Hydro Tasmania

and

Inland Fisheries Service

Memorandum of Understanding -
Water Level Arrangements 2023 – 2028

Details

Parties	Hydro Tasmania and Inland Fisheries Service	
Hydro Tasmania	Name	**Hydro-Electric Corporation**
	ABN	48 072 377 158
	Address	4 Elizabeth Street, Hobart Tasmania, Australia, 7000
	Email	Corporation.secretary@hydro.com.au
	Attention	Company Secretary
Inland Fisheries Service	Name	**Inland Fisheries Service**
	ABN	33294552909
	Address	17 Back River Road, New Norfolk, Tasmania, Australia, 7140
	Email	infish@ifs.tas.gov.au
	Attention	Director of Inland Fisheries

Recitals

A. Inland Fisheries Service (IFS) and Hydro Tasmania (HT) have for a considerable period of time negotiated and implemented a number of water level arrangements for several key lakes and lagoons in the State. Informal arrangements were initiated in the 1990's and the first formal arrangements were signed in 2004. There have been successive iterations of the arrangements since this time.

B. The current arrangements set out in this Memorandum of Understanding (MOU) document the IFS' and HT's shared understanding of considerations relevant to the management of water levels and address either single or multiple issues which may differ for each body of water. The issues are generally: (i) maintenance or improvements to the recreational fishery, (ii) native fish values and (iii) water quality.

C. The parties desire that this MOU will further enhance the spirit of co-operation that exists between them. With open channels of communication, collaboration, information and data sharing, the parties aim to maintain mutually beneficial arrangements.

D. Where possible, and towards the goal of improving our mutual understanding of angling, operational, stakeholder and environmental needs, Hydro Tasmania and the Inland Fisheries Service agree to collaborate in surveys and other evaluation techniques, with the aim of collecting and sharing stakeholder information relevant to both parties.

It is agreed

1. Object of this MOU

1.1 The parties agree that this MOU sets out, in separate Annexures, the shared understandings of the parties in relation to the management of water levels at the following water bodies:

(1) Bronte Lagoon

(2) Laughing Jack Lagoon

(3) Penstock Lagoon

(4) Arthurs Lake

(5) Woods Lake

(6) Little Pine Lagoon

(7) Shannon Lagoon

(8) Lake Augusta

1.2 The Inland Fisheries Service acknowledges and agrees that the commitments of Hydro Tasmania contained in this MOU are subject to:

(a) circumstances where, Hydro Tasmania, acting reasonably determines that it is not practical to meet a commitment due to: generation operations (including but not limited to 'Prescribed Events' as defined in Hydro Tasmania's Special Water Licence under the *Water Management Act 1999*); equipment failure; operational constraints; or regulatory or electricity market constraints);

(b) Workplace health and safety and environmental requirements and any unforeseen circumstance that requires Hydro Tasmania to implement an emergency procedure; and

(c) In the case of Lake Augusta, catchment inflow variability,

and that if Hydro Tasmania is unable to maintain a target water level or draw down rate for any reason, the provisions of clause 4 apply.

2. Contact officers

The following are the relevant contacts for the daily administration of this MOU:

(d) Hydro Tasmania

Dave Ikedife
Senior Aquatic Scientist

4 Elizabeth Street, Hobart, Tasmania, 7000
Phone: + 61 3 6240 2815
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Email: david.ikedife@hydro.com.au

(e) Inland Fisheries Service

Chris Wisniewski
Section Manager Fisheries Management

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3. Variation

Any variation to this MOU is not effective unless it is in writing and signed by the parties.

4. Liability

4.1 In no event will a party be liable for any direct, indirect, special, incidental or consequential damages, loss of revenue, loss of profits or loss of business opportunity resulting from or arising out of this MOU, even if informed of the possibility of such damages.

4.2 To the extent permitted by law, the limitations of liability in this clause 4 will apply regardless of how the loss or damage may have occurred and regardless of the theory of liability which shall be taken to include liability under contract, in tort, in equity, in restitution, under statute or otherwise.

4.3 In this clause 4, consequential loss shall be taken to include liability for:

(1) business interruption loss;

(2) loss which does not arise naturally or in the usual course of things;

(3) loss of actual or anticipated profit, revenue, production, opportunity or anticipated savings; or

(4) loss of use.

