



THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT
MEMBER FOR FARRER

EPBC Ref: 2018/8322

The Hon Michael McCormack MP
Minister for Infrastructure, Transport
and Regional Development
Parliament House
CANBERRA ACT 2600

12 JUN 2020

Dear Minister

Invitation to comment on proposed approval decision - Snowy 2.0 Main Works, NSW

I am writing to you in relation to Snowy Hydro Limited's proposal to construct and operate the Snowy 2.0 Main Works project. The Main Works project will increase the pumped hydro-electric capacity within the existing Snowy Hydro Scheme and includes the construction of a pipeline between Tantangara and Talbingo reservoirs, an underground power station, and associated infrastructure.

The Main Works project was referred to the Department under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and determined to be a controlled action on 5 December 2018. It was assessed by the NSW Government on behalf of the Commonwealth under an accredited assessment process, for its impacts on:

- National Heritage places (sections 15B & 15C)
- Listed threatened species and communities (sections 18 & 18A)
- Listed migratory species (sections 20 & 20A)
- Commonwealth action (section 28)

I have reviewed the relevant assessment documentation and now propose to approve the proposal under the EPBC Act, subject to conditions. I consider that a number of conditions are necessary to mitigate, manage and offset the impacts of the Main Works on nationally protected matters, including the environment generally as this is a Commonwealth action. I have decided to require the proponent to comply with the relevant NSW conditions of approval, which you can view under 'NSW Infrastructure Approval' at:

<https://www.planningportal.nsw.gov.au/major-projects/project/12891>.

I have added conditions only where I see these as necessary and convenient to protect matters protected under national environmental law, or to ensure enforceability under the EPBC Act. My proposed decision and conditions are attached for your information.

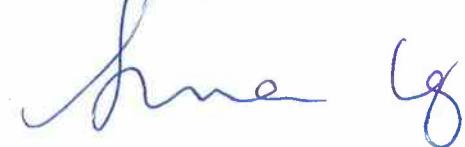
As you have administrative responsibilities relating to the proposal, I invite you to provide comments on my proposed decision within 10 business days of the date of this letter, to enable the Department to progress the proposal in a timely manner. This includes comments on any

matters of economic or social concern that should be considered consistent with the principles of ecologically sustainable development.

I have also written to Snowy Hydro Limited, the Prime Minister, the NSW Government, and other Commonwealth ministers who have administrative responsibilities, inviting their comments.

Please quote the title of the action and EPBC reference as shown at the beginning of this letter in any correspondence. Comments should be addressed to **s22(1)(a)(ii)**, Director, Southern NSW and ACT Assessments Section, and emailed to **s22(1)(a)(ii)** and epbc.nsw@awe.gov.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Suwan Ley".

SUSSAN LEY



THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT
MEMBER FOR FARRER

EPBC Ref: 2018/8322

The Hon Scott Morrison MP
Prime Minister
Parliament House
CANBERRA ACT 2600

12 JUN 2020

Dear Prime Minister

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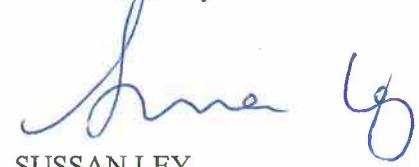
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**THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT
MEMBER FOR FARRER**

EPBC Ref: 2018/8322

The Hon. Rob Stokes MP
NSW Minister for Planning and Public Spaces
GPO Box 5341
SYDNEY NSW 2001

12 JUN 2020

Dear Minister

Invitation to comment on proposed approval decision – Snowy 2.0 Main Works, NSW

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The Main Works project was referred to the Department under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and as you are aware, the NSW Government assessed the project on behalf of the Commonwealth under an accredited assessment process. You approved the project on 20 May 2020 subject to a number of conditions to mitigate, manage and offset the impacts of the Main Works.

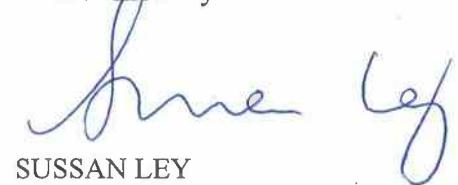
I have considered the state assessment report and your approval conditions and I am now proposing to approve the proposal under the EPBC Act, subject to conditions. I have decided to require the proponent to comply with the relevant NSW conditions of approval. I have added conditions only where I see these as necessary and convenient to protect matters protected under national environmental law, or to ensure enforceability under the EPBC Act. My proposed decision and conditions are attached for your information.

Should you have any further comments on my proposed decision, I invite you to provide comments within 10 business days of the date of this letter, to enable the Department to progress the proposal in a timely manner.

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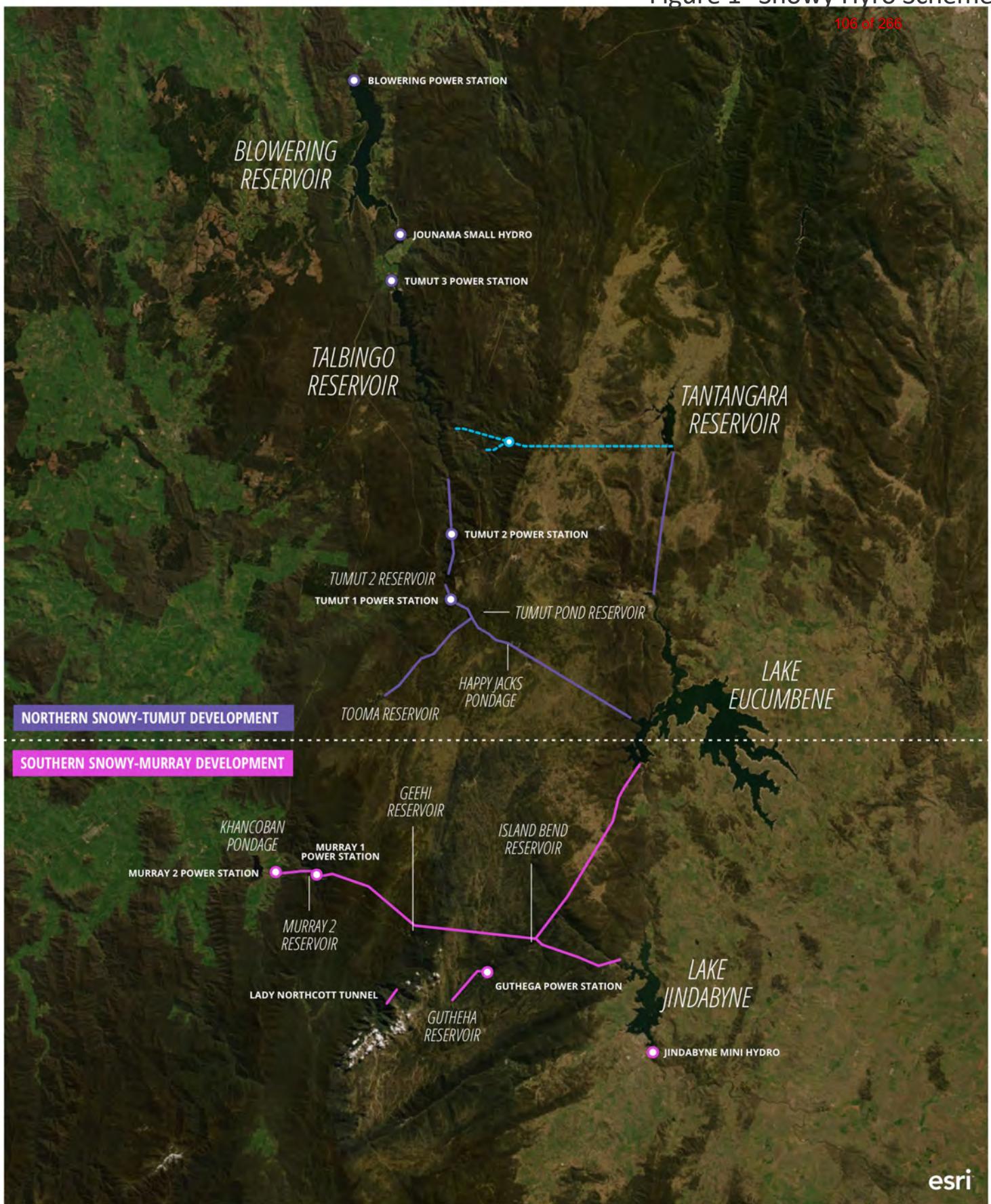
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SUSSAN LEY



Satellite image © Esri, CGIAR | Vicmap, Esri, HERE, Garmin, METI/NASA, USGS | Earthstar Geographics

Figure 1.6 Existing Snowy Mountains Scheme

LOCATIONS ARE APPROXIMATE ONLY

- Power Station in Snowy-Tumut development
- Tunnel in Snowy-Tumut development
- Power Station in Snowy-Murray development
- Tunnel in Snowy-Murray development
- Proposed Power Station in Snowy 2.0
- Proposed tunnel for Snowy 2.0

Figure 2 -Regional Map
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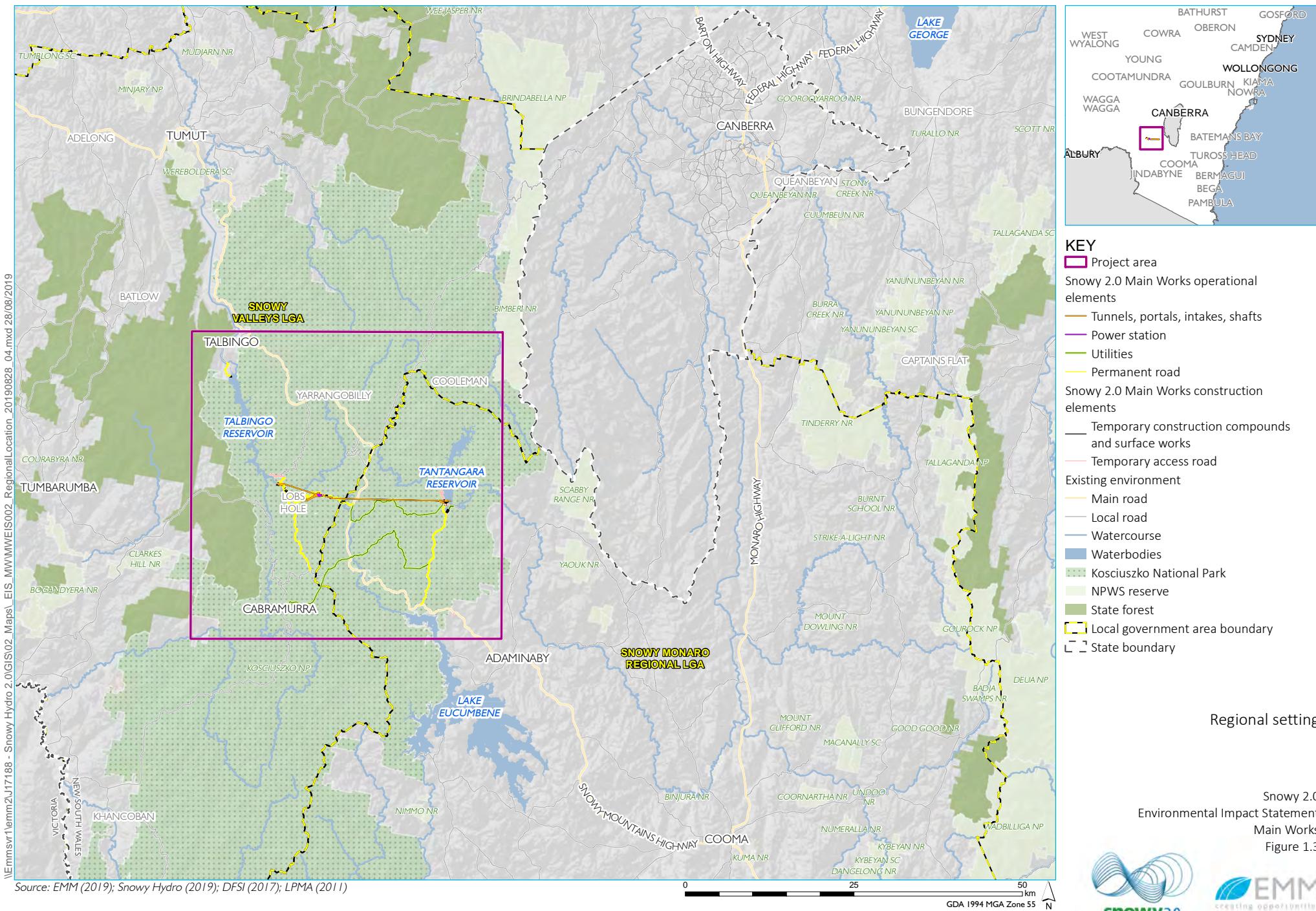


