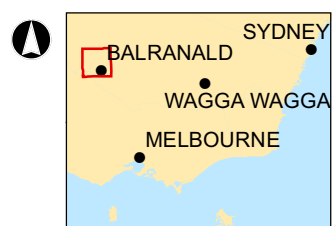


## Appendix E. Modelled drawdown and depth to water



- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 1





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 2

I:\VESAI\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Drawdown from 2014\Rev2\BAL2.0\_TS2\_opt29\_20190101\_L1\_DD.mxd





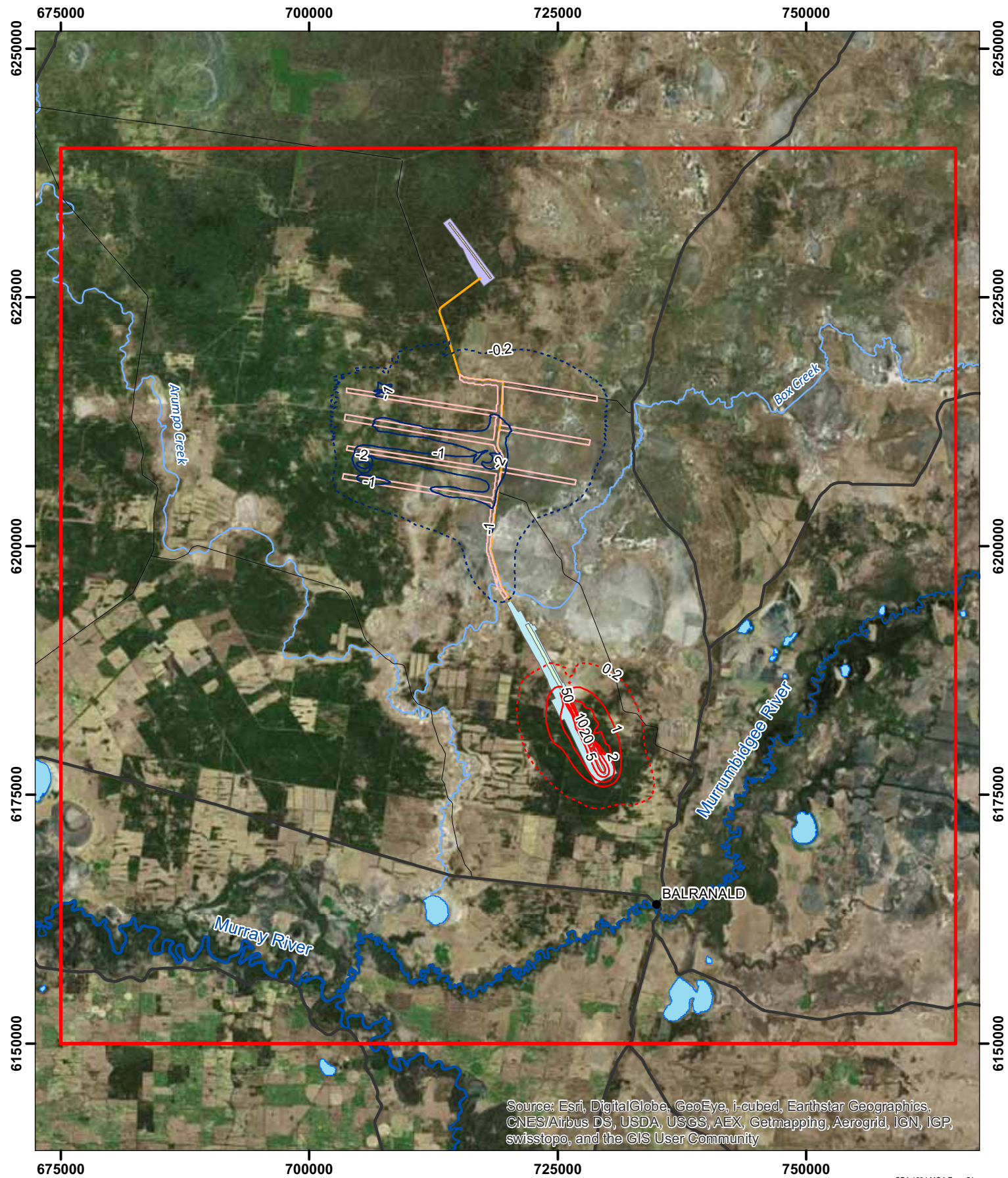
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain



## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 2







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain



**BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 3**





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

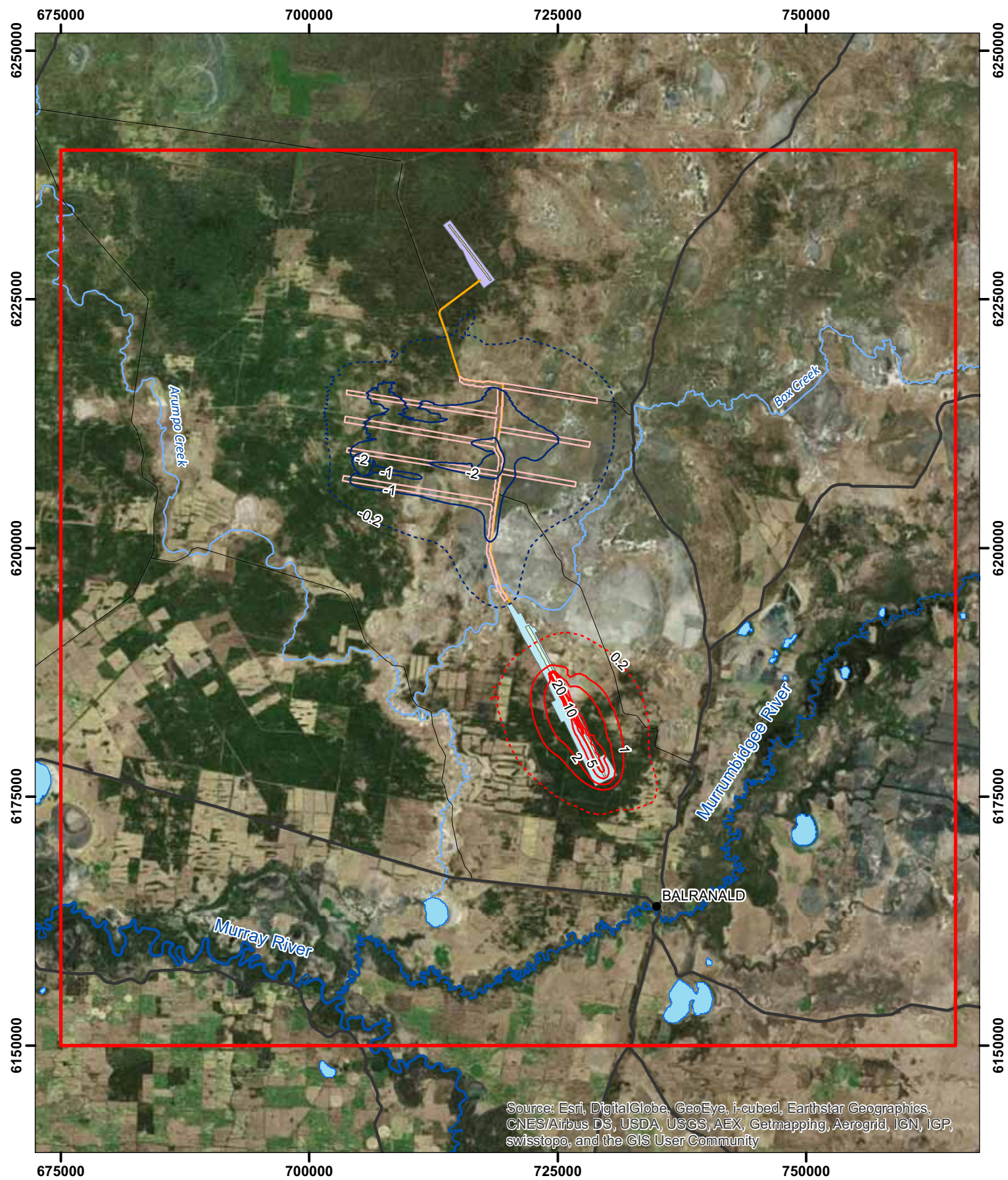
GDA 1994 MGA Zone 54



**BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 3**

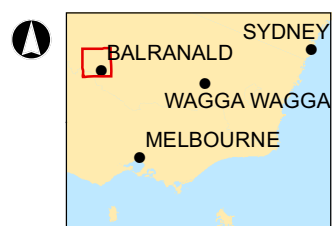






- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

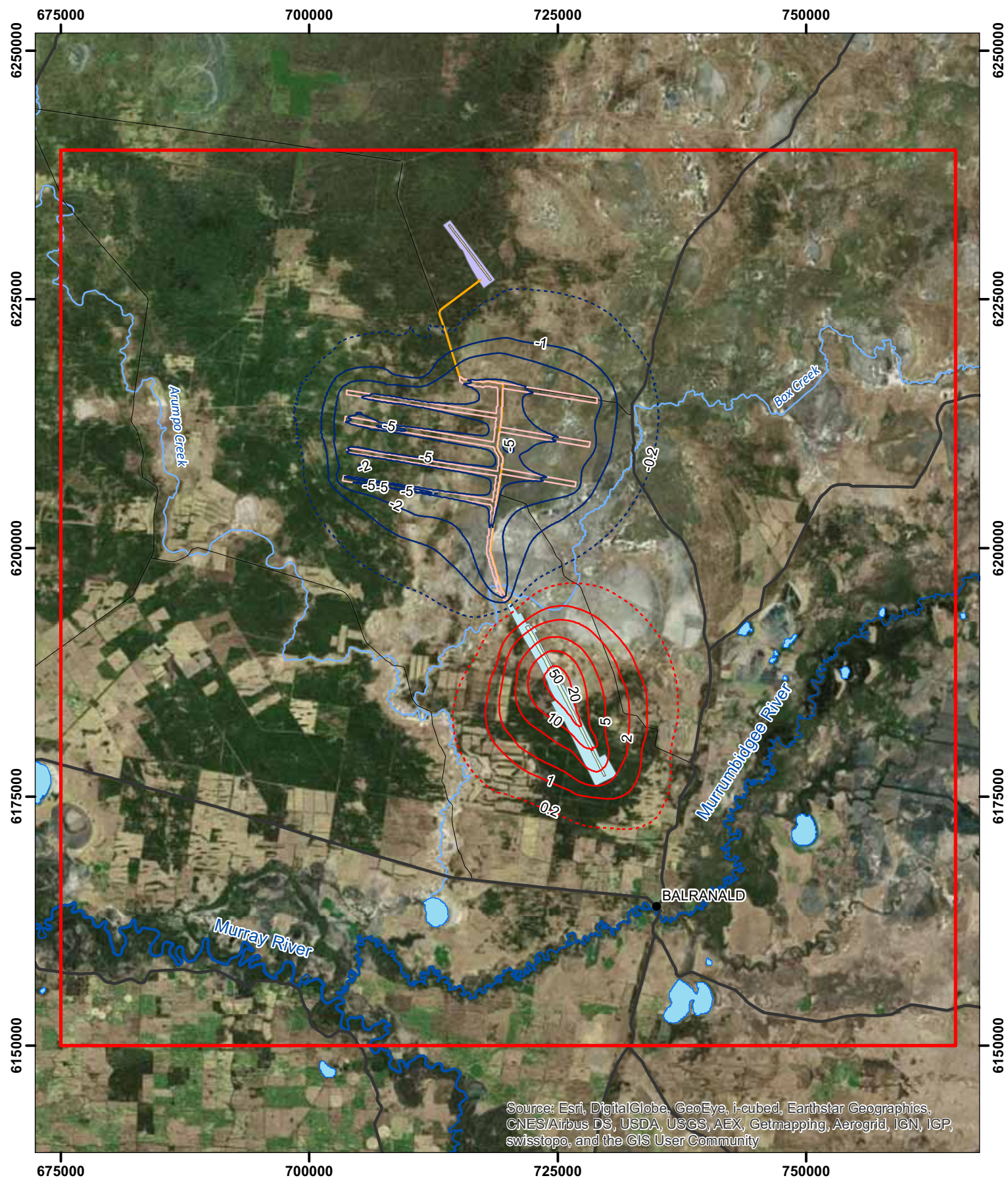
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 4

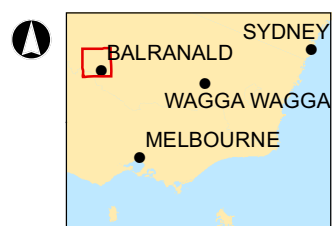
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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

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**BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 4**







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 5

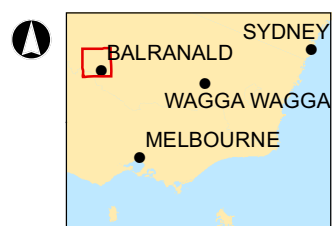
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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

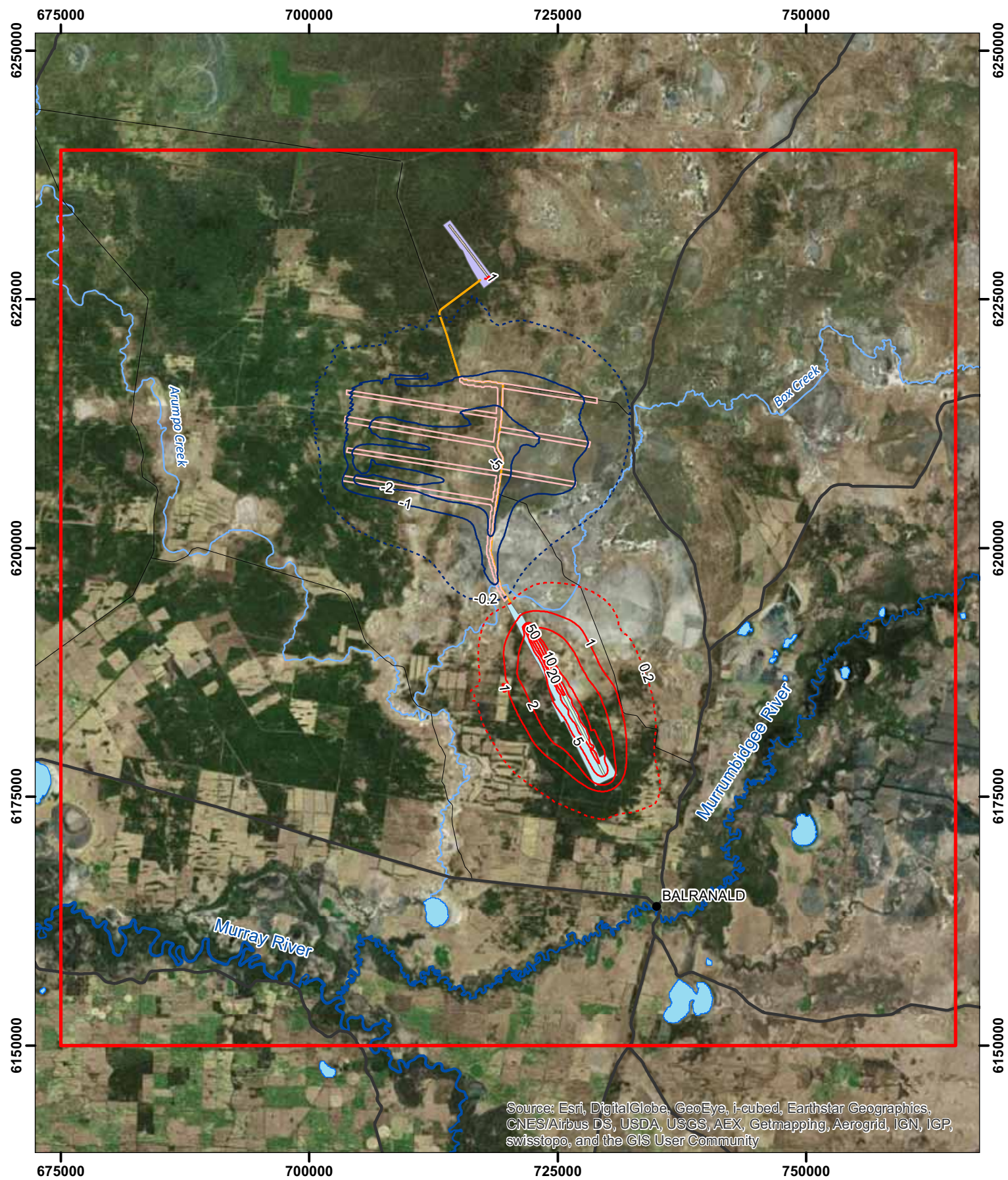
GDA 1994 MGA Zone 54



**BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 5**







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

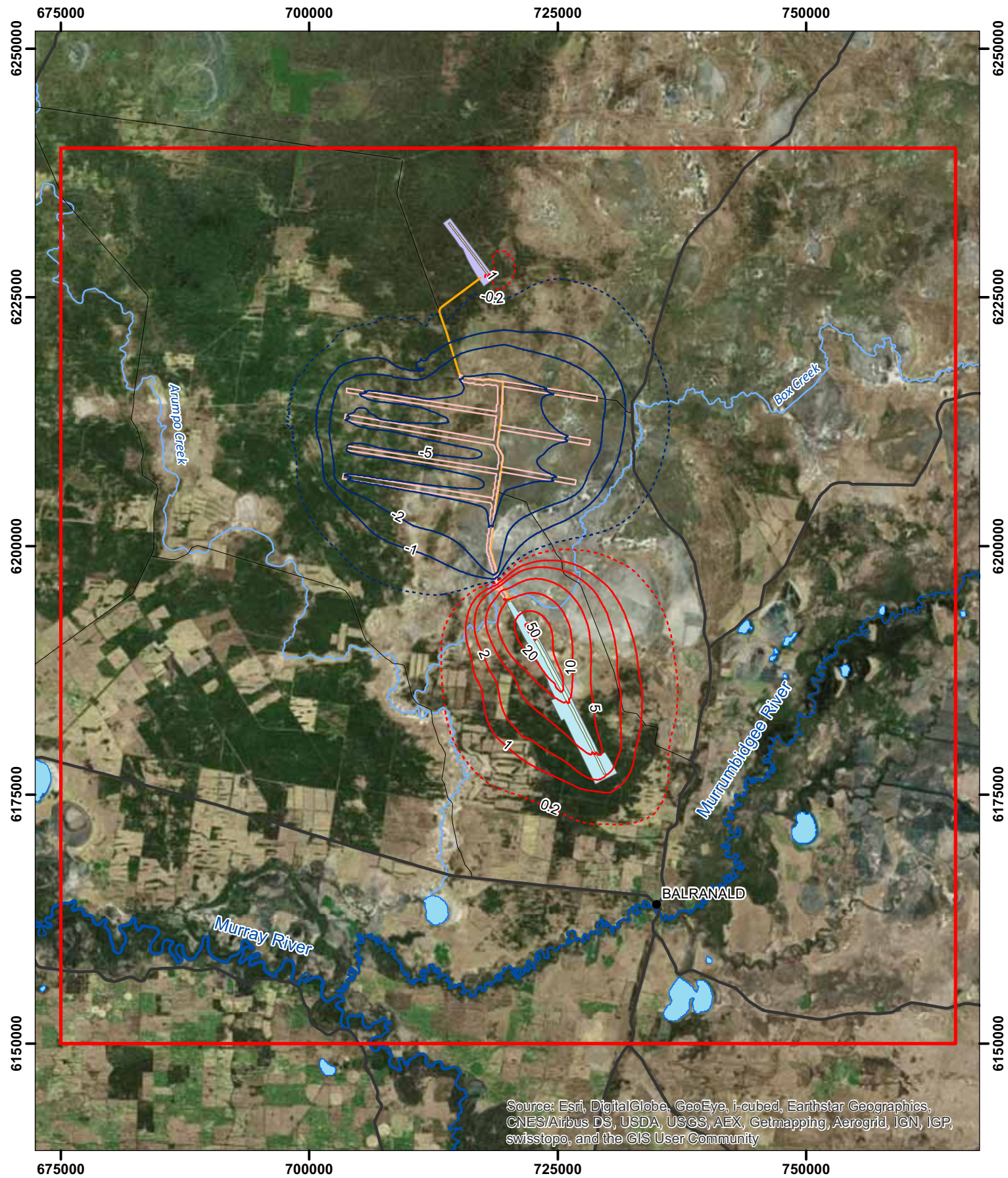
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 6

I:\VESAI\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Drawdown from 2014\Rev2\BAL2.0\_TS2\_opt29\_20230101\_L1\_DD.mxd





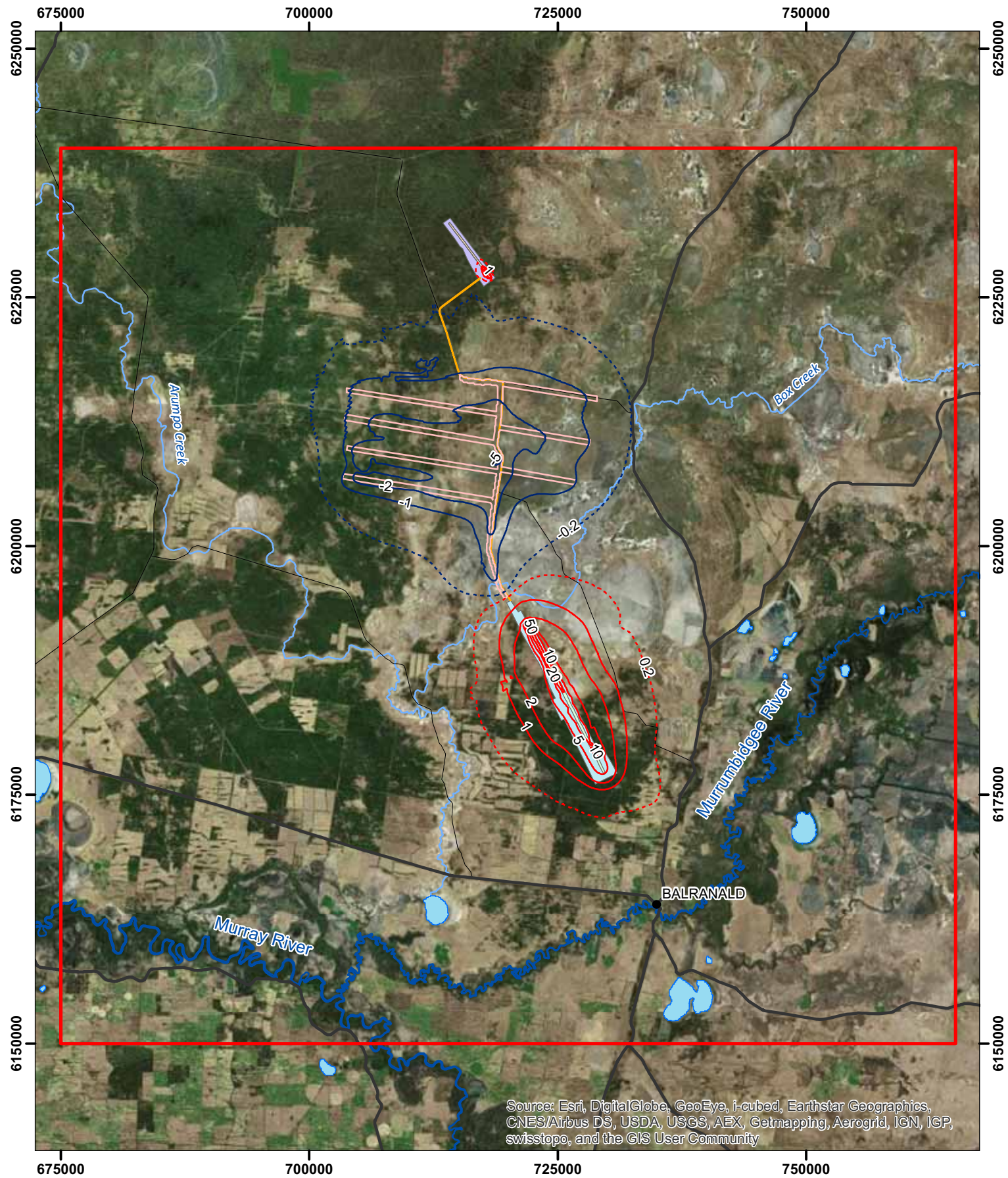
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 6





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

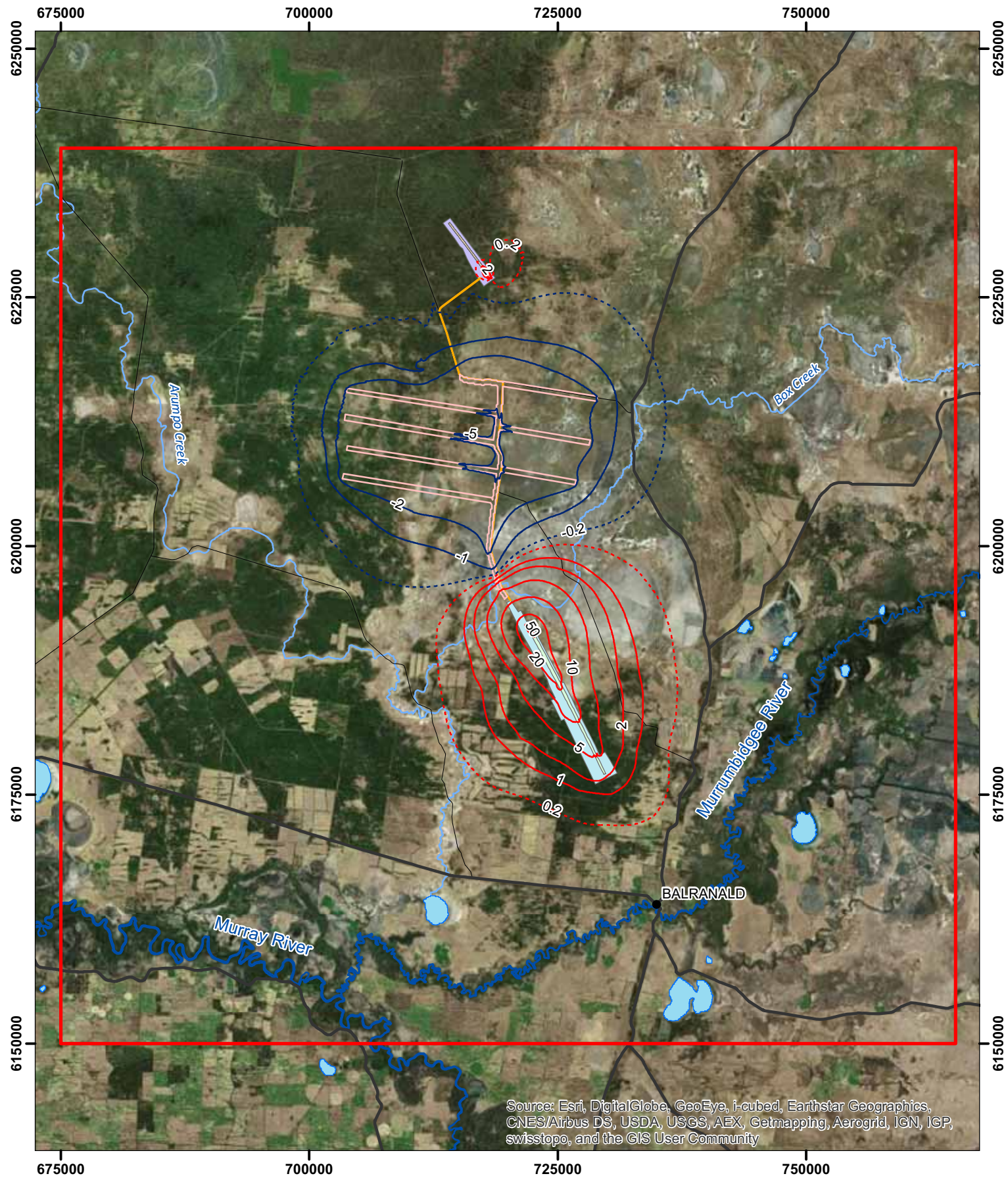
GDA 1994 MGA Zone 54



**BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 6.3**

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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

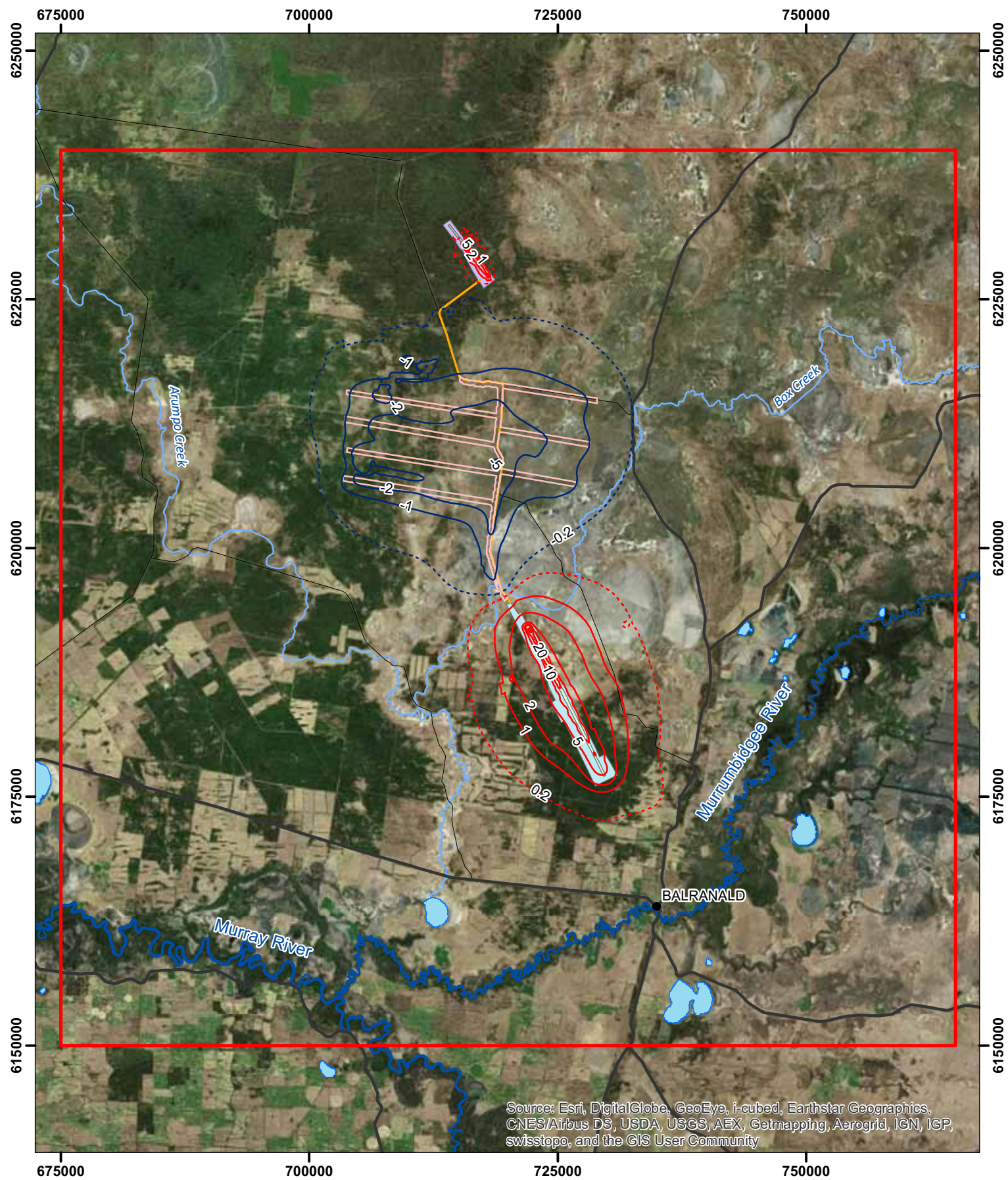
GDA 1994 MGA Zone 54



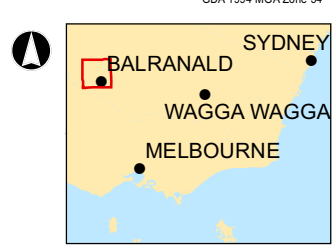
**BAL2.0 TS2 opt29 modelled drawdown in LPS1 FS at mining year 6.3**







