

INFRASTRUCTURE SERVICES
Operations

4.2.6

TITLE:	<u>CLOSURE OF UNSEALED ROADS DUE TO WET WEATHER</u>
ADOPTED:	OMC 19 April 2012
REVIEWED:	OMC 27 March 2014 – Pages 94 – 99 OMC 17 December 2015 – Pages 110 - 121
ASSOCIATED LEGISLATION:	Section 3.50 of the Local Government Act 1995
ASSOCIATED DOCUMENTS:	Australian Rainfall and Runoff Appropriate Safety Criteria for Vehicles Stage 2 Report P10/S2/020 Feb 2011
REVIEW RESPONSIBILITY:	Director Infrastructure
DELEGATION:	Road Closures, General and Temporary Cape Leveque Road, Wet Season Closure and Load Limits Permits, Road Trains and Extra Mass

Previous Policy Number 3.1.22

Preamble:

This policy is to act as an internal guideline to assist Shire staff in the determination of when an unsealed road is to be closed to particular traffic in wet conditions.

Drivers of all vehicles are expected to exercise all due care and drive in accordance with the prevailing conditions.

Objective:

1. To ensure that when unsealed roads are closed to traffic due to wet weather, it is as a result of the application of consistent criteria;
2. To ensure that all persons and businesses are treated equally in regard to whether or not they may obtain a permit to access a road which is closed due to wet weather and which has the "Road Closed" sign erected;
3. To ensure the prevention of unreasonable damage to roads due to excessive vehicle movements during wet weather necessitating costly maintenance work;
4. To ensure the amenity of the locality is maintained and protected.
5. To facilitate the enforcement of Road Closures where it is deemed necessary to ensure the safe passage of road users and vehicles, and/or the prevention of damage to road assets which will require costly repairs.

Definitions:

- Small 2WD is a Small Passenger car of length < 4.3m, kerb weight < 1250kg and ground clearance <0.12m;
- Large 2WD is a Large Passenger car of length > 4.3m, kerb weight > 1250kg and ground clearance > 0.12m;
- Small 4WD is a Passenger car of length < 4.5m, kerb weight < 2000kg and ground clearance < 0.22m;
- Large 4WD is a Large Passenger car of length > 4.5m, kerb weight > 2000kg and ground clearance > 0.22m;
- Essential work processes shall mean work activities which if foregone, would cause immediate hardship and a detrimental effect on the safety, health or well-being of communities, individuals or businesses greater than the impact of the wet weather itself;

Policy:

When significant wet weather occurs, Shire Staff with responsibility for road maintenance (or other nominated staff) shall inspect unsealed roads and assess the condition in accordance with the Wet Weather Condition Rating Criteria identified below.

This assessment will include consideration of the ability of a reasonably competent driver to safely negotiate the road in the conditions prevailing and vehicles described in the Guidelines below.

The assessment must also consider the draft interim safety criteria as set out in the Australian Rainfall and Runoff, Appropriate Safety Criteria for Vehicles, Stage 2 Report, P10/S2/020, Feb 2011, reproduced below in Schedule 1.

Upon assessment, a recommendation will be forwarded immediately to the Director Infrastructure for a decision under delegation from the CEO.

Guidelines for Road Closure

Wet Weather Condition Rating Criteria

For use as a guideline by Road Inspectors:

A. EXCELLENT

Road Open to All traffic. Road is dry to moist and surface not obviously affected by water. The road surface is not significantly marked by tyres and is not slippery. There is no erosion or wash-outs.

B. GOOD

Road Open to All traffic. Road is slightly affected by water with minor isolated ponding of depth and length which can be driven around easily without entering water. Road surface may be wet and marked by tyres, but not excessively slippery. There is no erosion or wash-outs.

C. FAIR - PARTIAL CLOSURE TO SMALL 2WD'S

Open to other traffic with care. Road is moderately affected by water necessitating slower speeds to negotiate. Isolated major pools of water occur, of a depth and length which cannot be by-passed without entering water for a short distance.

