

Borumba Pumped Hydro Energy Storage Project

Project Update

July 2022



Acknowledgement

Powerlink acknowledges the Traditional Owners and their custodianship of the lands and waters of Queensland and in particular, the lands on which we operate. We pay our respect to their Ancestors, Elders and knowledge holders and recognise their deep history and ongoing connection to Country.

Presentation will provide an update to the Borumba Pumped Hydro Project since our last update to community and stakeholders in April 2022

1. Budget announcement about Borumba
2. Wivenhoe site visit recap
3. Update and input on detailed studies
4. Transmission corridor engagement

Budget announcement about Borumba



What was announced?

- An additional \$13 million for the Borumba Pumped Hydro Project

The additional budget is to be spent to:

- Increase the scope of environmental studies to be consistent with environmental impact statement requirement
- Progress cultural heritage and archaeological studies with Kabi Kabi
- Enable a final investment decision

Environmental Studies Scope

	Study scope for environmental and social studies to support detailed analytical studies	Study scope for EIS scale study
Purpose	<ul style="list-style-type: none">• Identify any issues that affect project cost, design, operation, or may fatal flaw• Preliminary assessment of baseline, impacts, and benefits• Understand potential environmental and social cost implications for project development• Identify future investigations and approvals	<ul style="list-style-type: none">• Project specific assessment of potential environmental and social impacts• Detailed assessment of baseline, impacts and opportunities• Identify management measures or opportunities to maximise benefits• Basis for development of management plans for the construction and operations phases of the project

Wivenhoe site visit



- Occurred on 19 May to provide a deeper understanding of how pumped hydro storage works
- Visit included stakeholder reference group members, as well as representatives from Cleanco, Powerlink, Department of Energy and Public Works and SEQWater
- CleanCo presented on how Wivenhoe pumped hydro works and led a tour of the power station and upper reservoir
- SEQWater presented on Wivenhoe Dam operations



	Wivenhoe	Borumba
Scheme size	570 MW and storing up to 10 hours of energy (5,700 MWh)	1,500 MW to 2,000 MW and storing up to 24 hours of energy (36,000 MWh to 48,000 MWh)
Power station	Part underground and part above ground	Wholly underground
Upper reservoir capacity	28,700 ML	54,000 ML to 68,000 ML (depending on the height of the dam wall)
Lower reservoir capacity	1,165,240 ML	218,000 ML
Head	Minimum gross head – 87 m Maximum gross head – 117.5 m	Minimum gross head - 280 m Maximum gross head – 355 m

Studies Update

Key themes and issues raised – April SRG and community information session

- Upper reservoir design
 - Reservoir footprint.
 - Infrastructure requirements – footprint and impacts.
- Lower reservoir design
 - Location and height of the proposed new lower reservoir dam.
 - Design of fish and aquatic fauna passage.
 - What will happen to the existing dam wall (i.e., remain or be decommissioned).

Next steps

- Project Hydro Board approves final reference design.

Exploratory works

Exploratory works will increase our understanding of the site geology and will improve the engineering design. It does not imply that an investment decision has been made.

Exploratory works will include:

- Exploratory drilling
- Minor road works on Bella Creek Road and Borgan Road – road works to allow safe access to site and includes bridge improvements and curve widening
- Support infrastructure and on-site access road
- On-site spoil disposal site

Next steps

- Engage with stakeholders, including Bella Creek Road and Borgan Road residents
- Commence approval process with Gympie Regional Council and State Government

