SECTION **8**

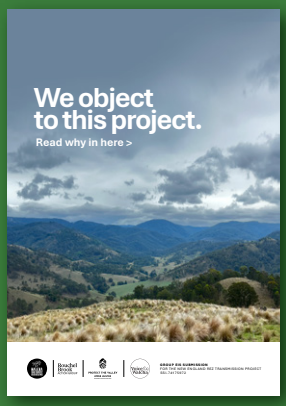
Water Supply, Water Security and Water-Related Environmental Impacts

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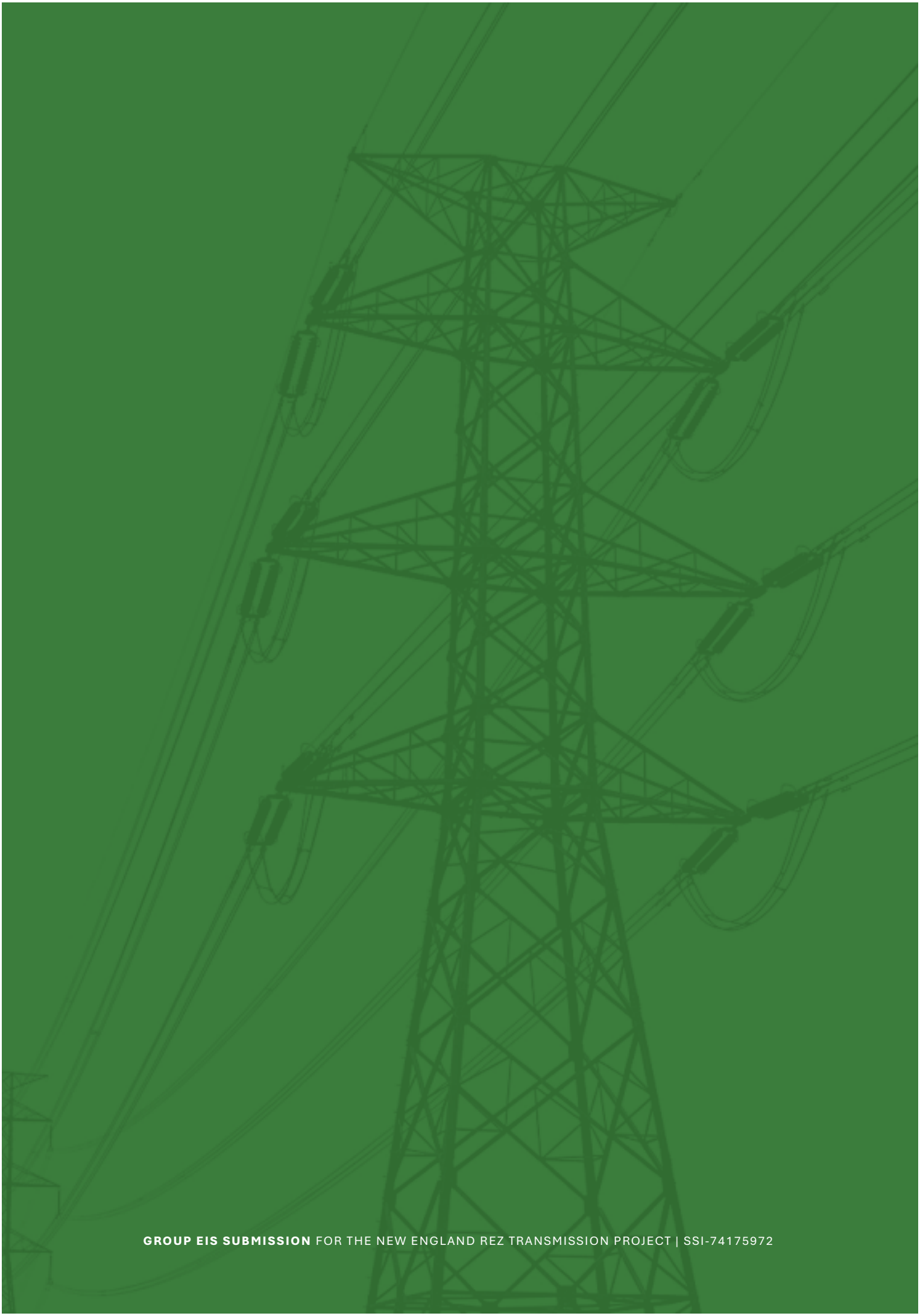
THAT FORMS PART OF A LARGER GROUP SUBMISSION

TO THE NEW ENGLAND REZ TRANSMISSION PROJECT

SSI-74175972



Walcha High Country Guardians | Rouchel Brook Action Group | Protect the Valley Upper Hunter | Voice for Walcha



GROUP EIS SUBMISSION FOR THE NEW ENGLAND REZ TRANSMISSION PROJECT | SSI-74175972

SECTION 8

Water Supply, Water Security and Water-Related Environmental Impacts

Key issues we have found ...



Water supply remains unproven

The EIS estimates 2,400 ML of construction water, but reliable sources, supplier commitments and delivery arrangements have not been demonstrated.



Existing bore supplies need protection

Potential production bores remain unidentified, leaving sustainable yields, drawdown and effects on neighbouring farm supplies and dependent ecosystems insufficiently assessed.



Drought increases demand and uncertainty

Drought increases demand and uncertainty Dust suppression needs can rise as supplies decline, yet construction demand and reliable water availability remain inadequately tested against drought.



Regional demand lacks supply evidence

Regional forecasts quantify construction demand while excluding actual source availability and existing users, leaving competition between projects and communities unresolved.



Camps lack proven water services

Camps lack proven water services. Waverley Road illustrates unresolved camp water sources, drought contingencies, tanker deliveries and wastewater capacity, with practical consequences for rural neighbours.



Protect Walcha's drinking water

Construction near Walcha's drinking water offtake requires demonstrated protection against sediment, chemical spills and any competing demands for river water.

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Read in more detail >





SECTION **8**

Water Supply, Water Security and Water-Related Environmental Impacts

EXECUTIVE SUMMARY

Our community considers that the New England REZ Environmental Impact Statement (EIS) fails to adequately demonstrate how the project's substantial water requirements can be met without unacceptable impacts on existing users and the environment.

EnergyCo estimates **2,400 ML of construction water demand** for the transmission alone, yet has not established where much of this water will come from, whether supplies will be reliable, or the consequences of extraction. These are fundamental questions, particularly in the New England Tablelands, where small catchments, variable fractured-rock aquifers and drought constrain water availability.

Our principal concerns are:

1. **Water supply remains unproven.** EnergyCo has identified possible sources but deferred the detailed supply strategy until after approval, leaving water availability and extraction impacts unresolved.
2. **Walcha faces substantial additional demand.** EnergyCo forecasts 403 ML of construction demand in Walcha LGA in the peak year, averaging 1.1 ML/day—greater than the town's existing daily water demand. While this water may be sourced elsewhere, neither reliable local supply nor the implications of importing water have been demonstrated.
3. **Waverley Rd workers Camp has unresolved water supply concerns** as raised by a landholder account of local water extraction limits, and access constraints.
4. **Groundwater impacts have not been adequately assessed.** Extraction locations, sustainable bore yields and potential effects on neighbouring water users remain unknown. Groundwater quality and treatment remain unresolved. The EIS records arsenic above drinking-water guidelines at several monitoring locations and acknowledges limited data concerning potential connections to existing users. Published groundwater results do not resolve uranium.
5. **Construction water demand appears materially understated.** EnergyCo has not substantiated its low allowances for concrete production, road construction, dust suppression and personnel. Its own assessment acknowledges that dry conditions can increase demand, yet leaves that increase to detailed design.
6. **These quantities must be justified and corrected before approval.Cumulative water availability remains unassessed.** EnergyCo's October 2026 regional demand update estimates construction demand across the REZ but expressly excludes water-source availability and existing community requirements.
7. **Critical assessment is deferred until after approval.** Decisions about water sources and extraction impacts will be made when affected communities have substantially less opportunity to scrutinise or influence them.

Our community asks DPHI to require EnergyCo to demonstrate reliable water supply, assess its impacts and resolve these fundamental deficiencies before determination.

Where acceptable outcomes cannot be demonstrated, the project must be modified accordingly. Future management plans cannot substitute for the evidence required to establish that the project is environmentally acceptable.

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Part 1
Failure to adequately address SEARs and agency assessment requirements

1 | Community Comment

Our community considers that EnergyCo's Environmental Impact Statement (EIS) has failed to provide sufficient information to demonstrate that the New England REZ Network Infrastructure Project can be constructed without unacceptable impacts on existing water users, regional water resources and the environment.

The shortcomings are not minor omissions. They concern fundamental questions about the project's construction requirements, the sources from which water will be obtained, the reliability of those sources, and the consequences for affected communities.

These are precisely the matters the Planning Secretary's Environmental Assessment Requirements (SEARs), issued on 7 April 2026, required EnergyCo to address.

EnergyCo has produced extensive technical reports, identified possible water sources, calculated construction water requirements and proposed numerous mitigation measures. However, the existence of these reports does not establish that the assessment requirements have been adequately satisfied.

The fundamental problem is that EnergyCo has assessed the demand for water without establishing how that demand will be met, and has reached conclusions about acceptable impacts without knowing where much of the water will be extracted.

This is not just about meeting the SEARs requirement with respect to impacts on the water resource in the area, it is also about the lack of analysis that is required to ensure the project can be built. All parties, including the NSW government, have a stake in this process being completed properly, prior to determination.

The EIS estimates 2,400 ML of water for construction of the transmission project. It then identifies a menu of possible supplies, including surface water, groundwater, harvested runoff, wastewater reuse, council supplies and commercial vendors.

Yet the detailed Water Supply Strategy will not be developed until detailed design – post determination.

This approach reverses the proper sequence of environmental assessment.

EnergyCo is seeking approval of a major infrastructure project before establishing the feasibility and environmental consequences of supplying one of its essential construction resources.

The consequences are particularly serious for the New England Tablelands, where water availability is constrained by small headwater catchments, variable fractured-rock aquifers, agricultural demand and prolonged drought.

The October 2026 regional water-demand update further demonstrates the scale of the challenge, with an estimated 1,566 ML required for projects located within Walcha LGA between 2027 and 2035. However, that report expressly excludes an assessment of actual water-source availability.

Our community submits that EnergyCo has not adequately demonstrated compliance with several material water-related assessment requirements, particularly those concerning supply arrangements, groundwater impacts and wastewater disposal.

We request that DPHI require these deficiencies to be resolved before determination, including further public assessment of material new information.

2 | What the SEARs required EnergyCo to do

The revised SEARs, issued by DPHI on 7 April 2026, establish the specific matters that EnergyCo's EIS must address.

Under Water and Soils, the SEARs require:

- Assessment of impacts on the quantity and quality of regional surface water and, where relevant, drinking water resources.
- Details of water requirements, supply arrangements and wastewater disposal arrangements for construction and operation, including consultation with suppliers.
- Assessment of impacts on groundwater aquifers and groundwater-dependent ecosystems, having regard to the NSW Aquifer Interference Policy and relevant Water Sharing Plans.
- Assessment of flooding impacts and risks.
- Identification and assessment of impacts associated with waterfront land.
- Description of erosion and sediment-control measures.

> Source: DPHI, Planning Secretary's Environmental Assessment Requirements, SSI-74175972, 7 April 2026, p. 3. Amended SEARs.pdf

The SEARs also require an assessment of likely environmental impacts, including cumulative impacts, measures to avoid or minimise impacts and actions proposed to address uncertainties.

