

Borumba Pumped Hydro Project

Stakeholder Reference Group briefing
Controlled Action status

8 NOVEMBER 2023

Acknowledgement of Country

In the spirit of reconciliation, Queensland Hydro acknowledges the Traditional Custodians of Country throughout Queensland and, in particular the lands, skies and waters on which we operate. We celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands, skies and waters of Queensland.

Queensland Hydro pays respect to Elders past and present honouring their continuing spiritual and cultural connections to Country.

1

Welcome and
Introductions

2

Controlled
Action status

3

Main Works
Approval
Pathway
Exploratory
Works
Approvals
Update

4

Ecological
Assessments

5

Impact
Reduction
Ecological
Studies
Mitigation

6

SRG
Involvement

7

Next steps

Welcome and Introductions



Introductions

On this call from Queensland Hydro

Julie Spencer: Head of Stakeholder Engagement and Communications

Leah McKenzie: Project Director – Borumba Project

Travis Graham: Project Manager Borumba Exploratory Works

Michael Price: Environmental and approvals manager for the Borumba Pumped Hydro Project

Nirvana Searle: Environmental and approvals advisor

Cindy Thomas: Stakeholder Engagement Lead – Borumba Project

Lynda Williams: Senior Advisor Stakeholder Engagement – Borumba Project

Georgia Southern: Senior Advisor Stakeholder Engagement – Borumba Project

Controlled Action status



Main Works Approval Pathway

EPBC Referral Process

- Project referral number - 2023/09466
- Open to public comment
 - [Project Decision: EPBC Act Public Portal \(awe.gov.au\)](https://www.awe.gov.au)
 - Closes 15/11/2023
- Decision end of December



Queensland Hydro considers the Borumba Pumped Hydro project to be a controlled action.

Queensland Hydro has requested that the assessment approach be via the bilateral agreement and thus the Coordinated-General will manage the EIS.

Deciding if a proposed action needs to be referred

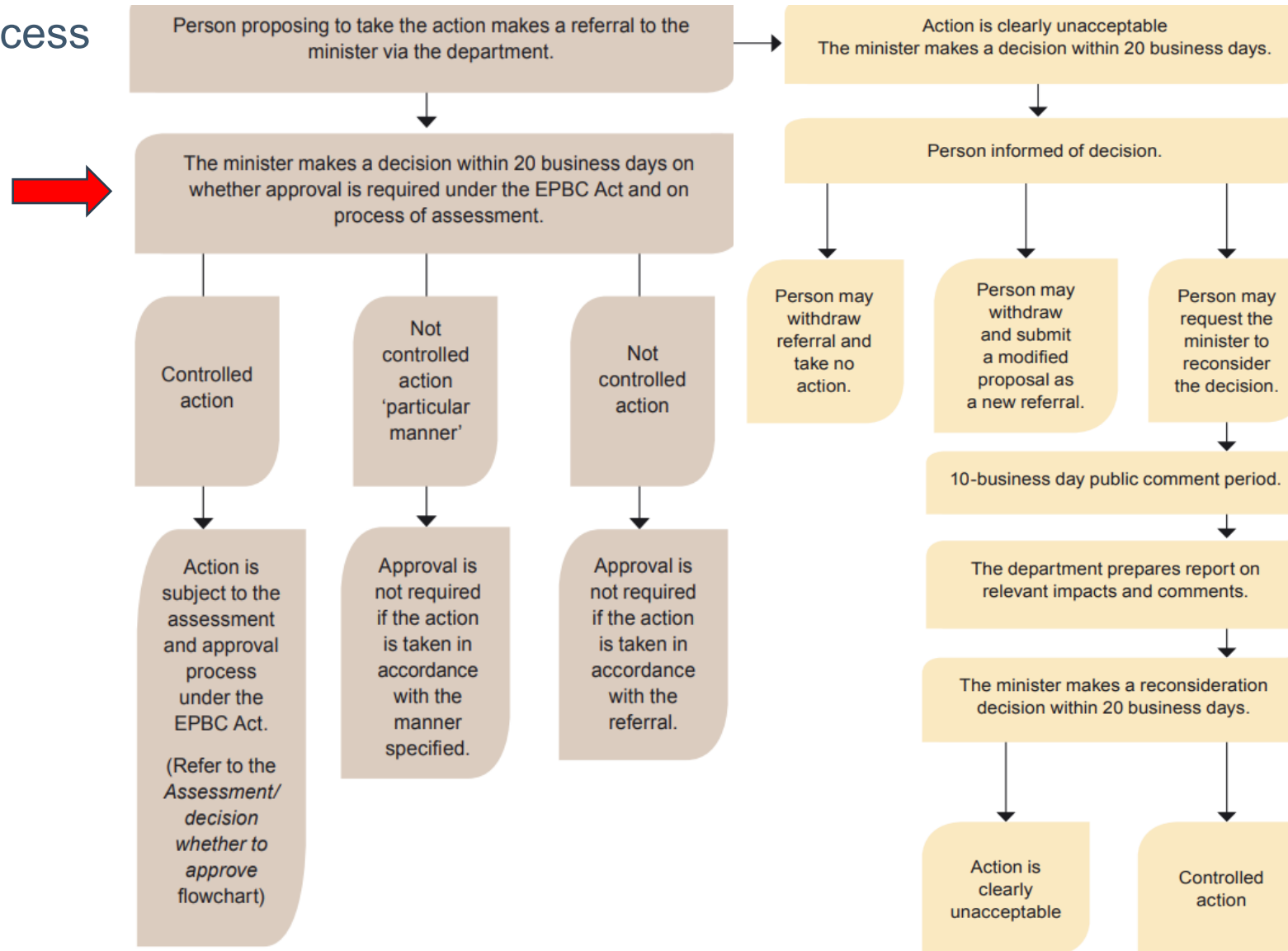
- Is the proposed action likely to have a significant impact on a matter of national environmental significance?