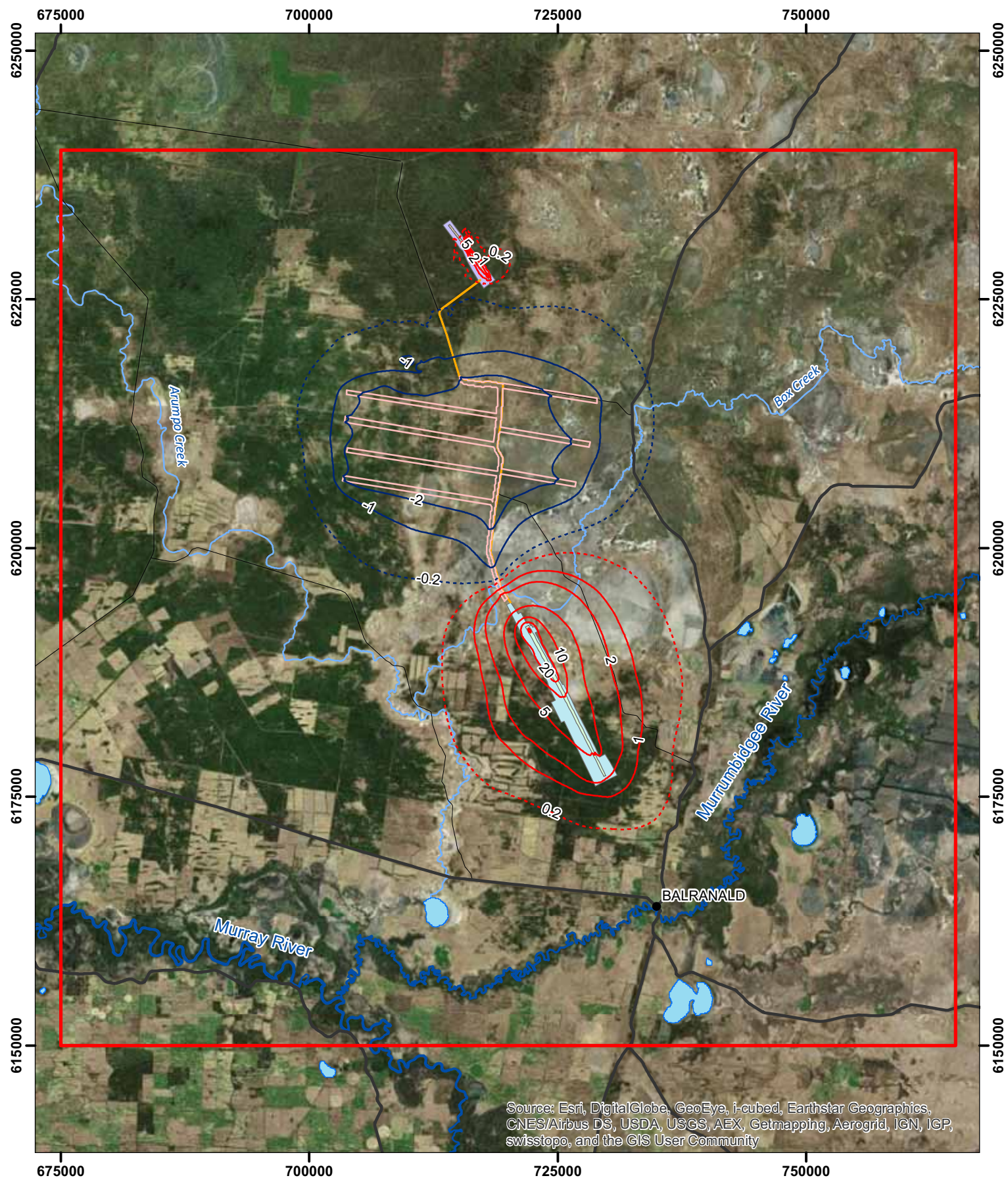
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain



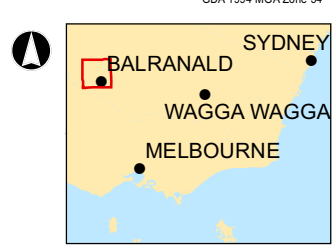
**BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 7**







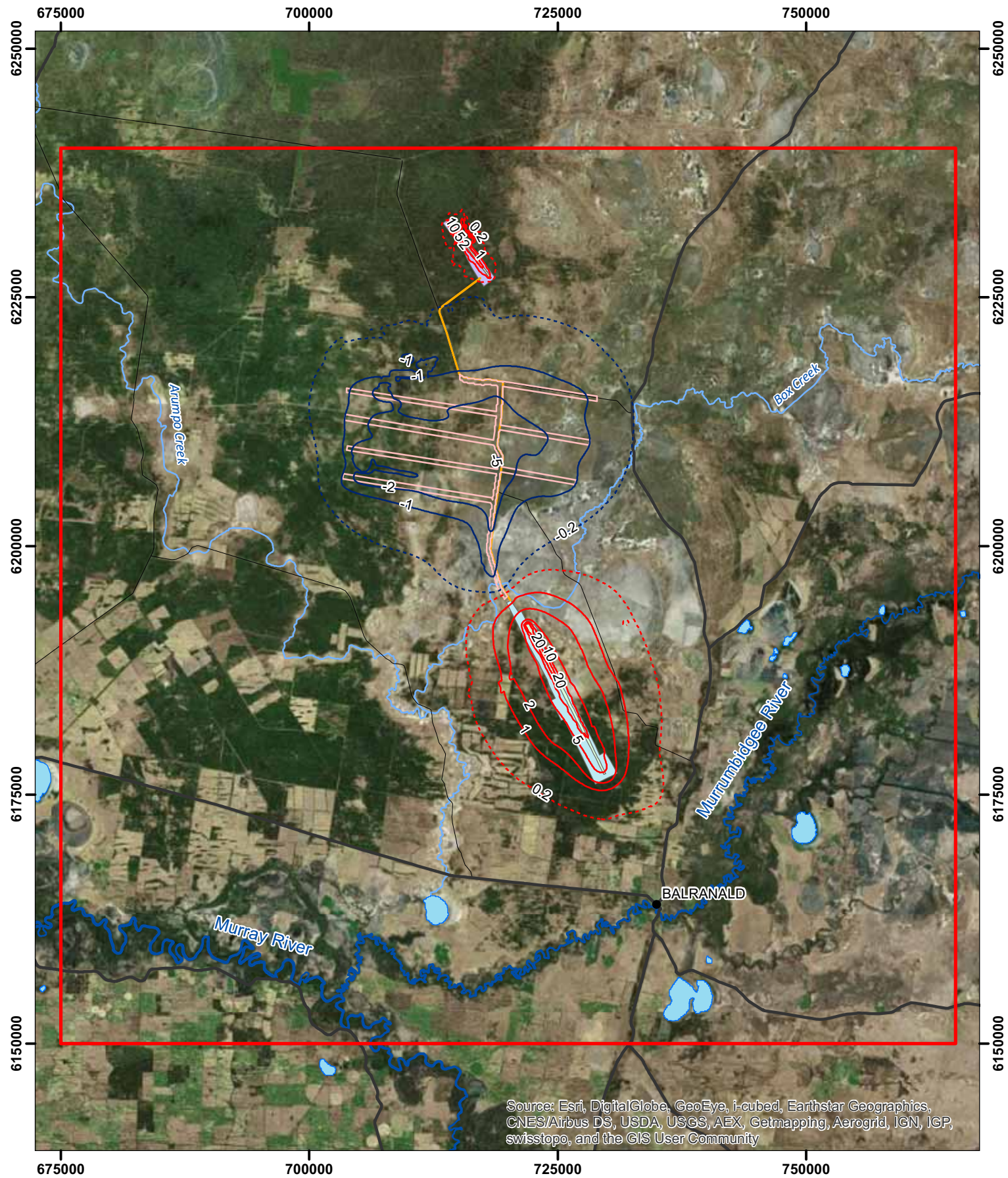
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain



**BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 7**







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

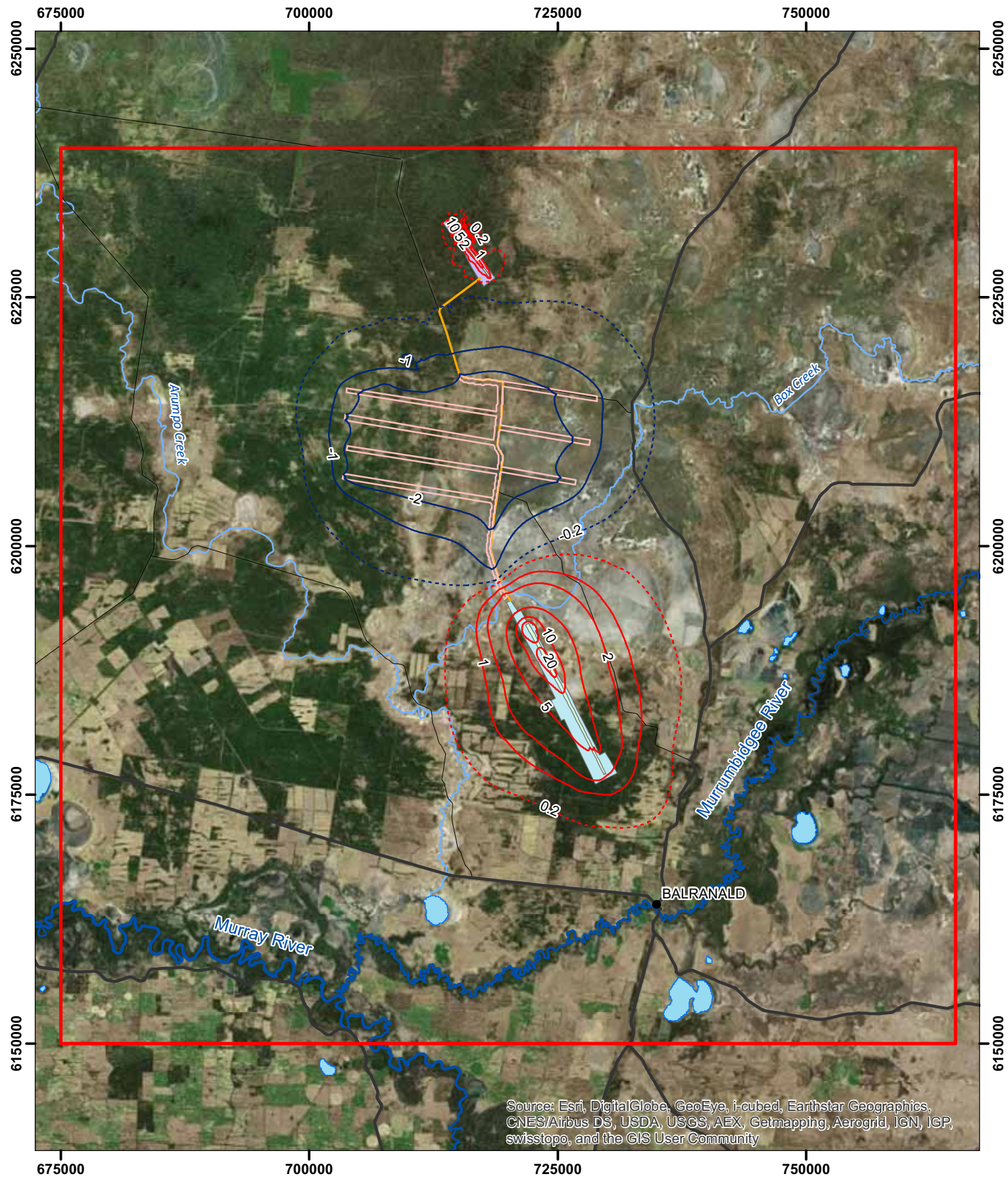
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 7.4

I:\VESAI\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Drawdown from 2014\Rev2\BAL2.0\_TS2\_opt29\_20240601\_L1\_DD.mxd





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

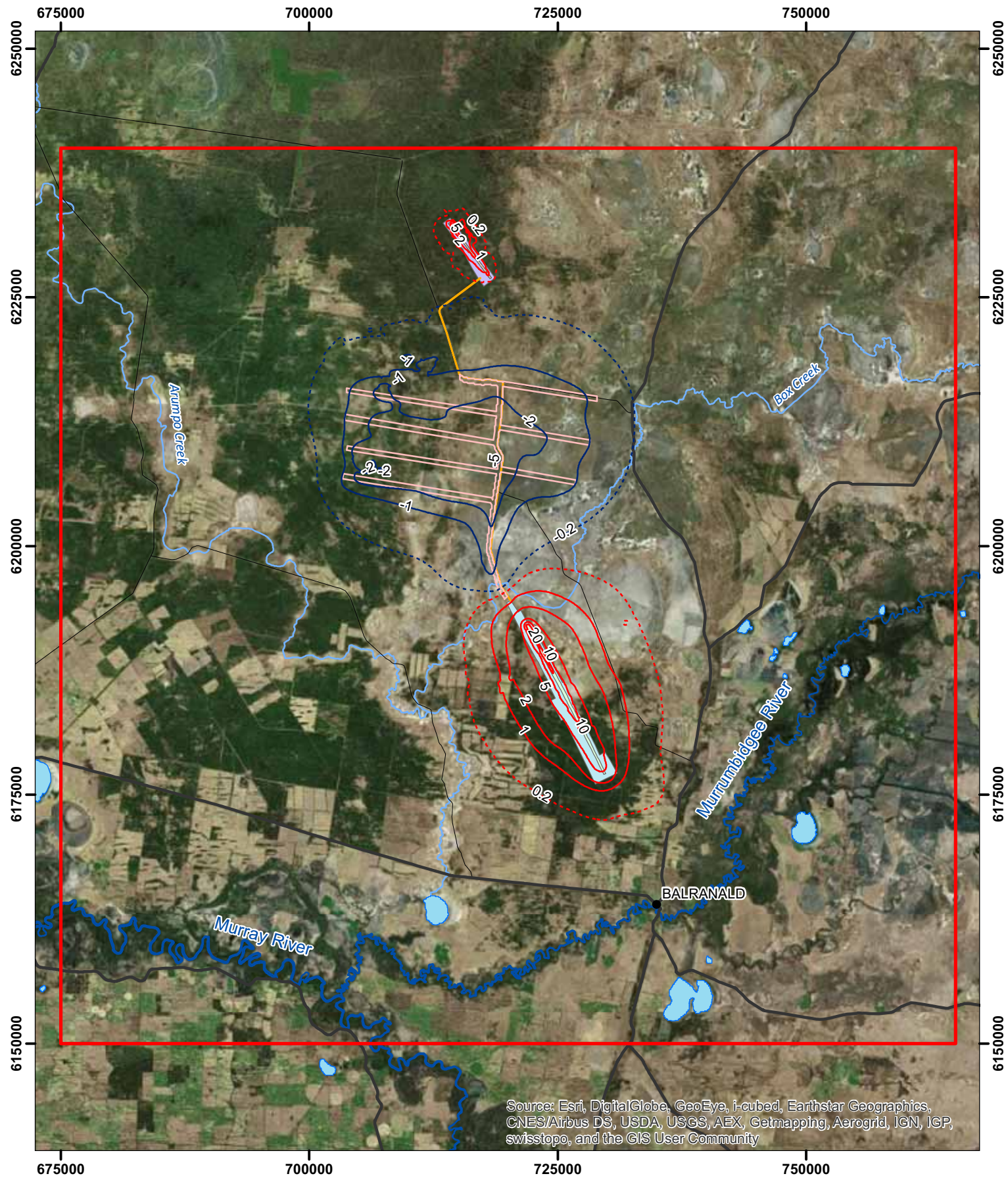
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 7.4







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

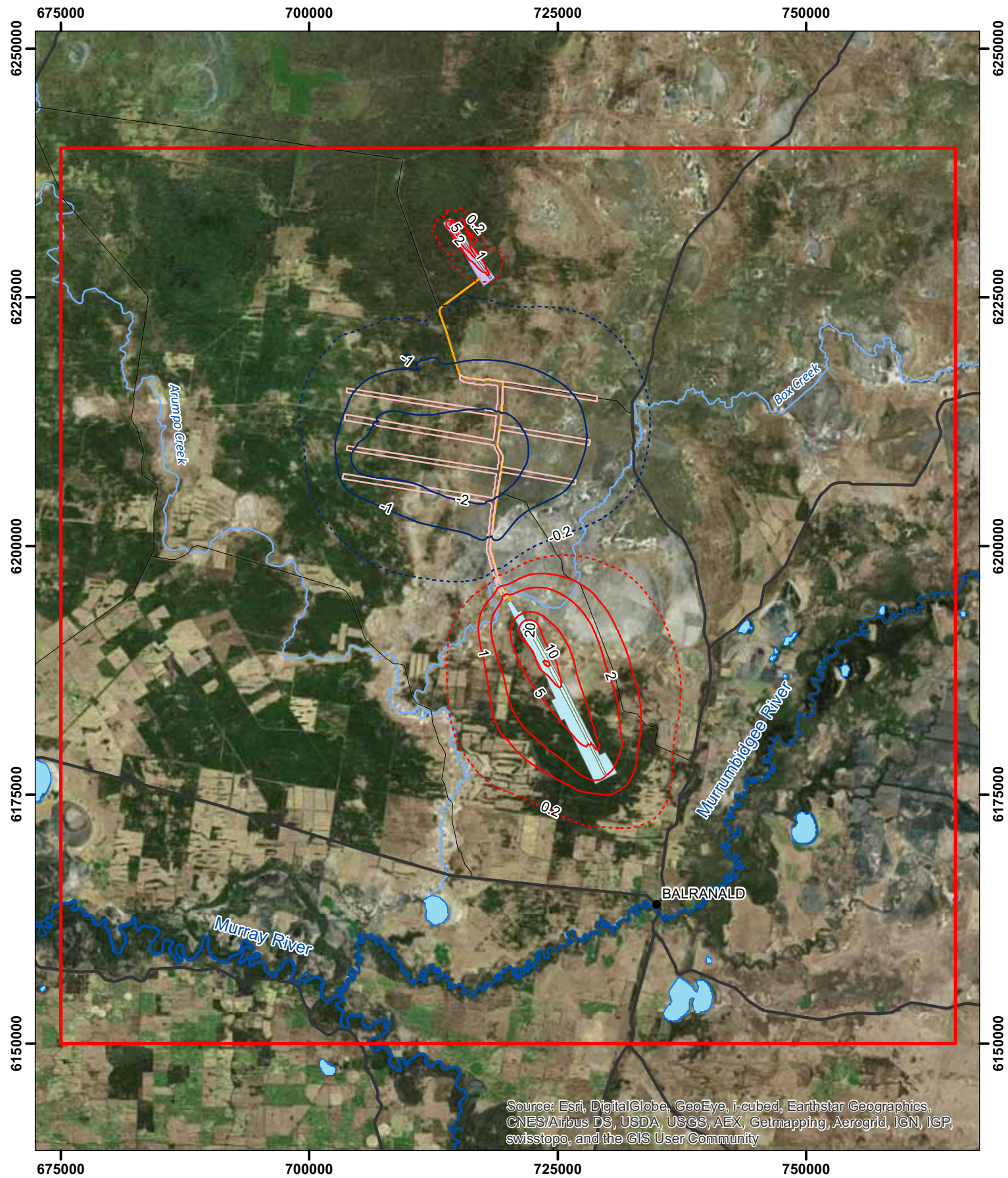
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation at mining year 8

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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54

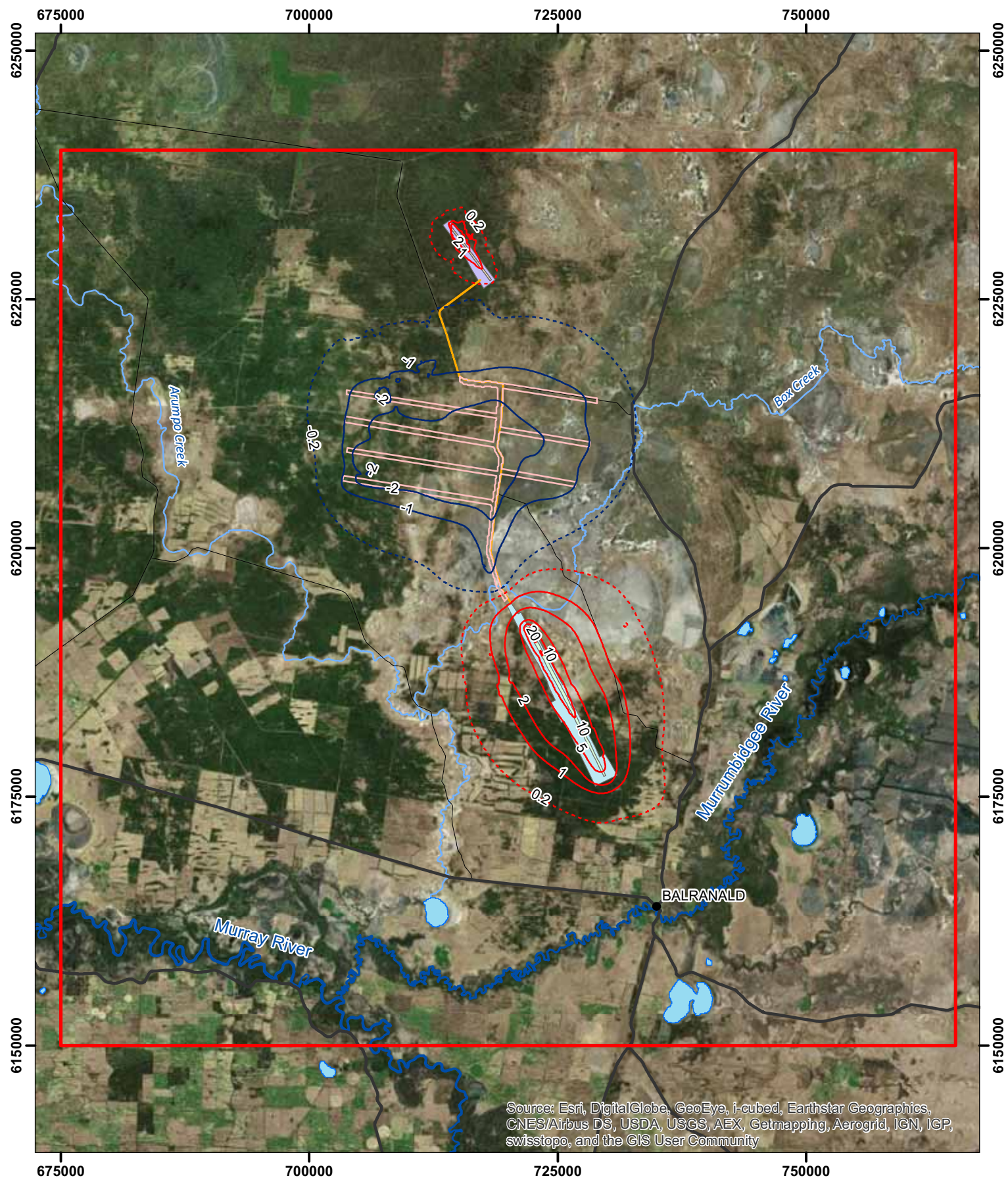


0 10  
Kilometres

## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore at mining year 8







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

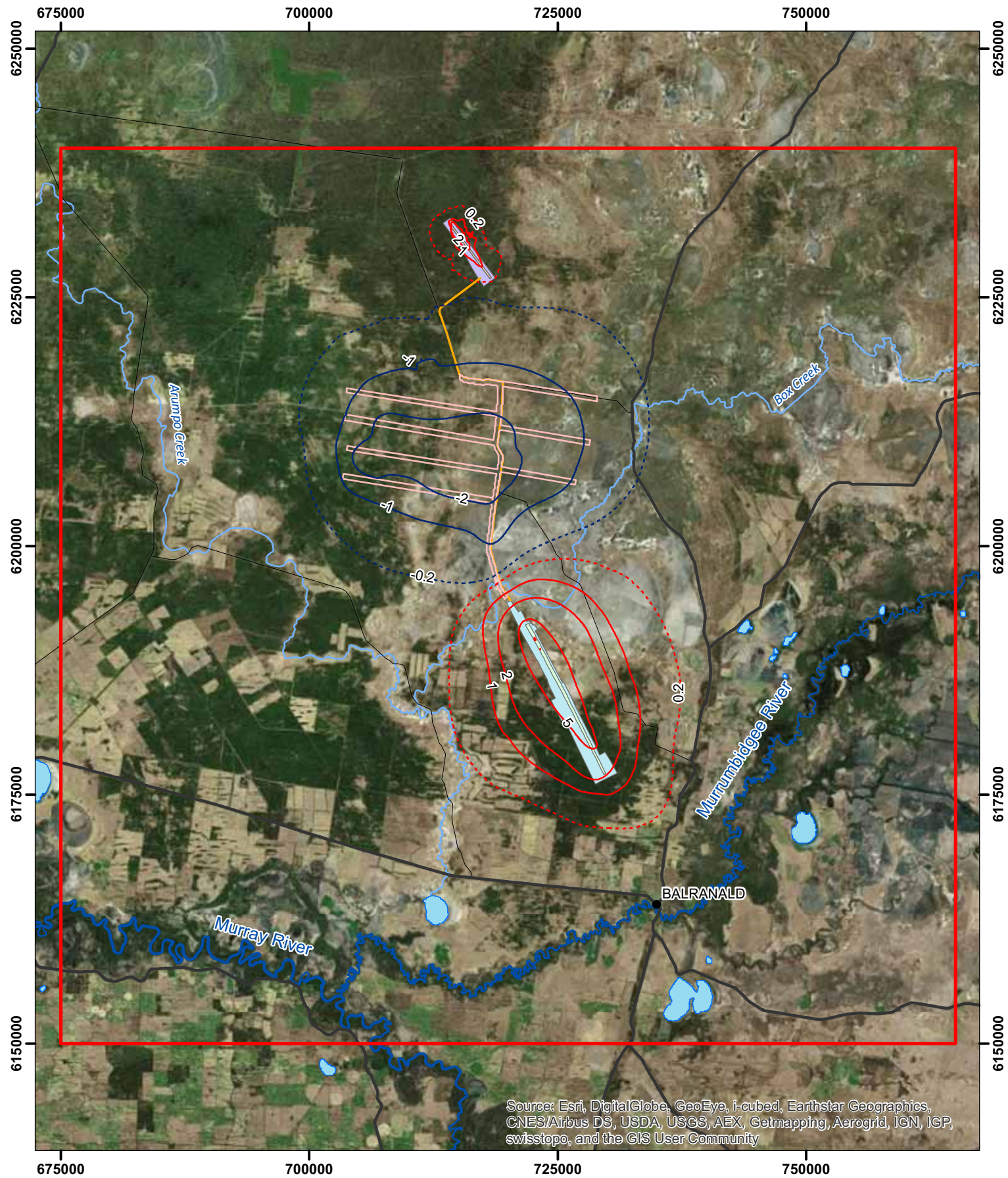
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation 1 year post-mining

I:\VESAI\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Drawdown from 2014\Rev2\BAL2.0\_TS2\_opt29\_20260101\_L1\_DD.mxd





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

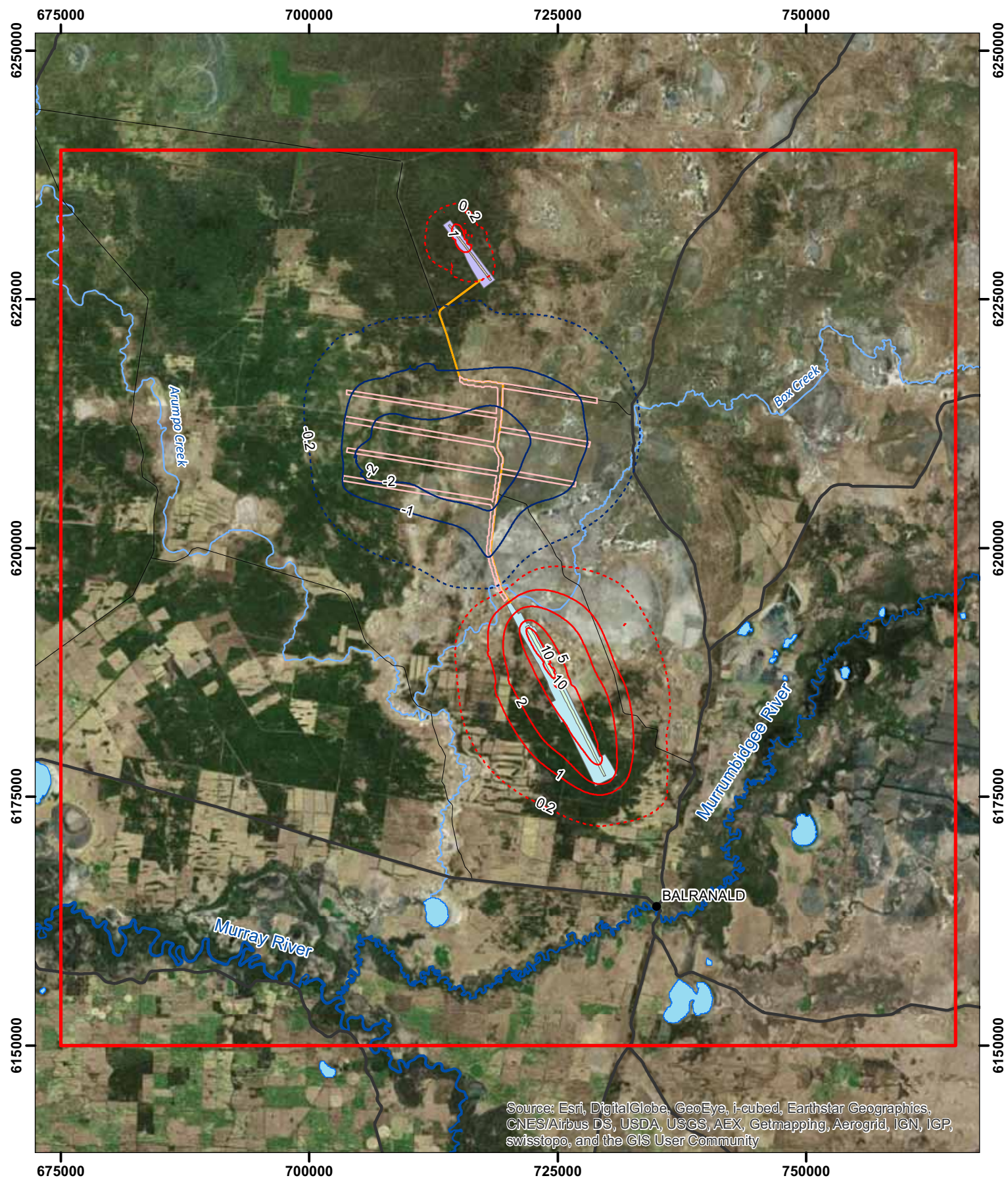
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Kilometres



