



The Hon. Warren Entsch MP
Special Envoy for the Great Barrier Reef



**Report to the Minister for the
Environment the Hon. Sussan Ley MP**

January – June 2020

Submitted | 6th July 2020

A note from The Hon. Warren Entsch MP

Firstly, Minister thank you for your continued engagement with me and the support you and your office have provided to me in the first year of my appointment as the Special Envoy for the Great Barrier Reef. The last six months have been rather tumultuous to say the least. Between the coronavirus pandemic outbreak and its decimation of the tourism industry, to the deeply concerning third mass bleaching event in 5 years across the Great Barrier Reef—these are certainly unprecedented times.

Understandably the effects of COVID-19 will continue to test the economy and our health system's capability. As we prepare for a potential second wave, the flow on effects will require significant mitigation efforts, eye watering sums of government assistance and protracted intervention measures to secure the health of Australians and the future of our economy.

Undoubtedly the long-term recovery will be a mammoth undertaking; I suspect that priorities will continue to shift, with all aspects of government funding likely back on the table for review as we move toward the October budget. The strict rationalisation of government expenditure will be the reality with which we must contend. While I understand the motivation, I fear that programs and policies of great importance, not least of which relate to addressing climate change, may end up being deemed as 'less-essential' in the post COVID-19 wash up.

This is not just a problem for Australia. Governments the world over will likely be grappling with the same questions and considering the same scenarios. The argument to kick the climate change can further down the road appears significantly more compelling when the threat of a pandemic driven economic and societal collapse is entirely imminent.

While I agree that we need to shore up our economic situation and lead a growth orientated response, I believe that in doing so, we must not accept a scaled back response to climate change. If anything, it should be greater. We know unequivocally, that climate change is the single greatest threat to the long-term health and future of the Great Barrier Reef. While at present our Reef remains a vibrant ecosystem, without sufficient global efforts to reduce greenhouse gas emissions—the Reef's continued decline over the decades ahead is virtually inescapable.

While we do great work on the Reef and globally we are recognised as the best reef managers in the world, conversely Australia's record on climate change falls short of attaining similar levels of prestige. We must recognise that these two elements go hand in hand, that is, the actions we continue to take through in water management initiatives are definitely worthwhile pursuits, but they can only do so much. By the turn of the century, these actions in isolation—while entirely valiant—will be all for nought if the world has not also effectively limited anthropogenic warming.

I have serious concerns in relation to climate change and its growing impact on the Great Barrier Reef. While I appreciate emissions are not within your remit as Minister for the Environment, this ministerial delineation does not absolve me of the need to raise this important issue. As such, I continue to make representations on the subject matter to the Hon Angus Taylor MP, Minister for Energy and Emissions Reduction.

Australia's efforts to reduce emission alone won't make an appreciable difference to global temperature rises, but the combined emissions of Australia and other similar sized emitters (less than 2 per cent) make up 40 per cent of global emissions. If any one country in this cohort should seek to abdicate responsibility for their fair share, others may be inclined to do the same. Bringing about what is known as a 'prisoner's dilemma' ultimately resulting in suboptimal emissions reductions.

I believe it is incumbent upon us as custodians of this great natural wonder, to protect it. In doing so we must work with other parties to the Paris Agreement, encourage greater ambition to reduce global greenhouse gas emissions and ensure warming is limited to well below 2 degrees Celsius. Without sufficient action we risk the long-term sustainability of the Reef, the economic value it provides our nation and the 64,000 jobs that rely upon it.

With the economic recovery from COVID-19 as our primary focus for now, many people of all political persuasions have indicated that this represents a unique opportunity for policy reform. I too share this view; I believe it is an important time to consider significant policy reforms and not just those that are seen as politically safe and expedient.

When we consider this opportunity, we should seek to deliberate fully and not solely in terms of black and white economics, but also consider more closely the societal and environmental impacts of our decision making, opting for approaches that more closely align with triple bottom line methodology.

We need to harness bold ideas that will propel us forward in this brave new world. Whether it's overhauling taxation and fiscal federalism, a faster transition to renewables, reviewing the viability of fossil fuel subsidies, increasing support for low emissions industries and perhaps even reconsidering the nuclear moratorium—the list goes on. There's plenty of policy areas that are inefficient and ripe for generational change.