Difficulty may be experienced in passing other vehicles due to steeper cross slopes and/or a narrow distance between banks. The floor of ponded water holes is firm and easily trafficable at low speed. Ponded water is <300mm deep, and flowing water is <100mm deep. Road surface may be wet, marked by tyres and somewhat slippery. There is no erosion or wash-outs.

D. POOR - PARTIAL CLOSURE TO BOTH SMALL AND LARGE 2WD'S AND SMALL 4WD's Open to Large 4WD Vehicles only. Road is significantly affected by water necessitating slower speeds to negotiate. The road surface may be greasy/slippery, with significant imprints left by tyres on road surface. Extensive pools of ponded water may exist of a depth and length which cannot be driven around and by-passed without fully entering ponded water. The floor of the water hole is less firm but still trafficable at low speed. There may be hazardous erosion gullies or wash-outs across the road. Ponded water is <400mm deep, and flowing water is <150mm deep.

E. ROAD CLOSED TO ALL TRAFFIC. Road is significantly affected by water necessitating slow speeds to negotiate. The road surface may be greasy/slippery, with significant imprints left by tyres on road surface. Extensive pools of depth and length greater than 100m, which cannot be driven around and by-passed without fully entering water with possibly invisible deeper holes within the water body. The floor of the water hole is softer and/or greasier and may cause the engine to labour. It may be difficult to gain traction with a risk of becoming bogged or stopping. There may be hazardous erosion gullies or wash-outs across the road in places. Ponded water is >500mm deep and flowing water is >200mm deep.

Road Closure in Sections

Roads may be considered for closure in sections of like conditions, for example on Manari Road.

- Cape Leveque Rd to Willie Creek Road turnoff;
- Willie Creek Rd to Barred Creek turnoff;
- Barred Creek to Quondong Point turnoff;
- Quondong Point turnoff to James Price Point precinct Laydown area;
- James Price Point precinct Laydown area to James Price Point;

Road Closed Signs to be erected

Shire staff shall erect appropriate signage at the entrance to all unsealed roads being closed. They shall be kept up to date to reflect the wet weather conditions of the road and the closure status for different vehicles and for different sections.

Permits to Travel on a "Closed" Road

Permits to traverse a "Closed" road may be issued to those with legitimate and pressing reasons for travel and/or in emergency situations and may contain such conditions of operation, including indemnity for Council, as deemed necessary by the CEO.

Operators will be required to assure the competency of both drivers and the vehicles used for negotiating such adverse conditions.

The following activities may be considered for such a permit:-

- food and grocery supplies to community stores,
- fuel supplies to power stations,
- building supplies for urgent housing projects,
- furniture transport for new essential public servants,
- access for businesses to ensure continuity of essential work processes,
- safety of employees,
- ongoing scientific studies of significance,
- community funerals, sorry business and other customary lore obligations,
- emergency response eg Emergency Services
- such other activities which may be determined from time to time by the CEO

The permit may be cancelled at any time by the CEO if circumstances warrant.

Schedule 1.

Proposed *DRAFT INTERIM* criteria for stationary vehicle stability

Class of vehicle	Length (m)	Kerb Weight (kg)	Ground clearance (m)	Limiting still water depth ¹	Limiting high velocity flow depth ²	Limiting velocity ³	Equation of stability
Small passenger	< 4.3	< 1250	< 0.12	0.3	0.1	3.0	$DV \leq 0.3$
Large passenger	> 4.3	> 1250	> 0.12	0.4	0.15	3.0	$DV \leq 0.45$
Large 4WD	> 4.5	> 2000	> 0.22	0.5	0.2	3.0	$DV \leq 0.6$

¹ At velocity = 0 ms⁻¹; ² at velocity = 3ms⁻¹; ³ at low depth

Extract from Australian Rainfall and Runoff, "Appropriate Safety Criteria for Vehicles, Stage 2 Report", P10/S2/020, Feb 2011,

Note: DV is Depth (m) multiplied by Velocity (m/s). For example:-

1. 0.2 m deep by 1 m/s is a DV of 0.2; and
2. 0.8m deep by 0.00 m/s is a DV of 0.0