

Engineering Policy 147

Road closure policy for wet weather and flooding

November 2020

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1 Policy statement

The State Government's campaign *If it's flooded, forget it*, is a reminder to the community that just a small amount of floodwater can wash a vehicle away. All Queenslanders should be aware of the dangers around floodwater or swift flowing water, and should never enter floodwaters.

Motorists should always:

- drive with due care and to the condition of the road
- comply with road rules and road signage
- observe water depth markers, and
- be cognisant of previous experience.

The Department of Transport and Main Roads is committed to ensuring the safety of road users and the general public and preventing damage to road infrastructure. State-controlled roads (SCRs) may be closed during wet weather and flooding events when the depth of still water is 300 mm or more. In cases where the water is flowing, departmental regional discretion can be used to close the road at a lower depth, depending on the speed of flow. The faster the flow of water, the lower the depth for closure.

In some circumstances, roads 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.

Exceptions to the general rule can be made, following discussions between the department's regional office and the local road steward (Road Maintenance Performance Contractor (RMPC) / Road Asset Management Contractor (RAMC), RoadTek, Regional Council, private contractor or Transport and Main Roads road inspector / officer on site), taking into consideration a number of factors, which are listed in Section 6 of this policy).

2 Scope

The scope of this policy covers SCRs only and the decision / requirements to close and re-open a SCR during wet weather and flooding.

3 Applicability

The *Transport Infrastructure Act 1994* (TIA) (s46) allows:

- authorised officers to declare an SCR temporarily closed to all traffic to prevent damage to departmental infrastructure and to ensure the safety of road users and other people, and
- authorised officers to grant written approval for a person to drive past a road closed / restricted sign (restricted road use notice) in exceptional circumstances during wet weather events.

The legislation applies to SCRs.

This policy applies to Transport and Main Roads regional staff, contractors and/or service providers involved in the closing, re-opening and inspection of roads due to wet weather and flooding.

4 Objectives

The objectives of this policy are to:

- provide guidance on when a flooded road should be closed
- provide guidance on circumstances when this may vary, and
- ensure a sensible degree of flexibility is applied when making road closure judgements.

The policy meets the business objectives of the Transport and Main Roads *Strategic Plan 2019–2023*: Creating a single integrated transport network accessible to everyone.

5 Rationale

Following the Queensland Floods Commission of Inquiry dated March 2012, action has been taken to make the SCR network a safer place for motorists and other people, during wet weather and flooding.

Apart from situations where the road is clearly flooded, the decision to close a road is made taking into account:

- road user safety
- protection of roads and bridges
- depth of water
- flow velocity (how fast the water is flowing over the road), and
- vehicle stability (the stability of vehicles on roads and bridges covered with water varies, according to their size, type and ground clearance) – the deeper the water level or higher the flow velocity, the more dangerous the situation).

To simplify the implementation, in most cases Transport and Main Roads adopts a conservative approach and treats all vehicles in the same manner when a decision is made to close the road; however, in the case of restricted access, some vehicles (refer to next section) may be permitted.

The department 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.

More information is available in the following documents:

- *Information sheet 1: Transport and Main Roads policy on closing of state-controlled roads during wet weather and flooding (depth of water over road)*
- *Information sheet 2: Temporary restrictions of state-controlled roads due to wet weather and flooding, and*
- Transport and Main Roads *Road Drainage Manual* 2nd edition – Chapter 2 (Section 2.5) (this manual is consistent with Austroads' standards and in line with the latest research, including the Engineers Australia *Australian Rainfall & Runoff – Appropriate Safety Criteria for Vehicles – Stage 2 Report* dated February 2011).

6 Exceptions

Exceptions to the general rule, outlined in the Policy Statement, can be made in the following circumstances:

- Following discussions between the department's regional office and the local road steward (RAMC, RMPC, RoadTek, Regional Council, private contractor or Transport and Main Roads road inspector / officer on site). The department and the local road steward will take into consideration a number of factors which, although not exhaustive, could include:
 - make, composition and clearance of vehicle
 - location of flooded road
 - geometrics of the road / water
 - exit point of flooded road not visible
 - road obscured by distance or horizontal curve, and
 - distance of floodway.
- Transport and Main Roads regions with remote communities under their jurisdiction could apply closures in a more practical manner, particularly for shallow and slow-moving water courses¹. Each situation should be considered on a case-by-case basis, with road safety and protection of government infrastructure being the prime considerations.
- Under section 46(4) of the TIA, access to particular locations can be managed through an approval process:
 - **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 of time for people who need to access their residence, property, business or essential services, and
 - **Transport and Main Roads Transport Inspectors (single / multiple trips)** – available in special circumstances where it is necessary for ensuring the safety of persons.