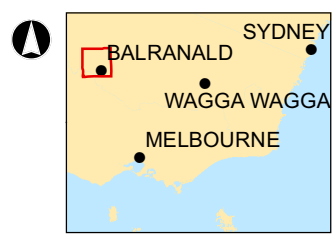
## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore 1 year post-mining

**JACOBS**





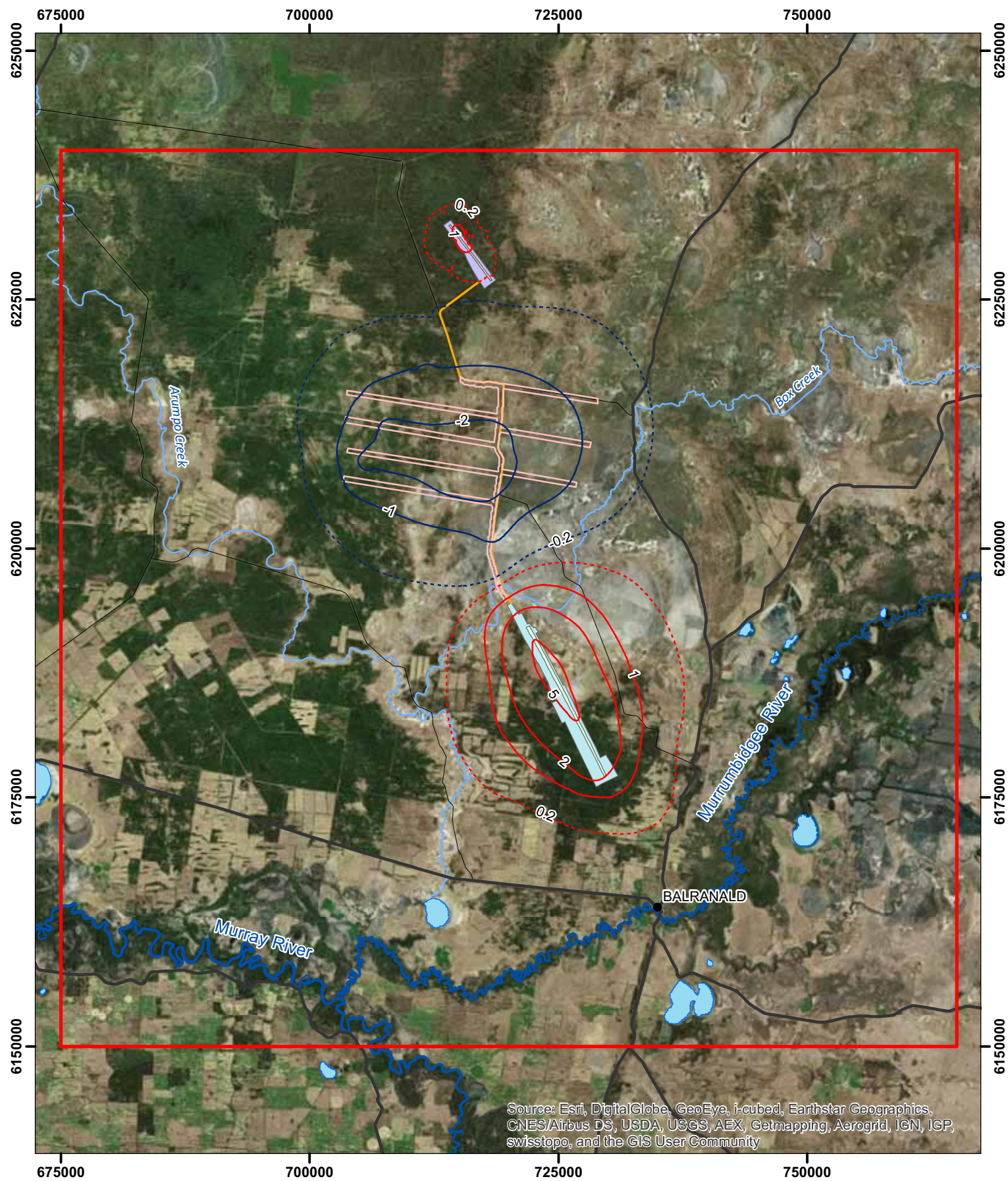
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain



**BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation 5 years post-mining**

I:\VESAI\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Drawdown from 2014\Rev2\BAL2.0\_TS2\_opt29\_20300101\_L1\_DD.mxd





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54



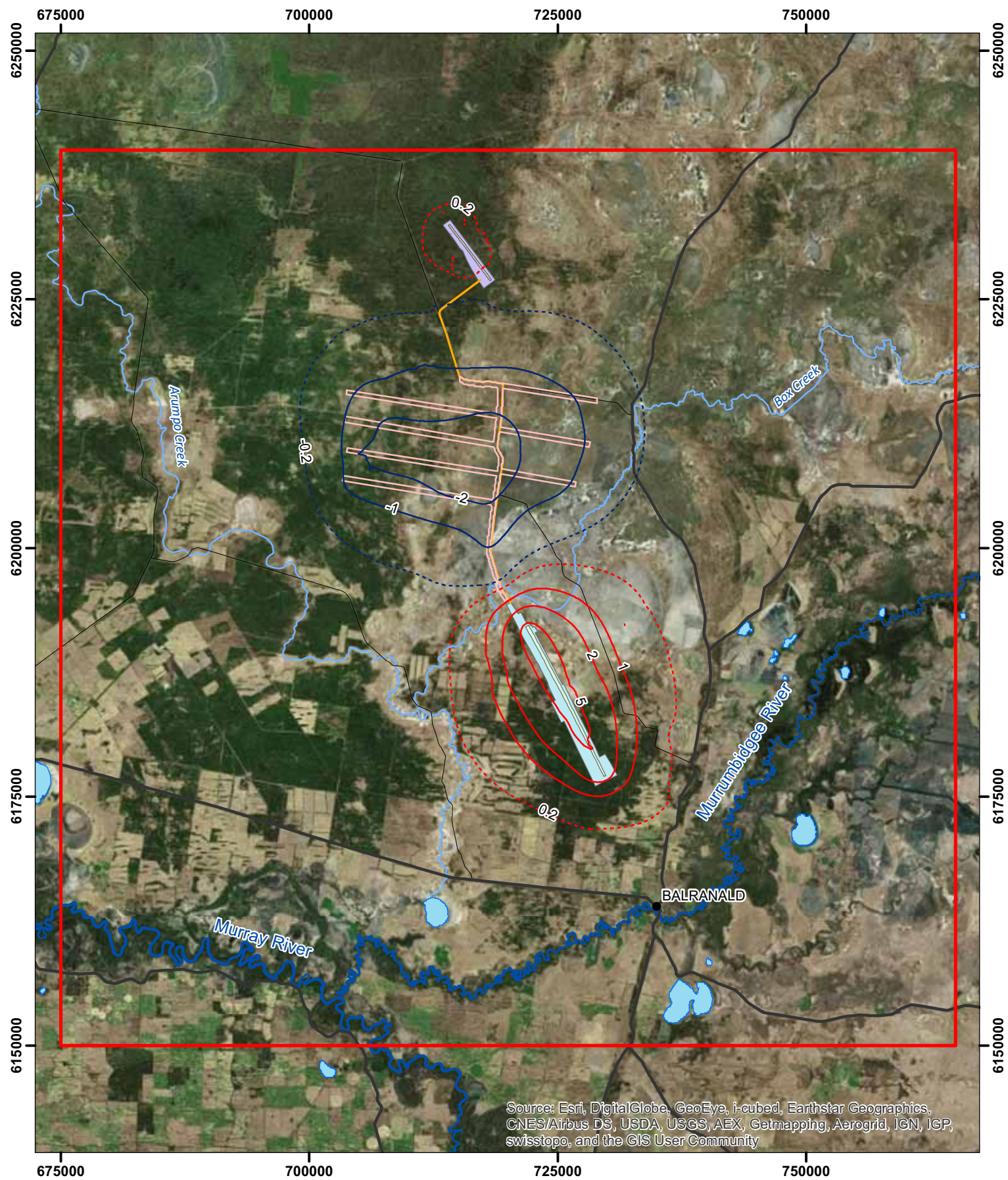
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Kilometres

**JACOBS**

**BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore 5 years post-mining**

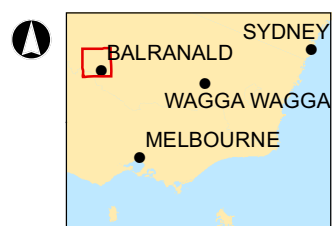
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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

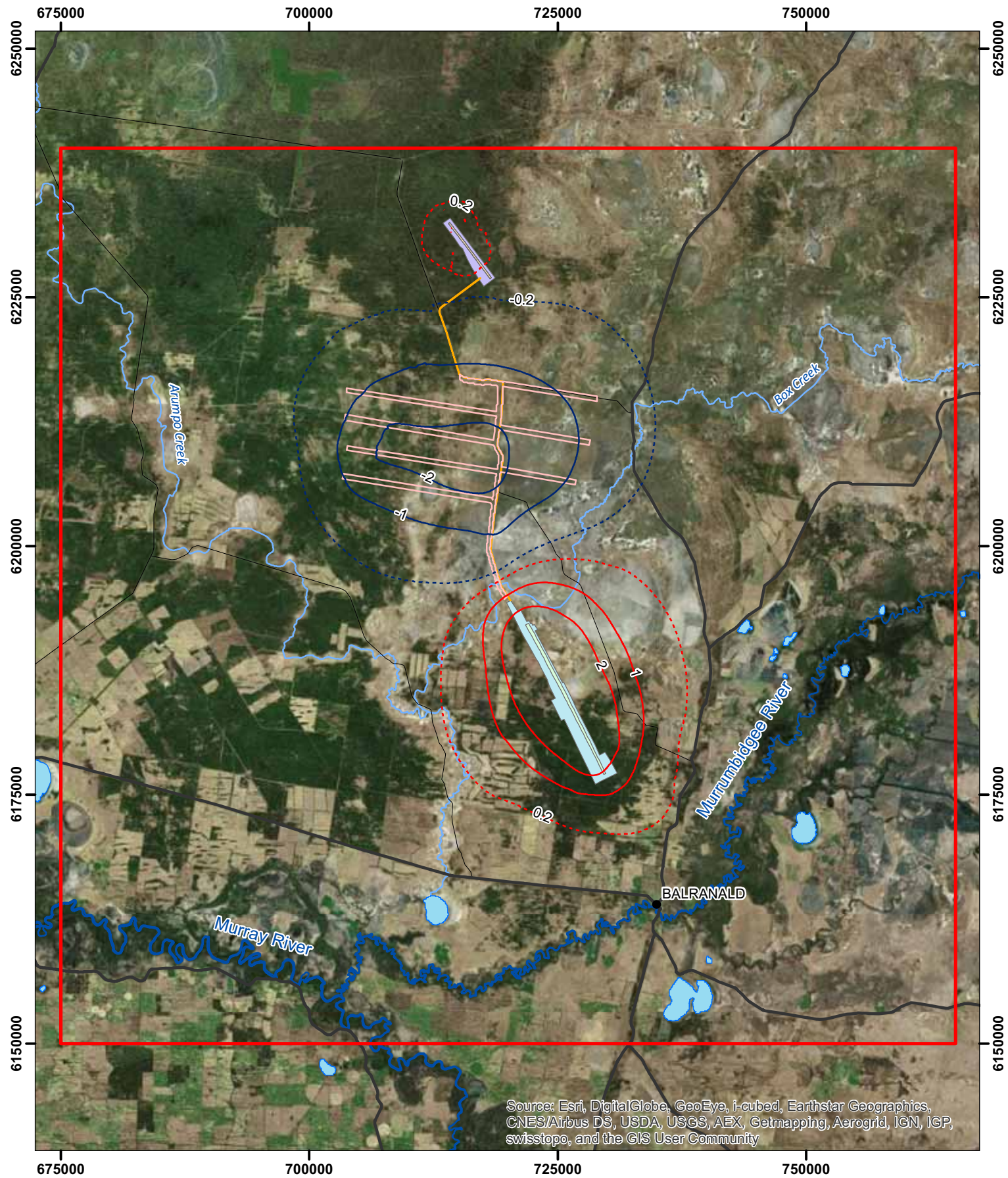
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation 10 years post-mining







- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

GDA 1994 MGA Zone 54



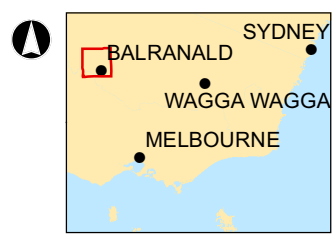
## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore 10 years post-mining

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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation 30 years post-mining

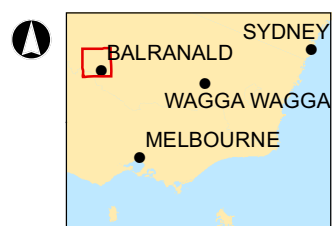
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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

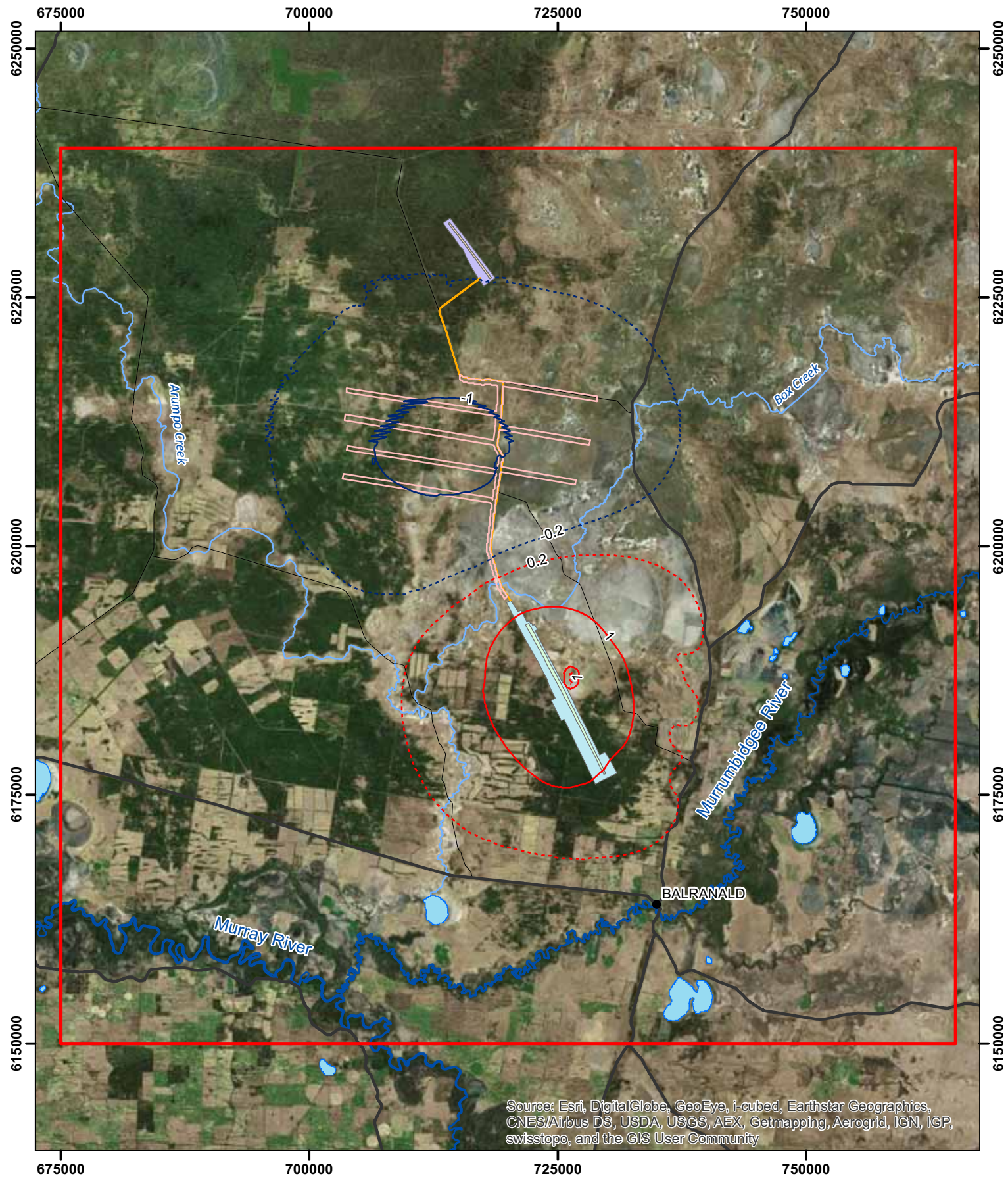
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore 30 years post-mining

I:\VESA\Projects\VE23875\Technical\Spatial\msd\BAL2.0\_TS2\_opt29\Drawdown from 2014\BAL2.0\_TS2\_opt29\_20550101\_L3\_DD.mxd





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

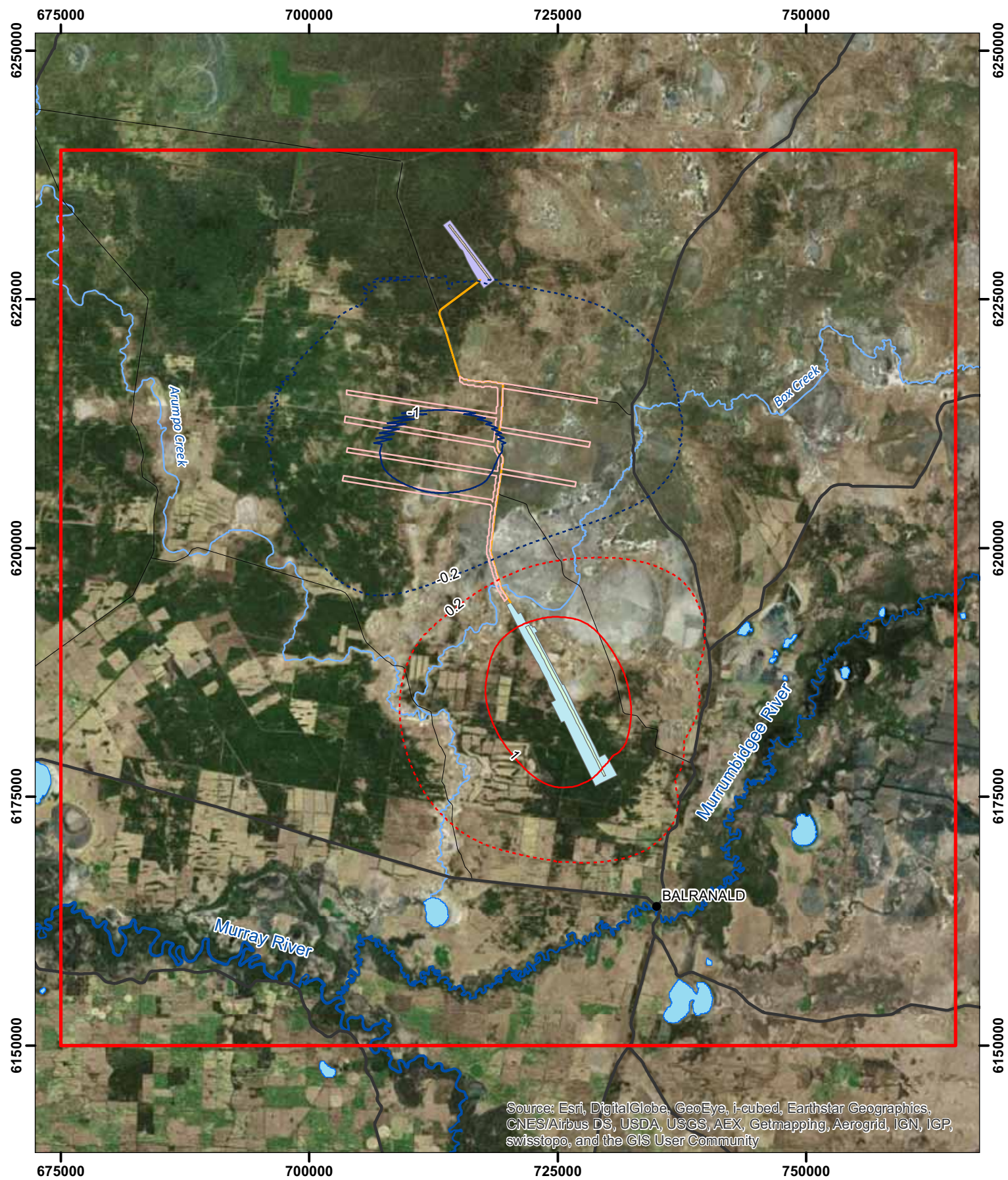
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in Shepparton Formation 100 years post-mining

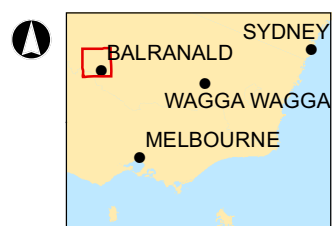
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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Modelled drawdown (m)
- Modelled mounding (m)
- BAL2.0 model domain

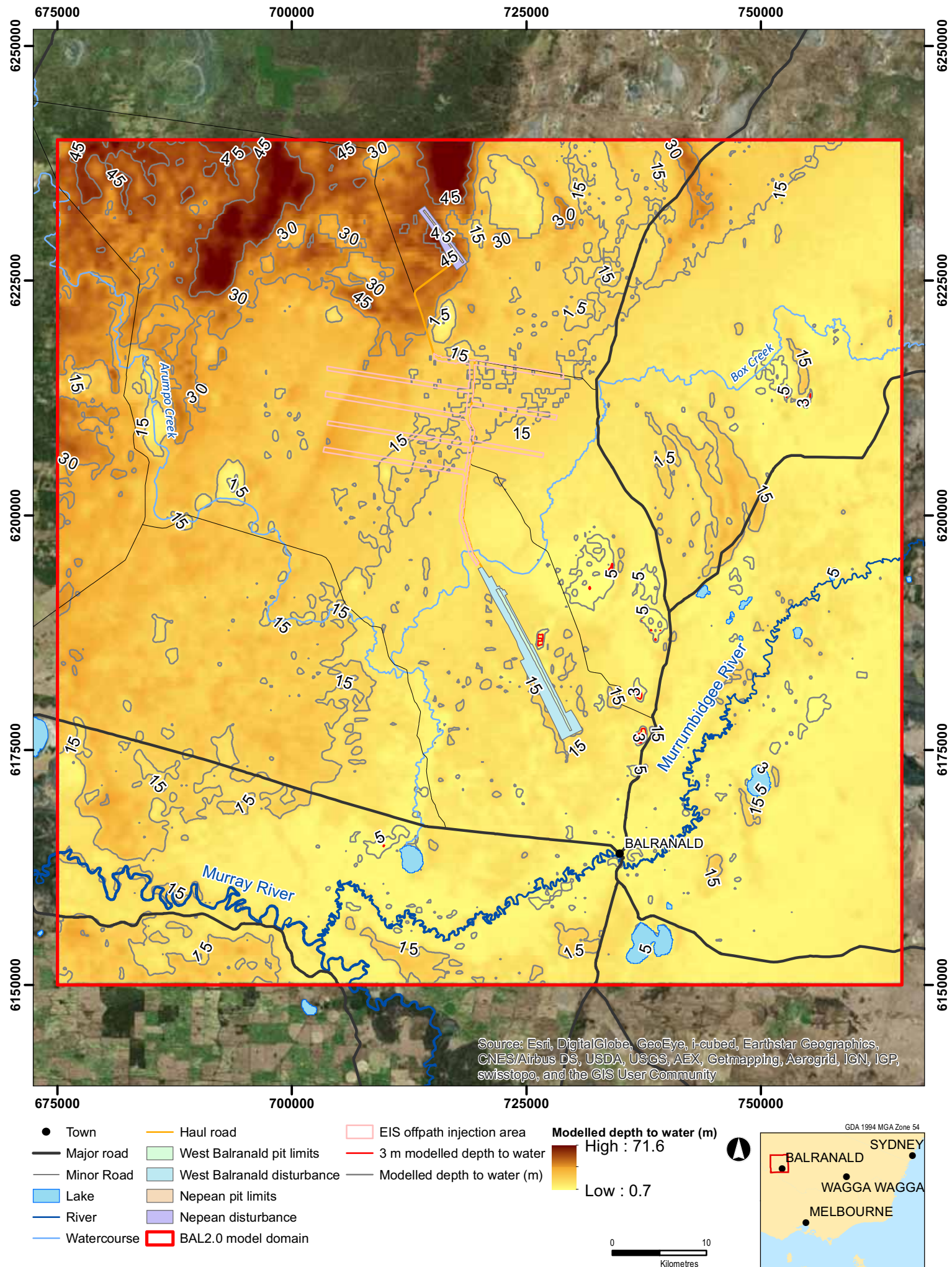
GDA 1994 MGA Zone 54



## BAL2.0 TS2 opt29 modelled drawdown in LPS1 foreshore 100 years post-mining

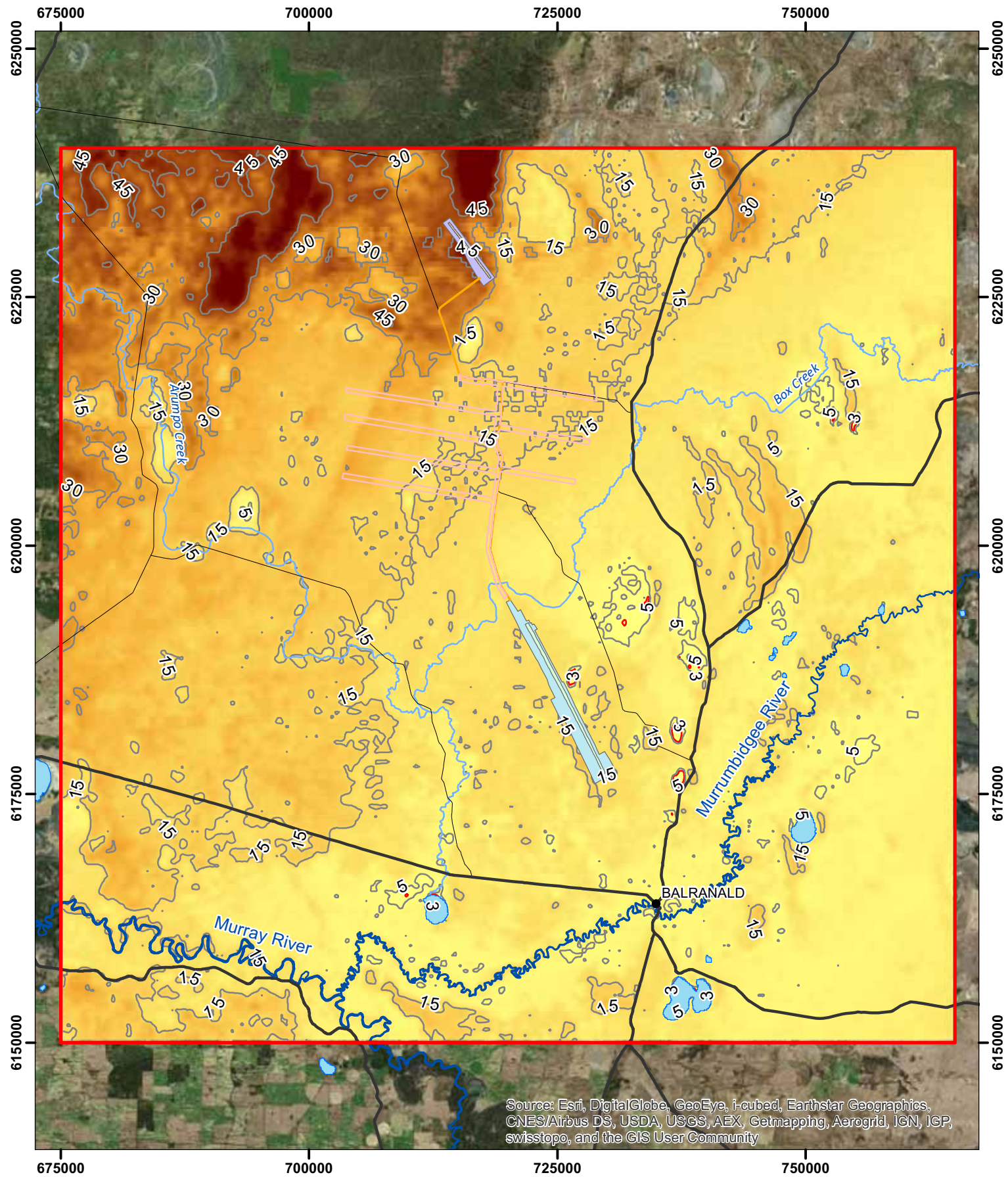
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**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 0 (end of construction)**