The matters of national environmental significance are:

- world heritage properties
 - national heritage places
 - wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed)
 - nationally threatened species and ecological communities
 - migratory species
 - Commonwealth marine areas
 - the Great Barrier Reef Marine Park
 - nuclear actions (including uranium mining)
 - a water resource, in relation to coal seam gas development and large coal mining development.
- Is the proposed action likely to have a significant impact on the environment in general (for actions by Commonwealth agencies or actions on Commonwealth land) or the environment on Commonwealth land (for actions outside Commonwealth land)?
 - If you are not certain about whether your proposed action requires approval under the EPBC Act you may refer the proposal for a decision by the minister.

Main Works Approval Pathway

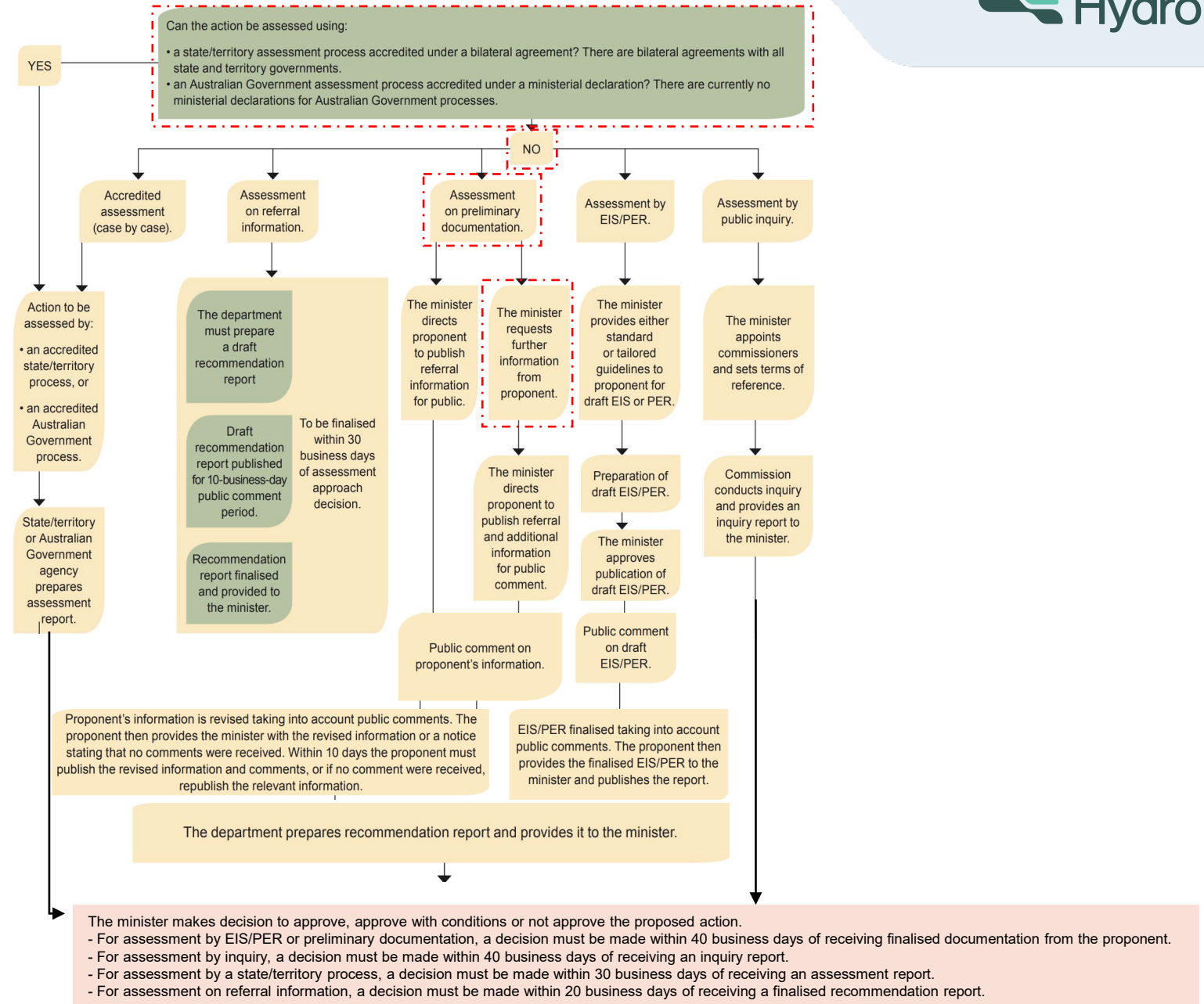
EPBC Referral Process



Exploratory Works Approvals Update

EPBC Act assessment

- Controlled action - 2023/09461
- Assessment via preliminary documentation
- Decision whether to approve post public consultation



Ecological Assessments to date

Ecological assessment	Timing	Description
Umwelt, 2023	December 2022 to January 2023	Targeted flora and TEC surveys, and fauna assessments (Spring/Summer).
Attexo, 2022	November 2022	Flora survey to assess vegetation status of proposed quarry site within Imbil State Forest.
Umwelt, 2022	November 2022	Flora survey and habitat assessment of areas within the exploratory work footprint not currently covered by previous surveys.
