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Submission from the Independent Trawlers Association Inc.

To Committee Secretary Senate Standing Committee on Environment, Communications and the Arts Department of the Senate

To Senators and others

We, the Independent Trawlers Association, would like to draw your attention to our concerns with the Traveston crossing dam and our fear of the impacts on our marine sustainability for our industry, based on past, current and proposed water projects. This paper was part of a submission to the EIS on the Traveston Dam.

It may appear that this overview is repetitive but think about why it may well be and why it has taken so long for such educated Water Infrastructure people to understand that thing called the water cycle and the links between the catchments and oceans.

I am no more than a lowly educated dyslexic fisherman, and I ask why your Environment Protection and Biodiversity, Conservation Act fails to safe guard links ecological functions between catchments, fresh water, estuarine, marine biodiversity and ocean currents in QLD.

Fisherman's Empirical Understanding

The old mullet fisherman sat in his punt, pondering his thoughts and casting his eyes over what was once wallum wetland, treed hills and fresh brackish waters. His mind slipping into the past and searching for the smells, the smells of sweet and sour, fresh and salt, the smells of river gum, wallum and mangrove.

His thoughts bring back pictures of gum leaves, blossoms and bark forever falling, floating then sinking and mixing with the inflows of wallum stains, of brown swamp water, pushing over the inward surges of the salted green waters of the flooding tide but forever mixing. He remembers the fresh's of small storms and local rain. He remembers how in the old days, when looking for mullet, he would test the water temperature and taste with fingers for sweet or salt, But forever listening for the plonk! That mullet make. Could these be pathways?

But he is forever longing for the smells of the creeks and the rivers that smell of life, death and decaying matter. To some the smells are offensive, but to the river man the differing smells of the river meant the difference between good seasons and bad, catches to pay bills, feed the kids and keep a roof over their heads.

The old netter felt that there were pathways and that the smell within an estuary was the lifeblood that would, in it self, link far greater coastal and offshore environments.

He ponders on how catchments, flooding rivers and the ocean currents really work and whether they themselves are linked to coastal pathways that stretch from catchment to catchment. He is not a limnologist but possesses an empirical understanding of how things in his river had worked in days gone by.

(The tributaries of rivers and streams in a catchment are more than just pathways to send pollution, top soil and debris downstream. They are pathways linking the waterways with genetic diversity, developed over millions of years. Not only within the catchment but also providing pathways for the coastal fish migration from south to north, upstream and down.

These pathways may link waterways over many thousands of kilometers and provide the essence for salinity niches to permit successful recruitment for larval to postlarval stages of many of our marine species. Just how much of the equilibrium, instincts and niches have already been eroded is anyone's guess?

We believe the Traveston Crossing Dam EIS fails to protect the K'gariion from further degradation or Frazer Island, Harvey Bay and The Great Sandy Region and many threatened species and fisheries.

The sustainability of the marine resources, and the commercial fishing industry which for some reason have been totally ignored when they have raised concerns for marine sustainability and ecological function when it comes to the water cycle.

As one of those people who have been trying to break through the QLD departmental code of silence and "the water running to the ocean is a waste" mentality I can only see this opportunity as the last hope for the long term sustainability of many marine species and to seek a new direction in understanding the structural linking between catchments, river flows and estuarine and ocean productivity or (Limnology and oceanography).

As former QLD cronies have said in the past, we can always blame the "bastards with the nets" and then plan behind closed doors, to remove them, on the pretext of fixing the sustainability of any fishery downturns by removing fisherman and licenses at no cost to the Queensland government and dishonouring any prior property rights that were established and sold to the fishing industry, by the government departments in the eighties, and consequently is now pretending to protect the sustainability of fish stocks to meet the federal governments sustainability provision for marine fish. In reality all this has been doing in many areas is to remove the much needed catch data that demonstrates the link between marine productivity and flood plumes. And you asked us to trust them when it comes to water for marine production sustainability.

It has always been too easy to incite unadulterated hatred of the commercial catching sector or the bastards with the nets mentality, when downturns happen in species and productivity. This hatred is still embedded in much of society today, thanks to the poor terms of reference in many EIS's for water infrastructure or development when it comes to marine sustainability and productivity.

