



**SUBMISSION REGARDING A PROPOSED BRIDGE ACROSS THE  
DAINTREE RIVER**



26 October 2020

## **TABLE OF CONTENTS**

<b>ABOUT DSSG</b>	<b>3</b>
<b>SUMMARY OF SUBMISSION</b>	<b>3</b>
<b>PRELIMINARY REMARKS</b>	<b>4</b>
What is the demand for a bridge across the Daintree River?	
Why are we discussing this now?	
Community impact – division and angst.	
<b>THE COMMUNITY ENGAGEMENT PROCESS</b>	<b>7</b>
The Survey	
The Options Report	
Submissions	
Community meetings with staff	
Focus Groups	
<b>ENVIRONMENTAL IMPACT</b>	<b>10</b>
<b>REGULATORY ISSUES</b>	<b>12</b>
<b>TOURISM IMPACT</b>	<b>13</b>
<b>THE COST OF A BRIDGE</b>	<b>14</b>
<b>BACK OF THE ENVELOPE COST BENEFIT ANALYSIS</b>	<b>15</b>
<b>DREDGING AND DIESEL</b>	<b>16</b>

## **ABOUT DSSG**

The Douglas Shire Sustainability Group Inc. (DSSG) is a community-based environmental advocacy organisation, registered by the Queensland Government under the Associations Incorporation Act in 2006.

DSSG has operated continuously for the past fifteen years, and our membership comprises over one hundred residents and ratepayers of the Douglas Shire. We have been actively engaged in community projects such as beach clean-ups, Mynah bird trapping and environmental art; and we have formed partnerships with other local community groups such as Plastic Free Douglas and Low Isles Preservation Society. We have partnered with larger organisations such as Tangaroah Blue, CAFNEC and GBR Legacy.

DSSG is a strong advocate for the special environment of the Douglas Shire, and we have made dozens of submissions on relevant issues to Douglas Shire Council, the Queensland Government and Wet Tropics Management Authority, Terrain and the Climate Council. DSSG is a member of the LMAC, CAFNEC, QCC and QWALC.

Our objects are:

- (a) To promote and encourage the adoption of the principals of ecologically sustainable development to all sectors of the community throughout the Douglas Shire;
- (b) To the protection and conservation of the unique environment in the Douglas Shire and its surrounds, including the Great Barrier Reef, the Wet Tropics and World Heritage areas;
- (c) To promote social, economic and environmental balance;
- (d) To promote and support environmentally sustainable practices, education and great environmental awareness amongst visitors to and residents of the Douglas Shire;
- (e) To recognise and promote the sustainable practices of the traditional owners of the Douglas Shire; and
- (f) To engage in any other activity in support of the objectives above (a to e) allowable under the Associations and Incorporations Act 1981 of the State of Queensland as amended.

## **SUMMARY OF SUBMISSION**

Members of DSSG have participated in the Douglas Shire Council's process which is aimed at determining the appetite of residents and others for a bridge over a two ferry system, as a means of crossing the Daintree River.

Our members do not support a bridge as a means of crossing the Daintree River.

We note that a single ferry with improved traffic management has the least environmental impact and is, by far, the least costly to the ratepayers of the Douglas Shire. However, taking a 'real world' view - DSSG supports the two ferry system as envisaged and commissioned by Douglas Shire Council in 2019. A new solar / electric ferry will enable speedy, efficient travel, minimise emissions and utilise existing infrastructure. The reservation of the existing ferry in service for peak periods or emergencies is a sustainable addition.

A real options approach is the evolutionary “no regrets” approach to dealing with real-world issues. The key thing is to select options that do not “lock you in”, that offer you the choice to adapt to changing circumstances as they arise, and to minimise the ‘regret’ that arises from being locked into a particular option that cannot be undone.

Although we do not envisage short term increases in tourist traffic, due to Covid 19, a northern priority lane for locals should be considered. Pre-booked ticketing for peak tourist visitation periods should also be considered with cheaper fares either side of “rush hour”. The concept of “park and ride” could be investigated and encouraging self-drive visitors to stay overnight in the rainforest would not only alleviate the amount of vehicular traffic on a single day but would also be a positive for the local accommodation providers.

In addition, DSSG recommends an upgrade of the Daintree entrance, including interpretation centre, booking office and cafeteria licence. This gives travellers an alternative to the ferry queue, a place to catch a river tour, or a lift to the other side to meet transfer and shuttle buses.

We, as custodians of the World Heritage Daintree Rainforest, must do all we can to protect this precious place for future generations.

On 28 April 2020, DSSG established an on-line petition asking for signatures to SAVE THE DAINTREE (AGAIN), in the face of developments such as a bridge to replace the ferry crossing. At the time of writing, there were almost 24,000 signatures – 24,000 people who do not want a bridge over the Daintree River.

The Daintree Rainforest is a World Heritage Icon – a globally significant ecosystem with some of the highest diversity of primitive flowering plants and monotypic species in the world. A poorly conducted local poll does not give the Douglas Shire Council a mandate to make development decisions that will put this crown jewel at risk.

