

QUESTION WITHOUT NOTICE

Legislative Council

ASKED BY: Ms Meg Webb MLC, Member for Nelson

ANSWERED BY: Hon Jo Palmer MLC, Minister for Primary Industries and Water

QUESTION 1:

The Derwent River and estuary are of critical importance to competing users, the wider community and the environment, can the government confirm:

- a) Is there either a statutory Water Management Plan or a non-statutory Water Management Statement in place for the River Derwent?
- b) If not, why not?
- c) When will a Water Management Plan or a non-statutory Water Management Statement be completed for the River Derwent?

ANSWER:

While the *Water Management Act 1999* provides for the preparation of statutory water management plans, these are not the only option to deliver sustainable water management in accordance with the objectives of the Act.

In situations where management is more complex and contested, or environmental conditions are of concern, consideration is given to whether a non-statutory Water Management Statement, or a statutory Water Management Plan is required.

The Derwent catchment includes statutory Water Management Plans in specific upper catchment areas, including the Clyde River catchment and Lakes Sorell and Crescent. Non-statutory Water Management Statements have been prepared for the Shannon River catchment in 2018 and the Jordan River catchment in 2016.

Tasmania's water management framework is being modernised through the implementation of the Rural Water Use Strategy over the next three years.

Catchments such as the Derwent will be reviewed in the context of the modernised water management framework.

QUESTION 2:

When was the most recent comprehensive review of Derwent River eflows, including climate change projections?

ANSWER:

I am advised that to support the management of water resources in the lower River Derwent and the upper Derwent Estuary, an environmental flows assessment was commissioned by the then Department in 2002.

This assessment focused on providing guidance related to the allocation and extraction of water from the lower River Derwent. The focus of this assessment was not on Hydro power generation or operation of the power station network, in what is a highly regulated catchment. The environmental flow work undertaken in 2002 employed conservative methods that have been reviewed, and current practice would now use the NRE Tas *Tasmanian Environmental Flows Framework* which encompasses a more holistic approach.

As part of the Rural Water Use Strategy, and with funding from the National Water Grid Authority and the State Government, NRE Tas is currently undertaking a Climate Yield Science Project examining contemporary climate data, the suitability of that data for Tasmania, and the best approach to incorporate updated climate data into NRE Tasmania's suite of hydrological models. The goal of this project is to provide a pathway to update future climate catchment yield projections which will inform water allocation volumes and future water allocation policy development.

The hydrological models for the Derwent catchment will be updated accordingly pending the results of the project.

QUESTION 3:

In regards to Tas Irrigation's Southeast Irrigation Scheme expansion, which is the largest ever proposed in Tasmania and proposes to take 41,000 ML of water from the river, primarily during summer months, can the government confirm:

- a) Who is responsible for doing the due diligence on the environmental impact of the SEIS?
- b) Whether a detailed (not desktop) environmental impact assessment was completed to ensure that the Greater SEIS will not have adverse impacts on the Derwent river system, estuary or downstream users?
- c) What studies have been done to assess potential impacts and determine whether the previously recommended environmental flow provisions can be safely altered?
- d) How the proposed SEIS expansion aligns with the government-commissioned previous studies (Davies & Parslow, 2002, with minor update in 2005) which recommended that no further summer extractions could be taken without serious risk to the lower river and estuary, and the resultant embargo implemented to prevent further summer takes?
- e) Given potential significant risks to downstream users and the environment, who has authorised the extraction of the large volume of water proposed in the SEIS expansion?
- f) The mechanisms by which the Government regulates these activities, i.e. who is the responsible entity?
- g) Who will monitor and mitigate impacts associated with the extraction and potential impacts of this additional water?

ANSWER:

The proposed 38 000 ML Greater South Eastern Irrigation Scheme is expected to incorporate and extend the existing south eastern irrigation schemes operated by Tasmanian Irrigation. The proposed project is undergoing the normal staged pre-construction environmental development and approval process for Tasmanian Irrigation schemes.

The preferred option for the Scheme involves access to water directly from Lake Meadowbank, removing the requirement to extract water from the lower River Derwent for the existing and extended schemes.

