

**Submission
No 47**

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

Name: Ms Debrah Novak
Date Received: 21 September 2020

To

The Director, Portfolio Committee No. 7 – Planning and Environment, Parliament House

Over the past 100 years many plans have been submitted to the state and federal governments to dam or divert the Clarence and Nymboida Rivers to the west over the Great Dividing Range.

Those producing these diversion plans have all advocated for diverting these rivers west over the Great Dividing Range without due consideration to the impacts it would have on the economic and cultural livelihoods of the residents and visitors of the Clarence Valley

There are numerous examples of man-made projects to divert other rivers that have created long-term ruin and community closures. The Murray-Darling Basin is a legacy of what not to do or grow in a region where the most precious natural resource, water, has been compromised.

My initial research has uncovered the following facts concerning diverting, damming or harvesting the floodwaters from the Clarence and Nymboida Rivers:

ECONOMIC IMPACT: Commercial scale industries within the Clarence Valley Local Government Area include beef, sugar cane, forestry, dry land agriculture, aquaculture, prawn trawling, fishing, lobsters, oysters, macadamias, blueberries, olives, pecans, adzuki beans, chickens, pastured pork, Alpacas, fruit and vegetables, edible flowers, coffee, tea tree, soya beans, bananas, garlic, truffles and turmeric.

The NSW Government in the North Coast Economic Regional Strategy 2036 featured the agri-food sector as an economic driver for the Clarence Valley.

Local councils and their utilities also draw water from the Clarence and Nymboida Rivers where the Clarence Valley's water supply for its 51,298 residents is raw and unfiltered and comes entirely from the Nymboida River.

Sugar Cane is the Clarence Valley's largest commercial industry, grows most effectively on a flood plain where the soil is regularly replenished with 'flood mud'. The fishing industry, another large commercial stakeholder, needs floods to scour out the bottom of the river. This needs to be done due to the build up of industrial and human waste in our river system that builds up on the riverbed.

The Clarence Valley LGA has **2186** farms and **3847** registered businesses. 1000 of these are a primary producer and they employ **1128** full time employees. Diverting the Clarence and Nymboida rivers would be an economic disaster for the Clarence River Catchment and beyond and directly threatening these industries:

- Cattle: \$33,882,653 million = 1,700 cattle producers
- Dairy: \$10 million = 6 farms
- Sugar: \$ 95 million = 300 growers
- Fishing: \$17 million = 182 licensed fisherman
- Blueberries: \$20 million = 30 farms
- Macadamias: \$15 million = 18 farms (one farm is the world's largest)
- Soybeans: \$10 million = 400 growers
- Prawn and Fish Farms: \$12 million = 5 farms
- Clarence Valley Primary Producer Exports: \$142 million

A HEALTHY RIVER SYSTEM: The Clarence River eco system is compromised by human activities negatively impacting on its health. When sewage, industrial chemicals, mining, soil runoff and land

clearing all happen simultaneously it contributes to the build-up of residue that can be harmful to the river's long-term health.

When a certain amount of rain falls over the Clarence Catchment, North Coast Public Health warn people to not swim in our rivers or at the beaches near the river mouth for three days because of pollution related health risks. There are currently 18 signs between Grafton and Yamba on the Clarence River that say, "people shouldn't swim here after it rains due to pollution". This indicates that everyone who lives along the river has a part to play in keeping it healthy, from top to bottom.

Imagine everyone in the town uses the same toilet every day. Not only this, but each time after use it does not get flushed. What is sitting in that toilet bowl becomes concentrated until a point in time you either flush it, or you risk your health in using it. The Clarence River is the same and needs its occasional flushing (floods) to scour and remove the cankers that have built up. The floods allow the river to flush itself out and any plans to dam or divert the river would jeopardise this ability.

The Clarence River sea grass beds (under water lungs of the planet) are functioning at only 60% (Explain this more: why do we care about seagrass? 60% of what? Why does this matter?). What is going into the river through industrialisation is impacting on the rivers health and these sea grass beds. Like trees these sea grass beds absorb carbon and act as a filter. They are our canary in the coalmine.

The Richmond and Tweed Rivers have been referred to in the past as dead rivers because their eco systems are compromised. (If you could work in some specific shit about the seagrass here too that'd be super good)

LOCAL FISHERMAN: an example of what mankind can do to a natural resource was done to the Clarence River in the 1970's. The seafood industry was on the verge of collapse and no one knew except the local fisherman what was happening below the surface of the Clarence River.

