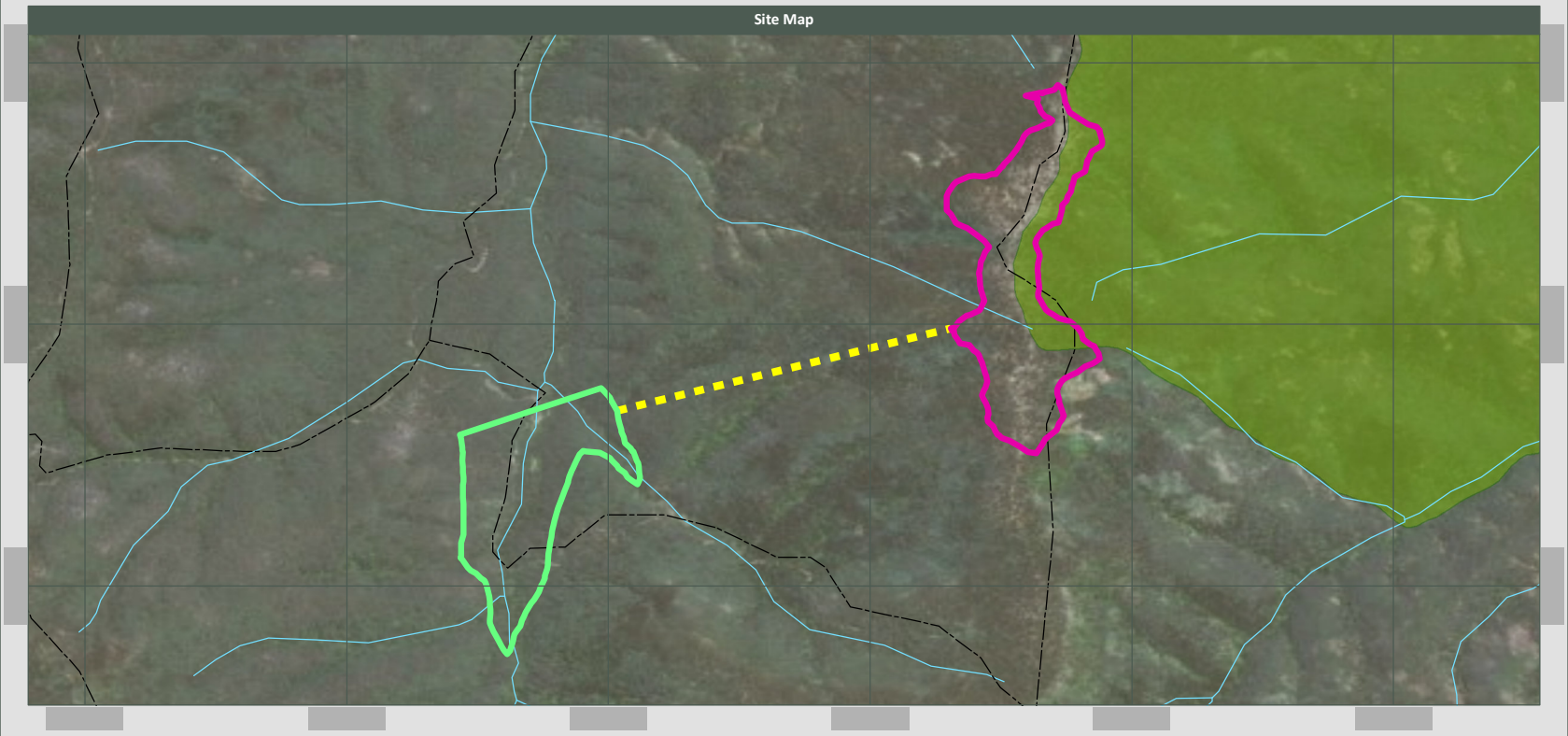
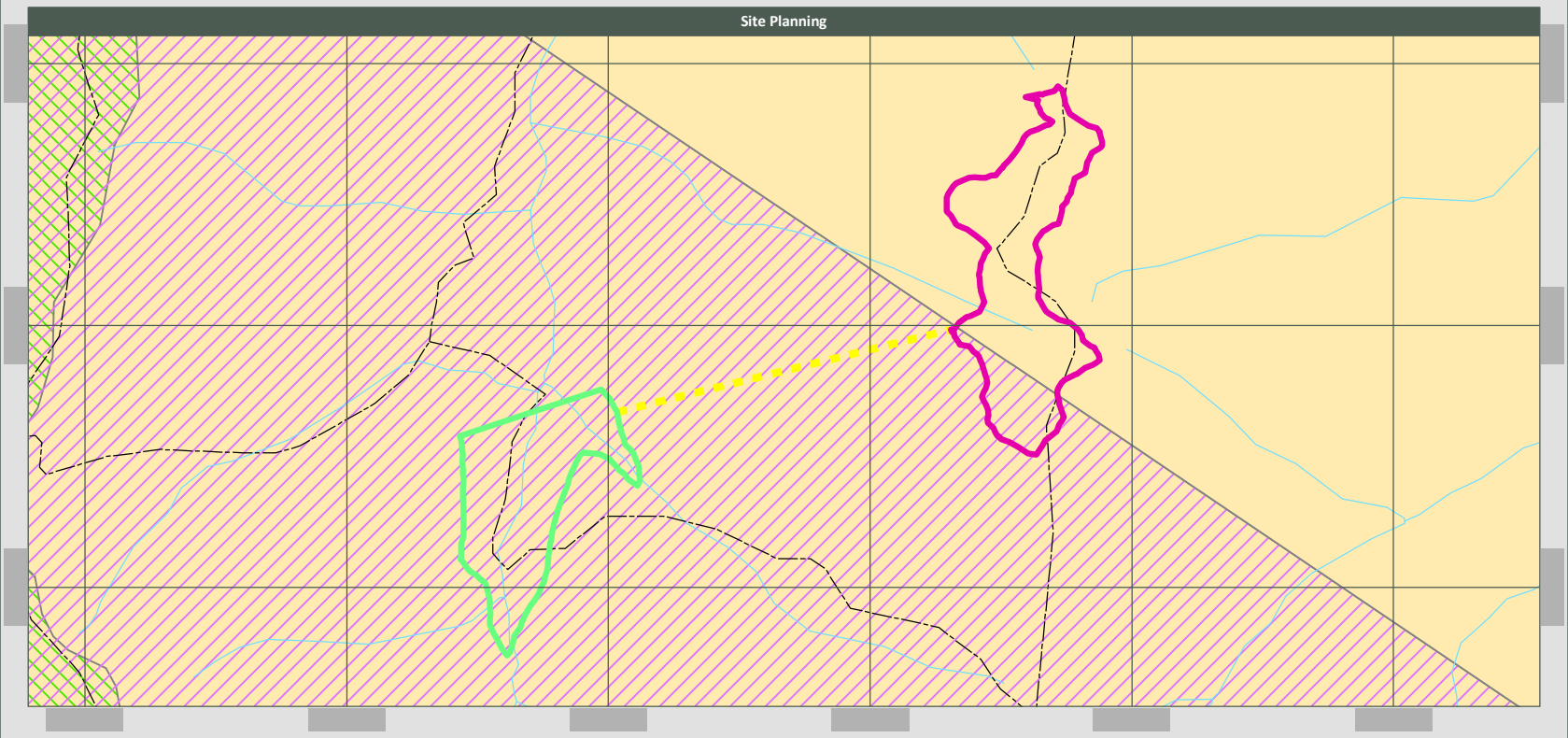
