Mobile Coverage Programme Discussion Paper Submission Cover Sheet

Submission Information This cover sheet should be attached to submissions made to the Department of Communications in relation to the Mobile Coverage Programme Discussion Paper. **Contact Details** ANDREW BROAD MP Name of respondent: MEMBER FOR MALLEE Name of organisation: Phone: Email: andrew.broad.mp@aph.gov.au Website (if applicable): www.andrewbroad.com.au 28.2.2014 Date: Confidentiality and privacy All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested, and acceptable reasons should accompany each request. Email disclaimers will not be considered sufficient confidentiality requests. Respondents lodging a submission should be aware that submissions (excluding any information agreed to be treated as confidential information) will be made publicly available, including on the Department of Communications' website. Submissions and comments will be subject to freedom of information provisions. Despite a submission being identified as confidential or sensitive, submissions may be disclosed where authorised or required by law, or for the purpose of parliamentary processes.

Do you want all or parts of the submission to be treated as confidential? Yes \square No \boxtimes

If yes, identify below which parts of the submission are to be treated as confidential (and provide a reason):

If the submission contains personal information of any third party individual, indicate on this Submission Cover Sheet if that third party individual has not consented to the publication of his or her personal information:

Submission Instructions

Submissions are to be made by 5:00pm (AEST) Friday 28 February 2014.

Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text-based formats via the email address $\frac{mobile coverage @communications.gov.au}{mobile coverage @communications.gov.au}$

Alternatively, submissions can be sent to the postal address below (to arrive by the due date):

The Manager Mobile Coverage Programme Department of Communications GPO Box 2154 CANBERRA ACT 2615

All submissions lodged will be acknowledged by the Department of Communications by email (or by letter if no email is provided). Respondents lodging a submission who do not receive acknowledgement of their submission should contact the Department. Submissions which are not acknowledged by the Department as being received may not be considered. Respondents should be aware that emails greater than 10Mb may not be successfully delivered.

Submission: Mobile Coverage Programme Discussion Paper Andrew Broad MP Member for Mallee

27 February 2014

Executive Summary:

Across the Mallee electorate there is strong evidence that as mobile phone technology has significantly developed, particularly the use of smart phones, the infrastructure is not in place to service these devices. Mobile phone continuous connectivity is an expectation, particularly in a deregulated environment for horticultural and agricultural markets where quick responses are required to market demands. Continuous connectivity is also the expectation in business, and for emergency management and community service.

With cloud based technologies and mobile phone applications being utilised daily across all sectors it is now apparent that mobile phone infrastructure is required to support the technology.

Emergency management heavily relies on contact through SMS, voice or data to crews and the community. During the January 2014 bush fires in the Wimmera and Mallee regions, these mobile phone services were unable to be accessed by a number of emergency crews or the community. In fact a number of people impacted by fire were cut off from all avenues of communication.

In conducting the research for this submission, it has become clear that the demand for infrastructure to support smart phone technology is very widespread across the electorate and that there are significant and critical black spots. Just over 1400 individual contacts to this office have been received on this issue, along with representations from peak industry bodies as well as each of the nine municipalities.

As one of Australia's largest food producing and tourism regions with an estimated Gross Regional Output of \$5.3 billion per annum, serious consideration should be given to the Mallee electorate in working toward the delivery of improved mobile phone coverage.

The solution to delivering infrastructure to assist with telecommunications in the Mallee electorate should include the construction of new towers in key locations, as well as co-location with other service providers, utilising shared infrastructure, including any future NBN infrastructure.

1. Introduction:

- 1.1. The Mallee electorate is situated in the north-west of Victoria and covers over 70,000 square kilometres, incorporating the Rural Cities of Horsham, Mildura and Swan Hill along with the Shires of Buloke, Gannawarra, Hindmarsh, Northern Grampians, West Wimmera and Yarriambiack. The combined population is 138,395 persons. (Census 2011)
- **1.2.** Gross Regional Product across the Mallee electorate is estimated at \$5.3 billion/annum, indicating that the region is a significant contributor to the economic output of Victoria and Australia. ¹
- 1.3. There are many recorded mobile phone black spot issues across the electorate which have been documented for over a decade. With the technology that is now available for mobile phone users, the demand for comprehensive coverage across the Mallee electorate is increasing exponentially. In fact the infrastructure in regional areas has not kept pace with the technology that is now available via mobile phones. Continuous mobile connectivity is the expected norm for the user, particularly with 24 hour business demands and critical emergency situations, however this is not the experience of many across the Mallee electorate.
- 1.4. One of the most recent and frightening examples of black spots in mobile phone coverage occurred in the Grampians bushfires in January of this year. This led to residents being unable to receive warnings and unable to communicate the fire conditions they were experiencing.
- **1.5.** Within this submission, each municipal area of the Mallee electorate has been consulted to demonstrate the need and priority of mobile phone coverage issues.