Umwelt, 2022. Borumba Pumped Hydro Project: Terrestrial Ecology Technical Report.	May to November 2022	Assessment of native vegetation and terrestrial ecology values, including targeted surveys for threatened flora, fauna and communities.
Attexo, 2022	October 2022	Flora survey to confirm TEC status adjacent to Borgan Road and at proposed exploratory tunnel portal sites.
SMEC, 2022	October 2022	Supplementary flora survey to confirm the presence of potential TEC near the proposed exploratory tunnel portal location.
Attexo, 2022	September 2022	Preliminary ecological assessment of areas proposed for road upgrade along Bella Creek and Borgan Road and around the proposed portal site.
Umwelt, 2022	August 2022	Terrestrial Ecology Technical Report (First round of Flora/ Fauna Surveys).
Hydrobiology, 2022. Borumba Pumped Hydro Project: Aquatic Ecology.	June to July 2022	Assessment of aquatic ecology values, including field sampling for fish, turtles, Platypus and other ecological values.
SMEC, 2022.	June 2022	A protected plant field survey was undertaken between 22 and 24 June 2022 to target <i>Rhodamnia rubescens</i> and <i>Coleus torrenticola</i> surrounding Geotechnical sites MD01, MD02, MD03, ET01 and PC01.
SMEC, 2022	May 2022	An initial protected plant field survey primarily targeting <i>R. rubescens</i> in preliminary investigation areas.
SMEC, 2022	April 2022	Field assessment of seven geotechnical investigation locations and access tracks - (Quaternary level flora assessments and threatened species searches).