The approval processes can be organised electronically at the department's regional offices or, in some cases, at the road site.

- A 5 tonne load limit for vehicles applies to the following roads during the wet season, when it is safe to do so:
 - Peninsula Developmental Road (Far North district) North Queensland Region, and
 - Burke Developmental Road (Far North District) North Queensland Region.

This allows access to residences, properties and businesses without the need for a Restricted Road Use Notice approval under s46 of the TIA.

¹ Reference Question on Notice 175 dated March 2013 from Mr Robbie Katter, Member for Mount Isa, regarding the Gulf Region

Higher mass vehicles can apply for a Load Limit Permit from either Far North or North-West districts, under Part 5 of the Transport Operations (Road Use Management – Mass, Dimensions and Loading) – Regulation 2005: *Protection of Roads and Structures*. These are approved for the movement of essential supplies or other urgent travel. The onus is placed on the permit holder to ensure the route is suitable for the proposed travel and to meet the costs of any excessive damage caused.

7 Benefits

The expected benefits of having a clear understanding of when to close a road during wet weather and flooding include:

- consistency of processes across the state
- improved safety of road users and other people during wet weather and flooding, and
- clear policy in the event of a legal claim.

8 Definitions

The following terms, abbreviations and acronyms are provided for the purpose of this policy.

Term	Definition
Austrroads	Association of Australia and New Zealand Road Transport and Traffic Authorities
QPS	Queensland Police Service
RAMC	<i>Road Asset Maintenance Contract</i>
RMPC	<i>Road Maintenance Performance Contract</i>
SCR	State-controlled road – a road or land, or part of a road or land, declared under s24 of the TIA to be a SCR
TIA	<i>Transport Infrastructure Act (1994)</i>

9 Consultation

This policy was developed in consultation with the following stakeholders:

- Transport and Main Roads regions and divisions
- Transport for New South Wales
- VicRoads
- Department of Main Roads, Western Australia, and
- Department of Planning Transport and Infrastructure, South Australia.

10 References

10.1 Legislation

- *Transport Infrastructure Act 1994, s46 Temporary restrictions on use of state-controlled roads, and*
- Transport Operations (Road Use Management – Mass, Dimensions and Loading) – Regulation 2005.

10.2 Other related documents / tools

- Transport and Main Roads *Road Drainage Manual* 2nd edition
- Transport and Main Roads *Strategic Plan 2019–2023: Creating a single integrated transport network accessible to everyone*
- Transport and Main Roads Wet Weather and Flooding Information sheet series:
 - *Information sheet 1: Transport and Main Roads policy on closing of state-controlled roads during wet weather and flooding (depth of water over road)*
 - *Information sheet 2: Temporary restrictions on state-controlled roads during wet weather and flooding*
 - *Information sheet 3: Heavy vehicle industry – Restricted state-controlled roads during wet weather and flooding*
 - *Information sheet 4: Process for temporarily closing / restricting state-controlled roads during wet weather and flooding*
 - *Information sheet 5: Re-opening of state-controlled roads following wet weather and flooding*
 - *Information sheet 6: Road workers, road inspectors, regional Councils and contract providers*
 - *Information sheet 7: Signage for temporary restrictions of state-controlled roads during wet weather and flooding*
 - *Information sheet 8: Traffic Management Centres and Transport and Main Roads regions*
 - *Information sheet 9: Approval process to drive past a Restricted Road Use Notice*
 - *Information sheet 10: Restricted Road Use Notice application and approvals checklist, and*
- Engineers Australia – *Australian Rainfall & Runoff – appropriate safety criteria for vehicles – Stage 2 Report* dated February 2011.