## **PRELIMINARY REMARKS**

### What is the demand for a bridge across the Daintree River?

Douglas Shire Council’s Economic Review Group had already approved the ferry option. So, what had changed? Why was a bridge now being considered? Douglas Shire community is told that we need to consider a bridge across the Daintree because:

1. The option of a bridge wasn’t fully considered in 2018

The purpose of the consultation in 2018 was to consider enhancements to the existing ferry service, prior to going to tender for a new ferry contract:

*“As part of stage 1 of the Daintree River Ferry contract renewal, Council is seeking feedback from all relevant stakeholders for suggestions on enhancements to ferry service..... To ensure a seamless transition from the current contract to the new contract, sufficient time has to be allowed for potential service providers to submit their tender and to ensure the vessel is ready to commence operations 1 July 2021. To facilitate this end result it is planned to be in a position to invite tenders no later than 30 June 2019 and to award the contract by no later than 31 December 2019. That would allow the successful tenderer to implement all necessary arrangements to effect a seamless transition to the new contract”<sup>i</sup>.*

The 2018 process was not testing appetite for a bridge to replace the ferry. Respondents were asked to identify enhancements to the ferry service. Six respondents said build a bridge and three of these suggested a bridge only if ferry issues could not be resolved.

As outlined in the Council's Q&A, the issue with the 2018 process is:

*"In summary, the Round One consultation does not enable us to know with any accuracy the percentage of people who do, or do not, support a bridge across the Daintree River."*<sup>ii</sup>

## 2. Residents living across the River spend too much time waiting for the ferry

Clearly waiting times in peak periods are frustrating for residents.

In our view, the traffic issues which occur only at peak times do not warrant the building of a bridge across the Daintree River. For most of the time the current single ferry is more than adequate to accommodate the amount of vehicular traffic traveling across the River.

None of the information presented to us tells us how much time will be saved in crossing the river, for what number of people, and at what times of the year or day.

The GHD traffic report<sup>iii</sup> uses two years of data from 2015 to 2017 and extrapolates 20 years into the future. This assumption is considered highly dubious.

Underlying the GHD traffic growth rate estimate is an assumption that tourism across the Daintree River will continue growing at 2015-2017 levels – which has not eventuated. It also implicitly assumes population growth north of the Daintree River will match that of the rest of the Douglas Shire. This assumption will be determined by Council zoning and development approval trends and should be assessed more rigorously.

The current reduction in traffic arising from Covid-19 could act to extend the zero-queuing threshold by an additional 10 years (i.e. queuing will not commence again until 2040). This assumes that pre-Covid international travel and domestic (Douglas Shire) population growth rates will be resumed within 5 years (by 2025)<sup>iv</sup>.

## 3. Emergency services will be able to access the community quicker and easier

It is noted that the ferry operator provides a 24 hour on-call service for emergency transport purposes, which reduces the relative benefit of a bridge as compared to the ferry.

## 4. Residents in Daintree Coast want a larger say

The Daintree Coast is struggling with what is there today. We constantly hear calls from a small cohort of those residents to provide services that were always going to be beyond the scope of the nation's taxpayers or local ratepayers. Services that are not in keeping with the very place in which they had chosen to live.

Mayor Kerr's election campaign included a commitment to 'unite' the Shire by giving a priority in decision making about the Daintree to those who reside there<sup>v</sup>. The fact is that previous Councils have always provided opportunities for these residents to give their views. In the 2018 consultation there were 117 responses to the ferry survey. 97 respondents lived north of the Daintree River, 13 lived elsewhere in the shire, one lived outside the shire and six did not respond to location. In addition, two community meetings were held in Cow Bay and Cape Tribulation.

Mayor Kerr's policy has somehow become about creating opportunities (at ratepayer cost) for those people who were unsuccessful in their previous inputs to Council policy, to have a further opportunity to advance their agenda.

#### Why are we discussing this now?

DSSG notes the view of many in the community that consultation on this issue is poorly timed. In a COVID environment when the economic position of businesses in the Shire is dire, spending money on this exercise is seen as wasteful and an incorrect priority.

The current Daintree ferry contract is due to expire 30 June 2021. Following a tender process that drew international attention, Douglas Shire Council resolved to allow the Chief Executive Officer to finalise contractual negotiations with local company, Sirron Enterprises Pty Ltd. The contractors have operated the ferry crossing since 2006.

The proposed 36-vehicle ferry would carry nine extra vehicles and operate in the main channel, while the current 27-vehicle ferry would operate downstream in a second channel to alleviate traffic congestion during peak tourist season.

In April 2020, Council resolved to temporarily suspend the Daintree River Ferry contract negotiations and explore the option of a bridge crossing at various locations along the river.

The Mayoral Minute presented to the Council Meeting of 28 April 2020 was the first business item considered by this newly elected Council – it has set the tone for the priorities and interests of the new Mayor. The Mayoral Minute was not accompanied by any information as to why this issue had to be considered immediately. We assume the looming expiration date of the ferry contract was one issue in the mind of the Mayor.

