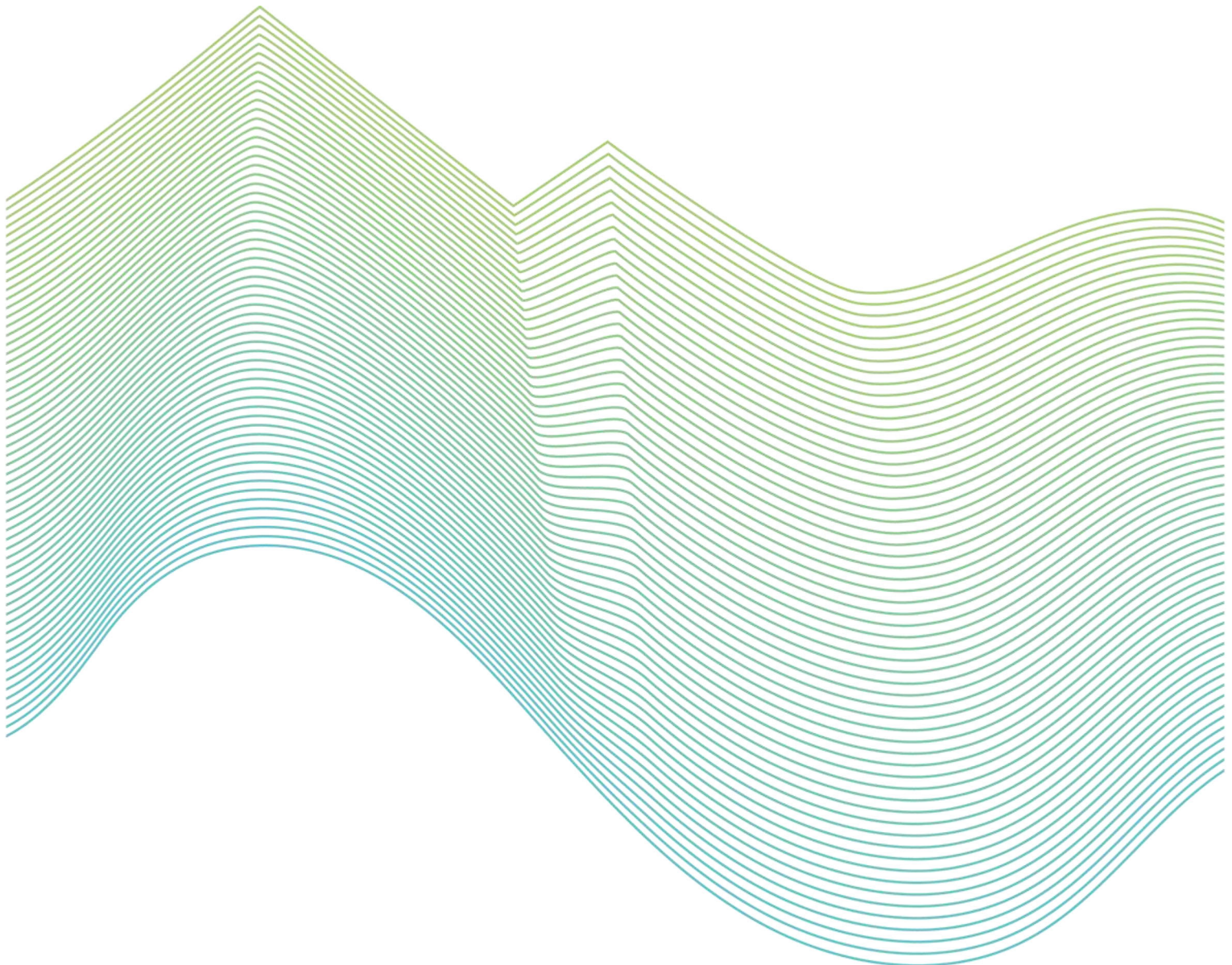


# Notice of Intent

## Lake King William Intake Structure, Tunnel and Completion of Approach Channel and Intake

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October 2022



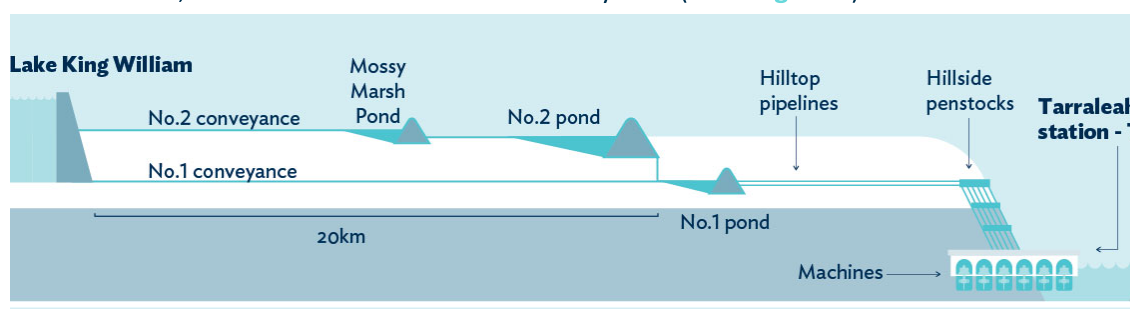
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Project name and location	
<b>Name</b>	Lake King William Intake Structure, Tunnel and Completion of Approach Channel and Intake
<b>Location</b>	Fourteen Mile Road and Butlers Gorge Road, Bronte Park, 7140
<b>Co-ordinates</b>	4400092E, 5320656N
<b>Title Ref</b>	PID 3384222, CID 1156123, CID 1446578,
<b>Landowner</b>	Sustainable Timbers Tasmania and Hydro-Electric Corporation
Proponent details	
<b>Company</b>	Hydro-Electric Corporation
<b>Postal Address</b>	GPO Box 355 Hobart Tasmania 7001
<b>ABN</b>	48 072 377 158
<b>Experience</b>	<p>The project proponent is Hydro Tasmania, which is a Tasmanian Government Business Enterprise that manages significant hydro-electric power generation assets across Tasmania. Hydro Tasmania is a trading name of the Hydro Electric Corporation (formally the Hydro-Electric Commission) which was established in the early twentieth century and operates 30 hydropower stations throughout Tasmania.</p> <p>Hydro Tasmania has a skilled and dedicated base of technical, managerial and administrative employees with roles including operation of power stations, dam surveillance, electrical and mechanical maintenance, statutory planning, environmental compliance, heavy machining, legal, financial, energy trading, dam safety, electrical, civil and mechanical design and project management. Hydro Tasmania has managed and completed some of Tasmania’s largest multidisciplinary projects. More recently these projects have focussed on maintenance and safety and efficiency improvements of existing assets.</p> <p>Civil works will be completed by an external contractor and will be managed in accordance with Hydro Tasmania’s ISO 14001 certified Environmental Management System (EMS).</p>
<b>Financial Capability</b>	Hydro Tasmania’s <a href="#">Annual Report 2021</a> , including a Statement of Financial Performance, demonstrates Hydro Tasmania’s financial capability to undertake the project.
Project description	