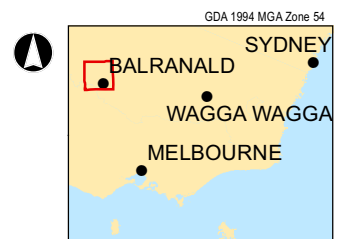




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)
- BAL2.0 model domain

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

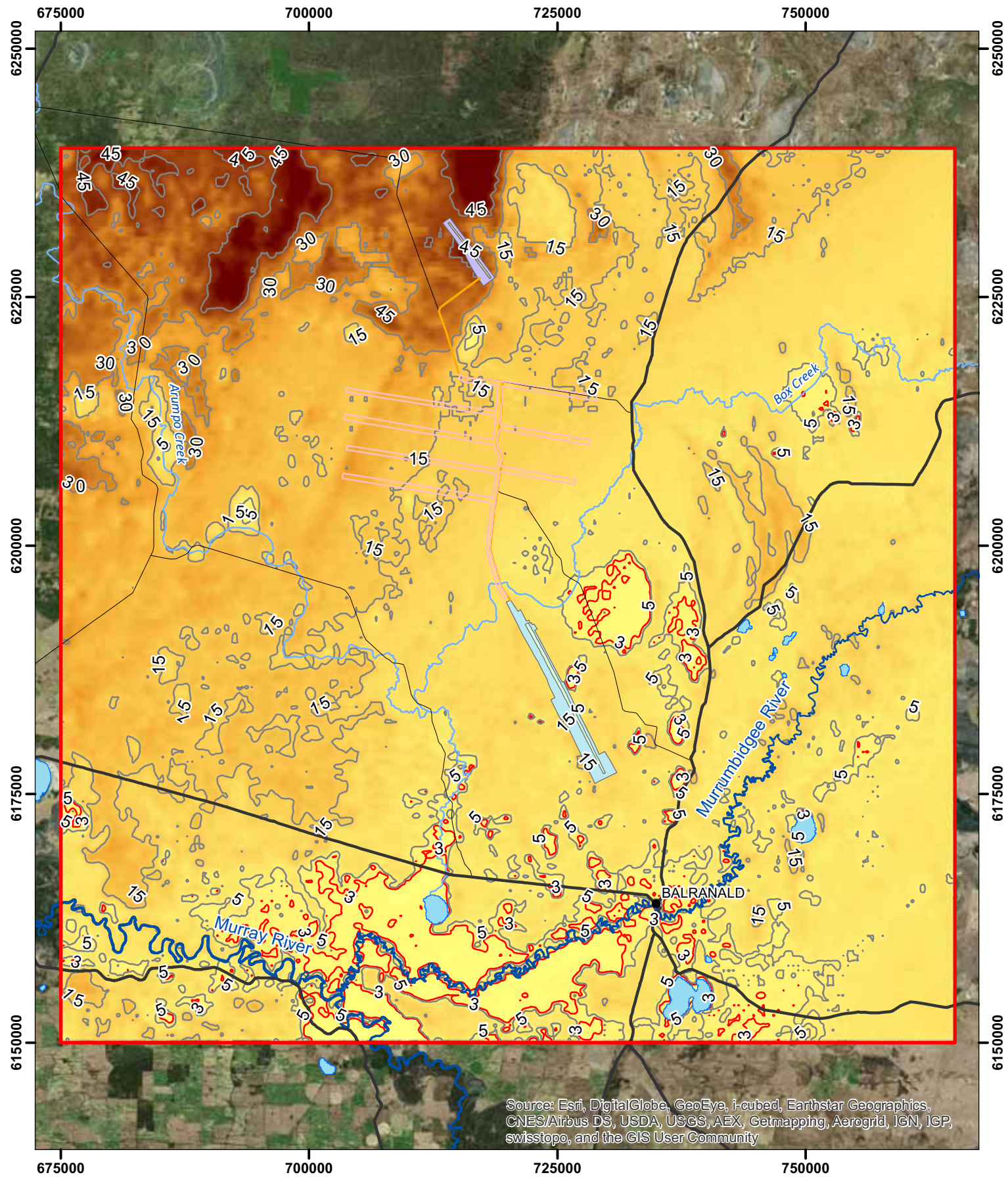


**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 0 (end of construction)**

**JACOBS**

I:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20170101\_L3\_DTW.mxd

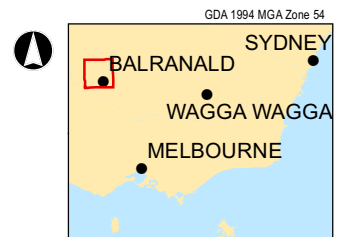




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

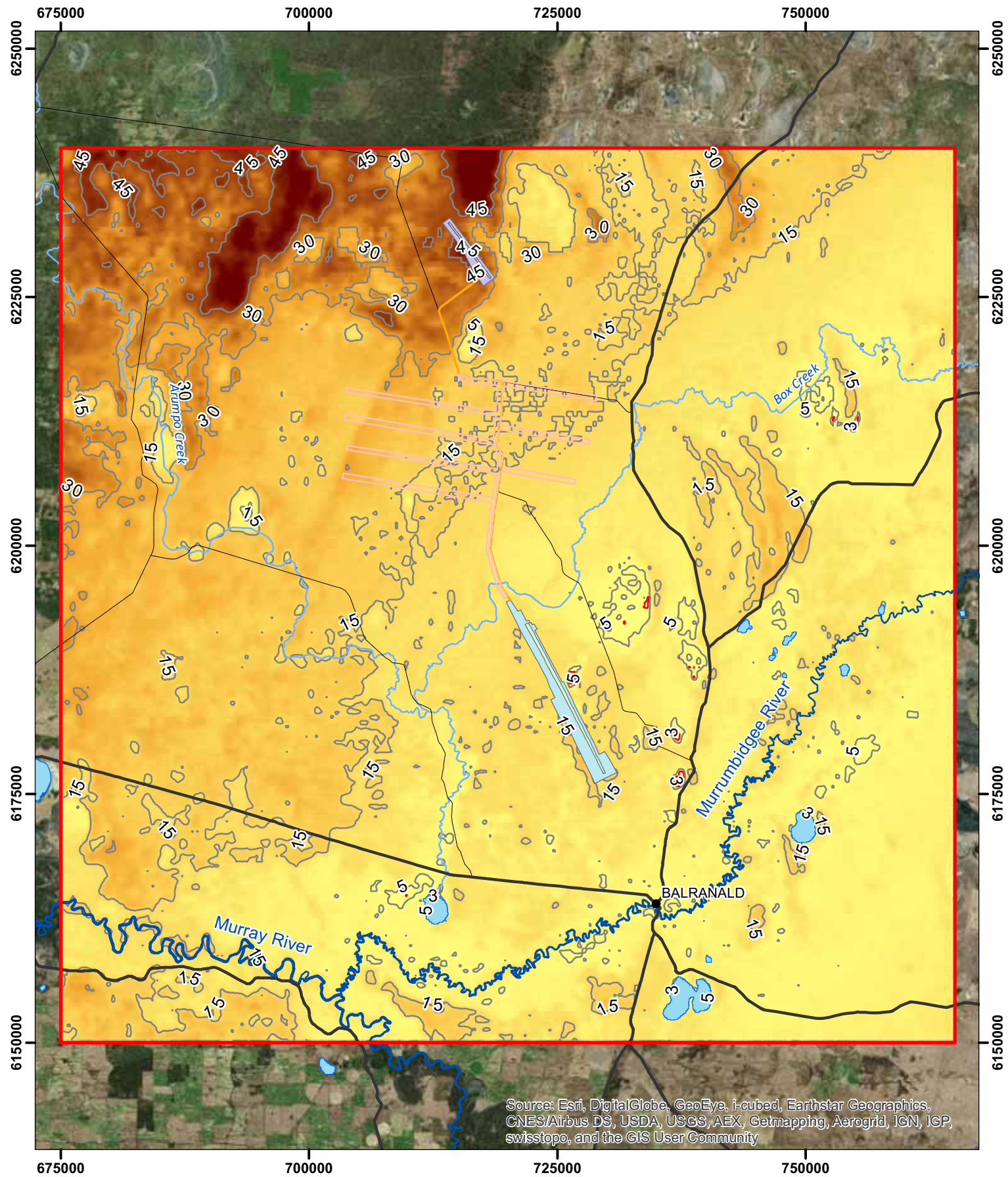


**BAL2.0 TS2 opt29 modelled depth to water in Olney Formation at mining year 0 (end of construction)**

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20170101\_L9\_DTW.mxd

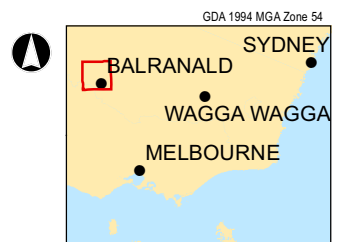




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

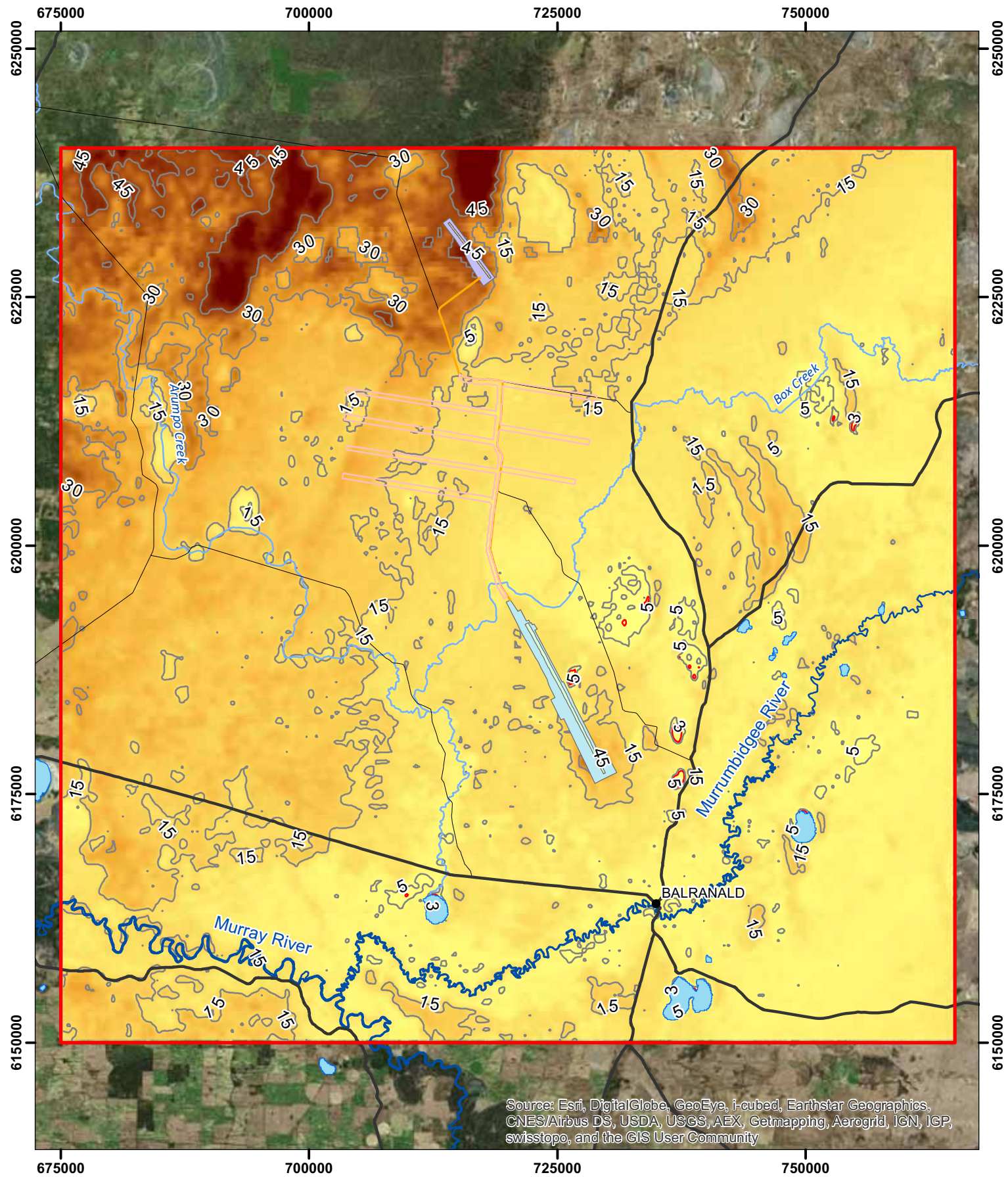
0 10  
 Kilometres



## BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 1

**JACOBS**

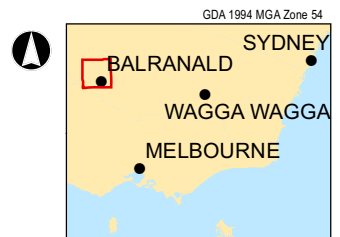




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

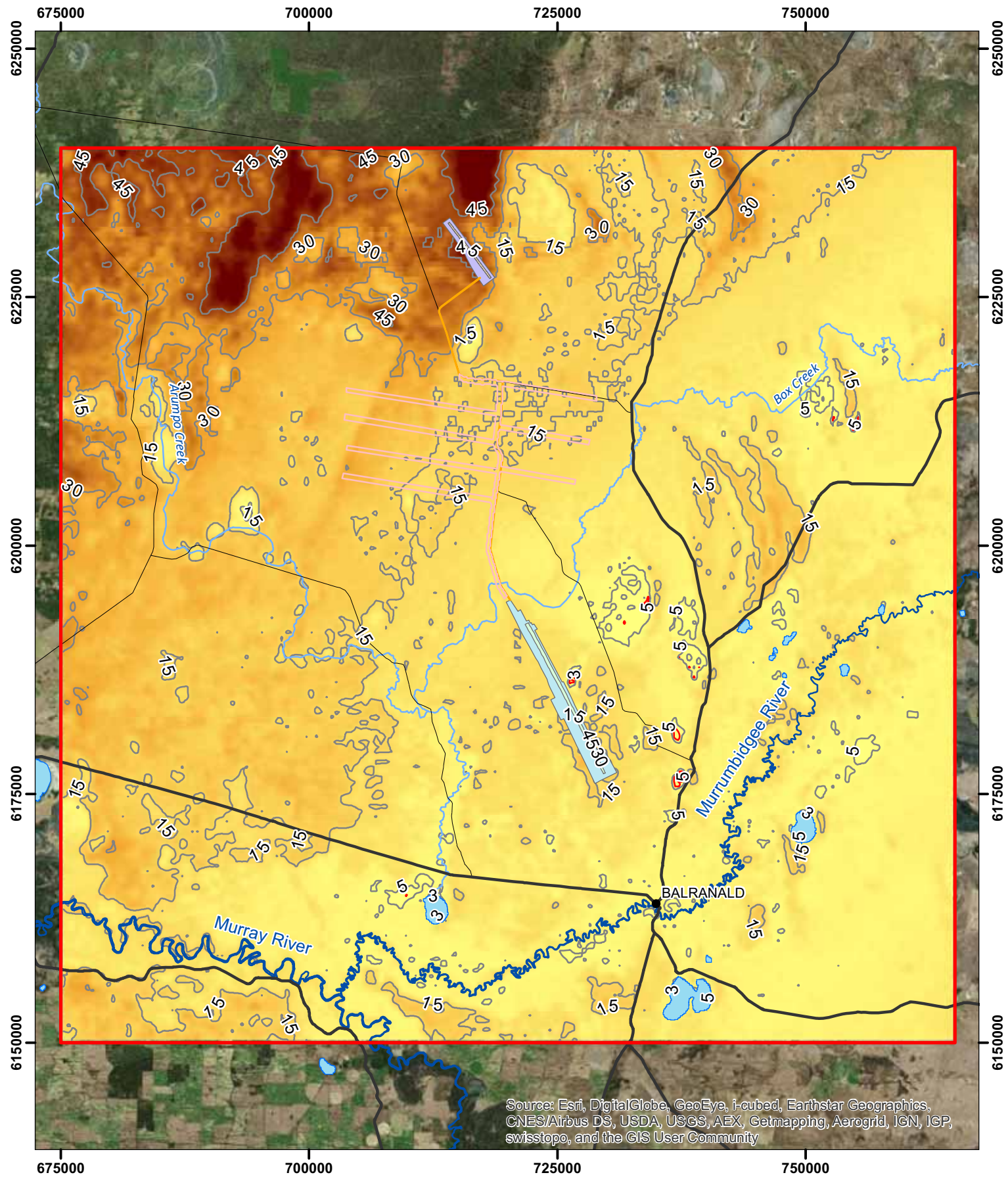


**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 1**

**JACOBS**

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- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