In introducing the motion, the Mayor said that he wanted the full ferry contract details to be considered by the community, including increased costs for the second ferry. He said that as these are 'changing times' more transparency was needed, and decisions made on all the options. All the options are 1. Remain with the current single ferry 2. Expand the capacity of a single ferry 3. Implement a two-ferry solution 4. Build a bridge.

Unfortunately not all the options have subsequently been included for community consideration – only two options – a bridge or two ferries.

#### Community impact – division and angst.

Developments north of the Daintree River have been contentious since the 1980s, when the Bjelke-Petersen government forced the Douglas Shire Council to subdivide the region into hundreds of lifestyle blocks and the developer promised that mains power would be supplied to these blocks.

The "Save the Daintree" Campaign gained global attention when the Douglas Shire Council forced a road through the rainforest from Cape Tribulation to Bloomfield. Locals and conservationists from all around Australia formed "The Blockade". This blocking of the bulldozers generated headlines around the world, and became one of main drivers of the World Heritage Listing of Wet Tropics rainforests. It also started the Council's environmental agenda that has been applauded as a role model for conservation in Australian local government.

Since the re-establishment of the Douglas Shire Council after the de-amalgamation with Cairns Regional Council, the last six years have been the most stable since the 1980s. This has now been de-

stabilised by deliberately choosing one of the most divisive topics possible – the development of the Daintree by building a bridge over the river.

There is no evidence that the Mayor has a mandate to pursue a bridge over the Daintree River.

His election materials, policy statements and priorities list do not mention a bridge. Making the very first business item he brings to the Council table a motion to explore appetite for a bridge was unexpected, inexplicable and divisive.

The Mayor wrote and published an open letter criticising those who opposed his campaign to put a bridge on Council’s agenda<sup>vi</sup>. This letter included the following:

*“In a crisis stage of pandemic like this, with nearly all businesses and residents heavily effected, you would think that the community as a whole would be working together to garner the best possible outcomes for its residents and not intentionally inflaming discontent in this community by inciting division for nothing more than their own personal gain and agenda.”*

DSSG is of the view that the Mayor’s campaign is in fact inciting division in our community. This whole exercise will result in this Council being seen as captured by narrow and vested interests.

*“I remain both dismayed and alarmed that this new Douglas Shire Council would choose to spend a considerable sum of our rates on this issue. This consultation process would not have come cheap coupled with the fact that a great deal of effort had already been expended by the previous council and a resolution had been both established and agreed it seems very wasteful to be revisiting it again. I sincerely hope that council is wise enough not to choose to plunge the shire into endless angst and hostilities that proposing to actually build a bridge will surely do”.*<sup>vii</sup>

## **THE COMMUNITY ENGAGEMENT PROCESS**

Douglas Shire Council has adopted an engagement process which comprises:

- a ‘survey’ to be completed on line or by way of postal ballot,
- an Options Report to assist with decision making
- submissions which will be de-identified and published
- community meetings with staff
- focus groups

### The Survey

DSSG observes that a poll is different from a consultation. Polls need to be free and transparent, which means that they should be conducted independently with scrutineers to ensure that all the votes are accurately counted. The Council has appointed a professional company to conduct the poll, however as this company is the client of the Council, there is a potential conflict of interest.

If there is no independent verification of the results, how do we know that the results are correct?

Several members have pointed out that the survey can be manipulated and deceptively controlled by using another name and address if you are not a Douglas Shire resident and simply want to have

your say – and put in false votes. No email identification is required for non-locals, so voters can use technology to vote repeatedly under their own database of names and addresses.

Council have devised their own survey tool. But instead of including all the options, they have limited it to two ferries or a bridge. This has been described as an unethical decision to manipulate the survey in order to obtain the answers they want. It is a good example of push polling. Push polling is a common tactic used to get people to support one side of a poll over the other.

Part way through the process, Council staff advised that people who are not happy with either of the two options presented on the survey postcard, can cross out both of them, and write in their own preference such as maintaining the single-ferry service, “leave as is.” These comments will be taken into consideration in the quantitative results. Similarly, people who vote online can skip voting for either of the two options, and record their alternate preference in the comments. These comments will be considered in the quantitative results.

This change to the process in the middle of a poll, without informing the voters, calls into question the credibility and competency of the data-collecting process. It could be seen as unfair and unethical.

### The Options Report

As with any consultative process, outcomes are driven by the scope of the issues considered and the quality of the information provided to the public.

Douglas Shire Council’s “Daintree River Crossing Option Assessment Report” is the document prepared to assist us to decide how to ‘vote’. Several commentators have stated that this Report is based on assumptions, is missing clear data on key areas and is misleading in other areas.

For example, it does not consider environmental, social, economic, or cultural heritage implications.

Some of the impacts should have been obvious to the engineers who designed and costed the proposals but they make little effort to discuss this. While DSSG accepts that with so many options on the table undertaking an EIS for each of them would have been expensive and wasteful, we find it alarming that it was not covered in the project proposal at all.

It states that there would be no requirements for major environmental permits, yet the two lowest cost options require the clearing of endangered forest types.