## Background

The Tarraleah Power Scheme is located in the Upper Derwent in southern Tasmania. Its headwater storage, Lake King William was formed by the construction of the Clark Dam in 1951 on the River Derwent. Water from Lake King William is discharged from Butlers Gorge Power Station and Nieterana mini-hydro Power Station. Water is then transferred via two conveyances; Tarraleah No. 1 conveyance and No. 2 conveyance.

Tarraleah No. 1 conveyance transfers water directly to Tarraleah No. 1 Pond, while Tarraleah No. 2 conveyance transfers water via Mossy Marsh and Tarraleah No. 2 Pond to Tarraleah No. 1 Pond. Water is then transferred from Tarraleah No. 1 pond to the Tarraleah Power Station via a hilltop pipeline and penstocks. Following discharge from Tarraleah Power Station, water enters the Lower Derwent system (refer [Figure 1](#)).



**Figure 1:** Existing Tarraleah Power Scheme

Much of the Tarraleah Hydropower Scheme is more than 80 years old and many of its assets are nearing the end of their operational life. In addition, there is insufficient capacity and operational flexibility in the existing water conveyances to meet the expected future National Electricity Market (NEM) requirements. Hydro Tasmania is currently investigating options to redevelop the Tarraleah Hydropower Scheme to extend its operational life and to meet expected future NEM requirements.

To mitigate high civil asset risks whilst these investigations continue, Hydro Tasmania plans to undertake upgrade works that will partially replace Tarraleah No.1 canal as an ageing asset. These works will be conducted in a way that supports future redevelopment of the scheme in the event that a redevelopment proceeds. Upgrade works include:

- Construction of a new intake and approach channel on Lake King William located approximately 1km north of Clark Dam.
- An approximately 1km long approximately 6.4m diameter tunnel beneath the ridge adjacent the new intake.
- Preparatory civil works for an approximately 6.5km pipeline from the tunnel portal to a new conveyance in the vicinity of Mossy Marsh.
- Upgrade of Mossy Marsh Dam to respond to ANCOLD safety standards.
- Establishment of a nominally 11kV power supply to the new intake location.

Hydro Tasmania has previously sought advice from the EPA regarding assessment under the *Environmental Management and Pollution Control Act 1994* (EMPC Act) of the following aspects of the upgrade works:

	<ul style="list-style-type: none"> <li>• Construction of a cofferdam in Lake King William. Note that the proposed coffer dam in Lake King William is no longer required and has been replaced with a small wave bund and plastic concrete foundation cut-off.</li> <li>• Temporary resumption of quarrying at Laughing Jack Quarry to supply material for the Mossy Marsh Dam upgrade.</li> <li>• Preliminary construction of an approach channel to the proposed intake on Lake King William to take advantage of historically low water levels.</li> <li>• Excavation of the intake cut and downstream tunnel portal and clearance of associated laydown and spoil storage areas.</li> </ul> <p>For each of these aspects the EPA has determined that assessment under the EMPC Act was not required.</p>
<p><b>Project Description</b></p>	<p>This Notice of Intent (NoI) includes the construction of the intake structure at Lake King William, construction of the tunnel beneath the ridge adjacent to Lake King William, commencement of preparatory civil works for the above ground pipeline and completion of the approach channel and intake excavation.</p> <p>Attachment 1 shows the scope of works included in this NoI (referred to as Package 3) as well as the scope of works included in the Lake King William approach channel (Package 1) and Lake King William intake and tunnel portal cut work packages (Package 2).</p> <p><b>Intake structure</b></p> <p>The intake structure will control the flow of water from Lake King William to the Tarraleah Scheme and will be constructed within the intake excavation cut. The intake structure will consist of an approximately 35m high reinforced concrete tower housing trash racks (to prevent the ingress of logs and other large material), gates and associated hydromechanical and electrical equipment. During operation the tower will largely be underwater with the top of the tower designed to be above the full supply level of Lake King William and the intake gate below the normal minimum operating level. A reinforced concrete deck will be constructed as part of the tower and accessed by a bridge from the abutment.</p> <p>A control room will be constructed above the intake structure and will allow remote control of the intake via SCADA connection.</p> <p>A concept intake plan, including section, is shown in Attachment 2. Attachment 3 shows a conceptual arrangement of the proposed new intake and approach channel in Lake King William.</p> <p>Construction of the proposed intake structure will include:</p>

- Site mobilisation and establishment using hardstands established adjacent to the intake during the intake excavation
  - Establishment of concrete batch plant, aggregate and cement storage
  - Establishment of tower crane(s) for intake construction
- Clean up and foundation preparation of intake excavation including consolidation grouting, if required
- Clean up tunnel invert and concrete line invert
- Grouting tunnel rock mass in the vicinity of intake
- Installation of secondary concrete lining where the tunnel connects to intake
- Construction of the mass concrete base
- Construction of reinforced concrete tower, including blockouts, embedded pipework, support structures and anchor points required to interface with the hydromechanical equipment
- Installation of hydromechanical equipment
- Construction of reinforced concrete deck
- Construction of permanent access road, drainage and hardstand area
- Construction of access bridge and abutment
- Construction of control building
- Installation of site security fencing & gates
- Rehabilitation of the site
- Demobilisation

Groundwater management will be established to support the excavation of the intake cut and will be maintained as required for the construction of the intake structure. Collected groundwater will be pumped to a purpose built settlement pond located adjacent to the shore of Lake King William. The settling pond will be approximately 10m wide by 30m long and approximately 1.8m deep. It will be lined with a geofabric liner (e.g. Ecosel Geosynthetic Clay liner) to minimise permeability. Water will be discharged from the top of the settling pond to Lake King William via a spillway drain at a maximum rate of approximately 100L/s. A sediment boom will be installed in Lake King William at the discharge location to minimise turbidity in the lake.

