



**QUEENSLAND  
COURTS**

**CORONERS COURT OF QUEENSLAND**

**FINDINGS OF INQUEST**

<b>CITATION:</b>	<b>Inquest into the deaths of Byron James Crowley and Bernard Ashton Davis</b>
<b>TITLE OF COURT:</b>	Coroners Court
<b>JURISDICTION:</b>	Cairns
<b>FILE NO(s):</b>	2015/3845 – Crowley; 2015/2961 – Davis
<b>DELIVERED ON:</b>	19 October 2017
<b>DELIVERED AT:</b>	Cairns
<b>HEARING DATES:</b>	22 January 2016, 14 April 2016, 23 & 24 June 2016,
<b>FINDINGS OF:</b>	Kevin Priestly, Northern Coroner
<b>CATCHWORDS:</b>	Stray horses, state forest, main road, hazard to road users, missed opportunities, better risk management
<b>REPRESENTATION:</b>	
Counsel Assisting:	Ms Jesika Franco
Byron Crowley:	Alex Raeburn, Counsel instructed by Connolly Suthers Lawyers.
Queensland Parks & Wildlife:	Kevin Parrott, Counsel of Crown Law
Queensland Department of Transport and Main Roads:	Benjamin McMillan, Counsel.
Townsville City Council:	A. D Bligh, Solicitor

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## **Introduction**

On the evening of 31 July 2015 Mr Bernard Ashton Davis was riding his motorcycle south on the Bruce Highway, when he collided with a horse and died. In the early hours of the morning on 30 September 2015, Byron James Crowley, a 15 year old passenger in a car his mother was driving south on the Bruce Highway in the same general location, died when the car struck a dead horse on the side of the road causing a loss of control. The car left the road and struck a tree. After the death of Byron Crowley, a cull was conducted of the feral horses in the State Forest adjacent to that section of the Bruce Highway. The risk to road users of collision with feral horses was mitigated.

A coroner is required to investigate and make findings about who died, when the person died, where the person died, how the person died and what caused the person to die. A coroner must not include in the findings any statement that a person is or may be guilty of an offence or civilly liable for something. Further, a coroner is empowered at inquest to make comments or recommendations to help prevent deaths from similar circumstances.

Coronial investigations started when each death happened. The information gathered during each coronial investigation was sufficient to make most of the required findings. However, the presence of horses and other animals near and occasionally on this section of the Bruce Highway was known to the relevant government departments and authorities.

Therefore, in the course of determining 'how' each death happened, an issue common to both arose: namely, what was done to manage the risk of animal related crashes and how might that be done better?

I approached the preparation of my findings by considering:

- The circumstances of the death of Mr Davis;
- The circumstances of the death of Byron Crowley;
- The roles and responsibilities of relevant government departments and authorities;
- Past management of stray animals on land adjacent to the highway;
- Past management of the hazard of stray animals on the highway corridor;
- Response of government departments and authorities to the fatalities;
- A way forward.

## **Mr Bernard Davis**

Mr Bernard Davis was 43 years of age and lived in West End, Townsville. On the evening of 31 July 2015 he had a few beers at the Rollingstone pub. He left about 10:00pm, riding his Ducati 998 motorcycle, travelling south on the Bruce Highway towards Townsville. He was travelling along a straight section of road leading into an open right bend near Clemant, just after the Leichardt Creek Bridge, when he collided with a stray pregnant horse on the road. He and his motorcycle slid over 100 metres after impact. Mr Davis was pronounced deceased at the scene by Ambulance Officers. The horse was killed on impact.

Forensic Pathologist, Professor David Williams, conducted an autopsy and concluded death was due to chest trauma due to a motorcycle accident. Toxicology testing revealed Mr Davis had smoked cannabis prior to his death, and his blood alcohol level was three times the legal limit for driving.

Forensic Crash Unit Investigator Constable Williamson investigated the incident and provided a report to me. An investigation was also conducted of Road Safety and Environment Conditions by Acting Senior Road Safety Officer, Ms Denise Elrick from Department of Transport and Main Roads (TMR).

The incident occurred on a straight section of road leading into an open right bend. The road was bitumen sealed and in good condition. The impact point was located in the southbound lane of the Bruce Highway after Leichardt Creek Bridge. There were no tyre marks prior to the area of impact. There were scrape marks and gouges in the road surface and parts of the motorcycle fairing located post impact, indicating the motorcycle slid onto its side. The scrape marks, continued along the road travelling onto the incorrect side. Mr Davis was located in the centre of the northbound lane. There were further scrape marks leading to the motorcycle positioned in the northbound lane. The distance from the point of impact to Mr Davis was 114.9m metres, with his motorcycle a further 68.7 metres beyond him.

The road was in a good state of repair with no defects or potholes, oil or debris found that would have contributed to the crash. The weather was dry and clear with no smoke hazards.

There is no street lighting on this section. Mr Davis likely had his headlight on low beam. The horse was brown and difficult to see in the poor light on the embankment. The end of the guardrail from the creek may have blocked Mr Davis' view of the horse as it approached up the embankment and entered onto the road.

The motorcycle was a 2002 red Ducati 998. It was damaged in a manner consistent with the circumstances of the collision. No defects were identified during the mechanical inspection that would have contributed to the crash.

Speed analysis calculations showed a speed prior to impact with the horse of 114km/h to 133km/h. The speed limit for that section of road was 100km/h. Constable Williamson reported the speed would have reduced the opportunity for Mr Davis to identify and react to the danger. However, it was reported that even at the 100km/h the same outcome would likely have occurred given the lack of protection afforded by a motorcycle.

There was a witness to the incident. A driver of a truck and trailer combination travelling north told police he saw the motorcycle travelling towards him with its headlight on low beam. This witness also saw horses on the southbound side of the road. He saw three horses, one white and two bay, run up from the southbound lane side in front of the guard rail at Leichardt Creek Bridge. Two ran across the road and he saw the motorcycle hit the third horse. He saw rider and motorcycle tumble along the road past his vehicle. The FCU Investigator noted the truck driver was seated higher than the motorcycle, had two headlights illuminated and was travelling around the sweeping left bend which would have illuminated the horses on the embankment; in contrast with the situation that confronted Mr Davis.