In developing our vision for a post-pandemic Australia, I believe absolutely everything must be on the table.



The Hon Warren Entsch MP

Special Envoy for the Great Barrier Reef

CSIRO Briefing – Blue Carbon

I was fortunate enough to have a briefing from a number of experts from Australia's national science agency the CSIRO, whose work and research relates to blue carbon and the Great Barrier Reef. I've already learnt quite a bit about blue carbon and the incredible potential it has to assist us with climate change adaptation. While blue carbon offers us a unique opportunity to sequester large quantities of CO₂, conversely it also poses a significant risk of releasing large amounts of it too. Particularly if current stocks are not preserved and managed properly or if they continue to succumb to ocean warming, acidification, or other climate change related pressures.

The unique parallel between the opportunities of leveraging and protecting versus the consequences of squandering and degrading blue carbon environments illustrates very clearly to me what we ought to be doing. On top of that, we know that blue carbon environments, particularly mangroves and seagrasses are critically important for their unique ecosystem support services, acting as habitats and nurseries for wildlife, as well as offering coastal protection through wave attenuation and their unique ability to act as the 'kidneys of the Great Barrier Reef' with respect to sediment filtration.

There is tremendous value in supporting the preservation of these coastal environments as well as growing and promoting land use change that helps to restore coastal environments back to their original condition. The role that Australian blue carbon environments play is not insignificant, despite their relatively small footprint they absorb in the vicinity of 20 million tonnes of CO₂ each year. Australia has comparatively one of the largest arrays of blue carbon environments in the world, it is in our interest to ensure that these stocks are properly recognised in our carbon inventories and we are acting to protect their value, that is, not just for the carbon offset potential but also the myriad of other co-benefits they provide.

I have heard for some time now, that the blue carbon accounting methodology is not quite finalised, which has long been seen as a significant roadblock to uptake by government and other interested parties. That's not to say that we shouldn't be investing in blue carbon until such time as we've got everything 100 per cent with respect to the methodology. Done is better than perfect and the science around blue carbon is done. By all accounts, it has reached a certain level of maturity now and we are ready to implement. We can wait another 18 months while the bureaucrats slave away over the perfect methodology or we can start to get on with it, while they work to finalise the minutiae. The environment and the climate don't care about the frameworks or the methodology, they care about overall emissions going down, sooner rather than later.

If the view is that we simply cannot invest in blue carbon initiatives until such time as the accounting methodology is confirmed, then we forgo the more immediate benefits, not just from a carbon sequestration perspective but also the critical ecosystem support services they offer. This, in my view, is probably reason enough to get cracking on a demonstration project. Let's work with all levels of government, Traditional Owners and land holders to identify large parcels of land ripe for restoration efforts. Then, let's deploy the knowledge we have accumulated and work on the gaps and practical challenges we face like scaling techniques.

In my view, we've been talking about this for long enough and this view is shared by quite a number of individuals I've engaged with in this space. There is interest from industry to utilise blue carbon as part of their corporate social responsibility mandates and we've taken the lead internationally on the world stage at COP25 in Madrid by spruiking the benefits of blue carbon. It's time we get serious about implementation.

The CSIRO has agreed to offer their assistance with initial scoping works of a potential blue carbon demonstration project. I'd like to thank the CSIRO for the forthright discussion and I very much look forward to working together to accelerate the next phase of blue carbon.

COVID-19 and Reef Tourism

While Australia's broad tourism sector has been hit very hard as a result of COVID-19, our multi-billion-dollar local tourism industry in Far North Queensland has practically fallen off a cliff overnight and the impacts have been utterly devastating. I've seen this firsthand in Cairns, as arguably we were the first region to be hit with the effects of the COVID-19 and will undoubtedly be one of the last to fully recover.

One financial assistance measure that was developed to assist the reef tourism industry through this challenging time was the waiving of the Environmental Management Charge for marine park operators. I was told by the industry in no uncertain terms that this waiver was a relief option that could be initiated quickly to provide immediate assistance. Our government acted decisively to ensure the industry received the financial reprieve required and these actions are helping to ensure the survival of the industry.

Across the entire industry there are more than 7,000 businesses directly benefiting from this initiative. Combined with other economic support packages like JobKeeper, this has ensured reef tourism operators have been able to retain staff until we return to some semblance of normality. It has helped save jobs that would otherwise have been lost and it also provides financial relief to people who have spent a lifetime establishing world-class tourism operations.