Hydro mechanical equipment will be manufactured offsite and transported to the intake location.

The construction of the intake structure is expected to be completed between November 2023 and June 2025.

### **Tunnel**

To transfer water between the intake and above ground pipeline a tunnel is proposed to be constructed beneath the ridge adjacent to the shoreline of Lake King William. The tunnel will be up to 6.4m in diameter, approximately 1km long and capable to transferring up to

62m<sup>3</sup>/s of water. The tunnel will have a concrete floor and be concrete lined at the interface between the intake structure and downstream tunnel portal, but will otherwise be unlined if ground conditions permit. The tunnel will be stabilised as required using rock bolts, friction bolts and reinforced shotcrete.

A concept tunnel plan, including typical tunnel sections, are shown in Attachment 4.

Construction of the tunnel will include:

- Site mobilisation and establishment using hardstands established adjacent to the intake and tunnel portal during portal excavation
  - Establishment of concrete / shotcrete batch plant, aggregate and cement storage
  - Establishment of temporary explosive storage facilities, if required
- Establishment works portal
- Excavate and support tunnel
  - Primary ground support (shotcrete, bolts and drain holes)
  - Lift out rock traps, backfill with spoil
  - Grade and profile tunnel spoil invert
- Demobilisation

Excavation of the tunnel will be completed using traditional drill and blast techniques. The tunnel will be excavated from the downstream tunnel portal advancing towards the Lake King William intake. Material blasted from the tunnel face will be transported to the designated spoil storage location by suitable underground equipment such as Load Haul Dump Loaders and articulated trucks.

Groundwater management will be established to support the excavation of the tunnel portal and will be maintained as required for the excavation of the tunnel. Groundwater will be pumped to a purpose built settlement pond of similar design to that proposed for the intake cut. Water from the settlement pond will be discharged to existing watercourses. Discharge will be visually monitored to ensure water quality in existing water courses is maintained.

A rock 'plug' will be left in place in the tunnel behind the Lake King William intake until the scheme is ready to be commissioned

The construction of the tunnel is expected to be completed between December 2022 and December 2023.

#### **Completion of approach channel and intake cut**

The EPA has previously determined that the commencement of excavation of the approach channel and excavation of the intake cut does not require assessment under the EMPC Act. The works that were included in this determination comprised the dry excavation of the approach channel on the shoreline of Lake King William to the low water mark and the excavation of the intake cut, but leaving in place an 'in situ rock plug'. This Nol includes the excavation of the remainder of the approach channel and the removal of the 'in situ rock plug'.

Hydro Tasmania intends to excavate the approach channel opportunistically in the dry as water levels in Lake King William allow over a three year project construction window. Excavation will occur in Autumn when water levels are generally lowest. However, completion of the approach channel excavation will require underwater works including both excavation and blasting. Removal of the 'in situ rock plug' will be completed following the commissioning of the intake gates (refer Intake Structure above).

A concept intake plan, showing the approach channel and intake cut is shown in Attachment 2.

Excavation of the approach channel and removal of the 'in situ rock plug' will include;

- Mobilisation and site establishment (site establishment completed as part of intake works)
- Excavation of approach channel opportunistically in Autumn 2023, 2024 and 2025
  - Excavation of quaternary material (dry and wet)
  - Drill and blast of dolerite material (dry and wet)
  - Excavation of dolerite material (dry and wet)
  - Underwater excavation using a barge mounted long reach excavator
- Rip-rap armouring of approach channel and intake batters in the quaternary material
- Storage of excavated spoil rockfill material
- Removal of 'in situ rock plug' following intake construction subject to lake level and commissioning timeframes for intake gates
  - Drill and blast
  - Underwater excavation using a barge mounted long reach excavator
- Demobilisation

Excavation of the approach channel in the dry and 'in situ rock plug' will likely be completed using a 30t to 40t excavator together with D8/D9 bulldozers. Suitably sized dump trucks will be used to transport excavated material to the nominated spoil storage locations.

Excavation of the approach channel underwater will be completed using a barge mounted long reach excavator (50t).

Blasting will be required to excavate dolerite from the approach channel and 'in situ rock plug' and it is anticipated that approximately one blast per week would be required for the duration of the dolerite excavation (approximately 10 months)

### **Concrete**

It is anticipated that approximately 3000m<sup>3</sup> of concrete / shotcrete will be required for the construction of the intake structure and tunnel lining. Concrete will be supplied via a mobile concrete batching plant(s) with a nominal capacity of approximately 20m<sup>3</sup> per hour. Water for concrete production will be sourced from Lake King William. Aggregate for concrete will be produced from spoil generated by excavation of the intake and tunnel (refer to spoil management). Cement, reinforcing, grout and other required materials will be sourced commercially and transported to the intake and portal sites.

### Spoil management

Due to construction sequencing four general spoil storage / disposal areas are proposed;

- designated spoil storage area adjacent to the downstream tunnel portal (Attachment 4)
- the disused quarry adjacent to the intake including additional area to the south of the quarry (Attachment 2),
- the western side of the approach channel (potentially including parts of the current shoreline) (Attachment 2) and;
- the eastern side of the approach channel (potentially including parts of the shoreline) (Attachment 2).

The final quantity of spoil at each of the proposed spoil storage sites and the design of spoil stockpiles is subject to further assessment and engineering design. However, Table 1 outlines indicative spoil volumes and storage locations for all planned upgrade works, including those which are the subject of this NoI.

