



Queensland Murray-Darling Committee Inc.

Mining and Energy Industry Impact on Natural Resource Management in the Queensland Murray-Darling Basin

Geoff Penton
CEO
QMDC



Funded by:



Australian Government



Queensland
Government

January 2009

Queensland Murray-Darling Committee

“Working together – healthy landscapes, viable communities”

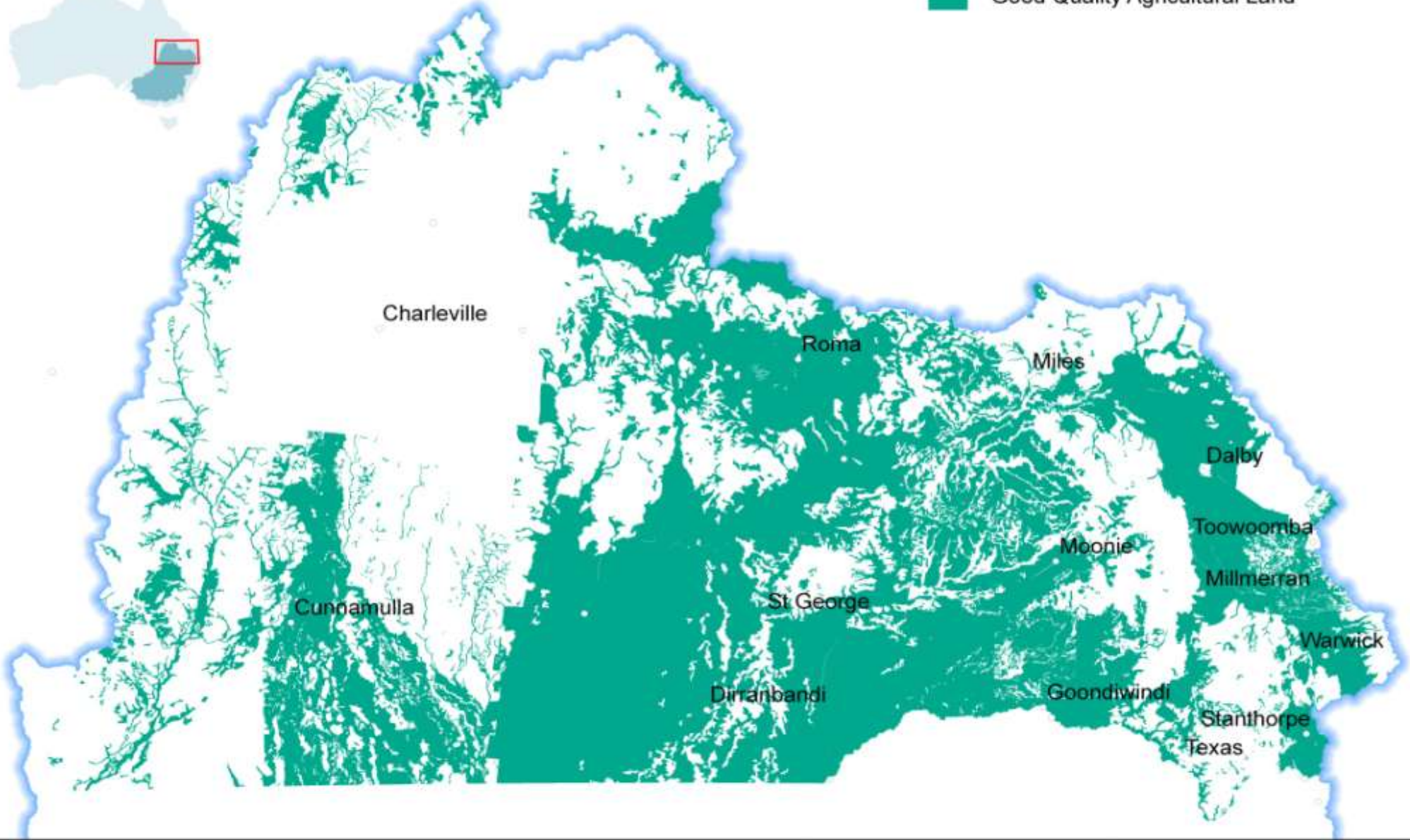


QMDC is not adverse to mining activity if the following issues can be effectively managed, mitigated or preferably avoided.

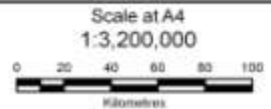


Land Use

Mining that disturbs areas of good quality soil (agricultural land) and is not able to be rehabilitated to its former productive state, could mean good soil, productive farming land is lost forever.



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.bitm.qld.gov.au/qmurraydarling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be used or re-made as part of a commercial product.



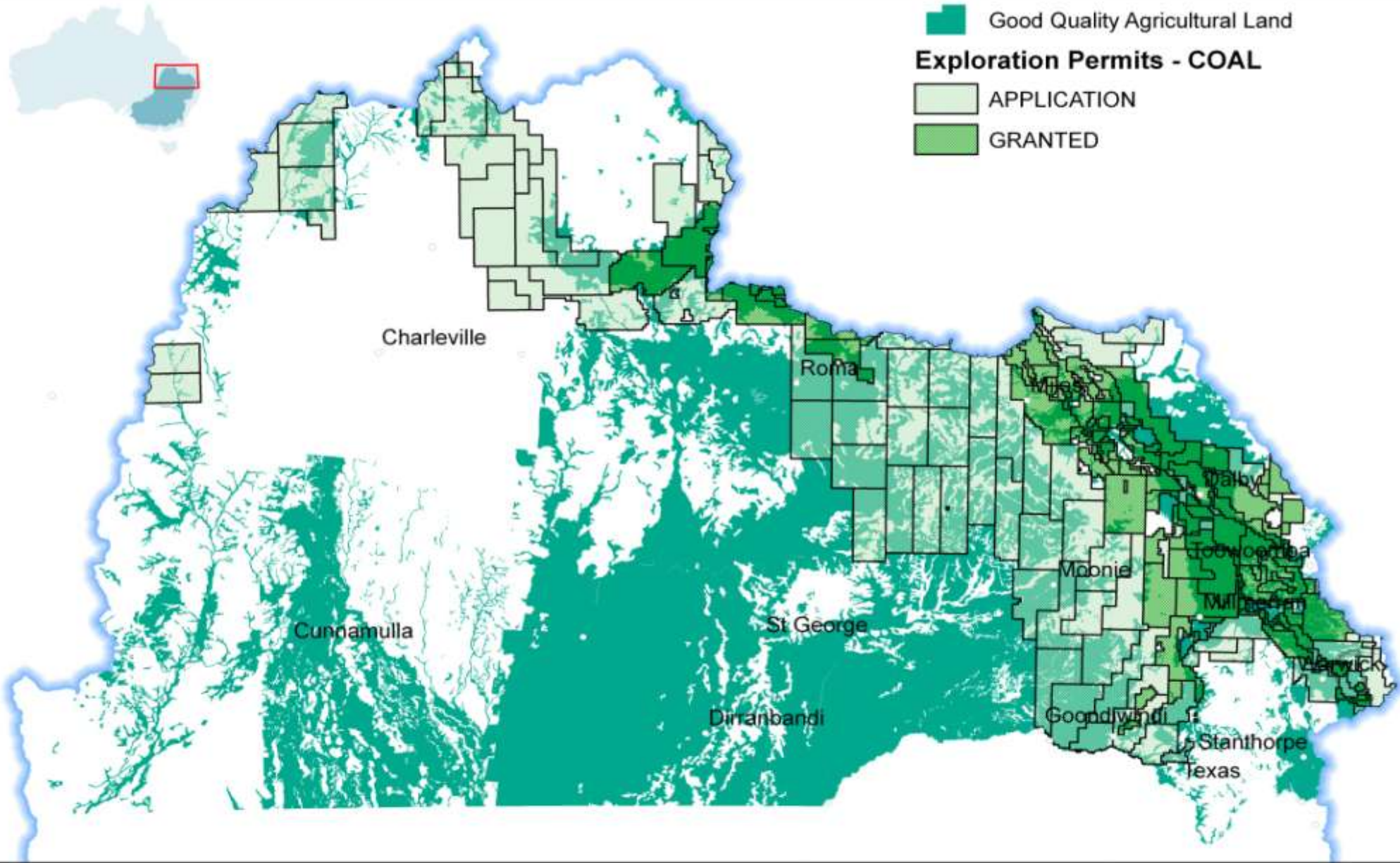
Projection: UTM
 Datum: Geocentric Datum of Australia 1994



Funded by

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA, QLD 4300
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Good Quality Agricultural Land

Exploration Permits - COAL

APPLICATION

GRANTED

© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the SITM website http://www.sitm.qld.gov.au/qmurray_darling_maps.cfm
 Customer: While every care is taken to ensure the accuracy, reliability, completeness
 or suitability for any particular purpose and decisions of responsibility and all
 liability (including without limitation, liability or negligence) for all expenses,
 losses, damages (including indirect or consequential damage) and costs which might
 be incurred as a result of the data being inaccurate or incomplete in any way and
 for any reason. This map is not to be sold or re-made as part of a commercial product.



Scale at A4
 1:3,200,000

Kilometers

Projection: UTM
 Datum: Geocentric Datum of Australia 1994



Funded by

Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA, QLD 4300
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

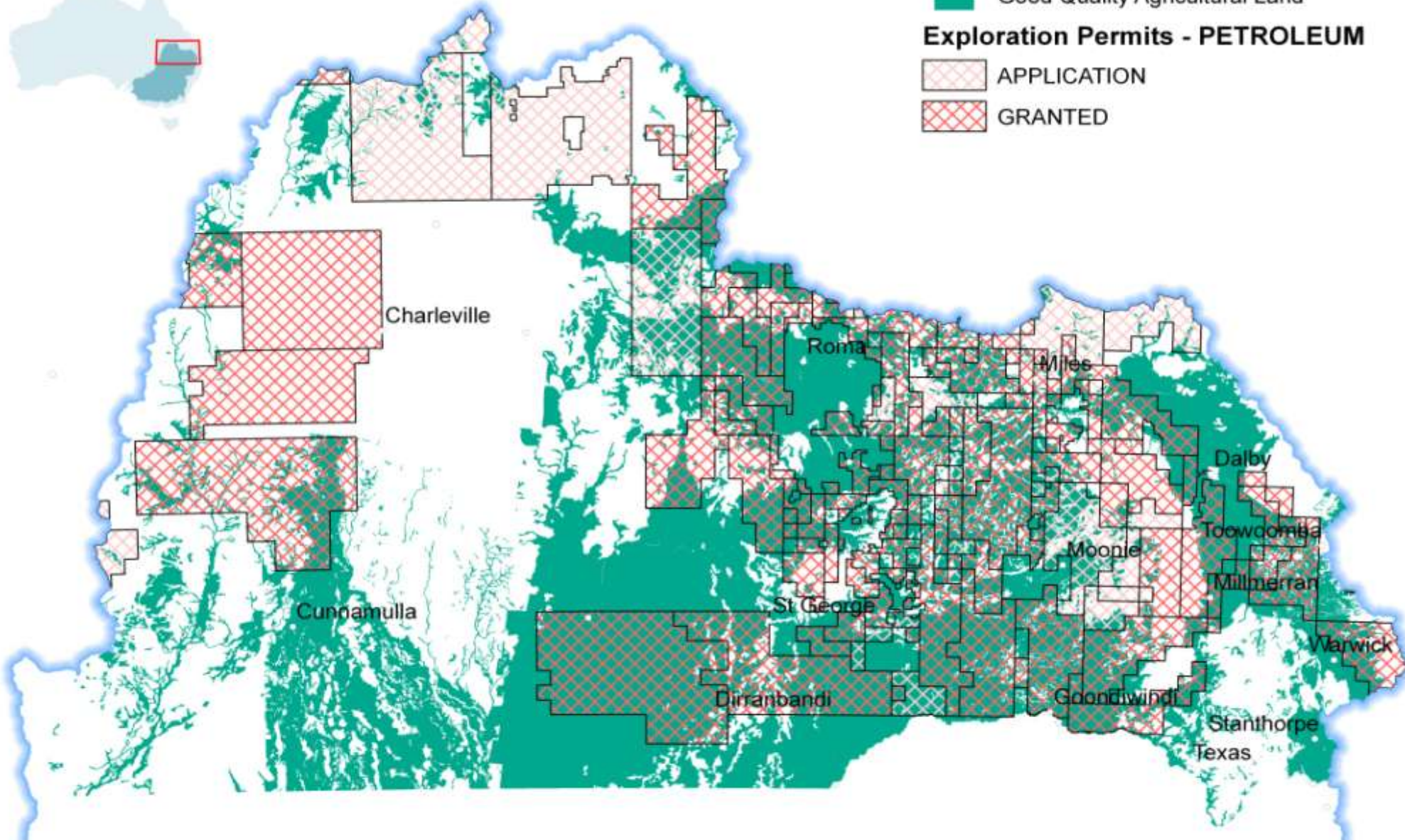


Good Quality Agricultural Land

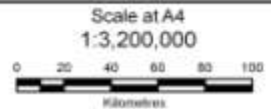
Exploration Permits - PETROLEUM

APPLICATION

GRANTED



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.bitm.qld.gov.au/murraydarling_maps.cfm
 Customer: While every care is taken to ensure the accuracy of this data, CMSC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be used or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994



Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA, QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