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¹ Estimated from REMPLAN and NEIR Data – Council websites, Mildura Development Corporation, Wimmera Development Association

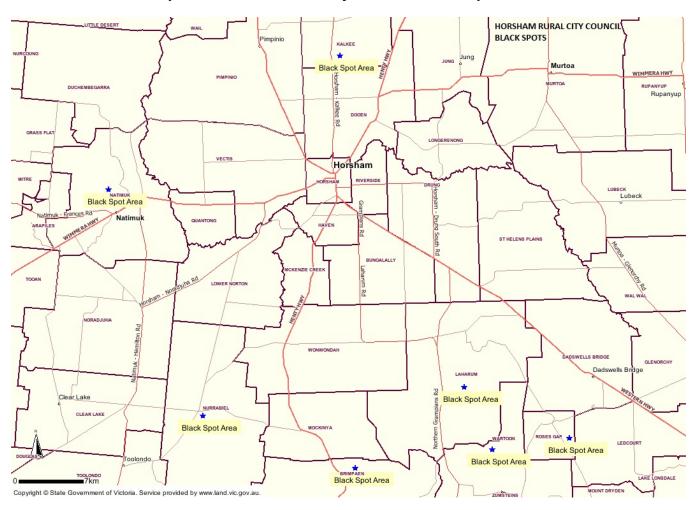
2. Mobile Phone Black Spots – Mallee Electorate

2.1. Horsham Rural City Council

- 2.1.1. With the experience of the recent bushfires impacting on areas of the Horsham Rural City Council (HRCC) and neighbouring Northern Grampians Shire, there were a large number of phone calls, emails and letters from local industry groups and the general community in regard to black spots in mobile phone coverage.
- 2.1.2. Areas that have been documented as at risk in terms of emergency management with mobile phone coverage include:
 - Wartook Valley
 - Has been reported as a serious black spot with no mobile phone coverage for over 20 years
 - Laharum
 - Suffered lack of coverage in the recent bushfires
 - Brimpaen
 - Suffered lack of coverage in the recent bushfires
- 2.1.3. These areas, only 35 kms from Horsham, are closely settled farming, tourism and lifestyle communities adjacent to the Northern end of the Grampians range.
- 2.1.4. Critical communications were lost during the emergency situation of the bushfires on Friday 17th January. The residents and farmers of the region could not receive critical SMS warnings through the Bushfire Emergency Warning System. They were also unable to update Emergency Services of their situation. This was a life-threatening situation. Governments and government authorities now rely heavily on mobile phone updates and warnings and in this situation, the new communications era failed, owing to the lack of mobile phone towers in the vicinities.
- 2.1.5. Other areas within HRCC that have been reported in regard to black spots include:
 - Quantong
 - Bungalally
 - Toolondo
 - Telangatuk
 - Nurrabiel
 - Kalkee
- 2.1.6. These areas include farmers, rural businesses and residents. With technology and communications now pivotal to farming systems and marketing of produce, it is imperative that farmers and rural businesses have mobile phone coverage. Residents also rely heavily on mobile phones for both voice and data.

- 2.1.7. The Centre for E-Commerce and Communications (Federation University Ballarat) undertook the Central Highlands ICT Study in 2010 which included mobile phone usage and coverage².
 - 2.1.7.1. In the data collected for Horsham, 94.9% of those surveyed use a mobile phone and 38.5% rank the mobile phone coverage as poor.

