

SUBMISSION TO THE AUSTRALIAN GOVERNMENT AGRICULTURAL COMPETITIVENESS WHITE PAPER - Canberra. A.C.T.

(Fairfax)

This submission is numbered to facilitate reading and notes.

1.

As an individual, I submit to the Agricultural Competitiveness White Paper that opportunity and need exists for the Australian Government to carry out an initial feasibility study toward government development of a new and newly productive water harvesting and aqueduct system running from the northern wet season Gregory Range area of Queensland, southward into upper catchment of the Darling River.

With understanding of ocean/water ecosystem devastation, this proposed significant water infrastructure system, and the example it provides, will help grow agricultural business and employment and the Australian and world economy.

2.

The Darling River already runs inter-state all the way to the water starved Coorong estuary in South Australia.

3.

It is proposed excess cyclone and storm water be harvested in northern high country before the bulk flows virtually wasted into the Gulf of Carpentaria.

4.

Harvesting such northern water would help reduce soil erosion, albeit natural but wasting erosion. Water can be made productive by reducing that waste.

5.

The proposed system would provide water for Gregory Range and other properties during the dry of winter in the region. Grass-fed beef is valued. Water is the key to ranging beef.

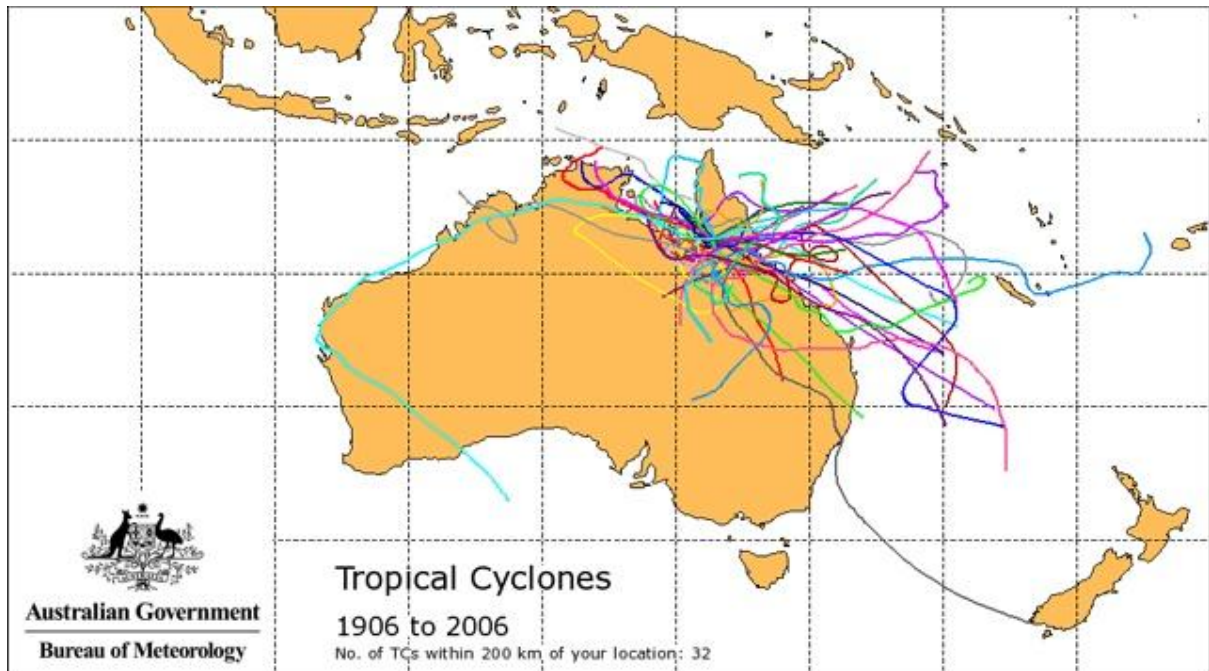
6.

Insight to Gregory Range location and country can be found on the Internet.

<http://www.rgsq.org.au/19-143c>

7.

The Gregory Range is known to attract cyclones and storms:



8.

Upper Darling River – Murray Darling basin catchment, is not far from the Gregory Range.

The basin flow is all downhill as existing rivers show, all the way to South Australia:



9.

Length of the aqueduct will be determined by the meandering to suit more or less level but downhill fall where suited.