The report omits relevant information about cost. It does not clearly state that the bridge requires 100% funding by the State and Federal Governments. It does not give the cheapest option of keeping a single ferry, with better priority lanes on the north and south sides of the river.

It ignores the larger environmental impact and financial costs of subsequent road upgrades to accommodate increased through traffic going to Cooktown, due to the need to prevent accidents because the narrow, scenic, winding road is not suitable for larger traffic flows.

In the face of significant criticism of the Options Report, Mayor Kerr said:

*“The Options report is presented in good faith and contains factual information on the costs involved around this project for both the installation and the operation for the community to decide. Other items which are subject to opinions and hypothetical thoughts such as Cost Benefit Analysis,*



*Environmental Impacts and Tourism Impacts etc. have been left for community debate and your thoughts can be contributed once the consultation opens*<sup>viii</sup>.

DSSG finds it very disturbing that Mayor Kerr views important considerations and considerable cost factors like Cost Benefit Analysis, Environmental impact assessment and Tourism impacts assessment as ‘opinions and hypothetical thought’.

Dr Steve Turton DFIAG, Adjunct Professor of Environmental Geography, Central Queensland University and University of the Sunshine Coast says of the Options Report, that in order to bring credibility and rigour to the community consultation and Council decision-making processes:

*“... the four crossing options must be examined from the perspective of the entire Shire, its existing planning schemes and its community values, as well as considering matters of national environmental significance and maintenance of World Heritage values to the north of the river... Cumulative impact assessment aims to consider the ‘effects of multiple actions or impacts on the environment’, including those beyond the particular river crossing point itself. Impact is a ‘neutral’ term and therefore includes positive and negative impacts on the environment, but social and economic impacts should also be included in any cumulative impact assessments.”*<sup>ix</sup>

### Submissions

Concern has been expressed about the lack of transparency in how public submissions, separate from votes on the survey, would be collated by the Council, de-identified and summarised in a document for Councillors and the general public.

How are these “results” going to be considered or weighed against the results of the survey?

DSSG is of the view all submissions should be identified, with the option of requesting privacy. This would go some way toward building confidence in the submissions process.

### Community meetings with staff

DSSG expressed concern early in this process at the restrictions on participation in community meetings. Genuinely free, fair and transparent consultations should not have restrictions that severely limit the number of residents who can participate in the public forums. The Council chooses who can attend the forums and imposes severe limits on who can speak at these forums<sup>x</sup>. This is a secretive process that has not been adequately explained, lacks transparency, and could easily be manipulated. These rules acted as a disincentive to attendance.

COVID-19 is not a valid excuse to limit the public forums. The forums could have easily been conducted in open venues such as Rex Smeal Park and the Mossman Show Grounds, allowing for space for all those who want to attend.

### Focus Groups

Focus groups are being held after the close of submissions, so DSSG is unable to comment on the utility or otherwise of this aspect of the consultation plan.

A significant omission from the list of groups to be involved is general businesses. The only business interests participating are limited to those operating north of the Daintree River and tourism operators working into the Daintree.

## ENVIRONMENTAL IMPACT

As a succinct picture of the overall environmental value of the Daintree, and the threats posed to it by a bridge, DSSG quotes Dr Steve Turton, Adjunct Professor CQU<sup>xi</sup>

*“The largest area of tropical rainforest in Australia – the so-called Wet Tropics – is a narrow strip along the northeast coast of the continent, totalling about two million hectares. It represents just 0.26% of the continent, but is crammed with hugely diverse landscapes: rainforests, sclerophyll forests, mangrove forests and shrub lands, as well as areas of intensive agriculture and expanding urban rural population centres. The Wet Tropics are home to a dizzying array of plants and animals. These include at least 663 vertebrate species, 230 butterflies, 135 different dung beetles and a remarkable 222 types of land snail. The area is teeming with more than 4,000 plant species, including 16 of the world’s 28 lineages of primitive flowering plant families.*

*In all, the Wet Tropics bioregion contains 185 distinct ecosystems. Of these, 18 are officially listed as endangered and 134 are of conservation concern.*

*Just under half of the region is covered by the Wet Tropics of Queensland World Heritage Area, the world’s second-most-irreplaceable natural world heritage area. A recent analysis listed it as the planet’s sixth-most-irreplaceable protected area in terms of species conservation, and it’s eighth-most-irreplaceable when considering only threatened species.*

*The rainforests in the Daintree Lowlands between Cape Kimberly in the south and Cape Tribulation in the north are undoubtedly the ‘jewel in the crown’ of the Wet Tropics. These ancient rainforests are globally significant as they represent the largest remaining area of lowland rainforest in Australia’s Wet Tropics, with an area sufficiently large to ensure ongoing evolutionary and ecological processes – an essential requirement for listing as World Heritage by UNESCO.*

*In other parts of the Wet Tropics lowland rainforest was cleared for agriculture and urban development, with only small remnants remaining today. The Daintree National Park and most adjacent ‘undeveloped’ blocks of freehold land contain extraordinary plant biodiversity, with many endemic species. These extremely rare plants are often referred to as ‘green dinosaurs’ because of their archaic characteristics.*