Map of Horsham Rural City Council Black Spot Areas



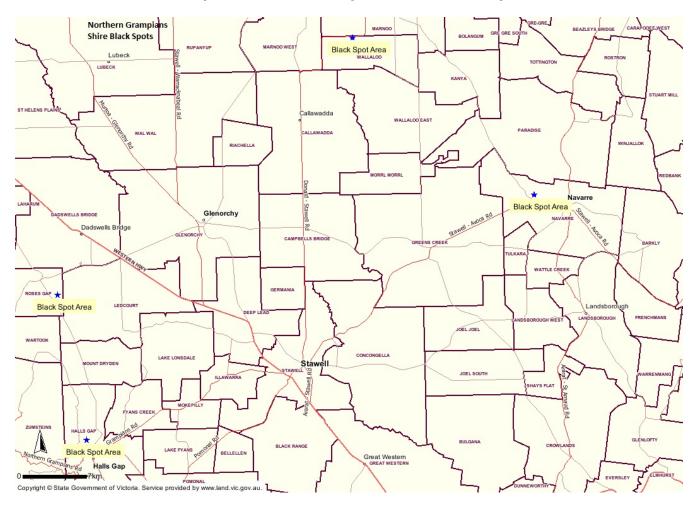
² Central Highlands ICT Study, Centre for E-Commerce and Communications, June 2011

2.2. Northern Grampians Shire

- 2.2.1. A neighbouring municipality to Horsham, Northern Grampians Shire also experienced critical and dangerous mobile phone black spots during the recent fires in January.
- 2.2.2. The Grampians National Park forms a significant part of this Shire and this is also a very important tourist attraction for the region. The region is also known for its wine industry and gold mine.
 - 2.2.2.1. Tourism generates \$949 million of economy activity across the region (2011-12)
- 2.2.3. Communities severely impacted by telecommunications black spots include:
 - Roses Gap
 - Halls Gap
 - Areas within Grampians National Park
 - With this being a major tourist drawcard, many visitors are not aware of the limited coverage they will receive and this is problematic when an emergency situation arises
- 2.2.4. Consultation within the community indicates that two new towers would be required to service the communities above. This would also assist the communities identified within the Horsham Rural City Council.
- 2.2.5. The Central Highlands ICT Study shows that 94.6% of people surveyed use a mobile phone and 32.6% rank the coverage as poor.

(Please see map on following page)

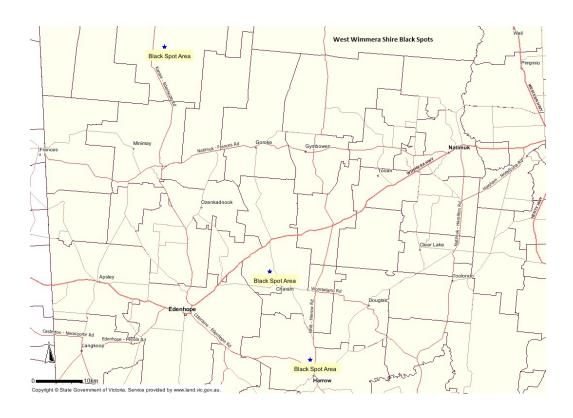
Map of Northern Grampians Shire Black Spots



2.3. West Wimmera Shire

- 2.3.1. Situated on the Victorian-South Australian border, West Wimmera incorporates the tourist icons of the Big and Little Deserts. A significant farming and tourism area, as well as managing emergency situations in the neighbouring National Parks, this municipality has a range of issues with limited mobile phone connectivity.
- 2.3.2. West Wimmera Shire has identified a number of communities that have minimal or no access to mobile phone coverage:
 - Booroopki and along the Edenhope to Kaniva corridor link
 - This main corridor link has minimal to non-existent coverage from just 5 kilometres north of Edenhope until just south of Kaniva
 - Dorodong, Poolaijelo, Connewirricoo, Harrow
 - These areas are situated in the south and south-east of the Shire, and south of the Wimmera Highway and generally have nil coverage
 - Charam
 - Mobile reception in this area is limited and is hampering opportunities for further business growth, particularly for an established agricultural and transport business that operates from this region.
- 2.3.3. The Central Highlands ICT Study indicates that 88.7% of people in the Shire use a mobile phone and 66% rank the coverage as poor.