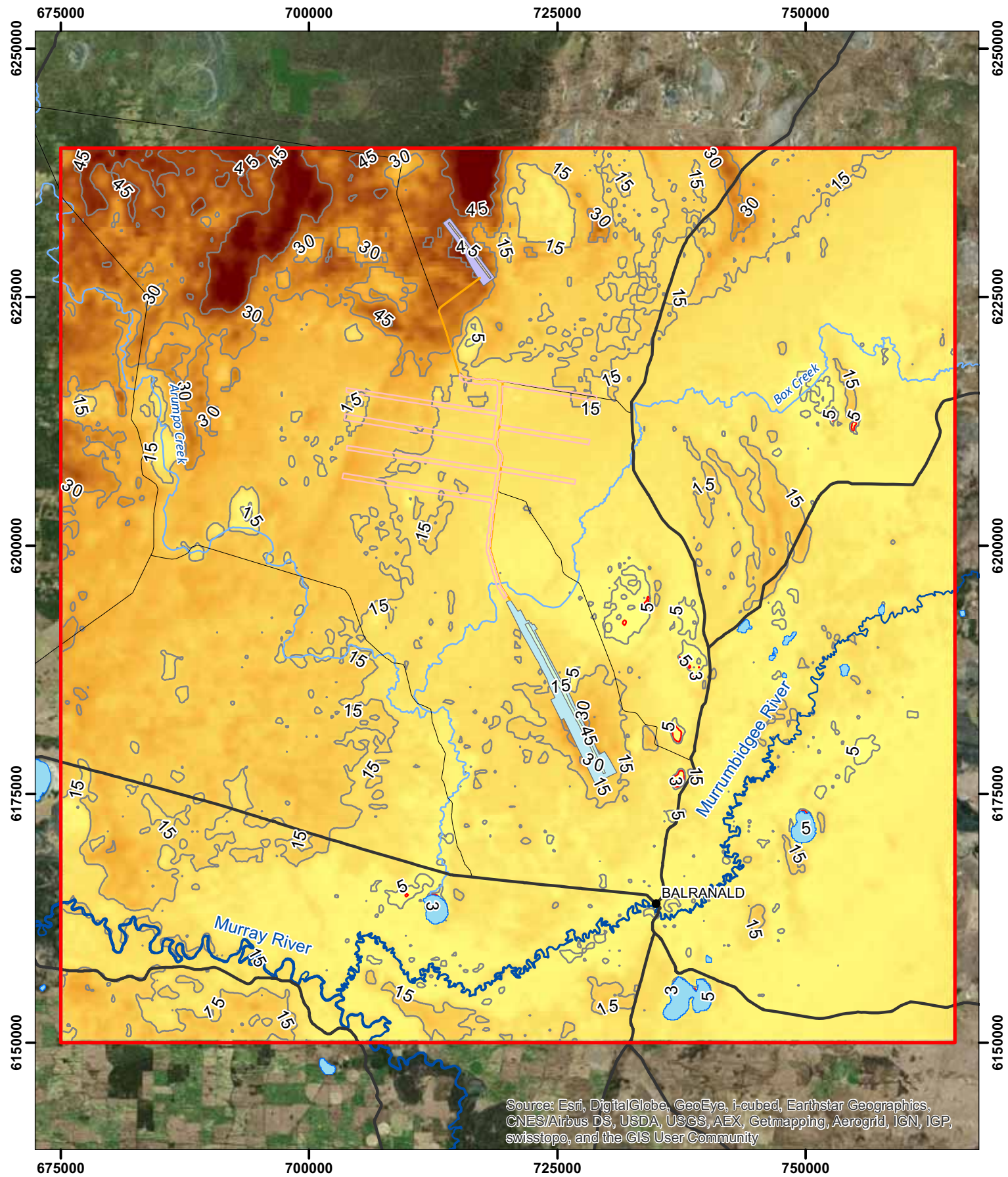
0 10  
 Kilometres



## BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 2

**JACOBS**

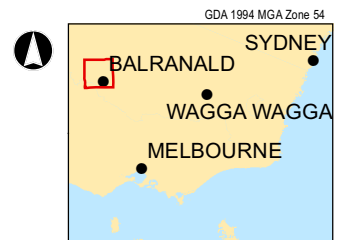




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

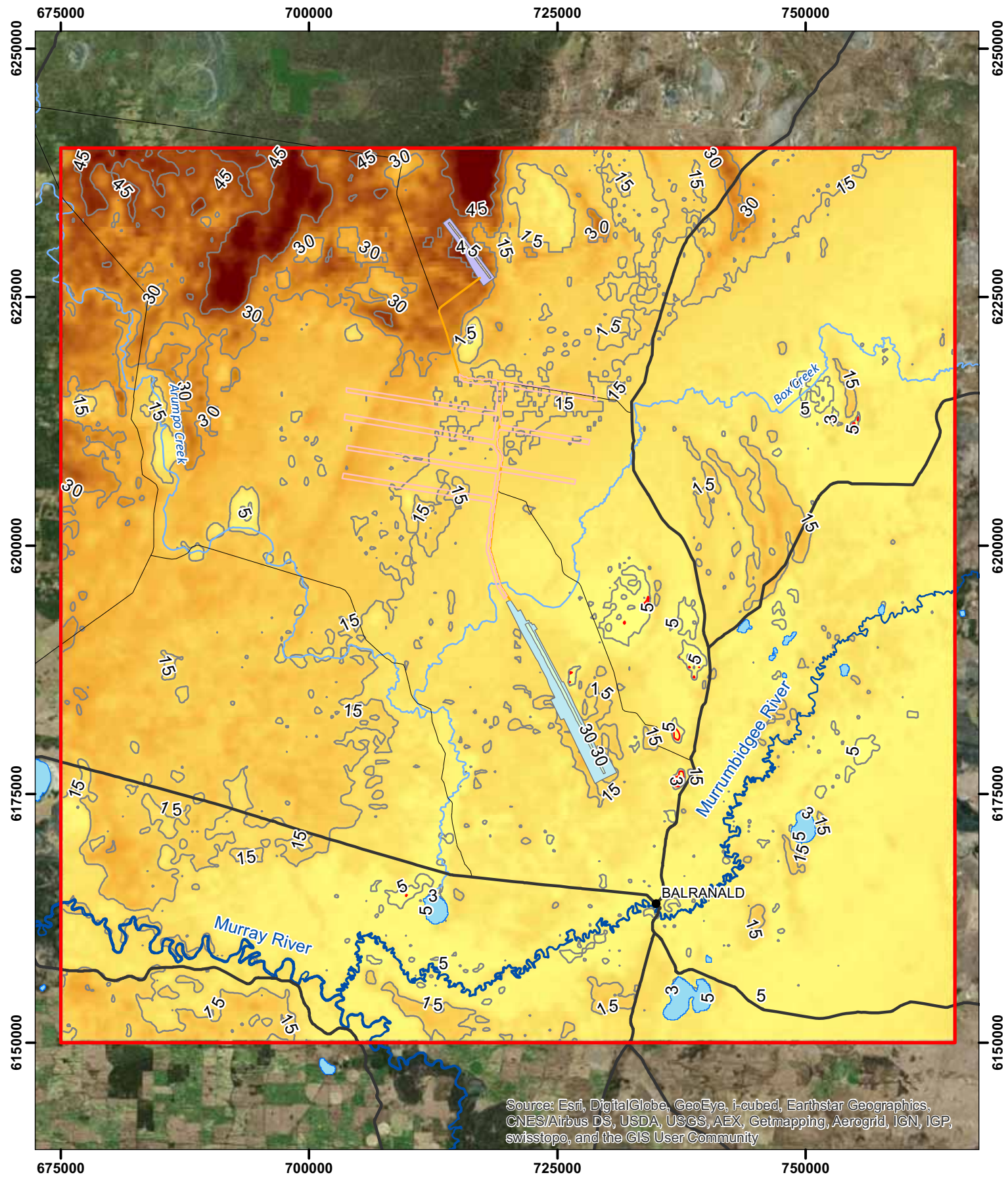
0 10  
 Kilometres



## BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 2

**JACOBS**

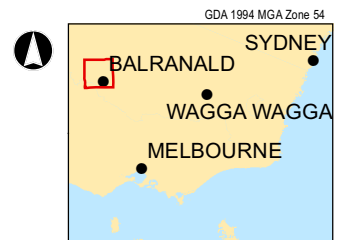




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

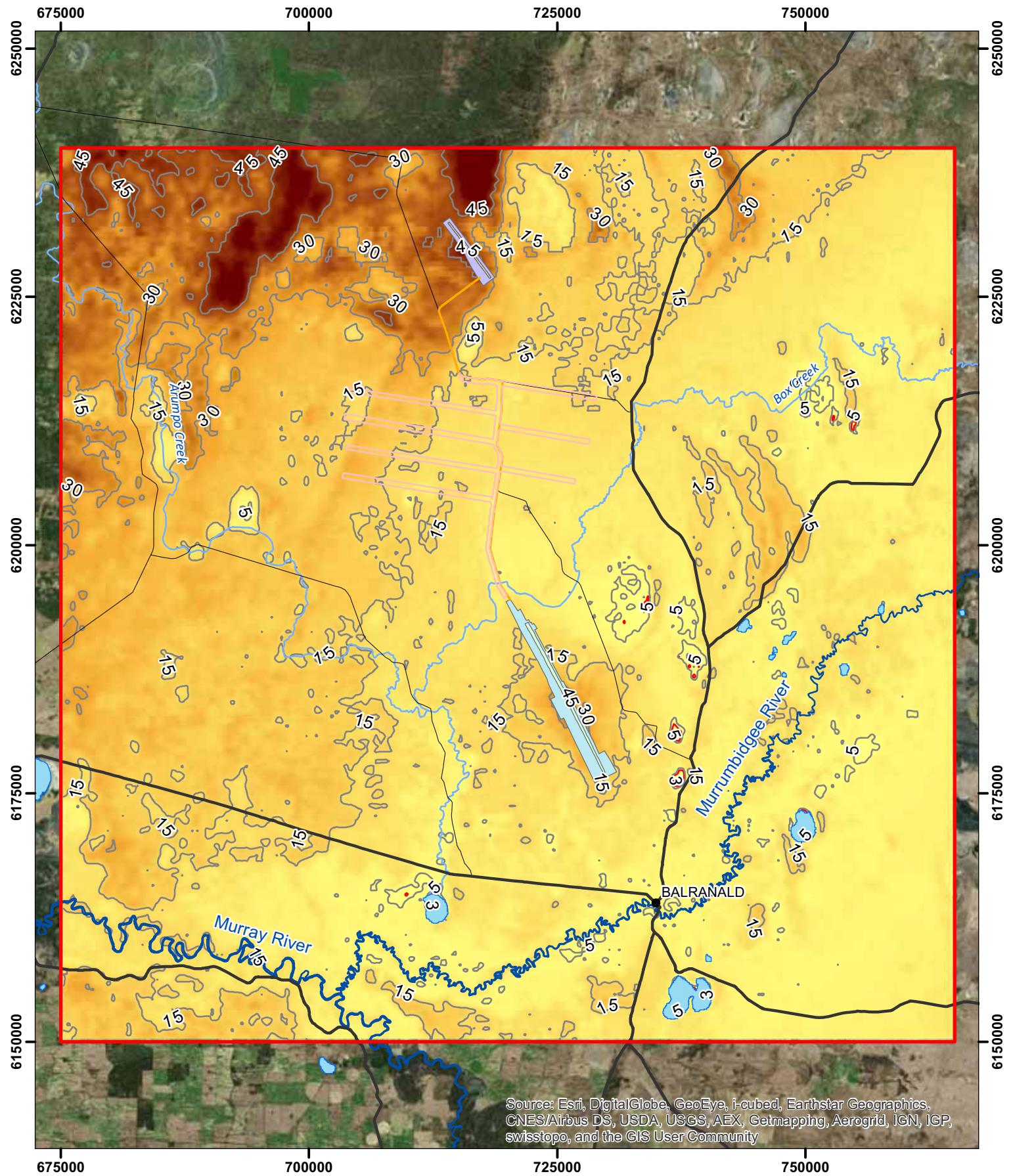
0 10  
 Kilometres



## BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 3

**JACOBS**





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

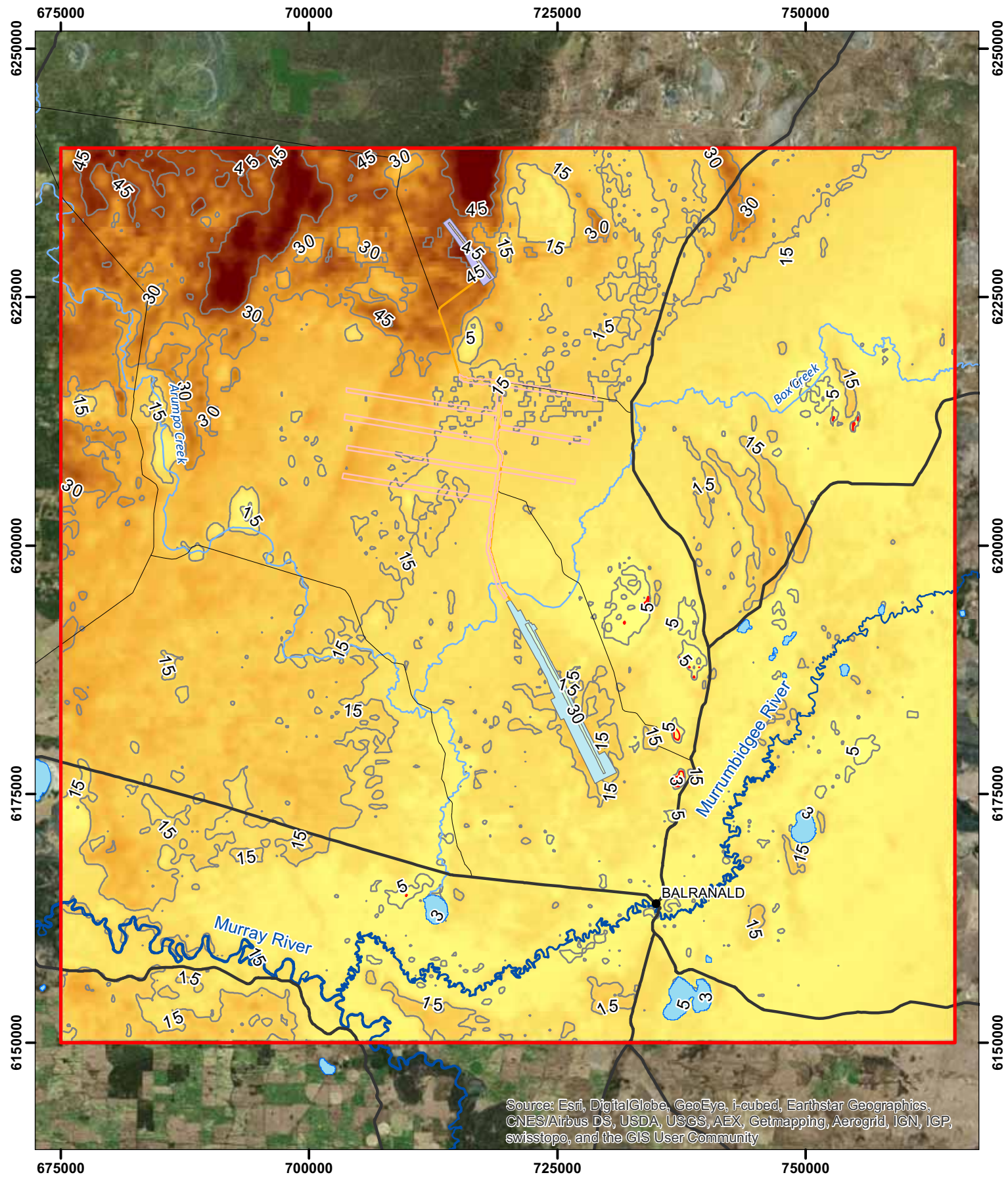


**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 3**

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20200101\_L3\_DTW.mxd

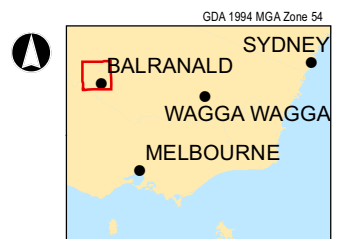




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)
- BAL2.0 model domain

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres

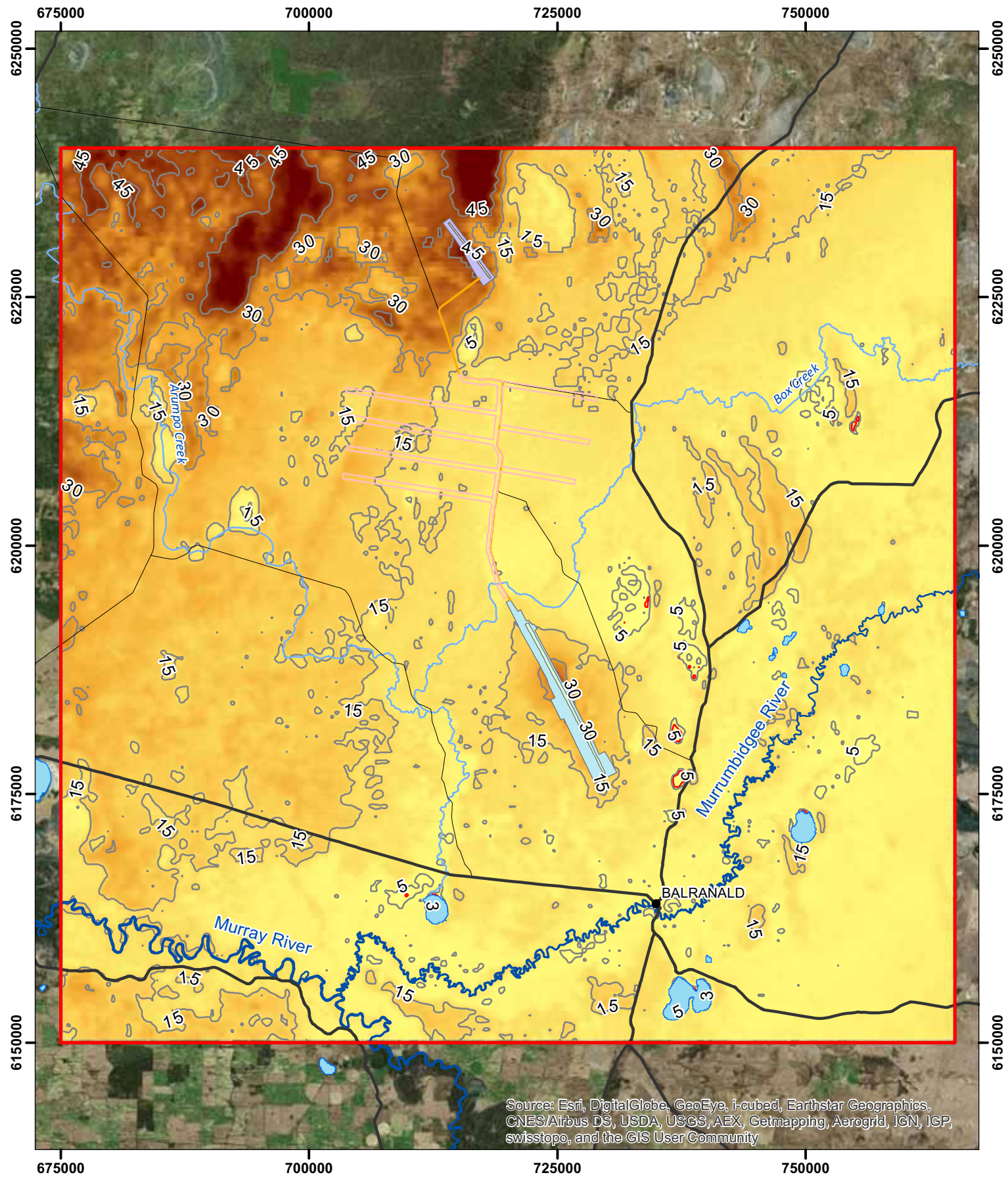


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 4**

**JACOBS**

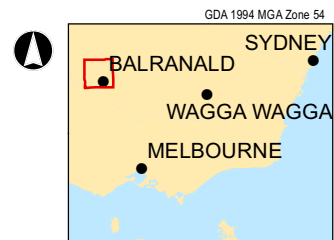
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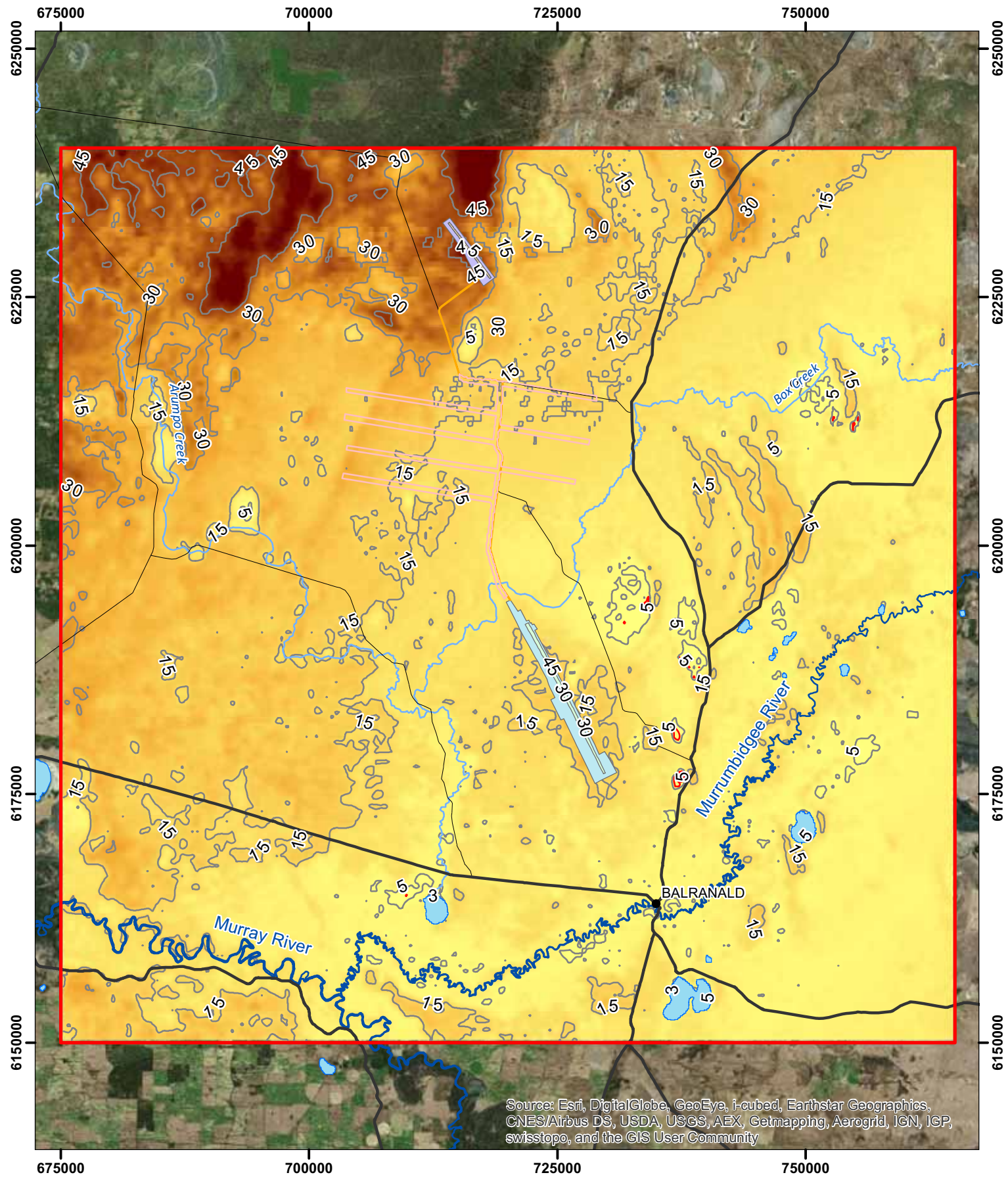


- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7



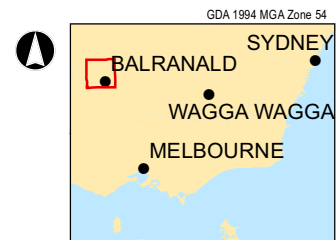




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres

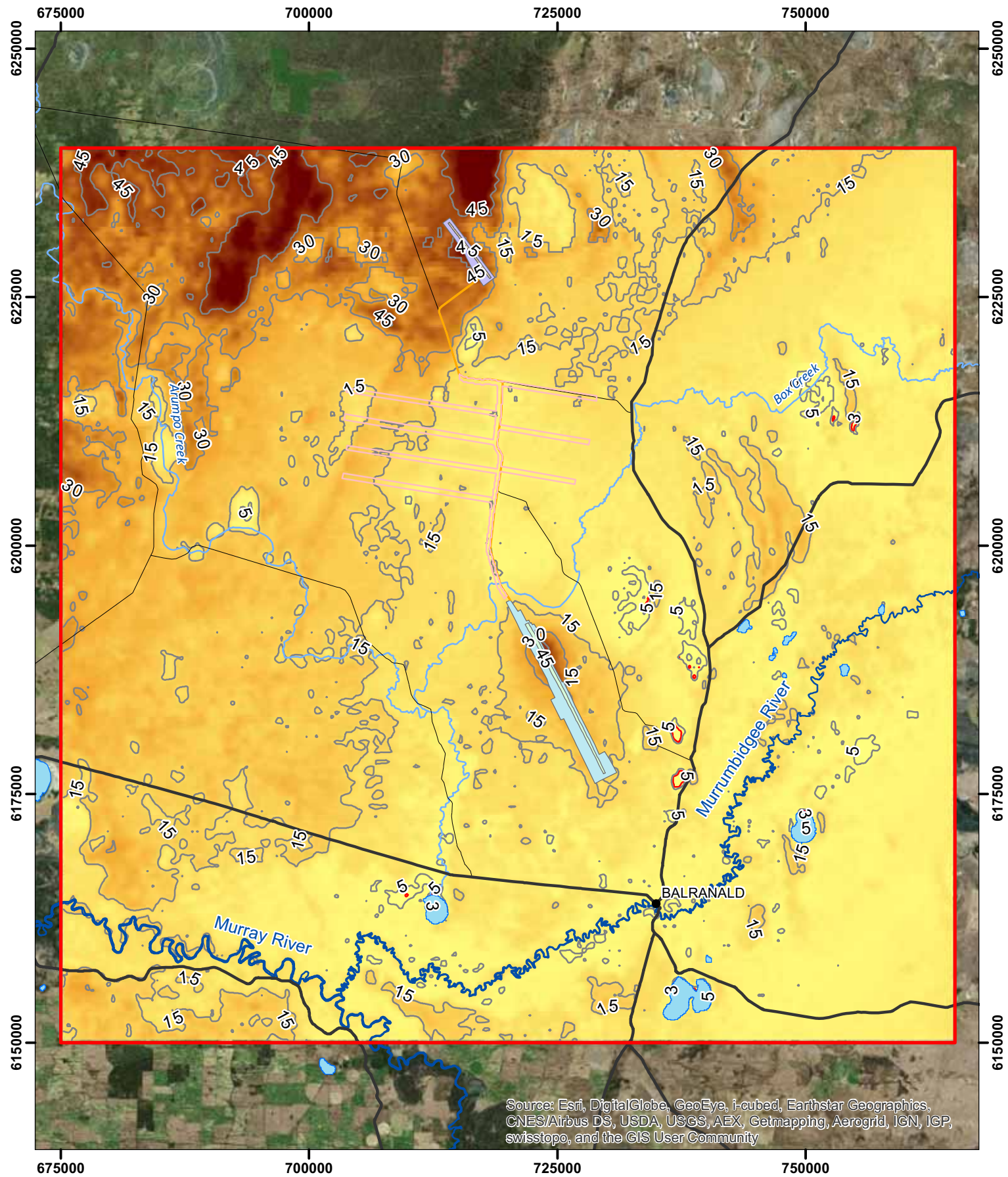


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 5**

**JACOBS**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20220101\_L1\_DTW.mxd

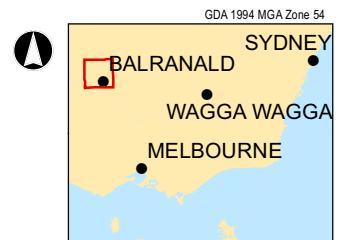




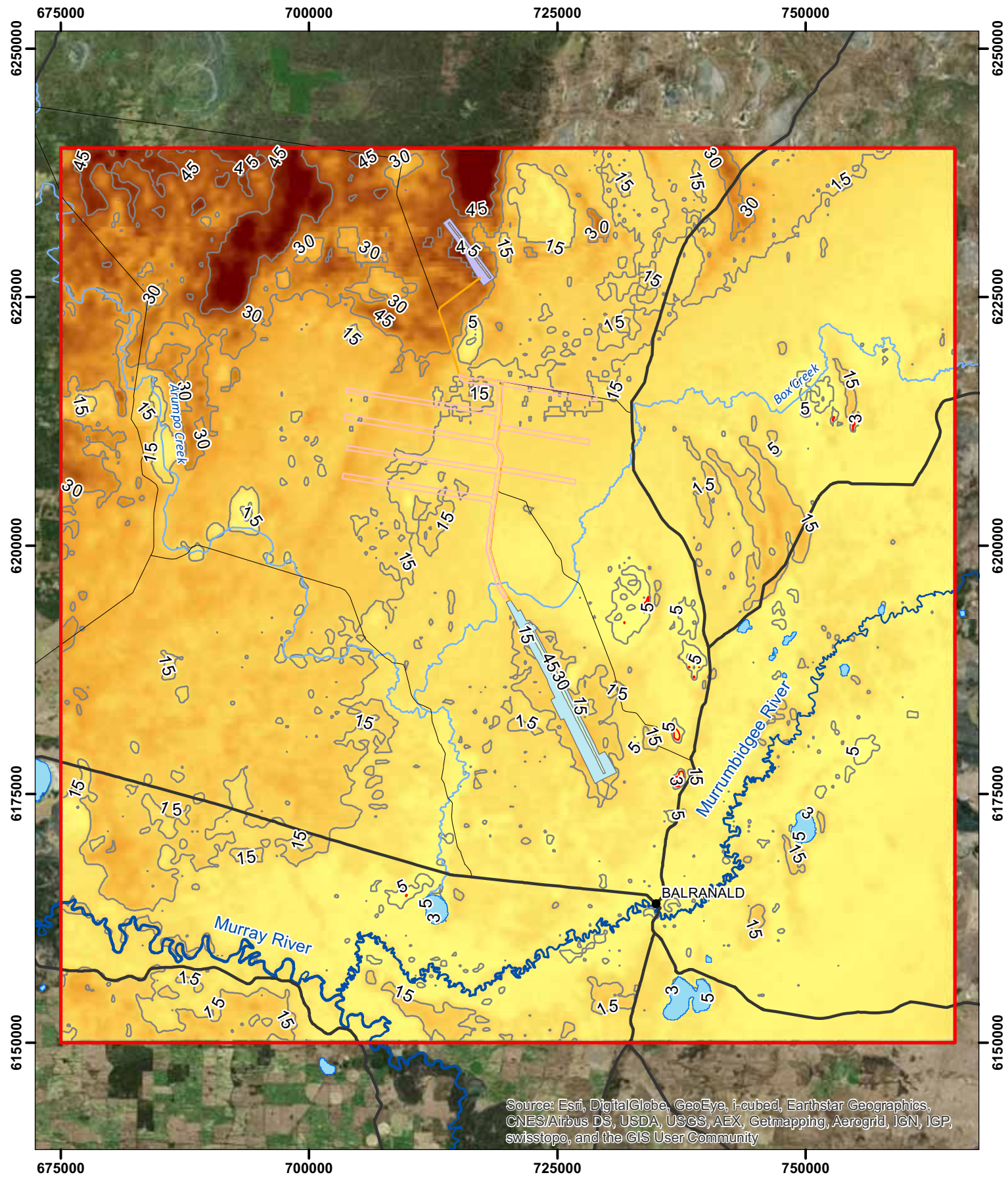
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)
- BAL2.0 model domain

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres



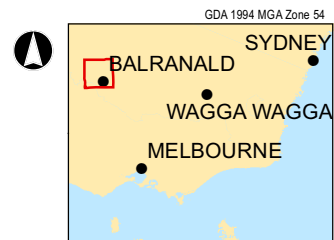




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres

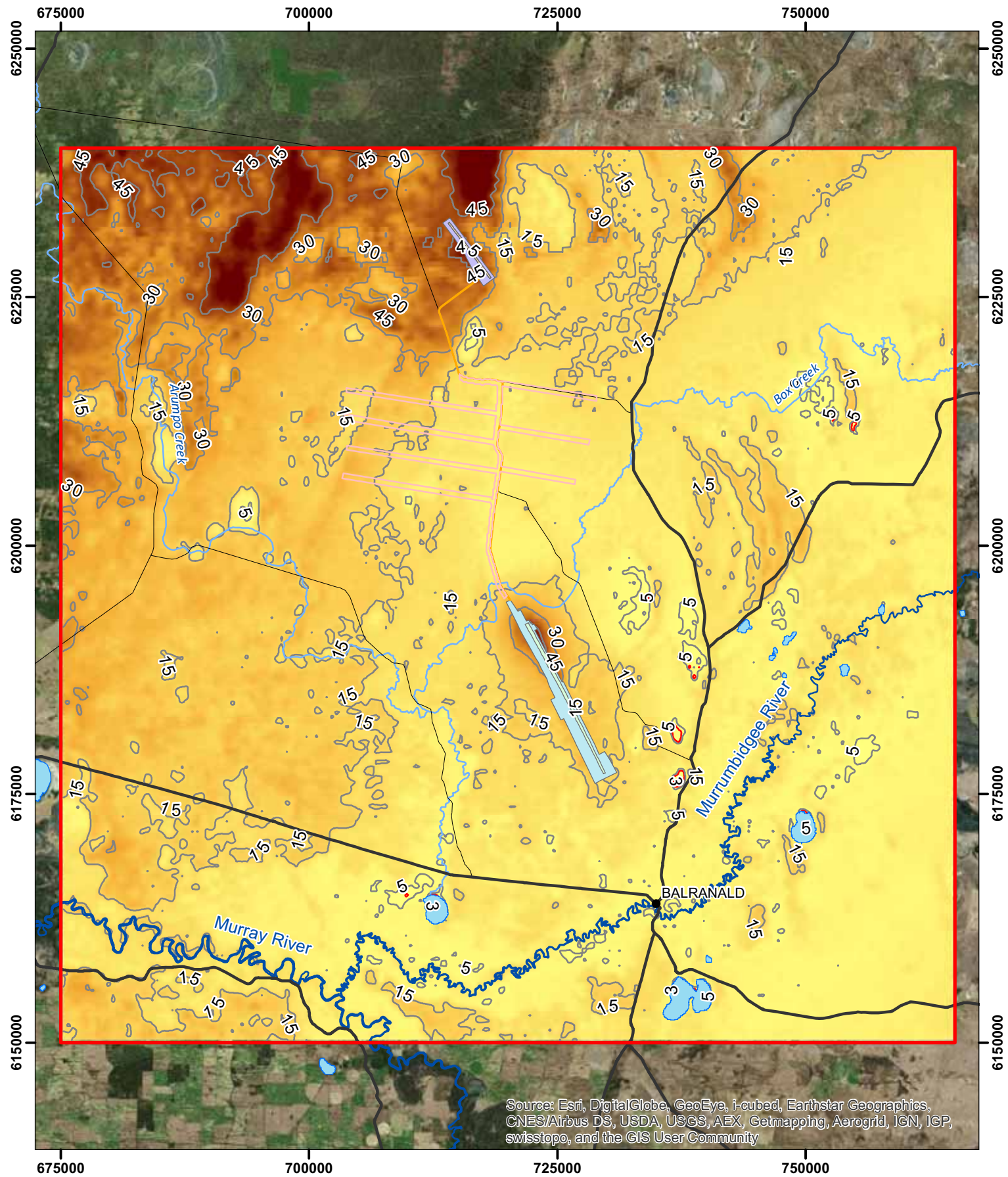


## BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 6

**JACOBS**

L:\VESA\Projects\VE238751\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20230101\_L1\_DTW.mxd





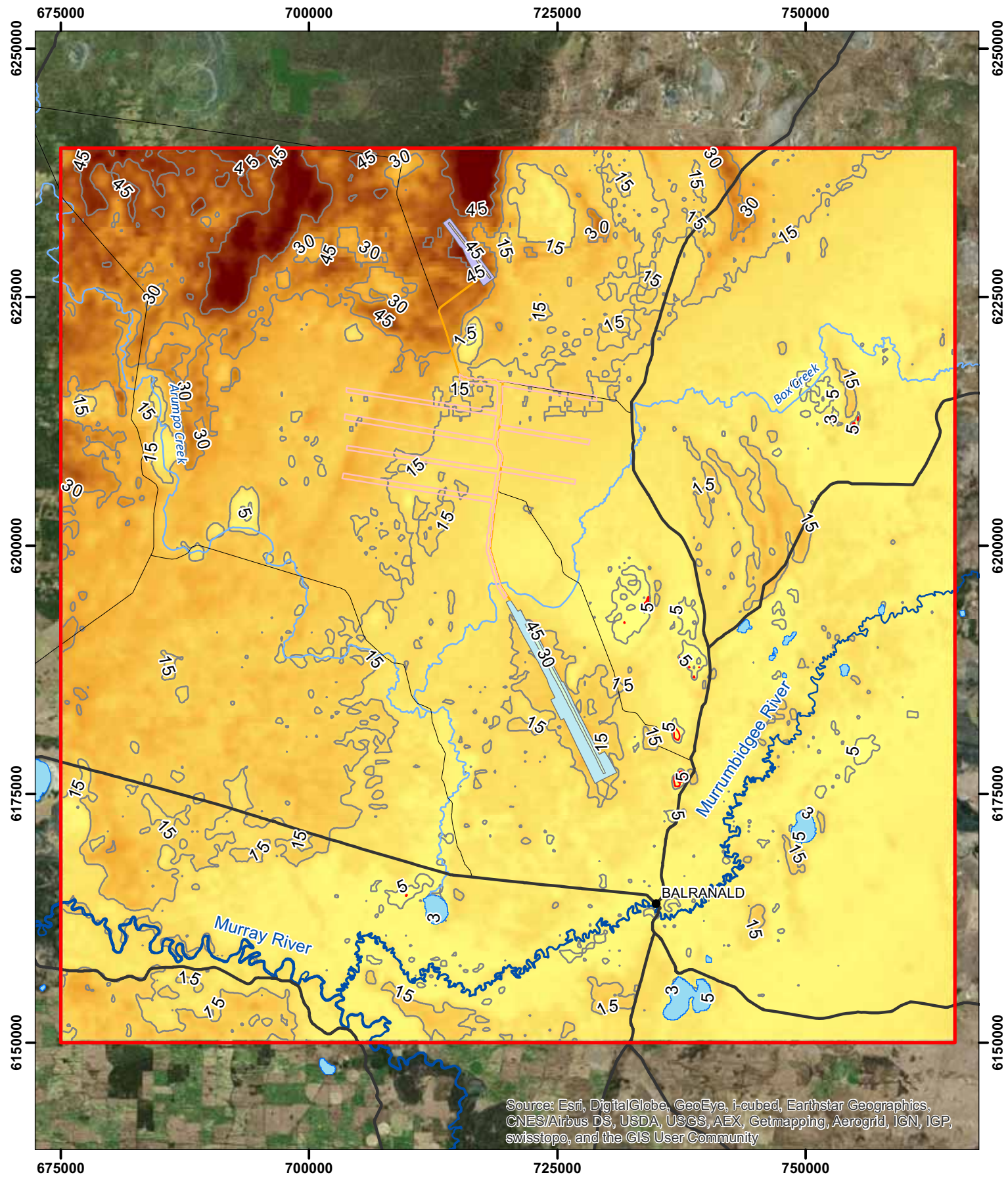
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres



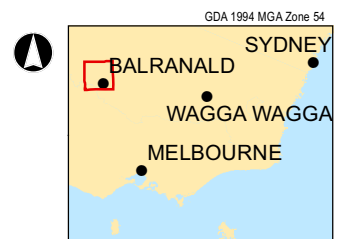




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

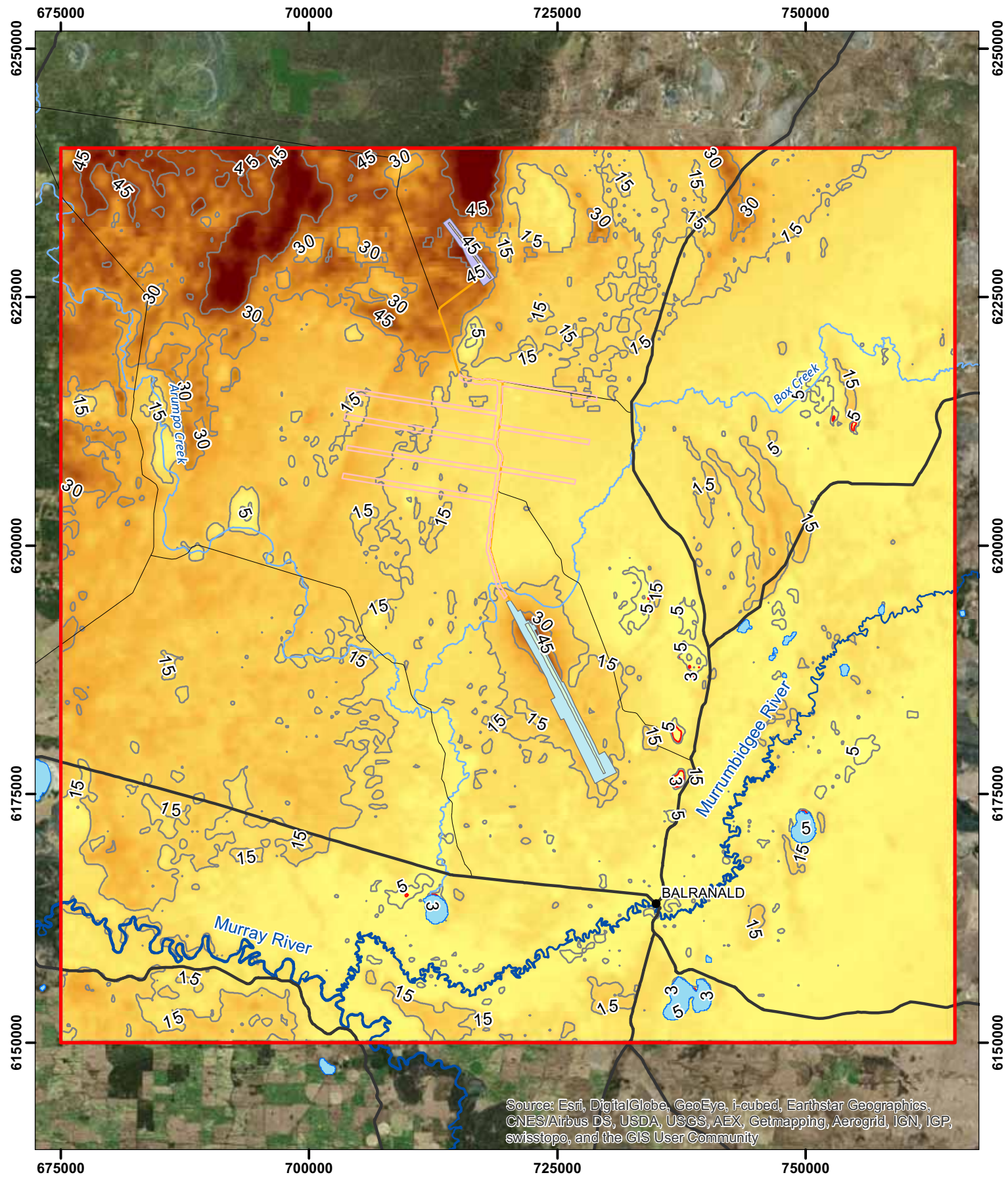


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 6.3**

**JACOBS**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20230501\_L1\_DTW.mxd

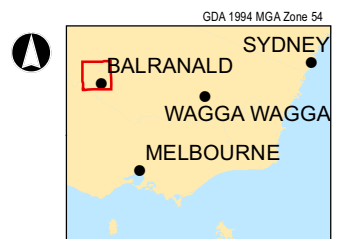




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)
- BAL2.0 model domain

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

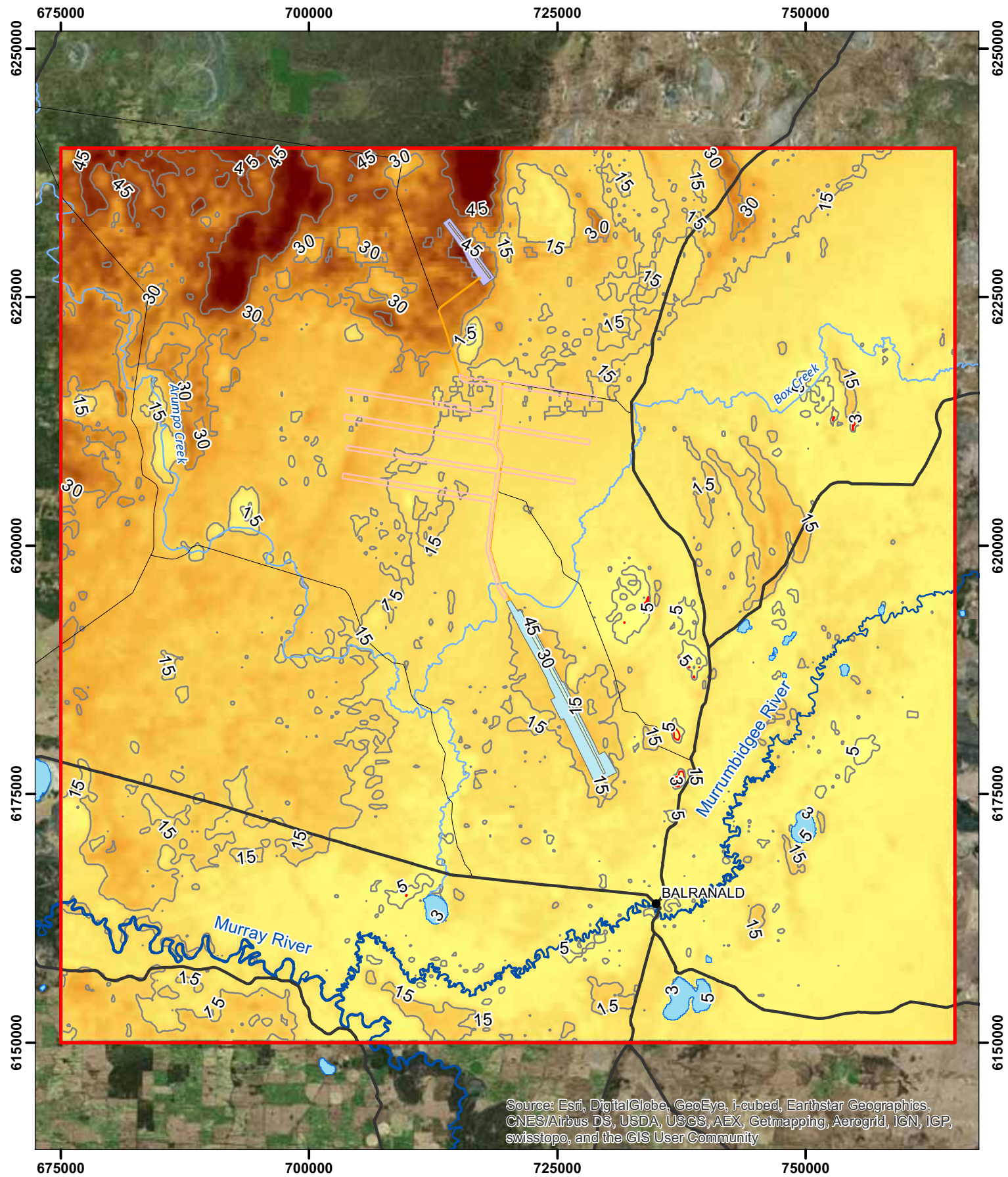


**JACOBS**

**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 6.3**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20230501\_L3\_DTW.mxd