Currently the project is in the 'water sales' phase of development, in which irrigators are invited to contractually apply for water within the proposed scheme. This phase informs the final design of the scheme, including the total water volume to be delivered and the business case. At an appropriate point in the future when the design is finalised, the proposed scheme will be subject to the usual rigorous State and Federal environmental assessment processes which include the taking and application of water

supplied via the scheme. Of course, all necessary permits and approvals must be obtained prior to the Government approving that construction of the scheme can commence.

As part of establishing the irrigation scheme, provided it is a viable proposed scheme, Tasmanian Irrigation will apply for the establishment of a Water District under the *Water Management Act 1999* and will become the Responsible Water Entity for the District, allowing it to operate the scheme effectively. Responsible Water Entities are required to report annually to the Minister for Primary Industries and Water on the operation of their Water District including compliance with all regulatory permits and approvals.

QUESTION 4:

The Hydro is increasingly being asked to provide water for irrigation and other consumptive uses, can the government confirm:

- a) What assessment has been made to determine the impact these large diversions from Hydro facilities will have on the health of downstream river systems?
- b) How these transfers are being assessed, managed and monitored within the Tas Government broader water accounting and management systems, including where responsibility lies for environmental assessment and decision-making?

ANSWER:

- a) Requests are made from a variety of sources, and depending on the source, responsibility for assessing the take may sit with Hydro Tasmania or Natural Resources and Environment Tasmania (NRE Tas).

Where water is to be taken from a Hydro Tasmania storage, an assessment is done on the impact of Hydro Tasmania's ability to continue to meet our Special Licence obligations as well as other downstream riparian and environmental flow requirements, water level commitments and constraints.

- b) Once a transfer has been completed, the ongoing water accounting, management or monitoring responsibility rests with Tasmanian Irrigation (TI) and NRE Tas generally. TI have a water accounting and reporting system. In addition to meeting ^{its} their usual Irrigation District obligations, TI also provide Hydro Tasmania with their annual usage information. All Hydro Tasmania water transfer agreements have metering and annual water reporting requirements.

Representatives from Hydro Tasmania and NRE Tasmania also meet periodically to discuss power station operation, water allocations, river health and environmental monitoring activities. This is in addition to frequent informal discussions on current water management issues.

QUESTION 5:

There are 5 flow-through fish farms located upstream of the Bryn Estyn water treatment plant that discharge large nutrient loads directly to the river, can the government confirm:

- a) Whether monitoring has identified that these operations have discharged taste and odour compounds (T&O) and blue-green algae into the river system?
- b) Whether pollutants from these operations have likely contributed to the water quality problems experienced in the Hobart water supply over the past 5 years?
- c) What is the timeline for the Government to phase out flow through fish farms on Tasmania's rivers, particularly upstream of public drinking water supplies?

ANSWER:

- a) Monitoring of taste and odour compounds is not required by the EPA in environmental licence conditions related to fish farm activities. Sources of taste and odour are often related to the growth of algae rather than any direct compound released into the environment. Furthermore, there is no monitoring of blue-green algae in fish farm effluent. The EPA believes the risk is low and fish farms are unlikely to be a major contributing source of blue green algae as high flows within farms are not optimal for algal growth.

The EPA requires four of the five flow-through fish farms to monitor and report on algal biomass and algal cover upstream and downstream of their discharge point.

- b) Nutrients discharged into waterways that have conditions that support algal growth (such as low flow, warm temperature, plenty of sunshine) contribute to algal growth, including blue green algae, which can influence taste and odour of drinking water. Flow-through fish farms, along with other agriculture uses like dairying, forestry, and orchards, are all a source of nutrients in the Bryn Estyn catchment hence may have contributed to taste and odour experienced in the Hobart water supply over the past 5 years.
- c) The government has committed to phase out of flow through systems for all freshwater salmonid fish farms over a certain size. This will involve working with industry to establish timeframes for transition of existing flow through systems to fully recirculating systems.

APPROVED/NOT APPROVED

A handwritten signature in blue ink that reads "Jo Palmer". The signature is written in a cursive style with a large initial 'J'.

Hon Jo Palmer MLC
Minister for Primary Industries and Water

Date: 23/11/22