10.

Water harvesting is proposed in Gregory Range region high country of over 500 metres elevation above sea level, using a number of Windamere Dam type holding areas in presently dry valleys on the western side of the Great Dividing Range. http://en.wikipedia.org/wiki/Windamere_Dam

11.

Outflow from the various dams would be controlled to meet aqueduct capacity flow southward.

12.

Aqueduct can pass over natural rivers and lands without detrimental impact to the natural environment.

13.

Flow via aqueduct could assist drought impacted wetlands.

14.

Some hydro-electric power generation would be possible.

15.

Water harvesting and the ducted flow in this day and age can be remote-controlled in interest of the environment and agricultural productivity.

16.

Camouflaged epoxy coated prefabricated/removable steel aqueduct will prevent eyesore and seepage and reduce evaporation.

17.

The 500 metre plus elevation in the Gregory Range region will allow water to run downhill without any pumping.

18.

Big and small water holding areas en route, some with capacity similar to Cubby Station, will allow water flow management as well as new food and fibre production.

19.

Aqueduct has a long history and comes in different shapes and sizes and construction methods including use of riveted and bolted steel:



20.

Size of aqueduct to suit the purpose obviously determines cost.

See Google Images – aqueduct.

21.

Aqueduct linked to significant water storage in otherwise dry inland Australia could almost guarantee at least one flow annually to help provide water security.

22.

Existing food and fibre producers along the Darling River could increase productivity and safeguard loss due to drought.

23.

Natural wetlands severely impacted by drought could be sustained by aqueduct flow that would otherwise be wasted in the Gulf of Carpentaria.

24.

There is need for agribusiness to realize why international resources must be applied to development of ocean ecosystem management infrastructure such as the proposed water harvesting and aqueduct system. The following points provide insight and reasoning.

25.

Opportunity and need to develop this proposed water harvesting and aqueduct system has arisen from ongoing collapse of world ocean seafood sustainability, resulting as evidence indicates, from impact of sewage nutrient overload /pollution from a world population of over 7 billion people.

26.

Sewage nutrient overload is proliferating algae is smothering coral and vital seagrass food web nurseries. The situation is worsening. Solutions are inevitable.

27.

The problem is not overfishing, though fishing obviously does have impact. When fishing is reduced or stops, fish populations are not recovering as they should.

Fish are not immune to starvation.

Seagrass nurseries are supposed to produce small fish to feed bigger fish.

28.

Seafood dependent indigenous island people are also already impacted by collapse of island seagrass nurseries.

Loss of seagrass is linked to protein deficiency malnutrition among seafood dependent people in the Solomon Islands, known since 1982 to the author of this submission.

There are glaring examples of ephyte devastated seagrass loss and of course there is social and economic impact. Evidence of algae-epiphyte impacted seagrass dead in the western Pacific Ocean coast ecosystem at Sydney, is obvious:



29.

The aqueduct system was conceived as a way of providing employment for Pacific Islands fly-in fly-out workers and to stimulate island economies, in lieu of seagrass food web devastation and depletion of islander protein food abundance and affordable availability.

30.

With traditional ocean and local fish supply devastated, many (enough) island people now need to earn cash to buy alternative healthy food, including for whole families.

31.

There is dire urgent need to develop alternative affordable protein food supply now, yesterday, not in years to come.

There can be no excuses now.

Allowing death of people to now continue is a crime against humanity.

32.

In Solomon Islands there has been a 69 percent increase in anaemia-linked maternal mortality.

In Vanuatu, small babies needing longer care are taking up hospital beds needed for normal deliveries.

33.

Non communicable disease (NCD) is virtually raging in some Pacific Islands. Island hospitals and clinics are overloaded with NCD cases.

Most islanders lack cash for medicine.

Government health services cannot effectively cope.

All of this coincides with devastation of traditional seafood protein supply.

34.

There are various impacts and various solutions, and various opportunities. It is agricultural industry and business that must produce affordable food.

35.

Present virtually unproductive low cost land in outback Australia can be made productive if water becomes available.

36.

Growing affordable food will help grow the Australian economy.

Use of steel for aqueduct will stimulate the mining and steel industry.

37.

Aqua-culture produce generally is not affordable to people in need, especially to people at the bottom of economy.

38.