4.4 The parties acknowledge that this MOU is not a legally enforceable agreement, and is not intended to be an agreement enforceable in a court of law.

5. Term of this MOU

5.1 This MOU shall commence upon its execution and, subject to clause 5.2, this MOU shall terminate upon the earliest of the following events occurring:

(1) unless the parties otherwise agree in writing, 30 June 2028; or

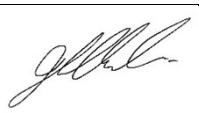
(2) a party notifies the other Party in writing of termination.

(**Term**).

5.2 Clause 4 (Liability) survives the expiry or termination of this MOU.

6. Definitions

SL means the State Datum which is based on a determination of mean sea level made prior to 1905 at the old Marine Board of Hobart tide gauge at Castray Esplanade, Hobart.

SIGNED for and on behalf of the HYDRO-ELECTRIC CORPORATION	
In the presence of	
Date	19 December 2023

SIGNED for and on behalf of the INLAND FISHERIES SERVICE	
In the presence of	
Date	17 November 2023

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ANNEX 1

BRONTE LAGOON

Overview

(A) Bronte Lagoon is an artificial reservoir constructed and managed by Hydro Tasmania for purposes associated with hydro-electric generation.

(B) Bronte Lagoon is a highly popular recreational trout fishery and remains an important fishery from a regional and State perspective. The lagoon offers highly valued shore-based fly-fishing experiences for tailing trout because of the extensive shallows along most of the shorelines.

(C) Hydro Tasmania operating levels for Bronte Lagoon:

- Full storage level SL665.988m
- Normal minimum operating level SL662.330m

(D) As a multiple use lake Hydro Tasmania has a desire to accommodate a range of users and will therefore make compromises between requirements from time to time. For example, to provide water for white water kayaking events it may be necessary to vary water levels for short durations.

(E) The purpose of this MOU is to document certain measures to assist to minimise adverse impacts on the trout fishery, maintain the high quality recreational trout fishing experience and maintain the lagoon's ecological health.

Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain the water level in Bronte Lagoon around a level of between SL664.50m to SL665.5m with a target level of SL665.0m for the period 1 October to 30 April inclusive (Agreed Period). Hydro Tasmania will undertake regular monitoring of water levels and, where prudent, adjust its operations to maintain the target water level. If the water level is drawn below SL663.90m then the draw-down should proceed as slowly as practicable. Recovery will be dependent on inflows and generation requirements.

2. Hydro Tasmania will aim to maintain a water level of SL664.5m or above, with operational adjustments to reduce the impact of lake level changes during the opening weekend of the angling season (first weekend in August).

3. Hydro Tasmania will notify the Director of the Inland Fisheries Service if the water level falls below SL664.5m for a period in excess of one day during the Agreed Period (Clause 1). The notification will include the expected duration of the low water level and the measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

4. If the water level of Bronte Lagoon drops below the agreed water management level of SL663.9m outside of the Agreed Period (Clause 1), Hydro Tasmania will, at the earliest opportunity, notify the Director of the Inland Fisheries Service of the expected duration of the low water level and any measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent

via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications. Hydro Tasmania may notify the public via appropriate websites, in advance of significant planned water level draw-downs (i.e. infrastructure maintenance) that may impact negatively on the fishing experience of anglers.

5. Inland Fisheries Service undertakes to assess the trout fishery performance in Bronte Lagoon, through surveys or other appropriate fishery evaluation techniques, to assess the effectiveness of this Memorandum of Understanding. The Inland Fisheries will provide Hydro Tasmania with a report summarising the outcomes of the assessment prior to the expiry of this agreement.

ANNEX 2

LAUGHING JACK LAGOON

Overview

(A) Laughing Jack Lagoon is an artificial reservoir constructed and managed by Hydro Tasmania for the purposes associated with hydro-electric generation. Water from this storage is released into the Clarence River, which is then diverted to Bronte Lagoon via the Clarence Weir and pipeline.

(B) Laughing Jack Lagoon supports a recreational trout fishery that is important for local anglers. In the past, operational draw-downs of water have left trout stranded in the lagoon, in downstream dam infrastructure and in Powers Creek. Since 1995 an agreed minimum operating level of SL753.0m has been in place to reduce the likelihood of this situation occurring.

