



## ***Amateur Fishermen's Association NT – Hearing Transcript***

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**10 March 2017**

***Darwin Convention Centre, Darwin***

***Speaker: David Ciaravolo***

David Ciaravolo: I'm David Ciaravolo, Executive Officer at the Amateur Fishermen's Association. Better known at AFANT around the Territory. AFANT is the peak body for recreational fishing in the Northern Territory. It's our role to represent the interests of all amateur fishers, including our 4,300 members, as well as fishing clubs, associations, and related businesses. The most recent estimates available suggest that over one in five residents in the Northern Territory participate in recreational fishing each year. In 2010, the highest levels of the participation were recorded in children 15 years and under, which we think indicates a bright future for participation in recreational fishing.

Recreational fishing activity shares its social and economic benefits widely in the Northern Territory community. Such benefits are not confined to the thousands of people who actually go fishing, but also enjoyed by the town's communities and businesses that fishers visit for services and amenity. The 2010 Northern Territory Recreational Fishing Survey estimated that the expenditure of resident Northern Territory fishers was approximately 50 million dollars in that year. Another study suggests that interstate and international recreational fishing visitors contribute a similar amount to the economy, with Northern Territory tourism estimating at least 26 million dollars in annual expenditure occurring in the guided fishing tour sector alone.

It should be noted that the fishing experiences on offer in the Northern Territory are recognised as being world class, with tourism NT establishing that most fishing visitors are actually motivated to travel to the territory for that particular purpose. The Northern Territory government has recently stated that they believe recreational fishing to contribute over 100 million dollars annually to the Northern Territory economy.

Recreational fishing provides many social benefits, including connecting people with their local environment, natural and cultural heritage. Other benefits include being physically active, spending time outdoors with family and friends, as well as providing fresh sustainably harvested seafood. Much recreational fishing harvest is highly selective. Guided not only by effective government regulations, but also a strongly and well-established conservation ethic among recreational fishers.



It is acknowledged by AFANT that up to date figures on participation and social, economic benefits are required for our sector. While it is expected that new social, economic, and fishing efforts surveys will be announced in the near future it may be relevant for the panel to note that up to date figures, which we do expect to show growth in the sector, are not going to be available during the term of this inquiry. The most recent reliable figures are currently seven years old, and there are some figures which we rely upon that are actually 17 years old. It's an identified national and Northern Territory priority for the recreational fishing sector to update these figures.

Recreational fishers place a high value on the opportunity to fish healthy stocks in natural environments that support them. The many contributions made by recreational fishing to the economy and the way of life in the Northern Territory depends on the good management, and most importantly, healthy aquatic and terrestrial ecosystems. It is the protection of the natural environment, especially ground and surface water resources that constitutes the major concerns of the recreational fishing sector with respect to the proposed development of unconventional gas resources in the Northern Territory.

AFANT are not here today or through this process to be alarmist or to make unsubstantiated claims. Through our involvement in this inquiry, it is our ambition to make clear the significance of what is at stake should any harm come to the ecosystems which support our well-established, highly valued, vibrant industry and its community. While we're able to recognise the potential for economic benefits to the Northern Territory, AFANT is not able to supporting fracking or the development of unconventional gas resources unless we can be satisfied through this process at the consequences of risks identified in the Background and Issues paper and those raised by the community through this process could be adequately addressed or mitigated.

It is also of critical importance that the likelihood of risk attached to the already identified consequences be fleshed out and substantiated by the expert panel in the lead up to the release of the interim report. AFANT will be looking to be guided by this expert opinion and your findings will no doubt shape our follow up response. Again, it's going to be necessary for our community to be assured that the likelihood of identified risks can be minimised through best practise, as well as world-class regulation and management in order for any kind of social licence to be granted.

AFANT will provide a full written submission to the inquiry prior to the April 30 deadline. At this time, AFANT would like to provide the following feedback on the Background and Issue paper prepared by the inquiry. We commend the panel for producing a clear and concise document which makes some of the key facts accessible to the general community. Let us be clear that AFANT understands we are only talking about the potential development of unconventional shale gas resources in the Northern Territory.



We applaud the transparency and inclusivity of this process from the outset, and we note that all submissions in the final report will be made public, which is a decision we're very pleased with. We were a little concerned with the simplified examples of the common use of chemicals used in fracking on page nine. While the communicative intention of the table is appreciated by us, we think that understanding that chemical concentrations and their context makes all the difference between a benign or harmful application is essential. For example, while we may routinely chlorinate our swimming pool, we wouldn't willingly apply the same chemical or dosage to our fish pond. Clearly, such tables, examples, and analogies have their limitations and we would not want the community to have the impression that just because a compound is used to season our food that it cannot also have devastating effects on natural ecosystems should it occur in a sudden or elevated concentration.

