

MAPPING THE REGION

Julie Briggs and Dan Smith

REROC
RIVERINA EASTERN REGIONAL
ORGANISATION OF COUNCILS

RIVERINA JO
JOINT ORGANISATION

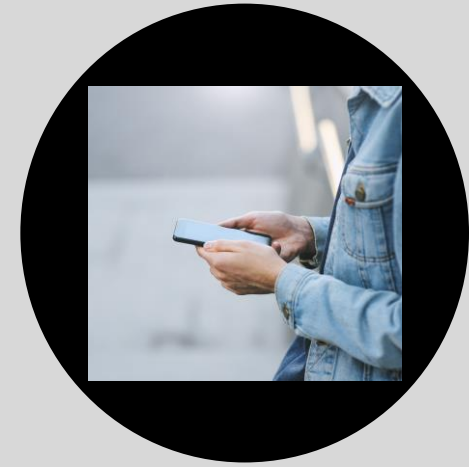
What we have Mapped



**REGIONAL FREIGHT ROUTES
AND CONSTRAINTS.**



**INDUSTRIAL LAND
AVAILABILITY**



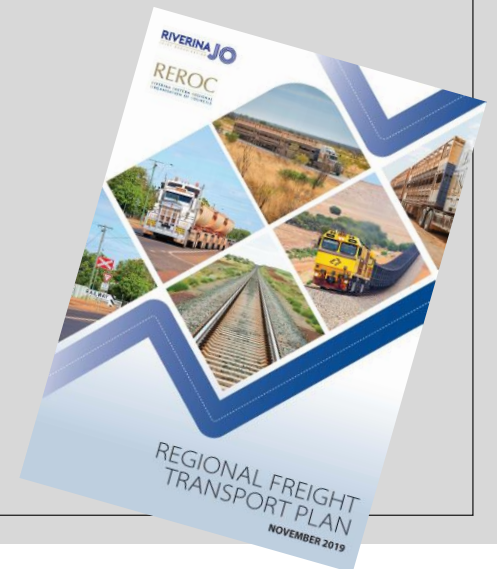
**MOBILE PHONE
BLACK SPOTS**

We have mapped the Region using giscloud, we pay an annual subscription



Regional Freight Transport Plan

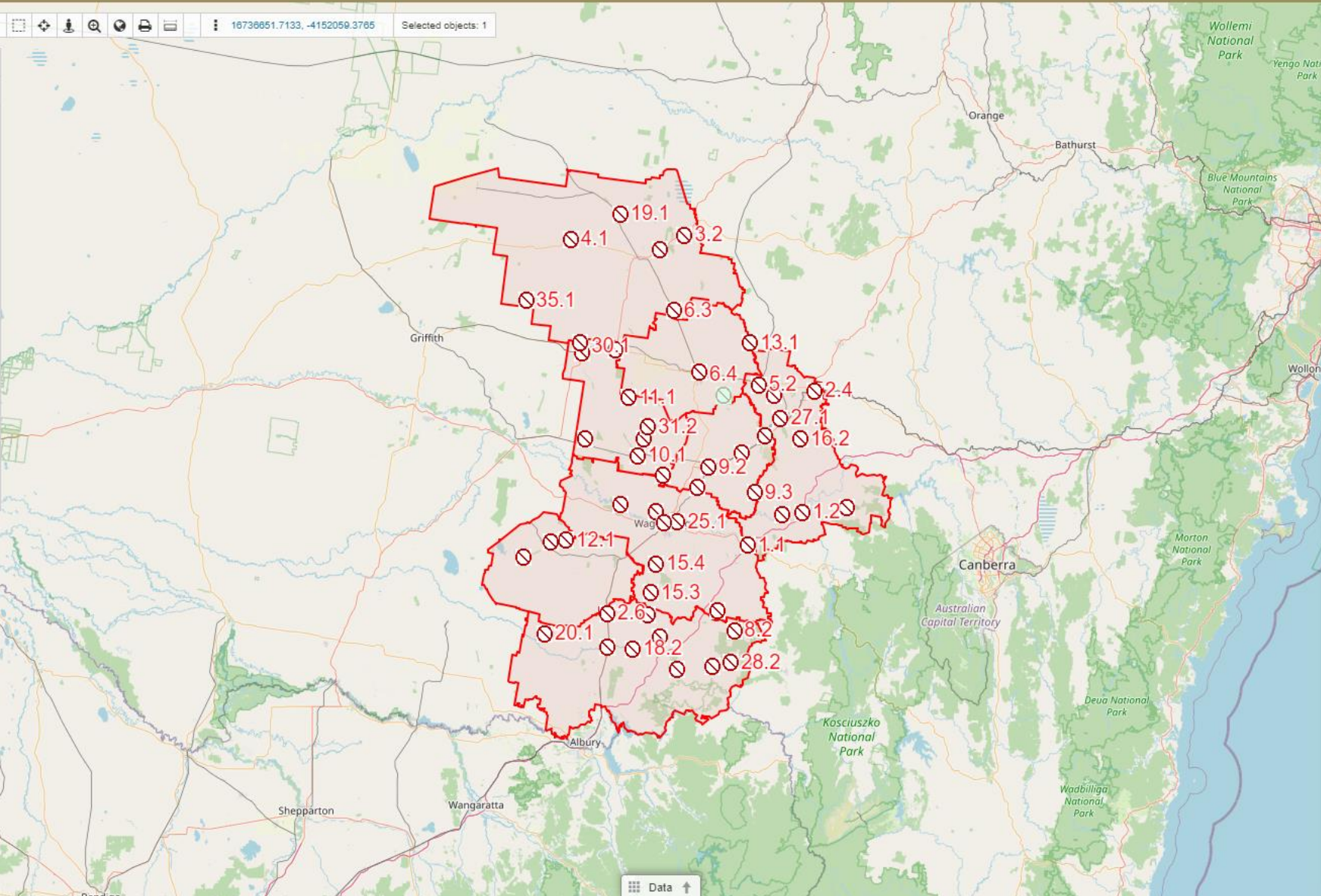
- Why? – councils wanted to know the impacts on their roads of increased freight movements, particularly grain.
- Plan is delivered as a hard copy report and interactive mapping
- Covers 38 State, Regional and Local Roads that have an economic significance in the region. The roads were identified by the REROC Engineers
- Identifies any constraints which inhibit the efficient and effective movement of freight.
- Each road is profiled – what it carries, the LGA it traverses, a prose description of the problems (in the hard copy) a short description on the mapping.
- Modal points are identified
- Industry routes are identified
- HML and Road Train routes
- Operating and non-operating rail is identified. Rail issues are discussed.
- The mapping is made up of 21 layers based on spreadsheets compiled by the participating councils.
- Updated every 2 years.
- Councils use the information to support funding applications e.g. Fixing Country Roads