Ecological studies to date have largely focused on confirming the presence of individual species, presence and extent of plant communities and identifying potential impacts and mitigation. e.g., moving project elements to avoid threatened plant communities.

Impact Reduction

Queensland Hydro is committed to reducing impact

Queensland Hydro has implemented several measures to avoid or reduce potential impacts.

For the Exploratory Works this has comprised of:

Locating works components in previously disturbed areas
(eg grazing paddocks) in the first instance, and avoiding areas where clearing would be required

Co-locating Exploratory Works infrastructure
and activities with proposed main works footprint to reduce additional, future disturbance.

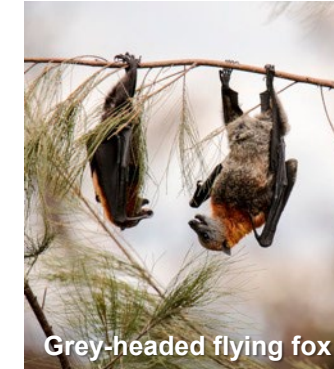
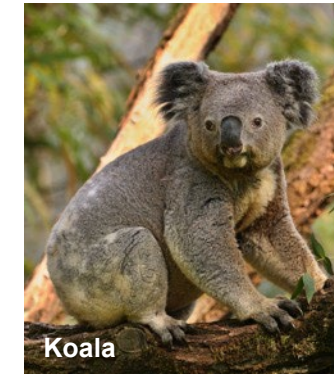
Relocating works where possible
to avoid sensitive environmental areas.

The initial portal for the exploratory tunnel, drilling to the proposed site of the underground power station, was found to be located within the critically endangered Threatened Ecological Community (TECs) - Lowland Rainforest of Subtropical Australia.

As a result, the exploratory tunnel drilling portal has been moved and two options are being considered by Queensland Hydro, both of which are in less environmentally sensitive areas as discussed in this report.

Impact Assessment on fauna

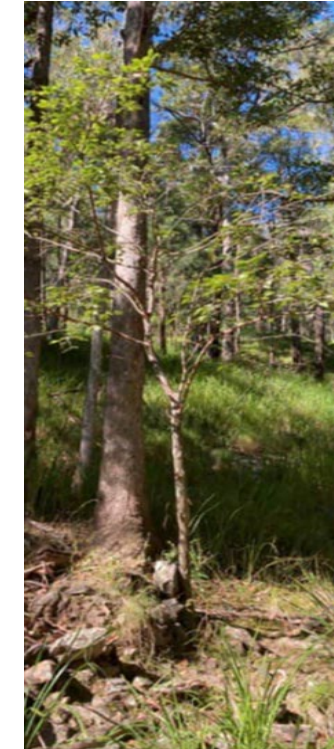
Matter	Main Works	Exploratory Works
Koala	Likely	Likely
Greater glider, Long-nosed potoroo, Grey-headed flying-fox, Glossy black-cockatoo	Likely	Possible
White-throated snapping turtle, Yellow-bellied glider, Black-breasted button quail	Likely	Unlikely
Spotted-tail quoll*	Possible	Possible
Mary River turtle, Mary River cod, Australian lungfish, White-throated needletail, Brown treecreeper	Possible	Unlikely



With additional surveys planned for the site, other species may also be identified eg the Collared delma and will be included in the EIS.