It also appears that, in the past, in Queensland QW, QDPI&F, Natural Resources and the QFMA now QFS have clearly removed any concern about the sustainability of marine fisheries and marine productivity, regarding the fresh water links to the Estuaries, Bays, Oceans and their currents. They force the commercial fishing sector

to be sustainable even though they don't acknowledge any major problems in their water infrastructure's EIS's terms of reference in the past and have never added the true cost's to the commercial fishing industry of lost productivity and the pain on many hundreds of operators forced out under draconian rules and the use of the precautionary principle to thieve endorsements. There is no compensation in Queensland for marine fishing sectors because the QLD government bureaucrats have managed to extinguish the earlier property rights WITH THE PRECAUTIONARY PRINCIPLE which would have led to fair buyouts and compensation instead of the theft of commercial licenses and endorsements to meet some pretend sustainability problem due to their past neglect when it comes to fresh water for marine ecosystems.

They have for many years managed to hide the connections and roles between the catchments and oceans by the narrow scopes of the terms of reference and it appears that the EPBC act has done little to change things in the past EIS's for dams and water infrastructure in South Eastern Queensland and have failed to graph the two underlying roles of limnology and oceanography which are the connection between fresh water flows, catchments and oceans.

This leaves vast holes in the knowledge needed to progress the Traveston Dam and the past dams built in the Burnett region, EIS's have failed to cover this high rating region, when it comes to the different listings that the Mary's and Burnett catchments feed.

So where are the much needed scoping studies to link the flood plumes, medium and low flows to maintain the ecological functions of this listed region for its long term sustainability?

The narrow terms of reference in EIS's for Dam impacts and fresh water flows to sustain ocean and marine ecosystems is and has been of the highest level of incompetence by departmental experts in Queensland.

The little flows will be taken for top up in the proposed Traveston Dam and the Mary Rivers tidal barrier will be sucked almost dry, under the current circumstances. This implies that there will be longer gaps before the much needed fresh water pulses make it into the estuary and even longer periods between the much needed flood plumes into Hervey Bay and consequently the Fraser Coast region. The people living on the lower Mary River already know this by living and watching what goes on near the tidal barrage now.

Many world experts frown on the way that annuals flows can be fudged by Dam proponents to suit their own outcomes. Take a good look at the Burnett catchment and you can see what world experts mean about annual flows. It's not just experts. Even commercial fisherman can produce a paper such as Alan Dooley's submission to the Burnett W.A.M.P called "Fishers Concern within the Burnett Region" which was totally ignored by the Burnett WAMP and the water bureaucrats and their experts.

Just how do they explain the missing 35 species of fish and crustaceans which are not commonly found in the Burnett but are commonly found in the Baffle and Elliott creeks?

It appears that they admit now that there are problems with the down steam impacts of the Mary River tidal barrage. Well now just how long did it take to admit that? Well after the damage was done! What about the 40ks of tidal prism and the marine nursery in low saline areas that were destroyed, along with the long periods when this weir is kept down, well below the fish way, leaving it with no water and it appears the WAMP do not require any flows into the lower estuary is this so? WHY?

It also appears that the current Fisheries Act only requires a fish ladder and does not seem to cover the requirement of the need for water to service them or the flow requirements for marine ecosystem sustainability so it kind of makes it hard to believe in marine sustainability.

So all we can expect from this new Mary River Dam is an even greater prolonged marine drought and increased hyper saline conditions across the whole ecological bioregions which would impact on the whole food web, not just the fishery but also on the RAMSAR wetlands and world heritage areas. So just how big are the real impacts?

World experts claim that an order of magnitude happens in marine bioregions with major impacts from a dam or any number of dams and weir constructions in a catchment. Encarta Dictionary defines this as "The difference in size, usually expressed in the powers of ten, between two quantities" So if a fishery's catch is 1000 ton's before a dam, with four dams in the catchment the catch would be reduced to just 1 ton and this is without even putting a net in the water.

This alone means, there are far reaching impacts from dams whether they are on RAMSAR wetlands or commercial catchers. So what will be the true down stream impacts? Nothing in the Traveston EIS Explains this! Or even "the order of magnitude".

We believe there would be fewer flood plumes and the much needed fresh water pooling in Hervey Bay would not be there to stimulate the feeding and grow out of many of the State and Commonwealths fisheries, like the pilchards, mackerels and tunas Billfish and the food chains that feed the whole process. It also stimulates some of the richest scallop and Bug beds within the Mary's longitudinal drift of the flood plume, then over the Great Sea Spit, down along Fraser Island and off into the Eastern Australian current which runs to the south and in turn, feeds many other State and Commonwealth fisheries along the east coast of Australia.

