

## The impact of pumped hydro on your recreational fishing in NSW

Pumped hydro systems might soon have an impact on your recreational fishing. There are reportedly more than 60 pumped hydro projects proposed on NSW waterways. The NSWCFCA will monitor developments at the state level, but affiliates are encouraged to monitor projects in their districts.

### What is pumped hydro?

Pumped hydro involves the construction of dams that are used to drive turbines to produce electricity. The dams are filled by using cheap power purchased from the grid in periods of low demand/cost; currently much of that power is generated by fossil fuel power stations. The water is released through turbines to generate 'hydro' power at peak load times, and sold at a higher price than the power purchased to fill the dam. Pumped hydro acts as a rechargeable battery, storing energy collected when supply exceeds demand, and then providing electricity to the grid when other sources are insufficient to meet needs.

A typical pumped hydro project involves two reservoirs built adjacent to a natural waterway: a lower holding reservoir is initially filled by water from the stream and pumped to a higher reservoir positioned above turbines. After running down through the turbines to generate power, the water returns to the lower reservoir and is then pumped back up to the higher reservoir using low-cost, off-peak power from the grid. The lower reservoir is topped up from the stream whenever water is lost through evaporation and seepage.

### Key points

- NSWCFCA affiliates should keep their ear to the ground for proposed pumped hydro projects on their local streams.
- Affiliates should seek to engage with project proponents at the earliest possible stage, and be recognised as stakeholders that use the waterway for recreational fishing, or in the case of acclimatisation societies, as legislated fish stocking organisations.
- Attendance at public forums will assist recognition.
- Affiliates should formally register for consultation/comment on any Environmental Impact Studies/Statements that are released.
- Affiliates should lobby for project proponents' recognition of the potential for impacts on recreational angling. Matters that might be relevant are:
  - Transfer of pest species from one waterway to another.
  - Impact on fish habitat due to changing water temperature, water flow and water levels, and turbidity caused by construction or operation.
  - Impact on angler access caused by prohibited zones around infrastructure, roads and dangerous bank conditions.

- Pumped hydro dams are not usually built in the bed of a stream, they are built nearby. But they always require water extraction infrastructure to be placed in the stream.
- Pumped hydro projects are mostly privately owned infrastructure.
- Pumped hydro projects vary in type, design and scale.
- Pumped hydro projects involve infrastructure beyond the site of the dams, e.g. water extraction offtakes, roads and power grid connections.
- Pumped hydro dams do not contribute to water security.
- Filling or topping up of reservoirs from natural waterways, even during periods of high flow, may alter the stream by interfering with natural environmental flows and flushes.
- Pumped hydro projects do not provide cheap power for your local district – the power is sold by the power company into the national grid, at the highest price they can get.

Affected angling stakeholders should consider seeking a recreational fishing offset – i.e. some form of compensation for any impact on recreational fishing. This could include proportionate financial compensation that enables enhancement of other recreational fishing assets.

### **Links to more information**

These web sites are a limited selection that have further information about pumped hydro projects in NSW.

Other sites will deal with specific projects:

- <https://www.waternsw.com.au/about/renewable-energy-and-storage-program>
- <https://www.energy.nsw.gov.au/nsw-plans-and-progress/major-state-projects/pumped-hydro-roadmap>
- <https://www.arup.com/projects/nsw-pumped-hydro-opportunity-map>.

-----

*Updated December 2022*