At the time of publishing this report, reef operators were starting to recommence some activities, but it will be an extremely slow start and we are not out of the woods by any stretch of the imagination. I would like to take this opportunity to thank the Australian Government, the Great Barrier Reef Marine Park Authority (GBRMPA) and you Minister—these collective efforts have assisted the tourism industry and ensured reef management plans could continue during this difficult time.

GBRMPA Briefing – Current Status of the Reef

I was very recently briefed by the GBRMPA in relation to the current state of the reef, particularly as it relates to the most recent bleaching event. There has been significant heat stress experienced predominately in the central and southern parts of the Great Barrier Reef. Whereas areas like the reefs off the coast of Cairns have fared reasonably well, in contrast, other locations like Keppel Island and Magnetic Islands have unfortunately suffered greater levels of bleaching.

It is important to remember that bleached doesn't mean dead and that corals do recover, this is something that is conflated regularly, particularly through media reporting of such issues. This only serves to further exacerbate the dialogue on this issue and often can convey the message that the Great Barrier Reef is a lost cause, which it is not. The Great Barrier Reef remains a vibrant ecological wonder and the crown jewel of our tourism industry. However, the growing pressures facing the Great Barrier Reef, if not adequately addressed over the long-term will lead to its sustained decline.

The 2020 bleaching event appears to be, in terms of severity, somewhere between the two most recent bleaching events from 2016 and 2017. However, stronger quantitative reports are proving more difficult to acquire at present given the impacts from COVID-19, resulting in significantly less researchers, tourists, operators and people in general out on the reef. Consequently, the data that is coming back from all sources is reduced as compared to what would normally be available to the Authority.

The current information gap highlights the GBRMPA's potential need for additional resourcing. I understand that on a number of occasions the Authority has been unable to lead important monitoring initiatives, particularly after the recent bleaching event. In order to gain timely insight into the current state of the Reef, the Authority was reliant on third parties providing voluntary assistance. My view is that the Authority should be at the front leading such efforts, being the primary source of information and not simply taking the backseat as a fortunate passenger to the interests of third parties.

With what information the Authority does have access to at present, reports appear to be mixed, with some mortality, some recovery and some corals remaining bleached, noting that this information has been obtained through more anecdotal reporting methods. It will be quite some months yet until we have a much clearer picture of the effects of the 2020 bleaching event and a deeper understanding of the proportion of coral mortality and recovery across the marine park.

Regional Development Australia Tropical North – Funding

I am pleased to learn that \$150,000 in federal funding has now been granted to Regional Development Australia (RDA) Tropical North Inc. This will enable them to commence works on the feasibility study into developing a regional plastics recycling industry replicable pilot template and create an education program for the Far North Queensland Region.

The feasibility study will feature evidence-based regional analysis of current and future capability, capacity and provide a 'blueprint' for what the industry would and should look like. I understand that the components considered for analysis will likely include:

- Source, flow and quantity of raw and recycled materials
- Existing and necessary infrastructure
- Recycling opportunities for soft plastics, low value plastics and plastics from commercial and agricultural sources across the region, as well as identifying innovative use cases
- Distribution networks including local, regional and international markets
- The potential impacts to the Great Barrier Reef, including potentially reducing the amount of plastic waste making its way into the marine park
- Identifying and considering costs, benefits and legislative compliance requirements
- Recommendations to inform government regarding regional infrastructure investments.

The development of a Replicable Pilot Template will aim to assist other regional areas to address their own waste and recycling challenges. The Regional Education Program will aim to reduce the use of single-use plastics in the Far North Queensland region and increase awareness of plastics recycling and remanufacturing initiatives. The project has also received \$50,000 in funding from the Queensland Government and additional financial support from other sources.

Discussion Paper: Convenience vs. Conservation

Minister as you are aware, I launched my discussion paper *Convenience vs Conservation* on the 14th of November 2019 and submissions closed on the 21st of February 2020. My office received 51 submissions from respondents - of those 26 were from organisations and 25 were from individuals.

Firstly, I would like to thank all of those who made the effort to provide a valuable contribution. I was able to consider an array of perspectives, reflect on important suggestions and consult with some stakeholders in greater detail on their submissions. There are quite a number of issues and considerations raised through this process which I hope to outline in detail for you. Importantly the vast majority of submissions were broadly supportive of the direction of the paper, the concept proposed for addressing the gaps in regional areas as well as acknowledging the significant work that needs to be undertaken nationally.

