

Hydro Generation

The Great Lake catchment is supplemented by diversions from the Ouse River in the west and from Arthur's Lake in the east. Augusta Dam stores the headwaters of the Ouse River; the outflow is picked up a few kilometres down the river and conveyed to Great Lake via Liawenee Canal. Water from Great Lake flows through a 5.7 km long headrace tunnel situated beneath the Great Western Tiers, down a 2.7 km long penstock and a 110 m deep vertical shaft into an underground power station at Poatina.

Poatina is Tasmania's second largest power station comprising five 51.6 MW and one 54.5 MW turbines operating under a head of 835 metres and produces approximately 12% of Hydro Tasmania's hydro generation capacity.

Native Fish Management

Four species of native fish are present in Great Lake including the Great Lake paragalaxias. Two of these species only occur in Tasmania and are listed under both State and Commonwealth legislation as threatened species. Through the implementation of the Threatened Tasmanian Galaxiidae Recovery Plan, the IFS are managing to conserve these species and their habitats in Great Lake.

Water Level Management

Numerous activities are undertaken to manage water levels at Great Lake. The optimum operating level set down by Hydro Tasmania, rainfall conditions permitting, is between 30% and 60% of Full Supply Level (FSL). This is designed to accommodate the needs of hydro power generation, recreational use, irrigation releases and ecological sustainability. Water quality and the Charophyte beds are regularly monitored to assess any changes in condition. A low lake level boat ramp and assessment of emerged obstacles ensures continued recreational use and safe boating. Key stakeholders maintain regular communication on all aspects of Great Lake facilitating effective management of this important resource.

Lake Levels

Information on Current lake levels (Metres from full supply level) can be obtained through the IFS website at www.ifs.tas.gov.au and follow the links >Going Fishing>Things to check>Lake Levels.

Sustainable Management

Great Lake is an example for balancing the protection of biodiversity of freshwater lake ecosystems, providing for recreational needs, whilst ensuring the economic and social imperative of reliable power supply. Managed by Hydro Tasmania for hydro generation purposes, with its fishery managed by the Inland Fisheries Service (IFS), Great Lake is a unique ecosystem in Tasmania. You are encouraged to enjoy and protect its beauty.

Background

Great Lake is located on the Central Plateau of Tasmania, 1,034 metres above sea level. It was one of Australia's largest natural freshwater lake systems prior to its initial damming in 1916. In 1922 the Miena multiple arch dam was built across the outlet of Great Lake to increase storage. In 1967 a sloping core rock fill dam was built down stream. Then in 1982, the rock fill dam was raised six metres and a levee was built across a saddle on the storage rim. When full, the lake has the capacity to cover 17,610 hectares and hold 3,178 million cubic metres of water.

Great Lake is Tasmania's second most popular fishery in terms of angling effort. All angling methods are permitted except for Tods Corner and Canal Bay, which are reserved for artificial lures only. Brown trout were first released into Great Lake in 1870 and in the following forty years, some of the best trout fishing in the world was experienced here. The fishery has gone through several cycles of high productivity. In the period 1920 - 1940, rainbow trout dominated angler's catches with forty rainbow trout caught for every brown trout. Today the fishery is dominated by brown trout of 0.75 - 1.5kgs while rainbow trout represent approximately 10 percent of an angler's catch.

Recreational Fishery Management

The Inland Fisheries Service (IFS) manages Great Lake as a Premium Wild Trout Fishery. The primary focus of the IFS is to enhance the rainbow trout population. Brown trout populations are maintained through natural recruitment. Management goals are supported by specific



Great Lake Anglers Access

REGION: CENTRAL



CONTACT DETAILS

17 Back River Road,
New Norfolk, 7140
Ph: 1300 INFISH
www.ifs.tas.gov.au



Inland Fisheries Service

size and bag limits and a reduced angling season at Canal Bay to protect spawning fish.

Angling Notes

Shore based anglers have many options from which to choose. Set-rod bait fishing is practised along most shores and is often very productive. Best baits are mudeyes, crickets, and worms. It is an offence to use any fish or fish products as bait. For the fly angler, polaroiding the shoreline on a sunny day provides good returns. The trick is to cover plenty of water and eventually you will find fish. Beetle falls and hatches of various aquatic insects during late December to February provide good dry fly fishing. The best spots are generally on the leeward side of the large points and bays around the lake particularly the Tods Corner area. Trolling on Great Lake is very popular with deep diving lures, down rigging or lead core line used to get lures down into the strike zone just above the weed beds. One of the best spots for this type of fishing is the south-western region of the lake, in particular Swan Bay. For the fly angler with a boat, wind lane fishing on a relatively still morning is a highlight. Polaroiding from the deck of a boat can also provide some very productive outings even when the wind is blowing hard.