Figure 3 - Map of Main Works

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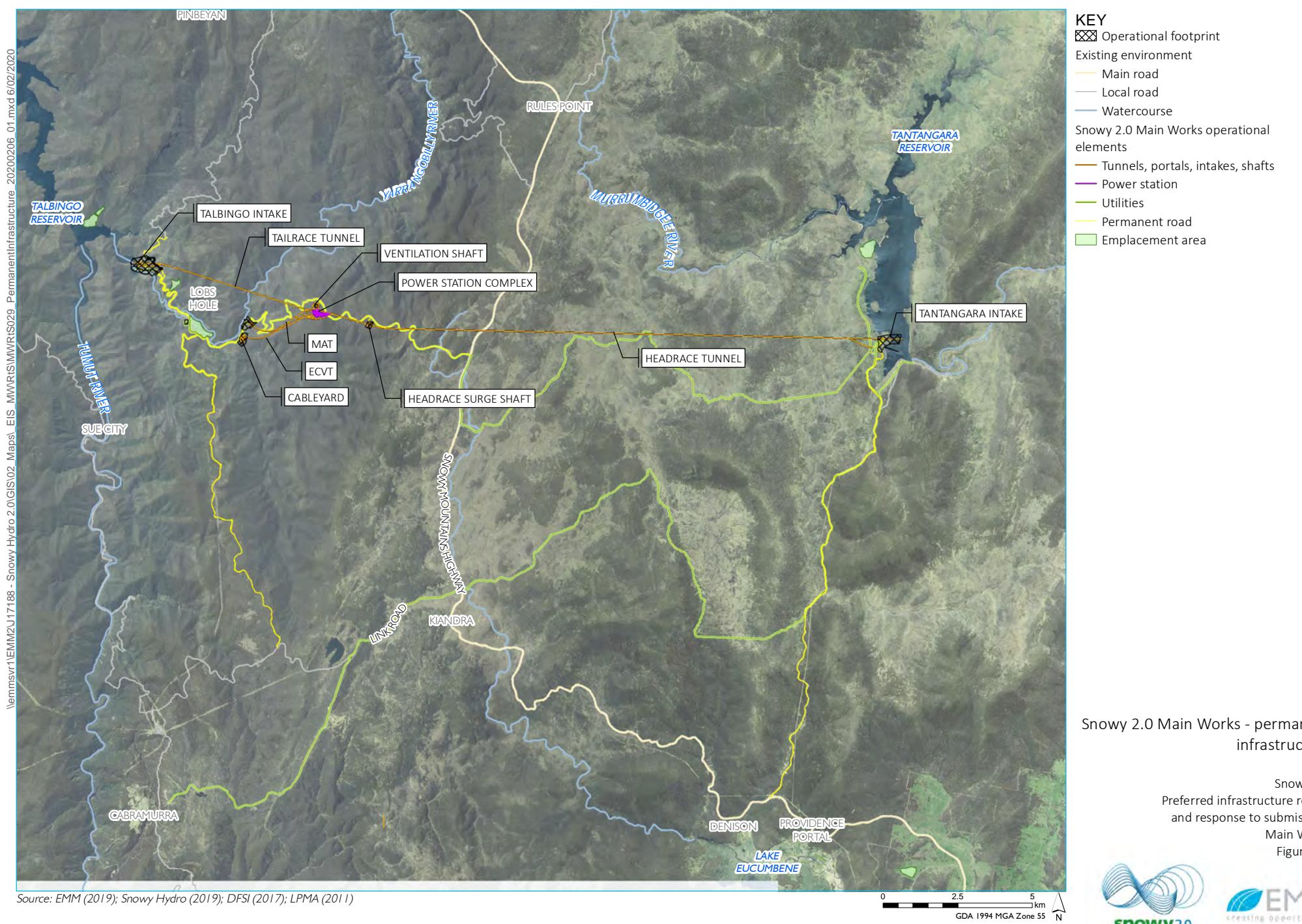