A dead female brown horse was located at the bottom of the embankment adjacent to the impact point, about 4 metres from the road. It had injuries to the right side indicating it entered the road from the left and crossed the southbound lane colliding with Mr Davis. The horse was in unkempt condition with chunks of fur missing. It had no form of branding or marking.

Constable Williamson concluded the horse, a 'wild brumby', was the main cause of the crash.

Constable Williamson investigated where the horse may have come from. About 28 metres to the left of the southbound lane over a railway track there is a fence that runs parallel to the road. This fence had a gap near the collision site with bundles of barbed wire on the ground. There were no horse tracks through this gap. Checks revealed the identity of the owner of the property and enquiries were made. The owner told police they didn't own any horses and the fence was being erected by Queensland Rail.

Police spoke with another property owner near the crash site. The owner told police they had constant problems with wild horses from the adjacent state owned land, breaking through fences to access green feed on the grass embankments. A further adjacent property owner told police

their horses were all accounted for, and recently they had to avoid a brumby on the highway when returning home.

Constable Williamson concluded the horse did not access the area through this gap, but rather from the State Forest located on the northern side of the highway north of the crash site.

### **Required Findings**

I find Bernard Davis died shortly after 10pm on 31 July 2015, when the motorcycle he was riding in a southerly direction on the Bruce Highway at a point near Leichardt Bridge, collided with a feral horse that entered the road corridor from Clemant State Forest. He died due to chest trauma sustained in that collision. Mr Davis was travelling at an excessive speed and was significantly affected by alcohol. These factors reduced the opportunity to detect and respond to the presence of the horse that entered onto the road in front of him.

### **Byron Crowley**

Byron Crowley was 15 years of age. On 30 September 2015, he was travelling with his mother, Ms Crowley and younger brother from Cairns to Townsville. His mother was driving a Toyota Starlet sedan with his younger brother in the front passenger seat while Byron was seated in the rear right position. They left Cairns early that morning. At about 4:45am they were travelling on a straight section of the Bruce Highway leading to a bridge at Christmas Creek, Bluewater when their car hit a dead horse on the road causing a loss of control and collision with a tree. Byron was killed on impact. Ms Crowley and the younger sibling were injured and hospitalised.

Forensic Pathologist, Professor David Williams, conducted an autopsy and concluded Byron died due to a fractured spine due to the motor vehicle accident.

Constable North from the Townsville Forensic Crash Unit conducted the investigation and provided a report. An investigation was also conducted of Road Safety and Environment Conditions by Acting Senior Road Safety Officer, Ms Denise Elrick from Department of Transport and Main Roads.

Investigations revealed a Western Star prime mover with a 14 metre drop-deck trailer travelling north through the same location hit a horse at about 4.28am. The horse was likely thrown across to the southbound lane coming to rest on the left of the southbound lane next to the fog line. The truck driver called 000 reporting he hit a horse just past Sleeper Log Creek, around Rollingstone. He reported he did not stop but saw through the side mirrors the horse come to rest on the left of the southbound lane. Between his report and the time of the crash, at least one other vehicle

swerved to miss the carcass.

On inspection of the initial impact site, Constable North saw a blood trail leading to the dead horse, located at the side of the southbound lane next to the white fog lane. There were no tyre marks prior to the area of impact. After impact, there were two tyre friction marks leading to where the Toyota Starlet left the road. Further south along the Bruce Highway, just prior to Christmas Creek Bridge, the Toyota Starlet was located down the embankment. It was about 5 metres left of the highway in tall grass and had collided with a tree.

The incident occurred on a straight section of road leading onto a bridge at Christmas Creek. The road was constructed of sealed bitumen in good condition. Bordering each side was a grass embankment approximately 2 metres below road level. There is no overhead lighting and the highway had audible lines on the edge. Constable North was of the opinion the road was in a good state of repair with no defects or potholes, oil or debris that would have contributed to the crash.

The weather was not considered to be a factor other than the presence of light fog in the general area.

A site examination of the Toyota Starlet revealed major damage consistent with the circumstances of the incident. The FCU Investigator found evidence of excessive speed.

The Toyota Starlet was fitted with seatbelts. The first response officer, Constable Manson, reported that on arrival at the scene he noticed Byron was not wearing a seatbelt. When Byron was removed from the back seat, the seatbelt was in the retracted position behind his back. The right side where Byron was seated did not have impact damage. Constable North suggested that had Byron been wearing a seat belt, he may have avoided fatal injury.

The driver of the prime mover and trailer told police there wasn't much traffic on the highway. He drove past Bluewater and then approached one of the creeks. It was dark and he remembered fog, describing it as a light mist. His lights were on low beam because of oncoming trucks in the distance heading towards Townsville. The next thing he knew was the presence of a horse in front of his bullbar on the driver's side. He saw a horse's head, neck and shoulder hit the truck. It was dark bay or brown. On impact, the horse was spun around in front of him and thrown on the other side of the road. The witness immediately called 000 to report the incident and used his CB radio to warn other road users.

Another witness saw the same dead horse on the side of the road while driving south towards Townsville. He said it was just after 4.30am. He passed a yellow high visibility sign depicting animals and slowed in case there were any on the road. He was driving with his spot lights on. Just before Christmas Creek, he saw a small horse and a large horse standing beside the road. On slowing, he noticed a dead horse on the road. He called 000 to inform police of the hazard and to get it removed. The witness could not stop as he was on his way to the airport to catch a 6.00 am flight.

A further witness was driving north on the highway and her passenger was asleep in the front seat. She saw lights travelling towards her from a distance and then the lights veered off into the bushes on the side of the road. She woke her passenger and they patrolled the area, locating the Toyota Starlet. The couple stopped other vehicles and assisted with the recovery.

Constable North concluded the horse was the main cause of the crash and it was a brumby or a wild horse. Recent police reports suggested a large number of these horses from the Clemant State Forest were moving closer to the road and accessing nearby properties for feed due to the drought.