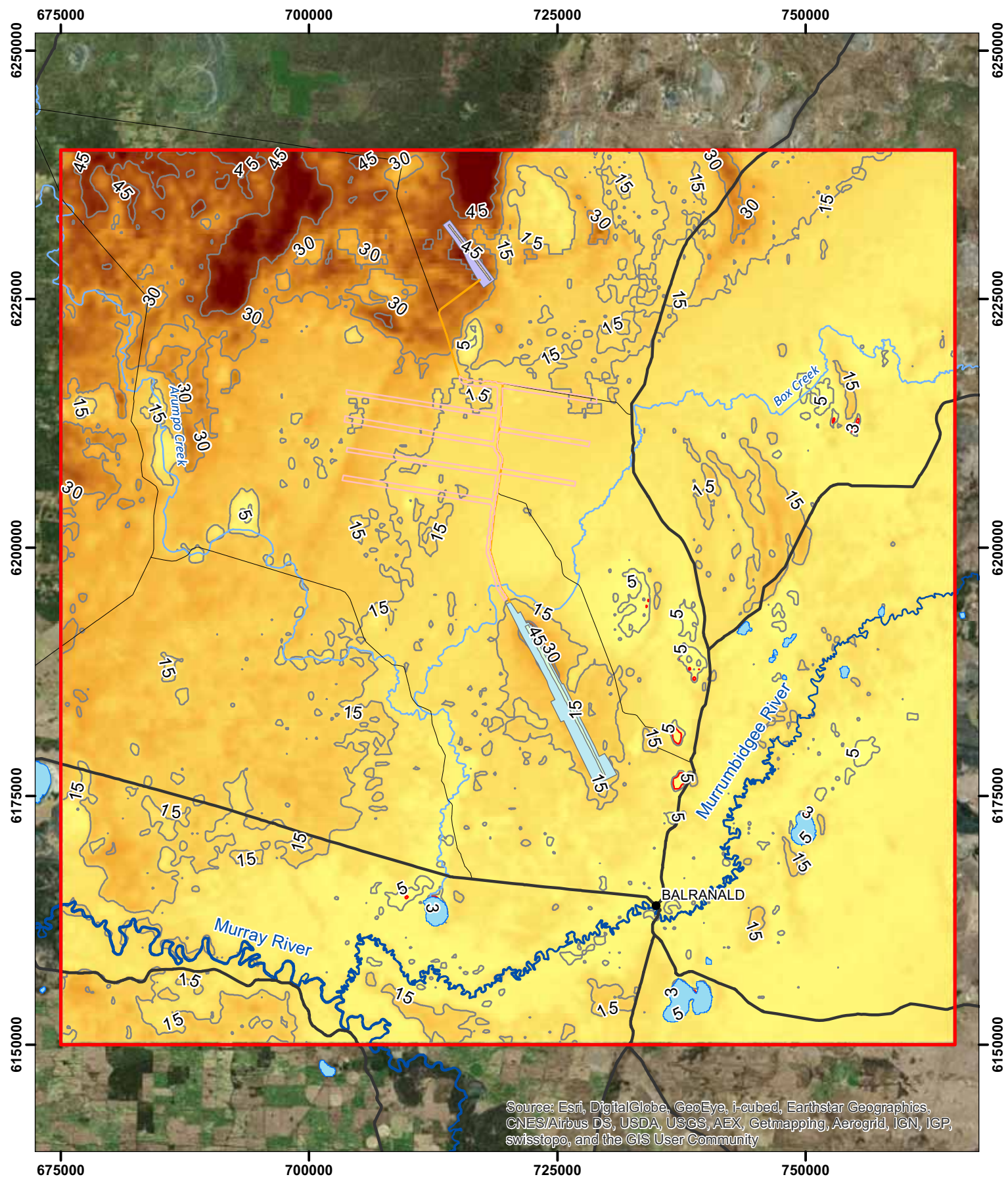
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres



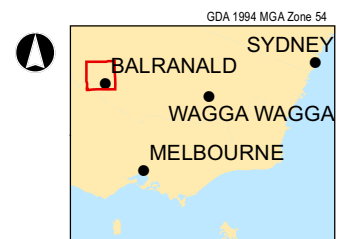




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

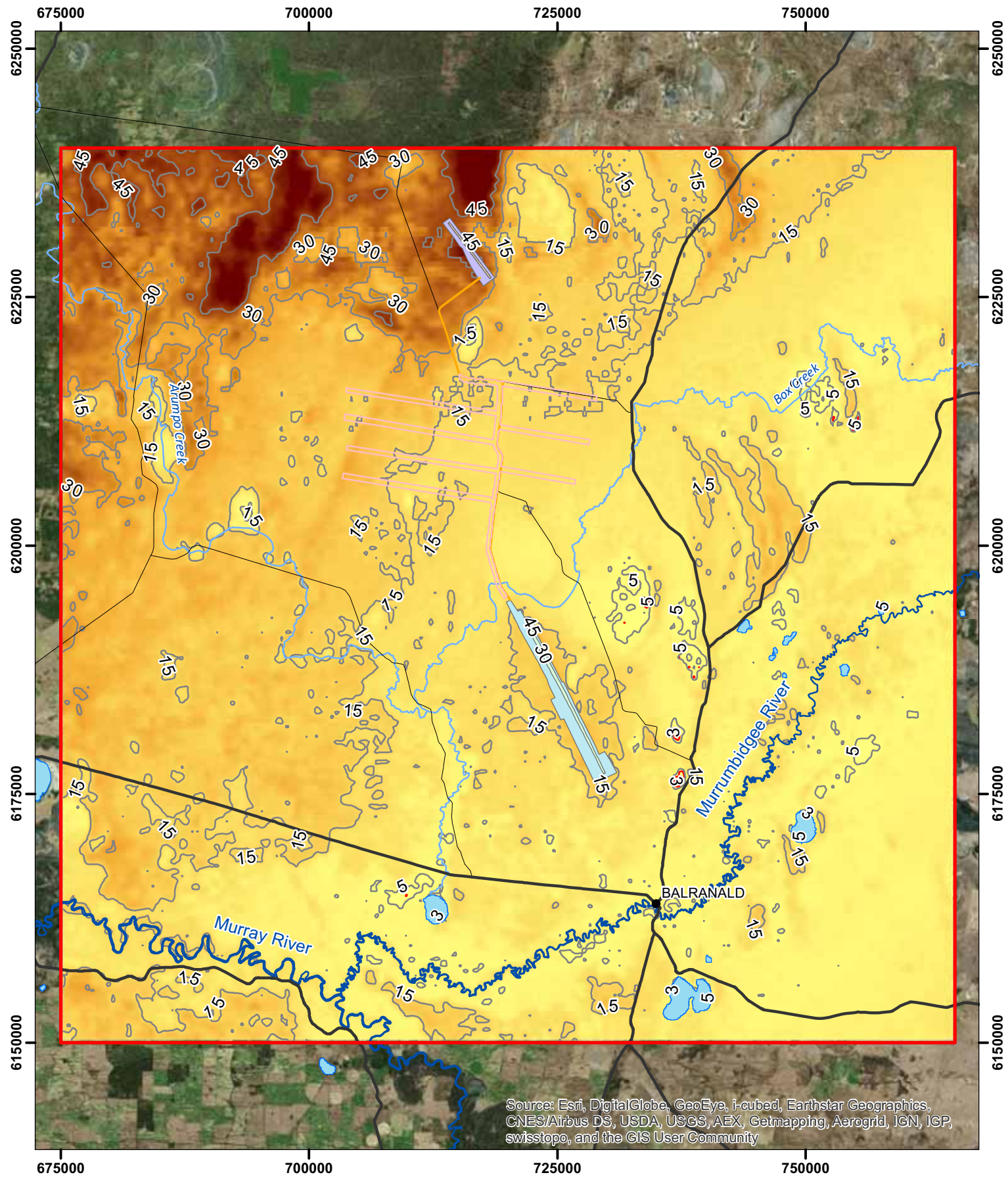


**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 7**

**JACOBS**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20240101\_L3\_DTW.mxd

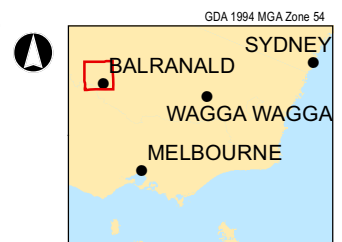




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

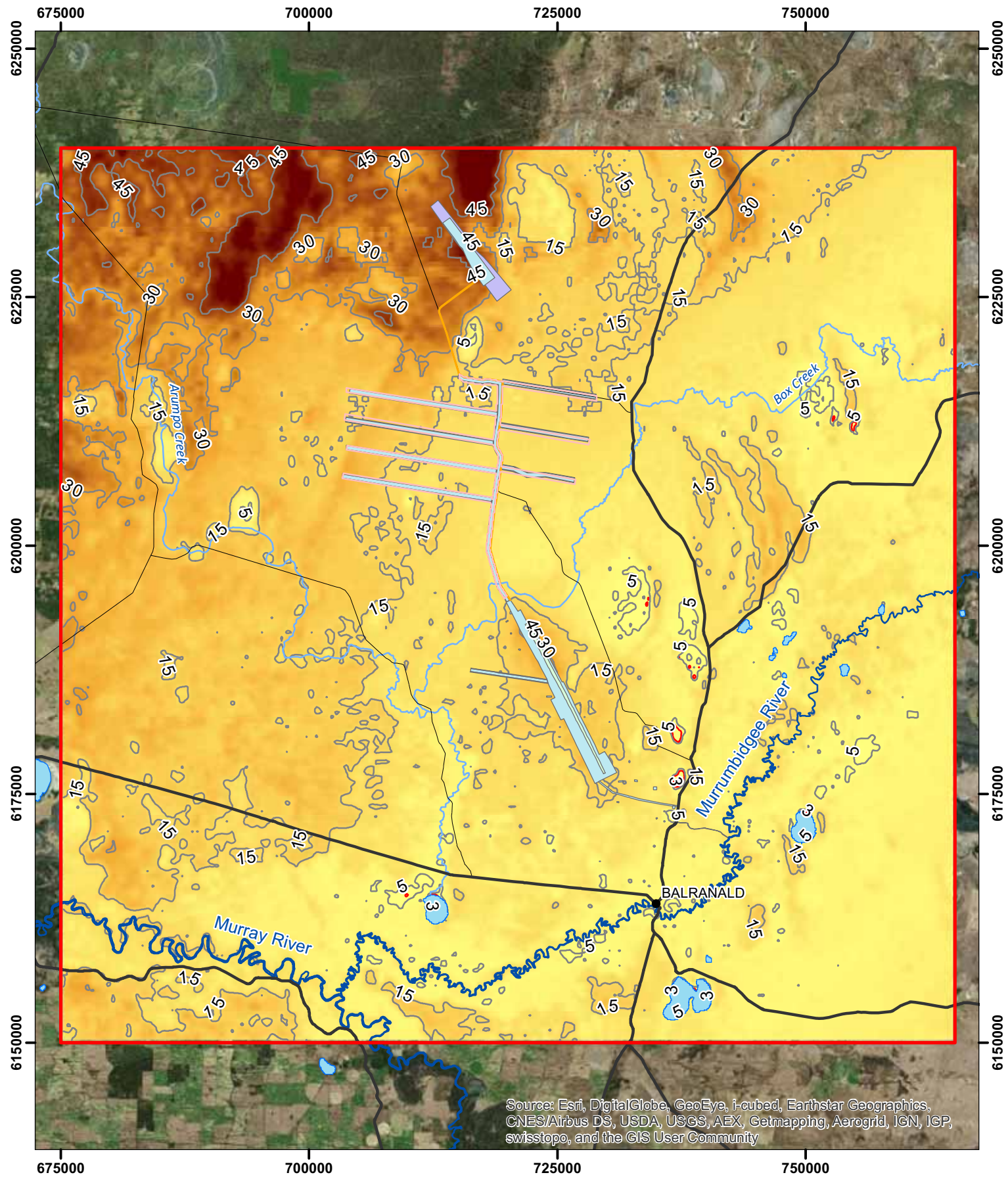


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 7.4**

**JACOBS**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20240601\_L1\_DTW.mxd

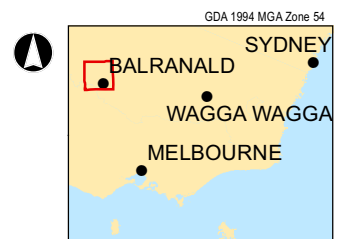




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

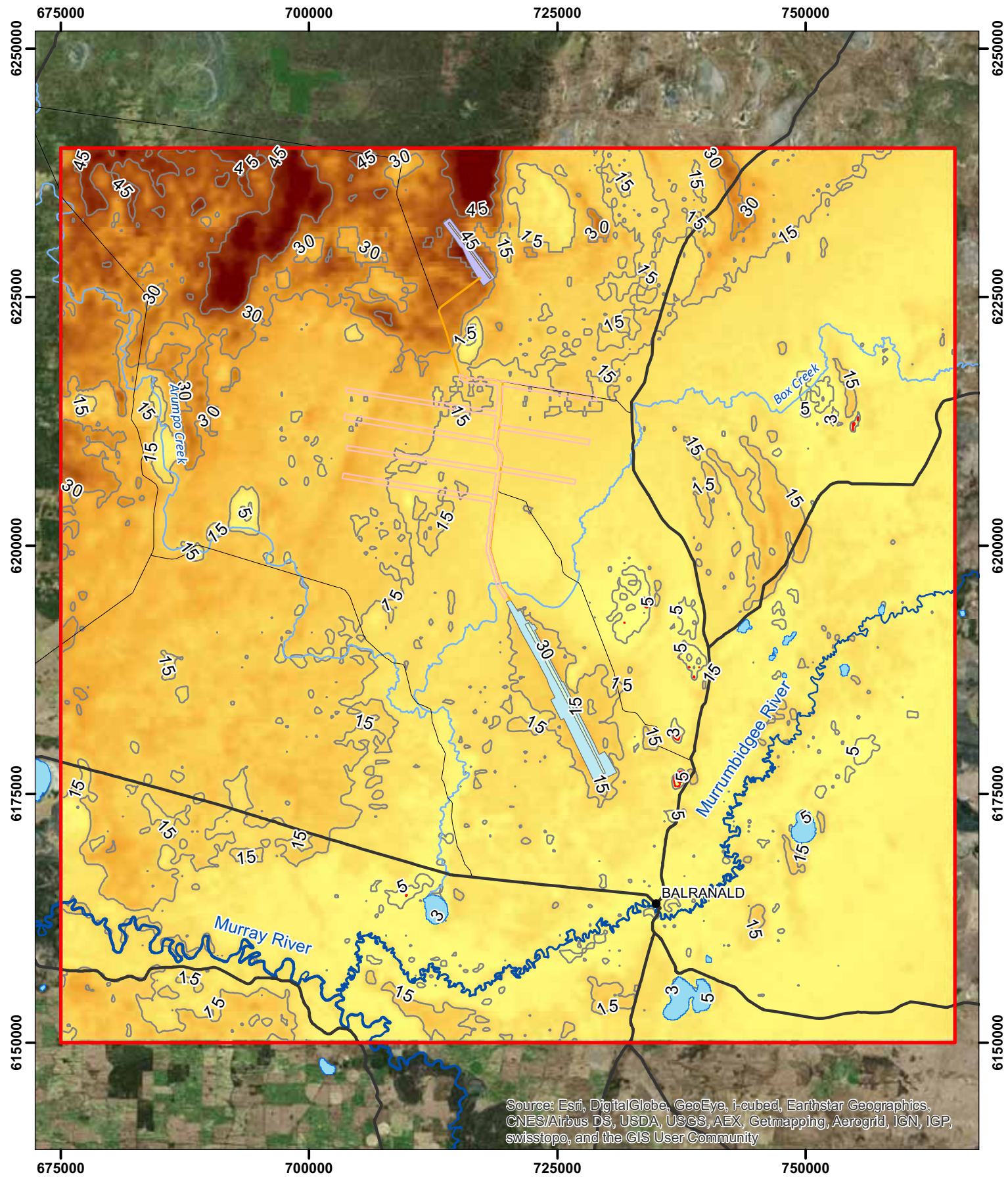


**JACOBS**

**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore at mining year 7.4**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20240601\_L3\_DTW.mxd





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

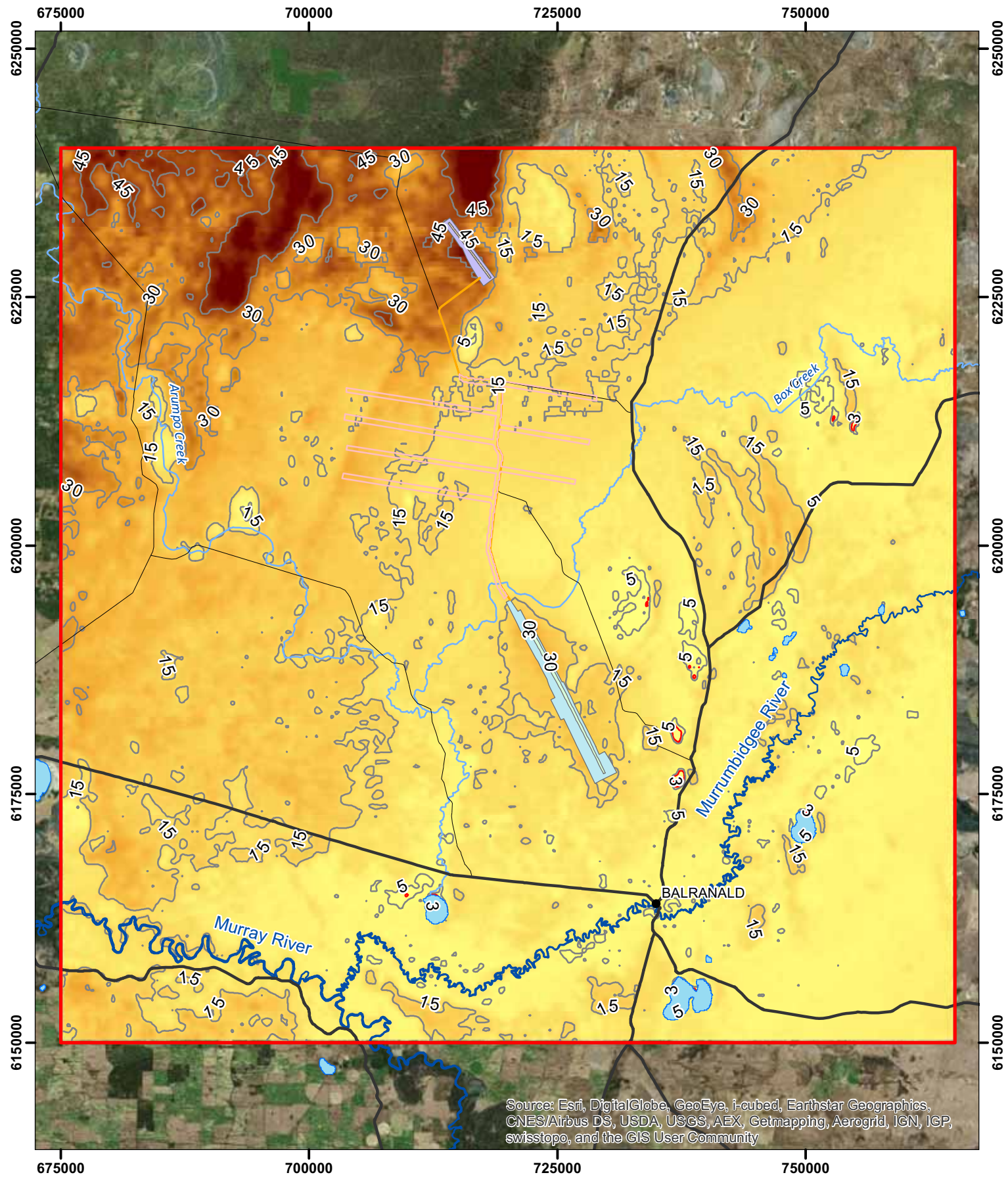


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation at mining year 8**

**JACOBS**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20250101\_L1\_DTW.mxd





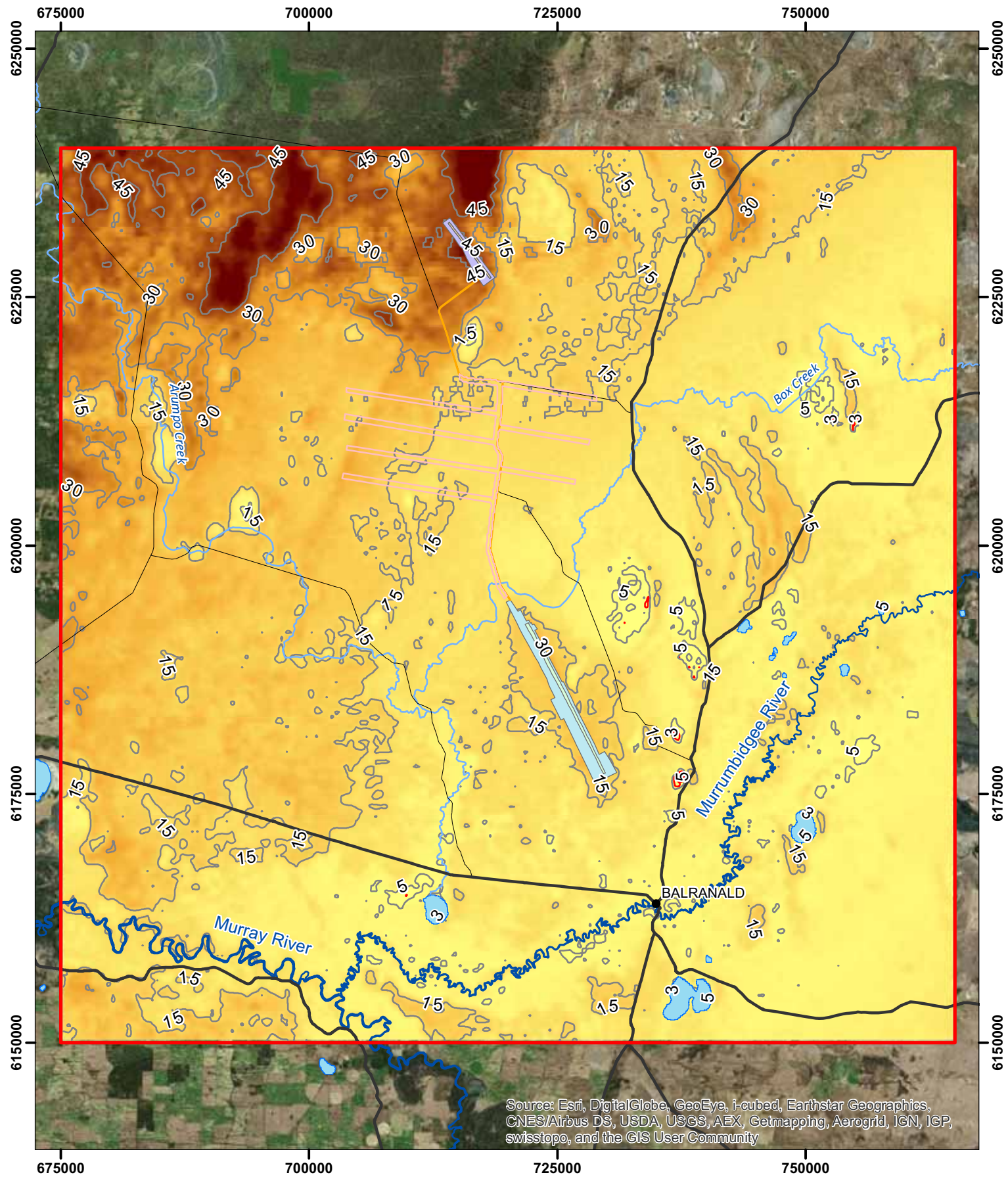
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)
- BAL2.0 model domain