**Table 1:** Spoil volume and storage/disposal locations

Aspect	Estimated Spoil Volume (m <sup>3</sup> )	Storage / disposal location
Tunnel	30,000	Designated spoil area adjacent to tunnel portal
Downstream tunnel portal	23,000	Designated spoil area adjacent to tunnel portal
Approach channel	243,000	Western and eastern side of approach channel and disused quarry including additional area*
Intake	82,000	Disused quarry including additional area

\* Spoil comprising quaternary rock excavated from the approach channel will be stored in the disused quarry

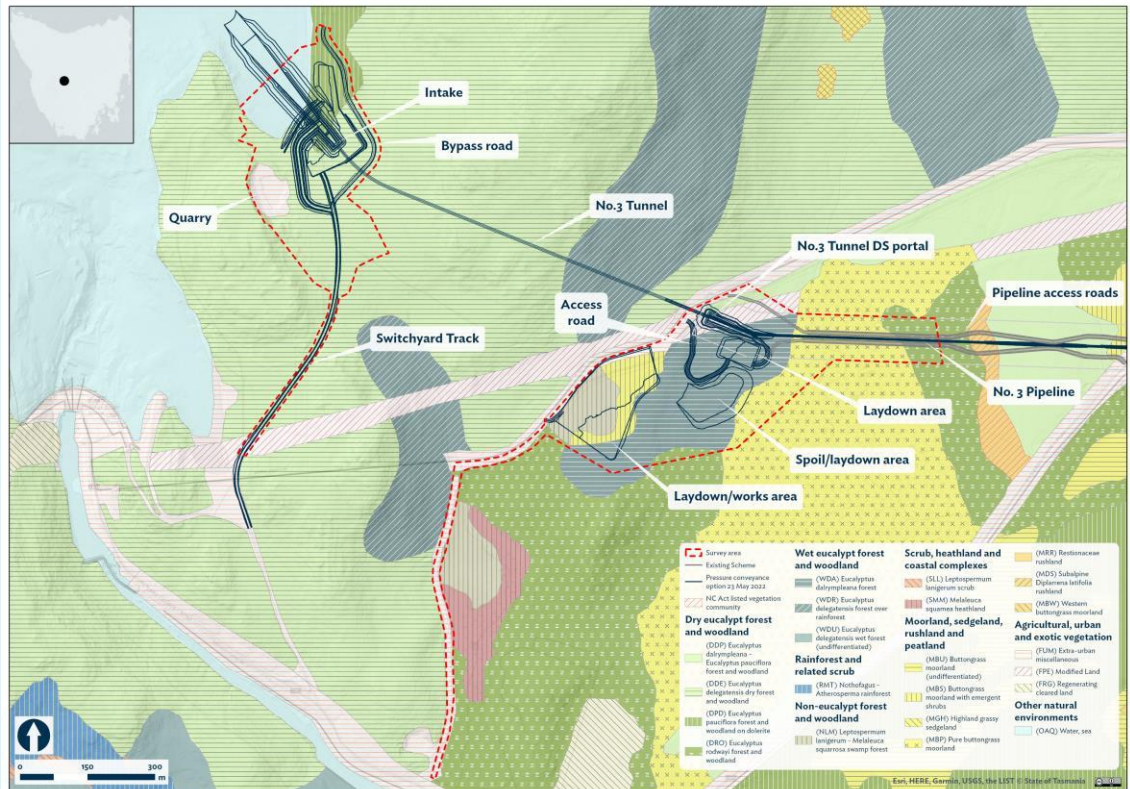
Where possible spoil will be reused by Hydro Tasmania either for the proposed upgrade works (refer below) or in future projects. Where spoil is not able to be reused stockpiles will be rehabilitated.

Up to 100,000m<sup>3</sup> of spoil will be crushed and screened. Crushing and screening of spoil will be completed in two stages, each taking approximately one month, coinciding with the excavation of the intake cut and tunnel. Screened and crushed spoil will be stockpiled at the spoil storage locations for future use as sub-base for the trenched sections of the proposed above ground pipeline, as aggregate for concrete for construction of the intake structure and tunnel lining and as road base for the establishment and maintenance of access tracks. No ongoing crushing and screening is proposed.

The works will be managed by Hydro Tasmania and undertaken by a specialist contractor. An Environmental Management Plan (EMP) under Hydro Tasmania's Environmental

	Management System (EMS) is being prepared and will be implemented in conjunction with the contractors own environmental management plans.
<b>Location</b>	
	Lake King William is located in the upper Derwent region of Tasmania. Road access from the Lyell Highway is via Butlers Gorge Road. The proposed new intake, tunnel and tunnel portal are located approximately 1km to the east of the existing Butlers Gorge Power Station (Attachment 5). The intake location is currently accessed by Switchyard Track whilst the tunnel portal is accessed by the existing track to Hydro Tasmania’s No3 Canal. The tunnel, intake, tunnel portal and access tracks are located on land either managed by Sustainable Timbers Tasmania or owned by Hydro Tasmania.
<b>Stakeholder consultation</b>	
<b>Consultation</b>	<p>Consultation has been held with the EPA regarding Hydro Tasmania’s proposed Tarraleah Scheme redevelopment of which the upgrade works to replace No1 Canal form a component. The EPA has also been consulted regarding the possible assessment of the aspects of the proposed upgrade works.</p> <p>Targeted engagement with key stakeholders including Central Highlands Council, Sustainable Timber Tasmania, Aboriginal Heritage Tasmania, local businesses, Inland Fisheries Service and Anglers Alliance are in progress to support the proposed upgrade works and redevelopment investigations and associated approvals processes.</p> <p>Notifications on any changes to public access on roads (including the Switchyard Track) or areas of land utilised as part of the proposed activity will be shared via the Hydro Tasmania website, and through local media where appropriate.</p>
<b>Engagement plan</b>	Engagement with the broader community, including Aboriginal communities and nearby shack communities at Bronte Lagoon, Bradys Lake and Bronte Park is planned and will be undertaken to support future works at an appropriate time.
<b>Physical environment</b>	
<b>Vegetation</b>	<p>Eleven vegetation communities were verified in field surveys undertaken in November 2021 and April 2022, including nine native vegetation communities and two modified communities (<b>Figure 2</b>). The native vegetation communities verified within the vicinity of the project site include:</p> <ul style="list-style-type: none"> <li>• <i>Eucalyptus pauciflora</i> forest and woodland on dolerite (DPD)</li> <li>• <i>Eucalyptus delegatensis</i> dry forest and woodland (DDE)</li> <li>• <i>Eucalyptus rodwayi</i> forest (DRO)</li> <li>• <i>Eucalyptus delegatensis</i> forest over rainforest (WDR)</li> <li>• <i>Eucalyptus dalrympleana</i> forest (WDA)</li> <li>• <i>Melaleuca squamea</i> heathland (SMM)</li> <li>• <i>Leptospermum lanigerum</i> - <i>Melaleuca squarrosa</i> swamp forest (NLM)</li> </ul>

- Buttongrass moorland with emergent shrubs (MBS)
- Pure buttongrass moorland (MBP)



**Figure 2: TASVEG Vegetation Communities**

The two modified vegetation communities verified within the project site included extra urban miscellaneous (FUM) and permanent easement (FPE).