> Source: Amended SEARs, pp. 1–2. Amended SEARs.pdf

These requirements are not satisfied merely by naming the relevant environmental risks or promising to investigate them later.

An assessment should provide sufficient information for the decision-maker to understand the likely impacts and determine whether those impacts are acceptable.

It should also give affected communities a meaningful opportunity to examine the assumptions and evidence upon which EnergyCo's conclusions rely.

Where essential information remains unavailable, it is legitimate to question whether the EIS has fulfilled the purpose of the assessment requirements.

3. Failure to establish construction water supply arrangements

The most significant deficiency concerns the requirement to provide details of water supply arrangements.

The SEARs expressly require:

> *"details of water requirements, supply arrangements and wastewater disposal arrangements for construction and operation (including consultation with suppliers)"*

Source: Amended SEARs, p. 3. Amended SEARs.pdf

EnergyCo estimates that construction of the transmission project will require approximately 2,400 ML of water, comprising 360 ML potable and 2,040 ML non-potable water.

The EIS identifies potential sources and discusses preliminary engagement with councils, WaterNSW, DCCEEW, AGL and commercial water suppliers.

It also identifies the possibility of obtaining water from existing licence holders through commercial arrangements.

However, EnergyCo has not demonstrated a complete, reliable water supply strategy.

The EIS does not establish which sources will supply the required quantities, where extraction will occur, which suppliers have committed water, or what physical infrastructure will be required to deliver the water to construction sites.

Instead, Section 18.3.6.1 states that a detailed water supply strategy will be developed as the project progresses and design details are refined.

Mitigation measure SW8 confirms that the detailed strategy will be prepared during detailed design.

> Source: EIS Section 18, pp. 695–696 and 704–705. Section 18 - Surface water and flooding (PDF) (1).pdf

This is not an adequate substitute for demonstrating supply arrangements in the EIS.

A list of possible sources is not a water supply strategy. Discussions with potential suppliers are not evidence of committed supply. The existence of water entitlements is not proof that water will be physically available when required.

EnergyCo's assessment leaves unresolved the very matters that determine whether water can be obtained without unacceptable impacts.

The deficiency is particularly serious because the location and nature of water extraction directly affect the environmental assessment. Without identifying extraction locations, it is impossible to fully determine which watercourses, aquifers, agricultural enterprises or existing users may be affected. Nor can the associated impacts of water transport, pipelines, pumping infrastructure and storage be confidently established.

We note that the Water Technical report does contain chemical analysis of the bores on pages 234 – 237. We also note that the Water Technical Report, on pages 226 – 232, contains Bore Data, such as Drilled Date, Latitude and Longitude location, Bore Depth, Water Sharing Plan and bore Purpose**. However, it does not record the measured bore yields.** Of all the information that is critical to informing the applicant or the planning department on whether water is available in sufficient quantities to build the REZ – this information is critical, it is easy to obtain, yet it is missing.

Energy Co needs to establish, through compiling of publicly available bore data, what the likely yields for ground water bores in the New England REZ may be. More importantly, the report needs to establish what the likelihood of interference with neighbouring bore yields might be. This interaction is a well-known impact between neighbouring fractured rock, small aquifer, bores. The extraction quantities need to be established, and the impacts measured. None of this work has been done.

It is difficult to reconcile this approach that has been taken, with a SEARs requirement specifically calling for details of supply arrangements.

> POSITION SOUGHT

DPHI should require EnergyCo to produce a detailed, source-specific Water Supply Strategy before determination. It must demonstrate physical availability, supplier capacity, reliable quantities, extraction locations, drought performance and the environmental consequences of the proposed arrangements.

Where reliable supply cannot be demonstrated, the project design, construction methodology, staging or scale must be modified accordingly.

4 | Failure to address DCCEEW Water's specific requirements

The inadequacy of EnergyCo's water assessment becomes more apparent when compared with the advice provided by DCCEEW Water on 23 December 2025.

DCCEEW identified 11 water assessment requirements and expressly stated that the transmission project required assessment comparable to that applied to major renewable generation developments.

The agency requested a detailed and consolidated site water balance, identification of water extraction and interference activities, details of water take and supplier confirmation.

It further requested information concerning water licences, existing users, groundwater conditions and environmental impacts.

> Source: DCCEEW Water, Comment on the Secretary's Environmental Assessment Requirements, 23 December 2025, Attachment A, items 1–11. Amended advice - DCCEEW Water.pdf

These are recommendations provided during development of the SEARs.

4.1 No demonstrated consolidated source-and-demand water balance

DCCEEW's first requirement was:

> *"A detailed and consolidated site water balance."*

EnergyCo has calculated construction demand and examined possible regional supply sources. However, the exhibited material does not establish a consolidated balance demonstrating how each component of demand will be met by identified, reliable supplies. A meaningful balance must account for supply availability, extraction restrictions, existing users, seasonal variability, storage, reuse and peak construction requirements. A forecast of demand is only one side of this calculation.

EnergyCo has quantified what it expects to use, but has not demonstrated where sufficient water will come from.

The October 2026 regional water-demand update reinforces this deficiency. It expressly acknowledges that assessment of water supply availability and existing user demand is outside its scope, and that further investigations are necessary.

> POSITION SOUGHT

Require a consolidated water balance identifying proposed sources, reliable supply volumes, peak demand, existing uses and drought constraints before determination.

4.2 Supplier confirmation has not been demonstrated

DCCEEW's third requirement specifically asks for confirmation from alternative suppliers that the appropriate volumes can be obtained. This is a clear and practical requirement.

EnergyCo's consultations and proposed commercial arrangements do not establish that sufficient water has been secured or that suppliers possess reliable capacity. Even if a supplier is willing to provide water, it must be demonstrated that the water is available within applicable extraction limits and can physically be delivered.

Our community questions how DPHI can accept EnergyCo's conclusions about supply impacts while this fundamental evidence remains outstanding.

> POSITION SOUGHT

Require documented confirmation of source capacity and supply arrangements, together with assessment of the impacts of extracting and transporting the water.

4.3 Available entitlements have been confused with reliable physical supply

Technical Report 14 compares predicted construction demand with allocations across relevant Water Sharing Plan areas.

For example, the Macleay catchment assessment identifies 152.8 ML of peak annual non-potable demand against regional allocations of 1,796 ML.

EnergyCo concludes that predicted project requirements are generally a small proportion of available allocations.

> Source: Technical Report 14, Table 4.3, p. 87; EIS Section 18, Table 18.3, p. 698.
Section 18 - Surface water and flooding (PDF) (1).pdf

But the amount allocated across a water-sharing area does not establish the amount available to a particular construction project. The relevant questions are how much water remains available after existing needs, how much entitlement can be acquired, where water can physically be extracted and whether extraction is reliable during drought.

Using broad regional allocations to support conclusions about local water availability risks giving the decision-maker a misleading impression of the security of supply. The problem is not EnergyCo's arithmetic. It is the inference that a regional allocation represents a demonstrated construction water source. It simply does not work that way.

> POSITION SOUGHT

Require EnergyCo to distinguish licensed entitlement, actual utilisation, commercially accessible supply and physically reliable water availability in its assessment.

5 | Groundwater - assessment deferred because essential information is missing

The SEARs require assessment of the project's impacts on groundwater aquifers and groundwater-dependent ecosystems, having regard to the NSW Aquifer Interference Policy and relevant Water Sharing Plans.

The Groundwater Impact Assessment provides extensive regional information concerning groundwater systems, existing registered bores and potentially sensitive environments. However, it acknowledges that future groundwater production sites have not been selected.

Technical Report 16 explains that groundwater modelling to predict impacts from production bores would be required, but is premature because extraction locations and site-specific data are unavailable.

This admission is fundamental.

> The EIS acknowledges that assessment necessary to predict groundwater extraction impacts cannot yet be completed, while simultaneously identifying groundwater as a possible source of construction water.

It is not sufficient to conclude that groundwater impacts will be acceptable simply because pumping tests, monitoring and management plans will be undertaken later. The purpose of those investigations is to establish the likely impacts. Until they are undertaken, the impacts remain uncertain. This is particularly serious in the New England Tablelands, where groundwater predominantly occurs in variable fractured-rock systems.

The EIS identifies 608 registered bores within the groundwater study area and acknowledges the possibility of additional unregistered basic-landholder-rights bores.

> Source: EIS Section 19.2.1–19.2.2, pp. 710–711. Section 19 - Groundwater (PDF).pdf

EnergyCo proposes that pumping tests, groundwater monitoring and assessment of neighbouring bore impacts will occur prior to extraction.

Mitigation GW4 includes possible responses such as reducing pumping, ceasing extraction, deepening or replacing bores.

> Source: EIS Section 19, mitigation GW4, pp. 720–721. Section 19 - Groundwater (PDF).pdf

These provisions may assist in controlling known impacts, but they do not demonstrate that the proposed groundwater supply is environmentally acceptable. Furthermore, in fractured-rock aquifers, drilling a replacement bore does not necessarily restore the quantity or reliability of the original supply. An existing agricultural water supply cannot simply be treated as replaceable without evidence.

Our community considers it unacceptable to defer the identification of potential impacts on existing groundwater users until after the principal project approval has been granted.

> POSITION SOUGHT

Require proposed groundwater extraction locations to be identified and assessed before determination wherever groundwater is relied upon as a construction supply. This must include sustainable yield (measuring recharge rates), pumping tests, predicted drawdown, drought reliability and impacts on neighbouring bores and groundwater-dependent ecosystems.

If groundwater supplies cannot be demonstrated to be reliable and environmentally acceptable, they must be excluded from the proposed supply strategy.

6 | Drought and construction water demand -acknowledged uncertainty left unresolved

The EIS estimates 1,751 ML of non-potable water for water carting associated with dust suppression and earthworks. This represents approximately 73% of the transmission project's total construction water requirement. The project includes extensive access tracks, earthworks, multiple work fronts and substantial construction traffic across difficult terrain.

These circumstances make the reliability of the water-demand estimate particularly important.

Section 18.3.6.3 acknowledges that dust-suppression requirements may increase during dry conditions, while the availability of water may decline.

> Source: EIS Section 18.3.6.3, p. 699. Section 18 - Surface water and flooding (PDF) (1).pdf

Yet EnergyCo proposes further consideration of this demand during detailed design. This is an extraordinary uncertainty to leave unresolved in a project for which water availability is already a significant constraint. The EIS has not adequately demonstrated how its estimates respond to prolonged drought, increased dust-suppression requirements or reduced local water availability.

It is possible that the greatest construction water requirements will arise precisely when the available supply is most constrained.

EnergyCo cannot reasonably conclude that construction water demand can be met without demonstrating how its estimates perform under the conditions most likely to challenge that conclusion. The issue is not whether a future contractor can adjust water-carting schedules. It is whether the project can be constructed within acceptable environmental limits when both water demand and water scarcity increase.

> POSITION SOUGHT

Require EnergyCo to provide the calculation basis for dust suppression and earthworks water demand, including road lengths, traffic volumes, watering rates and credible drought scenarios.

The assessment must demonstrate how supply will be secured under those conditions and identify the consequences if water is unavailable.

7 | Walcha - the scale of demand has not been reconciled with local availability

This is an area identified as high demand and limited supply.

.The October 2026 Regional Water Demand Update estimates approximately 1,566 ML of construction water demand associated with proposed projects located within Walcha LGA between 2027 and 2035. The modelled peak annual demand is approximately 403 ML in 2033, equivalent to around 1.1 ML per day averaged over the year. This is substantial relative to Walcha's existing town water demand of less than 1 ML per day, as identified in EnergyCo's earlier water-security studies.