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres



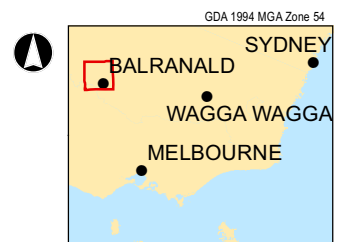




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres

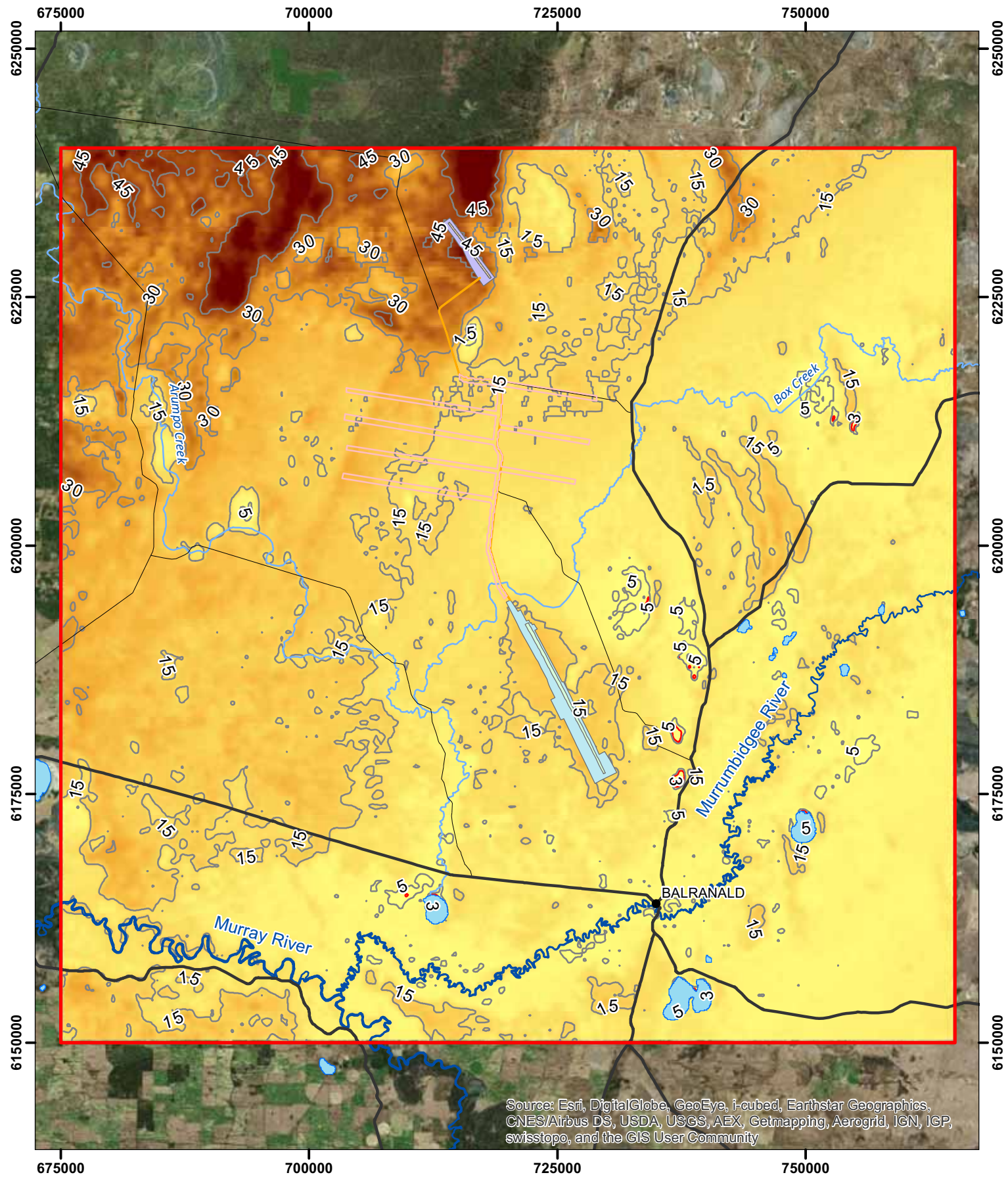


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation 1 year post-mining**

**JACOBS**

L:\VESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20260101\_L1\_DTW.mxd

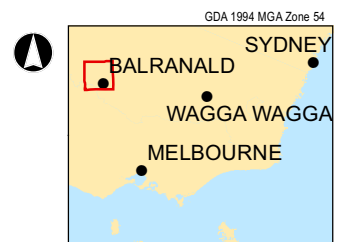




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

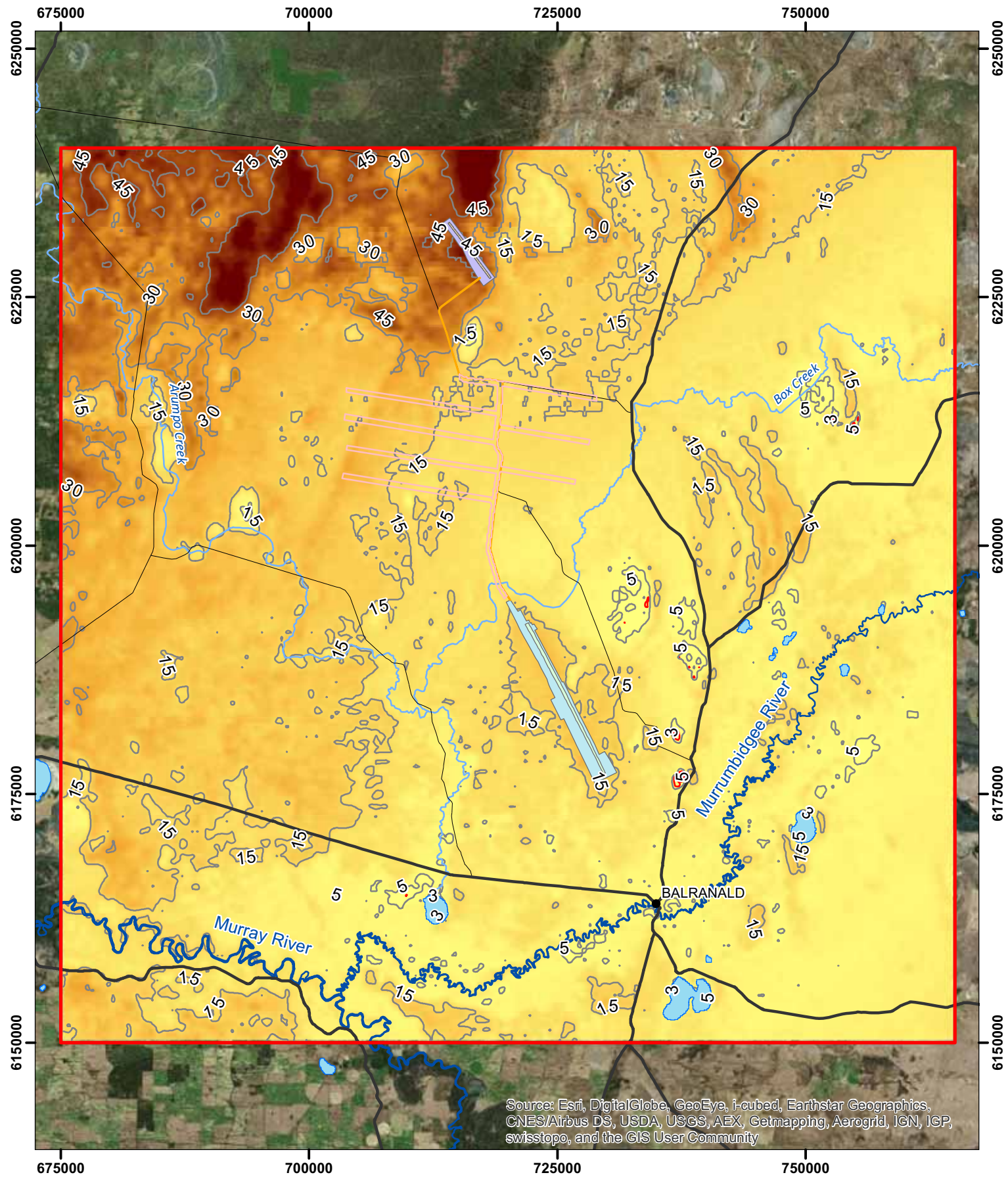


**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore 1 year post-mining**

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20260101\_L3\_DTW.mxd

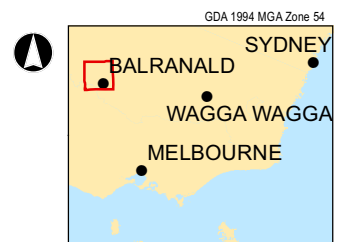




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

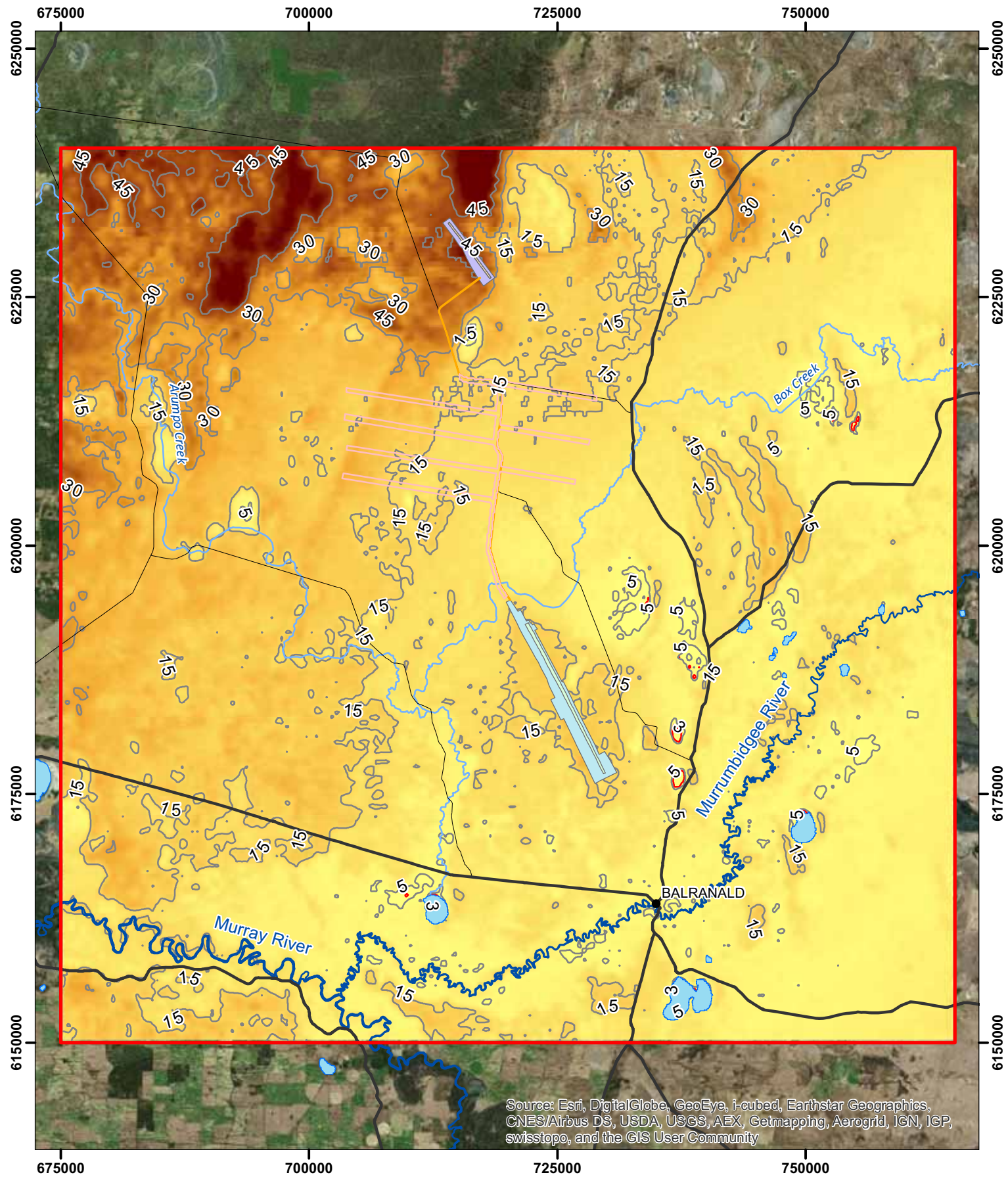


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation 5 years post-mining**

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20300101\_L1\_DTW.mxd

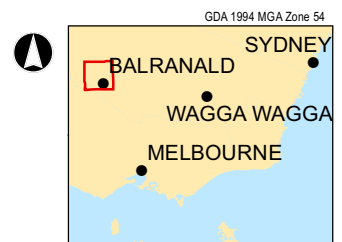




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

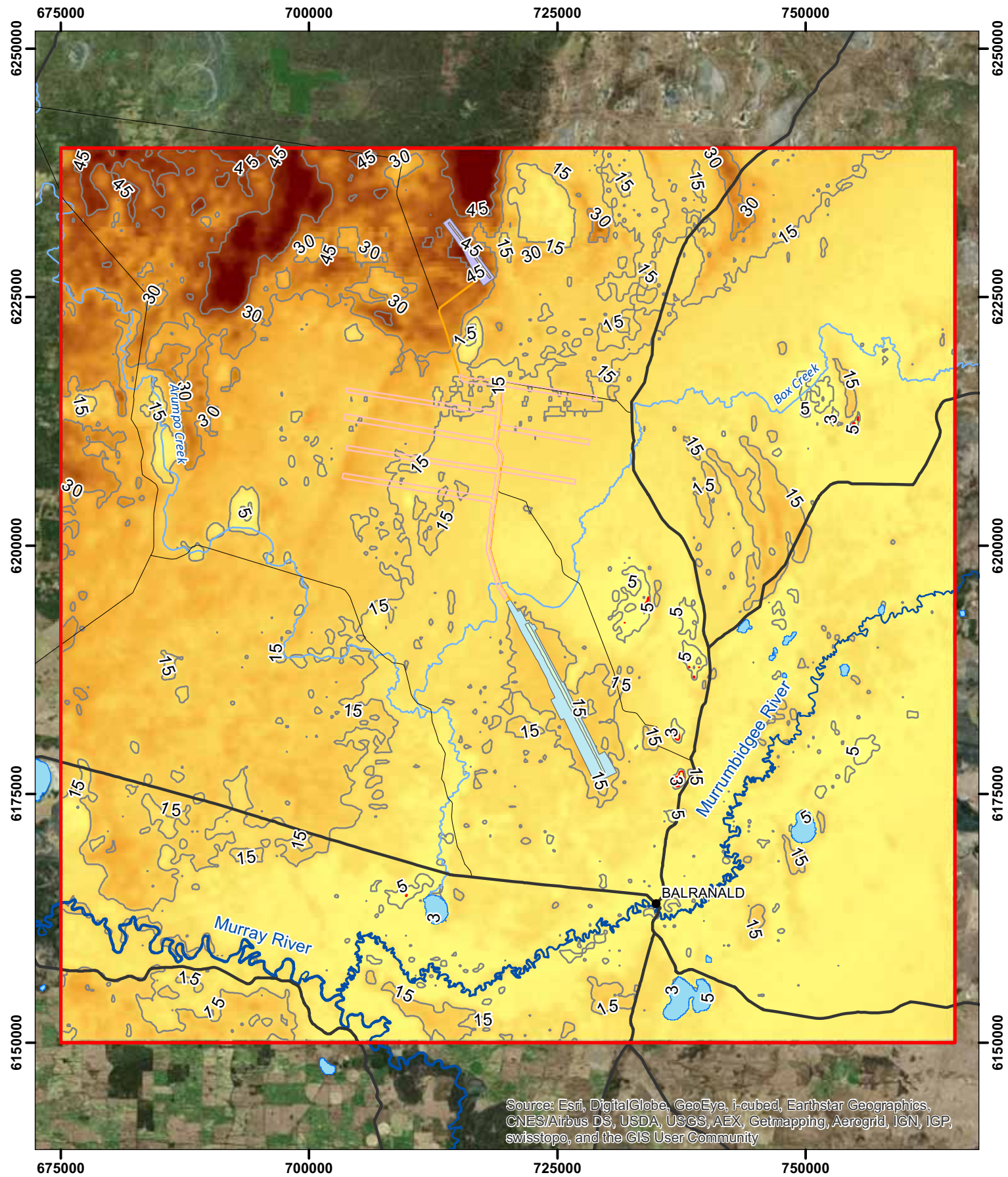


**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore 5 years post-mining**

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20300101\_L3\_DTW.mxd

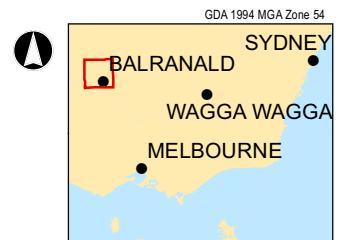




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres

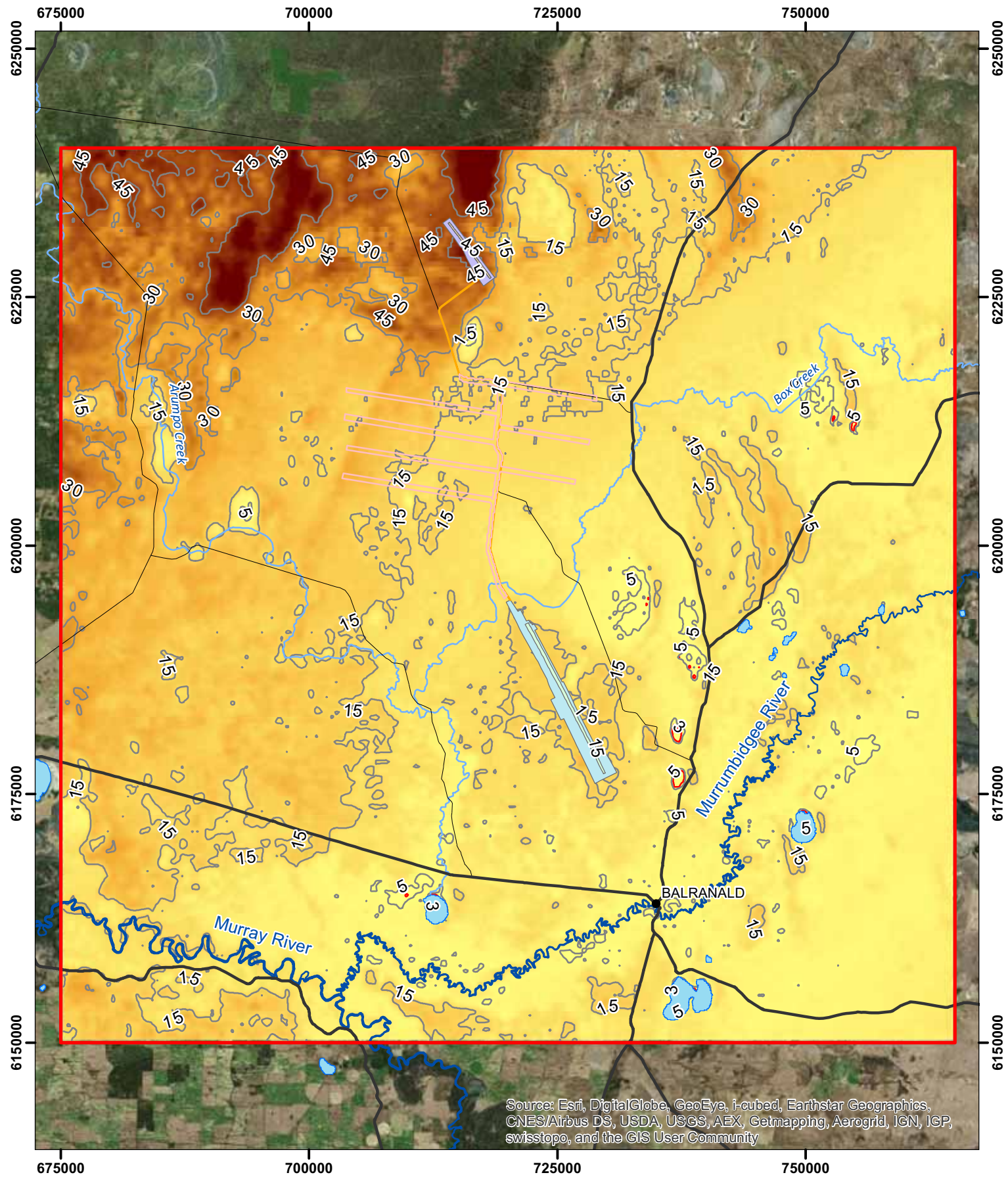


**BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation 10 years post-mining**

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20350101\_L1\_DTW.mxd

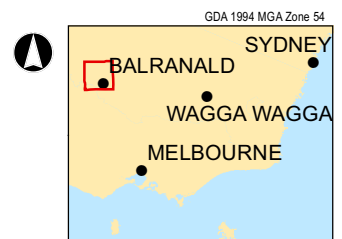




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres

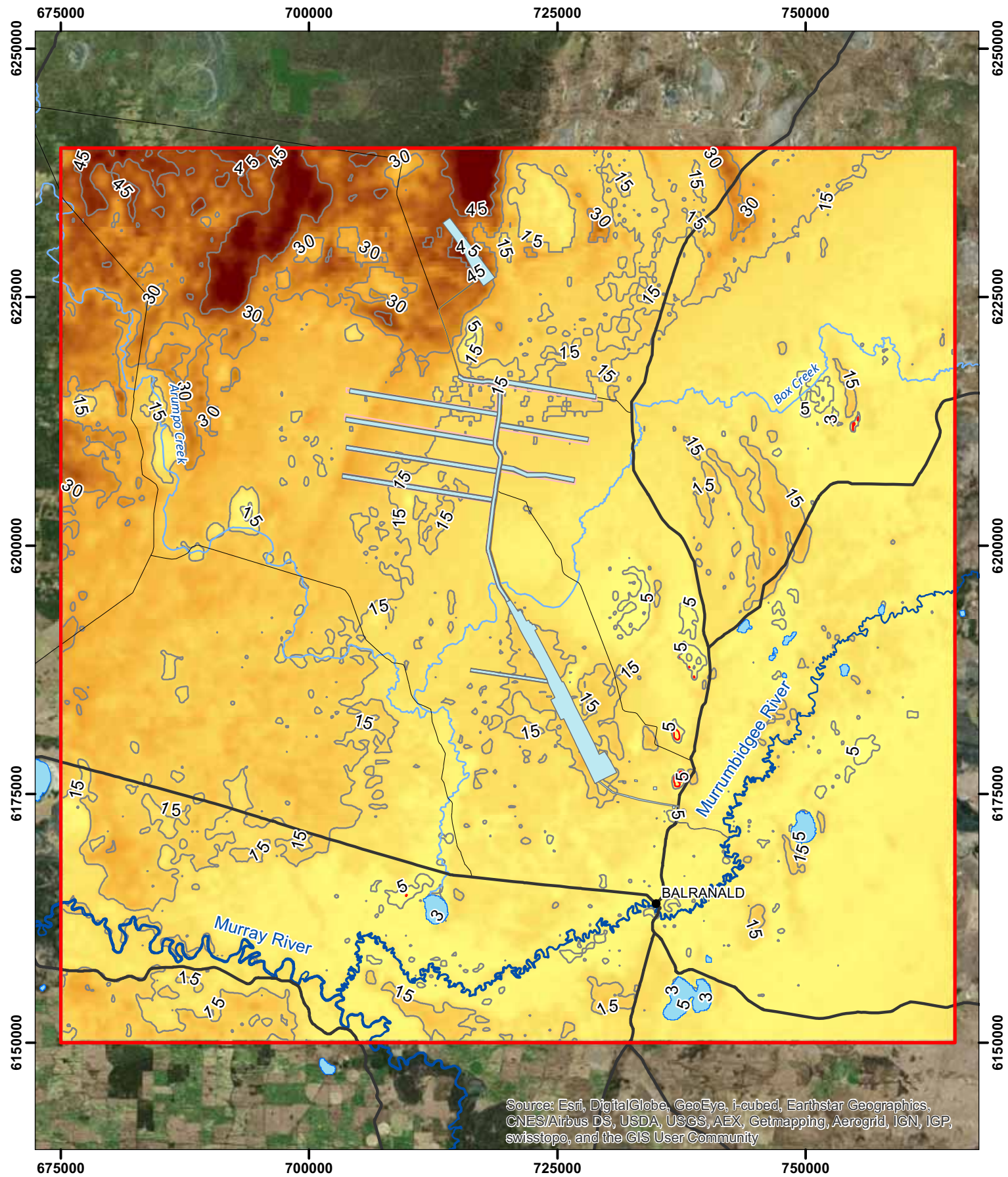


## BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore 10 years post-mining

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_20350101\_L3\_DTW.mxd

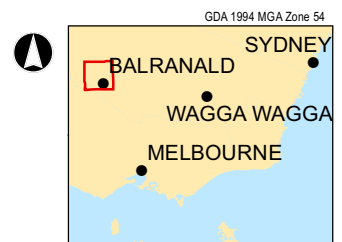




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

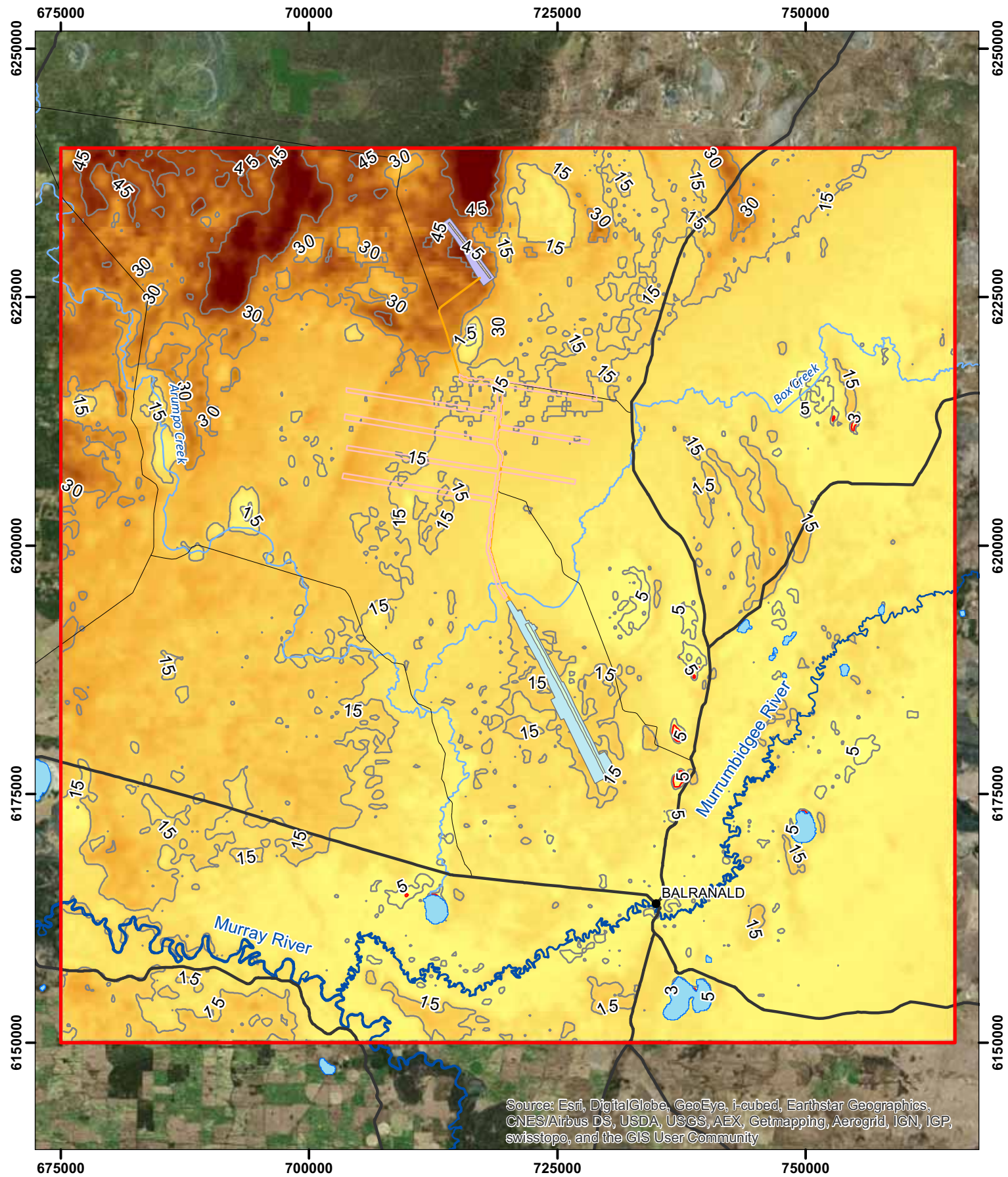
0 10  
 Kilometres



## BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation 30 years post-mining

**JACOBS**

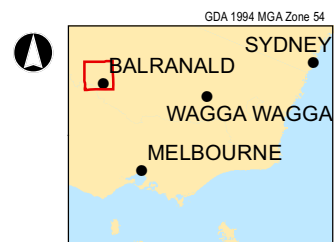




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

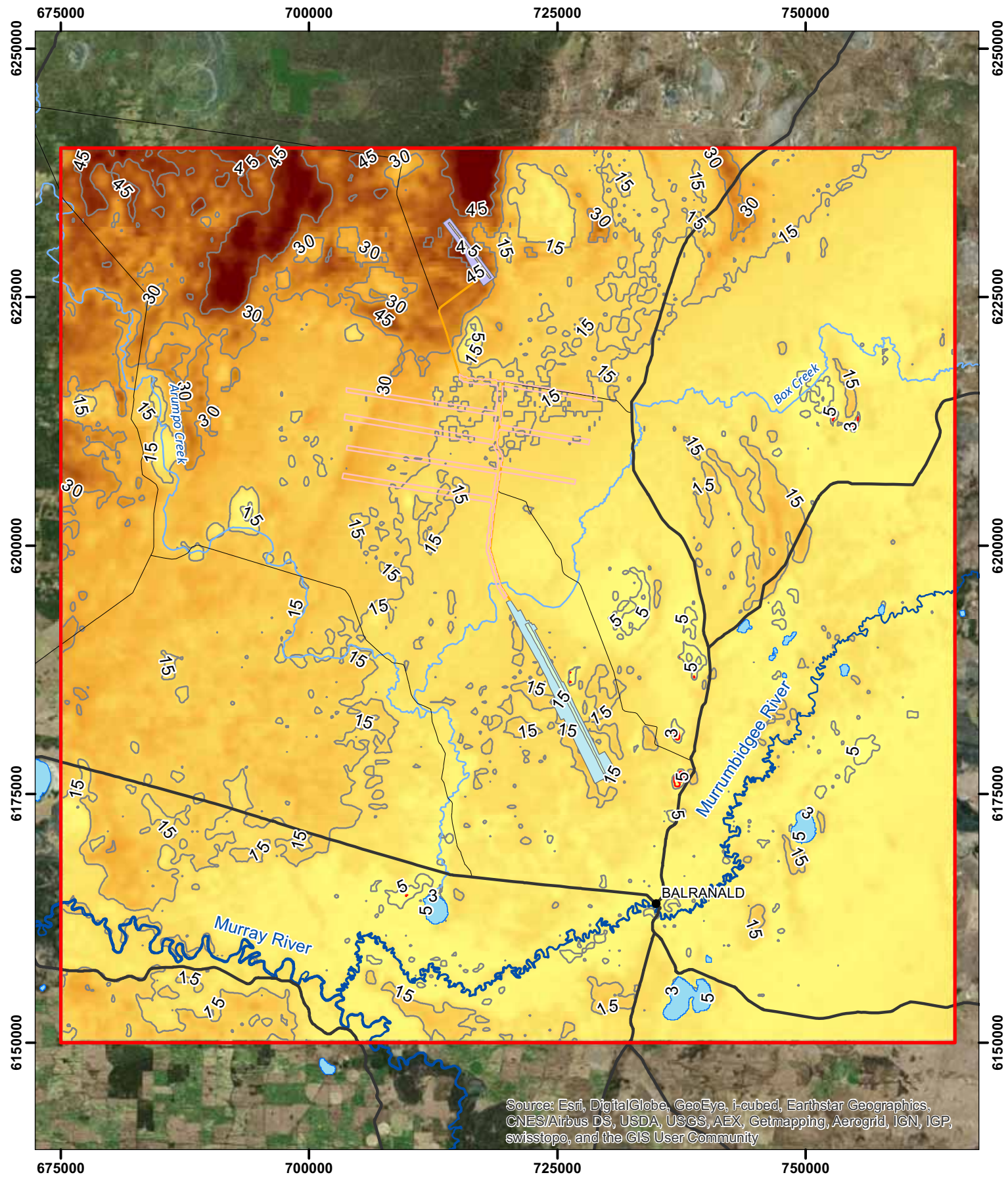
0 10  
 Kilometres



## BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore 30 years post-mining



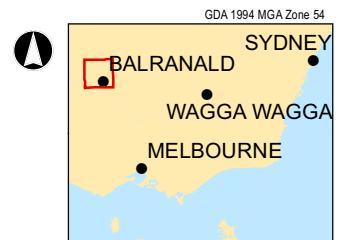




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
Kilometres

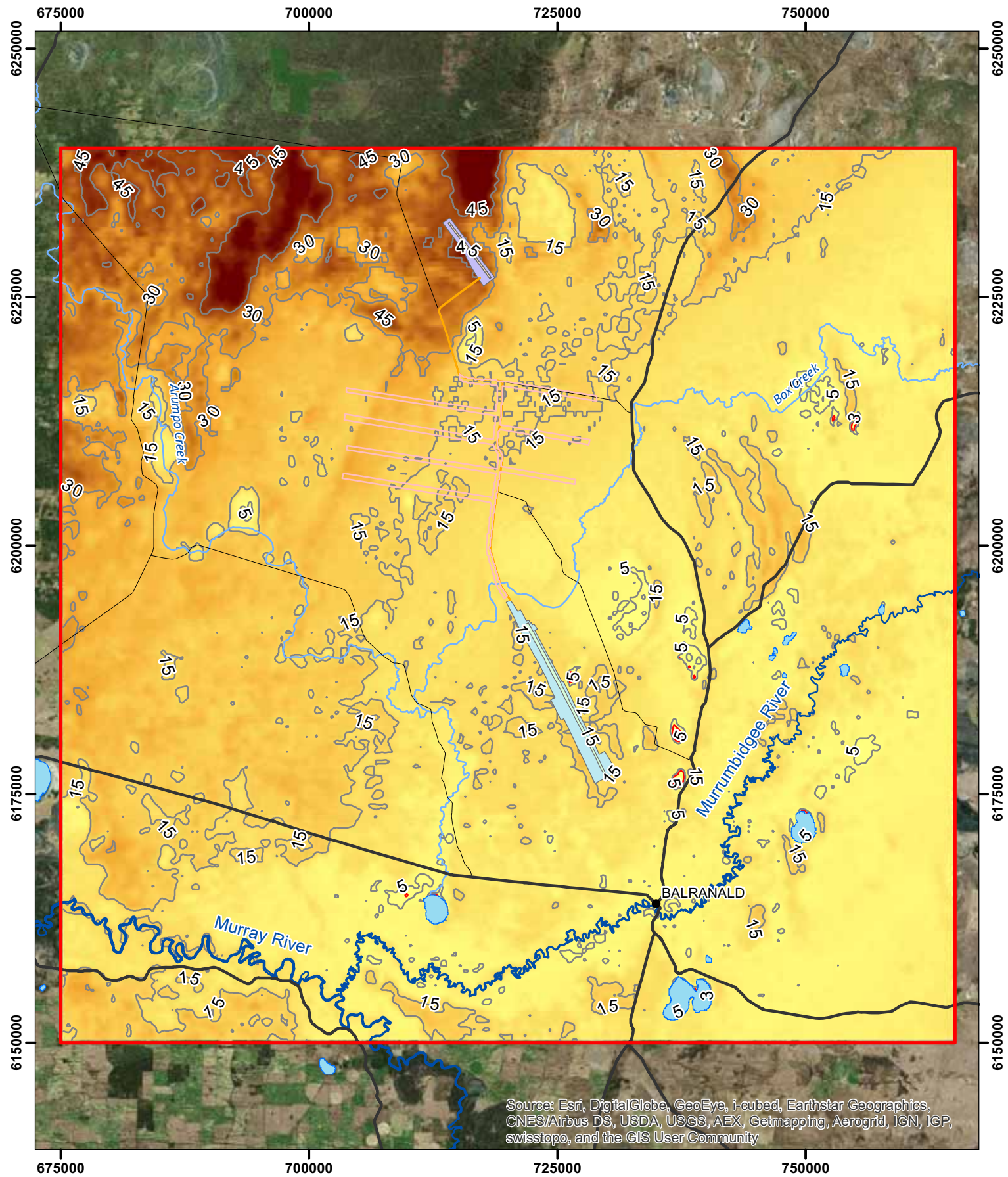


## BAL2.0 TS2 opt29 modelled depth to water in Shepparton Formation 100 years post-mining

**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_21250101\_L1\_DTW.mxd

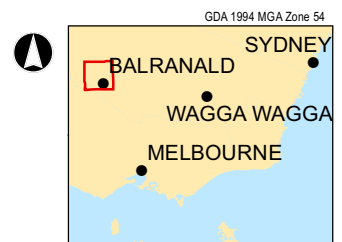




- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- EIS offpath injection area
- 3 m modelled depth to water
- Modelled depth to water (m)