None of the vegetation communities verified within the vicinity of the project site are listed as threatened under the *Tasmanian Nature Conservation Act 2002* (NC Act) or *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

### Threatened species and communities

No threatened flora or fauna species or vegetation communities have been recorded within the footprint of the proposed works. There are no threatened aquatic species recorded on the Natural Values Atlas (NVA) from Lake King William.

Two threatened flora species, *Westringia angustifolia* (narrowleaf westringia) and *Pomaderris elachophylla* (small-leaf dogwood), were recorded from adjacent to the access track to the No3 Canal (that will be used to access the tunnel portal) close to the junction with Butlers Gorge Road. *Westringia angustifolia* and *Pomaderris elachophylla* listed as rare and vulnerable respectively under the TSP Act. Neither are listed under the EPBC Act. The number of plants recorded were in the order of 20 plants for *Westringia angustifolia*, and more than 250 plants for *Pomaderris elachophylla* (associated with the disused quarry adjacent to the access track).

The wet eucalypt forest communities verified within the vicinity of the project site is potentially suitable habitat for Tasmanian devils (*Sarcophilus harrisii*) and spotted-tailed

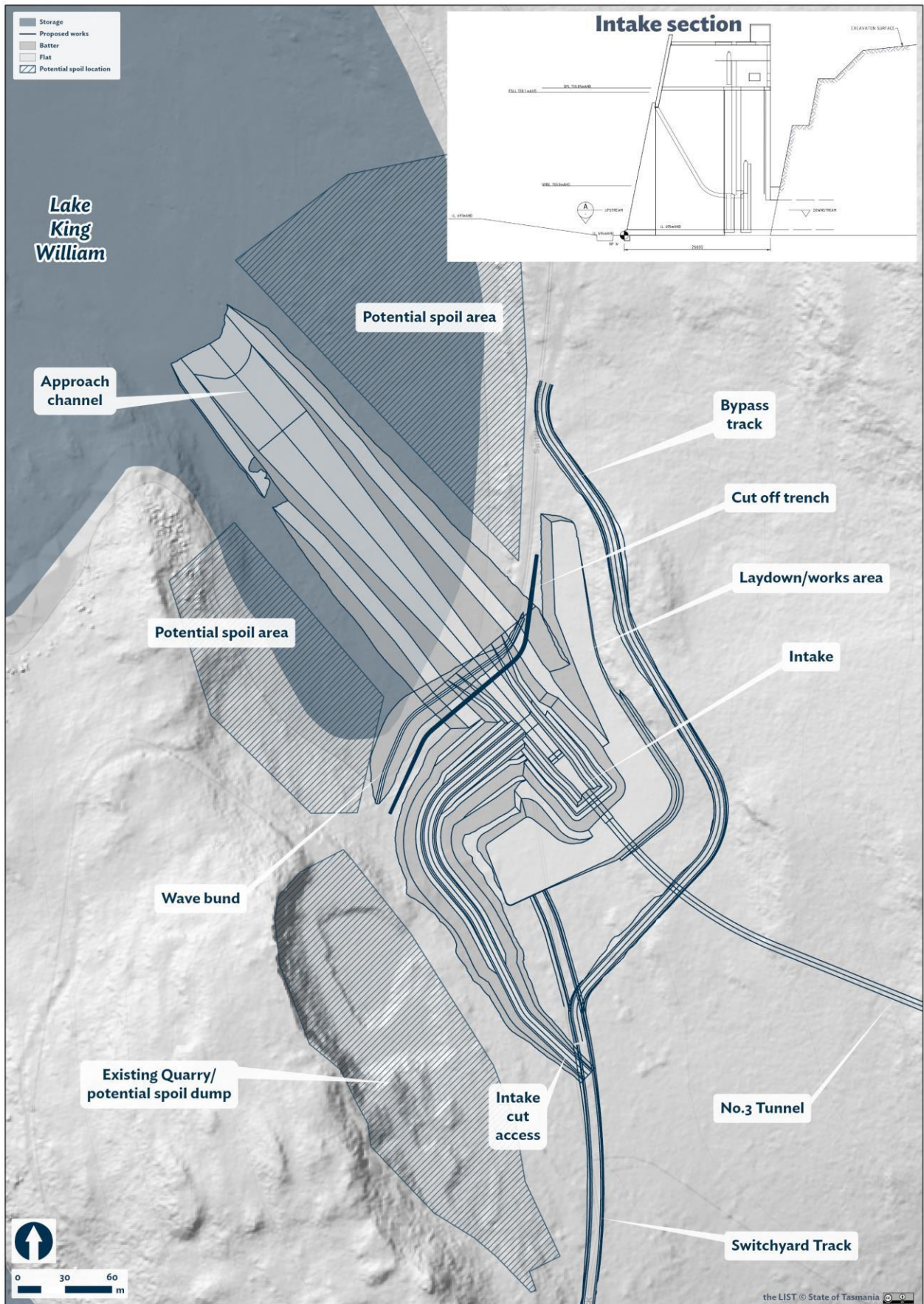
	<p>quolls (<i>Dasyurus maculatus</i> subsp. <i>maculatus</i>). The habitat would likely support foraging, however no dens were recorded during the field surveys in the vicinity of the project site.</p> <p>The closest wedge-tailed eagle (<i>Aquila audax</i> subsp. <i>fleayi</i>) nest is located 2 km north east of the project site in <i>Eucalyptus delegatensis</i> dry forest and woodland. This nest was last surveyed and identified as present in May 2021.</p>
<b>Weeds</b>	<p>One declared weed species listed under the <i>Weed Management Act 1999</i> (WM Act) was recorded the project area, <i>Cirsium arvense</i> var. <i>arvense</i> (Californian thistle) in the existing easement at the proposed downstream portal. Eleven environmental weeds were also recorded.</p> <p>No evidence of <i>Phytophthora cinnamomi</i> was recorded in the vicinity of the project site, nor has been recorded on the NVA within 5 km of the project site.</p>
<b>Noise and dust</b>	<p>The proposed project site is isolated from residential properties with the closest private freehold land located more than 10km to the east.</p> <p>Lake King William is open to the public for boating and fishing however, is not highly frequented and is not ranked in the top twenty lakes by visitation number in the most recent Tasmanian Inland Fisheries Service <a href="#">Recreational Fisheries Report</a>.</p>
<b>Heritage</b>	<p>The intake and disposal quarry has been surveyed and no Aboriginal or historic heritage values were recorded. The tunnel portal has been partially surveyed with no Aboriginal or historic heritage values recorded. The remainder of the tunnel portal site will be surveyed prior to the commencement of any works. If heritage values are identified they will be avoided where possible or, if avoidance is not possible, relevant consents sought (e.g. a Permit to Disturb under the <i>Aboriginal Heritage Act 1975</i>).</p>
<b>Environmental, health, economic and social issues</b>	
<b>Environmental</b>	<p>No vegetation clearance is proposed for upgrade works included in this Nol.</p> <p>Works will be completed in areas already cleared as part of the excavation of the approach channel, intake cut and downstream portal as described in the Lake King William Intake and Tunnel Portal Cut and Lake King William Approach Channel project descriptions (refer Background).</p> <p>No threatened vegetation communities, flora or fauna species will be impacted. The two threatened flora species; <i>Westringia angustifolia</i> and <i>Pomaderris elachophylla</i>, located adjacent to the access track to the tunnel portal are outside the project footprint and have been flagged and fenced to prevent accidental disturbance.</p> <p>It is possible that the spoil disposal sites in Lake King William will require clearance of a relatively small additional area of vegetation on the shoreline of Lake King William outside the proposed clearance footprint. If additional vegetation clearing is required ecological and heritage surveys will be completed prior to ground disturbing activities. Threatened vegetation communities or species or Aboriginal artefacts will be avoided or, if avoidance is not possible, then appropriate permits sought.</p>