Impact Assessment on Vegetation / Flora

Matter	Main Works	Exploratory Works
Lowland Rainforest of Subtropical Australia	Likely	Likely
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Likely	Unlikely
<i>Bosistoa transversa</i> , <i>Floydia praealta</i> , <i>Coleus torrenticola</i> (syn. <i>Plectranthus torrenticola</i>), <i>Rhodamnia rubescens</i> , <i>Rhodomyrtus psidioides</i> *, <i>Sophora fraseri</i>	Likely	Unlikely
<i>Thesium australe</i> *	Possible	Possible



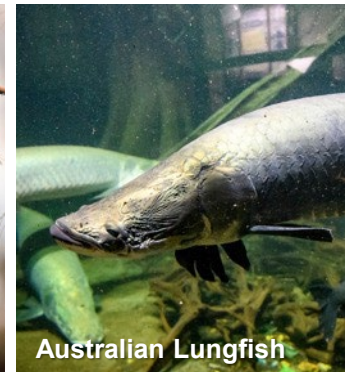
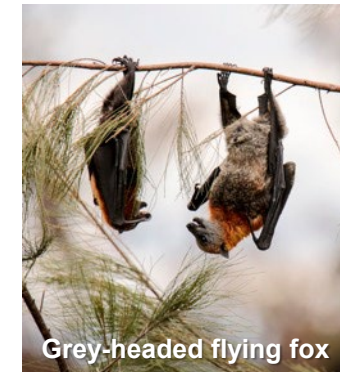
With additional surveys planned for the site, other species may also be identified eg Macadamia species, and will be included in the EIS.

Upcoming Ecological Studies

Objectives

- confirm the extent and quality of habitat for individual species and communities both in the project footprint and the wider area
- confirm the extent and health of local populations
- develop improved understanding of species population structure and significance
- identify potential threats.

Commencing this month



Mitigation

A key consideration will be the effectiveness of the mitigation measures with a focus on species specific actions

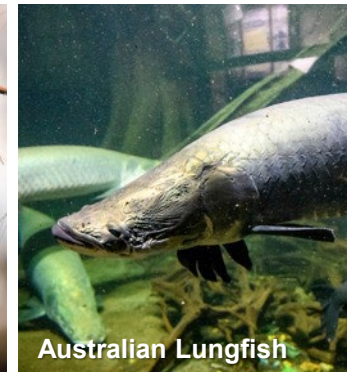
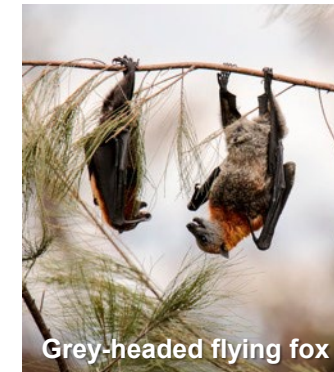
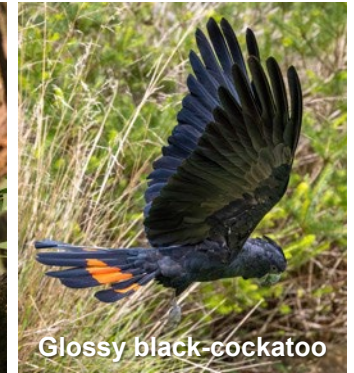
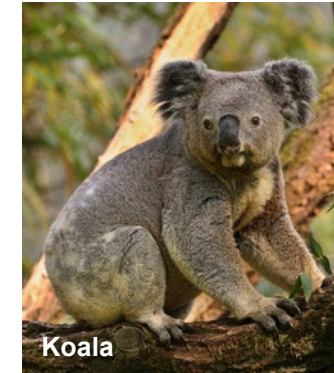
- Rehabilitation
 - buffers around existing TECs
 - TECs
- Aquatic species
 - Fauna passage
 - Fish salvage guidelines
- Translocation activities for flora
- Follow koala strategy requirements
- Replacement of hollows

Will also need to consider mitigation measures implemented for other environmental matters (e.g. water quality)

Upcoming Ecological Studies

Methodology

- thermal imaging surveys via drone for koalas and gliders
- koala detection dogs and genetics
- bioacoustic survey for frogs, birds and bats
- targeted reptile surveys
- camera trapping
- detailed habitat quality assessment/mapping (eg Biocondition Assessment)
- eDNA studies for aquatic species
- targeted nest surveys for turtles and breeding habitat
- targeted flora surveys to map out population extents within the footprint and in the area.