Figure 4 -Location of construction works
109 of 266

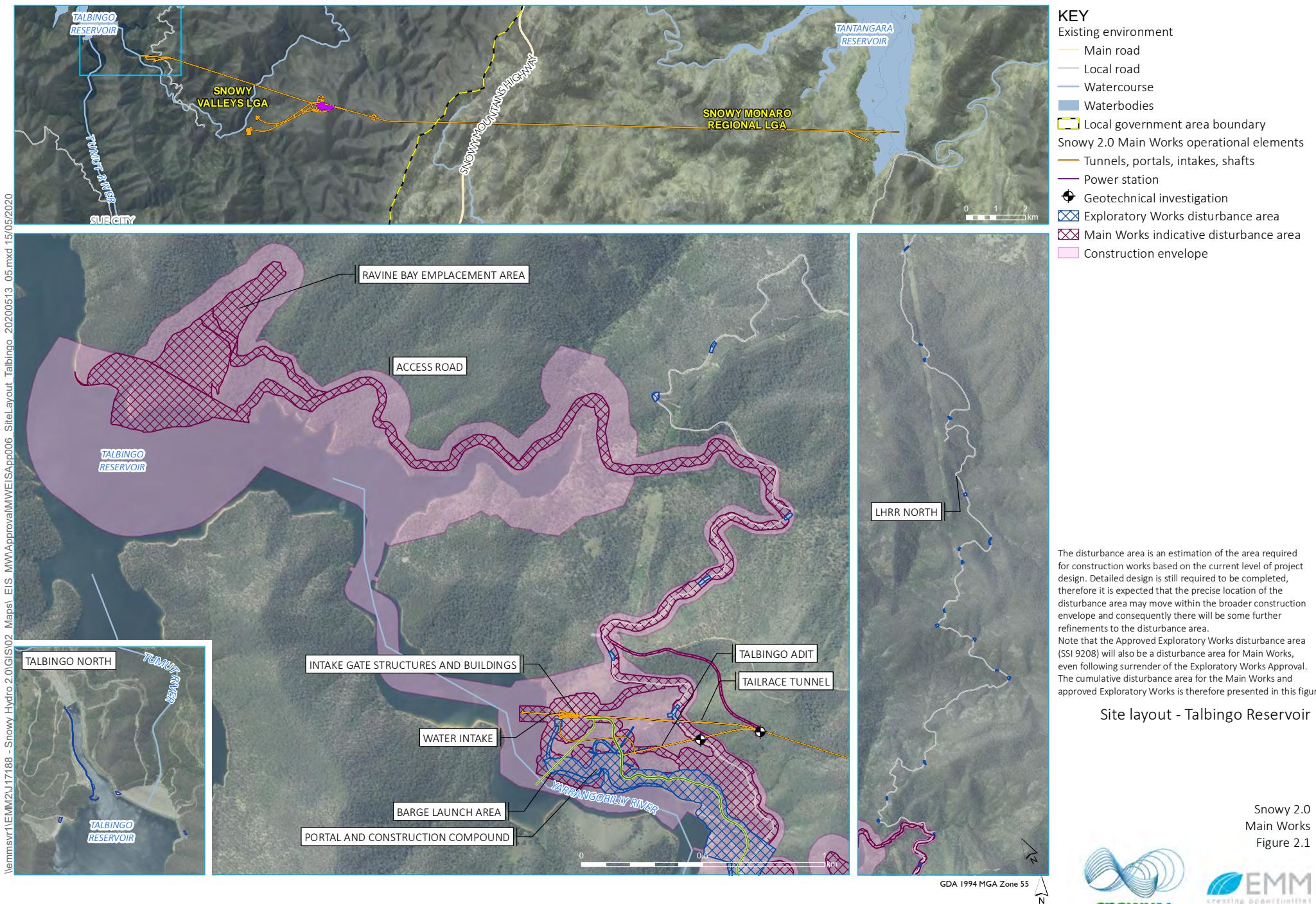


Figure 5 - Location of construction works

110 of 200

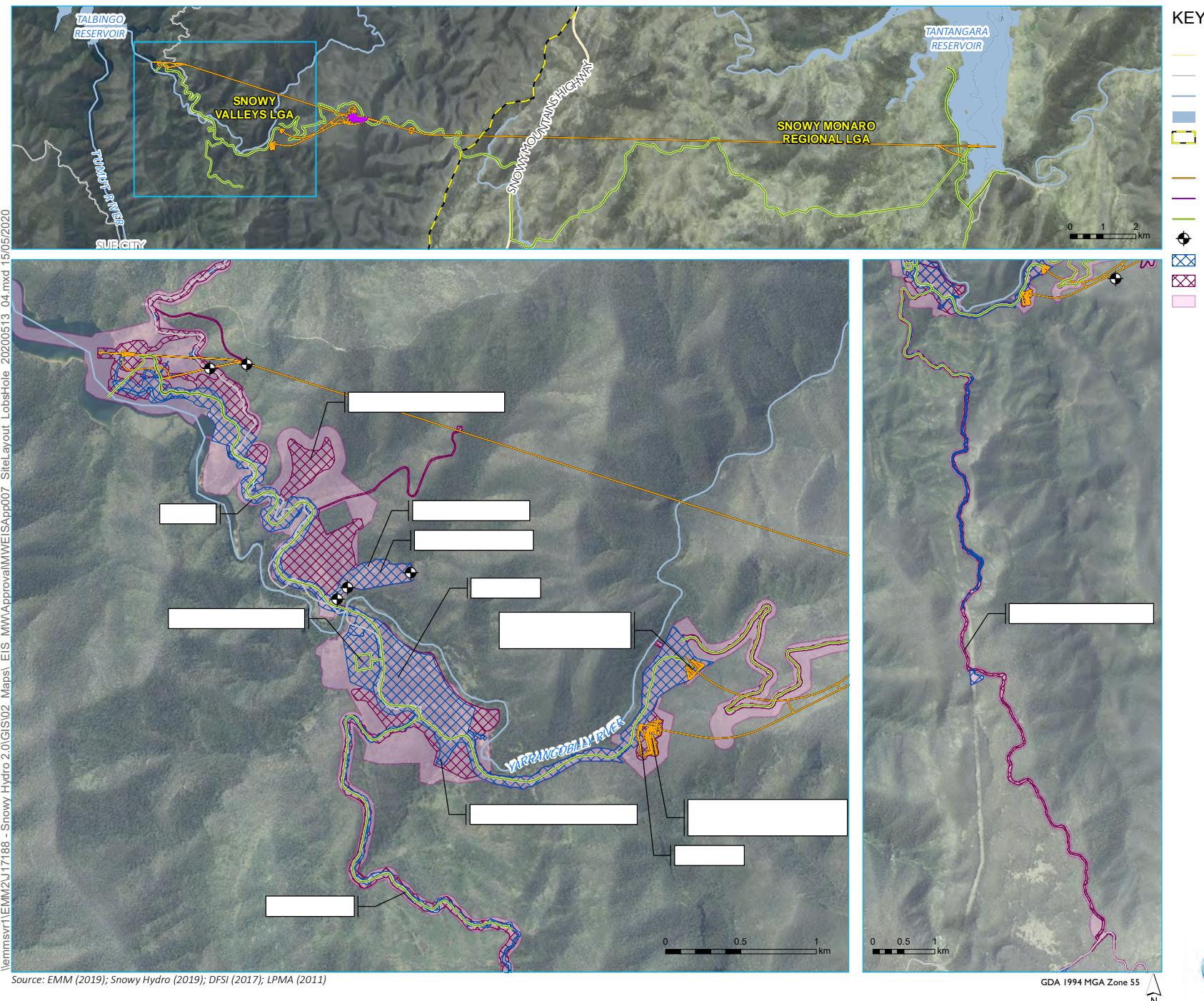


Figure 6 - Location of construction works
111 of 266

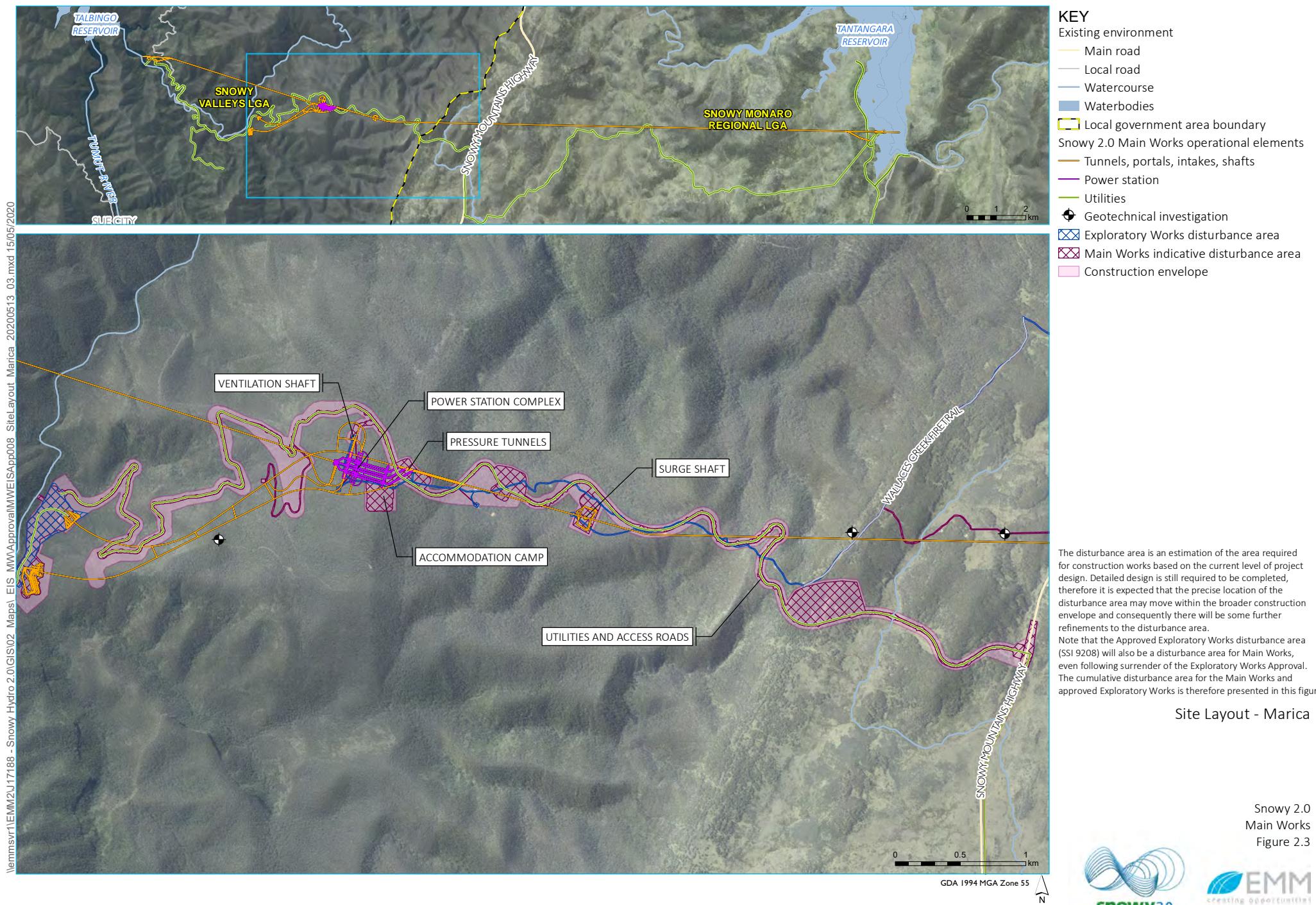


Figure 7 - Location of construction works
112 of 266

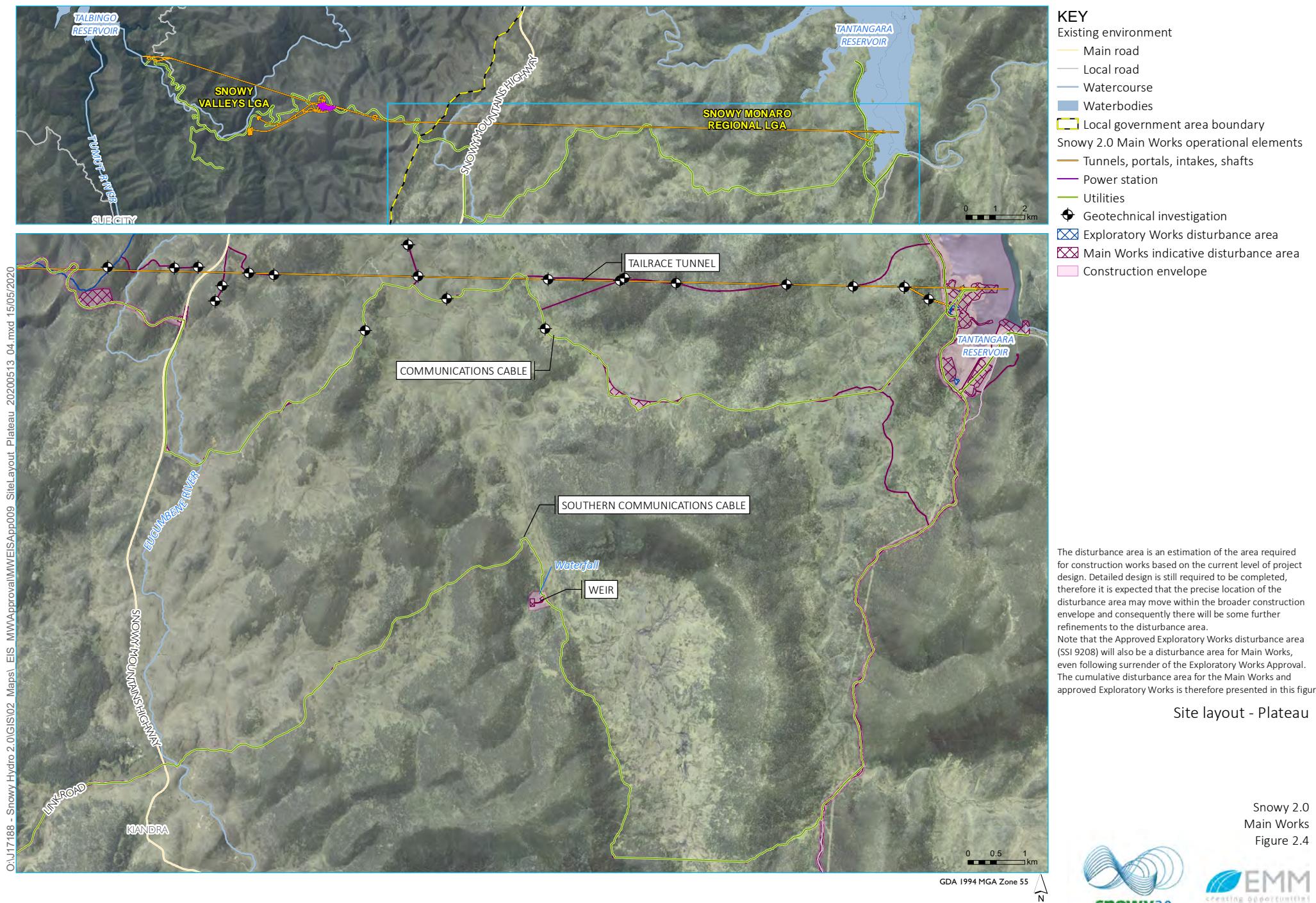


Figure 8 - Location of construction works
113 of 266

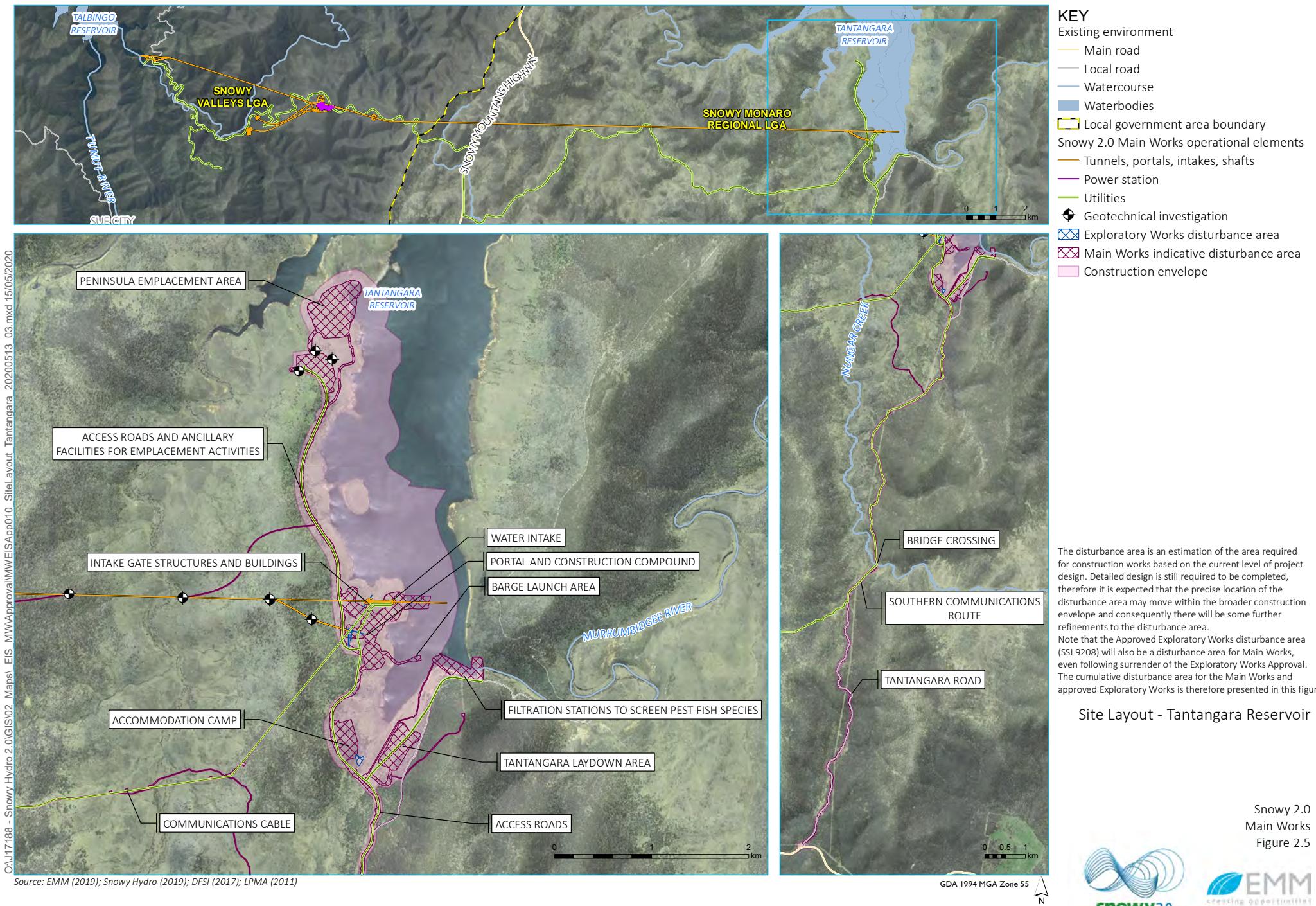


Figure 9 - Location of construction works
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\emmsvr1\EMM2J17188 - Snowy Hydro 2.0\GIS02 Maps\ EIS MWApproval\MEISApp011 SiteLayout RockForest 20200513_02.mxd 15/05/2020