It must be recognised that the modelled Walcha demand is attributed according to project location and does not necessarily represent water to be sourced within the LGA or supplied by Walcha Council. Nevertheless, these figures reveal the scale of the supply challenge.

If water is to be extracted locally, EnergyCo must demonstrate that suitable supplies exist without compromising existing users. If water is to be imported, the source, transport requirements and additional infrastructure impacts must be assessed.

The annual average also disguises potential peak daily requirements. Water demand will fluctuate with the construction program, concrete manufacture, earthworks, access-track construction and dust suppression.

The EIS has not demonstrated that these peak requirements can be met from reliable identified sources.

> POSITION SOUGHT

Require a Walcha-specific water balance addressing peak daily demand, drought reliability, existing water requirements and the impacts of alternative supply arrangements.

8 | Cumulative water availability -the missing half of EnergyCo's regional assessment

The October 2026 regional update estimates total water demand of 7,318 ML across the modelled wider REZ construction program between 2027 and 2035.

However, the update explicitly acknowledges that it does not assess water supply sources, availability or existing community demand. This is a major limitation. The regional forecast may provide an estimate of demand, but it cannot demonstrate that sufficient water exists to meet that demand.

Furthermore, the update relies on modelled project development scenarios, generic water-use benchmarks and assumptions about construction timing. Actual development schedules may differ materially. Projects may be delayed, accelerated or constructed concurrently in combinations not captured by the modelled scenario.

This matters because multiple developments may compete for water from the same limited catchments, aquifers or suppliers.

The EIS's project-level cumulative impact assessment does not remove the need to examine whether the proposed transmission project will contribute to unacceptable cumulative pressure on shared water resources.

A finding that each project proposes to comply with water-sharing rules does not, by itself, demonstrate that the combined construction program can obtain reliable water without unacceptable consequences.

The regional water-demand update also states that individual projects must demonstrate secure water supply and cumulative impacts before planning approval. EnergyCo must explain how that pre-approval expectation on generation projects is not applied to their own transmission EIS.

> POSITION SOUGHT

Require a source-specific cumulative water assessment considering existing users, peak construction demand, realistic project overlap, drought and the reliability of proposed supply options.

9 | Wastewater disposal - another essential service left to detailed design

The SEARs expressly require details of wastewater disposal arrangements. The EIS estimates approximately 120 ML of liquid wastewater and slurry from construction amenities, including workforce accommodation camps.

It proposes wastewater treatment, reuse where appropriate and off-site disposal where necessary.

However, the final design, treatment capacity and disposal arrangements remain substantially dependent on detailed design and future decisions. This leaves the community completely unable to assess and make comment. It also allows EnergyCo to pass on responsibility to a contractor that will have this process approved without community scrutiny – once again.

Mitigation SW7 leaves the design and capacity of wastewater management systems to that later stage.

> Sources: EIS Section 18, mitigation SW7, p. 704; Section 23, Table 23.2, p. 766. Section 18 - Surface water and flooding (PDF) (1).pdf Section 23 - Waste (PDF).pdf

Section 23 also proposes subsequent confirmation of the licensed facilities and capacity available to accept waste. This raises further questions concerning whether proposed disposal facilities can accommodate the quantities generated, particularly where multiple regional construction projects may compete for limited wastewater infrastructure.

The issue is directly relevant to water security because wastewater reuse forms part of EnergyCo's potential water supply hierarchy. EnergyCo cannot rely upon wastewater reuse as a contribution to water supply without demonstrating that the necessary treatment, storage and reuse arrangements are achievable.

> POSITION SOUGHT

Require the proposed wastewater treatment, reuse and disposal arrangements to be demonstrated as feasible before determination, including appropriate capacity and contingency assessment.

10 | WaterNSW's requirements concerning Lake Glenbawn

WaterNSW's amended advice of 22 January 2026 acknowledges that the revised transmission alignment avoids earlier impacts at Chaffey Dam. However, it expressly maintains requirements concerning Lake Glenbawn, WaterNSW land, infrastructure, water quality and associated catchments. The advice also calls for consideration of cumulative impacts involving other renewable energy developments being investigated on WaterNSW land.

Source: WaterNSW, Revised Scoping Report Advice, 22 January 2026, pp. 1–2. Amended advice - WaterNSW.pdf

The EIS considers the Lake Glenbawn environment and identifies potential impacts involving water quality, erosion, acid sulfate soils and groundwater. However, important questions remain concerning whether all relevant infrastructure interactions, alternatives and cumulative impacts have been adequately examined.

The presence of an assessment does not establish that the concerns raised by WaterNSW have been satisfactorily resolved.

> POSITION SOUGHT

Require EnergyCo to demonstrate specifically how each applicable WaterNSW recommendation has been addressed, including a response to the request for assessment of cumulative development on WaterNSW land.

11 | The wider failure - transferring essential assessment into post-approval processes

The deficiencies identified above reveal a common problem.

EnergyCo repeatedly relies on future investigations, detailed design and management plans to resolve questions that determine the project's environmental impacts.

The following matters are examples:

Matter	What remains unresolved
Water supply	Actual sources, reliable quantities and delivery arrangements
Groundwater extraction	Locations, sustainable yields and drawdown impacts
Drought demand	Higher dust-suppression requirements and corresponding supply availability
Cumulative water demand	Physical capacity of shared sources under overlapping demand
Wastewater	Final treatment and disposal capacities
Water infrastructure	Consequential pumping, storage, extraction and transport works

These are not merely operational details. Their resolution may require changes to construction methods, water sources, access routes, associated infrastructure, project staging or mitigation. Some may reveal impacts that have not been adequately assessed in the exhibited EIS.

Once approval has been granted, the opportunities for affected communities to influence those decisions will be significantly narrower.

Our separate Appendix – The CWO Experience – Failure of Process documents why assurances of later management and protection should not automatically be accepted as sufficient.

The appendix includes evidence of implementation failures, weaknesses in the effectiveness of consultation and complaints processes, and continuing concerns about cumulative resource planning. It does not suggest that every example represents a statutory breach or that deferred design caused every CWO problem. Rather, it demonstrates why commitments to future processes require scrutiny and why important environmental questions should be answered while the project remains subject to formal assessment.

The EIS process should not operate as an opportunity to approve an incompletely assessed project and transfer the consequences of unresolved design decisions to affected communities. This is especially troubling where the missing information could identify new affected landholders or environmental impacts only after approval.

12 | Conclusion - the Department must require EnergyCo to finish the assessment

Our community acknowledges that the EIS contains substantial information about water demand, groundwater, surface water, flooding and wastewater. However, the critical question is whether that information is sufficient to demonstrate that the project can be constructed without unacceptable environmental impacts.

On the evidence reviewed, significant questions remain unanswered. EnergyCo has not demonstrated a complete and reliable water supply strategy. It has not undertaken source-specific groundwater extraction assessment for production bores that may be needed for construction.

It has acknowledged uncertainties concerning drought-related demand and the physical availability of water. It has not established the source-specific cumulative water balance necessary to demonstrate the effects of competing regional construction demand. And it proposes to resolve important wastewater servicing arrangements during detailed design.

Water quality is a further unresolved constraint, addressed in Part 3, subsection 4.5. The arsenic results and acknowledged gaps concerning existing groundwater users require source-specific investigation. EnergyCo must establish the quality and suitability of proposed supplies, investigate uranium and other relevant contaminants, assess drought and pumping-related changes, and demonstrate any necessary treatment and waste-management arrangements before those sources are relied upon to establish the project's acceptability.

These deficiencies are directly relevant to the requirements imposed by the Planning Secretary and to the detailed concerns raised by DCCEEW Water.

Our community considers that the EIS has addressed several water-related SEARs requirements in form without adequately resolving important matters of substance.

It is not sufficient for EnergyCo to identify a requirement, nominate the section in which it is discussed and declare it addressed. The Department must determine whether the actual information provided satisfies the requirement and supports a reliable assessment conclusion.

Where the information is missing, uncertain or deferred, the Department should require further assessment before determination.

We do not seek further studies merely to generate more paperwork. We seek evidence that the project's essential construction resources can be secured, that environmental impacts can be identified and that proposed protections are achievable. If the required water cannot be reliably obtained without unacceptable impacts, the project must be redesigned, modified, reduced or staged accordingly.

Our community requests that DPHI not recommend approval of the project while material uncertainties concerning construction water supply, groundwater extraction impacts and wastewater servicing remain unresolved.

The project should only proceed on the basis of a sufficiently defined, environmentally assessed and demonstrably feasible construction proposal.

Principal documents relied upon

- DPHI, Amended Planning Secretary's Environmental Assessment Requirements, 7 April 2026, pp. 1–6.
- DCCEEW Water, Comments on the Secretary's Environmental Assessment Requirements, 23 December 2025, Attachment A.
- WaterNSW, Advice on Revised Scoping Report, 22 January 2026.
- Engeny, Technical Report 14 -Surface Water Assessment, 24 September 2026, particularly Sections 4–5.
- Aurecon, Technical Report 16 -Groundwater Impact Assessment, 28 September 2026.
- Aurecon, Technical Report 15 -Hydrology and Flood Impact Assessment, 9 September 2026.
- EnergyCo, EIS Section 18 -Surface Water and Flooding, October 2026.
- EnergyCo, EIS Section 19 -Groundwater, October 2026.
- EnergyCo, EIS Section 23 -Waste, October 2026.
- EnergyCo, EIS Section 24 -Cumulative Impacts, October 2026.
- EnergyCo, New England REZ Regional Water Demand Update, October 2026.
- Joint community groups, Appendix – The CWO Experience – Failure of Process, 21 October 2026.

Part 2
Statutory exemptions and the importance of complete assessment before approval

The New England REZ Network Infrastructure Project has been declared Critical State Significant Infrastruc ture (CSSI). This status provides EnergyCo with significant exemptions from statutory approval requirements that would ordinarily apply to activities affecting water resources.

Under **section 5.23 of the Environmental Planning and Assessment Act 1979**, approved State Significant Infrastructure does not require several separate approvals under the *Water Management Act 2000*, including:

- Water use approvals under section 89.
- Water management work approvals under section 90.
- Activity approvals under section 91, other than aquifer interference approvals. This includes controlled activity approvals for works on waterfront land.

This is outlined on page 149 of the EIS. These exemptions remove separate approval processes that would otherwise apply to water use, water infrastructure and certain activities affecting rivers and waterways.

Further exemptions are available under Schedule 4 of the Water Management (General) Regulation 2025.

These include exemptions from water access licensing requirements for qualifying public-authority activities associated with dust suppression and the construction of essential infrastructure, including electricity transmission infrastructure.

These exemptions are subject to statutory conditions. For example, the essential-infrastructure exemption includes requirements to record and report water taken, while the dust-suppression exemption is conditional on avoiding significant adverse impacts on water sources and dependent ecosystems.

Nevertheless, the combined effect is significant.

EnergyCo may be able to undertake substantial water-related activities without obtaining some of the separate approvals ordinarily required under the Water Management Act.

This places even greater importance on the EIS providing a complete and credible assessment of water requirements, extraction locations, water-source availability and environmental impacts before approval is granted.

The EIS should not rely on the assumption that unresolved water-related impacts will necessarily be examined through subsequent, separate approval processes. For activities covered by these exemptions, those processes may not occur.

This is especially concerning because EnergyCo proposes to defer its detailed Water Supply Strategy, the selection and investigation of groundwater extraction locations, and important water management arrangements until detailed design.

Page 80 of Technical Report 14 – Surface Water Assessment states;

> *Although the project is exempt from requiring water works approvals, water use or water access licences (Section 2.2.2), EnergyCo aims to avoid impacting environmental water and existing water availability, where possible.*

This is not satisfactory, especially given that the water sourcing assessment and arrangements are completely absent from the EIS.