Proposed actions - fauna

Matter	Actions
Koala Greater glider Yellow-bellied glider	<ul style="list-style-type: none"> • Learnings from Olive Downs • Engagement of specialists (all matters)
White-throated snapping turtle Mary River turtle	<ul style="list-style-type: none"> • Discussions with DES around turtle passage design • Discussions with environmental groups and university about existing studies and works
Spotted-tail quoll	<ul style="list-style-type: none"> • Whether detection dogs should be used
Mary River cod Australian lungfish	<ul style="list-style-type: none"> • Fish passage assessment with key stakeholders • Discussions with environmental groups and university about existing studies and works

Proposed actions – vegetation/flora

Matter	Actions
<p>Lowland Rainforest of Subtropical Australia</p>	<ul style="list-style-type: none"> • Learnings from the Big Scrub Restoration project • Identify local projects which have had success with rehabilitation • Review historic imagery to better understand dieback due to inundation • Weed and rehabilitation works on Queensland Hydro land
<p>Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions</p>	<ul style="list-style-type: none"> • Review historic imagery to better understand dieback due to inundation
<p><i>Bosistoa transversa</i>, <i>Floydia praealta</i>, <i>Coleus torrenticola</i> (syn.<i>Plectranthus torrenticola</i>), <i>Rhodamnia rubescens</i>, <i>Rhodomyrtus psidioides</i>, <i>Sophora fraseri</i>, <i>Thesium australe</i></p>	<ul style="list-style-type: none"> • Working with DAF on Myrtle Rust programs • Studies to better understand species ecology to support potential translocation activities • Work with environmental groups involved with implementing the Macadamia Action Plan

Offset Strategy

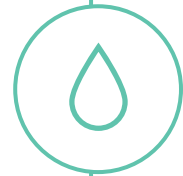
QH Preferred approach



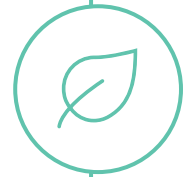
The total offset area will be significant

Strategic solution to offsets rather than isolated discrete areas

Explore a more robust Solution (connectivity/conservation gain)



Strategic solution
Land based and indirect solutions



Ecological values and function similar to areas impacted.
Ensure conservation gain for species



Proposed to provide one large offset across exploratory and main works, via the Main Works EIS process.
Working group established by the OCG



Should the Borumba PHES Project not proceed within five years of approval of the exploratory works, a stand-alone offset will be delivered using the Queensland Hydro land.

First Nations Partnerships

Engagement with Traditional Owners

- Kabi Kabi are the Traditional Owners of the land where the Borumba PHES project is located.
- Queensland Hydro is working extensively with Kabi Kabi on cultural heritage studies and management plans.
- Queensland Hydro is working openly and transparently with Kabi Kabi to manage impacts and create lasting benefits.
- Kabi Kabi interested in supporting the ecological works and future management activities

SRG Involvement

The Stakeholder Reference Group and can get involved by:

- identifying and providing records of threatened species in the project area and the wider region
- suggesting conservation and environmental enhancement projects in the region
- supporting ecological surveys (eg nest detection dogs)
- provide information on lessons learnt and effectiveness from conservation activities undertaken to date (eg turtle nest protection works)
- identify areas of land to target or undertake compensatory solutions
- advising of any known local experts Queensland Hydro should be in contact with
- Identify opportunities for Queensland Hydro to collaborate on environmental enhancement projects.

“Queensland Hydro will collaborate and partner with leading experts and conservation groups and Traditional Owners to implement the strategies to achieve the objectives of national recovery plans for species”

NEXT STEPS - OUR FOCUS

1.

EIS Process

Controlled Action determination on the Main Works

Public notification of the draft terms of reference by the OCG

Preliminary Documentation for the Exploratory Works



2.

EIS Commencement

Working with our technical specialists to undertake assessments and understand the key challenges



3.

Consultation with our stakeholders

- *To be confirmed*
- *May be workshops, specialist briefings, one-on-one landholder sessions, community drop in sessions*



4.

Exploratory works

Approvals, compliance, preliminary documentation submission



Questions?



Thank you

Get in touch

1800 433 939

info@qldhydro.com.au

ABN 81 661 444 515

qldhydro.com.au