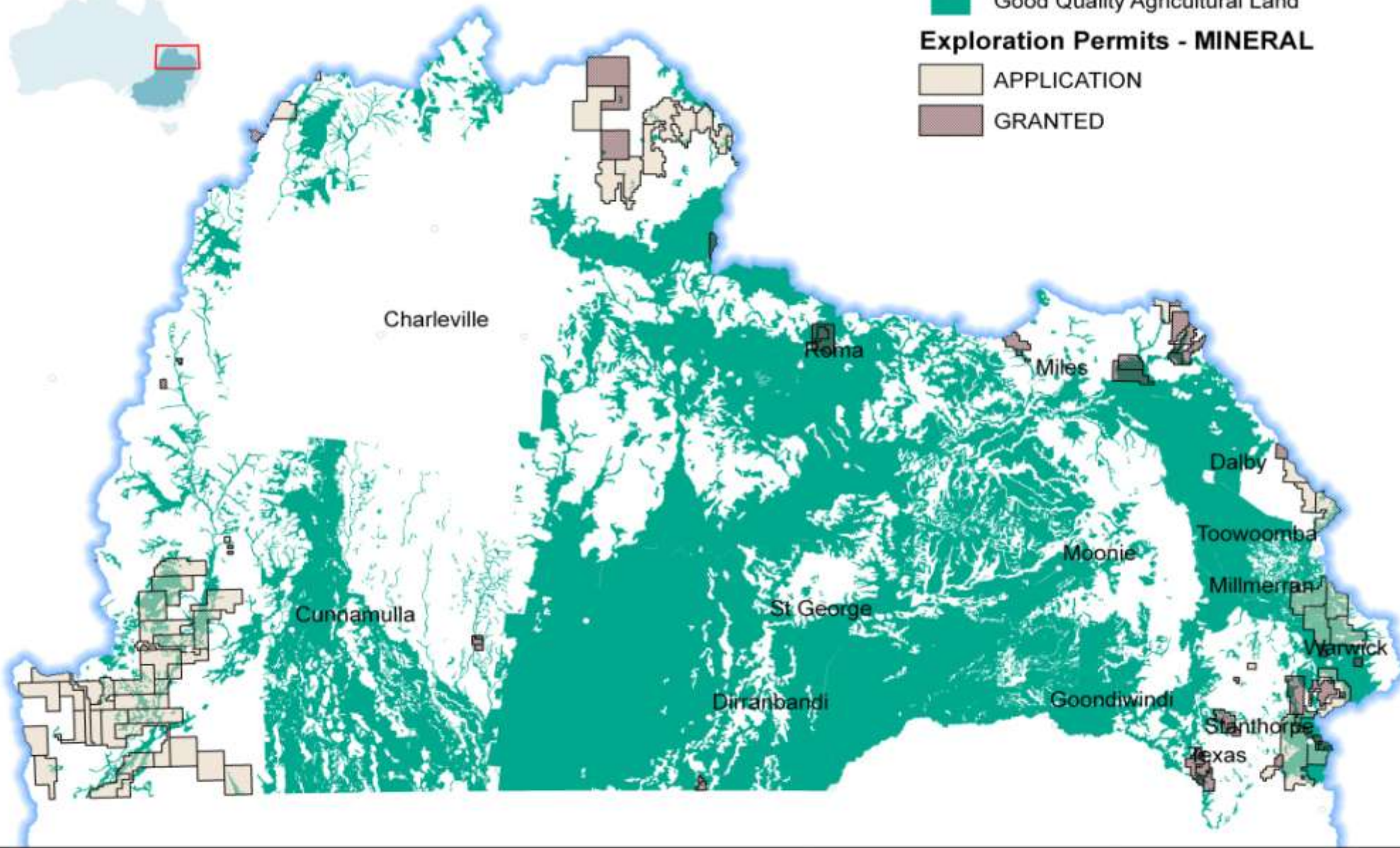


Good Quality Agricultural Land

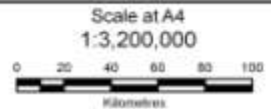
Exploration Permits - MINERAL

 APPLICATION

 GRANTED



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the SITM website http://www.sitm.qld.gov.au/qmurray_darling_maps.cfm
 Customer: While every care is taken to ensure the accuracy of this data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: UTM
Datum: Geocentric Datum of Australia 1994



Funded by




Australian Government
Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA, QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Good Quality Agricultural Land

June 08

Dec 2008

Current Exploration Permits

• COAL applications	1.9M Ha	2.96M Ha
granted	1.1M Ha	1.52M Ha
• PETROLEUM applications	3.2M Ha	2.20M Ha
granted	4.4M ha	5.53M Ha
• MINERAL applications		0.35M Ha
granted		0.16M Ha












Riverine/Wetlands

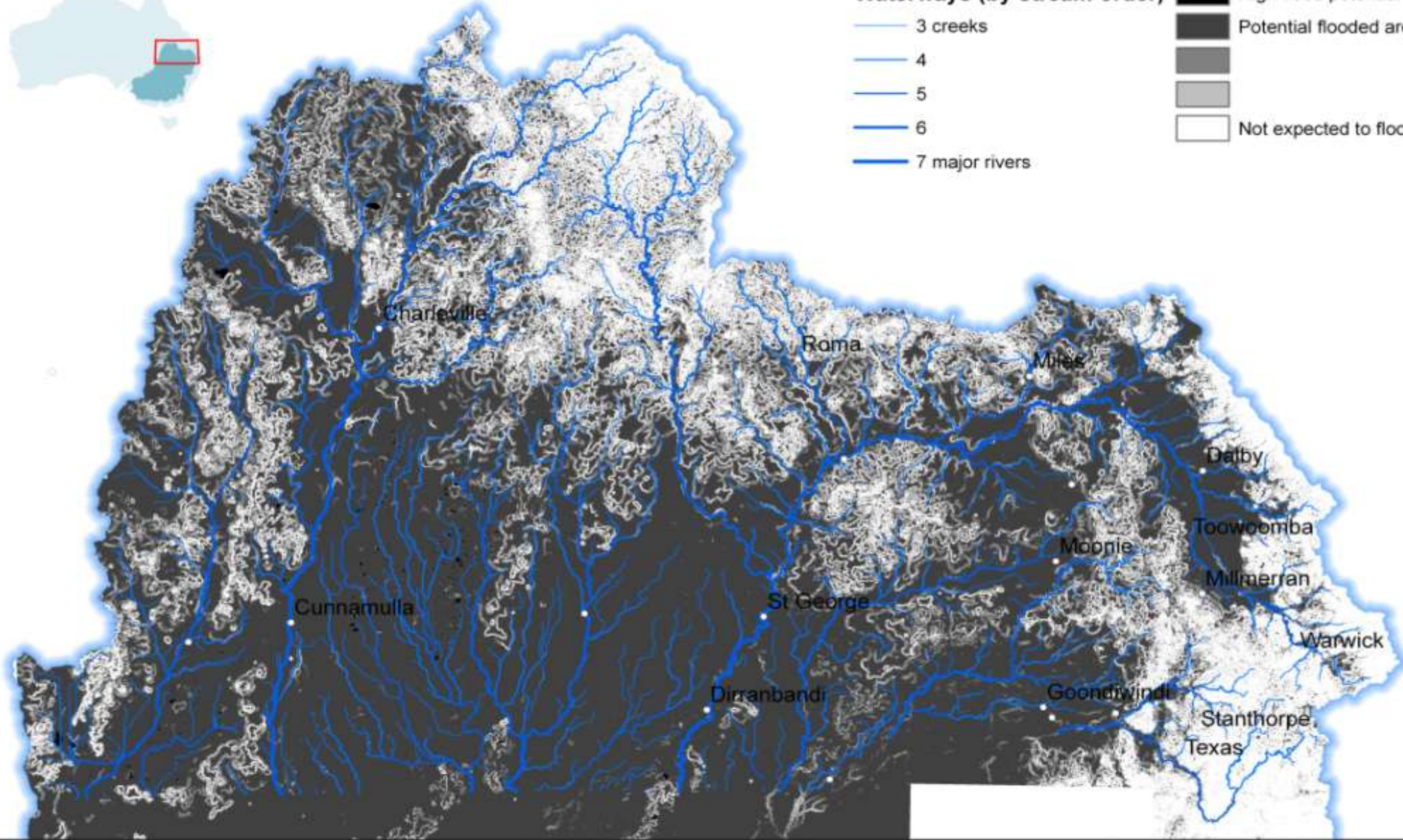
The modification of river, floodplains flows caused by creek, river diversions and flood plain levy banks diverting flows leads to erosion on floodplains and creek bank, slumping, changed overland flow patterns.



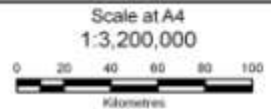
Waterways (by stream order)

-  3 creeks
-  4
-  5
-  6
-  7 major rivers

-  High flood potential
-  Potential flooded areas
- 
- 
-  Not expected to flood



© Queensland Murray Darling Committee, 2008.
 Includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.bitm.qld.gov.au/murraydarling_maps.cfm
 Customer: While every care is taken to ensure the accuracy of this data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be used or re-made as part of a commercial product.

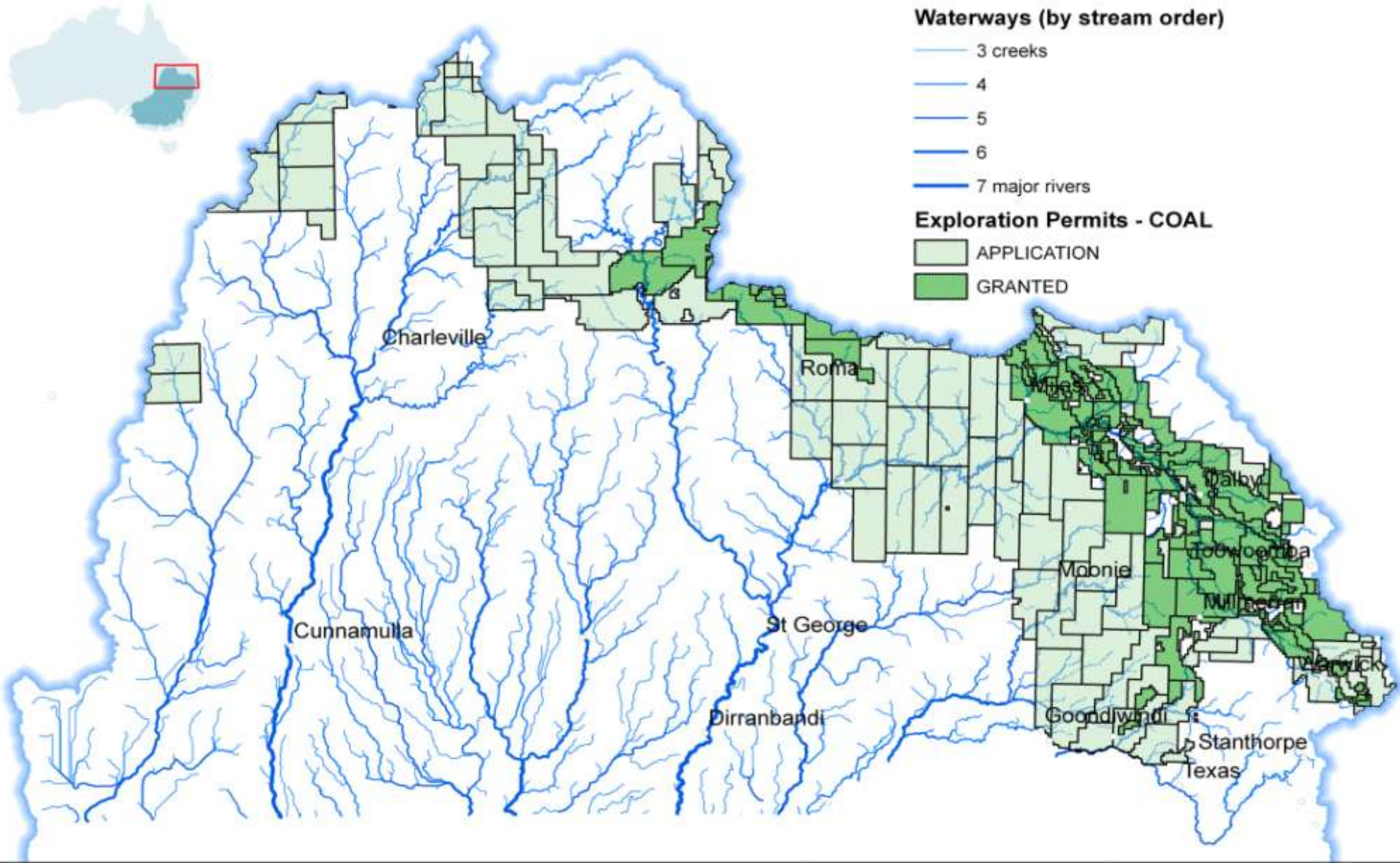


Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994



Queensland Murray Darling Committee Inc.
 Car Campbell & Bellvue Streets, TOOWOOMBA QLD 4300
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Waterways (by stream order)

- 3 creeks
- 4
- 5
- 6
- 7 major rivers

Exploration Permits - COAL

- APPLICATION
- GRANTED

© Queensland Murray Darling Committee, 2008.
 Includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.bitm.qld.gov.au/qmurray_darling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Scale at A4
 1:3,200,000

Kilometres

Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994







Funded by
 Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Belvue Streets, TOOWOOMBA, QLD 4300
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

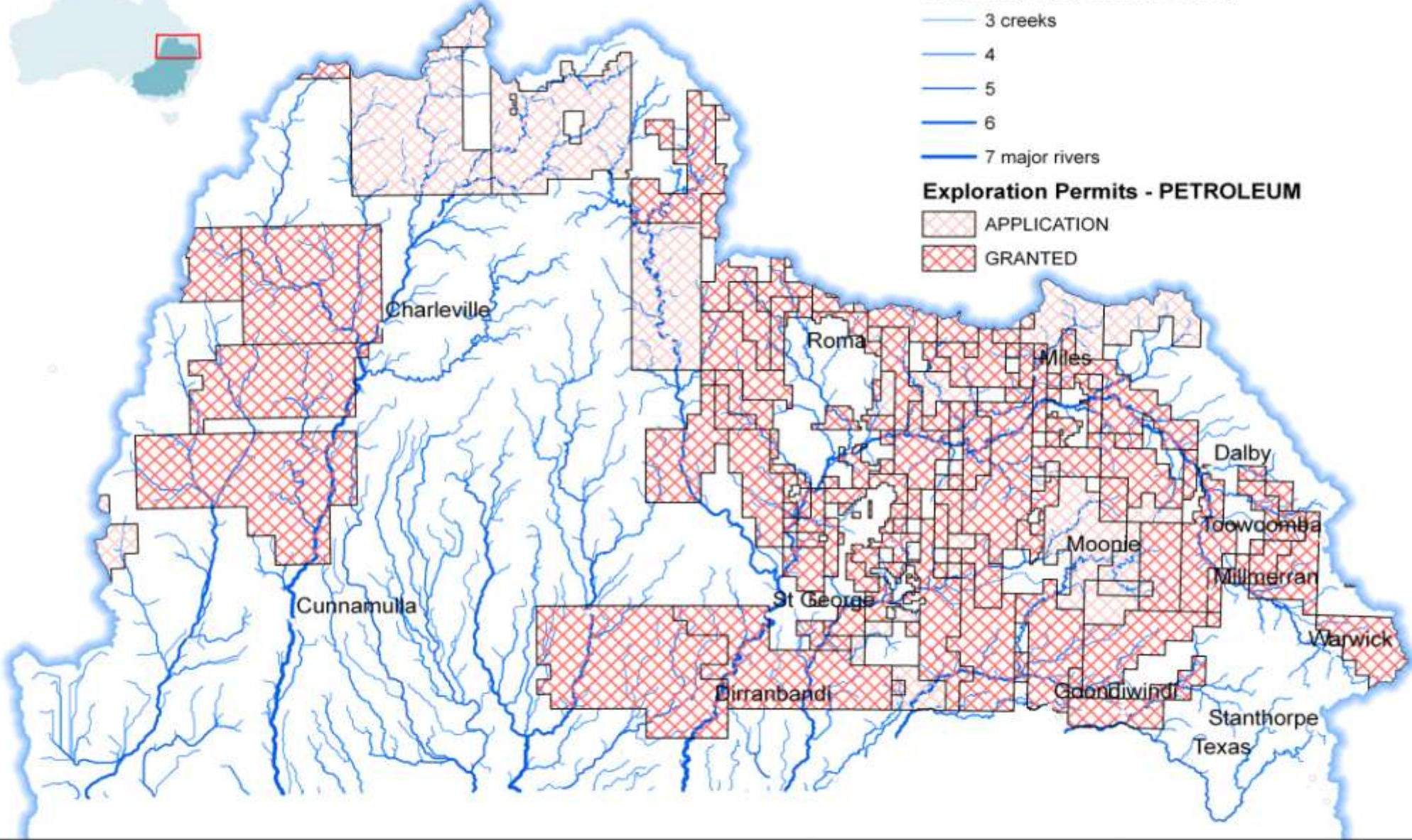


Waterways (by stream order)