Search Layer List + - < > 16738651.7133, -4152059.3765 Selected objects: 1

Regional Freight Transport

- Network Constraints
 - Network Constraints
- Roads
- Routes
 - HML Routes
 - Grain
 - Grain Modal Points
 - Grain Routes
 - Livestock
 - Modal_Livestock
 - Livestock Freight Route
 - Timber
 - Timber Modal Points
 - Timber Freight Route
- Railways
 - REROC Councils
 - REROC Boundary

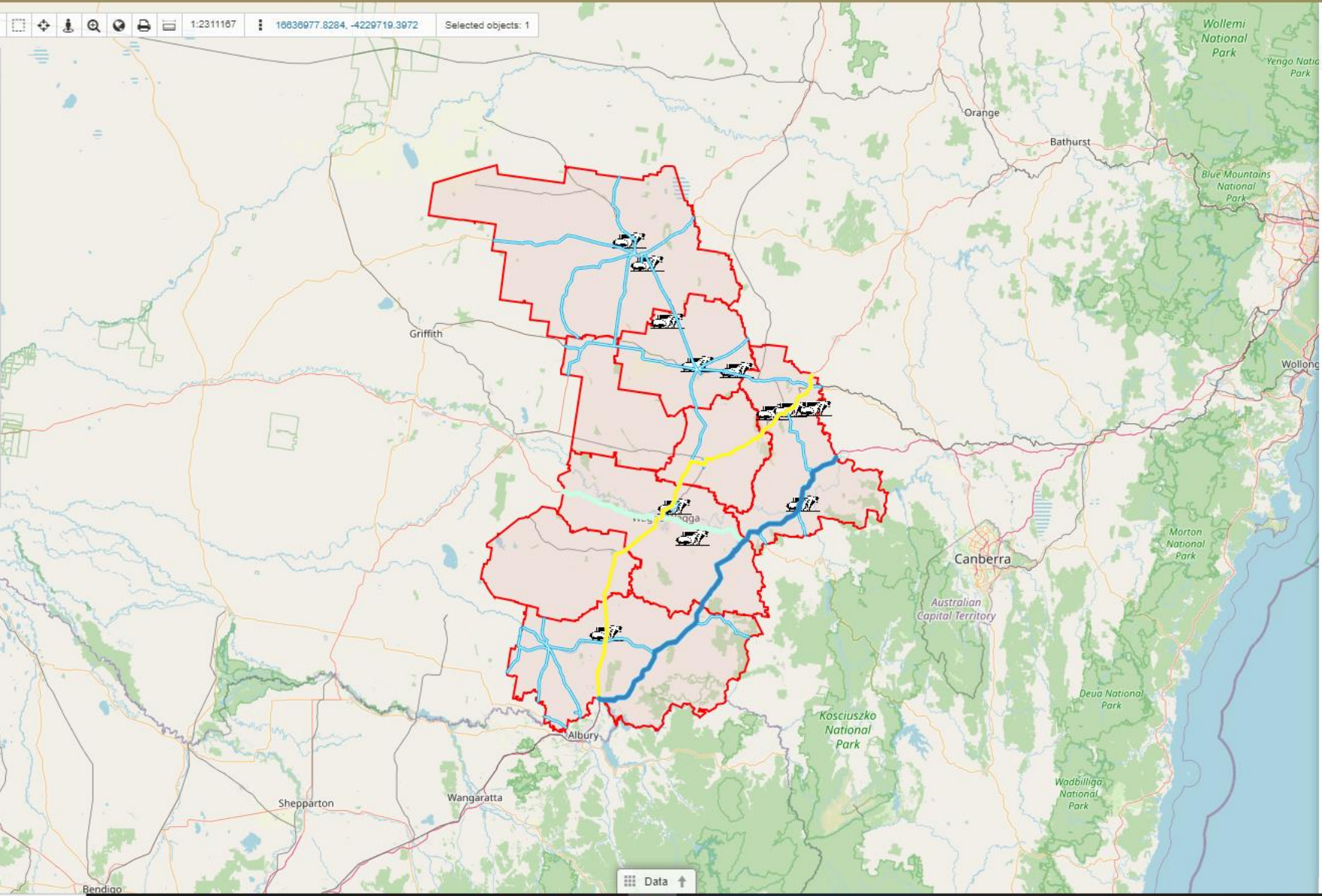


Close

Constraint Number	23.1
Road Name	Combaning Road
Constraint	Intersection Upgrade
Description	Intersection with Old Cootamundra Road requires standardisation
Local Government Areas	Temora, Junee

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- Regional Freight Transport
 - Network Constraints
 - Network Constraints
 - Roads
 - Hume Highway
 - Burley Griffin Way
 - Goldfields Way
 - Newell Highway
 - Olympic Highway
 - Sturt Highway
 - Routes
 - HML Routes
 - Grain
 - Grain Modal Points
 - Grain Routes
 - Livestock
 - Modal_Livestock
 - Livestock Freight Route



Close

Road Name	Sturt Highway
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Technical Issues

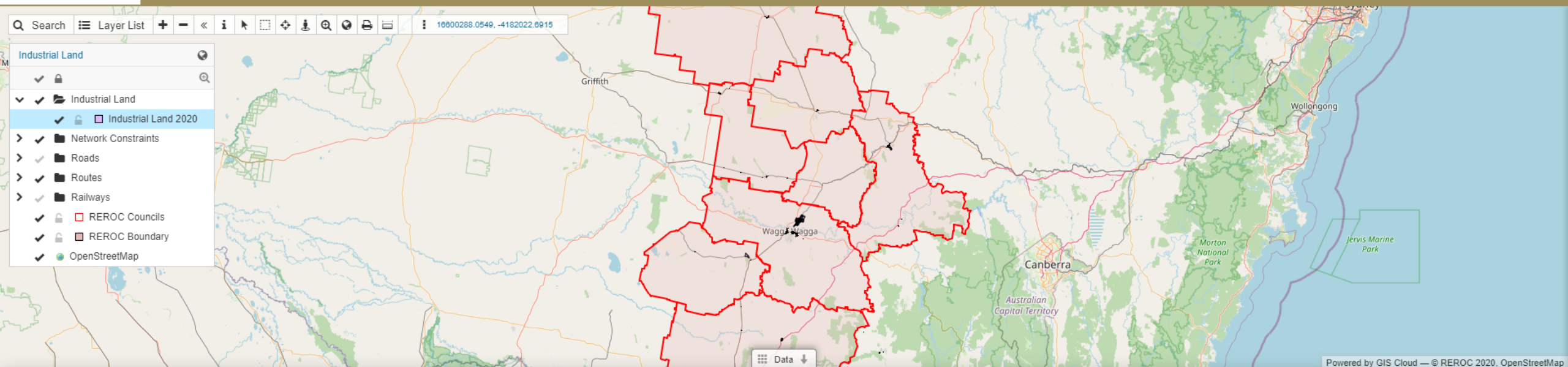
- Obtaining data from various departments and accuracy of data.
 - Major Roads obtained from RMS (High Accuracy)
 - Local Roads from each Council (used for production of Maps for document but left off Cloud for simplicity)
 - Routes (HML) using our own road layers to create the route based on data from the NHVR Portal, the issue here is there is so many different combinations of vehicles that we only concentrated on HML 19m Vehicles
 - Railways (obtained from John Holland) (Low Accuracy) can not align when zooming right into areas, regionally is ok for our mapping
 - Railways Inland Rail (No Map Layer that I could source)
 - Used Existing John Holland layer and digitised the Project Maps from ARTC
- All mapping compiled in QGIS and uploaded to GISCloud
 - GISCloud added QGIS Link to streamline the process but could never get the results we wanted