*Yet despite its global conservation significance, the Wet Tropics was recently described by the International Union for the Conservation of Nature (IUCN) as a World Heritage Area of “significant concern”.*

*This is due to the threat posed to the area’s biodiversity and endemic plants and animals by invasive species, diseases and predicted climate change impacts. Only two other Australian world heritage properties are listed as “of concern”: the Great Barrier Reef and Kakadu National Park.*

*If a bridge is built across the Daintree River it is certain that more vehicular traffic will occur into the Daintree lowlands, with 24-hour access throughout the year. Research shows that bridges, road construction and road upgrades always result in adverse impacts in tropical forests around the world.*

*For example, we know that bridges and roads act as conduits for invasive plants and animals to penetrate into intact forest areas. The current Yellow Crazy Ant invasion into rainforests near Cairns is an ecological disaster that could easily be repeated in the Daintree. Judging by the ants’ impacts elsewhere, this is an impending natural catastrophe.*

*These impacts could be direct – through predation and harassment – or indirect, such as by the removal of invertebrate prey or disruption of processes such as decomposition, pollination and seed dispersal. The potential for knock-on effects in a system as complex and interconnected as the Daintree rainforest is very high.*

*Building a bridge will bring inevitable pressures for road upgrades, residential and tourism development and will increase road kills of native wildlife, including loss of endangered species like the Southern Cassowary – an important keystone species. Roads also create a plethora of edge effects that can extend up to 100 m or more into adjacent rainforest. Opening of the canopy provides ideal conditions for invasive weeds and animals, and wider rainforest roads have been shown to be a barrier to the movement of some native animals.*

*All of these adverse impacts will result in a decline of presentation values admired by all tourists who visit the Daintree. Such threatening processes will undermine the outstanding universal value of the world heritage area – natural values that have remained remarkably stable for 10s of millions of years could be easily lost forever. If outstanding universal value of World Heritage attributes cannot be maintained due to threatening processes, then the World Heritage Committee of UNESCO has the right to list world heritage properties on the World Heritage In Danger list.*

*It's also worth pointing out that the Wet Tropics are a goldmine and the Daintree rainforest is a globally recognised icon. In its 2014-15 report, the Wet Tropics Management Authority calculated that this natural global asset is worth a whopping A\$5.2 billion each year – roughly half of it from tourism.*

*A 2008 report found that the Wet Tropics create the greatest economic benefit of any of Australia's natural world heritage properties, excluding the Great Barrier Reef. It found that every dollar spent on management costs earned an A\$85 return in tourism spending. Even in purely economic terms that makes a pretty compelling case for conservation.*

*A bridge over the Daintree River will be the beginning of 'death by a thousand cuts' for the Daintree rainforest, and a catalyst for UNESCO to place the entire Wet Tropics of Queensland on the in-Danger List.*

*The environmental and economic impacts of such an unnecessary project are not worth gambling within the new COVID-19 world"*

While road kills of wildlife are a significant concern with the existing service, particularly after sundown, replacing it with a bridge would greatly increase that risk. It would remove the period of time when few if any vehicles are moving around creating a greater hazard for nocturnal birds and animals. This includes Bennett's Tree Kangaroo, Quolls, Pademelons, Owls, Nightjars and Frogmouths.

A bridge will bring greater access and with that comes further residential development in the Daintree. This in turn creates increased pressure for services such as electricity, mobile phone towers and sealing of dirt roads. This infrastructure increases the region's land value which then drives further development. Commercialisation of the Daintree will incentivise land owners to develop their properties.

The construction phase and inevitable road upgrade will disturb sensitive ecosystems – both terrestrial and aquatic. When roads are built or widened, the rainforest canopy is opened. This results in fragmented habitat, increased light penetration and more weed species.

Each of the 4 bridge options has its own significant impacts which will need to be properly assessed. DSSG has the benefit of a survey of the vegetation for two of the sites identified by Council as sites for a bridge.

### The Bridge at Martinelli Road

Martinelli Road passes through a unique wetland that is listed as an endangered habitat. This wetland contains the only stand of *Melaleuca cajuputi* subsp. *platyphylla* in the Wet Tropics bio region. *Melaleuca cajuputi* subsp. *platyphylla* only occurs from New Guinea to Cape York, with a few isolated trees found as far south as near Cairns. The Daintree population is the most southern stand in the world, and is in a degraded condition because of para grass, molasses grass and hymenachne, the construction of dirt roads through it, as well as artificial and impeded drainage. The wetland also contains two waterlily species that some botanist believe are new undescribed species. These waterlilies are examples of the first primitive flowering plants and are now smothered by the exotic grass species.

Constructing a high-traffic volume, two-lane road through this unique and threatened wetland will require widening and raising the current narrow dirt road. This will result in clearing many of the unique melaleuca trees causing further degradation of the only example of this habitat in the Wet Tropics.

As well as damaging the *Melaleuca cajuputi* subsp. *platyphylla* wetlands, the bridge will require the removal of highly diverse riparian (river edge) forests on both sides of the river. The riparian forest on the south bank is listed as endangered habitat. The environmental damage alone should be enough reason for never constructing a bridge and road along Martinelli Road.