The incident log relating to the call from the driver of the truck that struck the horse records the call was received at 4.28am, and Officers Brown and Manson were assigned to respond at 4.32am. They were proceeding to the site at that time. The Townsville City Council was advised at 4.30am with a return call at 4.37am reporting personnel from RoadTek were heading out. Another call was received through 000 at 4.50am by another driver who had to swerve to miss the dead horse and reporting two or three horses near the carcass. The operator noted police were on their way. The incident logs record that police arrived at 5.04am, just minutes after the crash likely occurred.

Ms Crowley was 35 years of age and held an open C class licence. Toxicology testing of her blood taken at admission to hospital revealed levels of amphetamine, methyl amphetamine, ketamine, and lignocaine.

Forensic Medical Officer, Dr Griffith, later reported that ketamine and lignocaine were administered in Hospital after the incident but the level of methamphetamine (1.3mgm/kg) was high. He reported no level of methyl amphetamine is associated with safe driving and Ms Crowley would have been impaired at that level regardless of whether she was in the stimulant phase or withdrawing.

## **Required Findings**

I find Byron Crowley died at about 4.45am on 30 September 2015 near Christmas Creek, Bluewater when the car in which he was travelling as a passenger, struck a dead horse on the Bruce Highway, left the road and struck a tree. Byron died due to a fractured spine sustained in the incident. The driver was significantly affected by drugs and this likely reduced the opportunity to detect and respond to the danger of the dead horse on the road. Byron was not wearing a seat belt, which reduced his prospect of survival.

## **Management of Feral Horses on the Highway**

It is important that I acknowledge from the outset that every road user has an obligation to exercise care while driving to avoid hazards that might be present, including animals on the road at night. However, rather than focusing on the action or inaction of individuals, it is important from a road safety perspective to investigate the broader context to see what was done and what might be done to mitigate the risks associated with animals on the road in the first place.

How was the risk to road users from feral horses on the Bruce Highway near Clemant State Forest managed? I firstly turn to the issue of 'who' has 'what' interest or role in managing that risk.

The two fatalities occurred within 2 to 3 kilometers of each other on the Bruce Highway. The first incident was 20 meters off Leichardt Creek Bridge, Clemant and the second incident was just off the Christmas Creek Bridge, Bluewater.

The Bruce Highway is a state controlled road and managed by the Queensland Department of Transport and Main Roads (TMR). The northern block of the Clemant State Forest shares a boundary with the Bruce Highway. This area is managed by the Queensland Parks and Wildlife Service (QPWS) (see figure 1 in the Appendix). There is a separate area of land that is also part of Clemant State Forest but this is inland from the Bruce Highway and borders privately owned land and the Paluma Range National Park.

The Townsville City Council (TCC) is trustee of land on both sides of the Bruce Highway immediately to the north of, and adjacent to the Forestry Road/Toolakea Beach Road intersection with the Highway. Council has no ownership or trusteeship interest in any other land adjoining the Bruce Highway in the Bluewater or Clemant areas.

Queensland Police Service (QPS) and TCC had a first response role but primary responsibility for addressing the risk from feral horses rested with the owner or manager of the land from which the horses strayed, in this case QPWS, and the manager of the highway corridor, TMR.

I note the lessons learnt from these incidents may have application in situations where local roads are under the control and management of TCC and the land from which an animal strays is privately owned.

Each of these organisations have a different history and perspective about the issue of feral horses that needs consideration.

### **QPWS as Land Manager**

There is a significant history of feral horses in Clemant State Forest. Understanding what QPWS knew and did in response is important.

QPWS reported to the Court that the Department of Defence carried out an informal survey of the western slopes of the Bluewater area (bordering its training area at High Range). Defence conducted an aerial shoot on its lands to the west of Clemant State Forest sometime in 2005 or 2006. Approximately 2500 horses were culled during the operations.

In 2006, feral horses in Clemant State Forest were assessed by local rangers and recognised as a risk to the public on the adjacent sections of the Bruce Highway. QPWS considered a number of options; proceeded to fence a section bordering the Bruce Highway, and started planning for a feral horse removal program.

In December 2006 an aerial survey revealed an estimated feral horse population and distribution within Clemant State Forest of '116 +/- 41' animals. QPWS rangers concluded, through on-ground observations, the horse numbers fluctuated with seasons and generally moved west into the range country during the wetter months then back east to the lowland areas (nearer to the Bruce highway) in the drier months.

Between 2006 and 2014, QPWS rangers regularly conducted informal assessments of numbers of horses which indicated numbers were similar or slightly increased.

In September 2013, an aerial survey over Clemant State Forest resulted in the sighting of about 114 horses. QPWS flew over Paluma Range National Park, to the west of Clemant State Forest, and did not find any evidence of large horse numbers in the Paluma Range National Park, which

was consistent with the observations about seasonal movements.

QPWS reported they had a pest management system designed to meet its pest management obligations. The system guided planning, on-ground activities and evaluation, and encouraged an integrated approach with neighbours and other stakeholders. The primary document guiding management of pests on Clemant State Forest was the Paluma Aggregation Level 2 Pest Strategy which outlined what pests were present and strategies for on-ground pest management.

Pest Strategies were subject to periodic review and prior to 2015, the Paluma Aggregation Level 2 Pest Strategy listed feral horses as a high priority pest species on Clemant State Forest. In 2015, the strategy was revised and the priority for feral horses was increased to extremely high, along with feral pigs and a weed species. The strategy identified threats to conservation values associated with feral horses. It also noted feral horses presented a high risk (with known encounters) of crossing the Bruce Highway, thereby presenting a significant hazard to road users. Following these deaths, the strategy was updated in October 2015.

The management response recommended in the Paluma Aggregation Level 2 Pest Strategy was the preparation and implementation of a feral horse removal program and the strategy referred to other relevant planning documents including the Final Report Clemant Horse Plan 2005 and Pest Management Activity Proposal 1/2006.