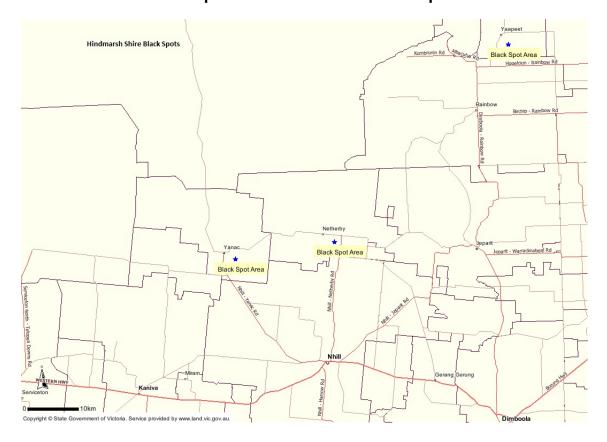
Map of West Wimmera Shire Black Spots



2.4. Hindmarsh Shire

- 2.4.1. Situated to the south of the Big Desert, Hindmarsh Shire is predominantly a dryland agricultural area.
- 2.4.2. Major towns include Nhill, Dimboola, Jeparit and Rainbow
- 2.4.3. With access to a range of National Parks, Hindmarsh is also an important destination for four-wheel drive enthusiasts and tourists generally
- 2.4.4. The community and the Council have highlighted the following towns and areas that are at particular risk from telecommunications black spots
 - Yaapeet
 - This is also an area highlighted by neighbouring Yarriambiack Shire as it is prone to bushfires. Emergency services have been at risk due to poor or no mobile phone coverage.
 - Lorquan
 - Netherby
 - Yanac
- 2.4.5. Central Highlands ICT Study indicates that 96.8% of people in Hindmarsh Shire use a mobile phone and 22.3% rate the coverage as poor.

Map of Hindmarsh Shire Black Spots



2.5. Yarriambiack Shire

- 2.5.1. This Shire stretches from the Wimmera River just north of the Grampians in the south, to the centre of the Mallee in the north.
- 2.5.2. The Shire is situated between the Grampians and Murray Tourist Regions and provides a link between Horsham in the south and Mildura in the northern end of that region. It is located immediately to the east of some of Victoria's main eco-tourist attractions, including the Big Desert, Wyperfeld National Park, Lake Hindmarsh, Lake Albacutya and the Little Desert.
- 2.5.3. The Shire is the heartland of grain production and handling in the Wimmera/Mallee. The dry-land farming area produces one quarter of Victoria's total production of wheat and barley and is noted for the production of lambs and wool. Legume and oilseed crops are very important and alternative livestock enterprises are also well established. (www.yarriambiack.vic.gov.au)
- 2.5.4. Yarriambiack Shire has identified a number of key areas across the municipality that remain priorities in terms of black spot funding initiatives. These are:
 - Patchewollock, Yaapeet, Nypo, Albacutya
 - These areas are in close proximity to Wyperfeld National park. Lack of coverage was highlighted during recent fires when these areas came under threat. A relief centre, initially set up at Yaapeet as the obvious choice, had to be moved further away owing to the poor communications on site. Emergency management utilising mobile telephony is a crucial tool which is experiencing a number of challenges in regional and rural areas. A petition has been received in regard to the need for mobile service for this region with 222 signatures appealing for this to be a priority area as soon as possible.
 - Lubeck
 - o This is another area in which both flood and fire can impact
 - Blackheath, Kellallac, Kewell, Wallup, Murra Warra, Banyena
 - These areas also struggle with poor coverage and mainly occur between Horsham and Warracknabeal in areas adjacent to the Henty Highway.
- 2.5.5. The Central Highlands ICT Study shows that 97.9% of people in Yarriambiack use a mobile phone and 16% rate the coverage as poor. (Please see combined map with Buloke Shire)

2.6. Buloke Shire

- 2.6.1. Buloke Shire is a predominantly rural area and includes the towns of Wycheproof, Charlton, Sea Lake, Birchip and Donald along with a number of smaller townships servicing dryland farming areas. It covers 8,000 square kilometres and incorporates two major highways traversing north and south: The Calder Highway and the Sunraysia Highway.
- 2.6.2. Buloke Shire has identified quite a number of key areas where there are issues with mobile phone continuous connectivity:

Birchip

O Home to the Birchip Cropping Group, a premier Research & Development organisation for dryland cropping, as well as being a service centre for farming. The Birchip region experiences a number of coverage issues, particularly when travelling just out of town.