**Modelled depth to water (m)**  
 High : 71.6  
 Low : 0.7

0 10  
 Kilometres



**BAL2.0 TS2 opt29 modelled depth to water in LPS1 foreshore 100 years post-mining**

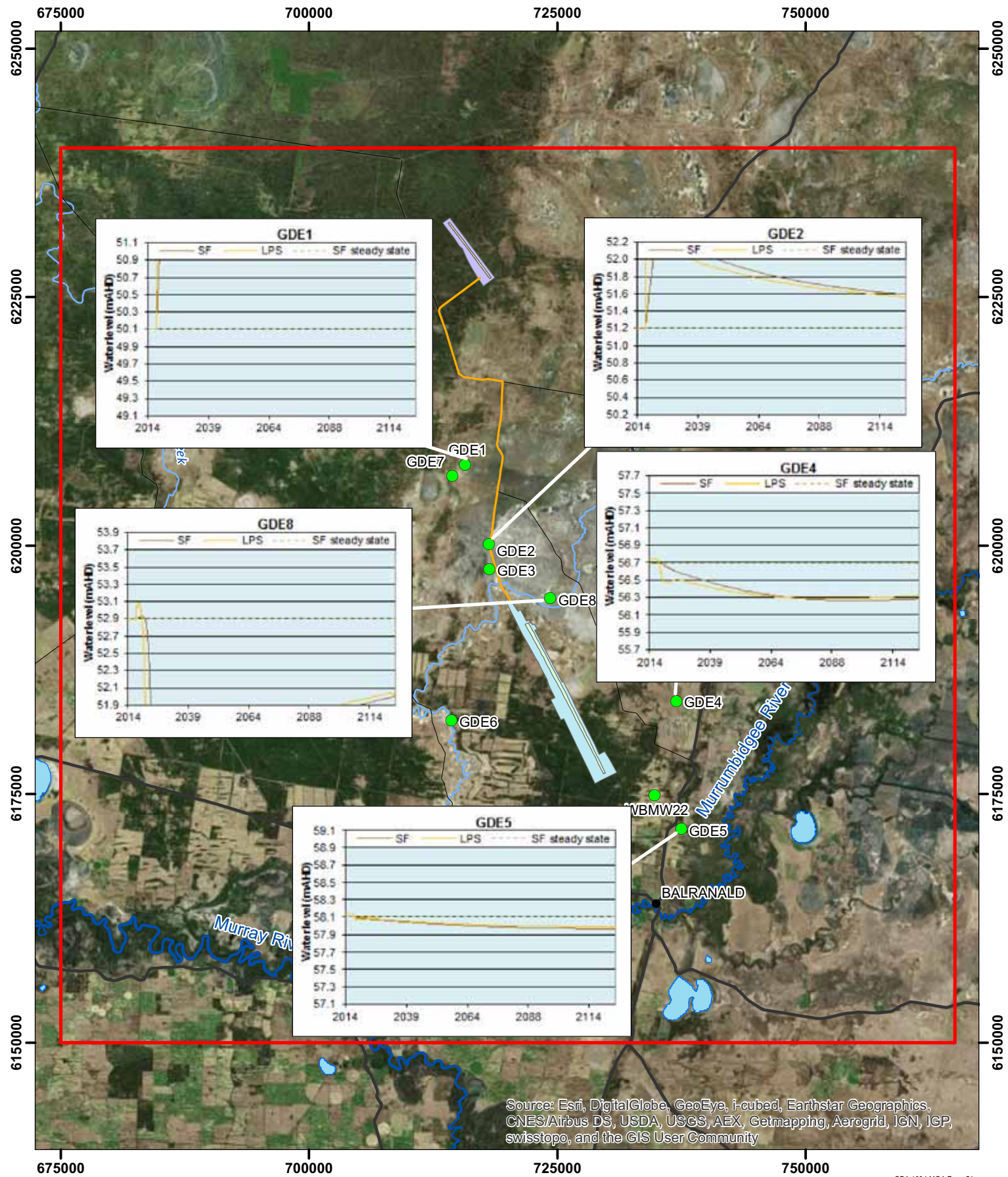
**JACOBS**

\\LIVESA\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt29\Depth to water\Rev2\BAL2.0\_TS2\_opt29\_21250101\_L3\_DTW.mxd



## Appendix F. Predicted hydrographs at potential GDE sites

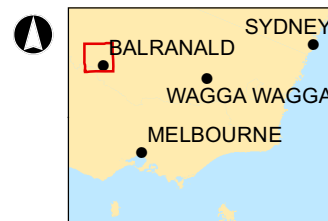




GDA 1994 MGA Zone 54

- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- GDE monitoring locations

0 10  
Kilometres

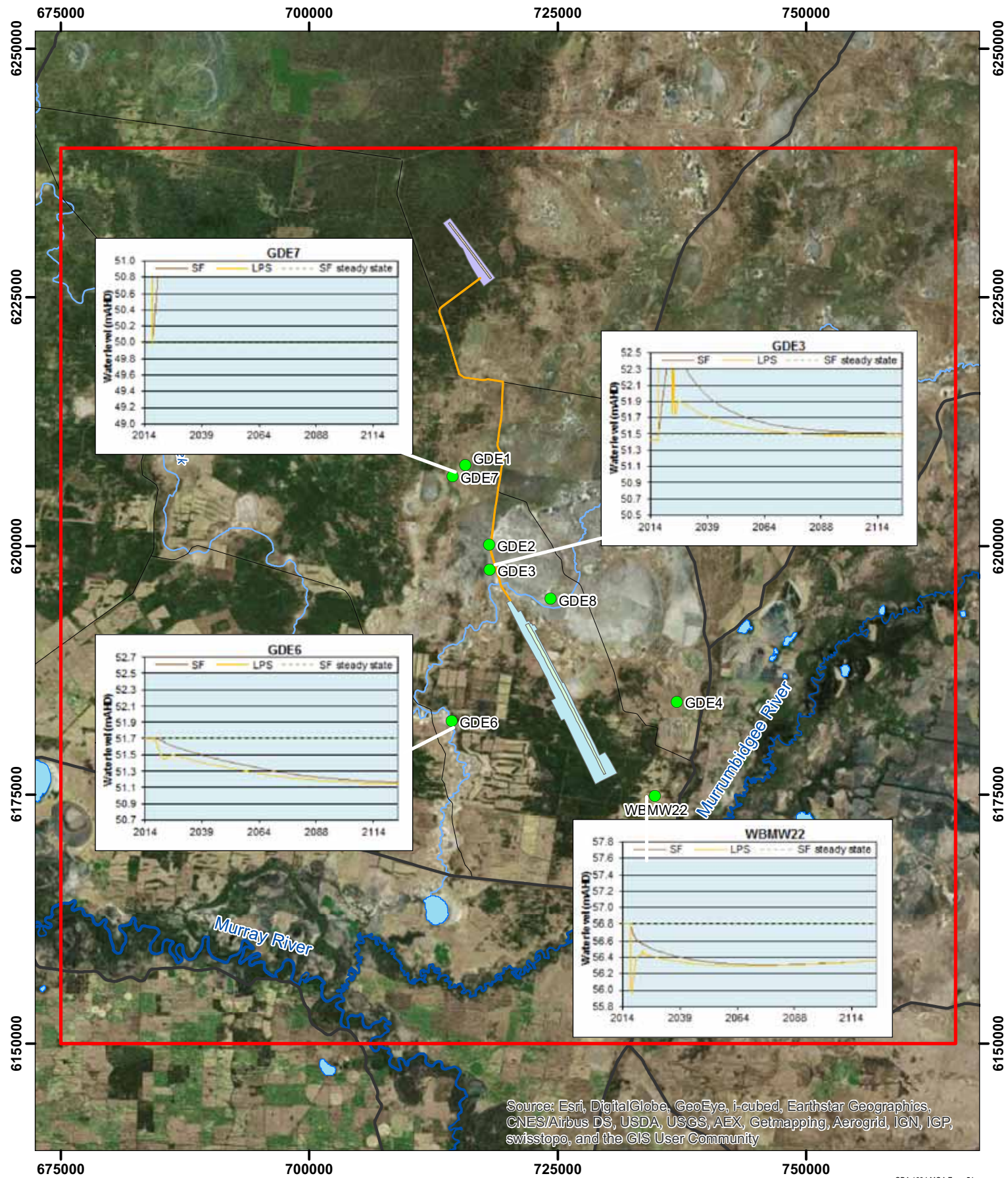


## BAL2.0 TS2 opt29 GDE hydrographs

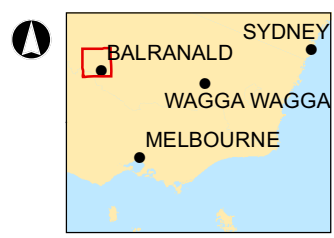
**JACOBS**

I:\VESAI\Projects\VE23875\Technical\Spatial\mxd\BAL2.0\_TS2\_opt28 hydrographs\Rev2\BAL2.0\_TS2\_opt28 hydrographs 2m a.mxd





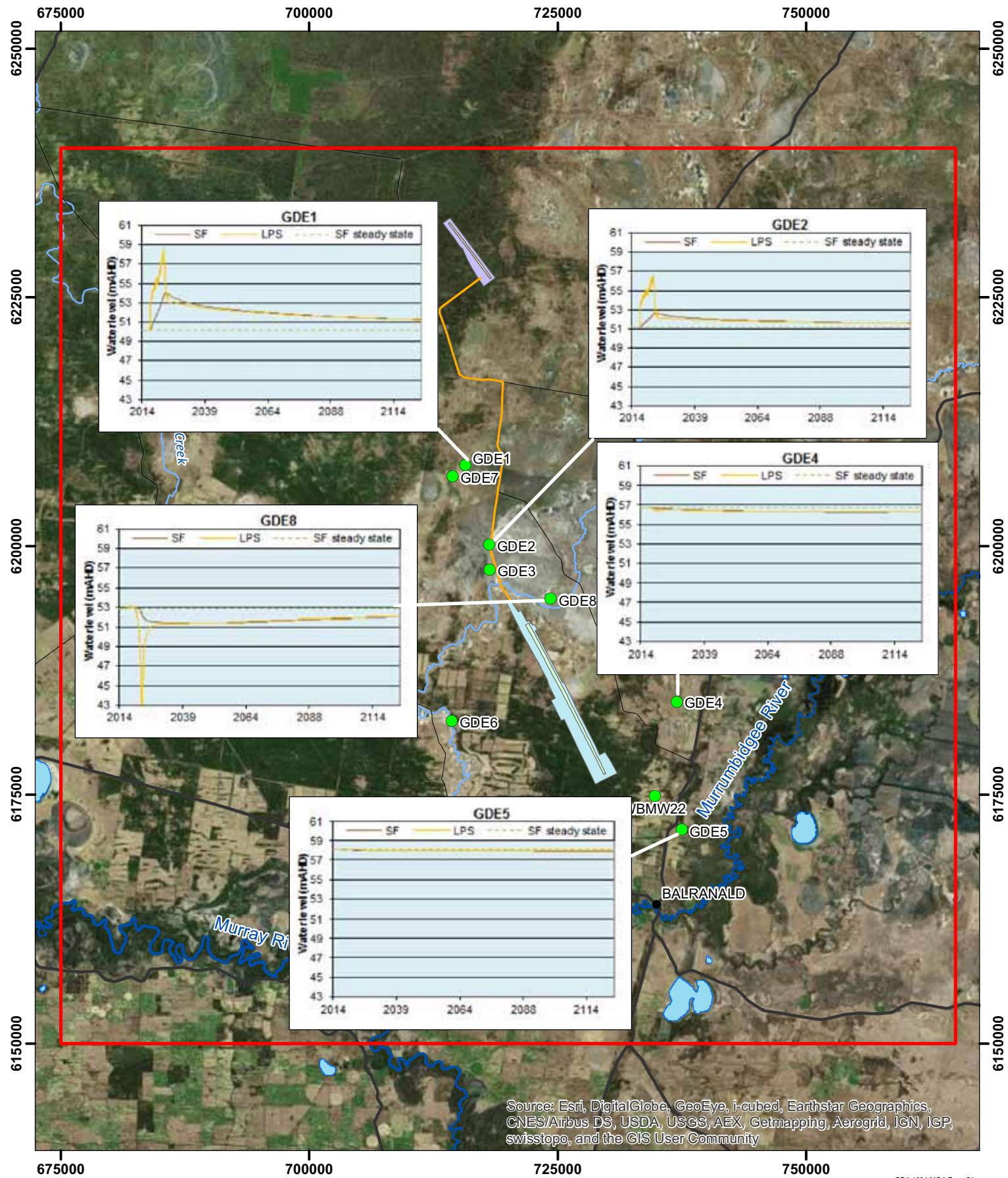
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- GDE monitoring locations



# BAL2.0 TS2 opt29 GDE hydrographs



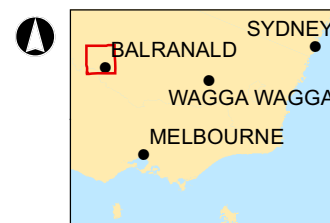




GDA 1994 MGA Zone 54

- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- GDE monitoring locations

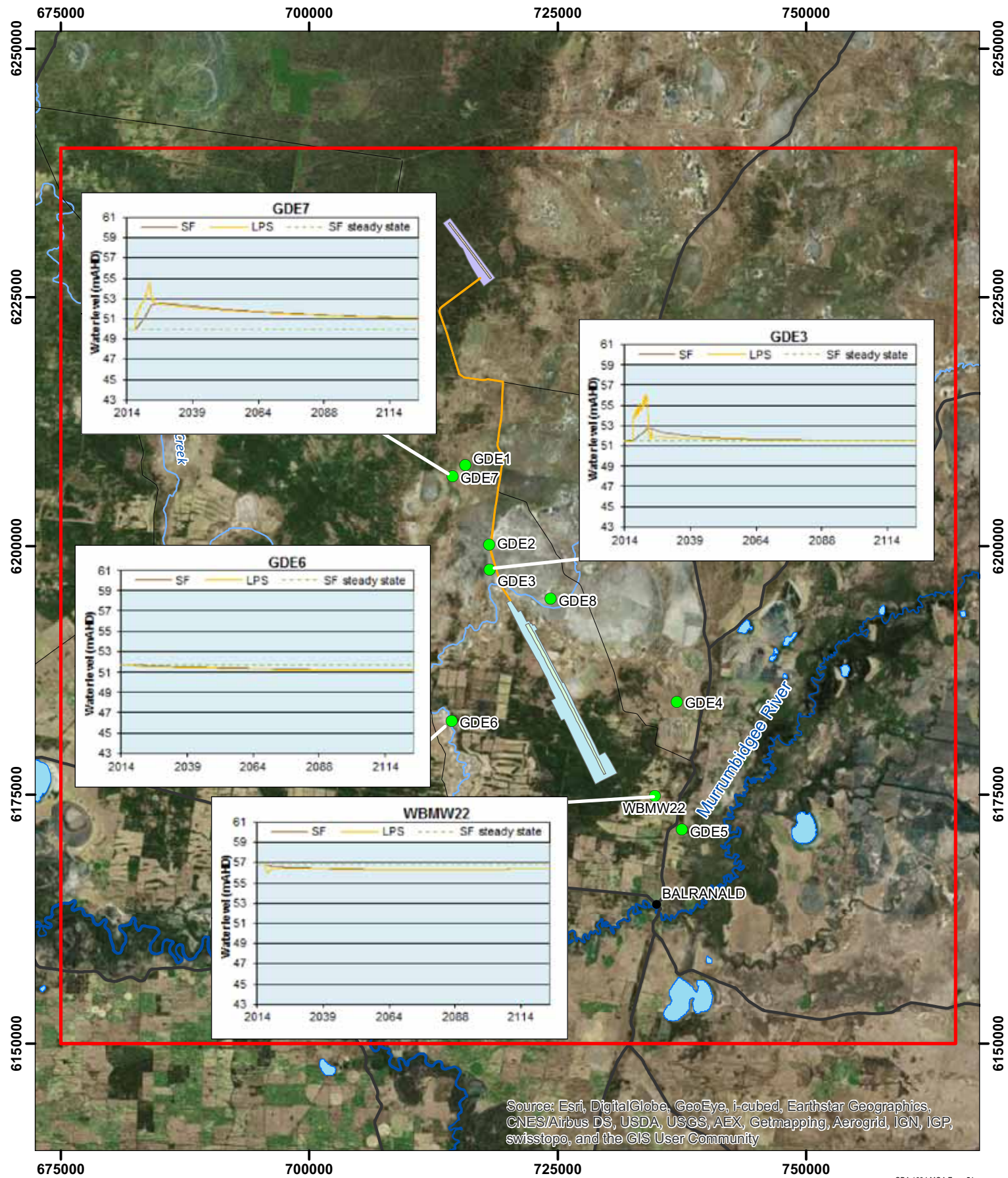
0 10  
Kilometres



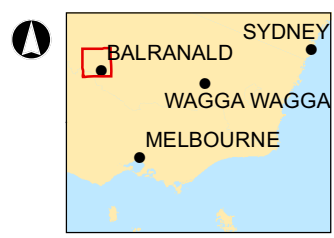
## BAL2.0 TS2 opt29 GDE hydrographs

**JACOBS**





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- BAL2.0 model domain
- GDE monitoring locations



### BAL2.0 TS2 opt29 GDE hydrographs



## Appendix G. Predicted hydrographs at third party wells

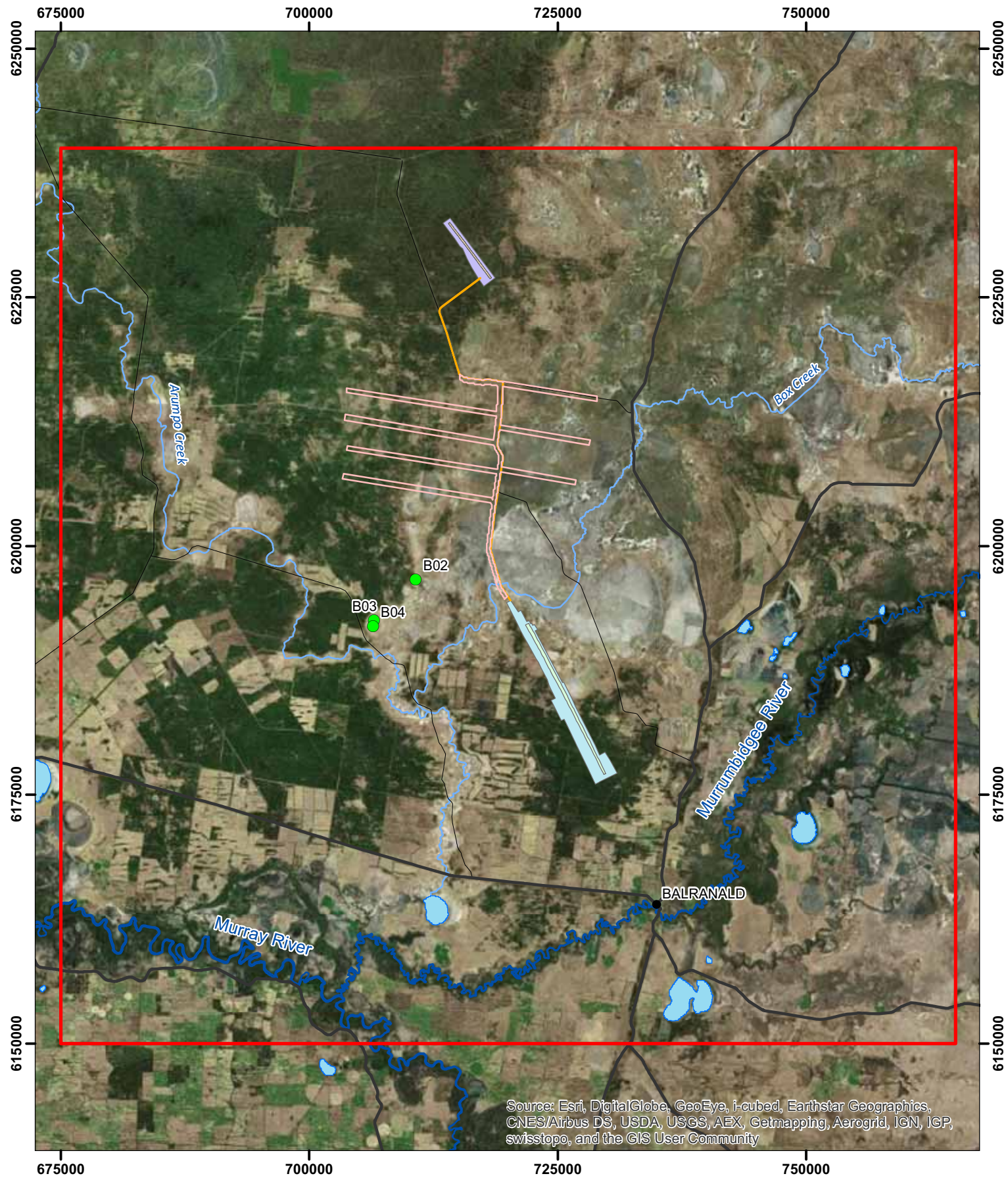


| Well name   | Easting (m) | Northing (m) | Depth (m) | Screened Unit (OW data) | Assumed Unit    |
|-------------|-------------|--------------|-----------|-------------------------|-----------------|
| B02         | 710718      | 6196641      | 15.71     | Shepparton Formation    |                 |
| B03         | 706511      | 6192542      | 8.16      | Shepparton Formation    |                 |
| B04         | 706422      | 6191959      | 6.94      | Shepparton Formation    |                 |
| B01         | 711496      | 6201617      | 182.88    | Olney Formation         |                 |
| GW004017    | 715950      | 6222573      | 224.5     | Olney Formation         |                 |
| GW022733    | 707304      | 6213683      | 202.1     | Olney Formation         |                 |
| GW036673(3) | 711658      | 6189281      | 294       | Olney Formation         |                 |
| GW036866(4) | 734923      | 6203101      | 217       | Olney Formation         |                 |
| GW036866(5) | 734920      | 6203104      | 278       | Olney Formation         |                 |
| GW040247(4) | 720958      | 6166114      | 198       | Olney Formation         |                 |
| GW054583    | 721618      | 6227340      | 264       | Olney Formation         |                 |
| HD1         | 726012      | 6185773      | 241       | Olney Formation         |                 |
| T01         | 722791      | 6201029      | 225       | Olney Formation         |                 |
| T02         | 729721      | 6195973      | 185.9     | Olney Formation         |                 |
| T03         | 732061      | 6189404      | 223       | Olney Formation         |                 |
| W400        | 727813      | 6221696      | 121.92    | Olney Formation         |                 |
| W800        | 720479      | 6226035      | 243.8     | Olney Formation         |                 |
| WB01        | 718657      | 6217757      | 250       | Olney Formation         |                 |
| WB02        | 707311      | 6213680      | 201       | Olney Formation         |                 |
| GW004486    | 678100      | 6187272      | 304.8     |                         | Olney Formation |
| GW005300    | 720650      | 6170207      | 182.9     |                         | Olney Formation |
| GW006428    | 730831      | 6236922      | 243.9     |                         | Olney Formation |
| GW013337    | 733546      | 6234544      | 184.4     |                         | Olney Formation |
| GW014365    | 731875      | 6231348      | 184.7     |                         | Olney Formation |
| GW026610    | 757728      | 6222969      | 181.1     |                         | Olney Formation |
| GW028355    | 743505      | 6226461      | 195.1     |                         | Olney Formation |
| GW029846    | 747636      | 6226446      | 295.1     |                         | Olney Formation |
| GW031767    | 718575      | 6169824      | 204.2     |                         | Olney Formation |
| GW036646    | 683566      | 6209309      | 346.4     |                         | Olney Formation |
| GW036724    | 704919      | 6155404      | 320       |                         | Olney Formation |
| GW036789    | 759805      | 6182257      | 409       |                         | Olney Formation |
| GW056790    | 733226      | 6214389      | 197.5     |                         | Olney Formation |
| GW401846    | 715871      | 6216258      | 227       |                         | Olney Formation |
| GW402887    | 747048      | 6161021      | 407       |                         | Olney Formation |
| GW416471    | 723925      | 6198357      | 180       |                         | Olney Formation |
| GW500288    | 711477      | 6189421      | 260       |                         | Olney Formation |
| GW600489    | 720429      | 6188312      | 239       |                         | Olney Formation |
| GW600496    | 725949      | 6200124      | 287       |                         | Olney Formation |
| GW600520    | 724796      | 6186381      | 264       |                         | Olney Formation |



| Well name | Easting (m) | Northing (m) | Depth (m) | Screened Unit (OW data) | Assumed Unit    |
|-----------|-------------|--------------|-----------|-------------------------|-----------------|
| GW600521  | 717669      | 6187456      | 290       |                         | Olney Formation |
| GW700047  | 748415      | 6231698      | 188       |                         | Olney Formation |
| GW704706  | 749478      | 6217866      | 206       |                         | Olney Formation |
| GW704758  | 764872      | 6221617      | 237       |                         | Olney Formation |





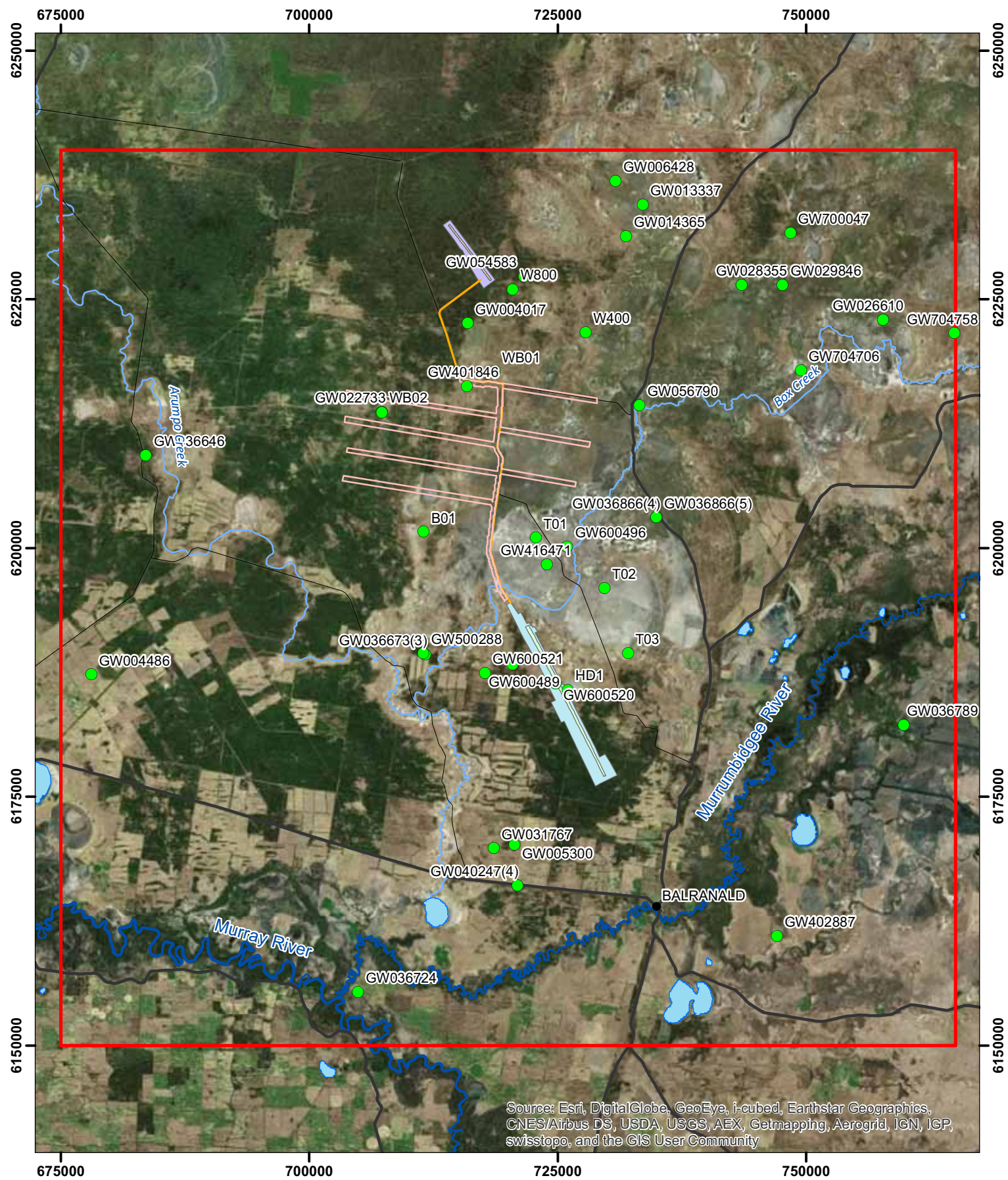
- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Third party wells
- BAL2.0 model domain

GDA 1994 MGA Zone 54



## Shepparton Formation third party wells





- Town
- Major road
- Minor Road
- Lake
- River
- Watercourse
- Haul road
- West Balranald pit limits
- West Balranald disturbance
- Nepean pit limits
- Nepean disturbance
- EIS offpath injection area
- Third party wells
- BAL2.0 model domain



## Olney Formation third party wells