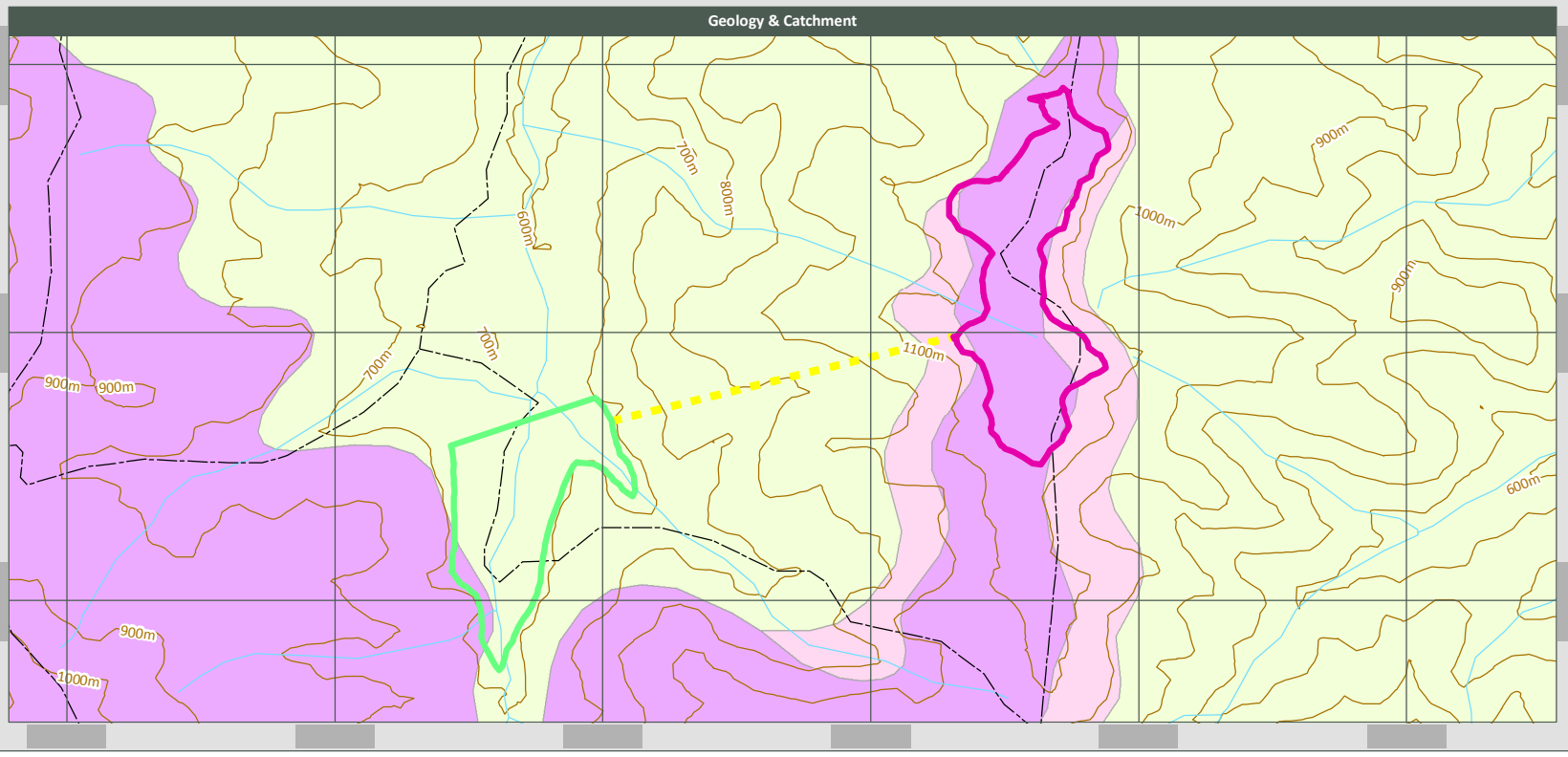
Site Map



