To whom it may concern: I wish to write a brief comment in regard to the Productivity Commission Investigation to the conduct of the Murray Darling Basin Commission and the implementation of the plan.
My first concern is the continuous high river flows along the Murray River. As a person in the past who has studied soil science I have observed the "slumping" of the river banks between Yarrawonga to Red Cliffs. The reason for this is that the clay soil types through these regions are sodic. The whole profile of the river is becoming wider and shallower. Sodium ionic bonds with clay colloid are extremely weak and the bonds break with the mixture of water. Consequently, the clay soils disperse. Also, these disperse clay particles fill the holes in the river to which native fish and crustacean inhabit.

Another issue with high river flows is the fact that with high rainfall events, flooding occurs, igniting hypoxic water. This occurred in 2016 along the Edward and Murray Rivers. Many Murray cray were seen to come out of the oxygen depleted water and baked on the banks.

A consideration also must be made in the construction of Lock Zero at Wellington. This is in regard to the fact that due to climate change and rising oceans, the barrages at Goolwa will become unworkable. The main control for fresh water into Lake Alexandrina and Albert, must come from the construction of this lock.

Prior to the development of the cotton industry in the north of NSW and southern QLD, over an average of years, 40% of South Australia water allocation came down the Darling River. Now over the past number of years this has been reduced to less than 10%, placing more pressure on the southern streams.

The Murray Darling Basin issues are diverse and complicated. However, the science must be considered when formulating policy over the whole basin, and not by select groups who have the political power.

Robert Watson Bsc Ag (CSU) Assoc degree Ag (Melb).