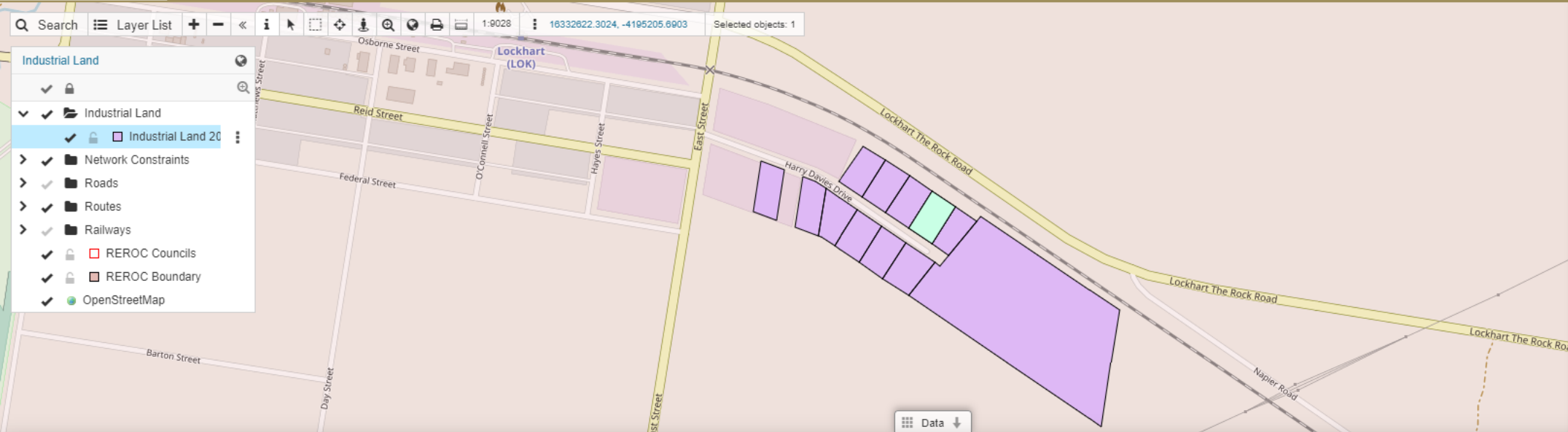


Industrial Land Mapping

- Why? – The Department of Regional NSW asked better and more centralised information on the availability of industrial land
- REROC Planners identified the land that was zoned in their LGA as industrial use.
- Also identified are the features of the land:
 - Lot and DP
 - Size
 - Power Connection
 - Gas
 - Sewer
 - Developed or Undeveloped
 - Zone
- Ability to turn the Freight Transport Layer on to see if the land is connected to HML route or close to a rail hub.
- Currently being updated



FID	town	address	council	lot	section	plan	area_m2	water	electrici	sewer	gas	status	zone	
<input type="checkbox"/>	1	Lockhart	11 Harry Davi...	Lockhart	21		DP1185018	4664	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	2	Lockhart	13 Harry Davi...	Lockhart	22		DP1185018	4980	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	3	Lockhart	15 Harry Davi...	Lockhart	23		DP1185018	4977	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	4	Lockhart	17 Harry Davi...	Lockhart	24		DP1185018	4977	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	5	Lockhart	19 Harry Davi...	Lockhart	25		DP1185018	4086	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	6	Lockhart	12 Harry Davi...	Lockhart	29		DP1185018	4909	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	7	Lockhart	14 Harry Davi...	Lockhart	28		DP1185018	4978	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	8	Lockhart	16 Harry Davi...	Lockhart	27		DP1185018	4980	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	9	Lockhart	18 Harry Davi...	Lockhart	26		DP1185018	5644	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	10	Lockhart	Harry Davies ...	Lockhart	30		DP1185018	85232	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	11	Lockhart	6 Harry Davie...	Lockhart	10		DP1131760	4989	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	12	Lockhart	10 Harry Davi...	Lockhart	13		DP1153002	4923	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	13	The Rock	Braithwaites Ln	Lockhart	4		DP194750	35205	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	14	The Rock	Braithwaites Ln	Lockhart	3		DP194750	147568	No		No	No	Undeveloped	IN1
<input type="checkbox"/>	15	The Rock	Bullbough Rd	Lockhart	2		DP1080578	2013551	No		No	No	Undeveloped	IN1



Close

undefined	
FID	4
town	Lockhart
address	17 Harry Davies Dr
council	Lockhart
lot	24
section	
plan	DP1185018
area_m2	4977
water	No
electrici	
sewer	No
gas	No
status	Undeveloped
zone	IN1