Site Planning



Geology & Catchment



Title	PSP ATLAS - STAGE 2 SITE OVERVIEW 6_3549-4_607116
Client	Hydro Tasmania
Map no.	E306448-P512479-GIS02-3
Date	27/02/2018
Drawn	James Head-Mears & Jim Moore
Reviewed	Mohsen Moeini
Approved	Scott Lobdale

Site Map

- NEM substation
- NEM transmission line
- Building
- Built up area
- Upper storage
- Lower storage
- Indicative waterways alignment
- Dual carriageway
- Principal road
- Secondary road
- Minor road
- Track
- Watercourse major
- Watercourse minor
- Protected area

FOR DEMONSTRATION ONLY
Sensitive location information obscured

Site Planning

VIC Planning Overlay

- Bushfire Management Overlay (BMO or WMO)
- Environmental Significance Overlay - Schedule 2

VIC Planning Zone

- Public Conservation and Resource Zone

Geology & Catchment

- Contour (100m)

Surface Geology

- Conglomerate, pebbly sandstone, minor red mudstone
- Mudstone, sandstone
- Rhyolitic quartz ignimbrite

Notes

1. The project arrangement shown has been manually adjusted to suit the defined installed capacity compared to the arrangement which was identified in the *PSP Atlas of Australia, Stage 1: Screening* (Entura, 2017). The optimum arrangement could significantly be different for the site once an engineering evaluation has been undertaken.