Cost of once low cost fish and chips is increasing, becoming more and more unaffordable. Some restaurants are taking fish off the menu due to high cost and dumping of unsold stock.

39.

As economic impact of fish depletion set in, ABARE found the cost of fish rising five times faster than cost of fed meat and poultry.

40.

Higher cost of fish involves inflation, including at the farm gate.

41.

Seventy percent of fish consumed in Australia is now imported, including fish for aquaculture production.

42.

It is proposed water linked to the aqueduct could provide for Australian aquaculture, to produce fish to feed aquaculture, and to supply protein supplement for fishmeal, and blood and bone for fertilizer.

43.

It is also proposed the aqueduct system be harnessed to grow algae to produce bio fuel.

Arid Australia has the sunshine and the space to more viably produce algae if water is available. <http://www.qantas.com.au/travel/airlines/sustainable-aviation-fuel/global/en>

And note insight into algae, if water is available:

<http://phys.org/news/2014-12-technology-enables-algae-productivity.html>

44.

Innovation to increase production of affordable food and fibre and fuel can increase returns to farmers, if presently arid land is made productive through sensible water management.

45.

It appears agribusiness is not aware of presently occurring collapse of whole world ocean wild fish stocks and it appears agribusiness is not gearing up accordingly, to sustain affordable world food supply ?

46.

At present there is no scientific evidence to prove or disprove world fish depletion is fact or not, yet empirical evidence of substance indicates natural wild fish depletion is already critically serious and general, worldwide.

47.

Absolutely, there is no world ocean total fish population baseline data. No scientist counted fish in the beginning and even now science is unable to precisely count or measure dwindling stocks that remain.

48.

Empirical evidence of substance indicates world fish depletion is even worsening, due to serious and general devastation of ocean food web ecosystems.

49.

Starving animals in general do not breed successfully during starvation, including fish. Herein is likely reason why stocks are not recovering.

50.

Starvation of fish and failure to breed may be why fishing regulations over the past 30 plus years have virtually failed.

52.

Is there any scientific evidence to establish aquaculture can supply increasing worldwide demand for fish including for fishmeal, and including to feed ocean animals and wild fish?

53.

Governments are only now beginning to virtually see that 'feed in the big paddock' is almost all gone, that the whole world ocean is virtually empty of affordable food. Affordable healthy feed for aquaculture and livestock is also essential.

54.

Increased effort, i.e the time to find and catch fish, is now taking 6 months instead of two months to fill holds of numerous fishing boats, this costing more for more for increasingly costly fuel, ongoing wear and tear, essential crew, food overheads and catch transport, all increasing the cost of ocean and aquaculture fish beyond reach of more and more people.

55.

Whole nations of people and farmed animals have to be fed and nourished daily. Seven billion humans have to be fed daily.

56.

The recently free Chinese fishing fleet that began roaming the world ocean just several years ago has now become aware that oceans cannot supply protein demand. That newfound understanding appears to have been followed by China turning to significant contracts to secure Australian beef protein.

57.

World demand for affordable fish and alternative food is continuing to increase, not just in China.

European super-trawlers are travelling long distances to fish southern hemisphere waters for fish protein supplement to feed winter-housed animals in Europe, this being indicative of the devastated state of northern hemisphere fish stocks and need to gear up alternative world protein production and affordable supply?

58.

There is need to warn agribusiness of southern hemisphere fish stock devastation, that both hemispheres are now involved.

During 2104 the Secretariat of the Pacific Community reported stocks of the four main species of tuna in the Pacific to now be at historically low levels. That level is substantiated by indigenous island people now unable to find and catch once common yellowfin tuna. See:

<http://www2008.spc.int/en/information-technology/about-it-section/1074-getting-to-the-point-on-pacific-tuna-fisheries.html>

59.

In 2003, National Geographic reported 90 percent of big fish already gone from the oceans. Now in 2014 the situation is worse, involving ecosystem collapse.

http://news.nationalgeographic.com.au/news/2003/05/0515_030515_fishdecline.html

60.

The United Nations FAO report indicating wild fish capture has stabilized at around 90 million tonnes per annum, is not taking into account increased catch effort resulting from better knowledge and more modern equipment including

satellite technology. The data is also not showing and has never shown the decline in significant unreported fishing.

61.

Ocean food web species and nursery devastation is not included in world fish catch data, very important when starvation is interfering with fish breeding.