(C) Hydro Tasmania operating levels for Laughing Jack Lagoon:

- Full storage level SL761.991m
- Agreed minimum operating level SL753.000m

(D) The purpose of this MOU is to document certain measures to; (i) minimise adverse impacts on the trout fishery, (ii) to minimise strandings of trout, and (iii) mitigate against outputs of turbid water which would enter Bronte Lagoon during peak fishing times.

Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain a minimum water level in Laughing Jack Lagoon at or above SL753.90m.

2. Hydro Tasmania will manage water outflows to limit the transfer of turbid water into Bronte Lagoon and minimise the risk of fish strandings.

3. Hydro Tasmania will notify the Director of the Inland Fisheries Service if the discharge is closed off when the water level at Laughing Jack Lagoon is below 753.9m, so that fish trapped in Powers Rivulet can be rescued. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

4. If Hydro Tasmania is unable to maintain the water levels in accordance with Clause 1, Hydro Tasmania will notify the Director of the Inland Fisheries Service in advance of the expected duration of the low water level and any measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

ANNEX 3

PENSTOCK LAGOON

Overview

(A) Penstock Lagoon is an artificial reservoir originally constructed and managed by Hydro Tasmania for the purpose of hydro-electric generation at Waddamana A & B power stations. Since decommissioning of the power stations the lagoon has been managed as a recreational fishing water.

(B) Penstock Lagoon is recognised as one of Tasmania's premier trout-fishing waters. Historically, water clarity has been a significant issue with anglers, however ongoing water level arrangements have reduced wind induced turbidity to a significant extent. The long-term management of turbidity remains a key objective for the lagoon.

(C) Hydro Tasmania operating levels for Penstock Lagoon:

- Full storage level SL919.840m
- Normal minimum operating level SL919.300m

(D) The purpose of this MOU is to document certain water level management measures to minimise adverse impacts on the trout fishery and sustain the lagoons ecological health.

Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain a minimum water level in Penstock Lagoon at or above SL919.50m to reduce the risk of water quality issues, enhance recreational trout fishing and protect important ecological features and processes.

2. If Hydro Tasmania is unable to maintain the water levels in accordance with Clause 1, Hydro Tasmania will notify the Director of the Inland Fisheries Service of the expected duration of the low water level and any measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

3. Inland Fisheries Service undertakes to assess the trout fishery performance in Penstock Lagoon, through surveys or other appropriate fishery evaluation techniques. The Inland Fisheries will provide Hydro Tasmania with a report summarising the outcomes of the assessment prior to the expiry of this agreement.

ANNEX 4

Arthurs Lake

Overview

(A) Arthurs Lake is an artificial reservoir constructed and managed by Hydro Tasmania for the purposes associated with hydro-electric generation and irrigation. Water retained by Arthurs Dam is pumped into Great Lake, via the Arthurs Flume and Tods Corner Power Station. Water from Arthurs Lake supplies the Midlands Water Scheme via pipeline and the Lake River irrigation district via the Upper Lake River.

(B) Arthurs Lake is an important recreational trout fishery in Tasmania, supporting a large, self-sustaining population of brown trout.

(C) The purpose of this MOU is to document certain measures to maintain the lake's recreational trout fishing experience and to maximise boating access at Arthurs Lake.

(D) Hydro Tasmania operating levels for Arthurs Lake:

- Full supply level SL952.82m.
- Normal minimum operating level SL943.050m

Understanding

1. Hydro Tasmania will use reasonable endeavours to operate Arthurs Lake so the water level is at or above SL950.00m on 1st November each year and at or above SL949.00m on 1st June each year[1] subject to the water level in Great Lake being above its Medium Risk Level of SL1023.0m[2] and the Midlands Irrigation Scheme being in operation. This will ensure Arthurs Lake is at or above SL949.00m during the general brown trout angling season (1 August to 30 April in the following year).

2. If Great Lake is below its Medium Risk Level of SL1023.0m or if the Midlands Irrigation Scheme is not operating then Hydro Tasmania will use reasonable endeavours to operate Arthurs Lake so the water level is at or above SL949.00m on 1st November each year and at or above SL948.00m on 1st June each year, both levels being one metre lower than Clause 1. This will ensure that Arthurs Lake is at or above SL948.00m during the general brown trout angling season (1 August to 30 April in the following year).