FID	town	address	council	lot	section	plan	area_m2	water	electrici	sewer	gas	status	zone
<input type="checkbox"/>	1	Lockhart	11 Harry Davi...	Lockhart	21		DP1185018	4664	No		No	Undeveloped	IN1
<input type="checkbox"/>	2	Lockhart	13 Harry Davi...	Lockhart	22		DP1185018	4980	No		No	Undeveloped	IN1
<input type="checkbox"/>	3	Lockhart	15 Harry Davi...	Lockhart	23		DP1185018	4977	No		No	Undeveloped	IN1
<input checked="" type="checkbox"/>	4	Lockhart	17 Harry Davi...	Lockhart	24		DP1185018	4977	No		No	Undeveloped	IN1
<input type="checkbox"/>	5	Lockhart	19 Harry Davi...	Lockhart	25		DP1185018	4086	No		No	Undeveloped	IN1
<input type="checkbox"/>	6	Lockhart	12 Harry Davi...	Lockhart	29		DP1185018	4909	No		No	Undeveloped	IN1
<input type="checkbox"/>	7	Lockhart	14 Harry Davi...	Lockhart	28		DP1185018	4978	No		No	Undeveloped	IN1
<input type="checkbox"/>	8	Lockhart	16 Harry Davi...	Lockhart	27		DP1185018	4980	No		No	Undeveloped	IN1
<input type="checkbox"/>	9	Lockhart	18 Harry Davi...	Lockhart	26		DP1185018	5644	No		No	Undeveloped	IN1
<input type="checkbox"/>	10	Lockhart	Harry Davies ...	Lockhart	30		DP1185018	85232	No		No	Undeveloped	IN1
<input type="checkbox"/>	11	Lockhart	6 Harry Davie...	Lockhart	10		DP1131760	4989	No		No	Undeveloped	IN1
<input type="checkbox"/>	12	Lockhart	10 Harry Davi...	Lockhart	13		DP1153002	4923	No		No	Undeveloped	IN1
<input type="checkbox"/>	13	The Rock	Braithwaites Ln	Lockhart	4		DP194750	35205	No		No	Undeveloped	IN1
<input type="checkbox"/>	14	The Rock	Braithwaites Ln	Lockhart	3		DP194750	147568	No		No	Undeveloped	IN1
<input type="checkbox"/>	15	The Rock	Bullbush Rd	Lockhart	2		DP108578	2013551	No		No	Undeveloped	IN1

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Industrial Land

- Industrial Land
 - Industrial Land 2020
- Network Constraints
- Roads
- Routes
 - HML Routes
 - Grain
 - Grain Modal Points
 - Grain Routes
 - Livestock
 - Modal_Livestock
 - Livestock Freight Route
 - Timber
 - Timber Modal Points

Close

FID	90
town	Coolamon
address	26-28 Curtis Ln
council	Coolamon
lot	15
section	
plan	DP1165490
area_m2	20049
water	Yes
sewer	No
gas	No
status	Developed
zone	RU4

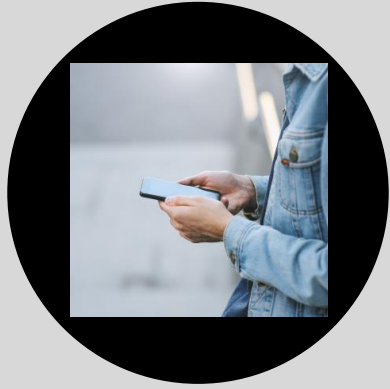
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<input type="checkbox"/>	87	Coolamon	95 Wade St	Coolamon	1	A	DP5710	805	Yes		No	No	Developed	RU5
<input type="checkbox"/>	88	Coolamon	Holden St	Coolamon	6	B	DP5710	809	Yes		No	No	Developed	RU5
<input type="checkbox"/>	89	Coolamon	25 Curtis Ln	Coolamon	3		DP1072287	1943	Yes		No	Yes	Developed	RU5
<input checked="" type="checkbox"/>	90	Coolamon	26-28 Curtis Ln	Coolamon	15		DP1165490	20049	Yes		No	No	Developed	RU4
<input type="checkbox"/>	91	Coolamon	Lewis St North	Coolamon	12		DP1124480	2659	Yes		Yes	Yes	Developed	RU5
<input type="checkbox"/>	92	Coolamon	3209 Canola ...	Coolamon	126		DP750829	107213	Yes		No	No	Developed	RU4
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<input type="checkbox"/>	94	Ganmain	23-25 Lake St	Coolamon	A		DP376113	4821	Yes		No	No	Developed	RU5
<input type="checkbox"/>	95	Ganmain	15-19 Lake St	Coolamon	C		DP376113	7323	Yes		No	No	Developed	RU5
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<input type="checkbox"/>	98	Ganmain	33 Lake St	Coolamon	25	54	DP3786	1310	Yes		Yes	No	Developed	RU5
<input type="checkbox"/>	99	Ganmain	31 Lake St	Coolamon	26	54	DP3786	1113	Yes		Yes	No	Developed	RU5
<input type="checkbox"/>	100	Ganmain	35 Lake St	Coolamon	24	54	DP3786	710	Yes		Yes	No	Developed	RU5