2. Due to the above, some of the generated reservoirs may include existing buildings, roads, etc. as this is not a proposed layout but rather a potential opportunity for the development of a Pumped Storage Plant.

3. Coordinates shown are in GDA94 (DMS).

4. Planning and geological information is sourced from the following bodies: Mineral Resource Tasmania (TAS); Department of Economic Development, Jobs, Transport and Resources (VIC); Department of Environment, Land, Water and Planning (VIC); NSW Department of Planning and Environment (NSW Crown Copyright).

0 0.5 1 1.5 km

1:50,000 @ A3

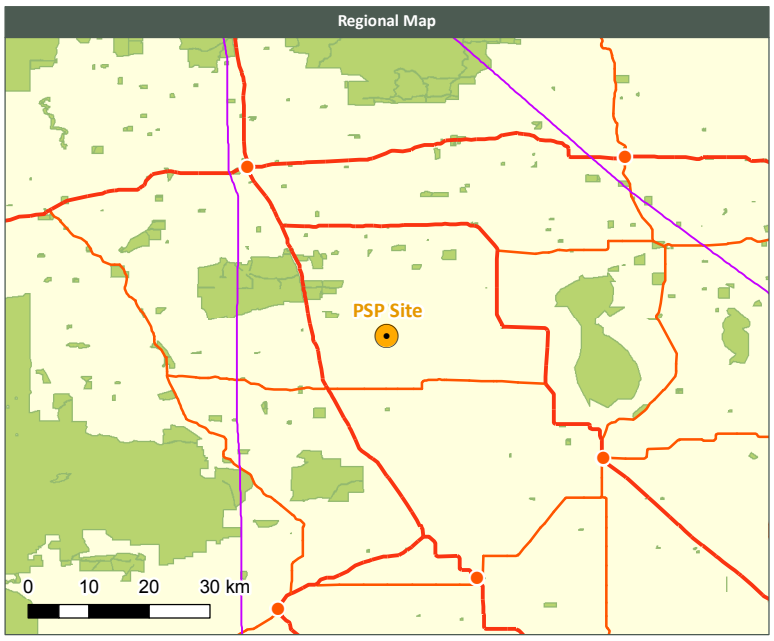
Geocentric Datum of Australia 1994

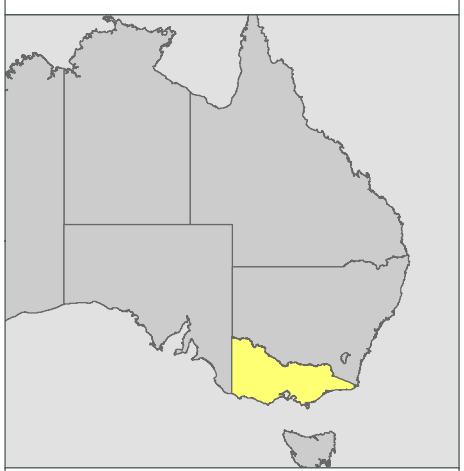
Summary Information

Project detail		Upper storage	
PSP ID	6_3549-4_607116	Catchment	1.12 km²
PSP type	Closed-cycle	Storage type	Turkey's nest
Active volume	13.2 Mm³	Storage name	N/A
Average gross head	460 m	Active volume	14.2 Mm³
Distance between storages (min.)	1,980 m	Assumed fluctuation	15 m
Estimated head loss	5.35 m	FSL	1,150 m AHD
Estimated energy generation	14,440 MWh (per cycle)	Dam height	20 m
Cyclic effciency	80.3%	Dam length	6,800 m
L/H ratio	4.3	Planning scheme	Public Conservation and Resource Zone
Design discharge (5-hour cycle)	745 m³/s	**Lower storage**	
Installed capacity	3,000 MW x 5 hours	Catchment	1.76 km²
Nearest substation	48 km to	Storage type	Valley dam
Annual rainfall	1,333 mm/yr	Storage name	N/A
Annual evaporation	1,126 mm/yr	Active volume	13.2 Mm³
Regional generation (50 km radius) — Wind	0 MW	Assumed fluctuation	20 m
Regional generation (50 km radius) — Solar	0 MW	FSL	690 m AHD
CAPEX	$2.4bn	Dam height	60 m
CAPEX per MW of installed capacity	$0.8m	Dam length	871 m
		Planning scheme	Public Conservation and Resource Zone

Data source(s): Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Regional Map





entura