I believe that this is the true range of the impacts of the Traveston Crossing Dam and al those Dams on the Burnett. The information on impacts that the dam proponents claim in the EIS falls a long way short of explaining all the expected impacts.

Some fishers believe that good floods even provide a boost in productivity in the Swains Reef king prawn fishery, along with other inshore and deepwater king prawns areas from Lady Musgrave through to Moreton Island and, yes, and possibly as far south as the king prawn's range.

Questions need to be asked about Moreton Bays long term sustainability, given that it was once known as one of the richest prawn biomass areas in Australia, producing

many spices of prawn and carried high volumes of juvenile king prawns after flood years.

There is no mention in the EIS of commonwealth fisheries that may be impacted on or that may have vital salinity niches and flood plume requirements from within the Mary's catchments as part of their food production or grow out cycle. They have not even tried to relate to these much need fresh water cycles in this EIS or any other. Don't you think the EPBC ACT should have tried given the devastation to marine productivity as a result of the dams on the Burnett River? Just look at what you have done with the Burnett's banana prawn fishery which was the largest on the east coast of Queensland. Now, with all those dams, it's almost nil.

It should make you think about off shore impacts on bait species, billfish and tuna, but your just blame it on over fishing. Ask an uneducated fisherman in third world countries about fish production and good monsoon rains and floods. They don't need an education to tell you when the good seasons come.

THERE ARE NO UNTOUCHED RIVERS IN THIS REGION. AT WHAT COST TO THE MARINE SECTORS?

It starts to make you wonder what the true cost to marine sustainability and productivity really is? All of the major catchments in the this region south of Baffle creek including the Kolan river have major water infrastructure with the most devastating being the Burnett river catchment, which as I understand it, is the 3rd largest catchment on the east coast of Queensland and has over 30 major storages and hundreds of smaller weirs, resulting in a extended near permanent drought for marine areas of Hervey Bay and it's marine productivity and sustainability appears to have had no peak flood plumes for over twenty years. One can expect that the timeframe will be even longer, now that the Walla Weir and the Paradise Dam are on line.

Ref Joe Mcleod Way Forward for Weirs Conference 2000 "Path ways to water ways." Ref Alan Dooley "Fishers concern within the Burnett region".

The Burrum R. fares no better, with tidal barriers and weirs and a dam, covering all of it's arms. It is believed that the subterranean water table in that region has been pumped so heavily that the fresh that once fed the many "wonky holes" or freshwater underground springs, out in Hervey Bays marine environment are now in reverse and flooding the irrigation bores with salt water and that this has progressed inland to more then 75k's, in the bore irrigation areas between the Burrum and Burnett catchments is this true?.

Even the Tuan River, a branch on the south side of the Mary, has three weirs and one only a short distance from its mouth. Then all you have left is a small inlet to the north on the Mary called the Susan River, which is not much more than a creek with little head water catchment and a small finger that drains the back of Maryborough .

The Traveston EIS seems to imply that there are other untouched rivers in the area to maintain the sustainability and biodiversity for this region. THIS IS CLEARLY UNTRUE.

The hyper saline condition of Hervey Bay is real enough with prolong periods of salinity around the 40ppt levels, well above the 25 to 32ppts, which would normally be expect in this kind of bay. This is the result of the over manipulation of the catchments in this region by the many experts who produced models and statistics to whitewash the people reading the reports. This flow, or lack of flow, brings environmental disaster into our marine ecosystems, and completely ignores the flow required to maintain fisheries and marine sustainability.

I KNOW I AM STILL REPEATING MY SELF, SO REPEAT AFTER ME- FRESH WATER IN MARINE ECOSYSTEMS IS NOT WASTED. FLOOD PLUMES PROVIDE SUSTAINABILITY FOR THE COMMERCIAL FISHING SECTOR.

THE FEDERAL GOVERNMENT HAS SET ENVRONMENTAL WATER REQUIREMENTS TO MAINTAIN ESTUARINE PROCESSES.

THIS REGION APPEARS TO HAVE HIGH RATINGS.

IT IS IMPORTANT TO KEEP THE MARY'S MAIN RIVER CATCHMENT AND FLOWS INTACT.

This region appears to rate very highly under the Federal Government's Environmental water requirements to maintain the estuarine process and it was agreed to by Queensland under COAG.