- KEY**
- Existing environment
 - Main road
 - Local road
 - Watercourse
 - Snowy 2.0 Main Works operational elements
 - Tunnels, portals, intakes, shafts
 - Utilities
 - Geotechnical investigation
 - Exploratory Works disturbance area
 - Main Works indicative disturbance area
 - Construction envelope

The disturbance area is an estimation of the area required for construction works based on the current level of project design. Detailed design is still required to be completed, therefore it is expected that the precise location of the disturbance area may move within the broader construction envelope and consequently there will be some further refinements to the disturbance area.
Note that the Approved Exploratory Works disturbance area (SSI 9208) will also be a disturbance area for Main Works, even following surrender of the Exploratory Works Approval. The cumulative disturbance area for the Main Works and approved Exploratory Works is therefore presented in this figure.

Site layout - Rock Forest

Snowy 2.0
Main Works
Figure 2.6



Figure 10 - emplacement areas
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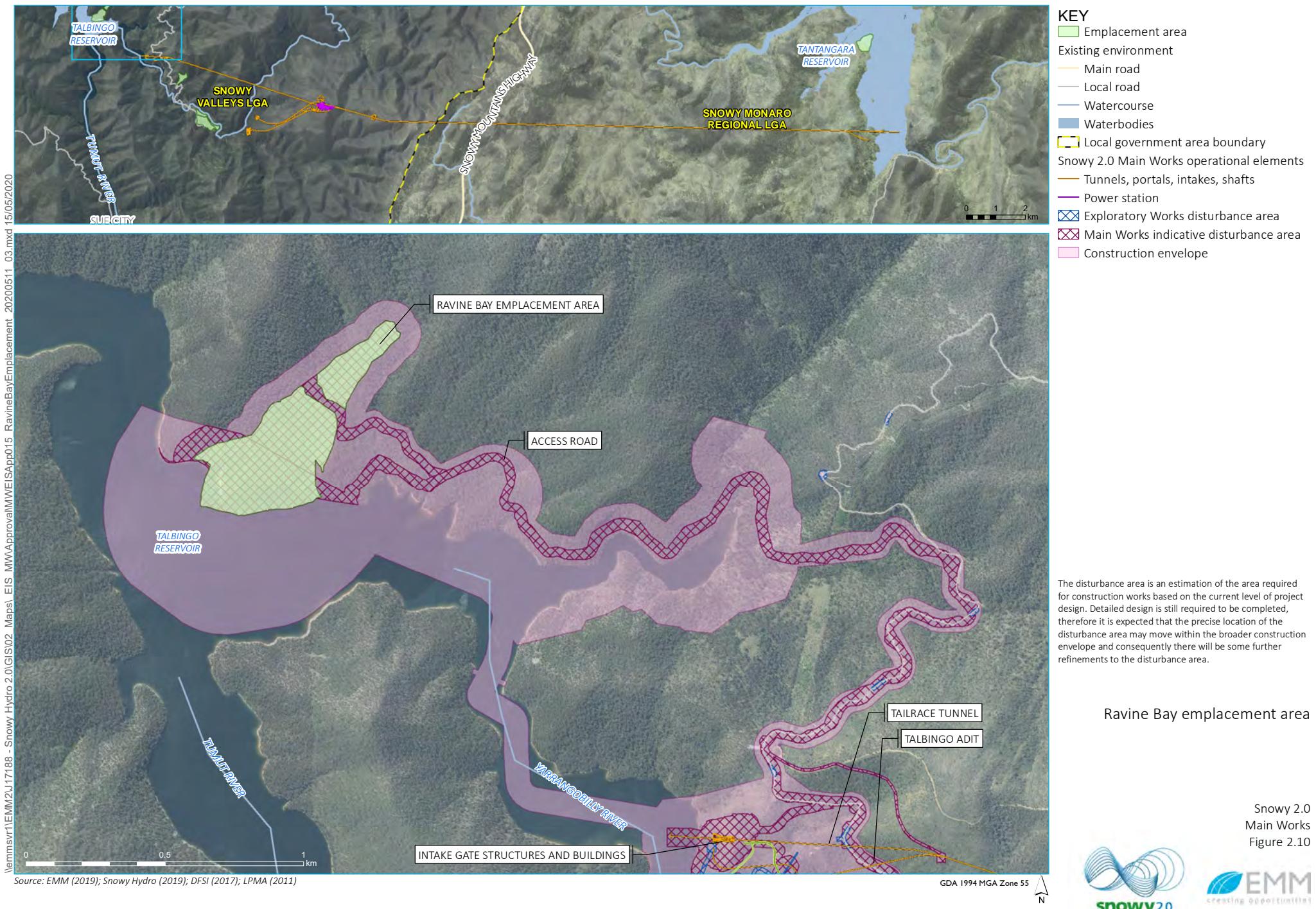