### Bridge Adjacent to 2874 Mossman Daintree Road

The bridge at 2874 Mossman – Daintree road requires the clearing of endangered riparian habitat on both sides of the river. The bridge will require the removal of 20 metres tall, highly diverse riparian forests on both sides of the river. It should be opposed for this reason alone.

On 28 April 2020, DSSG established an on-line petition asking for signatures to SAVE THE DAINTREE (AGAIN), in the face of developments such as a bridge to replace the ferry crossing. At the time of writing, there were almost 24,000 signatures – 24,000 people who do not want a bridge over the Daintree River.

## **REGULATORY ISSUES**

The construction of a bridge is not in keeping with the existing Douglas Shire Council Planning Scheme which specifically mentions retaining the ferry service. The Town Planning Scheme is what guides investment within our Shire. To move away from our gazetted planning scheme must surely require a more profound consultation process than what we have been presented with here.

Building a bridge is not in keeping with the State Government Regional Plan which also advocates retaining the ferry service. At a State level the Regional Plan is what guides investment decisions by the Queensland State Government.

The two lowest cost bridge options require the clearing of endangered forest types. It is highly unlikely that permits would be issued to clear this endangered vegetation when there are other options.

The Council Options report is misleading about this critical environmental issue when it states there is no need for special environmental permits. The clearing of listed endangered habitats require special permits that are rarely issued these days.

Both options considered by the Options Report require significant permits and approvals - including from Local, State and Federal Governments - construction of a bridge, roads, tolls, dredging an additional ferry channel, clearing vegetation and impact on the waterways.

This significant requirement has received little attention in the Options Report.

## **TOURISM IMPACT**

As Australia's first and only holder of the ECO Destination Certification – Nature Destination Level, the credibility of the Douglas Shire stands out as a hero in the offering of a tourism product unlike anything else in Australia. A destination brimming with world-class sustainable tourism experiences within a pristine environment is worth more environmentally and in terms of future tourism economics than the small convenience of a few less minutes to cross the river by way of a bridge.

A bridge will destroy our unique entrance to the Daintree National Park World Heritage area. A bridge will have little if any aesthetic appeal.

Many people regard these types of bridges as ugly and would regard it as an eyesore that is a blight on the visual beauty of the river and its highly diverse riparian forests. The Daintree tour boat industry is a globally renowned major tourist drawcard, employer and income generator for the Douglas Shire. It will be adversely affected because the image of the bridge is inconsistent with the pristine nature of the riverine and rainforest wilderness experience and has the potential to impact considerable damage on this valuable ecotourism industry. By contrast, the ferry, is seen as an integral part of this wilderness experience.

Surveys of visitors to the Daintree clearly show that the ferry service is of special note to tourists. Even when they are inconvenienced by delays. To replace it with what is effectively a boring, brutalist structured bridge that they can effectively see anywhere removes any point of difference that we currently have. We need to keep and improve our entrance to this magnificent destination.

One of the biggest selling points for a bridge is that it will bring in more tourists who spend money in the Shire. However inevitable road upgrades to accommodate through-traffic and 24-hour access may mean Daintree becomes the thoroughfare, not the destination that tourists travel through and don't stay over. The least valuable tourist is a day-tripper, the preference is for visitors who stay overnight, and spend more locally. Cooktown may be the beneficiary while the Douglas Shire pays the cost.

A 2008 report found that the Wet Tropics create the greatest economic benefit of any of Australia's natural world heritage properties, excluding the Great Barrier Reef. It found that every dollar spent on management costs earned an A\$85 return in tourism spending. Even in purely economic terms that makes a pretty compelling case for conservation.

## **THE COST OF A BRIDGE**

At a cost of between \$53 million to \$75 million a bridge is well beyond the budgetary constraints of the Douglas Shire Council.

We have received expert advice that the Council estimated costs of \$10,000 per square metre for a pier and beam concrete bridge and \$750,000 per kilometre to construct new roads are conservative, and that the budgeting costs could be considerably higher.

Douglas Shire Council states that they expect the bridge to be fully funded by the State and Federal Governments. These governments usually require a 50% contribution from a Council for these types of infrastructure projects. This would be a \$35 million debt on residents, ratepayers and businesses of the Douglas Shire.

This is the last thing we can afford as Council finished the financial year with an \$828,353 deficit, down from the projected \$86,915 surplus, in part because of a loss of revenue from the Ferry.

No government has made a commitment to fund a bridge.

In our view, it is highly unlikely that the State and Federal Governments will fund a bridge given that only a few hundred residents live north of the Daintree River and only 5% said they wanted the bridge option in the extensive public consultation undertaken by the previous Council. Governments would not spend such large sums of money for the benefit of so few people. Especially, when there is substantial local, national and international opposition to building it.