It is clear that QPWS knew the feral horses posed a hazard to road users although the extent of the risk was not formally assessed. In any event, what control measures were used in response to this hazard?

QPWS reported that since 2006 a number of control measures were implemented or planned relating to feral horse control at Clemant State Forest.

In 2006-07 a Feral Pest Control Plan for Clemant State Forest was funded for \$22,000. A proposed cull of horses did not occur after protests from animal rights advocates. A subsequent tender was offered for the Removal of Feral Stock (including horses) from Clemant State Forest. Both preferred tenderers withdrew their offers, citing fears for their property and wellbeing due to threats from outside parties. The project delivered an aerial survey and establishment of monitoring plots to assess feral horse impacts.

In 2007-2008, an electric fence was constructed adjacent to the Bruce Highway extending from Hankins boundary in the north, to Leichhardt Creek in the south and west into Clemant's boundary fence.

In 2008, the fence was upgraded to a barbed wire fence. This fence prevented horses directly moving onto the highway, however due to the terrain, the fence only ran along the highway and from the highway directly west towards the range and connected to the neighbour's boundary fence. The fence was regularly inspected along the Bruce Highway section by QPWS rangers and repairs are completed as soon as possible to ensure the fence line's integrity.

In 2012-13, \$38,000 was allocated to assist a contractor with set-up costs associated with a 3-year feral horse re-homing project. The second and third years were to be funded by the contractor from the sale of the horses he caught. In September 2012, a three-year passive trapping program was initiated using a contractor, sourced through an Expression of Interest process.

Given the low number of horses trapped and re-homed (34 in total) the contractor advised QPWS that without additional funding he could not continue the project as it was not financially viable. In July 2013, the passive trapping program was terminated due to poor results and ongoing animal welfare issues.

In the 2013-2014 financial year, QPWS Northern Region allocated one-third of its discretionary pest budget (\$10,000) for an aerial survey of Clemant State Forest and the engagement of a consultant to review existing and future options for controlling feral horses on the State Forest. The report was finalised in October 2013.

On 26 March 2014, a QPWS teleconference was held to discuss the report, safety implications, and to map out a plan of action. The meeting concluded the horses posed a risk to public safety, and that an aerial cull should form the basis of the control program. Liaising with QPS about the extent of horse encounters and assessment of risk was included in a project funding application to the Regional Pest Management Team. At that point, the three-year feral horse re-homing project was in its second year of operation, and the project funding application only sought enough funding to manage the project (\$5,200). Northern Region ranked the project as a medium priority, and it was submitted for assessment as part of the State-wide Strategic Pest Management Program. The application was not successful.

QPWS reported that in 2014, the fence was found deliberately cut adjacent to the gates to allow access. This was identified as potentially enabling horses to access the Bruce Highway. The gates were relocated and/or reinforced with wings.

In March 2015, feral horses on Clemant State Forest were discussed amongst the regional leadership team.

The first fatality occurred on 31 July 2015. How did QPWS respond?

QPS briefed QPWS on the circumstances of the fatality. On 6 August 2015, Rangers undertook an inspection of the fence line along the Bruce Highway and the eastern section of the southern boundary fence, which was filmed. The fence line was reported in sound condition. Some horses were seen in the Leichardt Creek locality, to the south of the State Forest boundary fence line. There was a considerable amount of horse droppings in the Setter Road locality (off the State Forest). QPWS discussed what further opportunities there were to reduce the potential of horses reaching the Bruce Highway. A flood gate and fence across Leichardt Creek (off the State Forest) was suggested to tie in the Clemant State Forest boundary with a south running, neighbouring fence line.

On about 8 August 2015, QPWS consulted a southern neighbour and agreed on the best site for a floodgate, about approximately 2 kilometers upstream from the Leichardt Creek Bridge. The site was found suitable as it would join the Clemant State Forest working boundary fence line to a functioning fence line on the southern side of Leichardt Creek.

On 8 September 2015, QPWS representatives attended a meeting that Member for Thuringowa Aaron Harper convened to discuss a multi-agency response.

QPWS reported the floodgate work was completed on 18 September 2015.

The second fatality occurred on 30 September 2015. How did QPWS respond?

On 2 October 2015, a southern neighbour contacted QPWS reporting there were up to 20 feral horses adjacent the Leichardt Creek Bridge between the southern park boundary and Setter Road.

Following this discussion, a further assessment was made of the area and a decision was made to construct a second fence line in that location, across Leichardt Creek adjacent the bridge

(predominantly on private property) to prevent the horses located between Leichhardt Creek and Setter Road entering the highway. This fence line was constructed that same day, 2 October 2015.

Over the months of September/October 2015, QPWS prepared a case for a significant feral horse eradication program. This was endorsed to proceed and planning commenced for the operation. A Pest Management Activity Proposal No 1/2015 (Clemant State Forest) was prepared and approved on 9 October 2015.

The first stage of an aerial cull was carried out on 21 October 2015, 143 horses were removed. Ground shooting of 20 horses along Setter Road and Leichardt Creek followed the initial aerial control action. The second stage of the aerial cull was carried out on 9 December 2015 and 34 horses were removed. Rangers also conducted several ground inspections and humane destruction activities of small numbers, concluding on 11 January 2016. A total of 203 horses were removed from Clemant State Forest.

I note that in November 2015, Rangers found the boundary fence at Clemant State Forest was deliberately cut. This was recognised as a major safety issue as it could allow feral horse's direct access to the Bruce Highway. The fence was immediately repaired and rock barriers installed to prevent the damage from occurring again.

On my assessment, the following are the key points:

- QPWS knew about the presence of the feral horses, approximate numbers and seasonal movements.
- QPWS recognised the feral horses presented a risk to road users on the Bruce Highway.
- QPWS sought to manage the risk by reducing the numbers of feral horses and preventing access to the highway through fencing.
- Both strategies faced challenges which limited their effectiveness. A cull was fiercely opposed by community advocates and containment of the horses to the State Forest was practically impossible.
- The primary avenue for funding available to QPWS was through the pest management program and the merits of those applications were assessed predominantly against environmental criteria, not safety to motorists.
- Query whether a comprehensive, formal risk assessment of the potential for harm to road users and possible control measures might have better informed QPWS management, opened up further options for funding and helped mitigate community opposition to an eradication program.

