

The potential of filling Lake Eyre is another of those nation-building schemes that fires the imagination. Various schemes have been brought forward for filling the Lake and improving this desert region, the oldest is that of letting sea water into Lake Eyre by means of a channel cut from the Spencer Gulf, considered by the Government in 1883.

Providing a suitable route could be found over a length of 400 km, the magnitude of earthworks would not be unprecedented, and the cost would be in the order of \$4B, no more than a major road project. Contrary to common objection, it could be made to flow using the tides at Port Augusta and generate renewable energy at the same time.

The most efficient solution would be to have two parallel channels, one for northward and one southward flow. Tide gates would control the entry and exit of water, according to the tide level. Water would move hydraulically along the channel, i.e. driven by the difference in water level along its length. This process requires virtually no gradient to the channel.

While the image shows a simple tidal power generating plant driven in two directions by the ebb and flow of the tide, a two-channel system with suitable siting of generators, conveyance delay and evaporation at Lake Eyre may allow almost continuous power generation from the scheme.

The other criticism is that conversion of Lake Eyre to an inland sea would not affect the climate in inland NSW. While it is well known that inland lakes do affect the climate by moderating temperature and that the 'lake effect' increases snowfall, I would refer to the detailed modeling to determine that increasing rainfall is not the case, as simple intuition suggests otherwise.