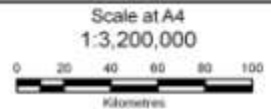
-  3 creeks
-  4
-  5
-  6
-  7 major rivers

Exploration Permits - PETROLEUM

-  APPLICATION
-  GRANTED



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.bitm.qld.gov.au/qmurray_darling_maps.htm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1984



Funded by
 Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4300
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

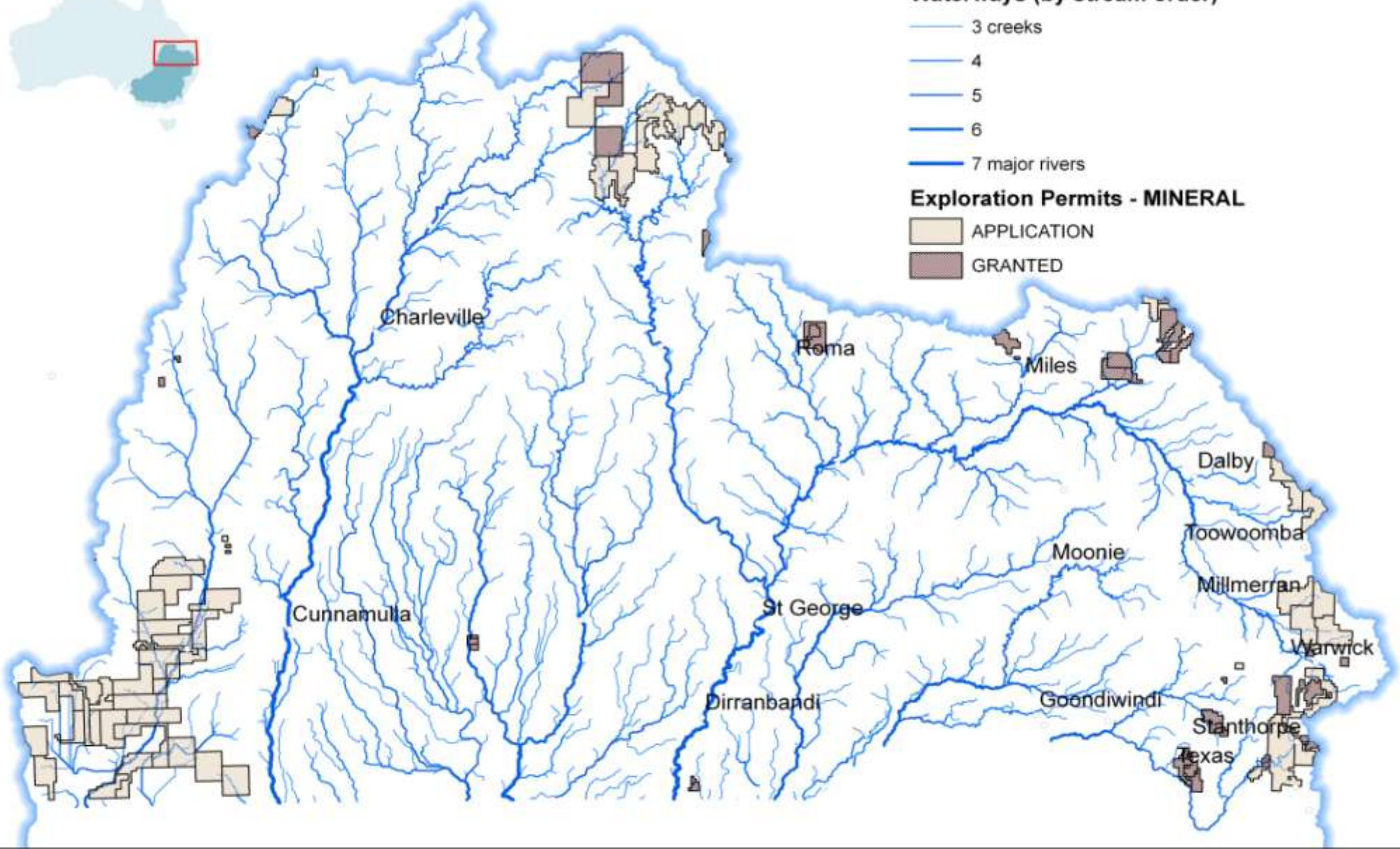


Waterways (by stream order)

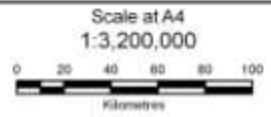
- 3 creeks
- 4
- 5
- 6
- 7 major rivers

Exploration Permits - MINERAL

- APPLICATION
- GRANTED



© Queensland Murray Darling Committee, 2008.
 Includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BTM website http://www.btm.qld.gov.au/murraydarling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, CMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and declines all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damages) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-sold as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1984



Funded by

 Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Selous Streets, TOOWOOMBA QLD 4300
 Phone: (07) 4617 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

Maranoa-Balonne-Condamine Rivers

Coal Exploration Permits

Row Labels	Sum of km
APPLICATION	9,447
1	4,529
2	2,551
3	1,121
4	685
5	319
6	242
GRANTED	6,855
1	3,339
2	1,699
3	974
4	355
5	299
6	189
Grand Total	16,302

Petroleum Exploration Permits

Row Labels	Sum of km
APPLICATION	7,332
1	3,630
2	1,843
3	948
4	499
5	174
6	237
GRANTED	15,742
1	7,712
2	3,945
3	1,962
4	1,043
5	485
6	465
7	129
Grand Total	23,074.031



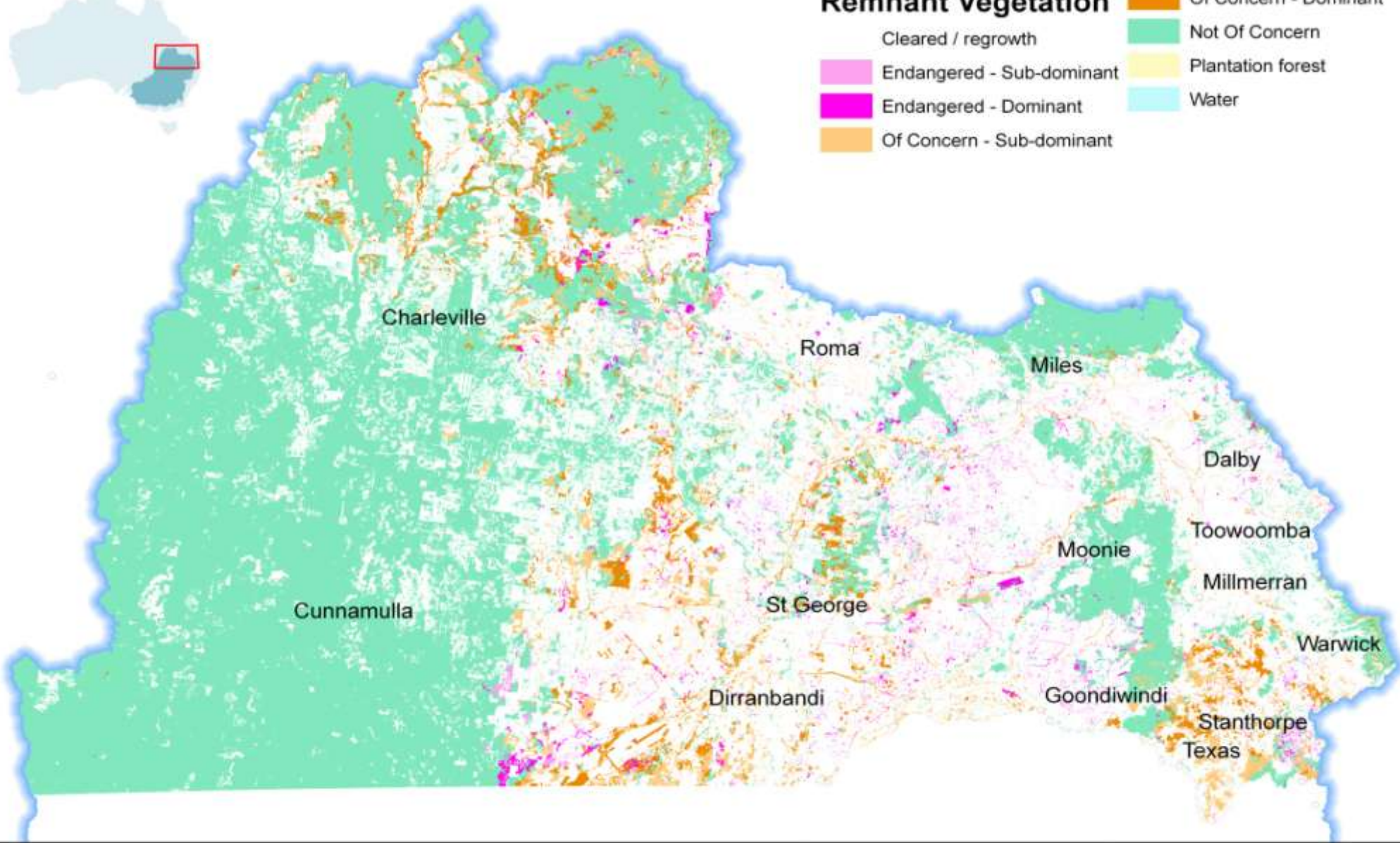
Vegetation and Biodiversity

Continued decline in vegetation extent and habitat fragmentation through clearing of vegetation.

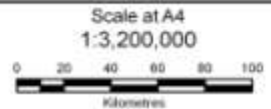


Remnant Vegetation

- Of Concern - Dominant
- Not Of Concern
- Plantation forest
- Water
- Cleared / regrowth
- Endangered - Sub-dominant
- Endangered - Dominant
- Of Concern - Sub-dominant



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.dme.qld.gov.au/murraydarling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of the data, QMDC the
 makes no representations or warranties about its accuracy, reliability, completeness
 or suitability for any particular purpose and declines all responsibility and all
 liability (including without limitation, liability or negligence) for all expenses,
 losses, damages (including indirect or consequential damage) and costs which might
 be incurred as a result of the data being inaccurate or incomplete in any way and
 for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1984



Funded by
 Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA, QLD 4300
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

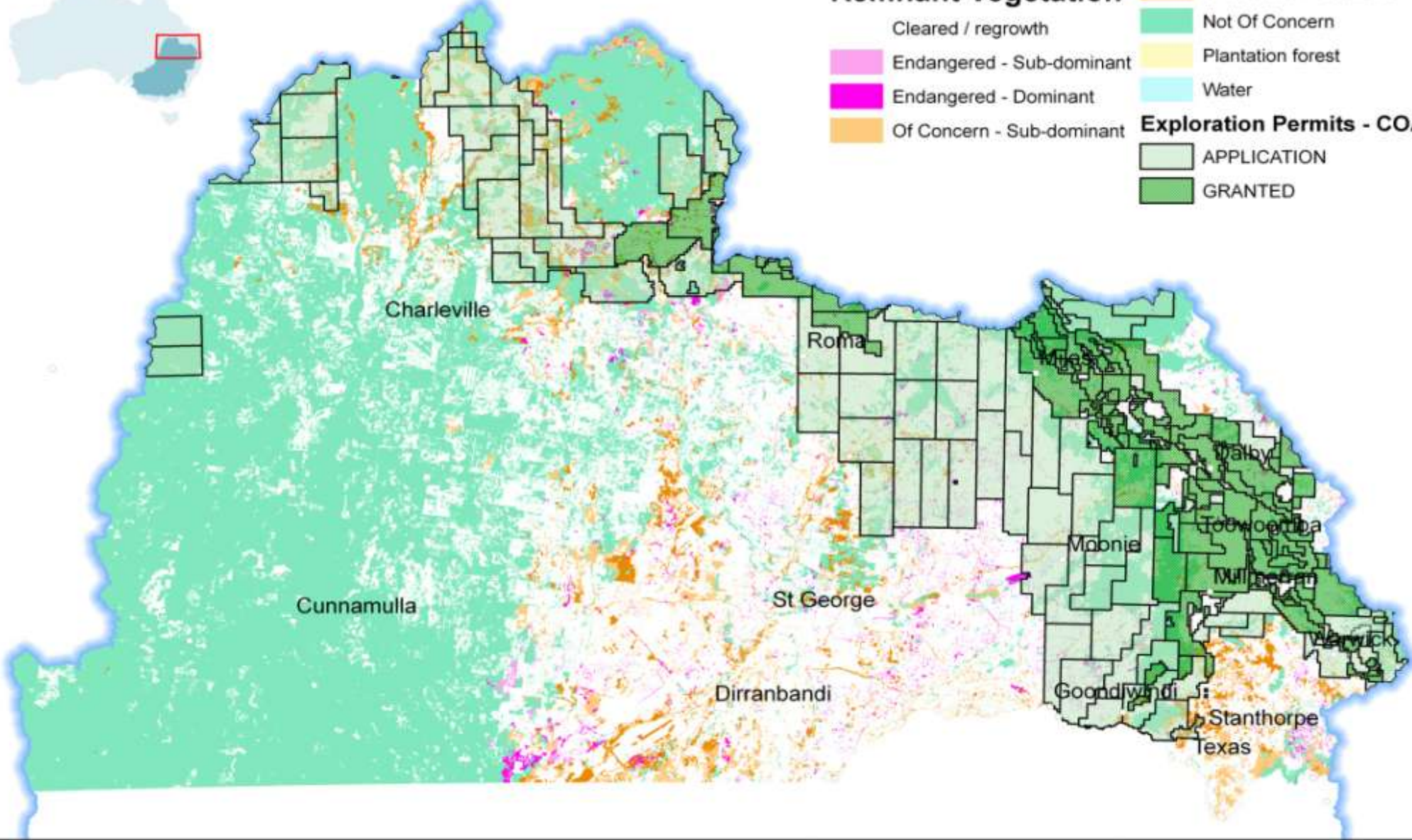


Remnant Vegetation

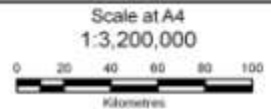
- Of Concern - Dominant
- Not Of Concern
- Plantation forest
- Water
- Cleared / regrowth
- Endangered - Sub-dominant
- Endangered - Dominant
- Of Concern - Sub-dominant

Exploration Permits - COAL

- APPLICATION
- GRANTED



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.bitm.qld.gov.au/murraydarling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC the
 makes no representations or warranties about its accuracy, reliability, completeness
 or suitability for any particular purpose and declines all responsibility and all
 liability (including without limitation, liability or negligence) for all expenses,
 losses, damages (including indirect or consequential damage) and costs which might
 be incurred as a result of the data being inaccurate or incomplete in any way and
 for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1984