3. If Hydro Tasmania is unable to maintain the water levels in accordance with Clauses 1 or 2, Hydro Tasmania will notify the Director of Inland Fisheries Service of the expected duration of the low water level and any measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

[1] The storage 'tracks' between the two water levels will not necessarily be straight lines to allow some flexibility in operating and maintaining the pump.
[2] At the medium risk level of SL1023.00m Great Lake is approximately 18.4% full.

4. Inland Fisheries Service undertakes to assess the trout fishery performance in Arthurs Lake, through surveys or other appropriate fishery evaluation techniques, to assess the effectiveness of this Memorandum of Understanding. The Inland Fisheries will provide Hydro Tasmania with a report summarising the outcomes of the assessment prior to the expiry of this agreement.

ANNEX 5

Woods Lake

Overview

(A) Woods Lake is an artificial impoundment that inundates a smaller natural lake, originally constructed to assist in powering the Duck Reach Power Station near Launceston. The dam supplies irrigation water to the downstream reaches of the Lake and Macquarie rivers to meet Hydro Tasmania's statutory water supply obligation. Water that passes the irrigation areas also contributes to power generation at the Trevallyn Power Station.

(B) Woods Lake is a broad and shallow lake , and its morphology and substrate characteristics make it susceptible to wind driven resuspension of sediments and elevated turbidity levels.

(C) The purpose of this MOU is to document certain water level management measures to reduce the likelihood of poor water quality occurring in Woods Lake, which will benefit the lakes ecology, trout fishery, threatened fish habitat and downstream riparian consumers.

(D) Hydro Tasmania operating levels for Woods Lake:

- Full supply level SL737.77m.
- Normal minimum operating level SL733.960m

Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain the water level in Woods Lake at or above SL736.20m. This includes releasing water from Arthurs Lake and these release commitments will be taken into account in the operation of Arthurs Lake.

2. If Hydro Tasmania is unable to maintain the water levels in accordance with Clause 1, Hydro Tasmania will notify the Director of Inland Fisheries Service. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

3. If it appears that the water level of Woods Lake will drop below SL735.70m, Hydro Tasmania will notify the Director of Inland Fisheries Service of the expected duration of the low water level, expected minimum low water level and any measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

4. Inland Fisheries Service undertakes to assess the trout and native fishery performance in Woods Lake, through surveys or other appropriate fishery evaluation techniques. The Inland Fisheries will provide Hydro Tasmania with a report summarising the outcomes of the assessment prior to the expiry of this agreement.

ANNEX 6

LITTLE PINE LAGOON

Overview

(A) Little Pine Lagoon is an artificial reservoir constructed and managed by Hydro Tasmania for the purposes associated with hydro-electric generation.

(B) Little Pine Lagoon is an extremely popular and highly valued recreational trout fishery,and is recognised as one of Australia's premier fly-fishing waters.

(C) The purpose of this MOU is to document certain water management measures to minimise adverse impacts on the trout fishery, support the performance of the fishery and fishing experiences, and maintain the lagoon's ecological health.

(D) Hydro Tasmania operating levels for Little Pine Lagoon:

- Full storage level SL1007.36m
- Normal minimum operating level SL1005.84m

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Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain a minimum water level in Little Pine Lagoon of SL1006.33m for the period 1 August to 30 April and will endeavour to maintain water levels to protect the aquatic ecosystem outside this period.

2. If Hydro Tasmania is unable to maintain the water levels in accordance with Clause 1, Hydro Tasmania will notify the Director of the Inland Fisheries Service of the expected duration of the low water level and the measures Hydro Tasmania proposes to take to address the issue. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

3. Inland Fisheries Service undertakes to assess the trout fishery performance in Little Pine Lagoon, through surveys or other appropriate fishery evaluation techniques, to assess the effectiveness of this Memorandum of Understanding. The Inland Fisheries will provide Hydro Tasmania with a report summarising the outcomes of the assessment prior to the expiry of this agreement.

ANNEX 7

SHANNON LAGOON

Overview

(A) Shannon Lagoon is an artificial reservoir constructed and managed by Hydro Tasmania for the purposes associated with hydro-electric generation and the supply of water for downstream riparian and irrigation users in the Shannon River.