Some have suggested that we could place a toll on a bridge should we build one. This seems very unlikely as from the Council's own proposals they are unlikely to self-fund a bridge it would be very hard to justify collecting a toll and keeping it. Clearly toll roads and bridges do exist around Australia but they are generally so that the financiers of constructing said roads and bridges can recoup their outlays and make a modest profit. Also when tolls are instigated they do not exclude local commuters. The collection of a toll even though we do not believe that one is likely to be permitted, would in itself create delays at the entrances to the bridge. Installing electronic toll infrastructure is costly, and it further requires extra administrative support within Council to chase toll payments from vehicles (often tourist vehicles) without an electronic tag, and generally manage the toll system. Electronic e-tag gates would present a host of running problems in our wet humid environment

The Options Report omits major costs associated with the bridge option – for example, it does not include costs of raising approach roads to match the height of the bridge. Without raising approach roads, the potential benefit of bridge use when river levels are high is reduced or lost entirely.

All bridge site options except building at the existing ferry site, require significant alterations to existing roads. Some, according to the Engineer, have been accommodated in the costings but we can find no mention of upgrades needed along Forest Creek Road to accommodate all traffic using what is effectively a local road. A potential bridge site near Daintree Village does not mention any changes to the Barratt Creek Bridge. The frequency and duration of flood events occurring at Barret Creek has significant cost implications if this option is chosen.

Additional roads, reconfiguring existing roads and land purchases will raise the estimated costs significantly. While some of the cost of land acquisition has been included in the bridge options, the cost of significant legal or court fees related to the land acquisition has not been allowed for.

When infrastructure was designed for National Park visitation in the Daintree car parks were structured and sized to accommodate the ferries pulse feed of vehicles every 15 minutes or so. To replace the ferry with a bridge runs the risk of causing traffic congestion at sites like the Alexandra Range Lookout and Jindalba Boardwalk. There is little capacity at either site to accommodate expansion of car parks.

In addition, the report assumes there are no environmental impact or hydrological issues – any of which will increase the cost of the bridge option.

The cost of (or revenue obtained from) operating the current ferry operations during the construction period has not been included in the financial comparison.

A bridge removes an existing revenue stream to Douglas Shire Council through the ferry fees. The existing ferry generates valuable income towards the running of the Douglas Shire which in the main is collected from people visiting our Shire.

A bridge will remove 30 immediate jobs. Jobs continue to be vital to our local economy and we cannot afford to squander these existing jobs.

## **BACK OF THE ENVELOPE COST BENEFIT ANALYSIS**

We have the benefit of a cost benefit analysis (CBA) undertaken by Mladen Kovac on 17 September 2020<sup>xii</sup>.

As the Options report is very light on information or data that can be used to undertake a full cost benefit analysis (CBA) of the three river crossing options, this imposes a limit on how detailed a CBA can be undertaken.

The ‘back of the envelope’ nature of the Options report necessarily means only a ‘back of the envelope’ CBA is feasible. Nevertheless, a ‘back of the envelope’ CBA should still provide enough insight into the broad costs and benefits of the various options – enough to determine whether it is worth exploring a bridge option in more detail.

A CBA will determine which of the bridge or two-ferry options provides the greatest net public benefit (i.e. which one is the better option from a whole-of-community perspective). Even if the bridge and two-ferry options are not financially viable (from the perspective of the Council’s budget), if they provide a net public benefit then that is a strong rationale for the Queensland Government to provide funding for them.

From a Queensland Government perspective, the most attractive option will be one that has a net public benefit and is financially viable at the local level (i.e. does not require State government funding).

This ‘back-of-the-envelop’ CBA has found that implementing a two-ferry solution is a far better option than building a bridge. The two-ferry option ends up delivering \$6.817 million worth of benefits to the broader community. On the other hand, the bridge option ends up costing the community \$40.644 million more than it delivers.

Another way of looking at the results is that for each dollar spent on a two-ferry option, the community gets a return of \$2.72. But only gets \$0.37 for every dollar spent building the bridge. The wider economic benefits of increased tourism (briefly explored in Appendix B) strongly suggest that a bridge will not entice tourists to spend an additional \$475,000 per year in the Douglas Shire – enough to offset the net costs of the bridge option.

Current queuing times during peak periods of the year are the main reason for considering a bridge or two-ferry service. That is, the objective of considering options beyond the current single ferry service is to reduce the length of time taken to cross the river.

Savings in time spent crossing the river are the single largest benefit of both the bridge and two-ferry options. Unfortunately, neither the Options report nor the ferry traffic modelling report prepared for Council in 2019 provide enough data to calculate travel time savings without the need for significant assumptions. Simplifications associated with making assumptions may favour one or the other option.

The Council's Options report notes that four different bridge sites were considered and costed. The Options report acknowledges that the cost of bridge access roads is not included in the analysis - making it cheaper than in reality.

The Options report also excludes consideration of the travel time associated with different bridge options. Depending on the location of the bridge, drivers may be required to drive several additional minutes to reach the bridge, reducing the time savings associated with the bridge option.

Not including any additional travel times acts to bias the CBA analysis in favour of the bridge option. Excluding maintenance costs creates a bias in favour of the bridge option.

## **DREDGING AND DIESEL**

There is no doubt that dredging is an environmentally sensitive activity, and it is heavily regulated in the Great Barrier Reef Coast Marine Park, by both the Queensland and Australian Governments.

