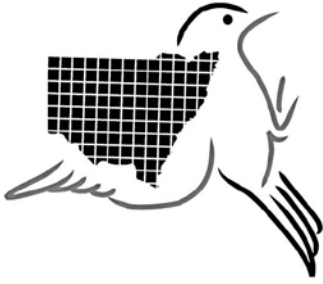


Submission
No 64

**INQUIRY INTO RATIONALE FOR, AND IMPACTS OF,
NEW DAMS AND OTHER WATER INFRASTRUCTURE IN
NSW**

Organisation: NSW Bird Atlassers Inc

Date Received: 21 September 2020



NSW Bird Atlasers Inc

A group monitoring birds in New South Wales

Postal Address: P.O. Box 1127 Orange NSW 2800

Website: www.nswbirdatlassers.com

WaterNSW
Parliament House
6 Macquarie Street
SYDNEY NSW 2000

20 September 2020

Re: Macquarie River Re-regulating Storage Project

Dear Members of Parliament concerned with this proposal

Thank you for the opportunity to comment on the above matter.

The New South Wales Bird Atlasers is a group of dedicated bird observers and ornithologists, whose goals are to enhance the environment, and in particular to protect and preserve Australian birds in NSW and ACT. Mapping and monitoring birds' distribution and preferred habitats is undertaken on an ongoing basis, thus better defining their status and identifying changes in populations, habitat needs and management.

The group also acts as advocates by making submissions on matters that may affect such status and habitats, imparting knowledge that will contribute to their conservation and protection.

The Bird Atlasers are opposed to the above proposal for a re-regulating weir on the Macquarie River at Gin Gin for the following reasons:

- The impact on the Ramsar listed Macquarie Marshes Nature Reserve, also the Wilgara Wetland, will be significant despite referral to Australian Government Department of Agriculture, Water and the Environment, in Matters of National Environmental Significance concluding otherwise.
- Natural flows from unregulated Bell River, Little River, Talbragar River and Coolbaggie Creek will be captured behind the massive weir. These flows are critical for the river below Burrendong Dam because they mimic the natural flow regime on which many ecological processes and organisms depend. They are vital contributors to large floods that reach the Macquarie Marshes and inundate the extensive mosaic of different types of vegetation including *Eucalyptus camaldulensis* River Red Gum forests, reed bed swamps predominantly *Phragmites australis*, water couch *Paspalum distichum* areas, lignum *Duma florulenta* areas, and Coolabah *Eucalyptus coolabah* and Black Box *Eucalyptus largiflorens* floodplains. Capturing these waters at Gin Gin will likely have a significant impact on nationally threatened plant and animal species in the marshes, Matters of National Environmental Significance under the EPBC Act 1999, as well as native

reptiles, many species of native fish, small and large native mammals, native frogs, and hundreds of plant species (NSW Office of Environment and Heritage, 2012).

- Bird species that will be affected in the Macquarie Marshes include migratory species and nationally threatened species which rely on triggers and stimuli from these flows for survival, breeding and recruitment. The site is extremely significant, it provides some of the most important breeding areas for waterbird populations in Australia; Straw-necked Ibis, Glossy Ibis, Intermediate and Great Egrets, Nankeen Night Heron, cormorants, ducks, grebes, wading birds; the nationally endangered Australasian Bittern and Australian Painted Snipe breed in the reed bed swamps. This cannot be considered as 'insignificant'.
- There are thirteen migratory species listed for consideration as Matters of National Environmental Significance that use the marshes during migration. Among these are the Bar-tailed Godwit, Common Greenshank, Common Sandpiper, Latham's Snipe, Marsh and Sharp-tailed Sandpiper and many others. The proposed weir will likely have a significant impact on these nationally threatened migratory species, a Matter of National Environmental Significance under the EPBC Act 1999.

The facts mentioned above are so well documented that NSW Bird Atlassers are at pains to comprehend why WaterNSW has put forward this Re-regulating proposal. There is little concern for the environment included in the proposal and referral.

- Water captured by the proposal, what will be essentially a 30km upstream weir pool, neglects to acknowledge the many effects it will have on the riverine environment. It will kill riparian vegetation, not only the River Red Gums *Eucalyptus camaldulensis* which cannot tolerate permanent inundation; but macrophytes that help stabilise the river bank and prevent erosion, provide shelter for macroinvertebrates, food for ducks and shrimps; riffle zones will disappear leading to deterioration in water quality; the passage of nutrients and organisms that need to migrate up and down the river will be curtailed, as will the passage of many species of native fish to feed and breed.
- The river regime will be changed so that it will cease to flow freely above the structure and become more like a lake habitat (Blanch et al., 2000). This will not suit the current ecosystem, an ecosystem already in danger from the erection of instream barriers, an impact listed as significant and a key threatening process. It requires natural variability and essential flooding regimes for different species and habitats along the river; the ecosystem of the river is interdependent but has not been taken into account; the proposal is completely unviable and must be rejected.
- The native fish communities of the Macquarie River and Ramsar-listed Macquarie Marshes are in extremely poor condition, already identified as an endangered ecological community (found in *The aquatic ecological community in the natural drainage system of the lowland catchment of the Darling River*); with nationally threatened Murray Cod, Cod Trout, and Silver Perch among fish species that could be affected. The community will be further endangered by the proposal's regulation leading to conditions ideal for introduced species such as carp and gambusia. A fish ladder never inserted at the present Gin Gin weir (promised in 2011) has contributed to the decline of these species. Cod breeding sites would be flooded and eggs drowned above the proposed structure. Smaller freshes top up the deep pools along the river below Gin Gin weir and help keep the river connected and

maintain the food web; while ideal atmospheric conditions at the time will trigger spawning. Releases from the weir pool cannot mimic the same factors.

- Other impacts on the river will be the likelihood of an outbreak of blue-green algae at Warren town because of the change to the river's flow. Raising the height of the lower weir (Brian Egan Weir) some years ago below Warren slowed the river's flow along a considerable stretch. Another weir will slow it further, conditions will become ideal for such an outbreak.
- We are most concerned that a registered Aboriginal site known as Terramungamine Rock Grooves would be inundated by the weir pool. This would be an infringement of rights of the Wongaibon clan who are charged with caring for cultural heritage. Other sites believed to exist along the river will also be inundated and hidden. The rights of the river itself, its aquatic animals; the Peaceful Dove whose home it is; native vegetation; and the river's relationship to all who know and love her, is also to be sacrificed. This is too great a burden to carry, the destruction of a major watercourse for the benefit of a few?
- The proposed action must not be assessed 'using an accredited process' in NSW, otherwise there will be a clear conflict of interest. The significance of this development and the likely significant impacts it will have on Matters of National Environmental Significance must be assessed by an independent process by the Australian Government Department of Agriculture, Water and the Environment under the EPBC Act 1999; this is a national obligation. The Re-regulating Storage on the Macquarie River proposal 2020/8652 should be designated a controlled action under the EPBC Act 1999 and require assessment by public inquiry.

Recommendations The NSW Bird Atlassers strongly recommend that the proposal for a re-regulating weir at Gin Gin be rejected; and that the fishway promised since 2011 be installed at the present weir site.

Yours sincerely

Jane Paul B.NRM; Ass. Dip. NRM
Conservation Officer NSW Bird Atlassers