Figure 11 - emplacement areas
116 of 266

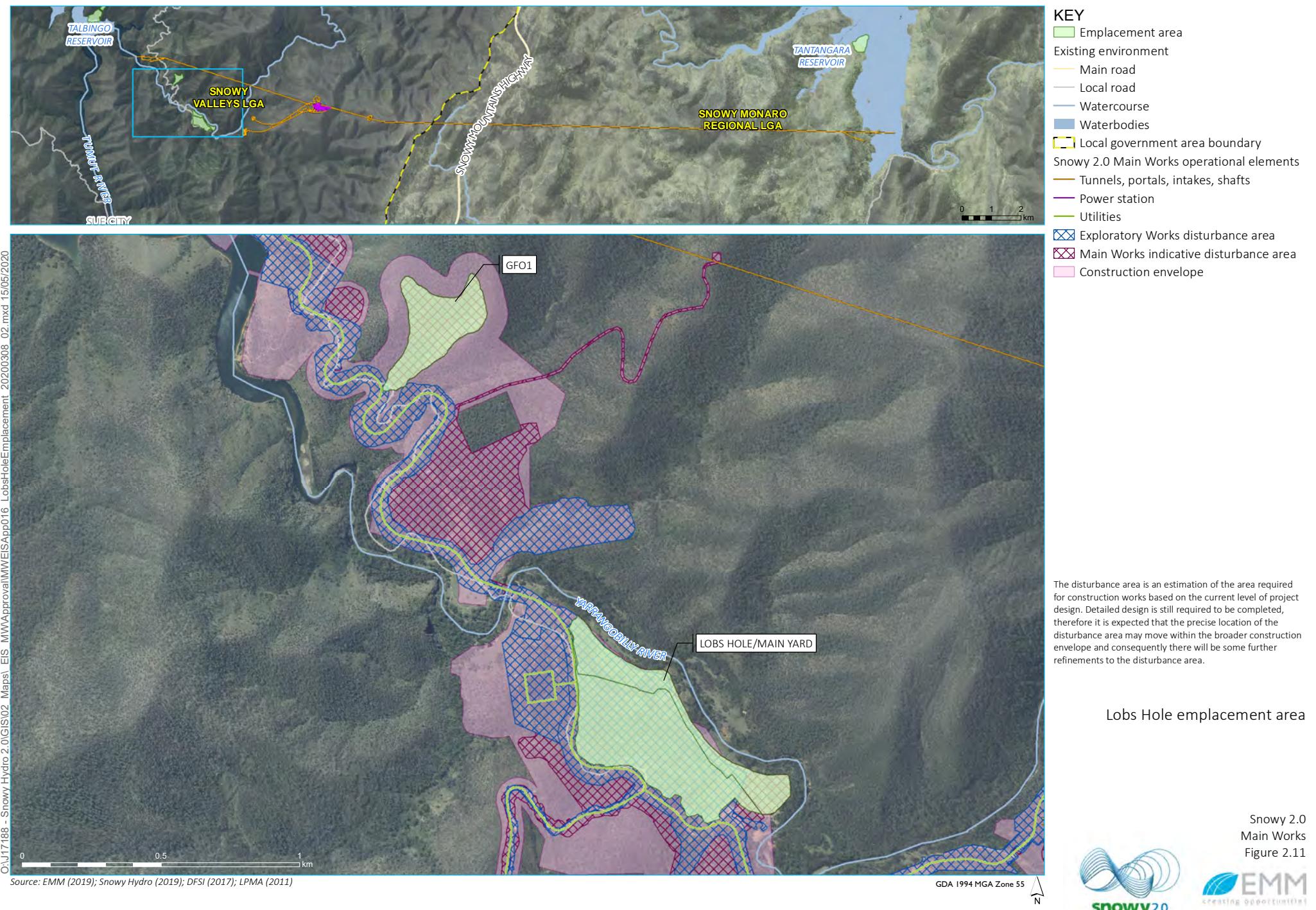


Figure 12 - emplacement areas
117 of 266

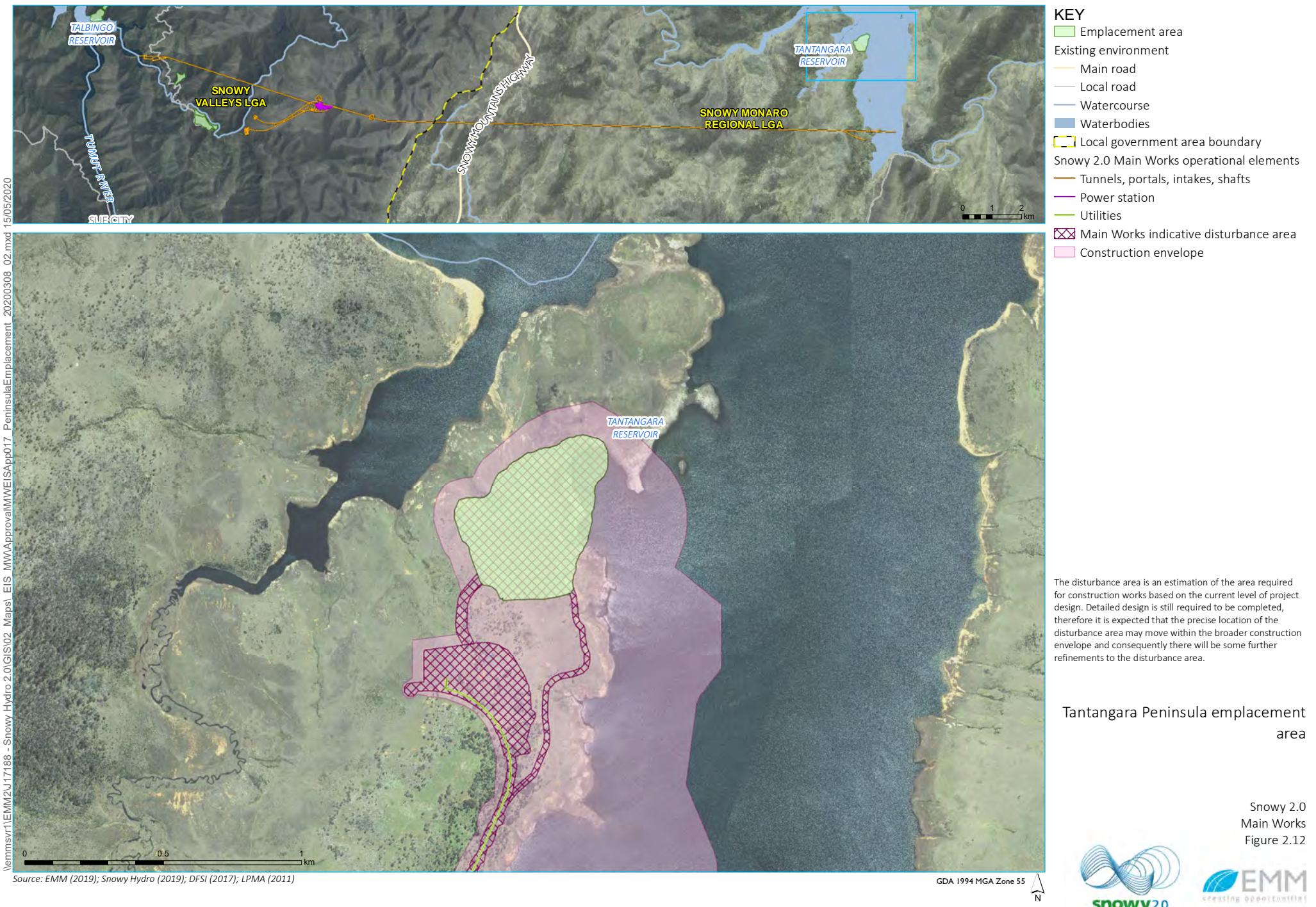


Figure 13 - emplacement areas
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KEY
Emplacement area
Existing environment
Main road
Local road
Watercourse
Snowy 2.0 Main Works operational elements
Tunnels, portals, intakes, shafts
Utilities
Exploratory Works disturbance area
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Construction envelope

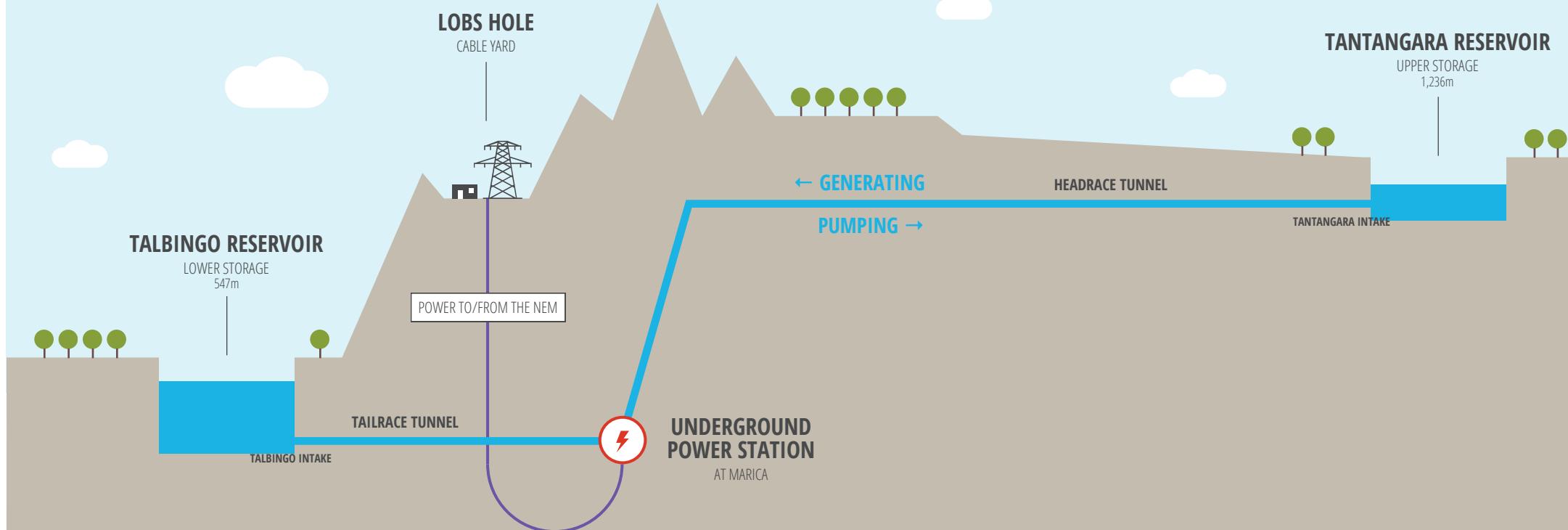
The disturbance area is the extent of construction works required to build Snowy 2.0. The disturbance area is an estimation of the area required for construction works based on the current level of project design. Detailed design is still required to be completed, therefore it is expected that there will be some minor amendments to the disturbance area.

Rock Forest emplacement area

Snowy 2.0
Main Works
Figure 2.13



Figure 14 - Schematic of generation/
118 of 266 pumping mode



Operation of Snowy 2.0 will involve the transfer of water through a series of newly established power waterway tunnels and the underground power station to provide for energy generation, as well as large scale energy storage that will be available as quick-start electricity generation at critical times of peak demand.

IN GENERATING MODE:

- The intake structure at Tantangara Reservoir allows water to flow into the headrace tunnel
- Water falls via gravity into the surge tank (the surge tank valves/gate are opened)
- Water flows through pressure tunnels and to the turbines in the machine hall, spinning the turbines and generators to create electricity
- Transformers located in the transformer hall of the underground power station convert the electricity to a higher-voltage current, and is then transmitted via cables to supply the NEM
- Water continues through the tailrace tunnel and is released into Talbingo Reservoir via the Talbingo gate shaft and intake structure

IN PUMPING MODE:

- Energy is sourced from the NEM which is transmitted into the Power station via the same electrical infrastructure used in generating mode
- The turbines in the machine hall, spinning in the reverse direction (as pumps), push the water up the inclined tunnel and through the headrace tunnel to Tantangara Reservoir where it can be stored and used again for energy generation when needed
- Water from Talbingo Reservoir is drawn through the Talbingo intake and the tailrace tunnel toward the turbines

Figure 15 - fire severity mapping
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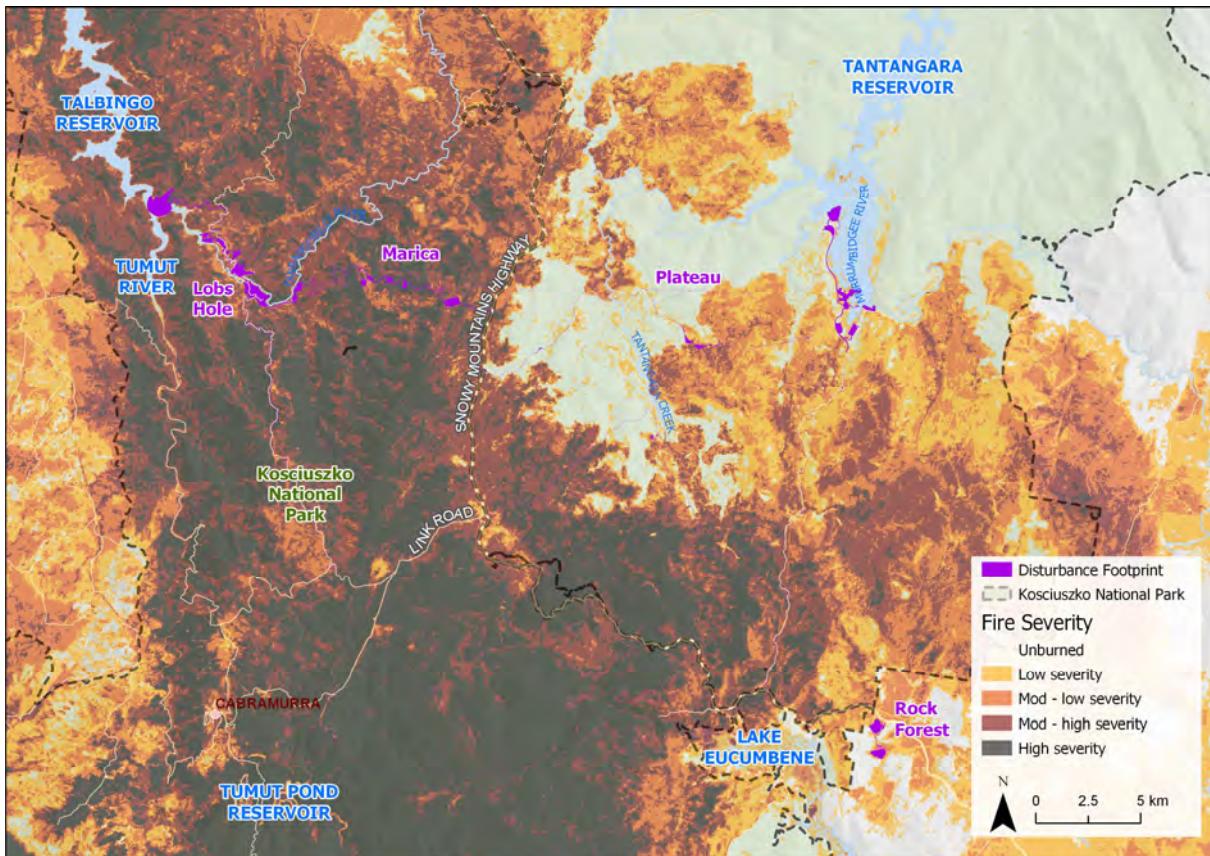