Technical Issues

- Same map layers used from Freight transport the only extra layer is the Cadastre supplied from Land and Property, data had to be clipped to only show Industrial Lots
- Information about services for each has to be provided by each council.
- Ability to filter the data in GISCloud is only available to Admin not the end user, there is currently 1300 lots and can only show 200 max records per page, still trying to work out a way around this issue
- Lot Boundaries and Zones constantly changing (new industrial zone in Coolamon)

town	address	council	lot	section	plan	area_m2	water	electric	sewer
Lockhart	11 Harry Davie	Lockhart			DP1185018	4664	No		No
Lockhart	13 Harry Davie	Lockhart			DP1185018	4980	No		No
Lockhart	15 Harry Davie	Lockhart			DP1185018	4977	No		No
Lockhart	17 Harry Davie	Lockhart			DP1185018	4977	No		No
Lockhart	19 Harry Davie	Lockhart			DP1185018	4086	No		No
Lockhart	12 Harry Davie	Lockhart			DP1185018	4909	No		No
Lockhart	14 Harry Davie	Lockhart			DP1185018	4978	No		No
Lockhart	16 Harry Davie	Lockhart			DP1185018	4980	No		No
Lockhart	18 Harry Davie	Lockhart			DP1185018	5644	No		No
Lockhart	Harry Davies Dr	Lockhart			DP1185018	85232	No		No
Lockhart	6 Harry Davies	Lockhart			DP1131760	4989	No		No
Lockhart	10 Harry Davie	Lockhart	13		DP1153002	4923	No		No
The Rock	Braithwaites Ln	Lockhart	4		DP194750	35205	No		No
The Rock	Braithwaites Ln	Lockhart	3		DP194750	147568	No		No