Funded by
 Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



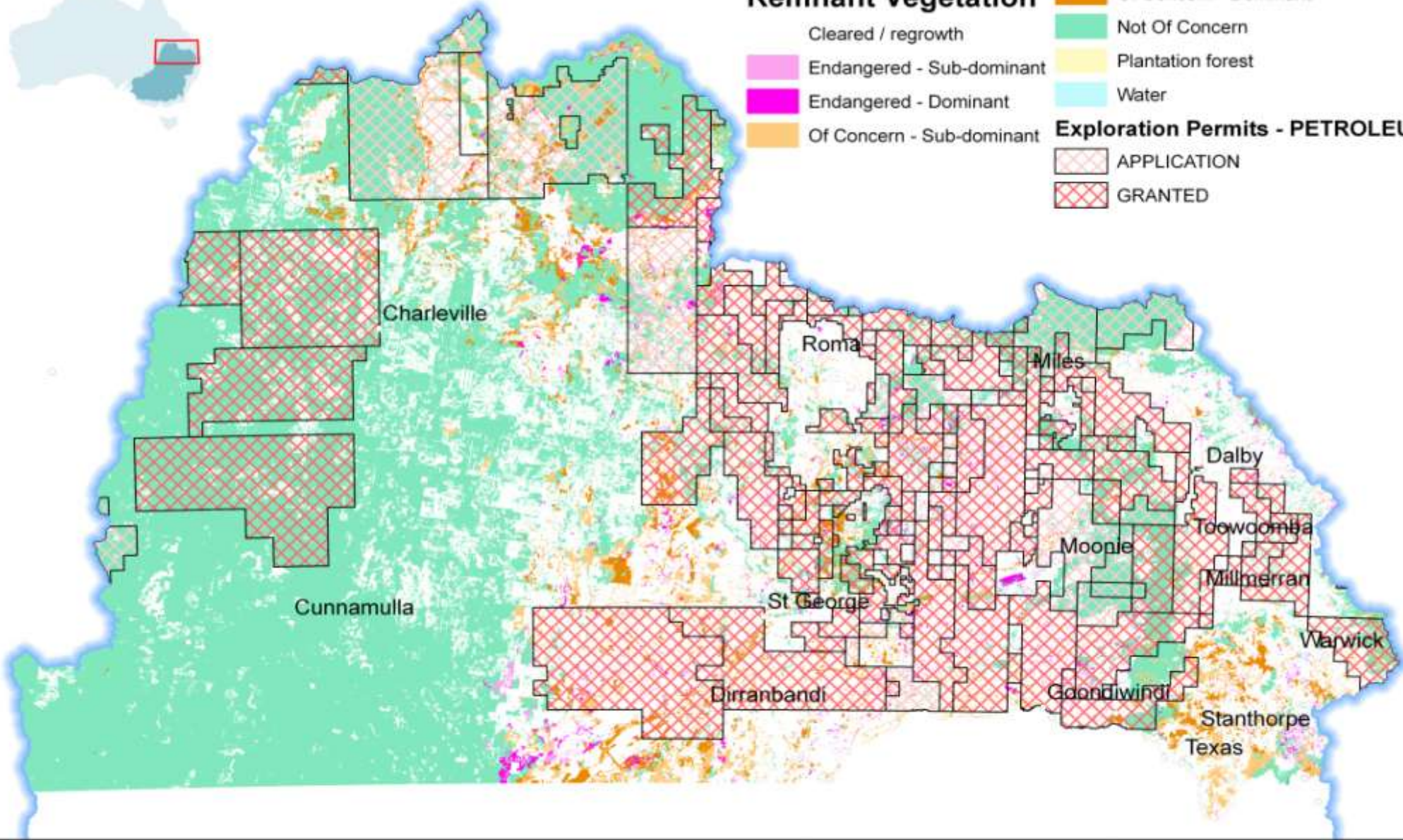
Remnant Vegetation

- Cleared / regrowth
- Endangered - Sub-dominant
- Endangered - Dominant
- Of Concern - Sub-dominant

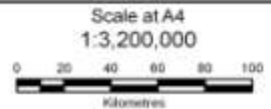
- Of Concern - Dominant
- Not Of Concern
- Plantation forest
- Water

Exploration Permits - PETROLEUM

- APPLICATION
- GRANTED



© Queensland Murray Darling Committee, 2008.
 includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the BITM website http://www.dme.qld.gov.au/murraydarling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC the
 makes no representations or warranties about its accuracy, reliability, completeness
 or suitability for any particular purpose and declines all responsibility and all
 liability (including without limitation, liability or negligence) for all expenses,
 losses, damages (including indirect or consequential damage) and costs which might
 be incurred as a result of the data being inaccurate or incomplete in any way and
 for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1984



Funded by
 Australian Government
 Queensland Government

Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA, QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 6062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Remnant Vegetation

Granted exploration permits:

- COAL granted 1.9M Ha
application 2.1M Ha
- PETROLEUM
Active granted 3.1M Ha
Active application 1.5M Ha



Current Exploration Permits Coal (EPC)

Sum of Hectares		Sum of Hectares		
EXPLORATION STATUS	VEGETATION STATUS	June 08	Dec 08	Change
APPLICATION	Endangered - dominant	71,461	86,783	121%
	Endangered -subdominant	10,160	20,332	200%
	Not Of Concern	1,073,128	1,631,279	152%
	Of concern -dominant	161,729	238,950	148%
	Of concern -subdominant	75,002	111,675	149%
total		1,391,479	2,089,018	150%
GRANTED	Endangered – dominant	23,493	22,431	95%
	Endangered -subdominant	4,274	3,627	85%
	Not Of Concern	401,030	425,011	106%
	Of concern -dominant	41,232	39,298	95%
	Of concern -subdominant	25,689	32,308	126%
total		495,719	522,674	105%
Grand Total		1,887,198	2,611,692	138%

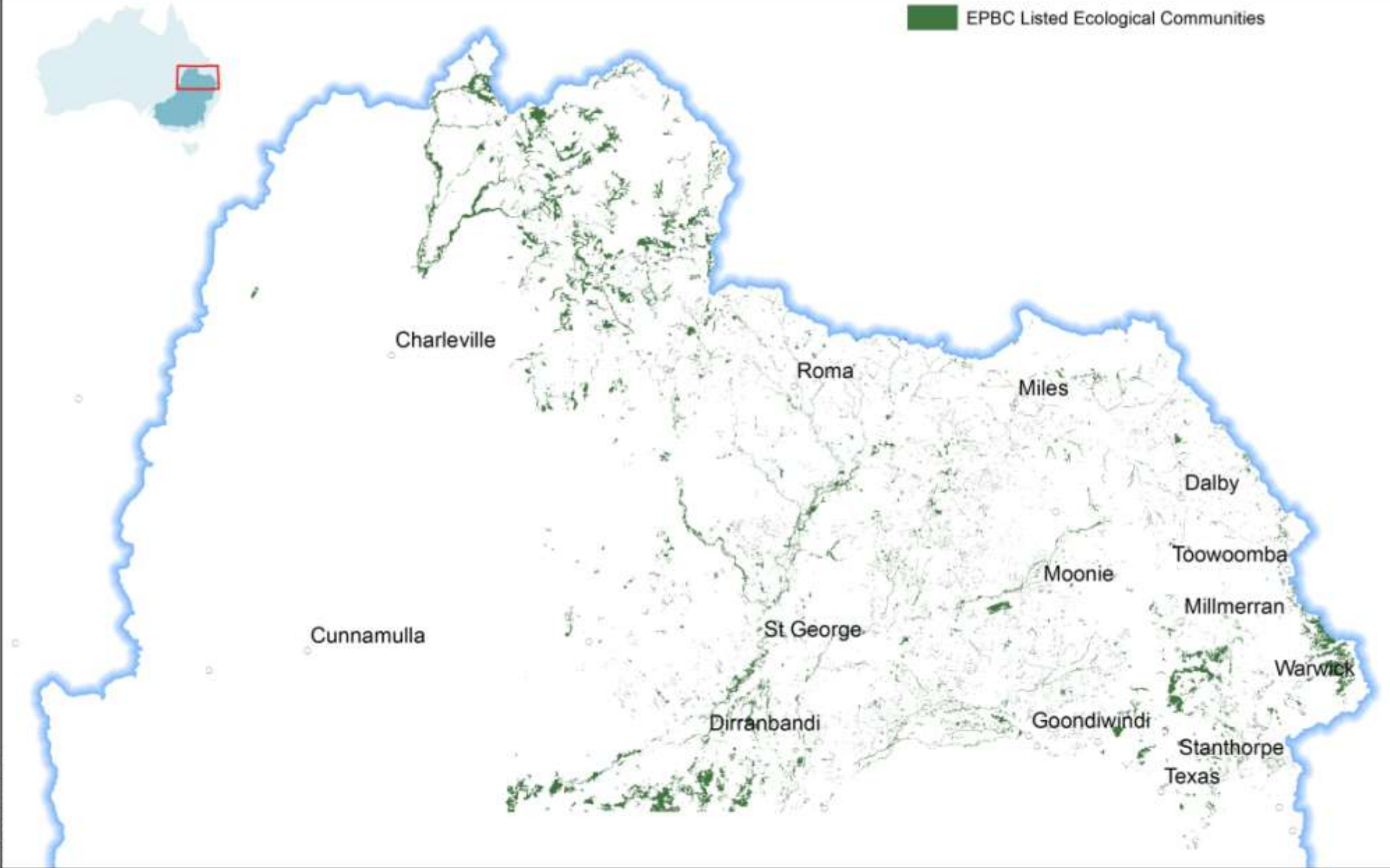
Current Exploration Permits Coal (EPC)

		Sum of Hectares		
EXPLORATION STATUS	VEGETATION STATUS	June 08	Dec 08	Change
APPLICATION	Endangered - dominant	71,461	27,209	38%
	Endangered -subdominant	10,160	11,629	114%
	Not Of Concern	1,073,128	1,347,112	126%
	Of concern -dominant	161,729	139,832	86%
	Of concern -subdominant	75,002	51,098	68%
total		1,391,479	1,576,879	113%
GRANTED	Endangered – dominant	23,493	117,159	499%
	Endangered -subdominant	4,274	28,340	663%
	Not Of Concern	401,030	2,649,909	661%
	Of concern -dominant	41,232	227,798	552%
	Of concern -subdominant	25,689	160,721	626%
total		495,719	3,183,927	642%
Grand Total		1,887,198	4,760,806	252%

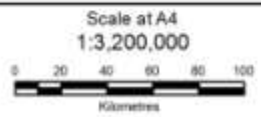


Environmental Protection and Biodiversity Conservation Act (EPBC)

Listed Ecological Communities



© Queensland Murray Darling Committee, 2008
 includes material © The State of Queensland and The Commonwealth of Australia
 For up to date information visit the ITIM website http://www.dtra.qld.gov.au/murres/tenure_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.

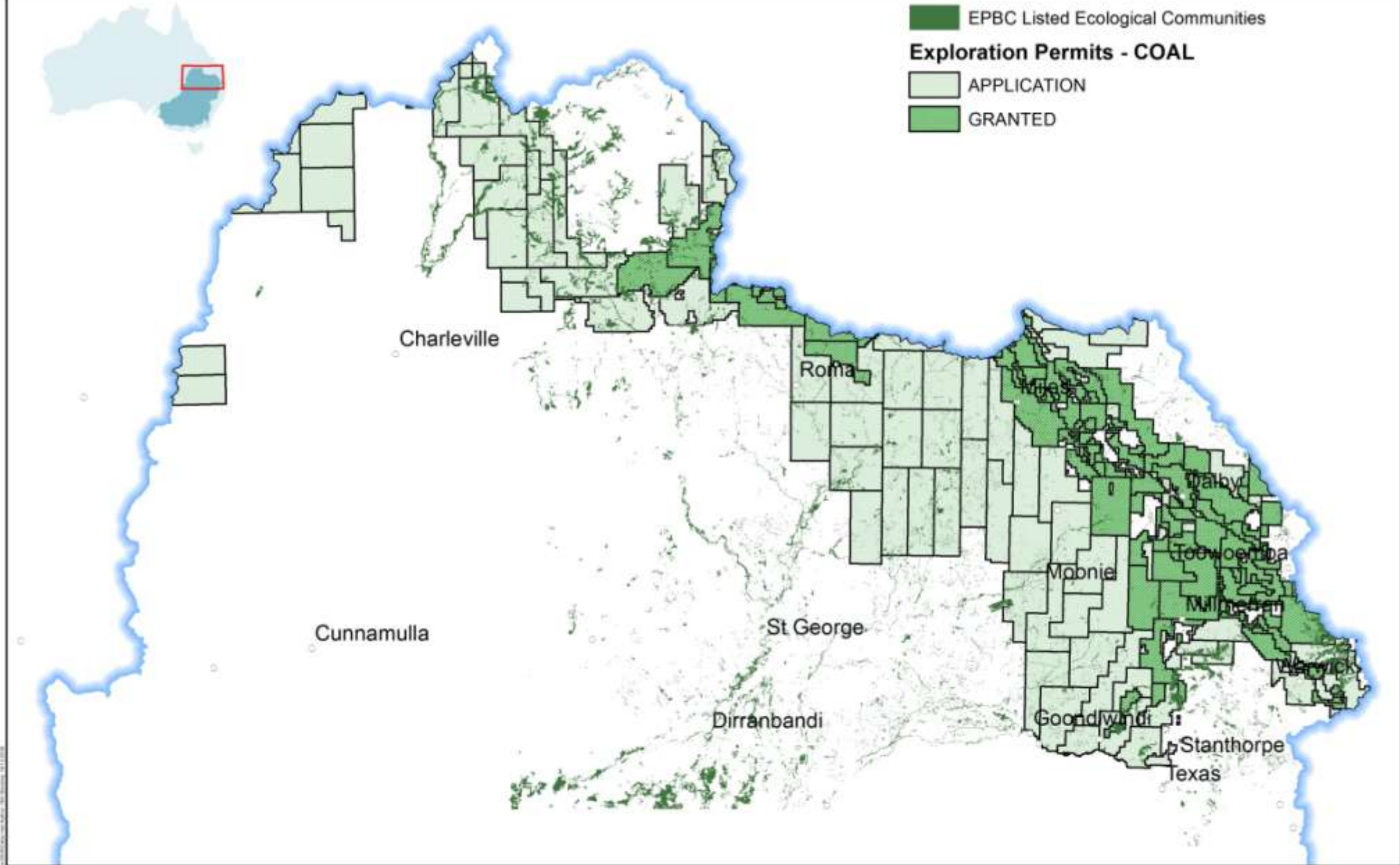


Projection: Abers Equal Area
 Datum: Geocentric Datum of Australia 1994

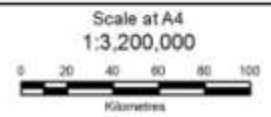


Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



© Queensland Murray Darling Committee, 2008
 Includes material © The State of Queensland and The Commonwealth of Australia
 For up to date information visit the RTM website <http://www.rtm.qld.gov.au/index.htm>
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994