The consequences are obvious. The project could receive its principal environmental approval before the locations and impacts of significant water extraction activities have been adequately established.

Our community considers that the statutory exemptions reinforce, rather than diminish, EnergyCo's responsibility to provide a sufficiently detailed assessment during the EIS process.

The assessment should establish the feasibility and environmental acceptability of proposed water sourcing before the project is approved, particularly where affected landholders would otherwise have limited opportunity to scrutinise subsequent decisions.

> QUESTION REQUIRING RESPONSE

1. Which water-related activities proposed for this project will be exempt from separate approvals and water access licensing requirements?
2. What statutory conditions apply to each exemption, and how will compliance be independently verified?
3. If proposed extraction locations and quantities are finalised after approval, what independent environmental assessment and public scrutiny will apply?
4. How will affected water users be informed and protected where a separate Water Management Act approval is not required?
5. How can the Department be satisfied that the impacts of exempt activities have been adequately assessed when their locations, quantities and operational arrangements remain unresolved?

> POSITION SOUGHT

Our community requests that DPHI require EnergyCo to identify all water-related statutory exemptions on which it intends to rely, together with the activities, extraction locations and quantities covered by those exemptions.

The environmental impacts of these activities must be adequately assessed before determination.

Where separate statutory approvals will not be required, the principal project approval must provide clear, enforceable protections, including extraction limits, environmental performance requirements, monitoring, reporting and mechanisms to prevent unacceptable impacts.

Fundamental questions concerning water supply and extraction must not be deferred to post-approval processes that provide less independent scrutiny or opportunity for community participation.

Legislative references

Provision	Effect
EP&A Act 1979, s 5.23	Removes specified separate approvals for approved SSI, including certain water use, water management work and controlled activity approvals.
Water Management (General) Regulation 2025, Schedule 4	Provides conditional water access licence exemptions, including for public-authority dust suppression and essential-infrastructure construction.
NSW Water — State significant development and infrastructure	Explains which approvals are waived and when water access licences remain necessary.

Part 3
Water Study incomplete

1. Construction Water Supply Has Not Been Demonstrated

1.1 Water requirements

The EIS estimates approximately **2,400 ML** of construction water over the approximately six-year construction period:

Requirement	Volume
Potable water	360 ML
Non-potable water	2,040 ML
Total	2,400 ML

The transmission project accounts for approximately 1,751 ML of water carting requirements associated with dust suppression and earthworks.

> Sources: EIS Section 3.3.13, Table 3.11; Section 18.3.5, pp. 693–694.

These quantities are estimates of demand. They do not establish that water has been secured.

1.2 Potential sources are not demonstrated supplies

EnergyCo identifies numerous possible sources, including existing water licence holders, harvestable rights, commercial suppliers, councils, groundwater bores and regulated or unregulated waterways.

Section 18.3.6.1 acknowledges that the final sourcing arrangements will depend on supplier willingness, proximity, infrastructure requirements and climate reliability.

This is not a completed water supply assessment.

The EIS compares estimated demand against water-sharing-plan allocations. However, allocations cannot automatically be treated as water physically available to EnergyCo.

Actual supply depends on the willingness of entitlement holders, extraction infrastructure, water-sharing rules, existing demand, streamflow, groundwater yield and drought restrictions.

The Macleay example illustrates the problem. The EIS estimates peak annual non-potable demand of 152.8 ML against regional allocations of 1,796 ML. The resulting ratio of approximately 8.5% does not demonstrate that 152.8 ML is available at an accessible extraction location.

> Sources: Technical Report 14, Table 4.3, p. 87; EIS Section 18, Table 18.3, p. 698.

> QUESTIONS REQUIRING RESPONSE

1. Which specific sources are proposed to supply construction?
2. What volume will each source provide, annually and during peak demand?
3. Which suppliers have confirmed capacity and willingness to supply?
4. What evidence demonstrates physical availability during drought?
5. What extraction, storage and delivery infrastructure will be required?
6. Have the impacts of those additional works been assessed?

> POSITION SOUGHT

Require a demonstrated, source-specific construction water supply strategy before determination. This must establish the reliability, legal availability, physical deliverability and environmental impacts of each proposed supply.

1.3 Location of source not matching location of demand

Ground Water supply is split between catchments, and the EIS p138, talks about balancing the draw from these catchments.

The project area is situated across multiple regulated and unregulated river and groundwater Water Sharing Plans (WSPs) across the Gwydir, Namoi, Macleay and Hunter catchments. Construction water demand would be sourced across these catchments, reducing reliance on any individual water resource.

Drawing water for construction purposes across a large region does not work that way, you need to draw water where you need it. If water is not available where it is needed, it needs to be transported. The proposed quantities make this a significant exercise in logistics and road usage. This reality needs to be assessed and planned. None of this has been completed or described.

> POSITION SOUGHT

Require a demonstrated, source-specific construction water supply strategy before determination, that includes local balancing between supply and demand. Where this balance is not able to be demonstrated, adequate transportation (or other) solutions needs to be described, and planned.

2 | Walcha - An acute imbalance between demand and availability

2.1 Scale of additional construction demand

EnergyCo's October 2026 Regional Water Demand Update provides the following estimates for projects located within Walcha LGA between 2027 and 2035:

Water demand	Estimated volume
Potable	379 ML
Non-potable water	1,187 ML
Total	1,566 ML

> Source: EnergyCo, New England REZ Regional Water Demand Update, October 2026, Tables 1 and 2, pp. 6 and 8.

The modelled peak year is 2033, with approximately 98 ML potable and 305 ML non-potable demand.

This represents 403 ML in one year, or approximately 1.1 ML/day averaged across that year.

EnergyCo's earlier Water and Wastewater Security Study identified Walcha's existing town water demand as less than 1 ML/day.

The projected construction requirement is therefore substantial relative to the scale of Walcha's existing town water system.

However, the regional model allocates demand according to the location of proposed projects, not necessarily the location from which their water will be extracted.

It does not establish that the additional demand will be supplied by Walcha Council.

This distinction is fundamental.

If water is to be obtained locally, the availability of suitable sources must be demonstrated. If water is to be imported, the extraction, storage, pumping, transport and environmental consequences of those alternative arrangements must be assessed.

2.2 Peak daily demand is particularly important

The annual average of 1.1 ML/day does not represent peak daily demand.

Water demand will vary considerably with the construction program, earthworks, concrete production, dust suppression and seasonal conditions.

Peak demand may coincide with the driest conditions, when local water supplies are least reliable.

The EIS does not adequately demonstrate the peak daily requirements for the Walcha construction area against the physical availability of water from identified local sources.

> QUESTIONS REQUIRING RESPONSE

1. the projected Walcha LGA demand is expected to be sourced within the LGA?
2. What are the peak daily requirements for the transmission project and overlapping generators?
3. What reliable local supply is available during drought?
4. How much additional water is genuinely available beyond existing agricultural, town and environmental requirements?
5. What infrastructure and traffic impacts would arise if water must be imported?
6. In scenarios of water deficiency, who has precedence and priority for water access? Will the developer have priority over town water supply? Will agricultural users of bore water have to deal with issues of bore drawdown as a result of high usage in neighbouring Energy Co bores? Our community has absolutely

> POSITION SOUGHT

EnergyCo must demonstrate how the projected Walcha construction demand can be met under realistic peak and drought conditions without unacceptable impacts on existing users. Assurances must be given to our community and businesses that access to water will not be compromised by Energy Co having priority usage of a large share of available water.

This assessment must be completed before approval, including evaluation of the impacts of importing water if local supplies are insufficient.

2.3 Conflict of water access at Walcha Council Drinking Water off-take site.

As noted on page 44 of the Technical Report 14 – Groundwater, there is a very close proximity between the Walcha Drinking Water Offtake site on the McDonald River, filling the Walcha Storage dam, and the project area.



Figure 1 - **Walcha Off Creek Storage Dam, completed in 2024, is only 2km downstream of the NE REZ Project footprint. Photo courtesy of Moree Online News https://moreeonlinenews.com.au/2024/10/26/new-off-stream-storage-dam-for-walcha/**

As the table notes,

> *"Walcha drinking water offtake located approximately 2 km east of and downslope of the project area"*

This raises 3 issues that are not dealt with in the Technical Report 14, that require a response;

1. How is sediment control being dealt with, given the close proximity and downstream nature of the town water supply offtake, relative to the construction site.
2. How is contamination from chemical spills, material waste etc, being dealt with at this location, given the severity of outcome if a spill occurs?
3. How is prioritisation of water supply being managed at this site, where the project could be drawing water from the McDonald River, upstream of the Walcha Town Water offtake site.

> POSITION SOUGHT

Energy Co must demonstrate how they will ensure that there is not a conflict of water access and harvesting ability, as well as how they will ensure that there are no adverse contamination or sediment issues arising from the close proximity of operations to the Walcha Council Drinking Water offtake site. A plan to avoid the incident is not sufficient. EnergyCo must outline a procedure that remedies the situation, should this occur.

The response to these questions, and Position Sought, will be indicative of the manner in which EnergyCo, and the NSW Government, are willing to protect our community, or run over the top of us. Assurances of goodwill by producing a plan, deferred until after determination no less, is not a satisfactory solution. Everyone is aware of the process that has predictably let down the community of the Central West Orana Region. We need to know what the remedy will be, for all scenarios of potential failure, sufficient to quell the anxiety and concern that our community currently has around this project, and the culture of the renewable roll out in the regional areas of NSW.

This community expectation applies to all "plans to mitigate" that exist throughout the EIS, from protection of the Bell's Turtle in the MacDonald River, to the protection of stock water currently sourced from fracture rock bores throughout the new England Area – in the next section.

3 | Workforce Accommodation Camps - The Waverley Road Water Supply Case Study

The EIS proposes five workforce accommodation camps. Camp 2 is identified on Waverley Road at Waverly, near Gundy. Its practical servicing requirements provide a test of the EIS's broader claim that construction water needs can be met through sources to be identified later. Peter Tout, a landholder near the proposed camp, has supplied an account of the surrounding agricultural district, its reliance on carefully managed private water supplies, drought conditions and constraints of local road access (edited account at Appendix 2). His observations warrant site-specific investigation; they are not a substitute for surveys or water-supply testing.

3.1 What EnergyCo actually forecasts

EnergyCo's Technical Report 7, Traffic and Transport Impact Assessment (28 September 2026, Section 6.2.5, Table 6-2), estimates a peak project workforce of approximately 1,400 people and an average main construction workforce of about 880 FTE. Table 6-11 (printed p. 92) assigns approximately 300 workers to Camp 2 during peak construction, rather than an equal share of a hypothetical 6,000-person workforce. These are indicative numbers; occupancy will vary with the construction program.

The EIS separately estimates 360 ML of potable water across construction: 340 ML for workforce personnel and 20 ML for concrete manufacture (EIS Section 3.3.13, Table 3.11, p. 138). The 360 ML is a project-wide total, not an allowance for each camp.

3.2 The scale of the site-specific servicing task

A transparent illustration remains useful. At Peter's assumed consumption rate of 180 litres per resident per day, 300 residents would require 54,000 litres (54 kL) of potable water per day. If all of this water had to arrive in 20,000-litre tankers, it would be equivalent to approximately three inbound tanker deliveries per day at peak occupancy, plus return journeys. This is a scenario, not a finding that tankers are the only feasible supply – although there appears very little alternative. Lower or higher occupancy, verified use rates, water treatment and reuse would change the estimate.