The following pages offer an analysis of the submissions received and is a collated assessment and summary of the points raised and conclusions that I have drawn from them. There are a number of commercial-in-confidence and privacy considerations given the nature of the submissions received. As such I won't be able to provide them in their entirety in this report. However, Minister I am happy to accommodate a briefing to you or your office at a suitable time should you wish to review these in greater detail.

About the submissions:

The submissions received represent a broad cross-section of organisations, industry proponents and interested individuals; they varied in levels of quality, length and depth of analysis. Cumulatively there are a number of commonalities and differences with shared fundamental concerns echoed by nearly all parties, illustrating a widespread relative understanding of the challenge we face. Indeed, there is some apprehension about the past and present circumstances surrounding the recycling industry within Australia.

The majority of submissions expressed a need or desire for Government to take the lead on resolving Australia's waste crisis, some expected consumers to change their behaviours, while others lamented the reality that the problem is too big for individual actions to make an appreciable difference. The lack of positive feedback loops, and/or the reduced visibility of improvements resulting from an individual's positive actions add to the challenge of keeping consumers on track and able to measure their own progress, even as small as it may be.

There is broad consensus that 'more needs to be done' and the submissions received largely agreed with the premises of the original discussion paper. The degree to which changes were required largely varied by the respondent's perspective, but an array of key themes from both individuals and organisations were evident and are described as follows:

Perceptions of major supermarket retailers and the implications of plastic bag bans:

A degree of scepticism exists amongst the individuals who provided submissions particularly with respect to the major supermarket retailers and plastic bag policies adopted by individual jurisdictions. There is a distinct reluctance from this group to accept that such corporations are in fact enabling positive behaviours with the implementation of the bag ban.

There is a level of cynicism that major supermarket retailers are taking sufficient action to rein in the amount of packaging inefficiencies and/or reducing their usage of problematic plastics. One example that is often cited is that some retailers choose to stock bananas that are encased in plastic clam shell like containers which seems about as ironic as it is wasteful.

A consistent theme among individuals who provided submissions was the suggestion that the ban on single use plastic shopping bags and the applicable state legislation has not adequately addressed the availability of single use plastic bags. While traditional lightweight bags have been removed from checkout registers across the nation, the transition to 'reusable' thicker plastic bags has occurred, with consumers able to purchase them for around 15 cents each. Many viewed this as entirely 'defeating the purpose' and the perception was that it was actually just a new revenue stream or a cost cutting measure from the major supermarket retailers. There was also some concern that these reusable heavy weight bags might just be as bad, if not worse for the environment, albeit seemingly in reduced quantity.

Some could argue that this scepticism might be well placed; but there is reason to believe that major supermarket retailers are doing their bit. For example, the Woolworths Group indicated in their *Annual Report 2019* that as a result of the plastic bag bans and their subsequent actions "approximately three billion fewer plastic bags [are] in circulation". The report then goes on to state they also "reduced plastic packaging with 600 tonnes removed from fruit, vegetables and bakery products in [the 2019 financial year]".

Submissions that expressed concerns about the effectiveness of plastic bag bans also encouraged governments to go further in their regulatory approach to the bags and other single use plastic items. Some argued that the sale of plastic bags should not be a revenue stream and that retailers should be encouraged or forced to allot the revenue generated from the sale of plastic bags to complementary plastic reduction and other environmental initiatives. Others considered whether a tax ought to be implemented by governments on plastic bags pushing up the price and acting to further curb consumer purchasing behaviours. Some even went as far to suggest a price upwards of \$1.00 per heavy weight reusable plastic bag might be warranted.

Queensland University of Technology Professor Gary Mortimer estimated in a piece he wrote for [the Conversation](#)—which subsequently became the subject of a [news.com.au](#) article in July 2018—that Coles and Woolworths stood to make roughly \$71 million in gross profit as a result of the removal of free lightweight plastic bags and replacing them with the heavier weight 15 cent options. The news.com.au article indicated that neither Woolworths nor Coles would say how much profit they will make from the plastic bag ban. The concerns raised in the article were echoed in a number of submissions received.