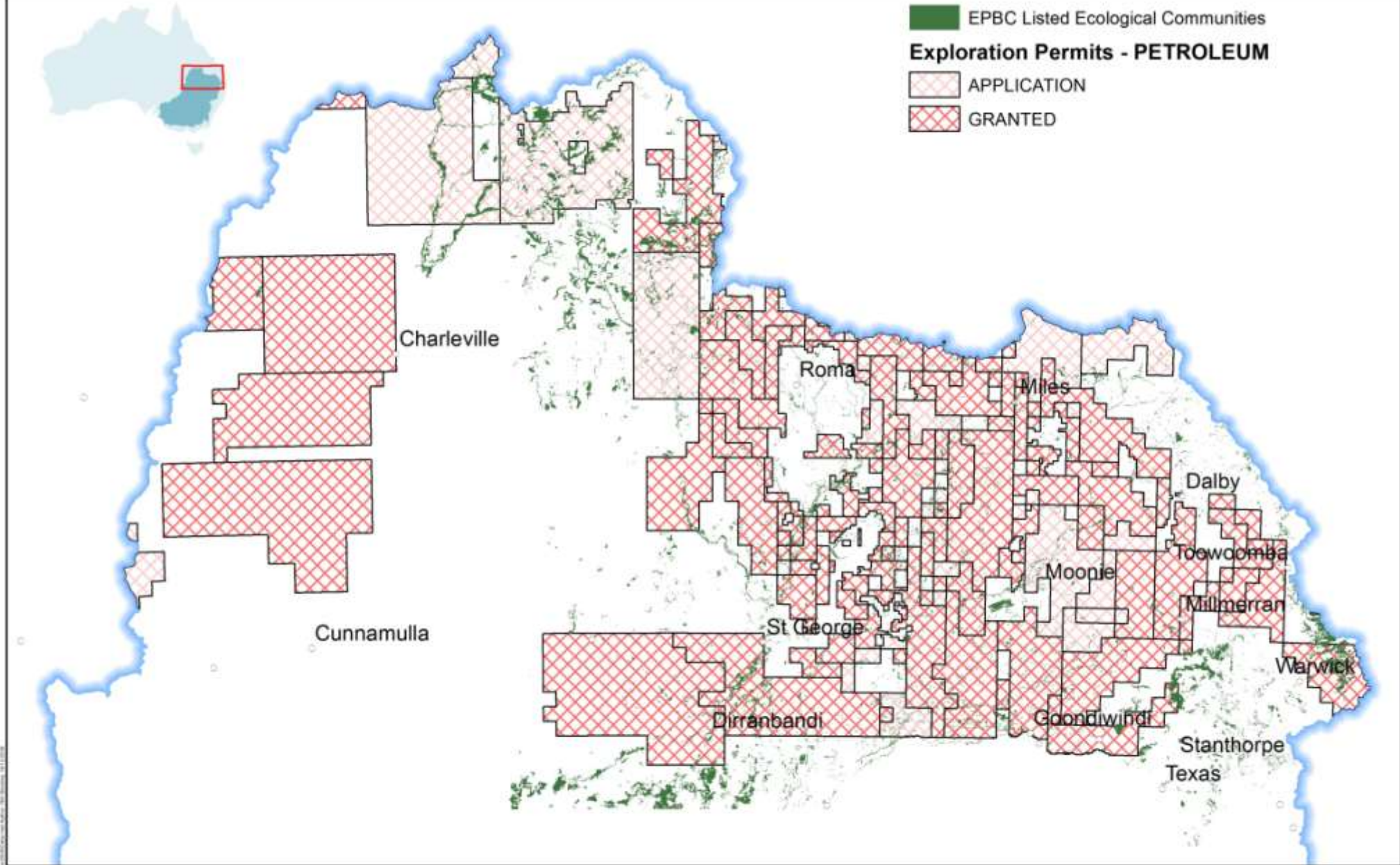


Funded by



Queensland Murray Darling Committee Inc.
 C/o Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



EPBC Listed Ecological Communities
Exploration Permits - PETROLEUM
 APPLICATION
 GRANTED

© Queensland Murray Darling Committee, 2008
 Includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the RTM website <http://www.rtm.qld.gov.au/murres/home.aspx>
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.

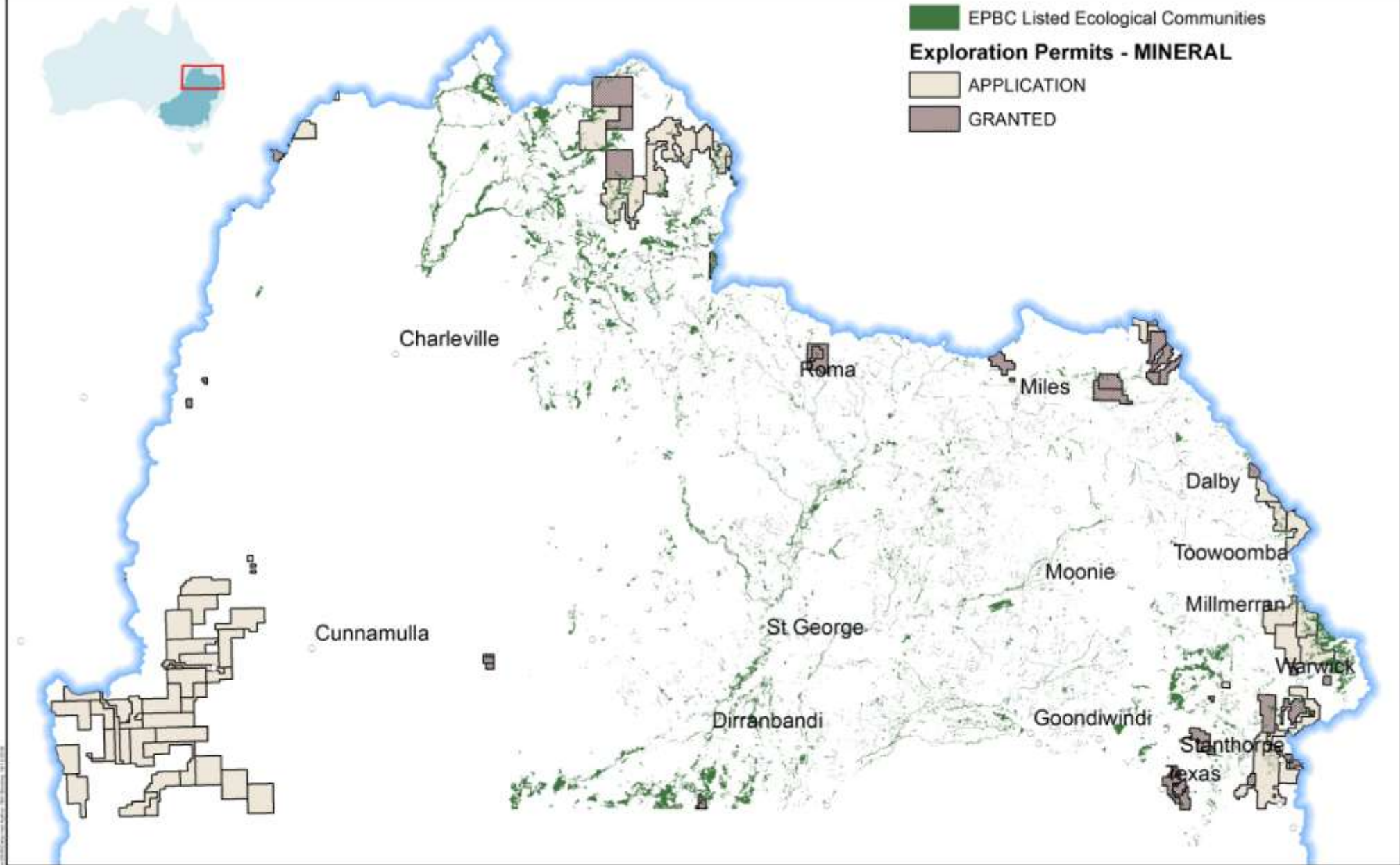


Projector: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994



Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



EPBC Listed Ecological Communities
Exploration Permits - MINERAL
 APPLICATION
 GRANTED

© Queensland Murray Darling Committee, 2008
 Includes material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the RTM website http://www.rtm.qld.gov.au/mines/permits_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994



Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Total Area of
EPBC Listed
Communities in
QMDB
881,654 Ha

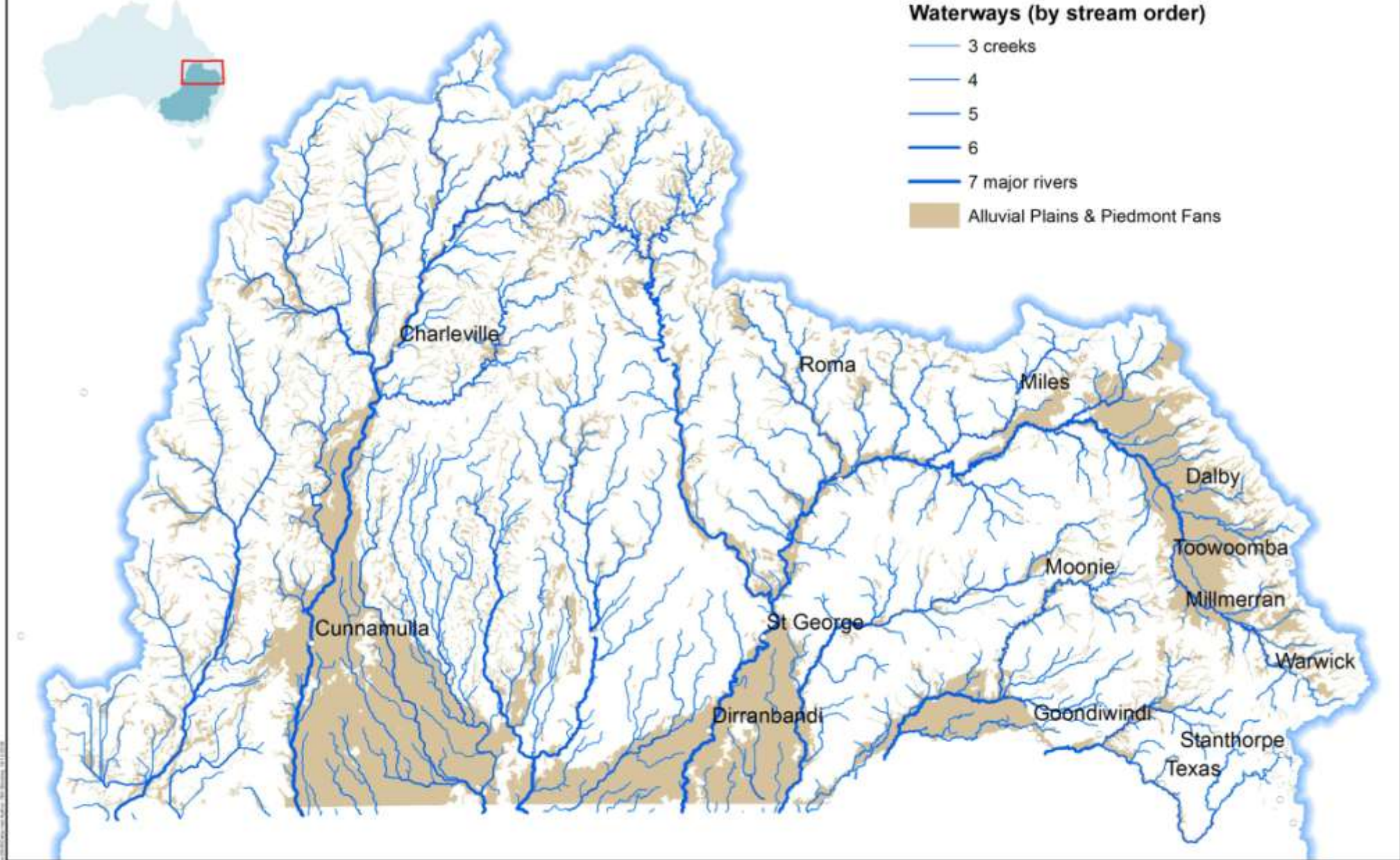
40-43% of
current extent
under coal
exploration
permits

Sum of Hectares		Sum of Hectares	
EXPLORATION STATUS	EPBC Community	Dec08	
APPLICATION	Weeping Myall Woodlands	168,686	
	Box Gum Grass Grassy Woodland	51,474	
	Brigalow Community	80,516	
	Semi-evergreen vine thicket	976	
	Native Alluvial Grasslands	907	
total		302,559	
GRANTED	Weeping Myall Woodlands	41,243	
	Box Gum Grass Grassy Woodland	20,034	
	Brigalow Community	11,764	
	Semi-evergreen vine thicket	4,216	
	Native Alluvial Grasslands	4,270	
total		81,527	
Grand Total		384,086	

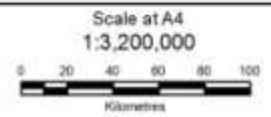


Water Quality

The possible pollution/sedimentation of water ways (rivers, creeks & wetlands) from erosion off mine sites and spoil heaps. Leakages and possible overtopping of settling ponds or evaporation ponds.



© Queensland Murray Darling Committee, 2008
 Includes material © The State of Queensland and The Commonwealth of Australia
 For up to date information visit the RTM website http://www.rtm.qld.gov.au/murray_darling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994



Funded by

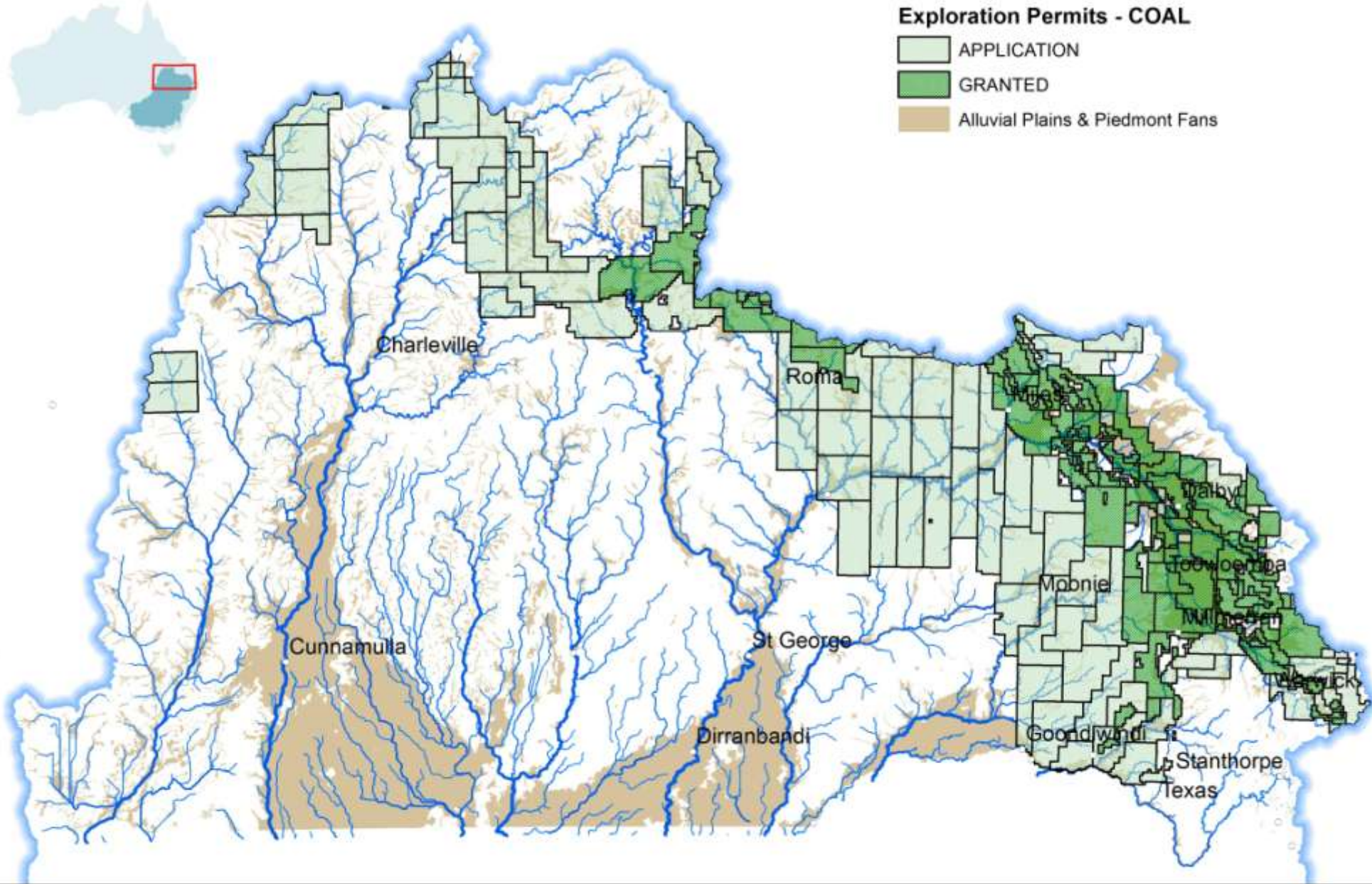


Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

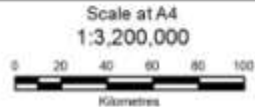
Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

