

The impact from the proposed Bylong Coal Project will significantly impact the future productivity of the Bylong Valley landscape, particularly the water resources.

The positioning of principally the open cut pits will significantly lower the aquifer level in the floodplain alluvium by at least five metres. The proponent suggests that this will not be a problem as the alluvium is easily and readily recharged and will recover in a short time post mining. In the past areas of this floodplain (which is already over allocated with Water Access Licences (WALs) compared to natural recharge) that have been over extracted for irrigation particularly during dry weather periods the aquifer level has been lowered causing the alluvium in the top part of the floodplain to dry out.

When there has been a flood event following these dry periods an incision (erosion) takes place in the flowlines on the floodplain turning the flowlines into drains that reset the maximum level the aquifer can recharge to. This reduces the amount of water available for both agriculture and environment.

The property "Tarwyn Park" is an example of what all of the valleys floodplains used to look and function like. This particular property is an almost intact floodplain system that acts as a giant reservoir of water, slowly releasing water to downstream users enabling agricultural productivity even in dry years. This property has not had irrigation on it for at least 40 years and therefore with the high extraction and pit inflows the proponent has modelled for that will affect this property it is unsure what the impacts will be. There has been no testing done over time to know how this will affect downstream users. Local experience will tell you that there have already been periods where agricultural productivity has been substantially impacted by low water availability due to dry conditions. At these times managers reduce or stop altogether their use of the aquifer however, the proponent will not be able to stop or reduce therefore continuing to lower the aquifer. The lowering of the aquifer will in turn affect the many wetlands as well as the ecology along the Bylong River.

In conclusion the key concerns is the effect this project will have on the aquifer and the ability of the Bylong Valley to remain a highly productive agricultural system now and into the future.