Nullawil

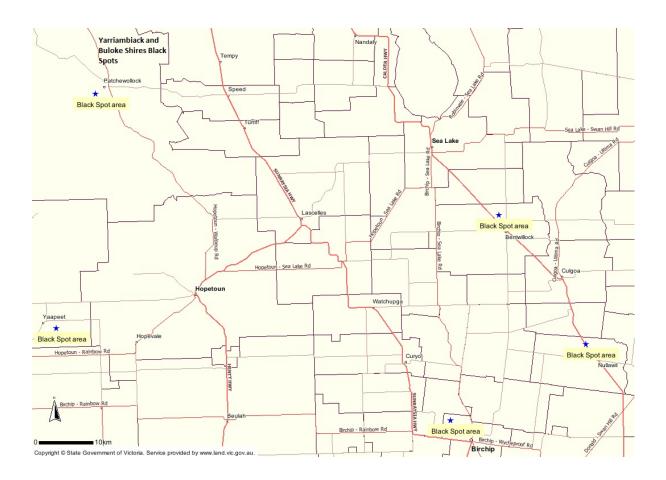
- Extremely limited coverage in township and no mobile coverage within houses
- Virtually impossible for small business owners to utilise mobile phones for any transactions or for contacting clients or employees

Berriwillock

- Recent investment of \$1 million for new CFA quarters, however no mobile connectivity possible in the facility
- Difficult for farmers to conduct daily business as limited or no mobile phone connectivity

Glenloth & Charlton East

- o Intermittent service
- Experienced fires in January, however fire crews could not direct neighbouring brigades owing to continual dropouts



Map of Yarriambiack and Buloke Shire Black Spots

2.7. Gannawarra Shire

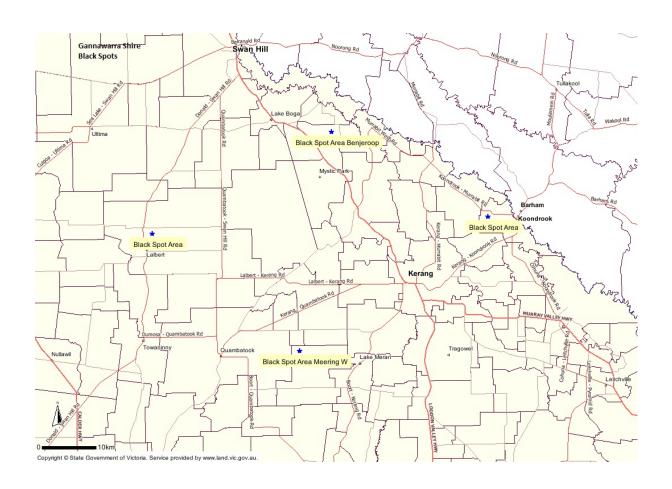
- 2.7.1. Located just three hours north of Melbourne, Gannawarra Shire is a diverse agricultural area and includes the major centres of Kerang and Cohuna, along with many other rural towns.
- 2.7.2. There have been a great number of reports of black spots from the community of Gannawarra Shire and they are centred on the following areas:

Lalbert

- A farming town located in the heart of Gannawarra, mobile signal is very poor and non-existent in some parts. The community of Lalbert continue to report the difficulties they face with mobile coverage in this area, as they have done now for many years
- Instances include great difficulty at local sporting events in being able to access emergency services where injuries have occurred.

- Meering West/Lake Meran
 - This is another key area that has experienced great difficulties in terms of black spots. Community information indicates a 25 km radius black spot in this area
- Benjeroop
 - A number of reports have been received from this area in relation to black spots
- Murrabit/Koondrook
 - o A black spot area exists in this region

Map of Gannawarra Shire Black Spots



2.8. Swan Hill Rural City Council

- 2.8.1. Situated on the Murray River, Swan Hill Rural City Council is primarily an agricultural and horticultural region, with the major towns being Swan Hill and Robinvale.
- 2.8.2. Both the Council and the community have identified a number of key black spot areas that are hindering business and community development:

Wemen

- An important horticultural centre and home to Lamattina Carrots, a 6,000 acre commercial enterprise employing 65 staff. New business is also occurring in almonds and other forms of horticulture, providing employment growth.
- Wemen is 32 kms from Robinvale, and 75 kms from Mildura – which provides the nearest acute health and emergency services
- This is a critical area that requires continuous access to mobile phone coverage for business and community safety