Whilst acknowledging the initial angst the bag ban caused, there remains two schools of thought. Some argue that consumers have since become less resistant to the additional cost of the bags and are returning to bagging behaviours reminiscent of the pre bag ban era. While others suggested that the ban is of net benefit given less bags are in circulation. The later argument is probably more accurate given the reduction that Woolworths is claiming to have experienced in their annual report. Regardless, more transparency around the sale of these new bags would be preferable given at present there is no measurable incentive to reduce the sale of heavyweight bags beyond the paltry 15 cents it costs consumers. As a consequence, it could well continue to be perceived as a revenue stream rather than a net benefit to the environment.

Industry is broadly supportive of change but cautious about the approach:

Industry bodies have acknowledged that single use plastics and packaging continue to pose a significant risk to the environment. They appreciate the concerns of consumers and have already made some inroads through initiatives such as national packaging targets established by the Australian Packaging Covenant Organisation. However, there is some concern amongst industry groups that by hastening to prohibit single use plastics through bans and other measures the result may in fact be equally if not more detrimental to the environment. The principle of unintended consequences was highlighted frequently and was recognised as being of significant concern to industry groups.

In order to avoid unintended consequences, industry focused on an evidence-based approach and encouraged policymakers to take a holistic view of the circumstances. It was acknowledged that significant improvements are required across Australia's waste management industry, the processes involved, as well as continuing reforms to specific packaging material types and a move away from single use plastics where practicable.

Packaging of fresh produce in particular was raised as a potential minefield for reform. If the goal is to keep waste out of landfill, by reducing packaging with a broad-brush approach it stands to reason that additional food waste would likely be generated as a result of the corresponding reduction in shelf-life and protection of produce. Food safety and logistics challenges were also raised as potential issues, particularly if packaging reform initiatives did not fully consider the entire context of the product supply chain and its requirements.

Industry focused on the case for improved consumer education and consistent messaging with a national approach being of great importance. Specific types of materials were identified and then broadly agreed to as worthy of banning, examples like Oxo-degradable packaging were identified as particularly 'problematic' and worthy of a swift phase out. There is willingness amongst industry for more engagement with government through increased product stewardship and research and development initiatives focused on finding suitable alternative materials. These were highlighted as of particular interest and presented unique opportunities for public/private collaboration and investment.

The environmental perspective:

For those engaged in clean-up efforts across the country they acknowledged the futility of their efforts without additional measures to stem the tide of plastic entering the environment, with one prominent organisation suggesting that "If all we ever do is clean-up, that's all we'll ever do". Just like industry, environmental groups also shared concerns about unintended consequences, but for different reasons.

In an effort to deal with the vast amount of plastic waste and the appalling rates of recycling, many efforts have been made to find new and inventive ways to incorporate waste plastic or recycled plastic into existing markets. One commonly cited potential panacea of sorts is through incorporating plastic in road base—I myself have even thought this is a no-brainer on the face of it. However, environmental groups expressed concern about the potential for plastic to leach out of such applications. Indeed, micro plastic researchers who I've spoken with have also expressed the very same concerns.

Furthermore, there were claims some applications that present an opportunity to divert plastic waste from landfill only do so for a short time. These secondary diversions may provide short-term avoidance from landfill but ultimately if these efforts are not also recycled at the end of their lifecycle; it's not a truly circular economic model. As a result, environmental orientated submissions tended to focus on 'turning off the plastic tap' or at least scaling back production.

As I highlighted in the discussion paper, the growth of plastic production is the highest it's ever been and it's important to remember that nearly all plastics begin their journey as fossil fuels. Our unabated consumption continues to be met through the use of fossil fuels and this poses tough questions for industry sustainability. This exponential growth in plastic consumption and production, was argued by some as rapidly outstripping the growth in our domestic waste management capacity. This harsh reality coupled with the impending waste export ban, presents significant challenges and it was suggested that market mechanisms are required to quell the production of virgin plastic.

The same properties that have resulted in plastics revolutionary status amongst industry and consumers are the very same ones that pose significant threats to the environment. Plastics versatility, low cost and ability to be easily mass produced have resulted in its significant growth and ubiquitous application. After serving its purpose, plastic barely retains any residual value and the inherently disposable nature of plastic items has resulted in the plastic waste crisis we are now faced with.