Exploration Permits - COAL

-  APPLICATION
-  GRANTED
-  Alluvial Plains & Piedmont Fans



© Queensland Murray Darling Committee, 2008
Includes material © The State of Queensland and The Commonwealth of Australia
For up to date information visit the RTM website http://www.rtm.qld.gov.au/murray_darling_maps.cfm
Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
Datum: Geocentric Datum of Australia 1994



Funded by

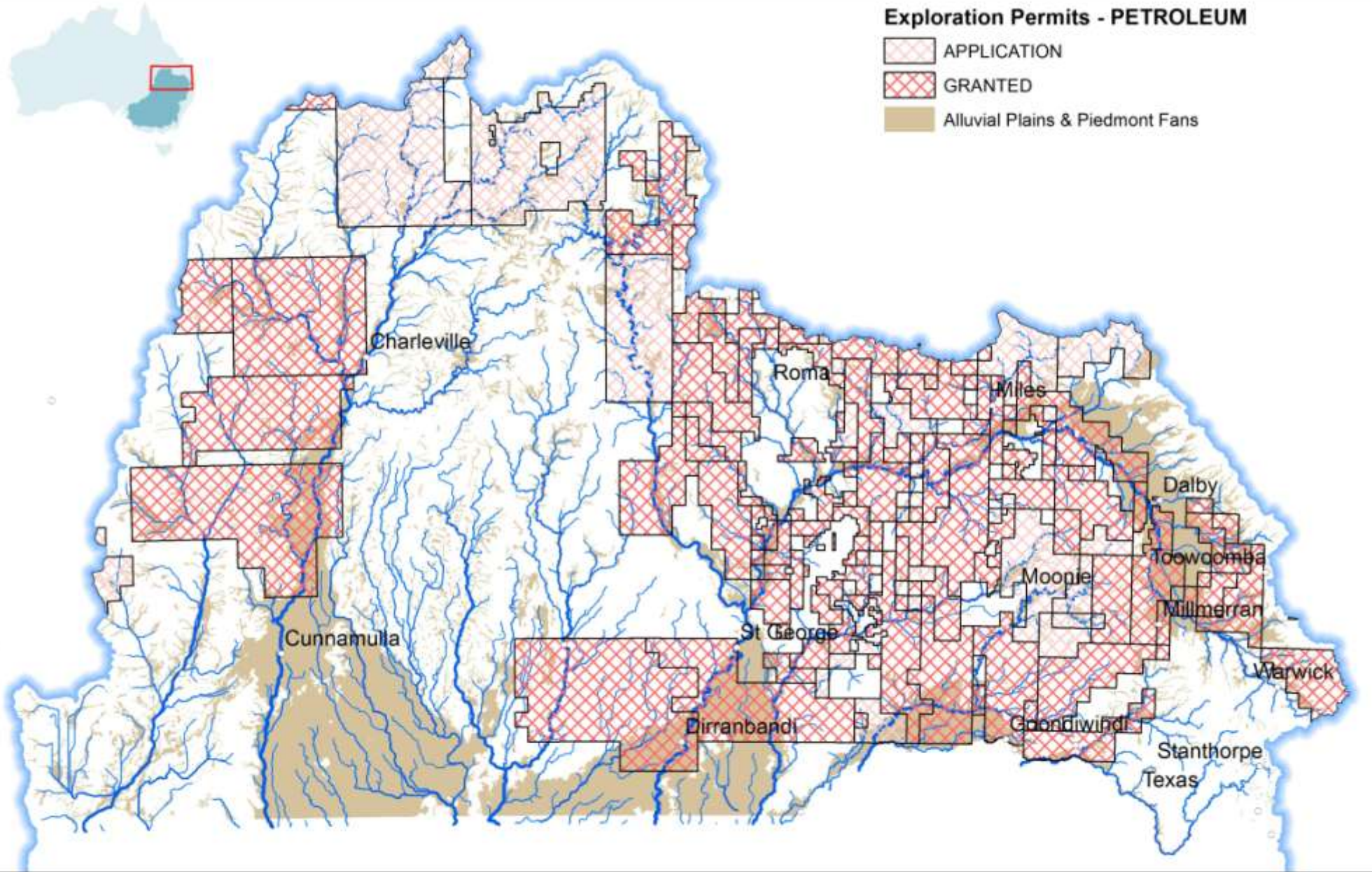


Queensland Murray Darling Committee Inc.
Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
Phone: (07) 4637 6226 Fax: (07) 4632 8062

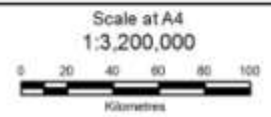
Mining & Energy Industry Impacts on
Natural Resource Management in the
Queensland Murray Darling
December 2008

Exploration Permits - PETROLEUM

-  APPLICATION
-  GRANTED
-  Alluvial Plains & Piedmont Fans



© Queensland Murray Darling Committee, 2008
Includes material © The State of Queensland and The Commonwealth of Australia
For up to date information visit the RTM website http://www.dtra.qld.gov.au/murres/home_murres.cfm
Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
Datum: Geocentric Datum of Australia 1994



Funded by

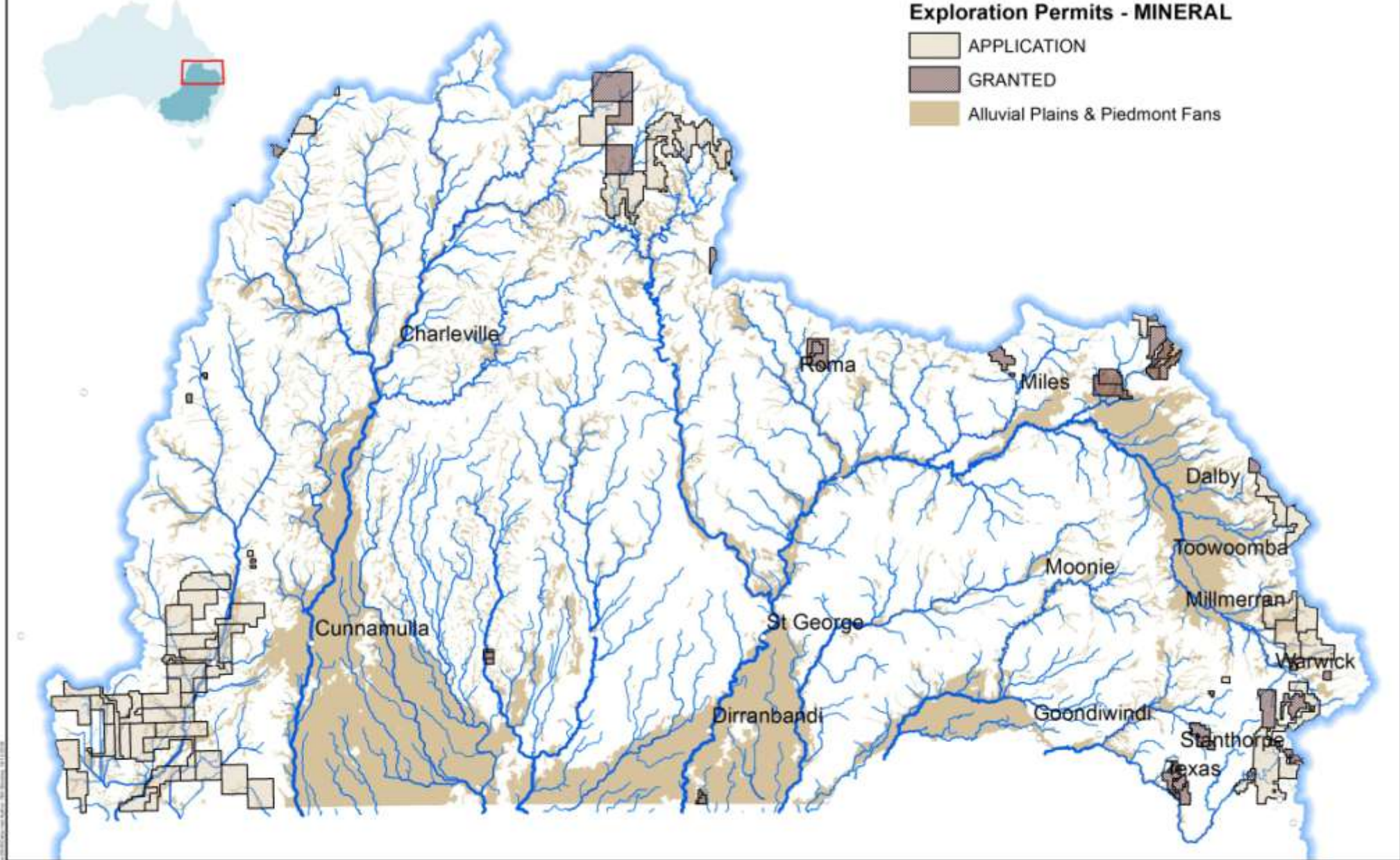


Queensland Murray Darling Committee Inc.
Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
Phone: (07) 4637 6226 Fax: (07) 4632 8062

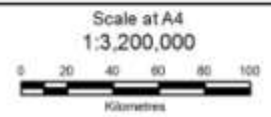
Mining & Energy Industry Impacts on
Natural Resource Management in the
Queensland Murray Darling
December 2008

Exploration Permits - MINERAL

- APPLICATION
- GRANTED
- Alluvial Plains & Piedmont Fans



© Queensland Murray Darling Committee, 2008
Includes material © The State of Queensland and The Commonwealth of Australia
For up to date information visit the RTM website http://www.rtm.qld.gov.au/murray_darling_maps.cfm
Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Funded by



Queensland Murray Darling Committee Inc.
Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
Natural Resource Management in the
Queensland Murray Darling
December 2008

QMDB Stream Order Summary

Coal Exploration Permits

	Length (km)
APPLICATION	17,859
1	8,774
2	4,455
3	2,281
4	1,322
5	770
6	257
GRANTED	7,467
1	3,712
2	1,871
3	1,028
4	367
5	299
6	189
Grand Total	25,326

Petroleum Exploration Permits

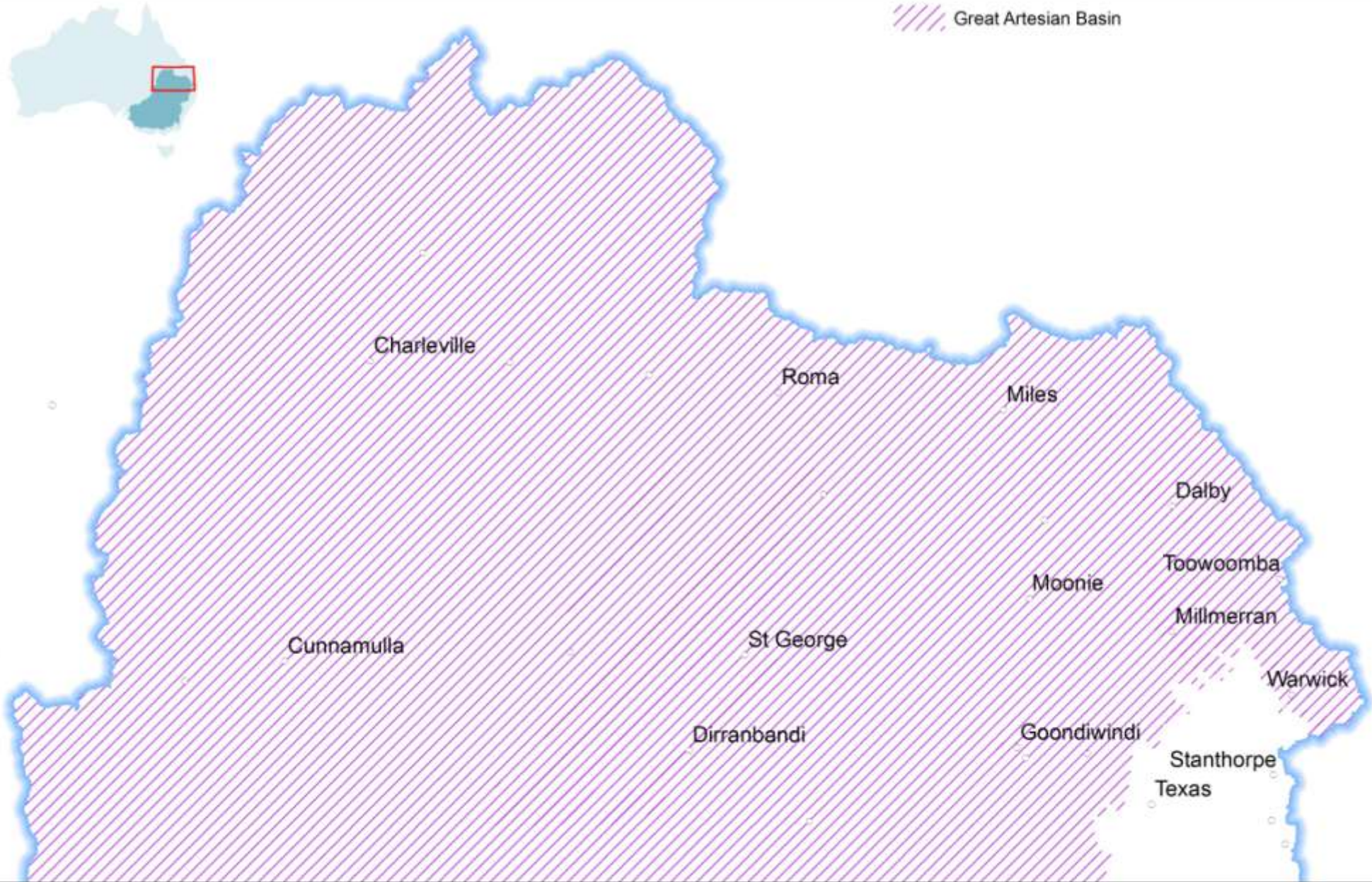
Row Labels	Sum of Length (km)
APPLICATION	19,876
1	9,660
2	4,707
3	2,569
4	1,739
5	778
6	422
GRANTED	31,714
1	15,916
2	7,785
3	3,755
4	1,947
5	1,217
6	836
7	259
Grand Total	51,590