## **Department of Transport and Main Roads**

Each of the fatalities occurred on the Bruce Highway which is under the management of TMR and it had the opportunity and power to manage the risk to road users from feral horses.

TMR provided a report to the Court in response to a series of questions. TMR was asked to report on how it monitored numbers and movements of horses in that road corridor. It reported:

TMR does not have jurisdiction to monitor the number or movements of wild horses outside of the road corridor.

The Department of National Parks, Sport and Racing has primary responsibility for monitoring the feral horse population in the Clemant State Forest.

However, TMR's traffic management centre keeps records of any hazards (including those posed by animals) on the road network that are reported to it or that it otherwise has knowledge of. A list of all known/reported hazards relating to animals on the Bruce Highway in the entire Northern Region (including the Clemant and Bluewater areas near Townsville) for the last two years can be found in Attachment A. Five potential hazards involving horses between Townsville and Ingham in the Northern District were known to or reported to TMR in the two years leading up to the first fatality. It is not known whether all of these horses were feral horses or whether there were domesticated horses also involved.

A few of immediate observations. TMR may not have jurisdiction to monitor horse movements outside the road corridor, but it certainly does have jurisdiction to monitor inside the corridor. QPWS may have 'primary' responsibility for monitoring feral horses in Clemant State Forest for its purposes, but that does not lessen the responsibility of TMR for ensuring the safety of road users. If that requires TMR to obtain information from QPWS and QPS or monitoring of feral horse incursions into the road corridor to assess risk to safety, then TMR must do so. TMR seemed to rely on the Traffic Management Centre records as indicative of its knowledge of the nature and extent of hazards in this corridor. I seriously query the reliability of that data as indicative of the total picture for reasons that will become apparent.

TMR also reported that, in the three years prior to the first fatal traffic incident, TMR did not receive any reports from any public or other agencies in relation to the numbers and movements of 'wild' horses in the Blue Water and Clemant areas. The key expression appears to be 'did not receive any reports'. In light of what contrary data/information was available from QPS, TCC and

QPWS; this assertion suggests a serious problem with data/information gathering.

How did TMR respond to the fatalities?

It reported to the Court that following the first fatality, a Stage 1 Investigation of Road Safety and Environment Conditions was conducted and it recommended TMR consider deploying two Variable Message Signs (VMS) trailers to warn drivers that there may be animals present on the roadside. It was also recommended that TMR enter into discussion with the principal stakeholders regarding options to prevent stock entering the road reserve. Following the second fatality, a Stage 1 Investigation of Road Safety and Environment Conditions was conducted and concluded a Stage 2 Investigation was required. That investigation was conducted and it recommended that TMR deploy VMS trailers, consider reducing the speed limit, and consider the installation of advisory signs warning of wandering animals. It was also recommended the tree struck by the Toyota Starlet be removed.

TMR also reported it developed a Corridor Management & Operations Guideline on Animals (native, domestic, feral or stock) on state-controlled roads. This guideline contains an example risk assessment methodology for assessing the risk of animals on the road network. TMR completed this risk assessment for the Clemant and Bluewater areas to check that no further control measures, apart from those recommended as a result of the fatal traffic investigation, were required.

TMR actioned the recommended control measures, reporting:

- VMS trailers were installed on 30 September 2015. The VMS showed 'Report stray animals, Call 13 19 40'. If the Traffic Management Centre received a report of animal sightings in the area, the VMS changed to show 'Stray animals recently sighted, Ingham to Townsville, Drive with caution'.
- The speed limit was reduced on 16 October 2015 through the highest risk section of the highway – Bluewater to Leichardt Creek – which was the area identified by the Queensland Police Service (QPS). The 3 month speed reduction aligned with the Queensland Parks and Wildlife Services' (QPWS) culling plan.
- The tree in the clear zone at the second incident location was used as a temporary memorial site. TMR planned to liaise with the family to find an alternative, permanent memorial site prior to removing the tree.

TMR also participated in the stakeholder meetings on 8 September and 7 October 2015, urgently convened by local MLA Mr Aaron Harper.

I return to the TMR Investigations briefly. The investigation after the first fatality involved an assessment using a checklist of criteria that focused primarily on design and condition of the road against various standards. The TMR investigator reported:

Police have stated that no road feature contributed to this crash. The road is in good condition with no visible defects. No immediate action required. The animal struck in the crash is a wild horse (brumby) thought to have been grazing on the road side then making its way across the highway. The crash history for the past 5 years shows a total of 5 crashes that involved animals. Only one (this fatal) involved a horse. Three reported vehicles hitting cattle and one a dog.

The area between Bluewater and Rollingstone has in the past had reports of animals, usually horses and cattle on the side of the road. Reports received by TMR (via phone calls to 131940) are forwarded to Townsville City Council for action by their Local Laws office. Discussions with a nearby property owner suggest the wild brumby's have come from the Clemant National Park due low rain fall resulting in the lack of feed in the park.

After the second fatality, a Stage 1 investigation applied the same criteria and concluded:

Police have stated that no road feature contributed to this crash. The road is in good condition with no visible defects. The animal struck in the crash is a feral horse that was deceased and laying in the southbound traffic lane.

The crash history for the past 5 years shows a total of 6 crashes that involved animals. Two fatal crashes (includes this fatal and one 31 July 2015) involved feral horses. Three reported vehicles hitting cattle and one a dog.

That report also concluded a Stage 2 Investigation was warranted. That higher level report was only triggered by reason of the involvement of the tree with which the Toyota Starlet collided. The relevant criteria found to exist to warrant a State 2 Investigation was:

The Stage 1 investigation finds that the road infrastructure at the site poses significant road safety risks, even though these may not have contributed to the crash and the District Director decides that a crash investigation is needed

The report goes into more detailed consideration of design and condition features of the road and notes the interim remedial action taken as well as more permanent action being taken by

QPWS to address the feral horse issue.