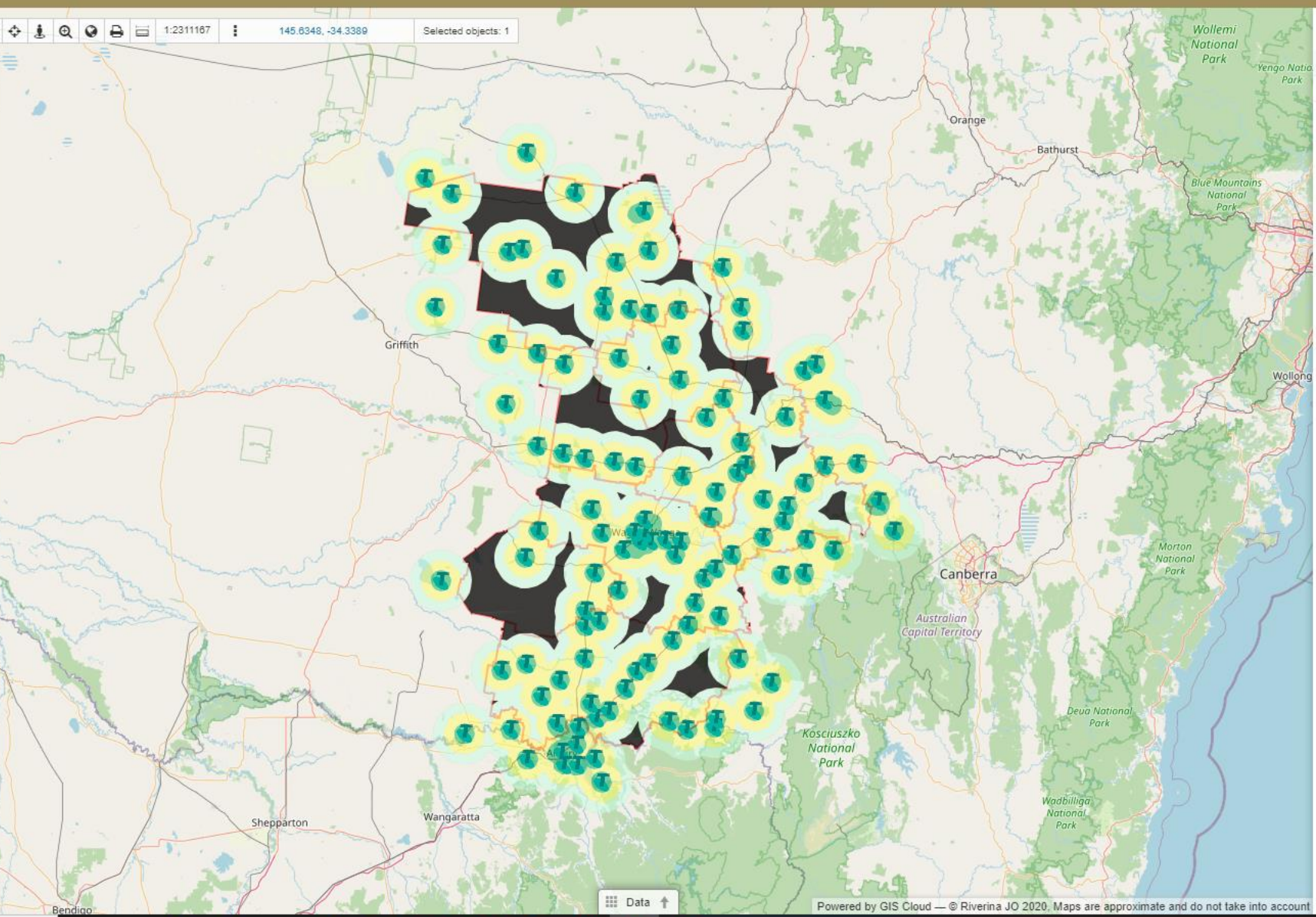
Mobile Phone Black Spots

- Why? – Concern Member Councils had about mobile phone reception in the Region
- We use the information to lobby for improved services and have provided the maps in hardcopy to the Minister for Communications
- Maps from the three major mobile phone providers