



ARGUMENTS AGAINST THE TILLEGRA DAM

Planning?

There is widespread concern that the democratic process is being bypassed in the State Government's approach to planning.

The Tillegra Dam is ill-conceived – its construction was not on the radar of Hunter Water for the next 20 years or more yet it has been thrust forward as a 'quick-fix' political decision.

If this kind of 'planning' is allowed to happen unchecked and the Tillegra Dam is built without proper environmental and social analysis, more such ill-considered projects will follow.

The Tillegra Dam, and water planning for Newcastle and the Central Coast, must go back to the proper planning process, with geology, other environmental and social factors and all alternative strategies understood before any decision is made.

The cheapest water is usually the closest

Pumping water over long distances is expensive.

The Central Coast will do best getting its water locally: by collecting rainwater from house roofs; by maximising the value of Mangrove and Mardi Dams, linking the two; by implementing existing plans to harvest stormwater flows in the Wyong River and Ourimbah Creek. These strategies should be implemented before consideration is given to building the Tillegra Dam.

If the State Premier can adopt a policy of recycled water for Sydney why not for the Central Coast? And Newcastle? Then we don't need the Tillegra Dam.

The profit motive

The water which Hunter Water provides to industry and households is sold at a profit.

The State Government earns millions of dollars annually from Hunter Water's endeavours. From Tillegra there is the potential for more earnings.

Associate Professor Peter Coombes from Newcastle University (Newcastle Herald 19/1/07) insists that tanks on houses are a better 'drought-proofing' solution than dams and better economics. But there is no profit for Hunter Water and the Government when householders install tanks or industry recycles its water.

The cost

The dam is slated to cost more than \$300million.

There has been no disclosure as to how the scheme will be financed. Will it be handed over to private enterprise? Will the people of NSW no longer own this river, this water?

One dam is enough

The Williams River valley already has one dam – the Chichester Dam – plus further regulation to natural flows at the Seaham Weir.

A second dam at Tillegra would put an end to the natural floods and freshes that keep the river healthy and top up the fertility of farmland.

Without the Tillegra Dam and with the four new pumps that Hunter Water will add at Seaham Weir, water from floods and freshes can be efficiently harvested to top up Grahamstown Reservoir.

It is much less damaging socially, environmentally and agriculturally to implement Stage Three of the Grahamstown Reservoir than to build Tillegra Dam – and this was Hunter Water's own statement of policy as recently as October 2006.

Those pumps at Balickera

Hunter Water already has pumps on the Williams River at Balickera. These enable some of the water in the Williams to be harvested for transport via the Balickera canal into Grahamstown Reservoir.

It is demanding on fuel, but the infrastructure is there and now four more pumps will be added to better harvest flood flows, especially if the Stage Three expansion of Grahamstown Reservoir is implemented (as per Hunter Water's Integrated Water Resource Plan of 2003). This achieves substantial gain in water harvesting from the Williams catchment at relatively low cost.

The Tillegra Dam would harvest more - but at great cost environmentally, socially and agriculturally. Since most of the land in the Tillegra area is owned by Hunter Water, they can re-forest this land to offset their carbon emissions in running the pumps at Balickera.

What is the cost of this valley lost?

The Williams River between Tillegra and Underbank has great potential as a place for controlled camping and nature recreation: scenic camp/caravan sites, beautiful swimming holes, fishing.

Only 1¼ hours from Newcastle. Platypus in a river! Where will we find that in fifty years' time?

More importantly, where will we grow our food? What is the value of food production in this valley each year? Food production that will be lost forever and should be an annual cost against Tillegra Dam's account.

Learning to live more efficiently in water usage incurs no such cost.

What's so bad about 35% capacity in a drought?

Hunter Water stated on 16th December 2006 in Dungog that taking the last 70 years of meteorological records, and allowing for Hunter Water augmenting Central Coast supplies, in the worst-case drought Hunter Water's existing storages could drop to 35%. With the Tillegra Dam factored in the figure would be close to 70%.

Why not focus intently on recycling and demand management to raise that 35% figure, rather than spend \$300 million on an environmentally and socially destructive dam?

The recycling alternative

A big dam like Tillegra is exceedingly expensive but in fact is only needed in severe drought.

Recycling infrastructure is much less expensive and much less environmentally and socially destructive: it too is only needed in severe drought but it *re-uses the water that is already there*, and can also benefit from any stormwater flows. Thus the recycling alternative is a cheaper and more reliable option, and one which has no adverse impact on precious farmland.

Encouraging waste

The Tillegra Dam will encourage domestic and industrial water users to continue in their water-wasting ways.

Rather than spending \$300 million and more on a new water supply that might satisfy demand for sixty years, the State Government should be investing in education and smart technology so we get into the habit of using water wisely and conservatively.

Water tanks on houses teach us to use the water (eg on gardens) most efficiently because we know the supply is limited. We do not have that same sense when a water supply dam is in a far-away valley.

Why do we need a dam so huge?

The Tillegra Dam is overkill. It is tripling Hunter Water's surface storage yet it seeks to cater for a less than 25% increase in lower Hunter and Central Coast population over the next 60 years.

Other water storage options by Hunter Water's own judgement in October 2006 (when water was already being piped to the Central Coast) – notably the Stage 3 expansion of the Grahamstown Reservoir – would, along with recycling and demand management strategies, be sufficient to ensure adequate water for the next 30 years or more.

As a political ploy the Tillegra Dam is a big-buck big-thinking winner but it is far, far more than is needed.

Will the Tillegra Dam ever fill?

The Tillegra Dam is more than twenty times the capacity of the Chichester Dam in the neighbouring valley, and has ten times the surface area. The catchment areas for the Tillegra and Chichester Dams are however the same size.

While the Tillegra Dam is filling, environmental flows must be allowed past the dam for the health of the river and for irrigation of farmland downstream. Add the loss from evaporation. Add concerns about climate change and reduced rainfall. Add the possibility of leakage through fault lines near the dam wall.

\$300 million spent and more than 2000 hectares taken out of agricultural productivity, but *there is no guarantee that this dam will ever fill*. An eminent meteorologist with close familiarity with the Hunter region has stated that he believes the Tillegra Dam would *never* fill.

Johnsons Creek Dam

Population growth and development should be focused where water supply can be economically and sustainability provided.

Johnsons Creek in the Karuah River catchment is accepted as a reasonable option for a water supply dam, if a dam *has* to be built. The agricultural land that would be flooded there is of much lower quality than that at Tillegra. Water from this reservoir could be pumped into Hunter Water's system, or the State Government could focus development away from the Central Coast, decentralising to places like Karuah supplied by Johnsons Creek reservoir.

Better don't build dams at all, but if one has to be built in the region, better it is in an area of different rainfall pattern rather than two eggs in the one basket with Chichester and Tillegra.