62.

Shortfall in supply of fresh wild fish and higher cost should be seen a 'canary in the coal mine' indicator of need to develop alternative affordable protein supply.

63.

Essential amino acids found in fish and meat, or developed in the human body when a daily mix of specific vegetable and nut is consumed together, are essential for healthy function of the human immune system.

64.

Affordability of protein for humans and farmed animals is essential. Fish price increase led to feed mills turning to abattoir offal to produce meat meal in place of fish meal, leading to cattle eating brain of their own species, leading to mad cow disease and CJD in humans.

65.

Undernourishment in confined animals due to poor quality feed may be linked to mutation of virus.

66.

Look around at the cost of healthy fresh fish these days.

67.

Fishing restrictions imposed over the past 30 and more years have failed to prevent ongoing fish depletion.

68.

Sewage nutrient overload and resulting algae is the problem, not overfishing.

69.

There is no scientific evidence of overfishing.

70.

When fishing stops or is reduced, fish populations are not recovering as they should be.

71.

There is a case of evidence indicating need for UNDP or other international institution funding of ocean ecosystem damage mitigation. If possible, there is need to provide water for the water starved Coorong that is supposed to help feed biodiversity of southern ocean waters.

72.

The world ocean is not presently managed. More and more whales are dead and appear emaciated. Imported fish is not for whales. Agribusiness will do well to realize evidence of world ocean fish depletion, and possible solutions. <http://www.abc.net.au/news/2014-12-08/sperm-whales-die-after-beaching-in-yorke-peninsula/5951094>

73.

Fisheries is about catching fish, not about biology of ocean ecosystems linked to world protein supply and production, or about fact that over 50 percent of oxygen on this planet comes from the oceans.

74.

The oceans are not managed and ecosystem water quality is deteriorating. Herein is justification for the UN, WB and IMF or a new institutional international body to participate in engineering and managing world ocean ecosystem health, by developing ecosystem management infrastructure.

75.

The world economy could be stimulated through development of water management infrastructure, in Australia for example, by providing water to the Coorong major ecosystem.

76.

Agribusiness could lead the way to improve water quality instead of being blamed for destroying it.

77.

Agriculture could best get on the front foot with innovative solutions to deteriorating water quality, instead of farmers being blamed for it, for example by alleged pollution the World Heritage - Great Barrier Reef.

78.

All nations need water quality improvement essential for ecosystem health. All national economies could be stimulated by managing water productively.

79.

Independent research has gleaned a case of evidence that could lead to UNDP or other international institutional partnership in development of productive and safe water management infrastructure.

80.

Expansion of aquaculture in the marine environment to meet world protein demand is not sustainable due to nutrient overload-pollution and consequences linked to aquaculture waste that adds to the total nutrient overload that evidence of substance indicates is devastating world ocean food sustainability.

SUMMARY:

This submission is based on evidence of substance gleaned from a lifetime of underwater ocean ecosystem exploration and observation since the early 1960's. The long term experience includes fulltime investigative general research since 1982 into world fish depletion and associated socio-economic and environment ramifications and achievable solutions.

Agricultural industry including farmers would do well to understand the seriousness of whole world ocean seafood and food web ecosystem devastation, and the impact, consequences, ramifications, solutions.

Agricultural industry has experience to lead the way toward solutions. Agri industry including farmers have first-hand experience in animal and plant and biodiversity management. Outcome of better understanding would include increased value of farming and property, and more produce to offset higher cost to consumers caused by shortfall in supply.

There is dire urgent need for agricultural industry to guide government policy to improve water management in order to gear up protein production, to sustain supply of affordable essential protein to feed over 7 billion humans daily, including would be consumers at the bottom of the economy.

This submission is substantiated by evidence of substance.

Available empirical evidence together with result of an initial feasibility study as proposed, will show the way to secure international partnership involving government and private resources to develop ocean/water ecosystem management infrastructure. That infrastructure will generate viable business and employment and economic growth worldwide.

All nations are linked by water ecosystems to the ocean.

All nations have water quality issues that require sensible productive and sustainable mitigation to overcome existing damage and impact it is having.

John C Fairfax. (marine explorer/researcher.

johncfairfax@gmail.com

Phone: 0410 169 306

1001 Barrenjoey Road,

Palm Beach 2108.

Sydney.

Australia.

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