(B) Shannon Lagoon is a shallow impoundment located to the south of Miena dam on Great Lake. In the past, low levels during the winter exposed extensive shoreline areas which led to a loss of aquatic plants. Shannon Lagoon also contains substantial amounts of silt and westerly/northerly winds regularly cause high turbidity in the lagoon. Water level in the lagoon is managed to reduce the severity of high turbidity events.

(C) Hydro Tasmania operating levels for Shannon Lagoon:

- Full storage level SL1017.66m
- Normal minimum operating level SL1016.97m

(D) The purpose of this MOU is to document certain water level management measures to minimise adverse impacts on the trout fishery and mitigate water quality issues at Shannon Lagoon.

Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain a water level at Shannon Lagoon at SL1017.50m through to SL1017.60m throughout the period 1 Aug to 31 May; and between SL1017.30m to SL1017.55m throughout the period1 June to 31 July.

2. If it appears that the water level of Shannon Lagoon will drop below the water level bands as defined in Clause 1, for a period in excess of one week, then Hydro Tasmania will notify the Director of the Inland Fisheries Service of the expected duration of the low water level and any measures Hydro Tasmania proposes to take to address the low water level. Notifications will be sent via Hydro Tasmania's Water Alerts Portal (https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.

3. Inland Fisheries Service undertakes to assess the trout fishery performance in Shannon Lagoon, through surveys or other appropriate fishery evaluation techniques. The Inland Fisheries will provide Hydro Tasmania with a report summarising the outcomes of the assessment prior to the expiry of this agreement

ANNEX 8

Lake Augusta

Overview

(A) Lake Augusta is a semi-artificial reservoir constructed and managed by Hydro Tasmania for the purposes associated with hydro-electric generation. The capacity of the natural Lake Augusta was increased by construction of a dam on the Ouse River at Bernacchi. Water from Lake Augusta is released into the Ouse River, which is diverted to Great Lake via Liawenee canal.

(B) Lake Augusta supports a recreational trout fishery that is important for the western lakes region.

(C) The Inland Fisheries Service have established fisheries management infrastructure in the lower reaches of the Liawenee canal which relies upon water released from Lake Augusta, and its operation is pivotal to the Services operations.

(D) The Pillans-Julian Lakes fishery is situated to the north of Lake Augusta. Access is via a four wheel drive track traversing the exposed bed of Lake Augusta. Access is only possible when lake levels are below SL1148m.

(E) Hydro Tasmania operating levels for Lake Augusta:

- Full storage level SL1150.62m
- Normal minimum operating level SL1141.63m

(E) The purpose of this MOU is to document certain measures to; (i) make reasonable endeavours to ensure sufficient flow is available in Liawenee Canal to support the annual brown and rainbow trout spawning runs and (ii) where possible and practical, maintain water levels at suitable level to facilitate vehicular access to Julian and Pillans Lakes.

Understanding

1. Hydro Tasmania will use reasonable endeavours to maintain a spawning flow in Liawenee Canal between April and June (brown trout) and September and October (rainbow trout). The minimum flow required to support the spawning run is 0.5 cumecs. If conditions allow, this flow should extend to 31 December to facilitate hatching and downstream migration of fry. Where possible, the IFS have requested that, during four days prior to and the two days of the Liawenee Trout Weekend (3rd weekend in May), the minimum flow be increased to 2 cumecs.

2. Where possible, Hydro Tasmania will endeavour to keep water levels below SL1148m during the months December to February (inclusive) in order to facilitate access to Julian and Pillans Lakes.

3. Hydro Tasmania will use reasonable endeavours to maintain a minimum water level in Lake Augusta at or above SL1146.63m.

4. If Hydro Tasmania is unable to maintain the water levels in accordance with Clauses 1, 2 or 3, Hydro Tasmania will notify the Director of Inland Fisheries Service of the expected duration of the low/high water level or low flow and any measures Hydro Tasmania proposes to take to address the non-conformance. Notifications will be sent via Hydro Tasmania's Water Alerts Portal

(https://alerts.hydro.com.au/login) and the Director is responsible for subscribing InFish@ifs.tas.gov.au to receive these notifications.