It seems the emphasis of the TMR investigation (per its checklist of items to consider) was on the static condition of the road and applicable standards, with insufficient focus on the hazard ie feral horses; a hazard that might not be able to be addressed by road design standards.

Ms Marissa Wise, District Director, TMR gave evidence at the hearing. She provided to the court a map of the region's state controlled roads with an overlay of data showing reports of animal sightings, primarily based on data collated through the Traffic Management Centre from motorist reports. Ms Wise acknowledged that QPS data show significantly higher numbers of animals on the same roads than TMR and it would be helpful to TMR to access that information. Specific to the Bluewater/Clemant areas, Ms Wise accepted QPS had significantly more sightings of animals as hazards and involvement in incidents. She also accepted there was no formal mechanism between TMR, QPS and TCC to monitor existing and emerging traffic safety issues relating to animals. Ms Wise also accepted there was a need for better awareness and coordination between TMR, QPS and TCC in responding to like situations as each entity doesn't have the power to comprehensively and independently deal with them. Ms Wise thought it might be better for TMR as manager of the road corridor to seek data from QPS and TCC, and for TMR to map the data and do the analysis so a 'complete picture of the situation' might be developed.

It was also confirmed that there was no agreement between TMR and TCC that covered animal management on state controlled roads. Ms Wise reported that the Road Maintenance Performance Contract with TCC did not include animal management, expressing the belief that stock management was a council legislated responsibility.

### **Queensland Police Service**

QPS was well aware of the magnitude of the issue from the number of calls for service in its first responder role. Various officers raised the issues with staff from the other departments. No issue arises about the response of the police service to the calls surrounding these incidents or others. However, the extent of the calls for service is very informative.

Townsville Police Communications Centre provided Constable North with information about the number of 'calls for service' (CFS) received in relation to livestock on the Bruce Highway. Senior Constable Capstick from the Communication Centre carried out checks of the QCAD system and reported:

I have conducted searches of the QCAD system for jobs coded as '221 - traffic hazard, 601 animal related and 602 stock related' for the Deeragun and Rollingstone Divisions.

The actual CFS figures may be much higher as the system is difficult to obtain accurate statistics because job codes are determined at the discretion of the operator creating the job and the attending crew's finalisation code provided.

During the period of 30 September 2014 and 30 September 2015 there were at least 274 CFS relating to livestock on or near the road way.

During the period of 30 September 2014 and 30 September 2015 there were at least 9 CFS relating to traffic crashes involving livestock.

I was also provided with the raw data relating to these calls for service. On my calculations, from 3 October 2014 through to 30 September 2015, there were 160 calls for service (excluding duplicate calls listed as "repeat"). Of those 160 calls, a total of 50 were calls for service relating to horses including the two fatalities (31% for horses).

There is a clear increase in the calls for service relating to horses in the period from 1 July 2015 to 30 September 2015 where, of the 51 calls for service, 35 were for horses (68 % for horses).

The figures support a finding there was an increase in the numbers of stray horses near roads in the period prior to the fatalities.

Senior Sergeant Gough, Officer in Charge of Rollingstone Police Station, reported:

"... historically the primary threat to motorists has been cattle, with the feral horse issue only becoming significant in later times.

Interactions with the general public since the operations conducted by the Dept of Environment and Heritage on 21 October 2015 and 9 December 2015 ... indicate a complacency brought about by the belief that the threat of animals on the Highway has been dealt with and no longer exists".

Although there is some uncertainty about the accuracy of the figures recorded by QPS, they are more likely to be accurate than TMR or QPWS. TMR and QPWS needed better information about the number and type of relevant calls for service to make better informed risk assessments. Clearly, there is a need for better information gathering and sharing so that the best assessments and decisions are made.

## **Townsville City Council**

Although Council was aware of the risk to road users on the Bruce Highway from feral horses in the Clemant and Bluewater areas, it had very limited land in those areas for which it was responsible as land manager. Similarly, the Bruce Highway is a state controlled road and therefore not a road corridor for which Council is primarily responsible. Nonetheless, it did respond to reports and work with police in addressing the issue.

Council reported its position:

Feral horses are not a declared pest in Queensland under the Land Protection (Pest and Stock Route Management) Act 2002 and are not included as a species for management in either the Draft Townsville Local Government Area Pest Management Plan or its previous iterations. Prior to October 2015, feral horses were not declared pests under local laws at the local government level in Townsville or surrounding local government areas.

Prior to the 2015 fatalities, Townsville City Council had received no request to implement a control or awareness program for feral horses with stakeholders from the Department of Transport and Main Roads which manages the Bruce highway, the Queensland Police Service which attend reports of stock on the highway, or adjoining property owners.

It then reported:

The council has involved itself in feral horse management in the Clemant and Bluewater areas through developing and acting in compliance with a response protocol with the Qld Police Service that evolved from the council's response to wandering livestock.

The management of domestic animals – including to an extent commercial livestock – is regulated under the council's Local Law no.2 (Animal Management) 2011. Council staff respond to reports of wandering domestic animals, and endeavour to have the owner of the animal immediately retake possession of the animal, or impound the animal with a view to ultimately having its owner retake possession. Because impounding large animals has the potential to be dangerous to staff, people in the vicinity, and the animals themselves, impounding of livestock is seldom carried out by council. That led to a system under which reports of livestock wandering near roads was actioned by council staff attending the scene and erecting warning signage. To ensure that the safety risks to road users were not exacerbated by council's actions, council staff would not attempt to muster the animals within the vicinity of roads unless police were in attendance and managing the operation.

Council has followed the same procedure about erecting warning signs in respect of reports about feral horses. That system was utilised on the night before the accident on 30 September 2015, with a council local laws officer attending the scene and in conjunction with the police mustering the horses away from the road. The local laws officer then erected warning signs with flashing amber lights on both the northern and southern ends of the portion of the Bruce Highway in Townsville within which feral horses had been reported as a problem. As part of that work, the officer drove through the area to confirm the visibility of the signage – which led to their repositioning the sign at the northern end to make it more prominent.