This is why it is so important to keep the Mary's main river catchment intact with frequent floods so that the ecological function, into the broader regions of the World Heritage listed Fraser Island, the Great Sandy Straits and Hervey Bays marine parks, along with the RAMSAR wet lands and Fish Habitat reserves with their bio diversity and the carbon and mineral blue print within marine species and food webs within the coastal oceans, is maintained. This cannot be done if the proposed Traveston Crossing Dam proceeds.

We believe that the agreed position on fresh water flows for estuaries agreed to by COAG do not go far enough towards providing the protection for the sustainability of fisheries, both state and commonwealth species, that the federal government requires in its obligations under international agreements. Who plays god with adjusting the ecological functions and who does the policing are questions that need to be answered? Does the EPBC act police this stuff by it self or do you let QLD police it self.

Getting water for the marine environment in Queensland just appears to be too hard for QLD to fathom. It's just easier to bury your heads in the sand and deny the whole water cycle and impacts then transfer the hidden problems on marine species into a sustainability issue on the commercial fishing sector and invent ways to thieve more Queensland commercial fishing licenser's under so called latent effort provisions.

FRC's desk top study gives fishers a very clear image of some of the impacts of the Mary River tidal barrier, something that pro fishers have been complaining about and fighting departments over from the time the Mary river Tidal barrier was built, but does not pay sufficient detail to the vast areas of sediment now locked in that rivers limited tidal prism that has filled in the deep holes and channels that the old

commercial fishers used to fish in, that ran all the way to the weir and well up into the areas knocked out by the removal of the 40k's of estuary and tidal prism by the barrier.

The estuary is now shorter and has inherited all manner of problems - such as enrichment, hyper salinity, massive turbidity and has large areas of anoxic acidic sub sediments that are trapped until the large flow events occur and is then stirred up and dumped into the outer reaches of the Sandy Straits and Hervey Bay. This creates problems with the seagrass, mud cockles and other marine life. I cannot stress the massive volume trapped in the estuary that should have been partly deposited on the shores of Hervey Bay, as beach Will the EPBC act fix this.

It also clearly shows that the impacts have never been acknowledged even today, by Queensland Water authorities, and that any suggestion that things might be better is just a statement to whitewash the true down stream impacts. (REF Joe McLeod, Down Stream Effects conference 1995.)

FRC's study appears to clam that the Mary River tidal barrier has stuffed much of the fresh water links and marine areas so it won't matter if the Traveston dam goes ahead because those impacts are so great that it will just mask any extra problems that are created. It appears they see this as a justification to build the dam even though they have never admitted to the past mistakes.

Then the EIS implies that they want to build more dams after the Traveston crossing dam stage two. Where and when does it stop and just who is going to get the blame when the Mary is like the Burnett, and the down stream impacts become too great to hide?

FRC's study was done without the knowledge of the just compiled FRDC project no. 2001/022--- FH3/AF. This project has raised grave concerns about the sustainability of marine ecosystems and fish stocks and the continued castration of the ecological function of river catchments by the damming of Queensland's east coasts catchments.

Yes your own fisheries experts are claiming that fisheries sustainability is under threat in Queensland. In the past marine fish experts have been pushed aside by interdepartmental bosses, along with their reliable information, and this has been kept quite so they can continue the grab even more water and even larger infrastructure.

YOU SHOT THE MESSENGERS WITHIN YOUR OWN FISHERIES RESARCH DEPARTMENTS AND TREATED THEM LIKE LEPERS WHEN THEY SHOULD HAVE BEEN HEROS. (Ref. McLeod- Way Forward for Weirs conference 2000)

We support a greater investigation into the already complex problems relating to the existing water infrastructure in South Eastern Queensland in relation to marine productivity and ocean ecosystems sustainability. If Queensland does not carry out the work itself then it should be done federally or even through international conventions before the Traveston Crossing dam proceeds.

The New South Wales Estuary Management Manual, out since 1992, has clearly pointed out many of the problems for marine productivity and set in place reviews and

at least acknowledged that there are major problems for fisheries and it must be taken into consideration, before any new Dam or water infrastructure is undertaken.

