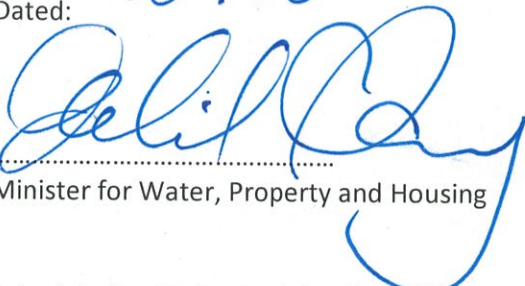


Recommended Conditions – Chaffey Dam to Dungowan Village pipeline
Authorisation under section 8 of the *Water Supply (Critical Needs) Act 2019*

I, Melinda Pavey, the Minister for Water, Property and Housing, authorise Water NSW (**Authorised Person**) under section 8(5) of the *Water Supply (Critical Needs) Act 2019* (**the Act**) to carry out the development specified in Schedule A, subject to any conditions specified in Schedule B, and note the concurrence has been obtained from the Honourable Matthew Kean, Minister for Energy and Environment as required under section 8(6) of the Act.

Dated:

30.9.20

Minister for Water, Property and Housing

Schedule A – Authorised development

Authorised development	The operation of the Chaffey Dam to Dungowan Village pipeline (Pipeline) to deliver water via the Pipeline from Chaffey Dam to the Calala Water Treatment Plant at Tamworth under the conditions specified in Schedule B.
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Schedule B – Conditions

Terms of authorisation

1. This authorisation commences on the date it is signed by the Minister.
2. Except as otherwise specified below, the development must be carried out in accordance with the *Peel River Drought Response Works - Review of Environmental Factors for Water Delivery Pipeline* dated December 2019 (**Stage 2 REF**), prepared under Division 5.1 of Part 5 to the *Environmental Planning and Assessment Act 1979*. To the extent of any inconsistency between the authorised development and the Stage 2 REF, the conditions of this authorisation below prevail.
3. This authorisation does not affect the operation of the State significant infrastructure approval SSI-5039 for the Chaffey Dam Safety Upgrade Augmentation.
4. The requirement in the Stage 2 REF to comply with clause 31(3) of the *Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010* (or any replacement provision in an amendment to or a replacement of that plan that has the same effect) (**WSP**) for minimum daily releases of 3 ML per day from Chaffey Dam via the Peel River does not apply to the development. Instead, the operating rules for the development are as follows:
 - a. **Phase 1 of operation**
 - The Authorised Person cannot operate the Pipeline (except for maintenance, flushing or testing purposes); and
 - The Authorised Person must make a minimum daily flow release of 3 ML for environmental water from Chaffey Dam via the Peel River.
 - b. **Phase 2 of operation**
 - The Authorised Person may operate the Pipeline;

- The Authorised Person is not required to release 3 ML of environmental water daily from Chaffey Dam via the Peel River. Instead the Authorised Person is to accumulate environmental water in an environmental water account established for the purpose of this authorisation (**environmental water account**) at a rate of 3 ML per day to a maximum accrued volume of 1095 ML per annum;
- The Authorised Person must if directed by the Director North West Biodiversity Conservation Division (after consulting with the Peel Environmental Water Technical Advisory Group (**PEWTA Group**)) release environmental water from Chaffey Dam via the Peel River at the volume, timing and rate directed. The environmental water must come from the environmental water account; and
- The Authorised Person must if directed by the Director Water Planning Implementation make an emergency release of water (in addition to water held in the environmental water account).

c. Phase 3 of operation

- The Authorised Person may operate the Pipeline;
- There is no requirement to release 3 ML per day of environmental water, however the Authorised Person must accrue environmental water in the environmental water account at a rate of 1.5 ML per day to a maximum accrued volume of 550 ML per annum;
- The Authorised Person must if directed by the Director North West Biodiversity Conservation Division (after consulting with the PEWTA Group) release environmental water from Chaffey Dam via the Peel River at the volume, timing and rate directed. The environmental water must come from the environmental water account; and
- The Authorised Person must if directed by the Director Water Planning Implementation make an emergency release of water (in addition to water held in the environmental water account).

d. Phase 4 of operation

- The Authorised Person may operate the Pipeline;
- The Authorised Person is not required to accrue or release any volume of environmental water; and
- The Authorised Person must if directed by the Director Water Planning Implementation make an emergency release of water (in addition to water held in the environmental water account).