The EIS does not provide a sufficiently detailed camp-by-camp assessment to demonstrate the reliable potable water source, peak daily supply, on-site treatment and storage capacity, or drought contingency for Camp 2. Nor is it clear how these site-specific choices are reconciled with proposed wastewater treatment and disposal and the road movements required to service an isolated construction camp.

3.3 Local experience reveals a wider assessment gap

Peter describes an agricultural landscape whose existing occupants have limited services and must conserve water carefully during drought. He also describes the winding rural road, limited existing traffic and watercourse crossings affected by heavy rain. These are firsthand observations that should be tested against the proposed camp design, site investigations and traffic and flooding assessments. EnergyCo should not assume that future procurement will remove the environmental or logistical consequences of extracting, treating, trucking or storing water at this location.

If a dependable supply or suitable wastewater disposal cannot be established, the camp may require different servicing infrastructure, additional deliveries, redesign or relocation. Such changes could create further impacts for neighbours, affect the assessed construction traffic and add cost or delay. They are not inconsequential details that can safely be left to post-approval contractors.

> POSITION SOUGHT

Before determination, EnergyCo should publish a site-specific servicing assessment for each proposed accommodation camp, beginning with Waverley Road. This must specify realistic daily and peak potable demand, verified source and supplier capacity, storage and treatment, wastewater arrangements, delivery routes, drought contingencies and material impacts on neighbouring properties. Any materially changed camp location or servicing design should receive appropriate further environmental assessment and public scrutiny.

> Sources: EIS Section 3.3.5 and Section 3.3.13, Table 3.11; Technical Report 7 - Traffic and Transport Impact Assessment, 28 September 2026, Section 6.2.5 and Tables 6-2 and 6-11; Peter Tout, EIS Potable Water Analysis (landholder account, edited at Appendix 2).

4 | Groundwater Availability and Impacts

4.1 Limitations of fractured-rock aquifers

The EIS acknowledges that groundwater across much of the project area occurs in fractured-rock aquifers and that availability can vary substantially over short distances.

> Source: EIS Section 19.2.1, p. 710.

This is particularly relevant to the New England Tablelands.

Groundwater in fractured rock depends upon the occurrence, extent and connectivity of water-bearing fractures. Nearby bores may have very different yields and recovery characteristics.

Jennifer Blaikie of NSW Public Works provided regional engineering advice dated 31 July 2026 explaining the variability of fractured-rock bore yields, the uncertainty associated with locating productive fractures and the difficulty of obtaining large, reliable volumes.

Her advice is general regional guidance rather than a site-specific investigation. It supports the need for properly demonstrated yields at actual proposed extraction locations.

> Source: Jennifer Blaikie, NSW Public Works, correspondence, 31 July 2026. See Appendix 1 within this section 8 of our submission.

4.2 Groundwater extraction locations remain unknown

The Groundwater Impact Assessment relies substantially on regional information and qualitative risk assessment.

Potential construction groundwater extraction locations have not been established.

Technical Report 16 states that modelling the impacts of future groundwater extraction is premature because production-bore locations and the necessary site-specific data are unavailable.

> Sources: Aurecon, Technical Report 16 – Groundwater Impact Assessment, 28 September 2026, Section 2.2; EIS Section 19.3.6, pp. 715–716.

Without identified sources, the EIS cannot fully establish sustainable yields, predicted drawdown or effects on neighbouring bore users and groundwater-dependent ecosystems.

This is particularly important given the 608 registered bores identified within the groundwater study area, with additional unregistered basic-landholder-rights bores potentially present.

> Source: EIS Section 19.2.2, p. 711.

4.3 Drought reliability and make-good measures

The EIS acknowledges that prolonged drought can reduce groundwater recharge and affect groundwater levels.

Mitigation GW4 proposes monitoring and responses such as reduced pumping, bore replacement, bore deepening and potentially managed aquifer recharge.

However, these measures cannot be assumed to restore equivalent supply in a fractured-rock system. Nor does the report identify what triggers a reduction in pumping.

Similarly, a twelve-month baseline monitoring period may not demonstrate the response of groundwater resources to prolonged drought.

> Sources: EIS Section 19.3.6, p. 715; mitigation GW4, pp. 720–721.

> QUESTIONS REQUIRING RESPONSE

1. Where are the proposed production bores?
2. What sustainable yields have been demonstrated?
3. What drawdown is predicted at neighbouring bores and sensitive ecosystems?
4. How will extraction perform during multi-year drought?
5. What evidence demonstrates that proposed make-good measures can provide an equivalent replacement supply?
6. What is the trigger for a reduction in pumping, due to neighbouring bores losing capacity, and what is the proposed monitoring program for these neighbouring bores?
7. Why has this assessment been deferred until after approval?

> POSITION SOUGHT

Require identification and source-specific assessment of proposed groundwater supplies before determination.

Where unacceptable impacts cannot be avoided, extraction from that source should not be permitted. Monitoring and make-good provisions should protect against residual impacts, not substitute for demonstrating an acceptable extraction regime.

4.4 Where does the water come from?

We note that again that there is little detail of where the ground water sources are. There is acknowledgment, however, of the limits to this supply, and the lack of certainty of these quantities being able to be drawn from ground water.

- The Peel Alluvium water source is over-allocated relative to its extraction limit, p30 of the Groundwater Technical report
- Fractured rock aquifers are generally characterised by low storage and highly variable yields, with groundwater occurrence and movement largely controlled by the presence and connectivity of fractures, faults and weathered zones. As such, the ability to extract large quantities of groundwater from these aquifers is often limited and highly site-specific. This limitation of fractured rock bores is supported by the correspondence from Jennifer Blaikie, Project Engineer with NSW Public Works. (See Appendix 1 of this section.
- The report further cautions: "While there are a number of registered bores in the Peel Fractured Rock Water Source, the majority are used for stock and domestic purposes, reflecting the generally low and unreliable yields available for larger-scale extraction."
- Most existing use in the Peel Fractured Rock Water Source is for small-scale, domestic, or stock purposes, not for large-scale irrigation or industrial supply. This is not simply an indication of capacity, it is a license restriction of these bores.'

4.5 Groundwater quality — arsenic, uranium and treatment requirements

Groundwater quality is a further constraint on the project's water supply and its potential effects on existing users. The EIS records arsenic above drinking-water guidelines at several monitoring locations, acknowledges limited groundwater-quality data and identifies an unresolved potential drinking-water pathway through hydraulically connected bores. These findings require explicit consideration in the assessment of water availability and impacts. [1, 2]

Technical Report 16 considers groundwater only for non-potable construction demands. The relevant questions are therefore whether each proposed source is suitable for its intended construction use, what treatment and waste management it requires, and whether project activities could affect neighbouring supplies. A drinking-water exceedance does not, by itself, establish that the water is unsuitable for every non-potable use. [1, §6.2]

Arsenic exceedances have already been measured

Arsenic is a metalloid, although it is often discussed alongside metals in water-quality assessments. The Australian Drinking Water Guidelines set a health-based arsenic guideline of 0.01 mg/L, equivalent to 10 micrograms per litre (µg/L). Technical Report 16 adopts that criterion and reports the following primary groundwater sample results. [1, 3, 4]

Monitoring bore and reported location	Primary sampling dates and arsenic results	Comparison with 10 µg/L drinking-water guideline
BH009 — Central-South Hub	8 January 2025: 18 µg/L 12 February 2025: 15 µg/L 18 March 2025: 18 µg/L	All three samples exceeded the guideline: 1.5–1.8 times.
BH129 — approximately 10 km north of Central Hub A	7 January 2025: 11 µg/L 12 February 2025: 6 µg/L 18 March 2025: 5 µg/L	The first sample exceeded the guideline: 1.1 times.

Monitoring bore and reported location	Primary sampling dates and arsenic results	Comparison with 10 µg/L drinking-water guideline
BH117 — approximately 5 km southwest of Central Hub A	6 January 2026: 14 µg/L 5 February 2026: 28 µg/L	Both primary samples exceeded the guideline: 1.4–2.8 times.

> Sources: Technical Report 16, Table 4-15, printed p40; Technical Report 19, §6.2.5, printed p56. These are monitoring bores, not confirmed project production bores.

The highest primary sample was 28 µg/L. Technical Report 19 reports a maximum of 29 µg/L because the laboratory results include a duplicate of the February 2026 BH117 sample. That duplicate is relevant quality-assurance information, rather than a separate sampling occasion. The repeated BH009 exceedances and the two BH117 exceedances warrant attention; the available results do not establish the quality of every bore in the project area. [1, 2]

The drinking-water comparison must also be kept distinct from other criteria. These arsenic measurements are below the 0.5 mg/L, or 500 µg/L, livestock drinking-water trigger adopted in Table 4-15. The results therefore do not establish an arsenic exceedance of that livestock criterion. Suitability for construction uses, irrigation or discharge must be assessed against the relevant use, exposure and receiving environment. [1]

Existing users and groundwater connections remain incompletely assessed

Technical Report 19 describes its groundwater dataset as limited: seven monitoring bores were sampled. It identifies 96 registered bores within the contamination study area, including 52 water-supply bores and 18 stock/domestic bores. These 96 bores relate to a different study area from the 608 registered bores discussed earlier in this section; they are not 96 tested or contaminated bores. [2, §6.3.3]

The report acknowledges that a potential drinking-water pathway through hydraulically connected bores cannot be discounted and that further data are required to determine the risk to surrounding residents or stock. It also describes this as a pre-existing site condition, independent of construction. The measured arsenic must therefore not be attributed to the proposed project. Nevertheless, the existing uncertainty requires a proper baseline and assessment of any additional effects from proposed abstraction, excavation or dewatering. [2, §§6.3.3 and 8.3.2]

Technical Report 16 itself identifies a general risk that large drained excavations could mobilise or concentrate polluted groundwater. This is a reason to investigate contaminant movement where relevant; it does not establish that the project will increase arsenic concentrations or affect a particular neighbouring bore. [1, printed p64]

Uranium has not been resolved by the published groundwater results

Uranium is not listed in the published groundwater testing schedules and analytical panels reviewed in Technical Reports 16 and 19. Those records therefore provide no uranium result on which to establish source suitability. An omitted analyte cannot be treated as a substance that was tested and not detected. [1, Appendix F; 2, Tables 6-2, 6-5 and 6-8 and Appendix B, Table D]

Separately, Armidale Regional Council's 18 February 2026 report on EnergyCo's regional studies refers to documented uranium and fluoride exceedances above Australian Drinking Water Guidelines in nearby local government areas. That passage does not identify a uranium detection in an NE REZ monitoring bore or provide a project-specific uranium concentration. The general groundwater-quality warning already reproduced in Appendix 1 of this Section 8 is also advice about potential conditions, rather than a laboratory result. [5; Section 8, Appendix 1]

These matters support a requirement for initial uranium screening of proposed groundwater sources, together with arsenic, fluoride and other contaminants relevant to the geology and intended use. Any proposal to omit uranium should be supported by adequate local evidence. If uranium is detected at a concentration requiring treatment for the intended use, the treatment design must separately demonstrate adequate uranium removal.