Annuello

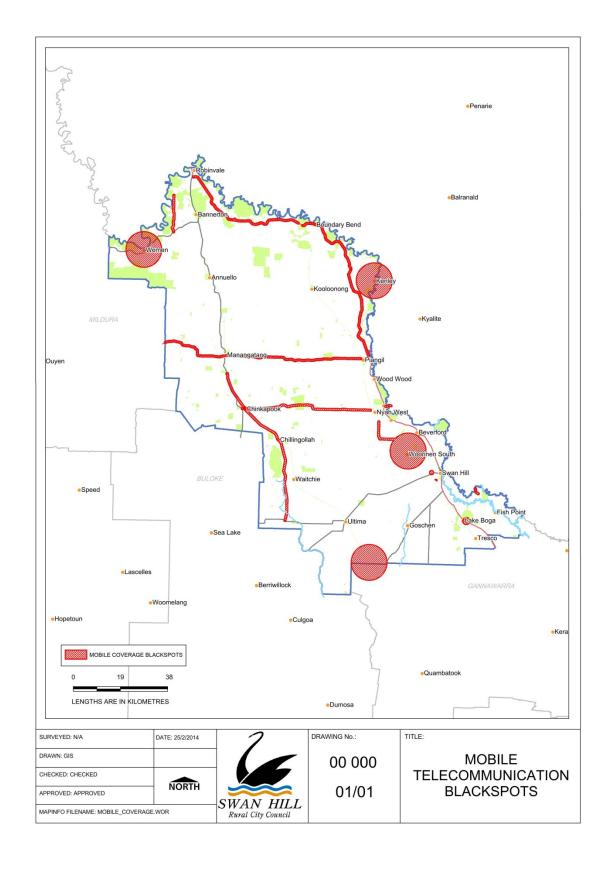
 A farming area and transport route between Ouyen and Swan Hill, this is another key black spot area

Woorineen/Beverford

 Close to the Murray River and an intensive horticultural region, this area also fails to provide continuous mobile phone connectivity

(Please see map on following page)

Swan Hill Rural City Council Black Spots Map



2.9. Mildura Rural City Council

- 2.9.1. Servicing a tri-state area in the north-west corner of Victoria, and 550 kms from Melbourne, Mildura is an important regional hub. Mildura Rural City Council incorporates 22,500 square kilometres, and there are a number of towns and regions that suffer from poor or limited mobile phone coverage.
- 2.9.2. With a range of services going online or into the cloud, reliability and speed are required. This can be challenging in areas where there is better reception, however virtually impossible in areas outside of townships. More and more businesses are utilising mobile broadband data to operate their businesses as their "wired" data services are too slow. This, coupled with residential traffic and urban growth is resulting in the footprint of quality signal decreasing and the areas demanding coverage, growing.
- 2.9.3. Evidence has been received from Mildura Rural City Council and residents listing the following areas that are at a disadvantage with mobile phone connectivity (Please Refer to Appendix -Map of Mildura Rural City Council re Black Spot issues):

Patchewollock

- As previously mentioned by the Yarriambiack Shire, this town and area is a priority for mobile phone coverage
- Currently the town and farming area around Patchewollock have great difficulty accessing any coverage.
- The area is the northern gateway to Wyperfeld National Park, which is a drawcard for domestic and international tourists
- Emergency management is required within and around the National Park which is difficult to coordinate because of the lack of access to mobile coverage
- Farmers having to manage grain markets on a day to day basis require access to mobile voice and data information
- Mallee Highway Walpeup to Murrayville
 - Areas from Walpeup through to Murrayville on South Australian border experience very weak reception to no reception
 - Being a main highway from Adelaide to Sydney, as well as a strong farming and tourism region, mobile phone connectivity is essential for emergency management and business transactions. With the Murray Sunset National Park to the north and the Big Desert to the South, the region attracts a range of tourists and off-road enthusiasts, as well as being prone to bushfires.

Nangiloc/Colignan

- Areas along Kulkyne Way, particularly close to Hattah-Kulkyne National park, that experience great difficulty with access to mobile coverage
- Intensive fruit growing region requiring access to voice and data for daily business dealings, particularly in regard to export markets
- Northern gateway to Hattah Kulkyne National Park which is very popular with tourists and also has to contend with emergency management issues