were sourced to create individual maps and then overlays
- Additional information was provided by councils on sites where there were Black Spots in their LGAs that they knew of.
- Updated every couple of years

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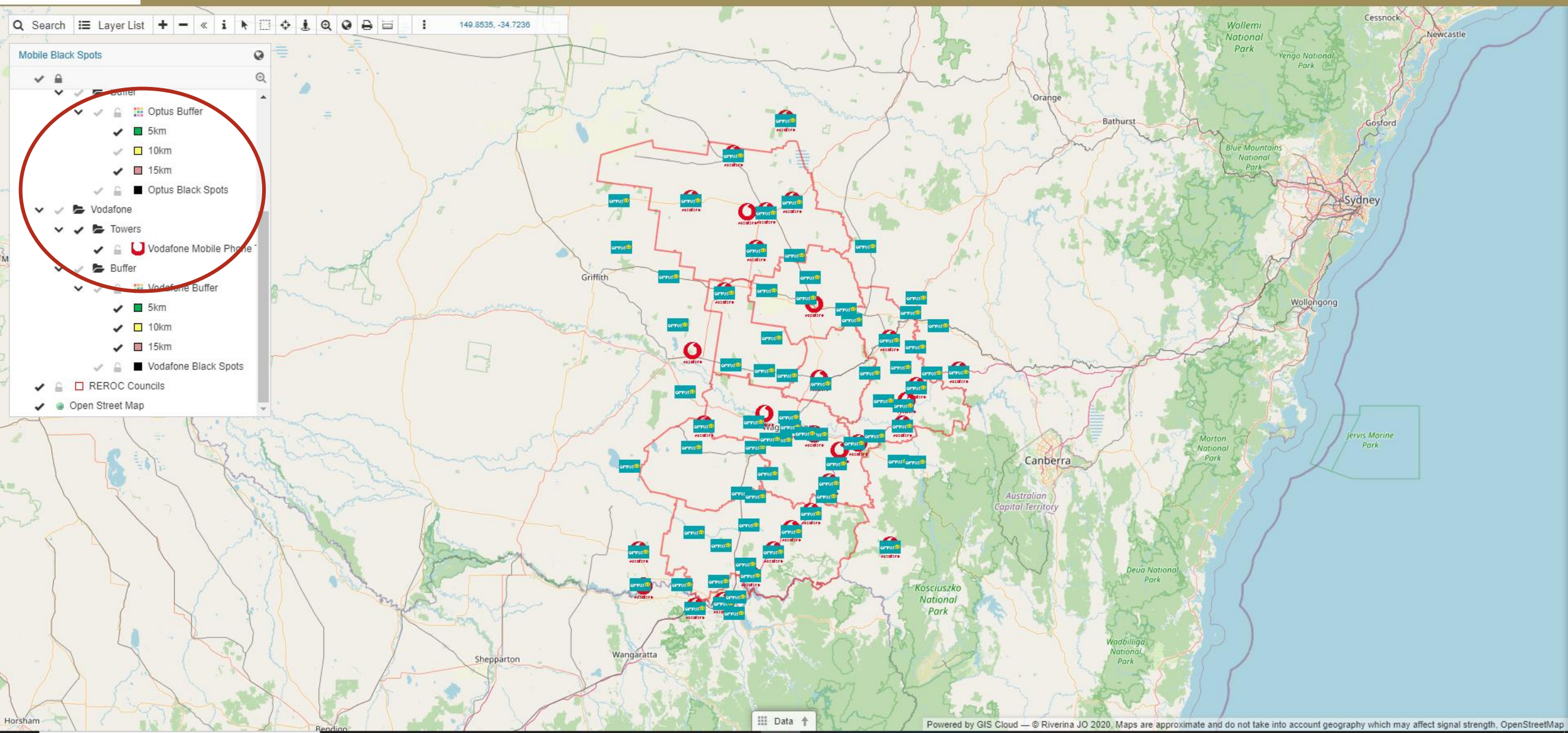
Mobile Black Spots