Figure 18 | January 2020 fire severity mapping

Table 9 | Vegetation clearing with credit liability

Figure 16 - survey locations

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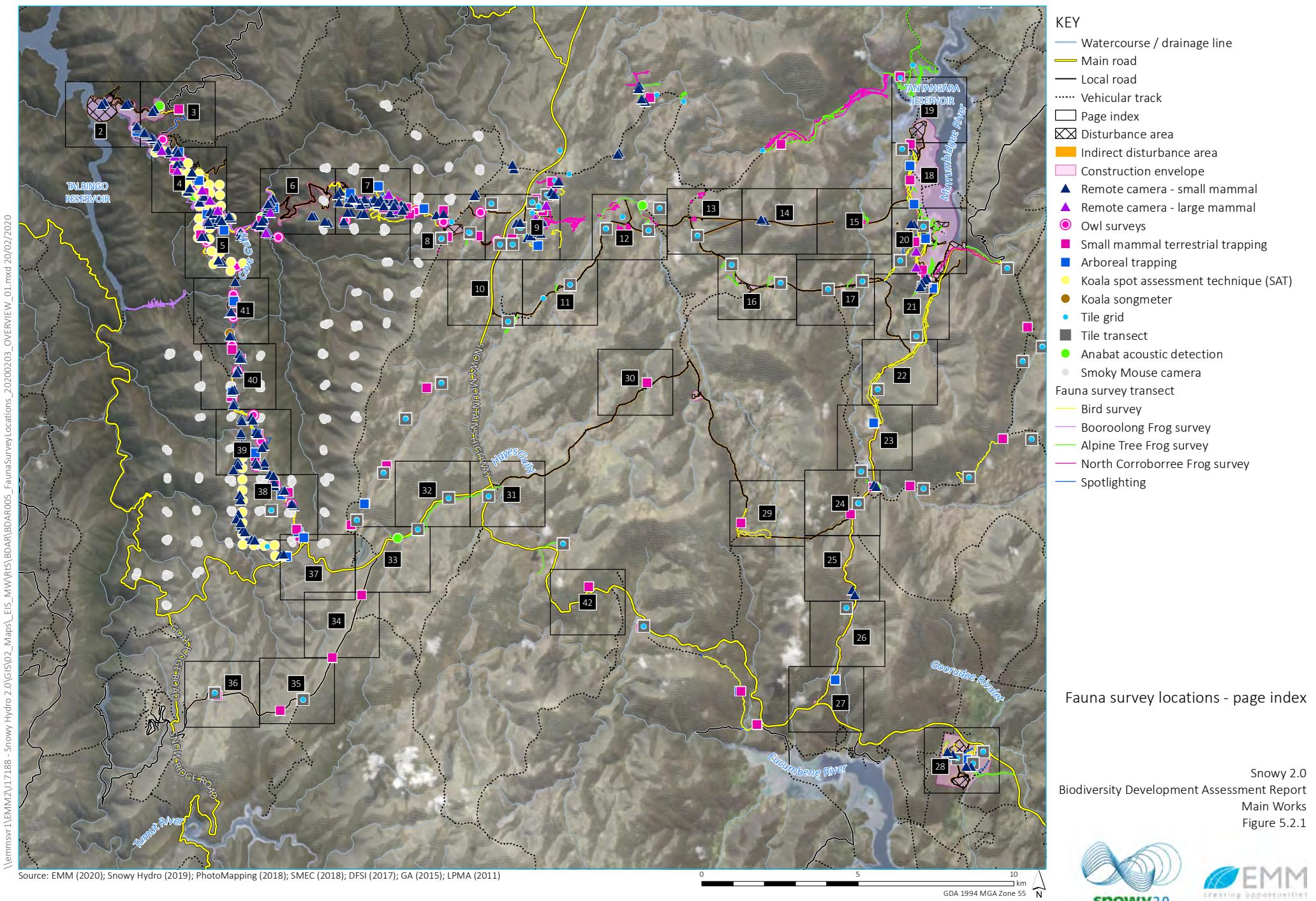
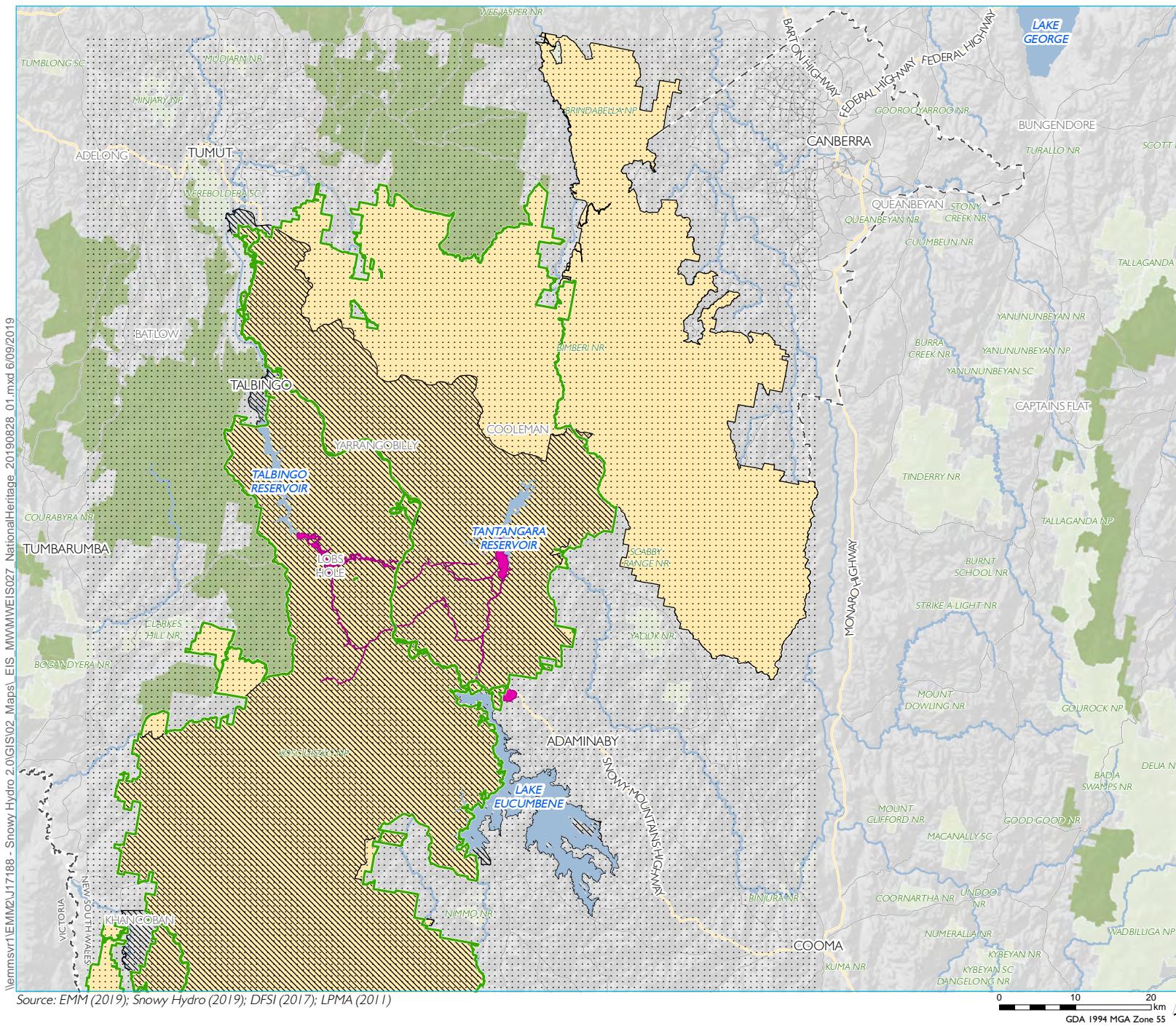


Figure 17 - National Heritage boundaries

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KEY

- Kosciuszko National Park boundary
- Disturbance area*
- EPBC Act matters of national environmental significance: National Heritage List
- Place ID: 105891 - Australian Alps National Parks and Reserves
- Place ID: 105919 - Snowy Mountains Scheme
- Existing environment
 - Main road
 - Local road
 - Watercourse
 - Waterbodies
 - NPWS reserve
 - State forest
- State boundary

Note: the disturbance area is the extent of construction works required to build Snowy 2.0. It has been identified to allow an assessment of impacts for the EIS, and represents a defined maximum extent where construction works will be carried out. The area will be minimised as much as possible during detailed design.

National heritage listing boundaries
(AANP and Snowy Mountains Scheme) and KNP boundary

Snowy 2.0
Environmental Impact Statement
Main Works
Figure 6.19



Figure 18 - small mammal survey results

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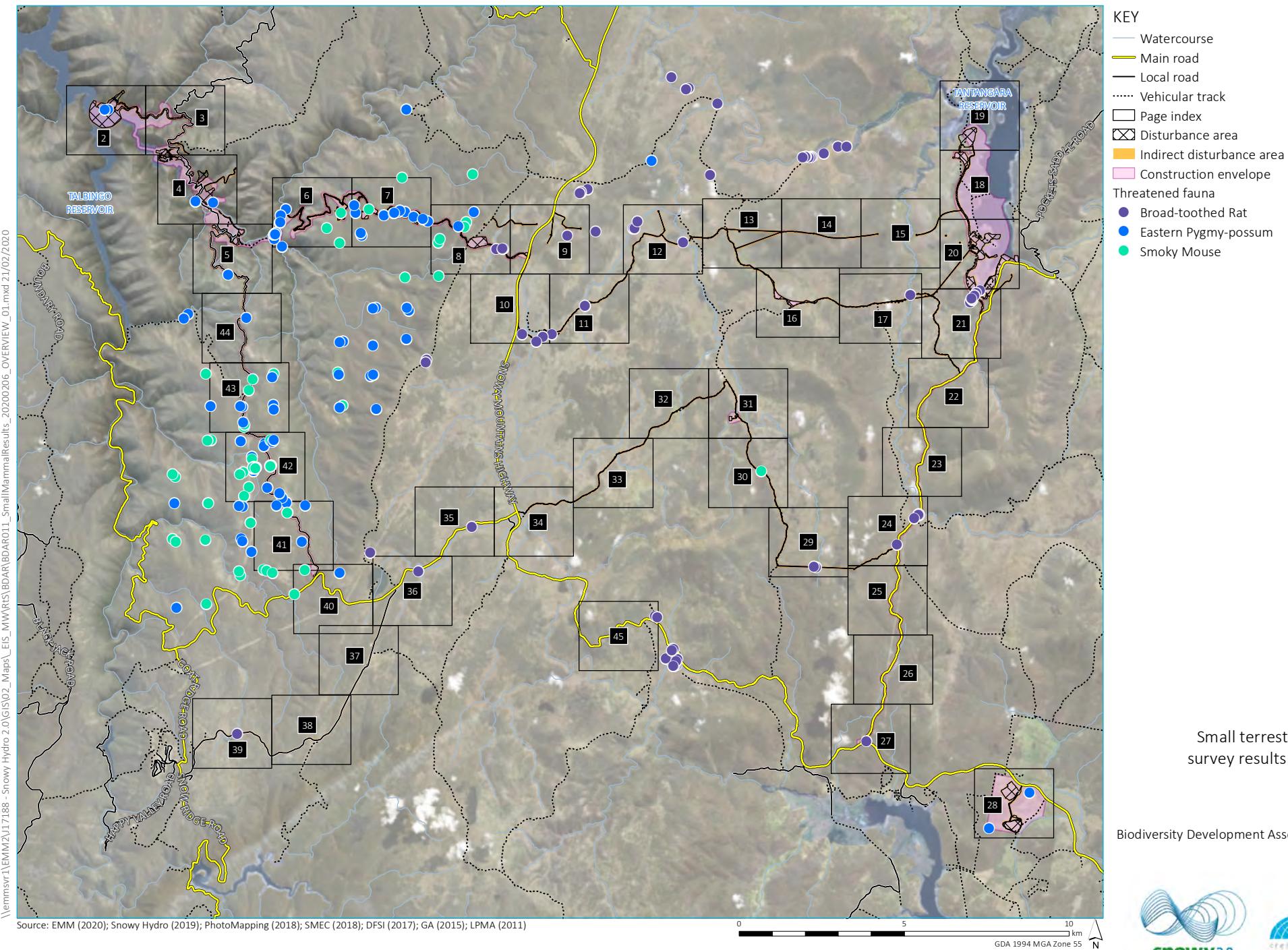