The Traveston Crossing dam EIS has no mention of the marine area bioregions or marine ecosystem attributes such as organic carbon, phytoplankton supply, abundance of invertebrate taxon, biomass of benthic macro invertebrates, the survival/abundance of fish taxa, involved nutrients, phytoplankton, zooplankton or even that one of the key requirements for marine species in their first eight weeks of life, for both state and commonwealth fishery species as well as the baitfish such as anchovies and pilchards let alone Spanish mackerel, tailor, mullet, bay squid and even bull shark, is a salinity range of 0.5 ppt upwards to 25ppt to progress and increases in productivity. For example after the 1999 floods the largest catches of lesser mackerel were taken 12 to 18 months after that event in Hervey Bay and many fishermen reported large schools of young tuna so there would have been benefits for commonwealth species as well.

Some marine experts claim that there are at least thirteen different functions of fresh water inflows in marine ecosystems while others claim fifteen. I am claiming that we are not even close, to understanding the marine impacts that are needed to progress and approve the Traveston dam Will those enforcing the EPBC act check this.

We believe the QLD TCDEIS does not even come close to meeting the Federal DEH Environmental Water Requirements to maintain Estuarine Processes, let alone the fresh water function in the coastal seas and oceans.

It is clear that water managers in Queensland have made every effort, over the last thirty or so years, to disenfranchise any impacts in their EIS process regarding the impacts on marine ecosystems and the oceans. So you can start to see the contempt we have when they say "Trust the figures."

We asked who is watching the watchers and who holds the departments accountable when they don't meet existing agreements and conventions? Surely not the QLD State Government bureaucrats, themselves? Aren't these the very people that advise you, the Federal government? You can see we, in the commercial fishing sector, have great problems in the trusting departments in Queensland.

We are now becoming more and more aware that the commercial fishers and fisheries are getting screwed and it appears to be by the very departments that are supposed to protect fisheries. I suppose they can always do what they have always done in the past, blame the Bastards with the nets and thieve more licenses, under the so called sustainability provision and Precautionary principle with in the Fisheries Act, at no coast to the state of Queensland.

We the Independent Trawlers Association request a copy of the QFS scientific review of and a proper assessment of the true down stream effects of dams weirs and other water infrastructure on estuaries, bays, oceans and currents in the Burnett, Hervey Bay and Fraser Island regions on both state and commonwealth fisheries for their sustainability. We also ask for an economic assessment of the lost productivity and financial impacts from past water infrastructures in this same region to be included. We would have expected that this would have been done to meet state, federal and international obligations under the ESD requirements and fish sustainability. Will DEH do this or will the senate committee.

We believe that the Traveston crossing Dam would be an Ecological castration of the last most important river in this region. Many fisheries world wide have recorded collapses caused by the construction of weirs and Dams within their catchments, with recorded losses in prawns catches of up to 75% and catch reductions in pilchards as high as 90%.

Please understand that International Limnologists claim an order of magnitude results from every weir or dam constructed in a catchment. So if marine productivity from the flows of any catchment is 1000 tonnes annually before the construction of any dam then after the construction of just 3 dams on the main river, it could drop to 1 tonne.

So you can start to see that if we are to manage our fisheries well then we need to know the difference between fishing pressure, reduced carrying capacity, species alienation and seasonal influences. Any of these, either alone or in any combination, means fewer fish and prawn numbers. We need to know the true down stream effects.

This does not mean that ITA opposes all dams. We are saying that the main river systems should be left alone with a few smaller dams, with less surface area for evaporation, built in deeper gorges or similar areas, off the main river itself. This would then maintain the ecological function of the main river catchments area and allow that ecological process of flood plumes into the marine environment and oceans, which is known as the true water cycle.

Remove the current tidal structure on the Mary River and replace it with smaller causeway type weirs from Miva upstream. A pipeline could be constructed to bring water to a reduced water allocation down stream. Please remember the millions of dollars that the tidal barrier has cost the commercial fishing sector and the emotional stress and the blame game that has caused much anguish in the innocent fishing families since the tidal barrier was constructed.

We believe that there is a case to halt the Traveston crossing dam and to explore alternative water supplies for the great south east.

SO REPEAT AFTER ME, FRESH WATER RUNNING TO THE OCEAN IS NOT WASTED.

FLOOD PLUMES ARE NEED TO MAINTAIN MARINE SUSTAINABILITY. LOOK AT THE TRUE COSTS TO MARINE PRODUCTIVITY ACROSS ALL SECTORS INCLUDING INTERNATIOAL REQUIERMENTS, GIVEN THAT THE FEDERAL GOVERNMENTS REQUIRE FISHERIES TO BE SUSTAINABLE.

Joe McLeod Environment spokesperson The Independent Trawlers Assoc. Inc.