	<p>Noise, including from crushing and screening and blasting, is not expected to impact wedge-tailed eagles. The closest wedge-tailed eagle nest is located 2 km from the project site and outside the Forest Practices Authority’s Eagle Nest Management Technical Note (endorsed by NRET) recommended constraint of activities within 500m (or 1km line of sight) from a wedge tailed eagle nest. The nest has been surveyed in the last two years and found to be present. Potential habitat within 1km of the project site was searched by STT on 3rd March 2022 with no nests found. There are no wedge-tailed eagle nests in line-of-sight of the project site. The project is not anticipated to result in a significant increase in evening or night time traffic volume and an increase in roadkill is not expected.</p> <p>Water quality in Lake King William has the potential to be impacted by the underwater excavation of the approach channel, placement of rockfill spoil in Lake King William and discharge from settlement ponds. A sediment boom(s) will be placed in Lake King William to contain potential water quality impacts (elevated turbidity) to the project site. Water quality in Lake King William will be monitored daily and, if required, additional mitigation measures implemented (e.g. additional sediment booms, flocculants, additional onshore controls).</p> <p>Erosion and sediment control measures will be put in place across the project site, including batching plants, such that water quality of local watercourses will not be impacted.</p> <p>No evidence of <i>Phytophthora cinnamomi</i> has been observed in the vicinity of the project site. One declared weed species listed under the WM Act has been recorded in the survey area, <i>Cirsium arvense</i> var. <i>arvense</i> (Californian thistle) in the existing easement adjacent to the tunnel portal. To minimise the potential spread of weeds and pathogens within and beyond the project site, the activity will be subject to a weed and disease management plan detailing hygiene measures for vehicles, equipment and materials.</p>
<b>Health</b>	<p>The closest private land is located approximately 10 km from the project site and will not be impacted by noise, vibration or dust generated by the excavation, blasting or crushing and screening of spoil.</p> <p>With the exception of the immediate project site, access to Lake King William will not be restricted and the amenity of lake users is not expected to be significantly impacted. Hydro Tasmania will restrict access to the intake and portal sites minimising potential noise and dust impacts to recreational users.</p>
<b>Social / economic</b>	<p>The amenity of road users on the Lyell Highway in the vicinity of the project site is not expected to be impacted by the upgrade works. There is not expected to be a significant increase in traffic volume as the placement of spoil within the project area and the reuse of spoil for aggregate, avoids the requirement for the movement of large volumes of materials. Oversize loads will be infrequent and restricted to prefabricated project components (e.g. hydromechanical equipment) and specialised machinery. The required workforce is anticipated to peak at approximately 25 people and workers are expected to be accommodated locally in existing facilities.</p>

	<p>Hydro Tasmania will engage specialist contractors to undertake the proposed upgrade works. The works also support a further program of upgrade works that will employ several locally based contractors and sub-contractors.</p> <p>Any Aboriginal artefacts encountered during works will be managed in accordance with Aboriginal Heritage Tasmania’s Unanticipated Discovery Plan.</p> <p><a href="https://www.aboriginalheritage.tas.gov.au/Documents/UDP.pdf">https://www.aboriginalheritage.tas.gov.au/Documents/UDP.pdf</a></p>
<b>Surveys</b>	
<b>Surveys completed</b>	<p>A vegetation, flora and fauna survey of the project site was completed in November 2021 and April 2022. This included meandering flora surveys carried out within the proposed works areas which involves walking over the survey area in a random manner and recording all flora species encountered. All flora species encountered during the survey were recorded on a computer tablet with GPS capability using Entura’s EFOS (Environmental Field Observation System) which records data using fields that are consistent with the NVA. Dominant and co-dominant flora species were recorded in all vegetation communities that were encountered so that the community could be attributed to the appropriate TASVEG 4 vegetation community. The boundaries and extent of the TASVEG communities were mapped in Hydro Tasmania’s corporate GIS (HT TASVEG). Threatened species locations or habitats, if observed, were recorded using EFOS.</p> <p>An Aboriginal and historic heritage survey of the intake, quarry and access track was completed April 2022. A partial survey of the downstream tunnel portal site and access track was completed in May 2022.</p>
<b>Surveys proposed</b>	<p>An Aboriginal and historic heritage survey is planned for the remainder of the proposed downstream tunnel portal works area prior to the commencement of ground disturbing activities.</p>
<b>Timeline</b>	
<b>Schedule</b>	<p>It is anticipated that construction of the intake structure and excavation of the tunnel and remainder of the approach channel will be completed between December 2022 and June 2025.</p>
<b>Information required under Section 27B(2)(k) of EMPC Act</b>	
<b>EPBC Act</b>	<p>No Matters of National Environmental Significance under the EPBC Act are anticipated to be impacted by the activity.</p> <p>Hydro Tasmania does not intend to refer the asset replacement project under the EPBC Act.</p>
<b>LUPA Act</b>	<p>The Central Highlands Council had notified Hydro Tasmania (Attachment 6) that the proposed works do <u>not</u> require a planning permit.</p> <p>In accordance with s.60A(2) of the LUPA Act, Hydro Tasmania, as a Water Entity administering a Water District, is not required to hold a planning permit for any activities necessary for the operation, maintenance, repair, minor modification, upgrading or</p>