Figure 19 - amphibian survey results
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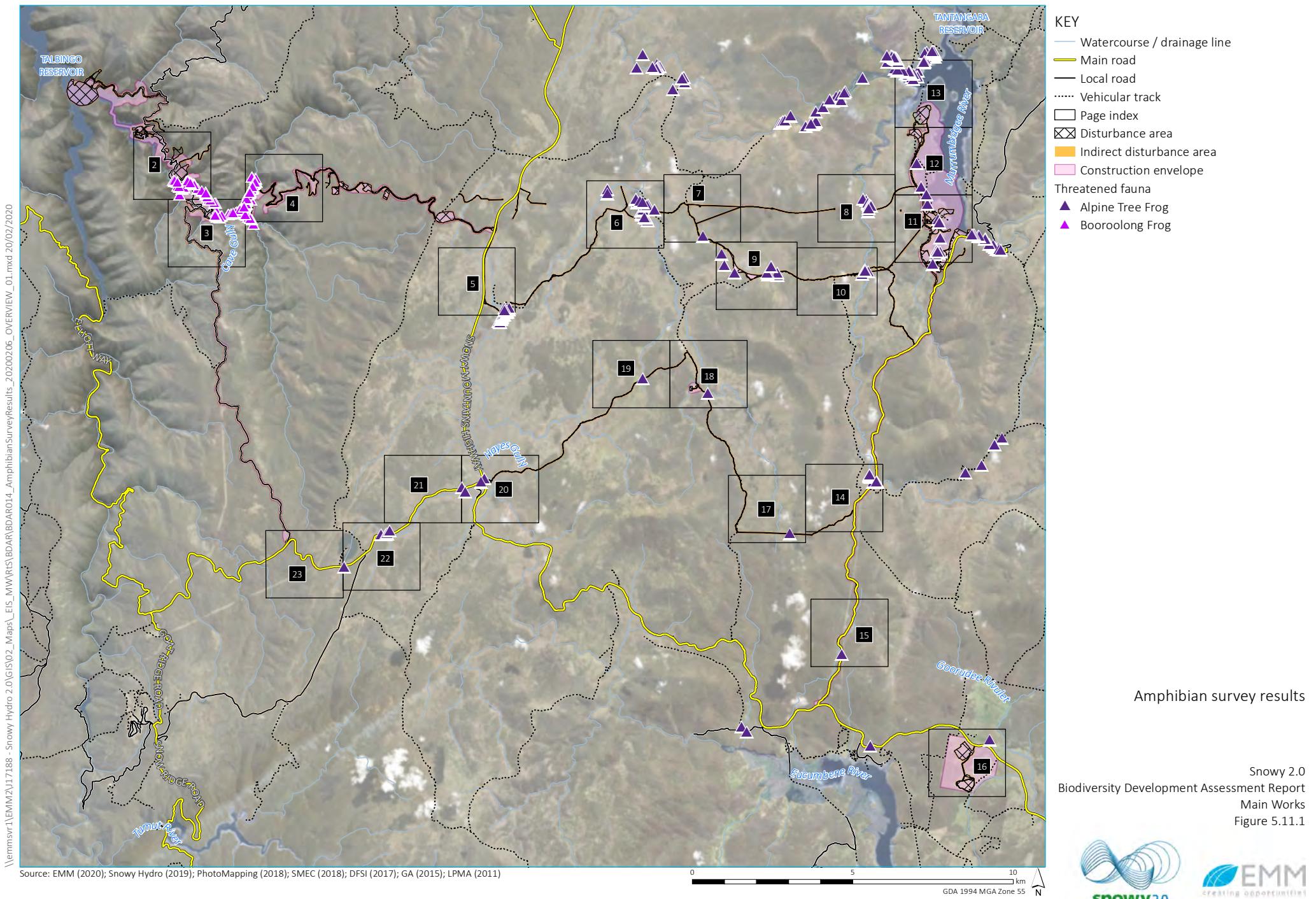


Figure 20 - reptile survey results

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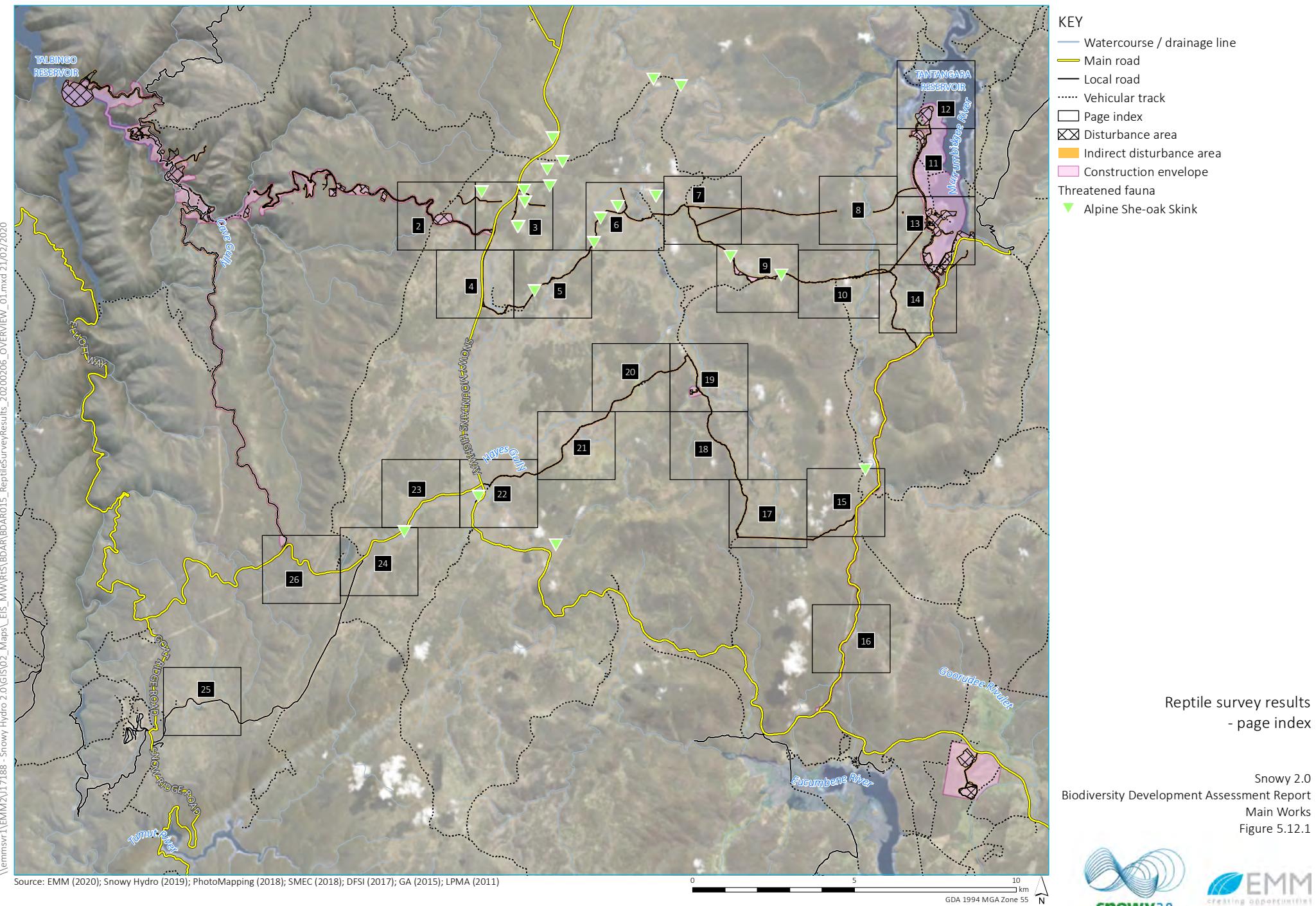


Figure 21 - Macquarie Perch survey results

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Annexure B - Existing Aquatic Ecology Rev
Snowy 2.0 Main Work

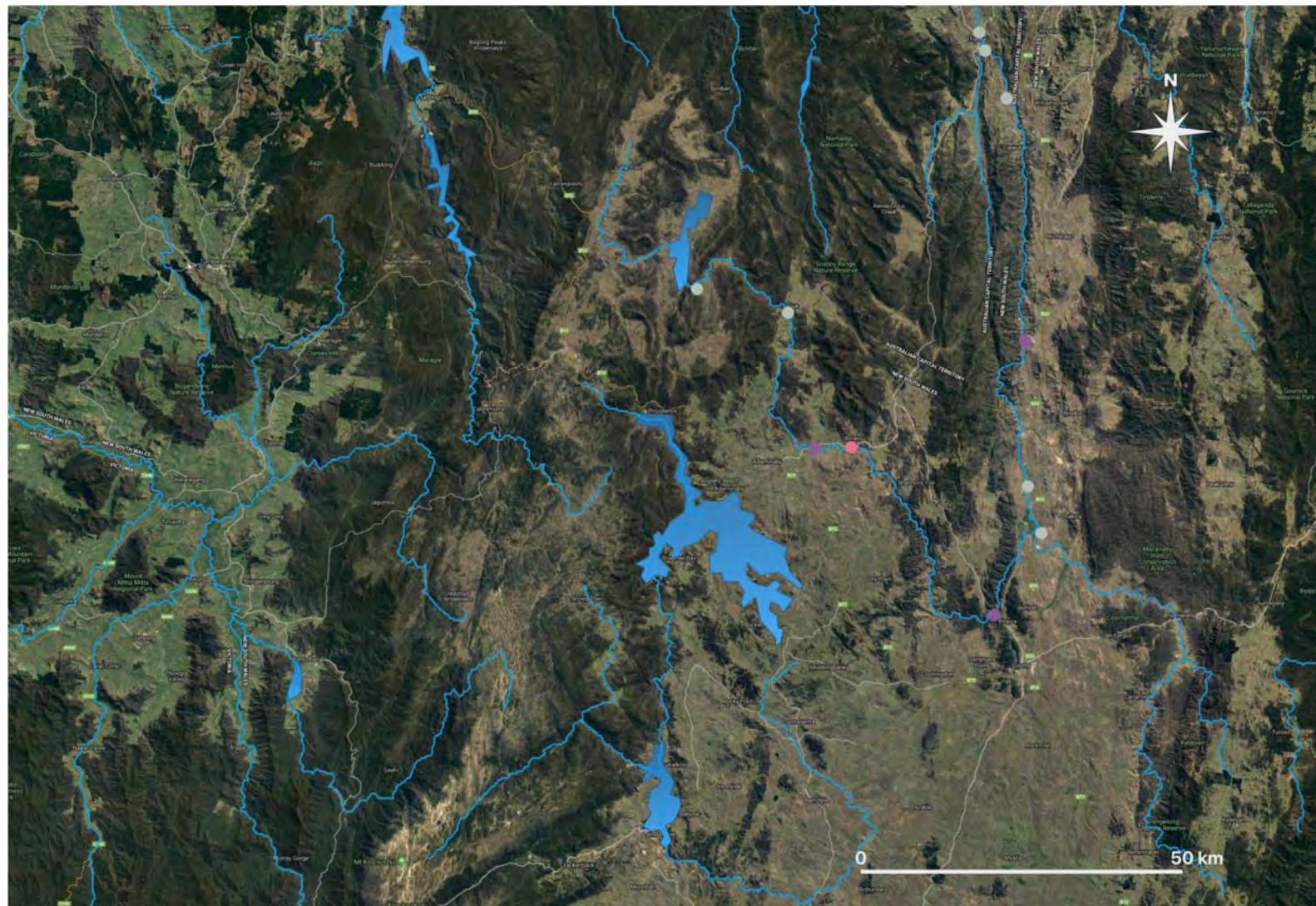


Figure 5-6 Site locations and detections of Macquarie perch DNA from March 2019 (EnviroDNA, 2019b). Purple circles indicate positive results, grey indicate negative results, and pink circles indicate equivocal results