Drought and sustained pumping can change arsenic concentrations

Drought can increase arsenic concentrations in some groundwater systems, but the response is not uniform. Reduced recharge and changing groundwater levels can alter flow paths, the water entering a bore and the chemical conditions controlling arsenic release from minerals. The local response depends on geology, groundwater chemistry and pumping conditions. Australian investigations at Lake Gwelup linked declining groundwater levels, associated with reduced rainfall and abstraction, to oxidation of sulfide minerals and mobilisation of arsenic. That different aquifer provides evidence of a possible mechanism, not a prediction for the New England fractured-rock systems. [7]

US research also illustrates the need for a qualified assessment. National modelling found that drought could increase the probability of elevated arsenic in domestic wells. Conversely, observations in California's San Joaquin Valley found a predominant decrease in arsenic during drought-related pumping stress, largely reversed during recovery. These studies show why the direction and magnitude of change at a proposed NE REZ source must be investigated rather than assumed. [8, 9]

Technical Report 16 acknowledges drought-related groundwater risks and recommends at least 12 months of baseline monitoring before extraction. The additional requirement is to establish how the selected sources' water quality may respond to the proposed pumping rates, cumulative extraction and credible prolonged drought conditions. Seasonal sampling, pumping and recovery tests, and an assessment of groundwater chemistry should support that evaluation. A limited set of baseline samples cannot establish stable water quality throughout a future drought. [1, printed p54]

Arsenic treatment is possible, but its performance must be demonstrated

Arsenic can be removed from water using suitable processes, including iron-based adsorptive media, coagulation followed by filtration, reverse osmosis and certain ion-exchange systems. Treatment selection depends on the arsenic species, pH, other dissolved constituents and required flow. Where arsenite, As(III), is present, conversion to arsenate, As(V), may be needed before effective removal. Oxidation is a preparation step and must be followed by an appropriate removal process. Arsenic speciation should therefore be investigated where needed for treatment design. [3, 6]

Boiling does not remove dissolved arsenic and can increase its concentration in the remaining water. Treatment must be selected and verified for the actual contaminant and source-water conditions. [10]

Treatment transfers captured arsenic into residuals, which may include sludge, spent media or concentrated liquid reject. Reverse osmosis also produces a reject-water stream, so the usable treated volume is lower than the raw volume supplied to the plant. These consequences need to be included in the project water balance and waste assessment. [6]

For each source requiring treatment, EnergyCo should demonstrate a feasible process and capacity, expected treated-water quality and usable yield, allowance for changing raw-water quality, monitoring and maintenance requirements, contingency supply and a practicable route for managing residuals. A general statement that groundwater may require treatment does not establish those matters for an identified source.

For non-potable uses such as dust suppression, the assessment should identify the applicable quality criteria and evaluate contaminant loads and pathways to land, runoff and receiving waters against the actual

abstraction rates, volumes and application locations. Drinking-water criteria should be applied where drinking-water exposure is relevant. The required outcome is suitability for the actual use and protection of existing users and the environment.

> QUESTIONS REQUIRING RESPONSE

- Which groundwater sources will actually be used, for which purposes and volumes, and what testing establishes their arsenic, uranium and other relevant contaminant concentrations?
- Which existing private supplies may be hydraulically connected to groundwater containing elevated arsenic, and what baseline information is needed to assess any additional project effects?
- How will water quality respond to the proposed extraction rates, cumulative pumping, prolonged drought and subsequent recovery?
- Where treatment is required, what evidence demonstrates reliable performance, treatment capacity, usable-water yield and the gross abstraction needed to deliver that yield?
- How will contaminated residuals be managed, and what assessment supports any proposed application of water to land or discharge to receiving waters?
- What monitoring, action thresholds, independent verification and funded responsibilities will trigger treatment changes, reduced or suspended pumping and equivalent replacement supplies where project activities adversely affect existing users?

> POSITION SOUGHT

Require source-specific groundwater-quality assessment before determination for each groundwater source relied upon in the project's supply strategy. This must address arsenic, uranium screening and other relevant contaminants, drought and pumping-related variability, effects on existing users, suitability for the intended use, and the feasibility of any necessary treatment and residual-waste management.

Only the reliable volume suitable for the intended use, after necessary treatment and associated losses, should be counted as available supply. Where suitable water quality after any necessary treatment, reliable usable yield or protection of existing users cannot be demonstrated, that source must be excluded from the demonstrated supply strategy and the project's water demand or sourcing arrangements revised accordingly

5 | Risk of understating construction water demand

EnergyCo's construction water allowances are not adequately substantiated and appear materially understated. The published figures are not a credible basis for approving construction on this scale. The October 2026 regional update adopts the transmission EIS estimates; it does not independently validate them. EnergyCo must justify its low allowances with quantities, application rates and a construction program that can be checked. The community should not have to discover the true demand after approval. [11–13]

5.1 The concrete allowance is implausibly low

EIS Tables 3.11 and 3.12 allow only 20 ML of potable water for concrete manufacture and supply, against 76,000 m^3 of concrete for towers and lines, 73,000 m^3 for hubs and 850 m^3 for ancillary infrastructure. Across that 149,850 m^3, the allowance implies approximately 133.5 litres per cubic metre. EnergyCo has not disclosed the mix designs and water accounting needed to explain that low figure. [11, pp.138, 140]

Boral's Australian Concrete Guide illustrates 180 L/m^3 for an 80 mm slump. The Valley of the Winds assessment adopts 170–175 L/m^3 for its proposed mixes. Applying 170–180 L/m^3 to EnergyCo's quantity gives 25.5–27.0 ML of total mix water: an unexplained difference of 5.5–7.0 ML from the potable allowance, before separately accounting for washing, curing and losses. These documented rates warrant a direct engineering response. [14, pp.8–9; 15, p.18]

Total mix water and new potable supply are different quantities. If aggregate moisture, recovered washwater or other sources explain the difference, EnergyCo must quantify those contributions. TfNSW's concrete specification requires aggregate moisture to be measured and added water adjusted accordingly. A possible contribution is not a demonstrated saving. EnergyCo must disclose gross process use, internal reuse and new supply without counting the same water twice. [16, cls.15.31–15.33]

Our Winterbourne submission exposed the same need for a quantity-based check: 119 foundations at 700 m^3, using 150–200 L/m^3, implied 12.5–16.7 ML of mix water against the initial 6 ML batching estimate. That calculation remains a useful test of the published allowance. EnergyCo must answer the equivalent calculation for its own project. [20, Part F, §1.7]

The concrete budget must separately identify mixer and plant washout, work-area cleaning, pre-wetting, curing, evaporation and other losses. Holcim's guidance shows why curing needs its own method and exposed-area calculation: some methods retain existing moisture, while others add water. Omitting these uses, or assuming recovery without a plant water balance, would understate the requirement. [17]

The regional update's change from potable to non-potable concrete water does not reduce physical consumption. Its rejection of the earlier 960 L/m^3 assumption does not establish a complete replacement budget. TfNSW permits non-potable and recycled mixing water subject to controls; EnergyCo must demonstrate suitability and quantify savings. The transmission EIS still classifies its 20 ML allowance as potable. [11, p.138; 12, pp.3, 12–13; 16, cl.10]

5.2 Road construction requires its own water calculation

EnergyCo combines dust suppression and earthworks in a 1,751 ML water-cart allowance. Technical Report 14 expressly includes compaction at access tracks and road upgrades, but does not provide the quantities and rates needed to reproduce that allowance. Naming an activity is not evidence that adequate water has been allowed for it. [11, p.138; 13, p.84]

The EIS identifies 1,734,000 m^3 of quarry products. Material used in compacted roads, hardstands and earthworks requires a moisture-conditioning calculation: the volume and dry density of each material, its

existing moisture, the target compaction moisture and losses during placement. TfNSW R44 requires moisture to be measured and adjusted for compaction. EnergyCo must disclose how much water it has allowed for this work. [11, p.140; 18, §7.1]

ARTC's Border to Gowrie assessment allows 100 L/m^3 of fill for conditioning, separately from dust suppression and embankment maintenance. At that comparator rate, every 100,000 m^3 requires 10 ML. The relevant NE REZ material quantities and moisture deficits must be established before applying a rate. EnergyCo must provide that calculation and show the volume remaining for dust control; the combined total conceals this essential distinction. [19, p.B5-1]

5.3 Dust suppression needs a credible allowance for dry conditions

The EIS describes approximately 580 km of access tracks, with upgrades generally providing access widths up to about four metres. Dust demand depends on the area actively trafficked or exposed, the application rate and the number of watering days. EnergyCo has not published those inputs behind its combined allowance. A lifetime total with no reproducible calculation gives the community no basis for accepting its adequacy. [11, §3.3.8, pp.125–126; 13, pp.84–87]

The Valley of the Winds assessment uses 2.5 L/m^2/day and warns that low rainfall can increase demand considerably. At that rate, an illustrative 100 km of active road, four metres wide, requires 1 ML per watering day, or 300 ML over 300 watering days. An extra 1 L/m^2/day adds 120 ML over the same period. This is one active-road scenario; it excludes other exposed work areas and stockpiles. [15, p.20]

EnergyCo must identify active lengths and widths by construction stage, unsealed haul routes, traffic levels, stockpiles, work fronts, watering frequencies and duration. Any reductions attributed to rainfall, rehabilitation, restricted traffic or chemical suppressants need an explicit basis. Compaction and dust control must be reconciled wherever one application serves both purposes.

The drought problem identified in Part 1, section 6 is particularly damaging to this estimate. Technical Report 14 recognises that prolonged dry conditions increase demand, yet leaves that increase to detailed design. EnergyCo is asking for approval before quantifying a foreseeable condition that could substantially increase the combined dust-suppression and earthworks requirement. The Department should reject that deferral and require the dry-weather calculation now. [13, §4.4.1.2, p.87]

5.4 Personnel demand must account for occupancy and duration

The camp-servicing problems are addressed in Part 3, section 3. The additional issue is whether EnergyCo has allowed enough water for the people who will live and work on the project. The EIS provides 340 ML of potable water for personnel and a separate 272 ML of non-potable water for general camp maintenance, without a published calculation that reconciles these totals with occupied beds, actual workdays and the services provided. [11, p.138]

For renewable projects, the regional update adopts 185 L/person/day at accommodation camps plus 60 L/person/day at worksites. It uses the transmission EIS estimate separately. EnergyCo cannot treat the regional rates as proof that its transmission allowance is adequate: the number of occupied bed-days and worksite person-days must also be demonstrated. Local workers, rosters, support staff and construction delays must be accounted for explicitly. [12, pp.7, 12]

At 185 L/person/day, an illustrative 550 occupied beds require 101,750 litres daily. A day with all 550 people at worksites adds 33,000 litres. An extra 100 days of full camp occupancy adds approximately 10.2 ML before worksite use. Omitting occupancy days, service staff or camp activities would translate directly into understated demand.

ARTC allows 250 L/person/day for camp facilities. The comparison requires EnergyCo to identify exactly what its rates cover: catering, laundry, showers, cleaning, grounds and maintenance. It must reconcile those services with the separate 272 ML allowance and disclose any treatment losses and reuse credits. An unexplained project total does not answer these questions. [19, pp.B5-4–5]

5.5 Published forecasts are a weak basis for regional benchmarks

The regional update derives its generation-project benchmarks from published estimates for more than 60 projects, including 0.178 ML/MW/year for non-potable wind-project demand. It does not identify those estimates as measured construction consumption. Installed capacity cannot substitute for the physical work: roads, foundations, earthworks, occupancy and watering days. Repeating forecasts through a regional model does not validate their accuracy. [12, p.10]

Winterbourne illustrates why those forecasts require scrutiny. Its September 2024 Submissions Report allowed approximately 50 ML for concrete, 350 ML for pavement construction and up to 300 ML for dust suppression over about four years: up to approximately 700 ML for those uses, plus additional potable needs. These are the developer's revised forecasts, not recorded consumption. They reinforce the need to test preliminary allowances against detailed construction requirements. [21, Table 4-12, p.50]

EnergyCo must disclose its reference projects, the forecast versions used and their validation against actual consumption. It must test whether the benchmark captures difficult terrain, long access networks and prolonged dry weather. The cumulative supply consequences are addressed in Part 3, section 6; this demand calculation must be corrected before it is used in that assessment.