Code of Conduct

- Be aware of and comply with fishing regulations.
- Respect the rights of other anglers and users.
- Carefully return undersized, protected or unwanted catch back to the water.

Angling Regulations

To fish in any inland water in Tasmania you must hold a current Inland Angling Licence unless you are under 14 years of age. A summary of the regulations are contained within the Tasmanian Inland Recreational Fishing Code.

Great Lake season, bag and size limits:

Species	Minimum size	Bag limit
Brown trout	300 mm	12*
Rainbow trout	400 mm	3*

* Combined daily bag limit of 12 can only include 3 rainbow trout.

Location	Method	Season
Great Lake excluding Canal Bay and Tods Corner	Fly fishing Artificial lures Bait fishing	Open all year round
Tods Corner east of the line marked on the map	Fly fishing Artificial lures	Open all year round
Canal Bay west of the line marked on the map	Fly fishing Artificial lures	Between the Saturday nearest 1st December in any year and the Sunday nearest 31st March in the next year

Anglers are reminded that it is an offence to:

- Take fish in any water flowing into Great Lake, including Liawenee Canal, and within a radius of 50 metres where they flow into Great lake
- Disturb Spawning Fish

Penalties up to \$1000 apply



Approx. 38km to Deloraine



Approx. 56km to Bothwell

Protect our Waters

- Recreational anglers have a responsibility to look after fisheries resources for the benefit of the environment and future generations.
- Do not bring live or dead fish, fish products, animals or aquatic plants into Tasmania.
 - Do not bring used fishing gear or any other freshwater recreational equipment that may be damp, wet or contain water into Tasmania. Check, clean and dry your fishing equipment before entering Tasmania.
 - Do not transfer any freshwater fish, frogs, tadpoles, invertebrates or plants between inland waters.
 - Check your boat, trailer, waders and fishing gear for weed and other pests that should not be transferred before moving between waters.
 - Do not use willow (which is a plant pest) as a rod support as it has the ability to propagate from a strike.
 - Do not drive vehicles over exposed weed beds.

Access Rules

- Keep to formed tracks
- Do not litter
- Respect private land – if in doubt ask permission
- Shooting is prohibited
- No fires on the lake shore
- Do not fell trees

Recreational Use

Camping and caravanning is only to be conducted at the formal camping ground at Miena. Other camp sites are available at Jonah Bay and Pump House Bay (Arthurs Lake) and Penstock and Little Pine Lagoons.

Fire management regulations and warnings need to be observed at all times. No fires are permitted on the foreshore of Great Lake.



Great Lake Paragalaxias

Report any unusual fish captures or algal sightings immediately to the Inland Fisheries Service.

**Report illegal activities to:
Bushwatch 1800 333 000**

Environmental & Cultural Values

Great Lake is recognised for its conservation value with many endemic species of animals and fish found only in Great Lake and its surrounding tributaries.

The lake itself supports a number of threatened endemic native fish and aquatic invertebrate species, including the nationally listed Great Lake and Shannon paragalaxiid fish species (*Paragalaxias electroides* and *P. dissimilis*), five species of isopod (more commonly known as 'shrimp' or 'scud'), and the prehistoric Great Lake shrimp (*Paranaspides lacustris*). The Great Lake ecosystem, therefore, is of significant conservation value and the protection of native habitat, especially the native Charophyte weed beds, is integral to preserving this status.

Reminder to Visitors

- Please remove all rubbish and do not litter.
- There is a public toilet at Miena. Anglers are encouraged to bring portable toilets or be sure to walk at least 100 metres from the water; dig a 15-centimetre hole and bury waste including the toilet paper.

Responsible Boating

Concrete boat ramps are located at Swan Bay, Cramps Bay, Brandum Bay and Todds Corner and a gravel ramp is located at Haddens Bay. These ramps are operational between Full Supply Level (FSL) and approximately 17 metres below FSL.

A gravel low lake level launching area is located at Boundary Bay on the western shore south of Liawenee.

Great Lake is exposed to extreme changes in weather and can become very rough. Hazardous conditions can occur at any time of the year with little warning. During periods of low water Great Lake may be extremely shallow with many submerged navigation hazards.

Please practice minimal impact boating by accelerating gently in shallow water to avoid the underwater wash from the propeller stirring up silt and mud. This sediment clouds the water, disturbs sensitive weed beds, smothers aquatic plants and degrades fish habitat.

Remember

- Check your wash - if its white it's all right - if it's brown slow down.
- Fishing from a boat within 100 metres of an angler fishing from the shore is prohibited unless the boat is securely moored.
- Do not park on or obstruct boat ramps.



Hydro Tasmania
The power of natural thinking

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