Werrimull – Morkalla

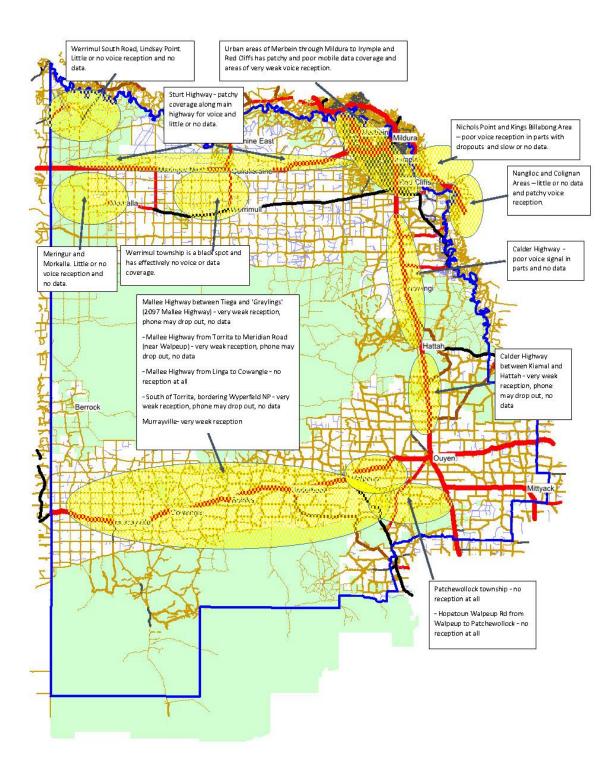
- Located west of Mildura heading towards South Australia, these towns and farming regions are poorly serviced with mobile phone coverage
- Werrimull is a service centre for a large dryland farming region and has effectively no voice or data coverage. This issue extends west to the SA border.
- The region is also the northern gateway to the Murray-Sunset National Park which attracts four-wheel drive enthusiasts and trail motorcycling. The region also experiences emergency management issues of fires and floods.

Merbein

- The township of Merbein is located to the west of Mildura and while only a short distance away, reception is often patchy and unreliable
- At a peak annual community event in the town of Merbein, signal was difficult to access for emergency services and for coordination purposes

(Please see map on following page)

Mildura Rural City Council Black Spots Map



3. Conclusion

- **3.1.** As can be seen by the above recorded evidence, there are any number of mobile phone coverage issues impacting on business, emergency management and community activities throughout the Mallee electorate
- **3.2.** Generating an economic return of \$5.3 billion/annum, the Mallee electorate would see continued growth in productivity and an increased return on investment with improved mobile phone connectivity
- **3.3.** With technology continuing to rapidly advance through smart phone applications and web based communication tools, continuous mobile phone access will only increase in demand
- **3.4.** If possible, co-location of shared infrastructure to improve mobile phone coverage would be welcomed along with construction of new mobile phone towers to enable comprehensive coverage across the electorate. Co-locating with NBN Co infrastructure, where appropriate, could also be of assistance in providing improved mobile phone capability.

Appendices:

Sample of Media Reports:

Delahunty fights for better mobile coverage

REGION - The Nationals Member for Lowan Hugh Delahunty has called for improved telecommunications in the Lowan electorate especially the Wartook Valley area.

"The recent fires in the Grampians region which covered parts of the Lowan and Ripon electorates burnt 55,100 hectares with 135 structures lost, 4,000 sheep dead, 300 kilometres of fencing burnt, many apiary sites destroyed and regrettably there was one fatality." Mr Delahunty said.

Also working on the fires were nearly 600 personnel, 81 tankers; 38 slip on units; seven dozers; four fixed wing aircraft; six helicopters; a number of graders, excavators and support vehicles.

"This was a mammoth effort from emergency services staff and volunteers and I thank them wholeheartedly for their efforts during this crisis," Mr Delahunty said.

"During and since the fires I visited the Incident Control Centre,

the Recovery Centres in Horsham and Laharum; I have spoken with many fire affected people about their experiences and those fighting the fires.

"The biggest issue they have spoken to me about is a lack of mobile phone coverage.

"This must be fixed not only for the safety of the residents and the emergency services personnel, but also for the day-to-day operations of the people in the Wartook Valley and many other areas around the Grampians.

"In my time in Parliament we have had a major or significant fire every two to three years, and the biggest issue we must address is to fix up the mobile phone coverage.

"I know the new Federal Member for Mallee, Andrew Broad has been in the area. We are working closely together with the residents and the councils. We must fix this issue of mobile phone coverage." Struggling for reception | The Northern Times

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Northern Times (/)

Struggling for reception

By ANGUS VERLEY Feb. 18, 2014, midnight



NO SIGNAL: Helen Rothacker searches in vain for a mobile phone signal.