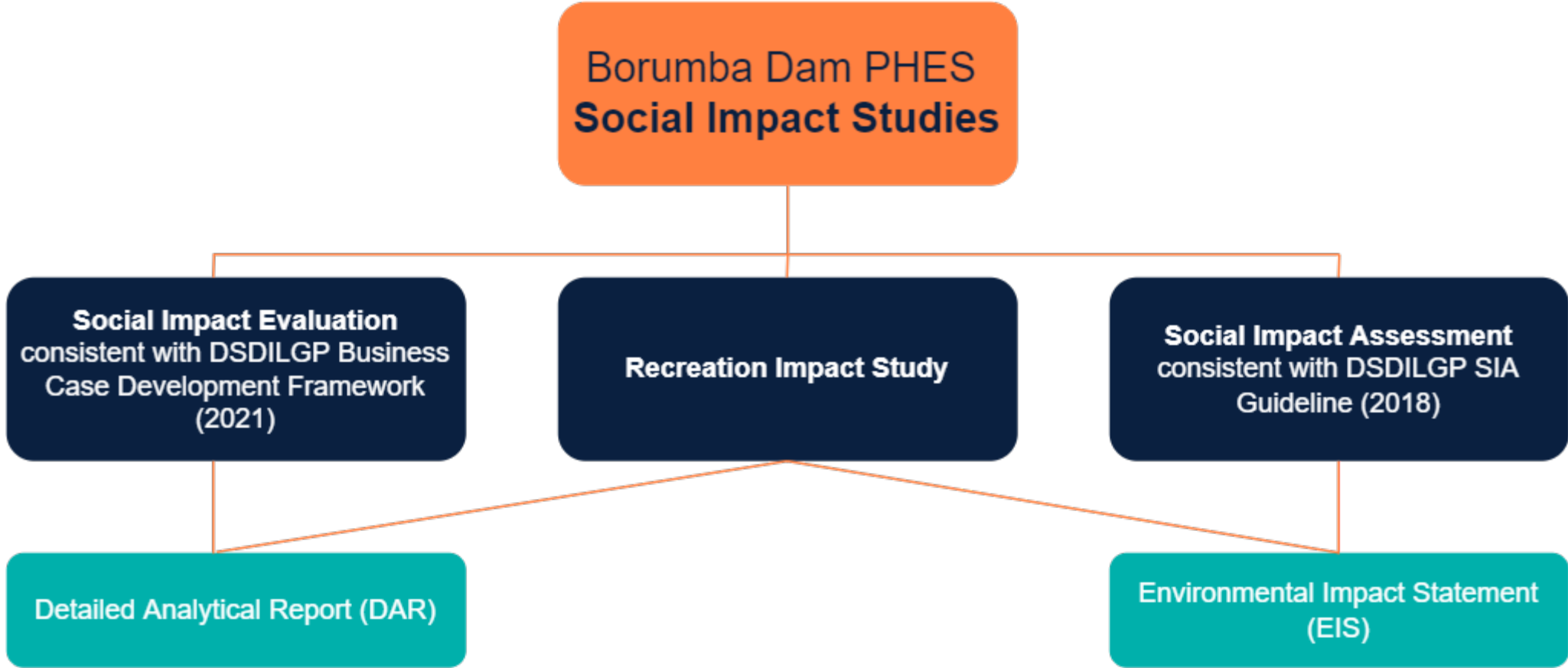


Key themes and issues raised – April SRG and community information session

- Construction traffic movements through town and impacts on tourism and the community.
- Local roads are already heavily used by locals and tourists and in need of an upgrade.
- Potential access disruptions during construction.

Next steps

- Council briefings – briefings with Gympie Regional Council and Somerset Regional Council (depending on transport routes)
- Traffic and transport stakeholder groups – meeting to outline exploratory works and traffic and transport study scope. This meeting will be like what was provided for the environmental groups in March 2022.
- Next SRG meeting is in September and will include a dedicated agenda item for traffic and transport.
- Engagement in relation to traffic and transport will continue into Q4 2022.



Social Impact Evaluation*

Key matters include:

- Land use and property
- Institutional, political systems and equity
- Community, lifestyle and quality of life
- Cultural
- Health
- Economic
- Environment
- Access and connectivity

* consistent with DSDILGP Business Case Development Framework (2021)

Recreation Impact Study

Key matters include:

- Existing recreation uses and values
- Drivers of recreation
- Barriers to recreation
- Benefits of recreation
- Opportunities for recreation

Social Impact Assessment*

Key matters include:

- Workforce management
- Housing and accommodation
- Local business and industry procurement
- Health and community wellbeing
- Community and stakeholder engagement

* consistent with DSDILGP SIA Guideline (2018)

April – July

- Scope key social and recreation impacts and opportunities
- Prepare detailed social and recreation baseline

August

- Targeted community and stakeholder engagement
- Community survey on recreation

September - October

- Analyse and describe the social value
- Recreation Impact Study

November

- Social Impact Evaluation Report
- Recreation Impact Study

2023

- Social Impact Assessment



Community and stakeholder engagement

Targeted engagement

- Semi-structured interviews with selected stakeholders (identified during scoping of impacts)

Community survey

- Community survey focusing on recreation values and experiences
- Target survey audience to include but not limited recreation users, local businesses, commerce groups, social infrastructure providers, visitors to region

Outcomes of broader project engagement program

- Draw on outcomes of broader project engagement activities, including minutes from SRG, community forums, and meetings with landholders

Aim today is to understand community priorities and potential opportunities for community benefit that will help us deliver the best social and recreation outcomes for the project and community.