	<p>replacement of existing assets owned by Hydro Tasmania, providing the works will not cause an environmental nuisance, material or environmental harm.</p> <p>Based on the temporary nature of construction activities and location, it is unlikely that the activities would:</p> <ul style="list-style-type: none"> <li>• unreasonably interfere with a person’s enjoyment of the environment</li> <li>• result in a nuisance specified in an Environment Protection Policy</li> <li>• consists of an environmental nuisance of a high impact or on a wide scale</li> <li>• involve an actual adverse effect on the health or safety of human beings</li> <li>• cause adverse effect on the environment that is of a high impact or on a wide scale</li> <li>• result in an actual adverse effect on the environment that is not negligible; or</li> <li>• result in actual loss or property damage above a threshold amount</li> </ul>
<b>Bilateral agreement</b>	Not applicable
<b>Environmental Licence</b>	The proposal does not include activities or development which requires an Environmental Licence.
<b>Consideration of other legislation</b>	
<b>Environmental Management and Pollution Control Act</b>	<p>Based on the quantity of spoil (rock) proposed to be crushed and screened the proposed project is classed as a Level 2 activity under Schedule 2 (6)(a)(ii) of the <i>Environmental Management and Pollution Control Act 1994</i>. Specifically:</p> <p><i>Materials Handling</i></p> <p>(a) <i>Crushing, Grinding or Milling: processing (by crushing, grinding, milling or separating into different sizes by sieving, air elutriation or in any other manner) of –</i></p> <ul style="list-style-type: none"> <li>(i) <i>chemicals or rubber at a rate of 200 tonnes or more per year; or</i></li> <li>(ii) <i>rock, ores or minerals at a rate in excess of 1 000 cubic metres per year.</i></li> </ul>
<b>Mineral Resources Development Act</b>	The proposed works do not constitute ‘mining’ for the purposes of the <i>Mineral Resources Development Act 1995</i> . The definition of mining requires that the purpose of the works is to ‘obtain’ minerals. In this case the creation of rock spoil is incidental to the excavation and is not the purpose of the activities.
<b>Aboriginal Heritage Act</b>	A Permit to Disturb will be sought in accordance with the <i>Aboriginal Heritage Act 1975</i> should artefacts be identified during additional surveys or excavation works that cannot be avoided.