> QUESTIONS REQUIRING RESPONSE

- What concrete volumes, mix-water rates and plant water balances justify the 20 ML allowance, including washing, curing, aggregate moisture, recycling and losses?
- What separate volume is allowed for road and earthworks moisture conditioning, and what material quantities and moisture deficits support it?
- What active areas, watering rates, frequencies and construction durations support the dust allowance, including a prolonged-drought case and peak daily demand?
- What occupied bed-days, worksite person-days, support staff and camp services support the personnel allowance, and how are they reconciled with camp maintenance?
- Which benchmark inputs are measured consumption, which are forecasts, and how have their scope, construction duration and local conditions been checked?
- What higher-demand scenario will EnergyCo adopt if these calculations exceed its published allowances, and how will that change the assessed supply, transport and environmental impacts?

> POSITION SOUGHT

DPHI should not accept EnergyCo's low, unverified allowances as the basis for approval. Require a fully itemised construction water budget covering concrete, road construction, dust suppression and personnel, with ordinary and prolonged-drought cases, peak daily requirements and independently checked assumptions. Any claimed savings from recycling or alternative water quality must be demonstrated. EnergyCo must do this work before determination; the community is not responsible for reconstructing the proponent's missing calculations. Approval should not transfer the consequences of an understated budget to existing water users.

6 | Cumulative Water Demand

6.1 The wider REZ water requirement

The October 2026 regional update estimates total construction water demand of 7,318 ML between 2027 and 2035, comprising 1,913 ML potable and 5,405 ML non-potable water.

The model covers a representative program of 35 generation and storage projects and the network infrastructure, while excluding pumped hydro.

The update expressly states that it does not assess actual water sources, their availability or existing community and other-user demand.

> Source: New England REZ Regional Water Demand Update, October 2026, pp. 5, 10–13.

The report therefore provides a demand scenario, not evidence that the regional water resources can meet it.

6.2 Source-specific cumulative effects

Section 24 of the EIS assesses cumulative impacts based on identified future projects and assumed construction schedules.

It acknowledges differences between the project-level cumulative assessment and the broader regional infrastructure studies.

> Source: EIS Section 24, pp. 776–779.

The critical question is whether projects may compete for the same physical water sources.

A regional total of available entitlements does not establish sufficient water in a particular catchment, river or aquifer during an intensive construction period.

Similarly, different project commencement dates may materially change the peak cumulative requirement.

A source-based assessment must consider existing agricultural, community and environmental demand as well as foreseeable construction demand.

6.3 Responsibility for cumulative resource management

The October regional update states that individual projects must demonstrate secure water supply and assess cumulative impacts before planning approval.

However, the broader regional studies leave physical supply availability and infrastructure capacity investigations continuing into 2027.

> Source: New England REZ Regional Water Demand Update, October 2026, pp. 14–16.

The relationship between these commitments and the assessment of the transmission project requires clarification.

> QUESTIONS REQUIRING RESPONSE

1. Which projects are expected to draw water from common sources?
2. What cumulative daily and annual demands may arise at those sources?
3. What existing water requirements have been included?
4. How do drought and alternative construction schedules change the results?
5. Which authority is responsible for assessing and managing cross-project competition?
6. How can the transmission project be determined while essential supply-capacity investigations remain outstanding?

> POSITION SOUGHT

Require a credible source-specific cumulative water balance before determination, including peak demand, drought reliability, existing users and realistic construction-overlap scenarios.

7 | Watercourses, Drainage and Flooding

The EIS identifies potential erosion, sedimentation and runoff impacts arising from earthworks, access tracks, watercourse crossings and construction facilities.

It generally concludes that impacts can be managed through standard controls.

However, Technical Report 15 acknowledges limitations in regional flood modelling, including the omission of detailed access-track, culvert and local drainage infrastructure.

> Sources: EIS Section 18, pp. 688–692; Aurecon, Technical Report 15 – Hydrology and Flood Impact Assessment, 9 September 2026, Section 5.8.

An impact considered negligible at regional scale may nevertheless be material to an affected property.

Changes to access-track drainage can concentrate runoff, damage paddocks, cause erosion and create ongoing maintenance liabilities.

The flood assessment also identifies significant flood hazards at some access crossings serving the North Hub and Central South Hub.

> Source: EIS Section 18.4, p. 701.

> QUESTIONS REQUIRING RESPONSE

1. Which unassessed or incompletely designed drainage works may affect neighbouring properties?
2. How will permanent access tracks alter local runoff?
3. What protections apply to steep slopes and vulnerable watercourses?
4. How will maintenance and emergency access be maintained during significant flooding?
5. Where would avoidance or redesign be more effective than standard erosion controls?

> POSITION SOUGHT

Require site-specific assessment of material drainage and flooding impacts before determination and avoidance or design modification where unacceptable impacts cannot be effectively mitigated.

Enforceable conditions must protect neighbouring properties, watercourses and drainage systems throughout construction and operation.

8 | The CWO Experience - Why Future Plans Are Not an Adequate Answer

Our community has provided a separate appendix:

Appendix – The CWO Experience – Failure of Process

The appendix examines the experience of the Central-West Orana REZ assessment and subsequent implementation, drawing on official documents, parliamentary findings, monitoring results, company statements and correspondence.

It records examples in which protective processes were not fully implemented, management targets were not achieved, or concerns continued after consultation and complaint procedures had been completed.

The appendix does not suggest that every recorded issue represents a breach of approval conditions, or that deferred design caused every problem.

Its relevance is the practical limitation of relying on future processes to establish protections that have not been demonstrated when approval is granted.

For water, the appendix identifies the risk of treating forecast demand, licensed allocations and physically available water as interchangeable quantities.

It also records the limitations of assessing resource demand separately for individual developments where multiple projects may depend on the same supplies.

> Reference: Appendix – The CWO Experience – Failure of Process, 21 October 2026, particularly Sections 6–9 and CWO Case Study 04.

The CWO approval includes condition B15, requiring EnergyCo to have sufficient water for all stages of development and, where necessary, adjust the scale of development to match available water supply.

> Source: Central-West Orana REZ Transmission Project – Infrastructure Approval, 26 June 2024, condition B15, p. 11.

That provides an appropriate example of an enforceable outcome.

However, a condition requiring sufficient water does not by itself establish where the water will come from, who may be affected or whether the relevant environmental impacts have been adequately assessed.

Our community therefore seeks both adequate pre-approval assessment and enforceable conditions.

> POSITION SOUGHT

DPHI should not accept commitments to future investigations, design or management as substitutes for information needed to determine the environmental acceptability of the project.

Where essential information remains missing, EnergyCo should be required to complete the assessment before determination and provide affected communities with an appropriate opportunity to examine material new information.

9 | Conclusions and Recommendations

The EIS has identified water requirements and possible supply options, but it has not demonstrated that its construction water allowances are adequate or that reliable supplies can be secured without unacceptable impacts on existing users and the environment. EnergyCo must substantiate both the quantities it proposes to use and the sources from which that water will be obtained.

This is particularly significant in the New England Tablelands, where small headwater catchments, variable fractured-rock aquifers and drought conditions constrain water availability.

EnergyCo's own modelling indicates substantial additional water demand in the Walcha area and across the wider REZ.

The physical availability of that water remains unresolved.

The central deficiency is not simply the absence of a final construction management plan. It is the absence of sufficient source-specific information to establish whether water can be obtained, what impacts extraction may cause and whether those impacts can be avoided or satisfactorily mitigated.

The same assessment deficiency applies to groundwater quality. Arsenic exceedances have been recorded at several monitoring locations, but the quality of future production sources and potential connections to existing users remain incompletely established. The available analytical records also leave uranium unresolved. A credible supply assessment must establish a reliable volume suitable for its intended use after any necessary treatment, and address drought performance, additional effects on existing users and management of contaminated residuals.

The Waverley Road workforce accommodation case study (Part 3, Section 3; Peter Tout's edited account at Appendix 2) illustrates why source-specific water and wastewater arrangements are needed before approval: the project's total water estimate does not demonstrate how an individual rural camp can be serviced without unexpected impacts.

Our community requests that DPHI:

1. Require a demonstrated construction water supply strategy before determination, identifying sources, quantities, availability, supplier commitments, extraction and delivery methods, and associated environmental impacts.
2. Require source-specific groundwater assessment, including sustainable yields, drought performance, effects on existing bores and groundwater-dependent ecosystems.
3. Require source-specific groundwater-quality assessment before determination, including arsenic, initial uranium screening, fluoride and other relevant contaminants; seasonal and pumping-related variability; credible drought conditions; and potential hydraulic connections to existing supplies.
4. Require demonstrated suitability for each intended use and, where treatment is needed, a feasible treatment process and capacity, verified performance criteria, usable-water yield, gross abstraction requirements, contingency supply and an assessed method of managing contaminated residuals.
5. Require enforceable monitoring and action thresholds for water quality and existing-user effects, independent verification, clear funding and responsibility, and reduced or suspended pumping and equivalent replacement supply where necessary to address adverse project-related effects.
6. Require EnergyCo to substantiate and, where necessary, increase its construction water-demand allowances for concrete production and associated uses, road construction and compaction, dust suppression and personnel. The revised budget must disclose physical quantities, application rates, construction duration, camp occupancy, treatment losses and verified reuse, including prolonged dry conditions and peak daily demand. Unverified low allowances must not be accepted as the basis for approval.

7. Require a credible cumulative water balance, including shared sources, existing users, drought conditions and overlapping project construction.
8. Require site-specific investigation and design changes where necessary to avoid unacceptable effects on drainage, watercourses, groundwater and neighbouring properties.
9. Require material assessment deficiencies to be resolved before determination, with further public scrutiny of additional information that materially changes the assessed impacts.
10. Impose enforceable conditions requiring construction to remain within demonstrated water supply and environmental limits, including reduced or suspended construction activity where water is insufficient.
11. Require avoidance, modification or refusal of the relevant project component where reliable supply or acceptable environmental outcomes cannot be demonstrated.

Final position

Our community does not assert that adequate water supplies are unavailable everywhere within the proposed REZ.

We assert that EnergyCo has not adequately demonstrated that the water required for construction can be reliably obtained from identified sources without unacceptable environmental and community impacts.

The availability of water is a fundamental constraint on project feasibility, not a detail that can be assumed to be resolved after approval.

Water quality is part of that fundamental constraint. A source cannot be counted as a demonstrated supply until its suitability for the intended use, reliable usable yield after any necessary treatment, management of contaminated residuals and protection of existing users have been established. The possibility of treatment does not establish that an unidentified or insufficiently tested source will provide an acceptable supply. These matters must be resolved before that source is relied upon to support approval.

The Department should require EnergyCo to establish that the project can be constructed within demonstrated water supply and environmental limits before determining whether the proposed development is acceptable.

Principal References

The following references are referred to generally in the document.

Engeny, New England REZ Network Infrastructure Project – Technical Report 14: Surface Water Assessment, 24 September 2026. Particularly Table 1.1, Sections 4–5 and Appendix A.

Aurecon, New England REZ Network Infrastructure Project – Technical Report 15: Hydrology and Flood Impact Assessment, 9 September 2026. Particularly Sections 5.8 and 7–9.

Aurecon, New England REZ Network Infrastructure Project – Technical Report 16: Groundwater Impact Assessment, 28 September 2026. Particularly Sections 2.2, 4–6 and 8.

EnergyCo, New England REZ Network Infrastructure Project EIS – Section 18: Surface Water and Flooding, October 2026, pp. 682–707.