Note: This authorisation establishes different requirements to the minimum flow rule under clause 31(3) of the WSP. Any other obligation under the *Water Management Act 2000 (WM Act)* is not affected by this authorisation, for example, any requirements for the delivery of town and non-town water supplies via the Peel River continue unaffected by this authorisation.

5. The trigger levels for each phase of operation in Condition 4 are as set out below in Table 1. The storage level % in Table 1 refers to effective storage level of Chaffey Dam.

Table 1 Trigger levels in Chaffey Dam for pipeline operation

Description	Falling storage level trigger	Rising storage level trigger
Phase 1	20.0% and above	20.0% and above
Phase 2	15.0%-19.9%	phase 2 does not apply
Phase 3	10.0%-14.9%	15.0%-19.9%
Phase 4	Below 10.0%	Below 15.0%

6. The Authorised Person must implement the following rules for the transition between each of the four phases set out in Condition 4 of this authorisation:
 - a. Environmental water that has not been used within a phase of operation will not be carried into the next phase regardless of whether the phase is an upward or downward movement. This means that the environmental water account will commence at 0 ML at the start of each phase.
 - b. If a phase of operation spans across water years, the water accrued in the environmental water account within that phase is not forfeited at the end of the water year.
 - c. Borrowing of water within a phase of operation can occur up to 1 week in advance. The maximum amount of borrow forward is therefore 7 times the daily accrual rate for the relevant phase of operation.
7. The authorised person must notify the PEWTA Group in writing when transitioning to a new phase at least two weeks before the date of each transition.
8. Where unplanned operational events result in an unexpected shift to a new phase, the authorised person must give the PEWTA Group at least two business days' notice before the environmental water account is adjusted to enable the release of any accrued environmental water as a pulse flow, if prudent.
9. This authorisation expires on 21 November 2021 unless otherwise agreed by the Minister in accordance with Condition 10.
10. Subject to Condition 9, have not expired, the Minister may extend the expiry of the authorisation provided that before the Minister's decision to extend the date of expiry, the Minister considers a report from the Authorised Person referred to in Condition 20, and obtains concurrence of the Minister administering the *Biodiversity Conservation Act 2016*. The Minister may only extend this authorisation if Parts 2–5 of, and Schedules 1–3 to, the Act are still in force and will not expire during that period. The date of expiry may be extended on more than one occasion.

Peel Environmental Water Technical Advisory Group (PEWTA Group)

11. The Authorised Person must establish and convene a PEWTA Group prior to the commencement date of the operation of the pipeline, comprising of representatives from:
 - the Division in the Department responsible for administering the *Water Management Act 2000*;
 - the Division in the Department responsible for administering the *Fisheries Management Act 1994*;
 - the Division in the Department responsible for administering the *Biodiversity Conservation Act 2016 Act*;
 - Tamworth Regional Council;
 - the Recreational User and Environmental Interests;
 - the Cockburn Water Users Group;
 - the Peel Valley Water Association;
 - the Commonwealth Environmental Water Holder; and
 - the native title claimants or Traditional Owners.
12. The Authorised Person must:
 - a. develop a Terms of Reference for the PEWTA Group containing at minimum the requirements included in this Authorisation prior to the commencement date of the operation of the pipeline;
 - b. convene a meeting of the PEWTA Group at least monthly;
 - c. appoint Director North West Biodiversity Conservation Division (or their delegate) as chairperson of these meetings;

- d. provide the PEWTA Group with monitoring results in accordance with condition 16;
- e. seek advice and recommendations from the PEWTA Group on:
 - i. the volume, timing and rate of environmental water releases from the environmental water account under Phase 2 and Phase 3 (see Conditions 4b and 4c of this Authorisation);
 - ii. the release of emergency water including processes for identifying triggers for release;
 - iii. appropriate discharge rates in Peel River when in-channel flows recommence in Phase 1 of operation set out in Condition 4a of this authorisation;
 - iv. the scope of the review referred to Condition 20.