MOBILE phone reception is a constant problem for those living in the notorious black spot region between Kerang, Quambatook and Boort.

Helen Rothacker lives at the heart of the blackspot - the Meering West farming district - and she is calling on residents to act swiftly to make the reception problems known to the Federal Government.

"We've got very poor or no mobile coverage for a 25-kilometre radius around the Meering West/Lake Meran area," she said.

"If you climb up on something and hang by one arm you might find a place where you are able to get one bar.

"We all need to tell the Federal Government we have a problem or they will think we don't."

The government has pledged \$100 million to address black spots across Australia and in order to map black spots it is asking for submissions from the public.

http://www.thenortherntimes.com.au/story/2093444/struggling-for-reception/?cs=1528

18/02/2014

Struggling for reception | The Northern Times

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Submissions can be e-mailed to mobilecoverage@communications.gov.au or posted to The Manager, Mobile Coverage Programme, Department of Communications, GPO Box 2154, Canberra, 2615, ACT.

Submissions should include a short explanation of the problem and the name and contact details of the person or organisation making the submission.

Importantly, submissions close at 5pm on Friday, February 28.

Federal Member for Mallee, Andrew Broad echoed Mrs Rothacker's calls on Friday, urging residents in the Wimmera, Mallee and Mildura regions to report any phone coverage issues in their area well before February 28.

Mr Broad said a submission to address the problem in the Mallee was being prepared for the Parliamentary Secretary to the Minister for Communications, Paul Fletcher on February 28.

"We have had a number of issues reported to us over the past couple of weeks which has been valuable in preparing our submission and I encourage anyone who has a problem with mobile phone coverage in their area to let us know in the next couple of weeks," he said.

"We're building quite a strong case against the black spot issue in the Wimmera-Mallee and circumstances such as the recent fires have only worked to reinforce why it is so important something is done to address this issue now.

"We will be preparing the submission in the next week or so and we really want to hear about any problems residents might be having with mobile phone coverage as soon as possible."

Residents can report any mobile black spot issues to Mr Broad by posting a letter with their name, location and brief overview of the problem to Andrew Broad MP at PO Box 1133, Mildura, Victoria, 3502 or by e-mailing andrew.broad.mp@aph.gov.au.

Mrs Rothacker said the Federal Government funding was the region's only hope to improve reception.

"We know we've got a problem and this gives us one glimmer of hope that someone might listen," she said.

"The more people who put in complaints, the more weight it carries.

http://www.thenortherntimes.com.au/story/2093444/struggling-for-reception/?cs=1528

18/02/2014

Struggling for reception | The Northern Times

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"We have just had a new fire station built at Meering West with state-of-the-art communication and data capabilities built into it, which should serve our district for many years and enable a command centre to be set up there in case of a large fire or other disaster," she said.

"The problem is that there is no mobile phone service at the site, so none of this wonderful equipment can work.

"It is a safety issue for our volunteer firemen.

"Also, if there is an accident in the area or a farmer has an accident in his paddocks a mobile phone probably wouldn't work to get help."

This rang true two seasons ago when a nearby farmer's header caught fire.

He tried to call 000 but had no reception, so he was forced to leave the fire and travel to Barraport to collect a fire truck himself.

Mrs Rothacker said the area was especially isolated during the 2011 floods, when landline phones went out of service because of water damage.

"This is a farming community and we need mobile phone contact with commodity buyers, transport drivers etc - especially at harvest time when you may be trying to co-ordinate drivers carting your grain and trying to work out prices so you can tell the driver who to deliver it to at the silo," she said.

"A good mobile phone service is essential, as a mistake can cost many thousands of dollars."

http://www.thenortherntimes.com.au/story/2093444/struggling-for-reception/?cs=1528

18/02/2014

Sources:

Horsham Rural City Council
Wimmera Development Association
Northern Grampians Shire Council
West Wimmera Shire Council
Hindmarsh Shire Council
Yarriambiack Shire Council
Buloke Shire Council
Gannawarra Shire Council
Swan Hill Rural City Council
Mildura Rural City Council
Central Highlands ICT Study, Centre for E-Commerce and Communications, June 2011
Mildura Development Corporation

Local Media

A special thanks to the people of the Mallee electorate for their emails, phone calls, letters and faxes indicating the issues they continue to experience with black spots in mobile phone coverage.