Professional fisherman dragged up mutated fish, crabs and worms for months. These heavily deformed species were described as 'monsters from the deep' and something you would see only in a horror film. Fish had missing fins or multiple fins, crabs with only 2 legs, sores, missing body parts. The Clarence Eastern Cod, the cousin of the Murray Cod was almost made extinct.

The cause of the species mutation was traced back to the Carrington Gold Mine at Drake. Two Clarence River Fisherman's Co-Operative (CRFC) Directors were tasked with the investigation and traced the cause to the mines tailing dams and found they were leaching arsenic into the Clarence River through the Rocky River. The gold mine was immediately shut down and 40 years later the Eastern Cod has now come full circle. The relevant report is attached for perusal.

WORLD CLASS FISH TRACK: Clarence Fish Track is a partnership initiative of Department of Primary Industries, North Coast Local Land Services, Clarence Valley Council, Coffs Harbour City Council and Essential Energy with support from the Recreational Fishing Trust and the Australian Government National Landcare Program.

The Clarence River now has a world-class fish-monitoring program where the knowledge generated by Clarence Fish Track is of interest to many people from all areas of the community. This project assists river managers; recreational fishers and the international scientific community to better understand and manage our precious freshwater fish communities.

Clarence River Fish Track continues to undertake world-class research investigating the influence of river flows and barriers (e.g. waterfalls and weirs) on the seasonal movements of freshwater fish species.

FLOOD WATERS: which exit at the mouth of the Clarence River at Yamba, are swept left from the Yamba break wall and are carried north by a current taking with it all the particles and sediment needed to replenish beaches, wetlands and fisheries along the NSW, Gold and Frazer Coasts.

The most obvious long-time recipient of this process is of course Fraser Island. Fraser Island's sand dunes have the longest and most complete age sequence of coastal dune systems anywhere in the world and have taken 2 million years to create.

All Fraser Islands sand originated by the geological process of longshore drift from the Clarence, Hawkesbury and Hunter River catchments in New South Wales.

Longshore drift consists of the transportation of sediments (clay, silt, sand and shingle) along a coast parallel to the shoreline, which is dependent on an oblique incoming wind direction. This oblique incoming wind squeezes water along the coast, and so generates water current, which moves parallel to the coast.

If you alter the process of the Clarence River floodwaters the knock-on effect impacts on the multi-billion-dollar tourism industry between Yamba and the Frazer Coasts.

There are a have the longest and most complete age sequence of coastal dune systems anywhere in the world and have taken 2 million years to create.

DROUGHT: also affects the Clarence River and its tributaries. The Clarence River had its last severe drought in 1985 when our major rivers stopped flowing and became nothing more than a trickle at Carnham Bridge at Coombadjha.

While it might be frightening to see a large volume of water coming through the Clarence Catchment system, severe droughts are just as bad.

TOURISM: The Clarence Valley's only tourism campaign is entirely centred on a river-based experience with around 1 million visitors coming to the Clarence Valley annually.

Numerous water-based activities such as dragon boat racing, rowing and ski racing and all rely on good quality water to run their events. When you add the Yamba Marina and associated industries, they all rely on clean water to operate their business activities.

FLOOD MITIGATION: The Clarence Valley already has flood mitigation processes in place. After a series of damaging floods in the 1940s and 1950s, the Clarence River County Council (CRCC) was formed in 1959 to tackle flood mitigation for all the shires of the Clarence floodplain. This role has now been taken over by Clarence Valley Council.

The majority of the early flood mitigation works were rural drains and floodgate structures designed to bring valuable agricultural lands back into production as soon as possible after each major flood event. Areas formerly inundated for weeks or in some cases months, are now drained in a matter of days.

No flood has ever breached the levee walls and it can sometimes be between 10 and 20 years between floods. To build a set of pipes to the west to carry Clarence Catchment floodwaters could sit idle for 10 or 20 years before they are ever used.

THE DREAMTIME: The Clarence and Nymboida Rivers are the lifeblood and spiritual heart of our First Nation People who today still use their traditional and ancestral grounds for customs on their homelands. There are five First Nations people have Native Title and changing the course impacts on them. The Yaegl People's 'Welcome to Country' speech always includes the reference "if you look after country, it will look after you".

The idea to divert the Clarence and Nymboida River's west will have devastating economic, social and environmental consequences for those of us who call the Clarence Valley and River Catchment home.

The implications for those who live further up the coast line will also be impacted on a vast scale.

Researched and prepared by Debrah Novak, 21/09/2020