In addition to the annual EPA Permit issued by the Queensland Government, Douglas Shire Council has a 10 year Marine Park Permit for dredging the river. The application process for that permit must be accompanied by an Environmental Management Plan and an Operational (Site) Management Plan. These plans are used to identify and mitigate environment damage to both the dredging and receiving zones.

Some people point to the environmental issues associated with the existing ferry service and a potential second ferry to augment it, as a reason to move towards a bridge.

Because of the dynamics of the river it is necessary to dredge the river at the ferry site to maintain the service. While this activity would create a flume during the activity it is generally not considered to be a significant pollutant source. As dredging is usually carried out at lower river flow periods the flume would not extend far and as it is not nutrient rich or loaded with farm chemicals would have minimal impact on the reef. The main issues with water quality effecting the reef are through farm based fertilizers and chemicals washed down during heavy rains. The dredge materials, which mostly comprises of river sand, is removed from site and utilised appropriately.

We have researched the impact of river dredging by reference to Reef 2050 Plan and the Reef Water Quality Improvement Plan (Great Barrier Reef Marine Park Authority), and established the sediment



fraction that impacts the reef is the “fines” i.e. the small particles that remain suspended when river flumes go out to sea. The coarse components of the sediment are left in the rivers or on the beaches in the form of sand.

There is obviously a turbidity impact while the dredging occurs but it is short lived, localised and intermittent.

The Reef 2-2- Water Quality Improvement Plan has found that *“Monitoring and scientific modelling have shown the main source of sediments from the Great Barrier Reef catchments is from agricultural land use, with grazing including gully and hillslope erosion accounting for nearly half of the fine sediment generated by human activity. The second biggest contributor is streambank erosion. Sugarcane cropping, non-irrigated dryland cropping and other land uses, such as urban, mining and industrial, also contribute but to a smaller degree”*.

The ferry requires regular dredging while the bridge will result in (currently unknown) siltage and scouring effects. Siltage and scouring effects (exacerbated by floods and heavy rains) are a potentially significant environmental impact.

Some people argue that as the existing ferry runs on diesel that it is not very environmentally appropriate - this is partially true. However the concept of building a 36 car carrying capacity, largely solar powered, ferry to provide the bulk of the service and to use the old diesel ferry only during peak times should lessen this.

The proposed new electrically driven ferry is to be partly solar powered, and recharged from mains power overnight. It will use no diesel and will have a fraction of the greenhouse gas emissions of the current diesel engine.

Of course, a bridge is not fossil fuel free either. Every vehicle still needs to cross the river on a bridge, and collectively it amounts to more fuel burnt than what the ferry service uses. Depending on which bridge option is selected, travel times could be increased by as much as 25 minutes each way. That constitutes a massive increase in fuel use as compared to the ferry service.

Whilst we acknowledge the need to reduce fossil fuels, we can find no evidence that diesel fumes directly damage forest. If it did damage the forest, the evidence would be on the roadside where there is the greatest concentration of diesel exhaust fumes. We also note trees grow happily in inner city areas where exhaust fume concentrations are huge. There is also evidence that increased CO<sub>2</sub> concentrations speed up plant growth - not surprising as that is what plants live off and is the reason trees are planted to pull CO<sub>2</sub> out of the atmosphere.

And finally, the greenhouse gas footprint in a concrete bridge is huge. According to the think tank Chatham House *“.....Cement is the source of about 8% of the world's carbon dioxide (CO<sub>2</sub>) emissions.....If the cement industry were a country, it would be the third largest emitter in the world - behind China and the US. It contributes more CO<sub>2</sub> than aviation fuel (2.5%) and is not far behind the global agriculture business (12%)”*

DSSG does not know how much concrete would be used for the proposed bridge and suggests Council should calculate the amount for the purposes of better understanding the climate footprint of the bridge, in comparison to a ferry that is partly solar powered.

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- <sup>i</sup> Douglas Shire Council Meeting 24 July 2018. Agenda paper.
- <sup>ii</sup> <https://douglas.qld.gov.au/daintree-river-crossing-consultation/>
- <sup>iii</sup> GHD | Report for Douglas Shire Council - Daintree River Ferry Traffic Assessment
- <sup>iv</sup> Back-of-the-envelope CBA of Daintree River crossing options, Mladen Kovac 17 September 2020
- <sup>v</sup> Michael Kerr election platform <https://www.michaelkerr.com.au/reformation/connectingnorthriver/>
- <sup>vi</sup> <https://douglas.qld.gov.au/download/LetterFromTheMayorSep2020.pdf>
- <sup>vii</sup> Allen Sheather, Committee member DSSG
- <sup>viii</sup> Mayor Kerr's Facebook Post
- <sup>ix</sup> Dr Steve Turton, DNN Opinion 3 September 2020
- <sup>x</sup> Daintree Ferry Crossing Round Two Public Consultation Plan
- <sup>xi</sup> Dr Steve Turton, DNN Opinion 19 May 2020
- <sup>xii</sup> Back-of-the-envelope CBA of Daintree River crossing options, Mladen Kovac 17 September 2020