Following the fatalities, Council was instrumental in facilitating remedial action through the making of an emergency declaration that feral horses were a local pest so that other agencies could dedicate resources to feral horse control measures. Council reported:

A declaration by the council was viewed as being more expedient than the usual State-based declaration, because a declaration under State laws requires State Government interest checks to be carried out and that would take considerable time.

An emergency declaration under Local Law No. 3 (Community and Environmental Management) 2011 that feral horses are a declared local pest would apply for three months and give the council authority to direct landholders – including the State government as the largest land-owner in the area – to take control measures in respect of feral horses within the owners' lands. The declaration does not of itself give the council authority to carryout control on land owned by others.

Council staff participated in a stakeholders meeting after the first fatality and started a process that was intended to result in a recommendation for the Full Council Meeting on 27 October 2015 for an emergency pest declaration. However, when the second fatality occurred on 30 September 2015, a Special Council Meeting was called for 7 October 2015 and the declaration made.

Although in this case, Council was not responsible for the road corridor, there are many busy roads in the Council network that may give rise to similar issues. Therefore, Council might learn from these fatalities and work with QPS on better information gathering and sharing for better informed risk assessments and countermeasures.

## **Comment and Analysis**

The immediate and obvious question: where is the detailed understanding and co-ordination of the different roles and responsibilities of each organisation to mitigate the risk to road users from stray animals? TCC and QPS acted immediately and appropriately in response to call for services when the presence of a feral horse was reported. QPWS and TMR as land and road managers respectively had the opportunity to proactively manage the risk of collisions between feral horses and traffic; with TMR taking the lead role. However, it appears neither was as well informed about the magnitude of the risk as it should have been.

The only document placed before the court that attempts to demonstrate any co-ordination is TMR's Corridor Management and Operations Guidelines. I have reviewed the guidelines and concluded it merely asserts the status quo and we have tragically seen that was not effective.

After opening statements to the effect that animals present a risk to road users, the document acknowledges a primary objective of TMR is the safety of road users. Under the heading Application, the document reads:

Under Section 45 of the Transport Infrastructure Act 1994 a local government may exercise powers on a SCR.

However, Transport and Main Roads can impose conditions on any SCR by way of a contract with local government.

Section 100 of the Transport Operations (Road Use Management) Act 1995 authorises local government to seize, remove and detain animals which have been abandoned on a road or whose presence on a road is hazardous. In some cases there are local laws that authorise local government to impound stray animals or other animals in the public interest.

Section 137 of the Police Powers and Responsibilities Act 2000 authorises police, in prescribed circumstances, to seize and move an animal, or arrange for it to be moved, to another place for its safety and that of others.

Certainly, those powers exist. However, the document does not outline the power or obligation of TMR to act in response to an animal on a state controlled main road. Presumably that is because as manager or owner of the road corridor, it does not need to point to specific legislation giving it power. It can act in any event. But this is not acknowledged. Why? Who has primary

responsibility to gather and analyse data about stray animals and the risk posed to state controlled road users? If TMR, why not acknowledge that and talk about how that role is to be undertaken.

Under the heading of Stock Removal, the following appears:

If an animal is found or reported as a danger on the road, local government should be notified and requested to take action to remove the animal as soon as possible.

There are two levels of responsibility:

- local government, or police -removal of the animal
- Transport and Main Roads - interim management of the hazard.

If the authorities normally responsible or the owner of the animal (if relevant) are not able to take immediate action to remove the hazard to motorists, it may be appropriate that Transport and Main Roads assess the situation and take appropriate action, such as erecting warning signs for motorists.

If the animal causing the situation has escaped from property the landowner should be notified of any suspect fencing. If the fence is not repaired within a reasonable time, it should be brought to the attention of local government for appropriate action.

Should an injured animal be reported as causing a hazard on the road and local government and/or the police cannot be contacted, the following organisations may be able to assist:

- RSPCA Inspectorate Ph 07 3426 9971 or 1300 852 188
- RSPCA 24-hr call centre Ph 3426 9999
- DPI Call Centre Ph 13 25 23
- Queensland Parks and Wildlife Office, or 1300 130 372.
- RSPCA Animal Ambulance (Brisbane/Gold Coast) Ph 3246 9971 or 1300 852 188.

The second paragraph asserts that 'if the authorities normally responsible' for the hazard are not able to act, 'it may be appropriate' for TMR to assess and take appropriate action. Isn't TMR responsible? If so, take responsibility by acknowledging it; and commit to act, not merely assert it 'may be appropriate' to assess. There seems to be more discussion about what others are expected to do and not what TMR will do.

To what action does this document commit TMR? Under the heading Stock Removal, it states:

District offices should liaise with local government to establish processes and agreed responsibilities for removal of stray stock and animals from roads. In many cases, stock control may fall within a Road Maintenance Performance Contract (RMPC). If such a contract does not exist for a particular road then negotiation of a service agreement that involves local government removing stock may be appropriate.

TMR commits to talk to each local government about processes and responsibilities for removal of animals. Can't the guiding principles, responsibilities and specific actions be mapped for universal application across all local government and mere application to a specific local government area be the subject to those discussions?

The document then addresses 'crash prevention':

Crash prevention aims to reduce the risk of exposure to, and the potential severity of, crashes involving animals. The two basic approaches to crash prevention involve influencing driver behaviour and interventions to prevent animals accessing the road (for example fencing, grids).

Any contribution to the costs of signage, fencing, or some other permanent infrastructure to improve safety and reduce hazards from killed, injured or stray stock should be undertaken on the basis of a risk assessment and a cost/benefit analysis. Examples of a risk assessment methodology and an intervention decision matrix are at Appendices 1 and 2.

Interesting to note:

- In the context of a hazard, the document refers to 'crash prevention' instead of control measures, countermeasures or risk reduction; terms typically employed in a risk management framework.
- It enumerates only two basic approaches, the first focusing on driver behaviour, and the second, interventions to prevent animals accessing the road.
- It is only in the context of a potential contribution to the costs of signage, fencing or some other permanent infrastructure; that a risk assessment is undertaken.