EnergyCo, New England REZ Network Infrastructure Project EIS – Section 19: Groundwater, October 2026, pp. 708–722.

EnergyCo, New England REZ Network Infrastructure Project EIS – Section 24: Cumulative Impacts, October 2026, pp. 775–815.

NSW DCCEEW Water Group, Comments on the Secretary's Environmental Assessment Requirements – New England REZ Transmission Project, 23 December 2025, Attachment A.

EnergyCo, New England REZ Regional Water Demand Update, October 2026, pp. 5–16.

Jacobs, New England REZ Water and Wastewater Security Study, December 2025.

Jennifer Blaikie, NSW Public Works, correspondence concerning regional water availability, 31 July 2026.

NSW Department of Planning, Housing and Infrastructure, *Central-West Orana REZ Transmission – Assessment Report*, June 2024.

NSW Minister for Planning and Public Spaces, *Central-West Orana REZ Transmission – Infrastructure Approval*, 26 June 2024, particularly conditions B15–B20.

Joint community groups, *Appendix – The CWO Experience – Failure of Process*, 21 October 2026, particularly Sections 6–9 and CWO Case Study 04.

EnergyCo, New England REZ Network Infrastructure Project - Technical Report 7: Traffic and Transport Impact Assessment, 28 September 2026, particularly Section 6.2.5 and Tables 6-2 and 6-11.

Peter Tout, EIS Potable Water Analysis, landholder contribution supplied October 2026 (edited summary at Appendix 2; calculations reviewed against EnergyCo Technical Report 7).

The following references are referred to directly in the document.

[1] Aurecon (28 September 2026), New England REZ Network Infrastructure Project EIS, Technical Report 16 — Groundwater Impact Assessment. Table 4-15, printed pp40–41 (PDF pp41–42); §6.2, printed pp51–54 (PDF pp52–55), including non-potable groundwater sourcing and baseline-monitoring recommendations; risk assessment, printed p64 (PDF p65); Appendix F, PDF pp234–237.

[2] Aurecon (4 September 2026), New England REZ Network Infrastructure Project EIS, Technical Report 19 — Contamination Impact Assessment. §6.2.5, printed p56 (PDF p57); §6.3.3, printed pp57–58 (PDF pp58–59);

§8.3.2, printed p72 (PDF p73); groundwater testing schedules in Tables 6-2, 6-5 and 6-8, printed pp49, 51 and 53; Appendix B, groundwater Table D, PDF pp238–240.

[3] National Health and Medical Research Council, Australian Drinking Water Guidelines, "Arsenic", guideline and treatment sections. Source

[4] Australian Government Department of Climate Change, Energy, the Environment and Water, National Pollutant Inventory, "Arsenic and compounds". Source

[5] Armidale Regional Council, Ordinary Council Meeting agenda, 18 February 2026, item 9.9, "Review of EnergyCo Regional Major Infrastructure Studies", printed p101. The statement concerns uranium and fluoride exceedances in nearby LGAs; it does not identify a project monitoring-bore uranium result. Source

[6] United States Environmental Protection Agency, "Overview of Drinking Water Treatment Technologies", sections on anion exchange, reverse osmosis/nanofiltration and adsorptive media. Source

[7] Clohessy, S.G. (2012), Perth Shallow Groundwater Systems Investigation: Lake Gwelup, Hydrogeological Record HG56, Western Australian Department of Water, summary and introduction. Source

[8] Lombard, M.A., Daniel, J., Jeddy, Z., Hay, L. and Ayotte, J.D. (2021), "Assessing the impact of drought on arsenic exposure from private domestic wells in the conterminous United States", Environmental Science & Technology 55(3), 1822–1831. Source

[9] Levy, Z.F., Jurgens, B.C., Faulkner, K.E., Harkness, J.S. and Fram, M.S. (2024), "Basin-scale responses of groundwater-resource quality to drought and recovery, San Joaquin Valley, California", Hydrological Processes. Source

[10] HealthLink BC (25 July 2025), "Arsenic in drinking water", File 49c, treatment and boiling advice. Source[EnergyCo, NE REZ Network Infrastructure Project EIS, October 2026, §§3.3.8 and 3.3.13; Tables 3.11–3.12, pp.125–126, 138 and 140. Source

[12] EnergyCo, Regional water demand update, October 2026, pp.2–3, 5–10 and 12–13. Source

[13] Engeny, Technical Report 14 Surface Water Assessment, 24 September 2026, §§4.4.1–4.4.1.2, pp.84–87. Source

[14] Boral, Australian Concrete Guide, 2023 edition 2.1, pp.8–9. Source

[15] icubed consulting, Valley of the Winds Infrastructure and Resource Assessment, revision C, 28 February 2024, pp.18 and 20. Source

[16] TfNSW, TS 00146:1.0 Supply of Special Class Concrete, effective 30 April 2025, cl.10 and cls.15.31–15.33, pp.29–30 and 40. Source

[17] Holcim Australia, Curing of concrete techniques, sections on curing methods and evaporation. Source

[18] TfNSW, QA Specification R44 Earthworks, edition 6 revision 0, June 2023, §7.1, pp.47–48. Source

[19] ARTC, Border to Gowrie Revised Draft EIS, May 2025, Appendix B5 Construction Water, pp.B5-1 and B5-4–5. Source

[20] Voice for Walcha, Winterbourne Wind EIS Submission, Part F, §1.7, p.10 (PDF p.75).

[21] ERM, Winterbourne Wind Farm Submissions Report, 20 September 2024, Table 4-12, response DPE Water_2, p.50 (PDF p.58). Source

Appendix 1

Correspondence from Jenifer Blaikie

---------- Forwarded message ---------
From: **Jennifer Blaikie**
Date: Fri, 31 Jul 2026 at 5:05 pm
Subject: RE: Water security New England REZ
To: Rachel Greig
Cc: Robert Powell, Clare Silcock

Dear Rachel

NSW Public Works does not have a current (or recent) engagement with Walcha Shire Council so the information I have is based on work either I did or colleagues have done for other New England councils or public information about Walcha. To develop more specific answers, NSW Public Works or another consultant would need to be engaged.

The very generic information is:

1. NSW country town water supply and sewerage infrastructure is usually sized for the expected growth, with very little additional capacity for unexpected events. This is largely because of the
    a. tight construction budgets
    b. the need to provide cost effective services in terms of operations and maintenance (bigger equipment is generally more expensive to operate and maintain)
2. Walch's water supply has recently been upgraded. The upgrade will have been scoped based on the growth expected at the time of the last water supply strategy. This is likely to have had minimal growth as no-one was expecting the REZ or equivalent projects.
3. The New England Tablelands region is close to the top of the Great Dividing Range, this means that most catchments are very small, it also means that storms coming from the east generally drop a lot of rain in the hilly areas to the east due to orographic effects (basically warm wet air is pushed up the range, as it gets higher the temperature drops and the rain falls on the hills and doesn't make it to the tablelands).
4. The majority of the rock in the New England regional is igneous rocks including lots of granite (and related rock types), this rock has low porosity (can hold very little water when compared to sandstone). This means that the dominant type of aquifer in the region is what is known as fractured rock, this means that the water is contained the fractures, rather than in the sand, clays and gravels beside a waterway (these are known as alluvial aquifers).
5. Obtaining water from fractured rock aquifers is more difficult than from alluvial aquifers
    a. There is much less known about the fractured aquifers because most of the investigation effort has gone into monitoring and describing the alluvial aquifers around the major rivers
    b. Drilling the bores tends to be more expensive because the rock is hard and the bores are often much deeper than the alluvial bores
    c. The fracture network varies a lot this means that

i. bores placed very close together can have big differences in their ability to access water as they may hit or miss key fractures

ii. total volume of water a bore can access varies

iii. the rate at which water seeps into the bores varies

iv. the impact of bores on each other is harder to assess

d. There is a higher chance of test bores failing to find useful volumes of water
e. There is a higher chance of the groundwater containing unsafe concentrations of radioactive minerals and/or fluoride.

6. Overall, obtaining large volumes of reliable water is more difficult in the New England Tablelands than areas further from the top of the range.

Kind regards

Jennifer

Jennifer Blaikie *(she/her)* Project Engineer, Engineering & Advisory

NSW Public Works

From: Rachel Greig
Sent: Thursday, 30 July 2026 9:32 AM
To: Jennifer Blaikie
Subject: Water security New England REZ

Dear Jennifer,

I am a councillor at Walcha Council and was in attendance at the REZ forum hosted by the University of New England where you were a panel member on water and waste water security.

I was interested in your description of the water constraints in the New England region and am particularly interested in those constraints around Walcha.

I was hoping you may be able to share the information you provided at the forum. I would also be interested to understand more about the groundwater supply that may be available in our region.

Is this something you could help me with?

I would really appreciate it if I could discuss this with you at a time that suits.

Thank you

Kind regards

Rachel

Rachel Greig
Walcha

Appendix 2

Peter Tout: Landholder Observations on Camp 2 at Waverley Road

A personal account by Peter Tout - provided for the joint community submission.

Local setting

I own a farm close to the proposed workforce accommodation camp on Waverley Road, near Gundy. I know this district through living and working in it. The surrounding properties are predominantly agricultural: farms and horse and cattle enterprises, rather than serviced urban land. Many families depend on water captured from roofs and held in tanks, carefully managed for domestic purposes and livestock. This country can become extremely dry. A proposed construction camp of this size cannot be treated as though it already has the services of a town.

The Waverley Road access is a winding rural road used by a relatively small number of residents, agricultural vehicles and a school bus. Some local crossings may become difficult or impassable after heavy rain. The likely effects of additional deliveries should be assessed at the actual proposed camp site, not simply treated as ordinary regional traffic.

What drought means to people who live here

I have seen repeated droughts cause severe hardship for landholders, livestock and the country itself. When domestic tanks are low, families may have to purchase and bring in water. Farmers already plan around limited supplies. Reliable potable water for a workforce camp must be demonstrated in these conditions, not merely during average rainfall years. A six-year construction program will encounter changing seasons, and a severe dry period is a credible risk that the EIS should address.

My concern is not that no water could possibly be supplied to the camp. It is that EnergyCo has not shown the community which source it will use, how dependable that source is, how much water is required at peak occupancy, or how existing users will be protected. Groundwater should not be assumed suitable or sufficient without yield and quality testing, and the possibility of importing water needs a proper traffic and cost assessment.

A camp is more than accommodation

Water is only one part of the servicing problem. A workers' camp needs kitchens, showers, toilets, wastewater treatment, waste collection, electricity, food and supplies, emergency access and arrangements to restore the site afterwards. Each of those services has implications for the surrounding landholders and roads. If water comes by tanker, those deliveries must be added to other traffic. If it is extracted locally, the impacts of extraction must be assessed. If wastewater is treated or carted away, the method and capacity must be explained.

The assessment must come before approval

People who understand construction accept that every fitting and detail need not be finalised at the earliest stage. That is not the point. A project of this scale should establish that its essential water and service arrangements are workable, with acceptable consequences for neighbours, before receiving approval. It should not be left to a future contractor to decide where water will come from and then seek to manage previously unidentified impacts.

I ask the Department to require EnergyCo to explain and assess the potable water source, treatment, storage, wastewater servicing, delivery arrangements, drought contingency and restoration commitments for Camp 2. The same exercise is needed for the other camps. Rural residents deserve to know what is being approved, not discover the arrangements after the main decisions have been made.

WALCHA HIGH COUNTRY GUARDIANS

Rouchel Brook ACTION GROUP

PROTECT THE VALLEY
UPPER HUNTER
RESPONSIBLE INFRASTRUCTURE GROUP

Voice for Walcha