We note that the amounts of water required during the fracking of shale gas reservoirs is significant, and that while only a portion of this water would be returned we are very keen to see what is being proposed by proponents and regulators for the storage and disposal of such waters. Especially in areas of the Territory that are prone to regular flooding and the consequent runoff into river and estuary systems.

AFANT would like to comment on some of the risks or risk consequences, probably more appropriately, which have been identified in the issues paper. We believe it is entirely appropriate that each of the nine identified themes are considered by the panel of particular concern to our constituents are water, water quantity, water quality, aquatic ecosystems, water amenity, and the economic and cumulative impacts or negative impacts of any realised risk upon water resources. We also have concerns for public health, especially mental health and wellbeing.

We applaud the focus on the regulatory framework, which must in advance of any development satisfy and gain consent of the Northern Territory community. Of course, the potential economic and social impacts of any resource developments. In fact, AFANT would like to see the loss of amenity or more specifically the potential loss of access to an enjoyment of healthy, high-quality natural environments being explicitly acknowledged under the social risk theme. We will have more to say on this in our written submission. However, at the core of this issue is the concept that the enjoyment of the often pristine ecosystems of the Northern Territory and the sustainable access to its natural resources can be a significant factor in Territorians balancing choices about where they are willing to live and work.

Disruption to this balance ... Sorry. One moment. I went the wrong way. Disruption to that balance of the experience that people have in the natural environment may have the potential to leave communities or individuals with the sense of loss or alienation. This could flow on and contribute to other risk factors, and therefore cumulative detriment. Additional issues which we are looking for the panel to consider during the inquiry include identifying and proposing remedy to address any knowledge gaps of the



subterranean systems, including knowledge about groundwater basins. We note that such gaps have previously been recognised as requiring addressment, including the 2014 Hawk Report.

AFANT encourage the panel to attend to making recommendations about the required monitoring of ecosystem, aquifer, and atmospheric baseline conditions prior to developments being green lighted. The need for improved baseline data has been acknowledged in previous reviews, again, including in the Hawk Report. Regrettably, through recent ABC reports and recorded comments of apparently qualified experts, it appears that the absence of appropriate baseline environmental data in other jurisdictions may now be contributing to the inconclusive findings of investigations into perceived environmental impacts of unconventional gas developments.

Simply, it's impossible to fully understand the relativity of changes unless the starting point of a range of environmental variables are well understood in advance of the developments taking place. This has rightly become a legitimate demand of the broader Northern Territory community as well recreational fishers. That is to understand and have that baseline data being collected.

AFANT and the recreational fishing community trust that this panel will understand the significance and contributions of recreational fishing to the economy and way of life of the Northern Territory. All of the benefits, all of the value of fishing and that very way of life is central to so many Territorians. That's underpinned by the unique and healthy environments that we're so privileged to enjoy here in the Northern Territory.

We support jobs and sustainable growth in the Territory. However, we must be assured that whatever the proposal, whatever the development, it does not come at the cost of or risk to our already well established, vibrant, and celebrated sector. I thank the Justice and the panel for your time and attention. I'm happy to answer any questions that I can now, and to otherwise take them on notice and address them in our formal submission. Thank you.

Hon. Justice  
Rachel Pepper:

Thank you very much, Mr. Ciaravolo. Just one question, and it's not me in anyway trying to be picky, but I just want to just tease this out. We need to expand what we've written we will do so with your suggestion. There's a copy of the issues paper in front of you.

David Ciaravolo:  
Hon. Justice  
Rachel Pepper:

Yeah, I have one in front of me.

Oh, wonderful. If you have a look at ... It happens to have just been a ... Have a look at page 22. What's happened is this particular value managed to drop off by accident from the risk themes table on page 15, but we have identified there under amenity the risk that the amenity of persons living on the land will be adversely impacted by hydraulic fracture units' associated activities. I appreciate that is stated in very general terms, but is that really



what you're trying to capture or is it something different? I just want to try and understand.

David Ciaravolo: Well, first of all, thank you for that. I think, obviously, you were-  
Hon. Justice  
Rachel Pepper: No, it had dropped off.

David Ciaravolo: You are correct. It's dropped off the bottom.

Hon. Justice  
Rachel Pepper: We only realised this when someone else said, "Well, why haven't you got amenity under social impacts." I thought, "Well, we do. Where is it? There it is."

David Ciaravolo: It maybe is that the list had already made it to the bottom of the page under social. Look, I think we could address it through that and it could be addressed through that. I think specifically what we're talking about is the potential impacts on people's mental health and wellbeing from that loss of amenity. Not only just that loss of amenity, but it's that connection to environment and the choices made that you're living in a wild, pristine place. You've made choices around being there and living there, and potentially sacrifices as well. People may be left feeling either alienated or in a way that can't be very easily compensated for if that is disrupted. Of course, whether that is disrupted remains to be seen.