Figure 22 - Alpine Bogs and Fens (PCT 637) mapping

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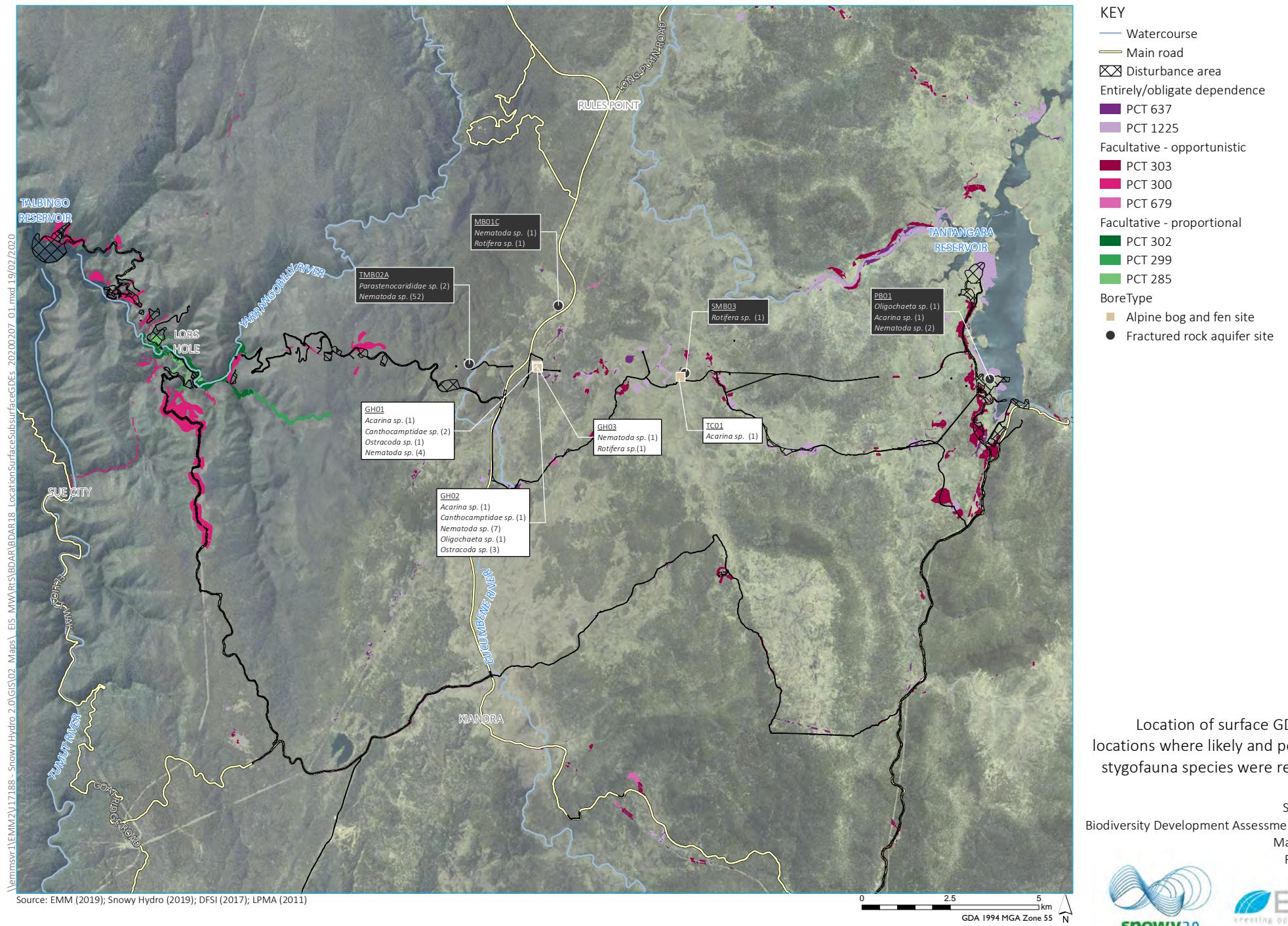


Figure 23 - flora survey results
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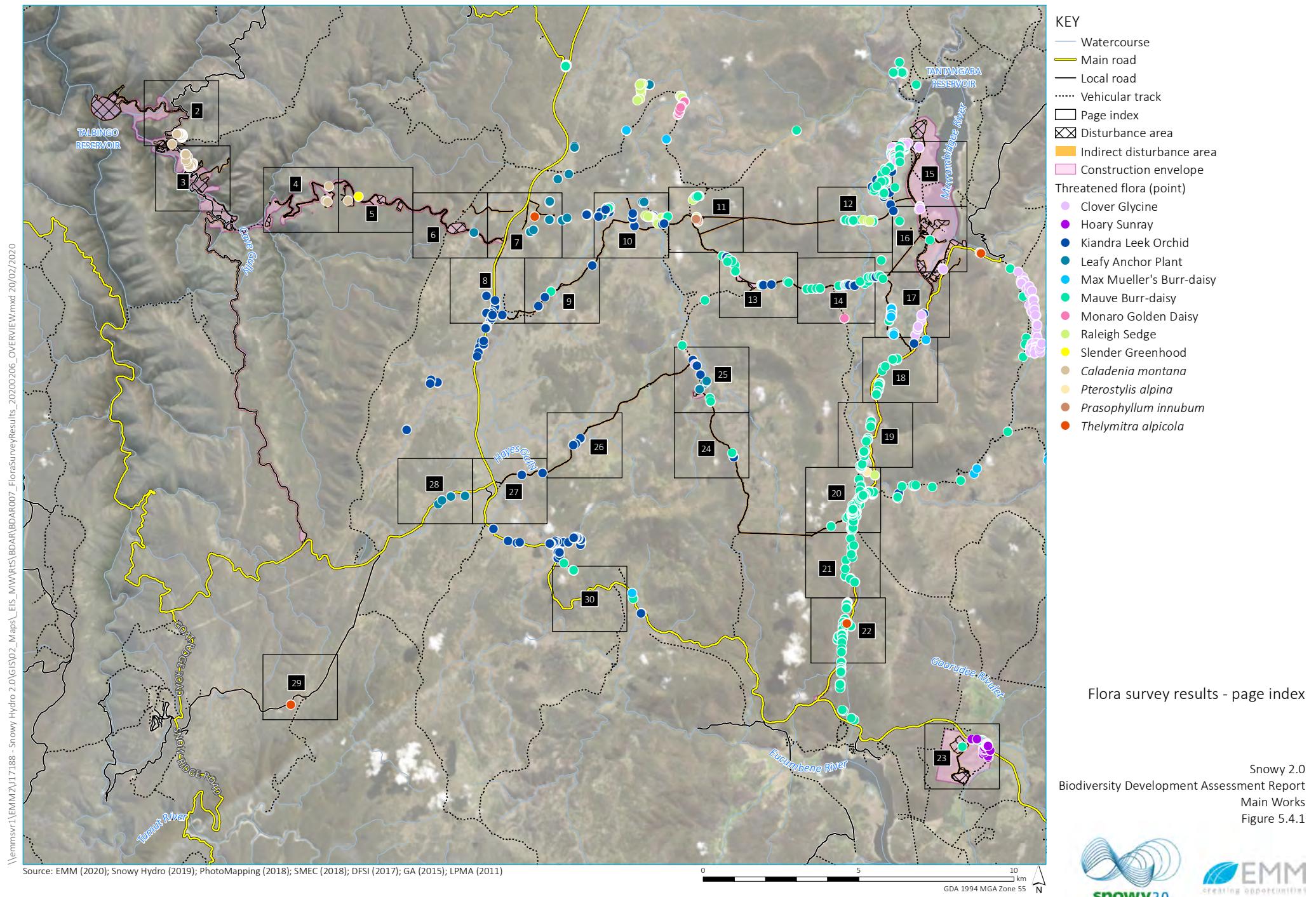
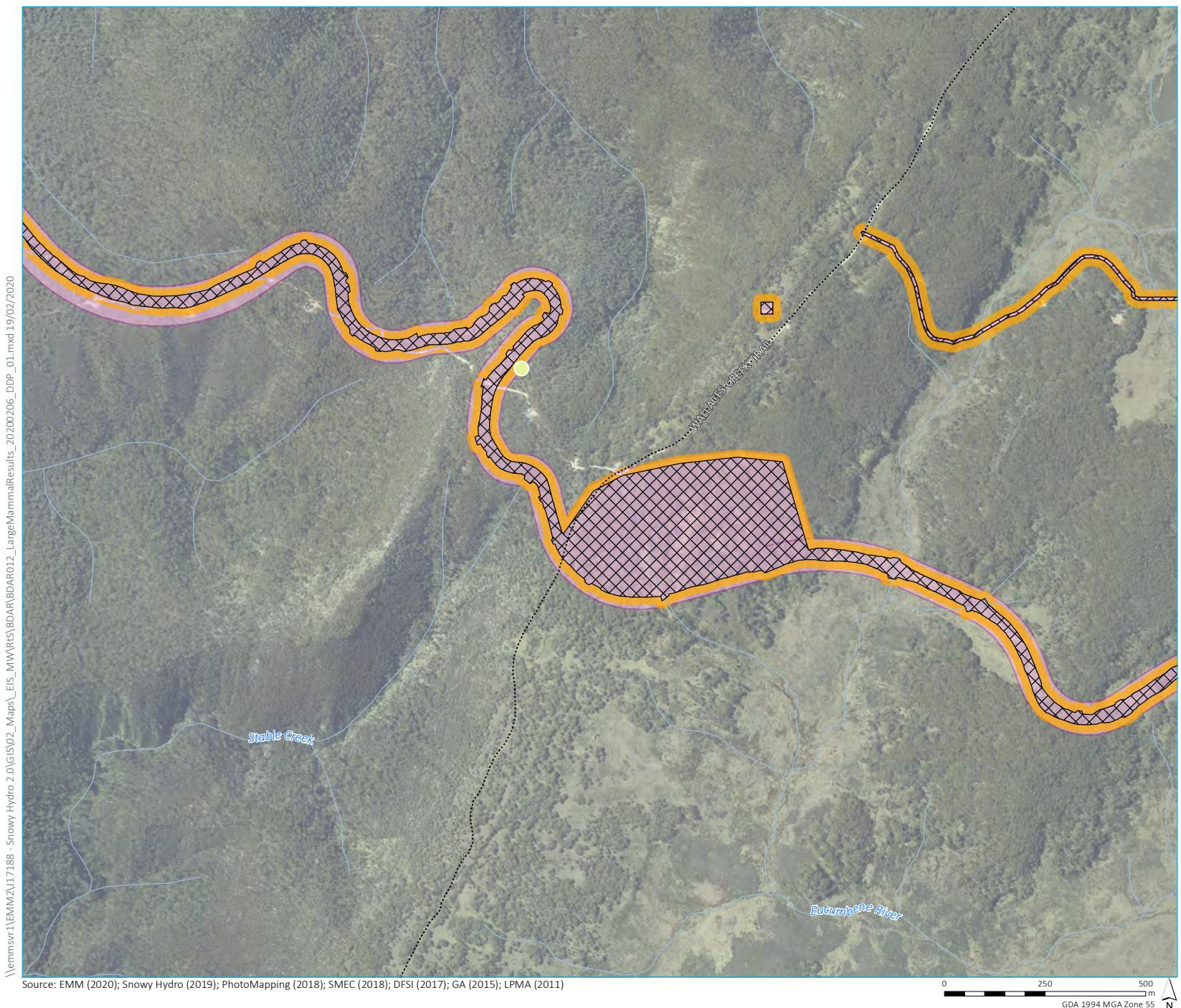


Figure 24 - Spotted-tailed Quoll survey results

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Large terrestrial mammal survey results

Snowy 2.0
Biodiversity Development Assessment Report
Main Works
Figure 5.9



Figure 25 - Bird survey results

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