Public notification requirements

- 13. The Authorised Person must monitor and report the Chaffey Dam effective water storage levels on real-time water data on the Authorised Person's website.
- 14. The Authorised Person must publish the authorisation (including any amendments or revocations of the conditions of the authorisation) on the Authorised Person's website within two weeks of being notified of the authorisation being granted.
- 15. The Authorised Person must also publish on the Authorised Person's website:
 - a) the terms of reference for, and membership of, the PEWTA Group;
 - b) commencement of the development permitted by this authorisation;
 - c) any variation to the conditions by the Minister under s.8(7) of the Act; and
 - d) the commencement date of each new phase of pipeline operation as specified in Table 1 of Condition 5.

Water Management Plan

- 16. The Authorised Person must cause a Water Management Plan to be prepared for approval by Director Water Planning Implementation within one month of commencing operation of the pipeline. This plan must:
 - a) be prepared in consultation with the Department and the PEWTA Group;
 - b) describe measures to be implemented by the Authorised Person to achieve the water management performance criteria identified;
 - c) include a:
 - i. **Surface Water Management Plan** that includes:
 - baseline data on surface water flows and quality of watercourses and/or water bodies potentially impacted by the pipeline, including:
 - stream and riparian vegetation health;
 - channel stability (geomorphology);
 - water supply and quality.
 - performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts associated with the operation of the pipeline on:
 - water quality;
 - native species including threatened species;
 - bed and bank stability;
 - stream and riparian vegetation health; and
 - water supply for other water users.
 - performance criteria for short, medium and long-term measures for the rehabilitation/restoration of native riparian and aquatic habitat, and flora and fauna, including:
 - bank stability;
 - natural pool and riffle sequences; and
 - native fish stocks.

- a monitoring program to assess performance against the identified performance criteria, including:
 - monitoring of priority locations; and
 - continuous monitoring during all phases of operation.
 - procedures for reporting the results of the monitoring program, including:
 - agreed reporting timeframes;
 - real time reporting of water level and water quality monitoring; and
 - provision of collected monitoring data to the PEWTA Group and the Department, including that all data will be provided in both report form and electronic form (excel, text, real time).
 - a plan to respond to any exceedances of the performance measures or performance criteria and repair, mitigate and/or offset any adverse surface water impacts of the development.
- ii. **Groundwater Management Plan** that includes:
- baseline data of hydrogeology and groundwater levels, formation parameters (such as electrical conductivity, storage, yield) and groundwater quality for the Peel River groundwater resources potentially impacted by the pipeline operation including:
 - aquifer health;
 - groundwater supply and quality for other water users; and
 - groundwater dependent ecosystems.
 - a description of the groundwater management monitoring system, including:
 - at least one representative site in each of the monitoring bore transects along the regulated part of the Peel Alluvium upgraded with a data logger and telemetry, to provide data in real-time;
 - conducting water quality testing and monitoring standard field parameters from select representative bores along the affected Peel River on a quarterly basis; and
 - a monitoring network capable of providing an early warning of any impacts to potentially affected groundwater sources.
 - performance criteria, including trigger levels for identifying and investigating any potentially adverse impacts associated with the pipeline operation, on:
 - Peel River groundwater resources;
 - groundwater supply and quality for other water users, including all potentially affected privately-owned licensed groundwater bores;
 - groundwater dependent ecosystems; and
 - aquatic habitat.
 - reporting procedures for the results of the monitoring program, including that all data will be provided in both report form and electronic form (excel, text, real time).
 - a plan to respond to any exceedances of the groundwater performance criteria, and repair, mitigate and/or offset any adverse groundwater impacts of the development.

17. The Authorised Person must implement the Water Management Plan as approved by the Director Water Planning Implementation.

Biodiversity Management Plan

18. The Authorised Person must cause a Biodiversity Management Plan to be prepared for approval by Director North West Biodiversity Conservation Division within one month of commencing operation of the pipeline. This plan must:
- a. be prepared in consultation with the Department;