Updated study timeline 2022

Study	Scheduled to commence	Scheduled to be complete
Historical heritage	June	August
Water transfer	June	October
Soils and erosion	April	August
Contaminated land	April	August
Indigenous cultural heritage		September
Fluvial geomorphology and sediment transport	March	September
Groundwater	April	September
Fish passage	April	September
Flood hydrology	May	October
Social impact assessment	April	November
Traffic and transport	June	November
Recreation	April	November
Sustainability	June	November
Air	July	October
Noise and vibration	July	October
Greenhouse gas	July	October

Transmission Line

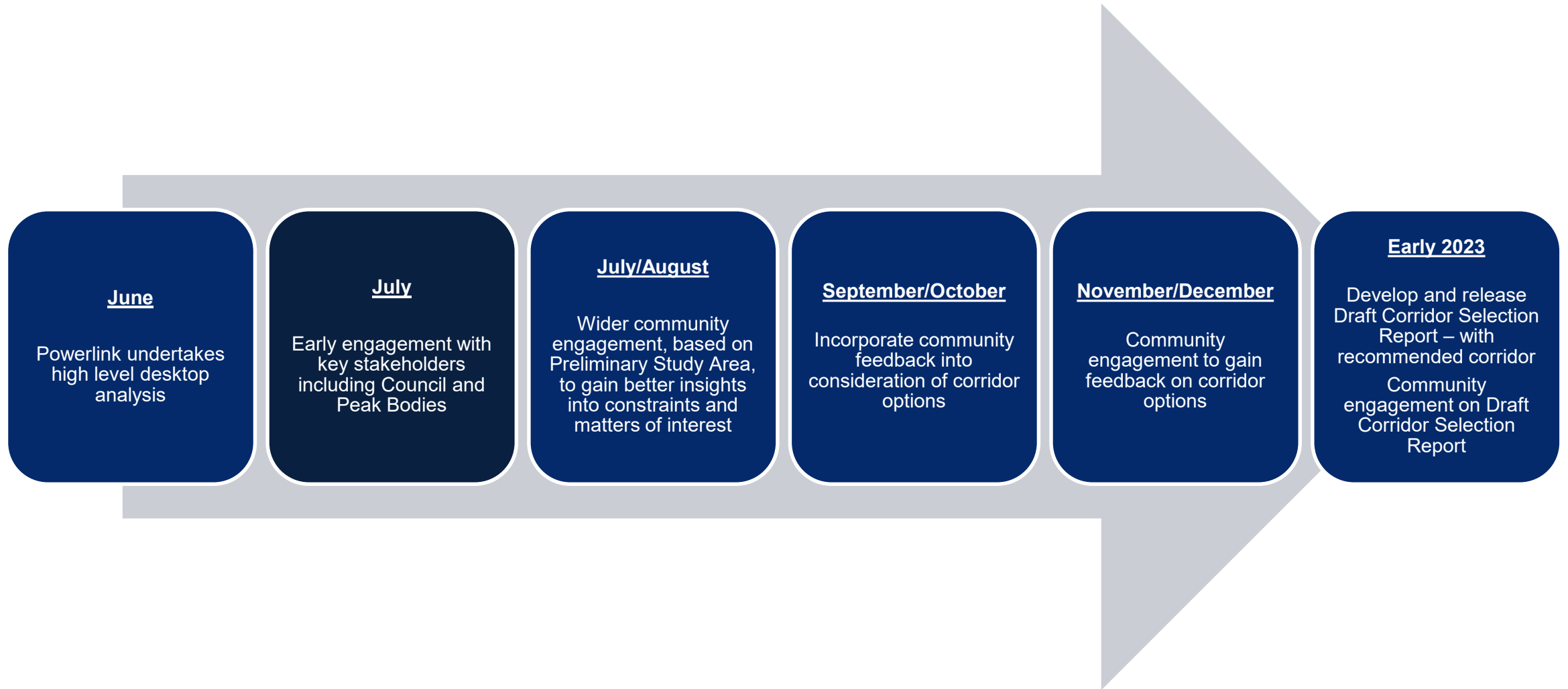


Transmission Network Connection

- Two new transmission lines will need to be built to connect the pumped hydro facility to the existing transmission network at Powerlink's Woolooga and Tarong substations.
- We are currently investigating important factors for the potential transmission corridors. Important factors Powerlink considers in planning for new transmission lines:
 - Environmental and physical
 - Social
 - Economic
- At the same time, we are engaging early and often with local communities and stakeholders to gain valuable insights and input to help with our planning.
- This first stage will enable Powerlink to then identify potential transmission corridor options, with community input and feedback playing an important role in this decision-making.



Transmission Engagement Timeline to early 2023



CONTACT

33 Harold Street Virginia
Queensland 4014 Australia

PO Box 1193 Virginia
Queensland 4014 Australia

1800 635 369

borumba@powerlink.com.au

www.powerlink.com.au