- Existing Towers
 - All Carriers
 - Telstra
 - Towers**
 - Telstra Mobile Phone Towers**
 - Buffer
 - Optus
 - Vodafone
 - Towers
 - Vodafone Mobile Phone Towers
 - Buffer
 - Vodafone Buffer
 - 5km
 - 10km
 - 15km
 - Vodafone Black Spots
- REROC Councils



Close

FID	0
buffer	15



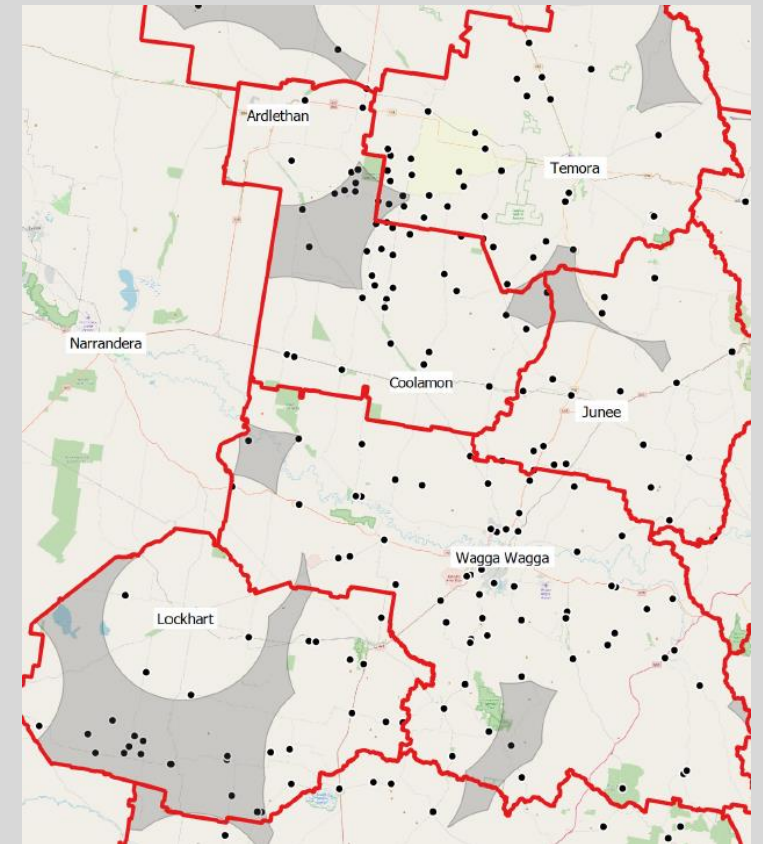
Mobile Black Spots

- Optus Buffer
 - 5km
 - 10km
 - 15km
- Optus Black Spots
- Vodafone
 - Towers
 - Vodafone Mobile Phone
 - Buffer
 - Vodafone Buffer
 - 5km
 - 10km
 - 15km
 - Vodafone Black Spots
- REROC Councils
- Open Street Map



Technical Issues

- Difficulty in obtaining Coverage areas from service providers they will direct you to their website maps which aren't clear and would need to be digitised, too many services to map all (3G, 4G and 5G now)
- Towers sourced from the Radio Frequency National Site Archive (no list to import, just a long search and create point process), each tower shows provider on tower & service (250 towers in REROC)
- Getting black spot data from each council was difficult, some would map as lines along roads, some as dots and some from other sources. Some councils also did community surveys but with limited responses made it difficult to show the picture
- Created a map based on buffer from towers only, as we weren't interested in local areas but more regional benefits, from research anything 0-10km was considered good coverage and even up to 15km, so we were looking at areas beyond that. It is purely a mathematical planning tool and doesn't take into account factors such as terrain or other constraints
- Consumer Reported Black Spots (sourced from Federal Government) reliability of data from the Consumer, there is about 30 consumers who said Wagga Marketplace is a black spot and the same number for south of Lockhart





Benefits

- A picture tells a thousand words and maps tell more than that!
- Strong lobbying tool
- Information consolidated in a single place
- Informs councillors and politicians
- Supports economic development
- Provides tangible evidence of what is happening in the Region