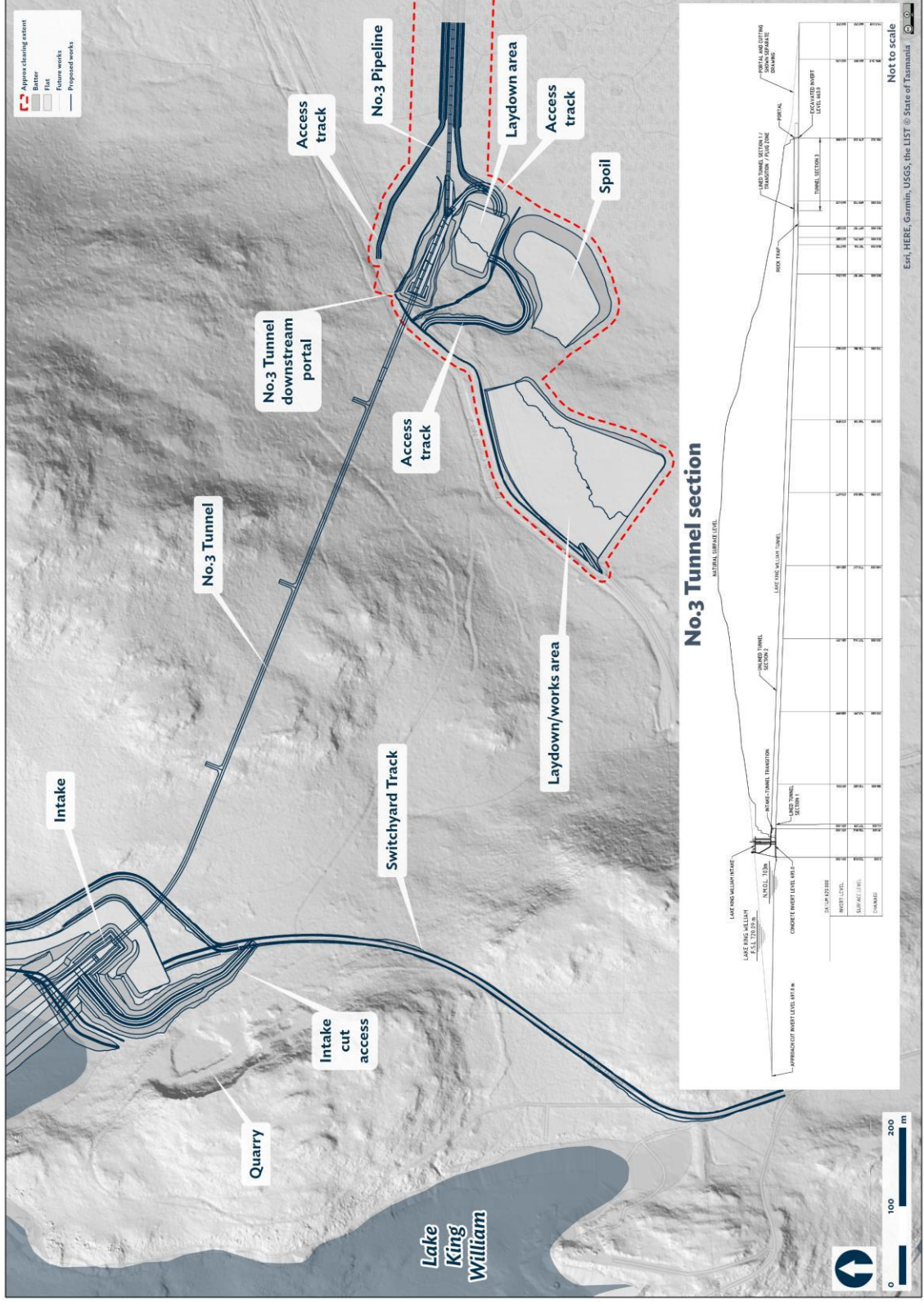


Attachment 2: Intake structure overview

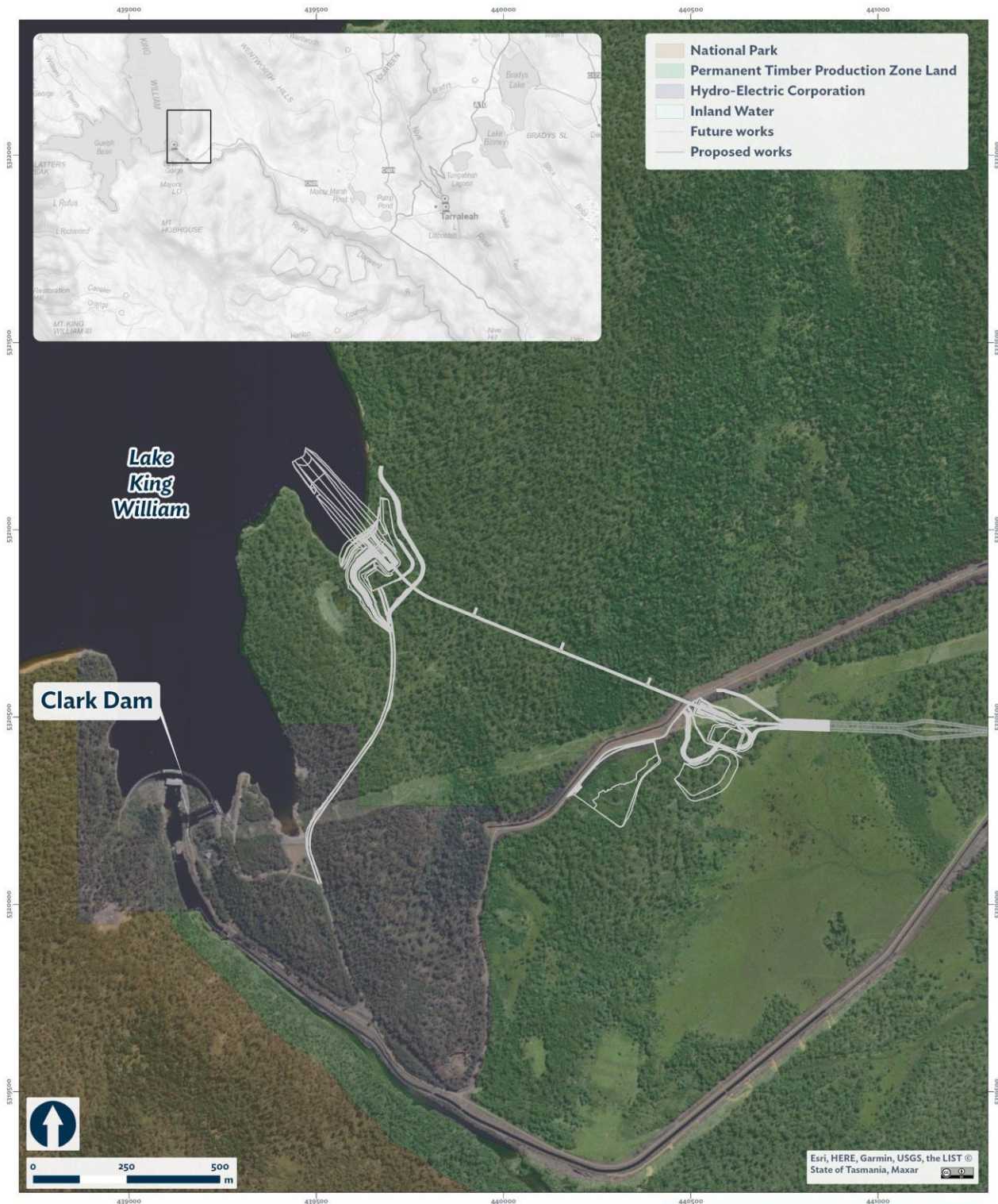
## New intake at Lake King William concept



Attachment 3: Conceptual intake arrangement



Attachment 4: Tunnel overview



Date: 15/09/2022  
 Prepared by: Grace Uziallo  
 Verified by: David Procter  
 Approved by: Ian Jones  
 Revision: 4  
 Scale 1:9,000 @A3  
 MGA2020 Zone 55  
**\*Intended to be printed at A3\***

## Battery of the Nation - Tarraleah

### Stage 2 upgrade works location

GIS Drawing Ref: BotN-TAR-GEN-936-1- Project Description Locality-A3

### Attachment 5: Project location

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**Ian Jones**

**From:** Planner <planner@centralhighlands.tas.gov.au>  
**Sent:** Tuesday, 18 October 2022 4:21 PM  
**To:** Ian Jones  
**Cc:** Kathy Bradburn  
**Subject:** RE: Tarraleah - Work Package 3

Hi Ian,

Thank you for your email with the attached letter dated 26 September 2022 and Notice of Intent document.

Council can confirm that the activities associated with work package 3 do not require a planning Permit from CHC.

Kind regards  
Louisa

Louisa Brown | Planning Officer | Central Highlands Council  
P: 03 6259 5503 | E: [planner@centralhighlands.tas.gov.au](mailto:planner@centralhighlands.tas.gov.au)  
19 Alexander Street, Bothwell, TAS 7030



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**From:** Ian Jones <Ian.Jones@hydro.com.au>  
**Sent:** Monday, 26 September 2022 7:49 PM  
**To:** Planner <planner@centralhighlands.tas.gov.au>  
**Subject:** Tarraleah - Work Package 3

Hello Louisa,  
Please find attached a letter outlining Work Package 3 of early upgrade and replacement works for the Tarraleah Power Scheme.

Please do not hesitate to contact me should you have any questions or require further information.

Regards  
Ian

**Ian Jones**  
Environmental Planning and Policy Specialist  
BEnvDes BUrbRegPlnn CPP