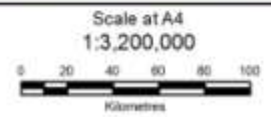
Landzones under Coal Exploration Permits

	Sum of Hectares
APPLICATION	5,212,607
Ranges, Plateaus and scarps (Low Fertility)	511,904
Ranges, Hills & Lowlands (Moderate fertility)	34,357
Ranges, hills & lowlands (Low fertility)	1,621
Alluvial plains & piedmont fans	861,300
Gently undulating plains-clay (Mod - High fertility)	998,141
Gently undulating plains-sand	977,920
Colluvium, low mesas and scarps	575,744
Plains and occasional low scarps (Mod - high fertility)	110,236
Undulating landscapes (Mod - High fertility)	1,141,233
Undulating, ranges, plateaus and scarps (Mod fertility)	152
GRANTED	1,977,024
Ranges, Plateaus and scarps (Low Fertility)	64,496
Ranges, Hills & Lowlands (Moderate fertility)	5,788
Alluvial plains & piedmont fans	818,181
Gently undulating plains-clay (Mod - High fertility)	55,239
Gently undulating plains-sand	316,956
Colluvium, low mesas and scarps	176,371
Plains and occasional low scarps (Mod - high fertility)	204,559
Undulating landscapes (Mod - High fertility)	334,237
Undulating, ranges, plateaus and scarps (Mod fertility)	1,199
Grand Total	7,189,632

Great Artesian Basin



© Queensland Murray Darling Committee, 2008
 Includes material © The State of Queensland and The Commonwealth of Australia
 For up to date information visit the RTM website <http://www.dtr.qld.gov.au/murres/murres.cfm>
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
 Datum: Geocentric Datum of Australia 1994

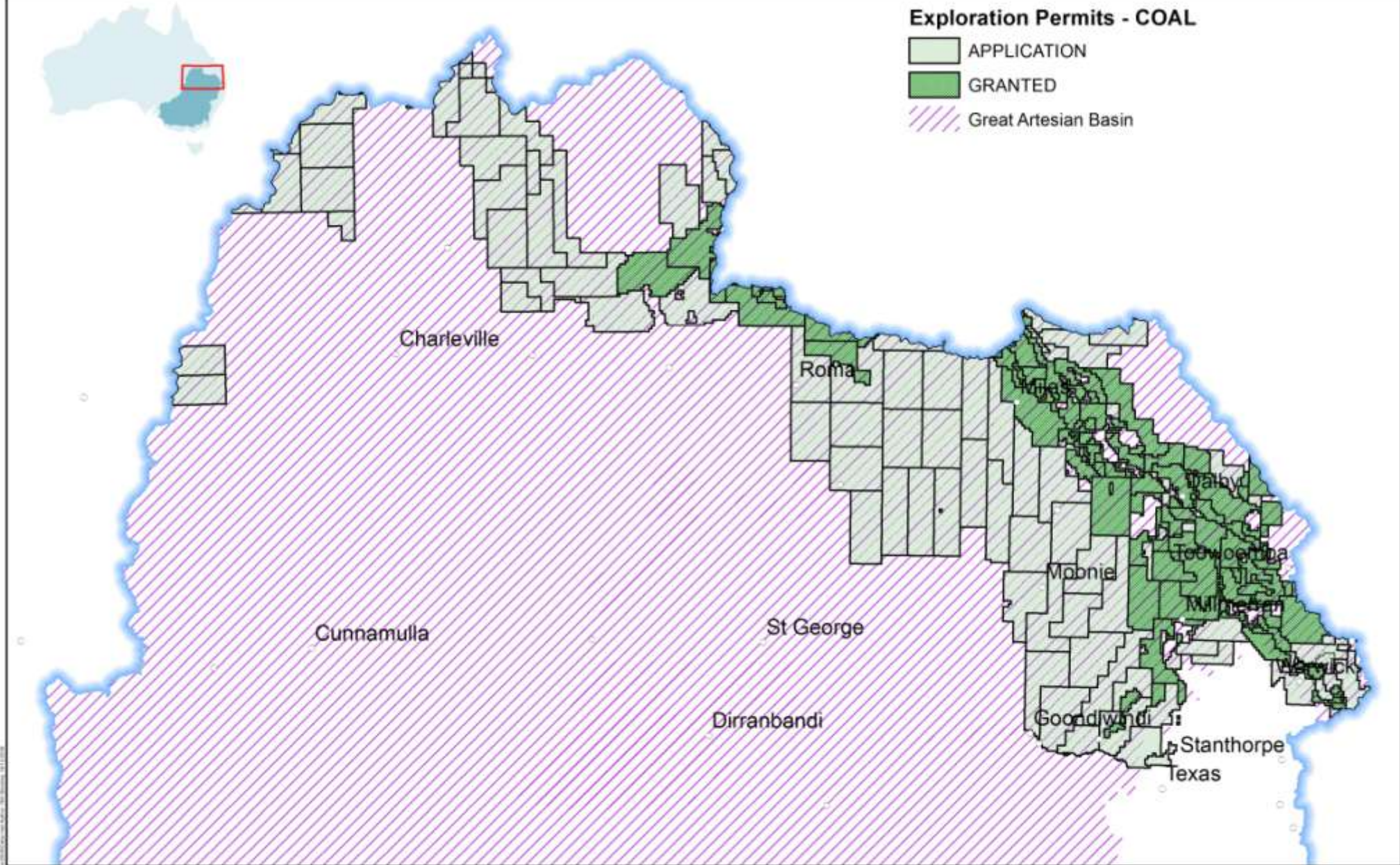


Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

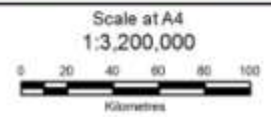
Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008

Exploration Permits - COAL

- APPLICATION
- GRANTED
- Great Artesian Basin



© Queensland Murray Darling Committee, 2008
Includes material © The State of Queensland and The Commonwealth of Australia
For up to date information visit the RTM website http://www.dtr.qld.gov.au/mines/rtm_mxdp.cfm
Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
Datum: Geocentric Datum of Australia 1994



Queensland Murray Darling Committee Inc.
Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
Phone: (07) 4637 6226 Fax: (07) 4632 8062

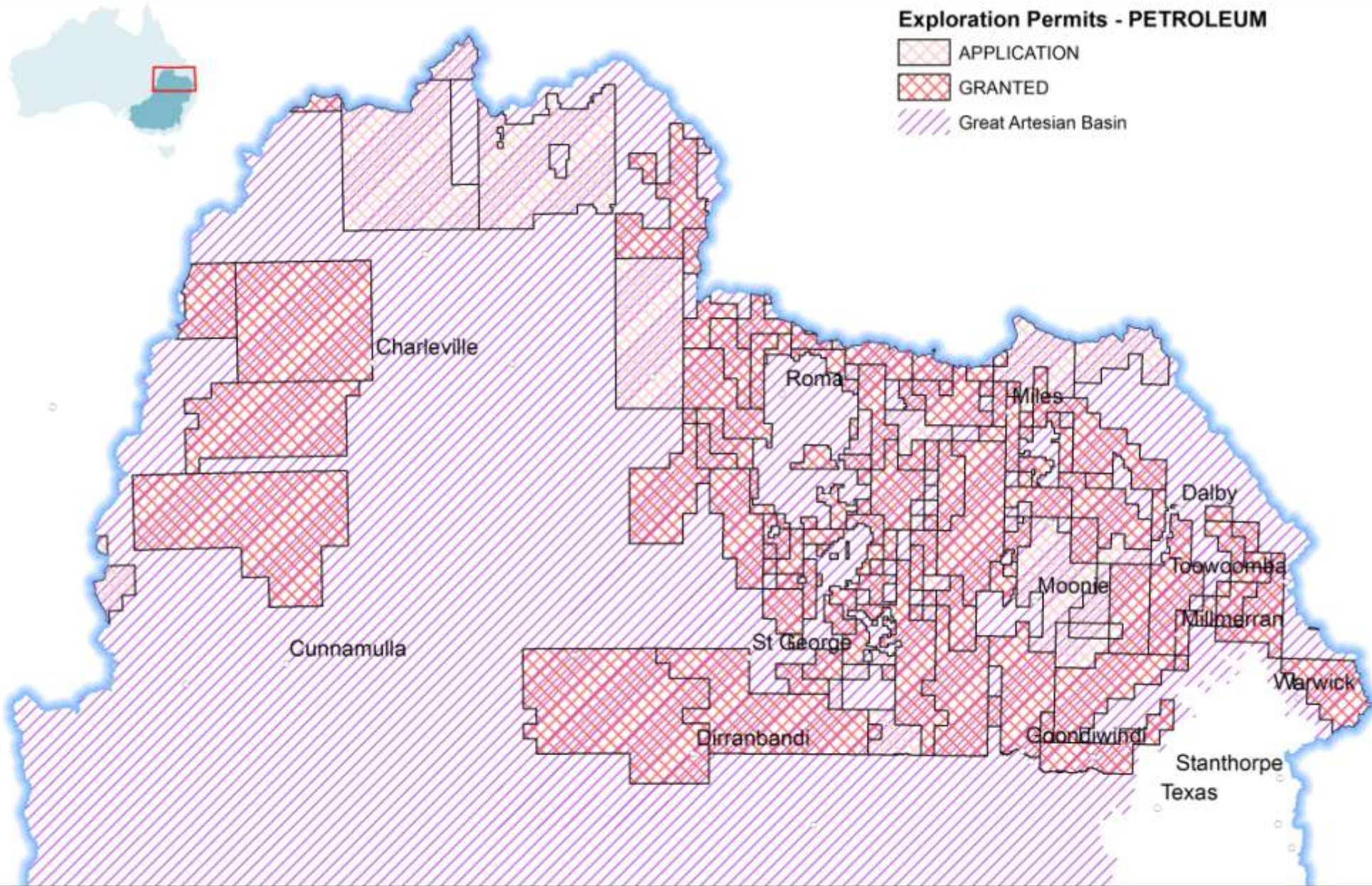
Mining & Energy Industry Impacts on
Natural Resource Management in the
Queensland Murray Darling
December 2008

Exploration Permits - PETROLEUM

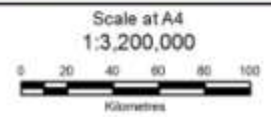
 APPLICATION

 GRANTED

 Great Artesian Basin



© Queensland Murray Darling Committee, 2008
Includes material © The State of Queensland and The Commonwealth of Australia
For up to date information visit the RTM website http://www.dtrm.qld.gov.au/murray_darling_maps.cfm
Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Projection: Albers Equal Area
Datum: Geocentric Datum of Australia 1994

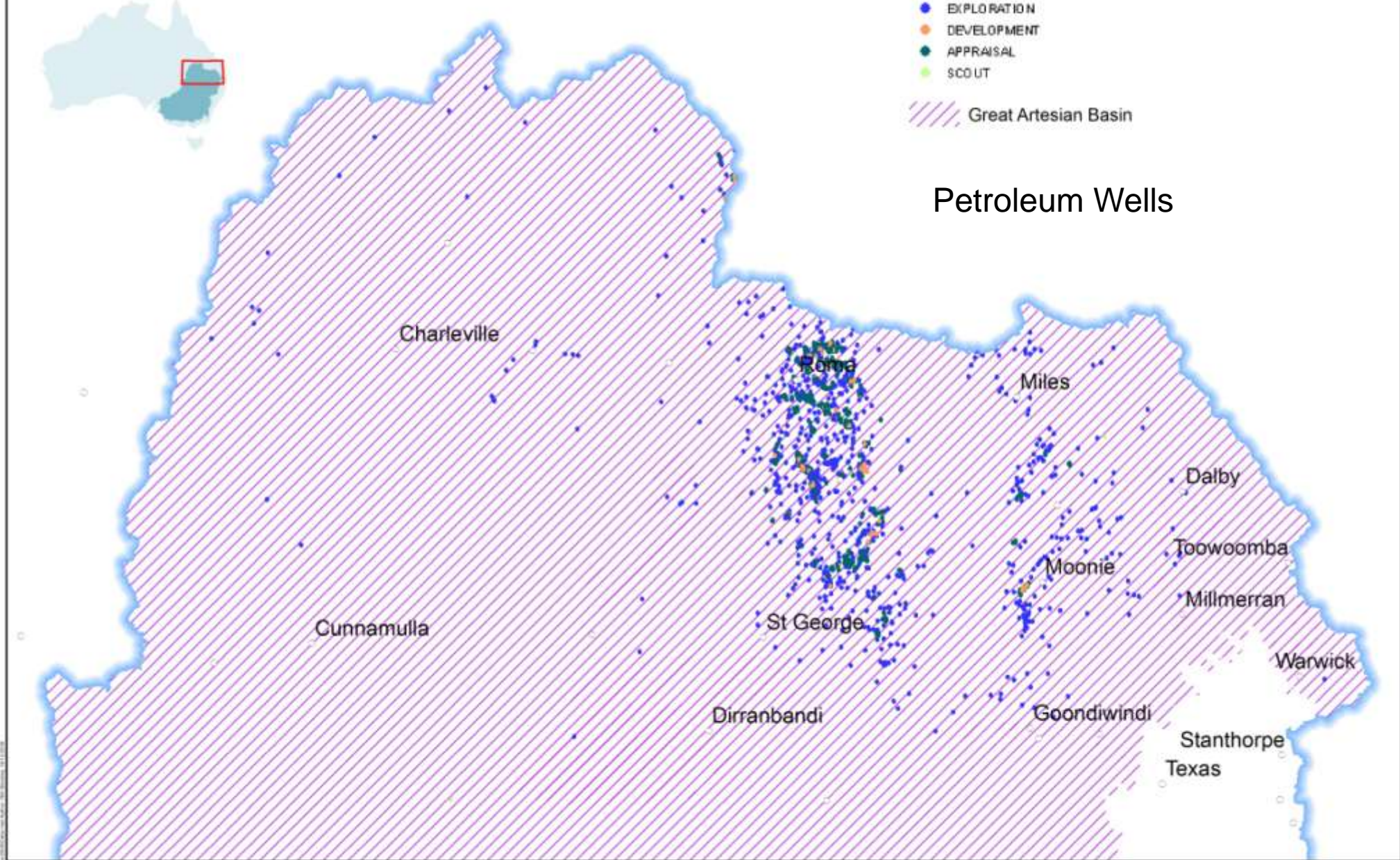


Funded by

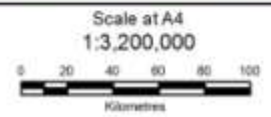


Queensland Murray Darling Committee Inc.
Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
Natural Resource Management in the
Queensland Murray Darling
December 2008



© Queensland Murray Darling Committee, 2008
 Includes material © The State of Queensland and The Commonwealth of Australia
 For up to date information visit the RTM website http://www.rtm.qld.gov.au/murres/tema_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of this data, QMDC Inc makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or incomplete in any way and for any reason. This map is not to be sold or re-made as part of a commercial product.