The usual approach to the application of a risk management framework is to identify the hazard, assess the risk, select and implement control measures to reduce the risk to an acceptable level. Then monitor and review for effectiveness. There is also a hierarchy of control measures that is taken into consideration when deciding of what control measure to use. The whole process should be risk assessment driven, and when particular control measures are under

consideration, cost might be considered.

The document expands, marginally, on influencing driver behaviour:

Driver behaviour can be influenced through:

- education
- increased visibility
- information (for example, tourist information centres)
- speed zones
- appropriate warning signs

Tourist information centres should be encouraged to provide information to motorists about driving conditions.

No guidance is given on how any of these topics might be incorporated into a strategic response and actioned in a real life situation. Typically, on assessment of risk, there would be a stratified approach to mitigating that risk with various control measures. These could certainly be mapped out.

## **Conclusion and Recommendations**

I am going to propose a joint management plan (animals on roads) be developed between the key actors (QPS, TCC and TMR) with TMR as the lead agency. Before doing so, I will address conceptually where there are opportunities to do better.

There was and remains, the opportunity for a better and more coordinated approach to the management of stray animals that pose a risk to road users. In any safety risk management approach, better information is likely to result in better assessments of risk and better selection of control measures to mitigate that risk.

The most accurate source of information presently available appears to be calls for service with QPS. There is the opportunity to refine the collection of that information and initiate a formal process for that information to be shared on a regular basis with TMR as the road manager for state controlled roads, and TCC as road manager for local roads. The frequency of reporting by QPS might be monthly with provision for shorter reporting periods in the event of an emerging hazard that requires closer scrutiny or more immediate action. The report from QPS to the road manager might include comments or observations of the compiling officer about matters that are worthy of attention.

Each of the road managers can then consider that data in the context of their own information

and carry out a formal risk assessment and decide on what control measures are necessary to mitigate the risk to an acceptable level. The risk matrix in the TMR Corridor Guidelines would make a good starting point for a stratified approach showing an escalation in interventions commensurate with the level of risk.

Each of the road managers need to consider the possibility that QPS data might not be sufficient of itself to assist in determining appropriate control measures. The road managers might need to consider collaborating with adjoining land owners or managers in gathering better information about animal numbers and movements on private land. It will be recalled that TMR reported it did not have power to gather information about such matters outside the road corridor. Whilst strictly correct, it did have power to collaborate with QPWS (and in the future with any private land owner) on a consensual or agreed basis if it was to fully understand the magnitude of the risk to road users and possible control measures.

The roles, responsibilities and powers of each organisation needs to be better understood and documented in the proposed joint management plan. When dealing with state controlled roads, TMR as road manager should assume primary responsibility for gathering information, assessing risk, determining what action is required and performing that action. TMR may engage TCC to do some of these activities. However, if there is a delegation or contracting out of these activities, it should be reflected in the Road Maintenance Performance Contract or some other such arrangement. What we don't want is any confusion in the future about who was meant to do what within a proposed management plan. TCC maintained throughout the inquest that its role was as a volunteer, responding in support of police to assist with an immediate danger to road users. While TCC had a statutory power to act in respect of stray animals on state controlled roads, it is arguable that it was under no obligation to do so. However, in respect of local roads, TCC has an obligation to act and the approach suggested to TMR is equally applicable to TCC when it comes to discharging that responsibility. The proposed management plan may make provision for equivalent information sharing of QPS information/date with TCC to the extent that TCC is the manager of local roads.

The Corridor Guidelines include reference to a number of other agencies that may collaborate and respond, depending on the specific nature of the hazard. That would be useful to include in the management plan.

In this matter, QPWS went to great lengths to attempt to contain the horses on the state forest. There are limits to which fencing might be available in other situations as a control measure. In the current legislative landscape, there is no obligation on landowners to fence and limited power

to compel fencing. However, there remains the opportunity for TMR (or TCC) to work with landowners, presenting to them the current data and risk assessments, and working towards consensual arrangements that mitigate the risk.

While QPWS knew about the hazard posed by the horses to motorists, the magnitude of the risk was not fully appreciated. Again, the statistics relating to QPS calls for service might have better informed QPWS. There were meetings between police officers and rangers but issues of this nature require higher level quantification, analysis, reporting and risk assessment. In this case, the opportunity within QPWS for significant funding was limited to a Pest Program. As I have commented earlier, that meant the funding bid had to compete with other bids for limited resources and assessment was weighted in favour of environmental criteria. I am not critical of that process. However, QPWS should consider the need for a separate line of funding where bids associated with risk to safety of user's roads adjacent to parks/forests can be considered on their merits and compete against like bids. Alternatively, where pests potentially have impacts on safety to humans, those impacts are risk assessed and given more weight in the assessment process.

### **Recommendations:**

1. Transport and Main Road as lead agency, together with Townsville City Council and Qld Police Service, develop and implement a trial joint management plan to manage the risk to road users from animals on the roads, addressing:
  - a. Roles, responsibilities and powers covering each scenario (local or state controlled road);
  - b. Information/data gathering, analysis and reporting protocols;
  - c. Communications protocols including identification of key personnel and contacts, regular meetings and minutes arising;
  - d. Risk assessment methodology to be applied;
  - e. A stratified/escalating approach to control measures commensurate with the assessed risk;
  - f. Processes for engaging with landowners and other stakeholders.
2. Transport and Main Roads consider the outcomes from the trial and the potential for wider application of like arrangements throughout Qld.
3. QPWS review the potential for a separate line of funding, or better criteria and weight in an existing line of funding, so that risk of harm to people on roads adjacent to land it manages is mitigated appropriately. As a road manager, Transport and Main Roads or

Council should share its information and risk assessments, fixing QPWS with relevant knowledge of the risk emanating from its land and collaborate on developing, funding and implementing controls measures to mitigate that risk.

I close the inquest

Kevin Priestly  
Northern Coroner

CAIRNS  
19 October 2017