- b. include a statement of commitments to mitigate and manage biodiversity impacts and should provide detail of:
 - identified relevant biodiversity impacts;
 - mitigation measures to be undertaken in the short, medium and long term;
 - the timing or frequency of the mitigation measures to be implemented; and
 - the position responsible for implementing the mitigation measures.
 - c. describe the measures to be implemented to:
 - relocate affected species to refuges;
 - rescue affected species to alternate off-stream holding facilities;
 - provide compensatory habitat, such as retention of refuge pools;
 - assist in species and ecosystem recovery, such as seed collection and propagation for future rehabilitation; and
 - rehabilitate and restore native riparian and aquatic habitat and fauna and flora.
 - d. describe how biodiversity management would be integrated with similar measures in the Water Management Plan (see condition 16 of this Authorisation).
 - e. include an Aquatic Biodiversity Offset Strategy that:
 - is prepared in consultation with the Department
 - Assesses and quantifies impacts on aquatic biodiversity and habitat to:
 - identify the species composition of the Peel River site, including threatened species
 - determine the offset requirements for key fish habitat, which should ensure 'no net loss' of key fish habitat
 - consider direct and indirect impacts of the proposed development, including those on connectivity and habitat availability in the project area.
 - outlines supplementary measures to achieve offsetting of biodiversity impacts and to accommodate for ongoing disturbances and recovery outcomes.
 - effects the offsetting of biodiversity impacts within 24 months of commencement of pipeline operations or an alternative timeframe agreed to in writing with the Department.
19. The Authorised Person must implement the Biodiversity Management Plan as approved by the Director North West Biodiversity Conservation Division.

Review of the Authorisation

20. The Authorised Person must cause two reviews of the operation of the Authorisation to be undertaken and provide copies of the review reports to the Minister administering the *Biodiversity Conservation Act 2016* and Minister administering the *Water Supply (Critical Needs) Act 2019* by 28 February 2021 and 28 October 2021 respectively.
21. The Authorised Person must address the information requested by the PEWTA Group in the scope of the review report. The scope of the review report must include information on:
- a. the days that the pipeline has operated and not operated, the frequency of moving between phases, and the dates when phases changed
 - b. the volume of environmental water accrued, whether it has been released and the dates it was released
 - c. whether there have been any directions to make emergency water releases and if so the volumes directed, whether the releases were made and the date of the releases
 - d. how the operation of the authorisation has contributed to water supply for Tamworth and how Tamworth town supply needs have been met during the term of the authorisation
 - e. any technical operational difficulties arising from the conditions
 - f. any impacts on hydrology and ecology and the results of monitoring undertaken in accordance with Plans referred to condition 16

- g. the current water security assessment for Tamworth town water supplies including depletion curves (incorporating flows up to January 2021) for Chaffey Dam and Dungowan Dam
- h. any non-compliance with the conditions or commitments in the Plans referred to in conditions 16 and 18, and the remedial actions taken to address the non-compliance
- i. the consultation the Authorised Person has undertaken with Tamworth Regional Council in preparing this report
- j. whether the pipeline is intended to be used in the future including whether the Authorised Person will be seeking an extension of the authorisation and, if so, for how long, and
- k. Any other information requested by the Minister within a reasonable period before 28 February 2021.

Note 1: The Minister may only extend this authorisation if Parts 2–5 of, and Schedules 1–3 to, the Act are still in force and will not expire during that period.

Note 2: The findings of the review will inform any decisions referred to in condition 10 regarding extending the period of authorisation, including whether extending the authorisation remains necessary and/or whether the conditions of authorisation require amendment or revoking in accordance with s 8(7) of the Act.

Reporting non-compliance

22. The Authorised Person must notify the Department in writing of any non-compliance with the conditions or non-compliance with the commitments in the plans referred to in conditions 16 and 18. The notification must be given as soon as practicable, and no later than 10 business days after becoming aware of the non-compliance. The notification must specify:
- a. any condition or commitment which is or may be in breach;
 - b. a short description of the non-compliance
 - c. any corrective action or investigation which the Authorised Person has already taken or intends to take in the immediate future;
 - d. the potential impact of the non-compliance; and
 - e. the method and timing of any redial action that will be undertaken by the Authorised Person.

Definitions in this Authorisation

23. In this authorisation the following terms are defined as follows:

Department – means the Department of Planning, Industry and Environment

Director Water Planning Implementation – means the Director Water Planning Implementation within the Department (or equivalent senior executive band 1 with responsibility for supporting the administration of the Department)

Director North West Biodiversity Conservation Division - means the Director North West Biodiversity Conservation Division within the Department (or equivalent senior executive band 1 with responsibility for supporting the administration of the Department)

Environmental Water Account – means environmental water account established for the purpose of this authorisation

Senior Executive Band – has the same meaning as clause 3 of the *Government Sector Employment (Senior Executive Bands) Determination 2014*

PEWTA Group – means the Peel Environmental Water Technical Advisory Group and is established and implemented in accordance with Conditions 11 and 12 of this authorisation.