Funded by

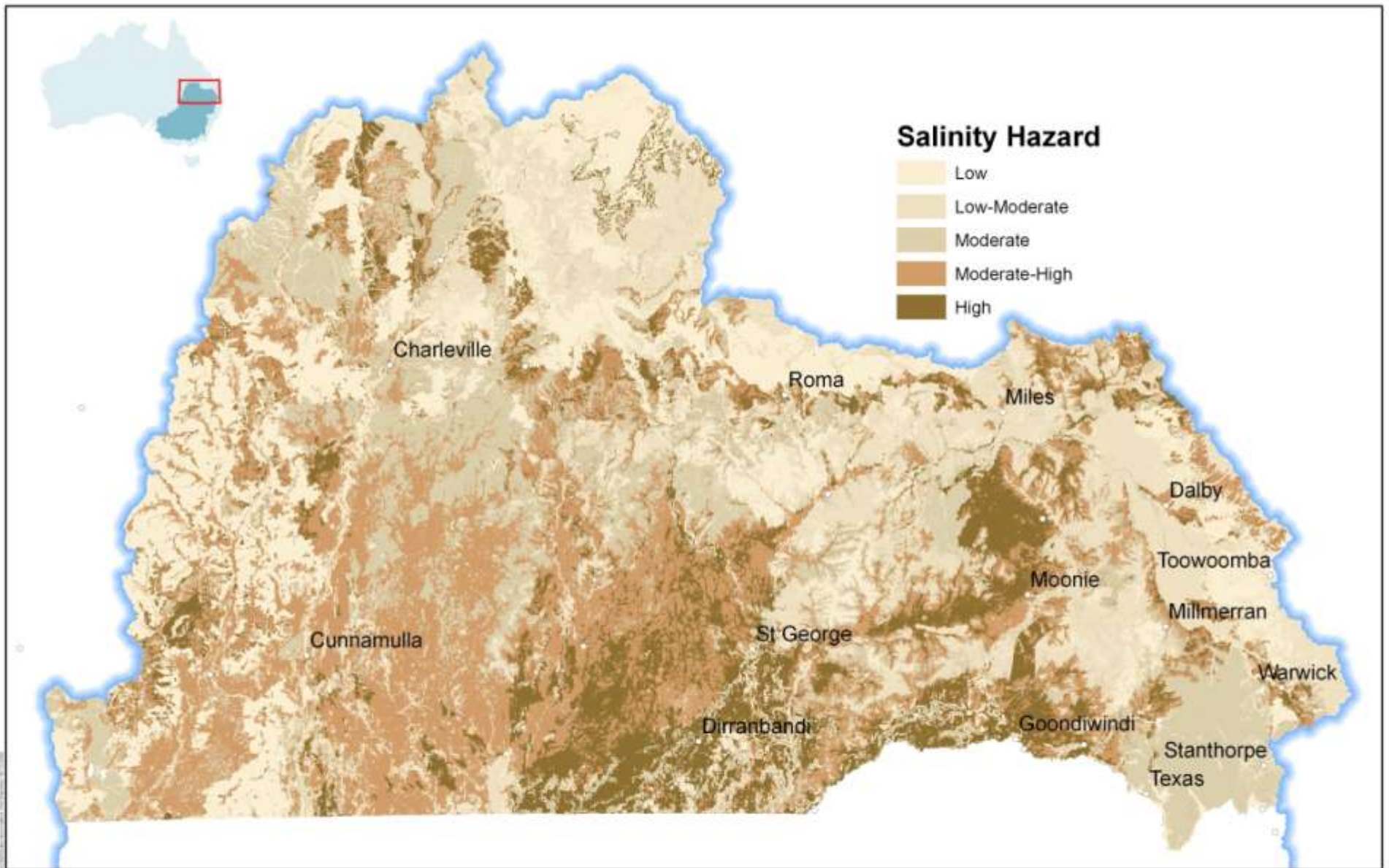
Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bellvue Streets, TOOWOOMBA QLD 4350
 Phone: (07) 4637 6226 Fax: (07) 4632 8062

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Salinity

Waste (or associated) water that has high salt content has the potential to be used (irrigation), leak or be left behind and damage farming land and creeks, rivers and wetlands.



© Queensland Murray Darling Committee, 2008.
 Included material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the IRTD website http://www.dms.qld.gov.au/irtd/resources_maps/site
 Disclaimer: While every care is taken to ensure the accuracy of the data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or acceptable in any way and for any reason. This map is not to be used or re-made as part of a commercial product.



Projection: UTM Equal Area
 Datum: Geocentric Datum of Australia 1994

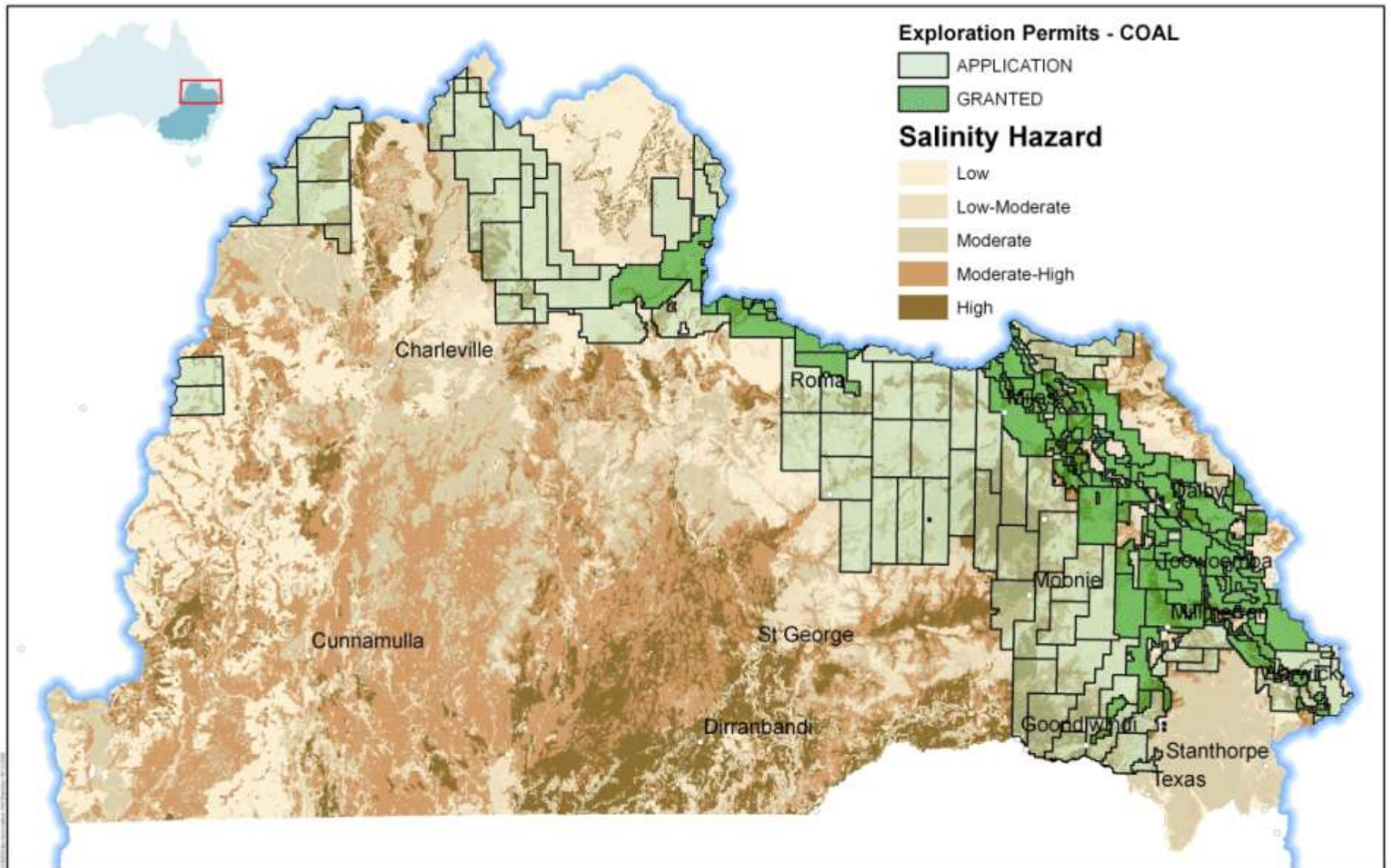


Funded by:



Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bullock Streets, TOOWOOMBA QLD 4318
 Phone: (07) 4637 5226 Fax: (07) 4632 8962

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



© Queensland Murray Darling Committee, 2008.
 Included material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the IRTD website http://www.dms.qld.gov.au/irtd/murray_darling_maps.cfm
 Disclaimer: While every care is taken to ensure the accuracy of the data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or acceptable in any way and for any reason. This map is not to be used or re-made as part of a commercial product.



Projection: Abert Equal Area
Datum: Geocentric: Datum of Australia 1994

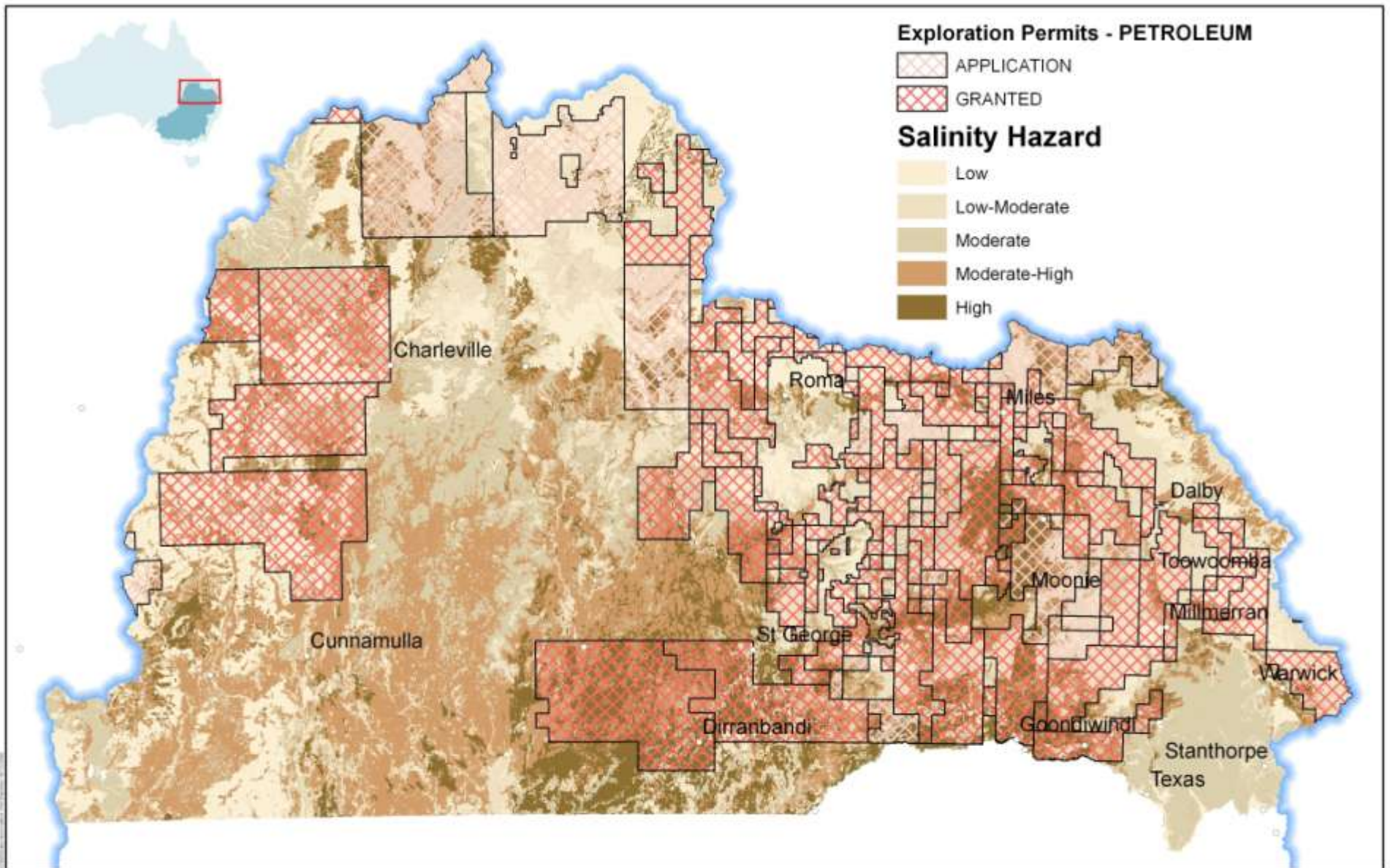


Funded by:



Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bullock Streets, TOOWOOMBA QLD 4318
 Phone: (07) 4637 9226 Fax: (07) 4632 8962

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



© Queensland Murray Darling Committee, 2008.
 Included material © The State of Queensland and The Commonwealth of Australia.
 For up to date information visit the IRTD website http://www.dms.qld.gov.au/irtd/resources_maps/site
 Disclaimer: While every care is taken to ensure the accuracy of the data, QMDC Inc. makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability or negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which might be incurred as a result of the data being inaccurate or acceptable in any way and for any reason. This map is not to be used or re-made as part of a commercial product.



Projection: UTM Equal Area
 Datum: Geocentric: Datum of Australia 1994



Funded by:



Queensland Murray Darling Committee Inc.
 Cnr Campbell & Bullock Streets, TOOWOOMBA, QLD 4318
 Phone: (07) 4637 9226 Fax: (07) 4632 8962

Mining & Energy Industry Impacts on
 Natural Resource Management in the
 Queensland Murray Darling
 December 2008



Current Exploration Permits Coal (EPC)

Sum of Hectares				
EXPLORATION STATUS	SALINITY HAZARD	Jul-08	Dec-08	% change
APPLICATION	Low	751,219	1,049,071	40
	Low-Moderate	1,368,071	1,679,644	23
	Moderate	663,157	931,477	40
	Moderate-High	571,041	814,874	43
	High	557,910	723,319	30
total		3,911,399	5,198,385	
GRANTED	Low	367,702	411,901	12
	Low-Moderate	935,017	1,007,040	8
	Moderate	233,956	219,290	-6
	Moderate-High	262,675	247,589	-6
	High	90,810	84,876	-7
total		1,890,160	1,970,694	4
Grand Total		5,801,559	7,169,080	24

Current Exploration Permits Petroleum (EPC)

Sum of Hectares				
EXPLORATION STATUS	SALINITY HAZARD	Jul-08	Dec-08	% change
APPLICATION	Low	373,818	1,228,174	229
	Low-Moderate	835,848	2,127,348	155
	Moderate	444,044	1,152,255	159
	Moderate-High	484,839	838,210	73
	High	465,237	566,065	22
APPLICATION Total		2,603,786	5,912,053	127
GRANTED	Low	1,552,176	1,652,015	6
	Low-Moderate	2,143,812	2,153,770	0
	Moderate	1,389,433	1,384,213	0
	Moderate-High	2,039,405	1,999,204	-2
	High	1,444,250	1,445,079	0
GRANTED Total		8,569,076	8,634,280	1
Grand Total		11,172,862	14,546,334	30



Further Information

Geoff Penton
Chief Executive Officer
Queensland Murray-Darling Committee Inc.

PO Box 6243, TOOWOOMBA WEST QLD 4350

Phone: 07 4637 6270

Fax: 07 4632 8062

lizt@qmdc.org.au

www.qmdc.org.au