Hon. Justice  
Rachel Pepper: I understand, and I must say that's a point that I must say other have made with as much conviction, which is obviously understandable and appropriate as you have. Others have made that in our community consultations as well. Thank you. Professor Hart.

Prof. Barry Hart AM: I had a question on the healthy aquatic ecosystems. I don't think anyone would disagree with your desire from your perspective, but others also want that. I'm thinking of that generically. Yes, tick, tick. I wonder if you have any comments about the issues that might arise with regard to ecosystem in the Beetaloo Basin? My understanding is that there's very, very little surface water. There's a bit of remnant billabongs that afterwards further you go south. It's all groundwater, groundwater fed. What do you think about that in terms of the Beetaloo specifically? That's not the only place that fracking might occur.

David Ciaravolo: Sure. Obviously, I don't have the geological training to understand all of the potential impacts and the significance of that, but I think we can acknowledge that where there is increased surface water that would be the areas that we are more concerned about. It's probably the places where fishing occurs as well. Certainly, we would agree with that, but more broadly from a public health perspective, we just want to make sure that the regulations were in place to ensure that any potential risks were minimised to the point where it had broad support from the community.



Acknowledging the difficulty in establishing when people are already potentially in the trenches to some extent.

Prof. Barry Hart AM: Thanks.  
Hon. Justice

Rachel Pepper: Yes. Dr. Beck.

Dr. Vaughan Beck: Towards the end of your presentation you were talking about baseline data, and then you started to express some reservations, I thought, about some particular baseline studies. I might have misinterpreted you, but I was trying to get clarification on the reservations that you had.

David Ciaravolo: Okay. I was expressing a principle, but it was based upon an example. I may have to come back and give you the exact details of that example, but there was a story that was on the ABC last week, which was dealing with a scientist who had been working in the area. He had identified that there was a significant amount of gas released into the atmosphere around an unconventional gas development. Whilst they were able to measure the atmospheric concentration of the gas, they weren't able to compare it to what it was like before the development had begun. Essentially, it wasn't able to be known how much natural seepage or release there already was in that area, and therefore, what the contribution was of that release.

Dr. Vaughan Beck: It would be worth your while to go back and have a look at that, but it may be that particular segment was using infrared cameras to detect the presence not the quantity.

David Ciaravolo: That's correct. The show for the media was the infrared camera, but there had been some examples where there had been atmospheric testing of the concentration of the gas in the area, but there wasn't a baseline to compare it to. It may have been that there was already a naturally elevated amount of gas in that atmosphere, but it may not have been. In addition, in speaking to the broader principle, the need for the collection of multiple baseline data points was identified in the Hawk Report as something that needs to be done to a greater extent than it had been done in other jurisdictions and also in the past, and so that's really what we're speaking to.

Dr. Vaughan Beck: Thanks for that clarification.

David Ciaravolo: You're welcome.

Hon. Justice  
Rachel Pepper: Yes, Dr. Jones?

Dr. David Jones A follow up on Professor Hart's question about Beetaloo Sub Basin. Given that fishing is the issue here, do you have a kind of inventory of fishing hotspots as it were? Because one of the things we'll be looking at is, if you like, the environmental amenity values of the particular regions that are involved. Maybe you could help us out with giving us a kind of a map with red dots on it or something like that.



David Ciaravolo: Well, absolutely. We can certainly assist with that in our formal written submission. What we could also do is point the inquiry to the 2001, actually, it was published in 2003 National Recreational Indigenous Fishing Survey. I think that's Henry and Lyle. That actually broke down by region the amount of effort in terms of fishing hours spent in locations in the Northern Territory. There was a follow-up by the Northern Territory government using similar, almost the same methodology in 2010, except that expressed it in fisher days. We will be making reference to that in our submission. Also, that's quite a lot of data. We're talking pages and pages to understand and express that, so it may be worth making some inquiries into that as well.

Hon. Justice  
Rachel Pepper: Thank you. Any other questions? Yes. Professor Priestly.

Prof. Brian Priestly: I guess, just my one comment. Thank you for your comments on the table in the document on the types of chemical used in the process. If the impression came across that this was an attempt to trivialise the impacts of those chemicals, that was certainly not the case. It was really to indicate that some of the chemicals that are used have other uses and we're familiar with those uses. We do understand some of the health impacts and so on of that. Thank you for that comment anyway.

David Ciaravolo: I think I did acknowledge the communicative intention of the table, and so we accept that. I think we were just wanting to publicly state and for the benefit of the community, they think we need to understand that beyond common use, concentration and context is also important.

Hon. Justice  
Rachel Pepper: No, that's quite right. In any event, I wouldn't want to be drinking detergent or a swimming pool cleaner.

David Ciaravolo: Precisely the point.

Hon. Justice  
Rachel Pepper: I understand that. Well, certainly as a fisherperson I look forward to the map of the fishing hot spots. Thank you very much for your presentation today.

David Ciaravolo: Thank you.