacted by wet weather and flooding events should be closed
- provide guidance on circumstances where an exception to closure may apply
- ensure a pragmatic and safe approach to road closure decisions, and
- support Transport and Main Roads' <u>vision and purpose</u> of creating a single integrated transport network accessible to everyone.

6 Benefits

The benefits of this policy are:

- consistent application of road closures due to wet weather and flooding policy across the Queensland SCR network
- 2. improved safety of road users and the public during wet weather and flooding events, and
- 3. clear departmental policy in the event of a legal claim.

7 Scope

This policy encompasses the actions of all Transport and Main Roads District and Regional staff, contractors and/or other service providers involved in or connected with Queensland SCR road closures due to wet weather and flooding events.

8 Applicability

This policy applies to all Queensland SCRs that are impacted by wet weather and flooding requiring a closure authorised under:

- section 46(1) Transport Infrastructure Act 1994 (Qld), or
- section 71 Transport Operations (Road Use Management) Act 1995 (Qld).

9 Road closure thresholds (including re-opening)

Transport and Main Roads is committed to ensuring the safety of road users and the public and preventing damage to road infrastructure and, in most cases, adopts a conservative approach and treats all vehicles in the same manner when a decision is made to close a SCR. Accordingly, Queensland SCRs may be closed during wet weather and flooding events when:

- the depth of still water is 300 mm or more
- where water is flowing, Transport and Main Roads' District or Regional discretion can be used to close the SCR at a lower depth, depending on the speed of flow – the faster the flow of water, the lower the depth for closure, and/or
- SCRs may be closed at lower depths if upstream catchment rainfalls or flows are likely to
 cause water levels to rise to levels greater than 300 mm in the near future, and it is practical to
 do so.

Transport and Main Roads will re-open SCRs following inspection of the road and bridges by an authorised officer. Depending on the severity of the inundation, a full inspection may be required.

10 Road closure exceptions (including limited / restricted access)

The following exceptions to the threshold may apply and are to be considered on a case-by-case basis with road user safety and protection of road infrastructure prime considerations:

- discussions between Transport and Main Roads District / Regional personnel, road stewards
 including contractors such as road maintenance performance contract holders, RoadTek
 and/or local government authority may occur where a range of factors, though not exhaustive,
 are considered in determining whether a road closure will be enacted:
 - make, composition and clearance of vehicles that would traverse the road consideration should be made as to the vehicle stability the roads and bridges covered with water, according to their size, type and ground clearance, noting the deeper the water level or higher the flow velocity, the more dangerous the situation
 - depth of water over the SCR
 - flow velocity (how fast the water is flowing over the SCR)
 - location of wet weather and flood-impacted SCR
 - geometrics of the SCR or resulting water impacting the SCR
 - exit point visibility of wet weather and flood-impacted SCR
 - distance or horizontal curve resulting in obscurity of the SCR, and/or
 - distance of floodway
- where a Transport and Main Roads Region or District has jurisdiction incorporating a remote community, road closures on SCRs may be applied in a more practical manner where the SCR is impacted by shallow and slow-moving water (refer to Question on Notice 175 from Member of Mt Isa to Minister for Transport and Main Roads [2013] Queensland Legislative Assembly 54 (Queensland Parliament)

- where any SCR closure is authorised under section 46(1) Transport Infrastructure
 Act 1994 (Qld), section 46(4)(b) Transport Infrastructure Act 1994 (Qld) provides an approval
 process (which can be organised electronically at <u>Transport and Main Roads</u>
 <u>District / Regional offices</u> or, in some cases, at the site of SCR closure) to allow Queensland
 road users to drive past the signage installed, including:
 - single trip one-way approval granted in limited circumstances for delivery of essential items, such as food, water, or medical supplies, to isolated areas
 - local access approval (multiple trip) granted in areas where SCRs are restricted for an extended period to Queensland road users who need to access their residence, property, business, or essential services, and
 - Transport and Main Roads inspectors (single / multiple trips) available in special circumstances where it is necessary for ensuring the safety of persons
- a five-tonne load limit for vehicles, when safe to do so, may apply to the following roads during the wet season (typically November to April inclusive) in Transport and Main Roads' Far North District within North Queensland Region: this may negate the need to secure an approval under section 46(4)(b) *Transport Infrastructure Act 1994* (Qld):
 - Peninsula Developmental Road
 - Burke Developmental Road.
- Vehicles exceeding the SCR mass limit or dimension limit can apply for a permit for movement of essential supplies or other urgent travel. Operators need a permit, where they are required to hold one to move on SCRs initially based on mass and dimension requirements etc, to qualify to apply to drive past installed road closure signage. Where operators hold the required permit, or don't require a permit in accordance with guidelines or Heavy Vehicle National Law, they may apply directly to Transport and Main Roads to drive past installed road closure signage.