Environmental groups understandably suggested greater measures were required, from listing off the litany of 'worst offender' plastic materials/products that ought to be banned, to suggesting that greater recycling targets for industry were required in order to make an appreciable difference. A commonly cited path forward was the introduction of a tax or levy on virgin plastic material, as doing so makes sense for a number of reasons. The rationales included, reducing plastic production levels and associated green-house gas emissions and stimulating demand for recycled plastic, making the process of recovery and recycled plastic more economical and enabling recycled plastic to compete with the presently cheaper virgin material.

Restoring faith in the recycling industry:

The recycling industry has faced an array of criticism in response to systemic failures in recent years. Consumer confidence in the industry has waned as a result, prompting concern that despite their efforts to ensure their waste is divided correctly among the respective household bins—these actions are not being backed up and honoured by the industry. Invariably one asks, "why bother at all?" but we can't just point the finger at the industry and say "fix it". This is a substantial undertaking and we need to equip the industry with the tools to help resolve this crisis.

The industry acknowledges the failings of the past and there is an increasing amount of good will to get the future of the industry back on track. This is backed up by the serious policy developments underway within the domestic waste industry, including the prohibition of key waste export streams in the near future, as well as a range of significant private and public investments supporting the sectors development. By making such concerted efforts we can restore the faith in the recycling industry, it might not have the same idealistic sheen it did in decades gone by, but the results will speak for themselves in time.

Education's role in altering consumer behaviour, improving perceptions and waste outcomes:

Part of the process towards restoring the community's faith in the recycling industry is through improving education to consumers. Particularly around what is expected of them and the importance of those expectations and how their actions can result in improved waste outcomes or conversely, compromise process efficiencies. Throughout the vast majority of submissions education was listed as a primary area requiring greater focus from governments.

It was acknowledged that some inroads were being made with regard to product labelling through initiatives like the Australasian Recycling Label scheme, although others lamented it was not mandatory, as well as more grass roots local education initiatives from local councils operating school outreach programs and the like. Nevertheless, quite a number of submissions referenced the importance of a national education campaign; I also recall this being a core recommendation stemming from the National Plastics Summit.

It's fair to say that in order to achieve an effective and clear national education campaign, more consistency is required across the states, territories and local government areas as to how waste is managed. Whether or not the benefit of such consistency for consumer education perspective outweighs the cost of implementation and other externalities is probably worthy of further analysis and debate. Nonetheless, people acknowledge the success of campaigns like *Slip! Slop! Slap!* and wonder whether an effective message might help with outcomes for the industry. At the very least it might assist with improving awareness of the nuance between 'yellow lid' recycling and other more bespoke initiatives such as RedCycle and indeed help towards improving their uptake.

However, a communication strategy and education initiative should go beyond just a 'this goes in that bin' style approach and cover a greater scope of the implications of not getting this change right. Just as we illustrate the challenges and risks, we should take time to explain the benefits of taking action and accelerating our efforts towards a circular economic model and the role of consumers in that transition. As tonnes of plastics continue to make their way into our oceans, we should be forthright in illustrating and conveying the enormity of the challenge and aim to bring the public along with us on this journey, as their participation is ultimately key to our success.

By conveying the simple principles of the waste hierarchy, we can better educate consumers as to where their efforts are best placed and illustrate the role of governments and the enormity of the challenge we collectively face. By supporting initiatives like Plastic Free Places, we can educate local communities and businesses more directly with the transition to alternative products and assist them in rationalising their use of single use plastics.

While education will help in a number of aspects, it's only part of the solution. We can improve consumer recycling rates, restore faith in the industry and more clearly define what goes where. However, even if we're able to address the confusion, this will do little to improve the economic viability of a myriad of plastic types we currently utilise. At present there is very little market for recycled plastics other than PET and HDPE—while all plastics can technically be recycled there is literally no economic rationale to do so. We can't pretend that everything that is recyclable is in fact being recycled. That's how we got here. The recycling rates to begin with are appallingly low and illustrate clearly that we have a substantial issue with the economic viability of recycled product. It appears to me that some government intervention is required in order to address the failings of the recycled plastic markets.

The cost of untaxed negative externalities:

The key failing of our management of single use plastics is the absence of an appropriate mechanism to address the cost of its negative externalities. For instance, with plastics it's the environmental cost of it leaching into our oceans and the myriad of consequences that follow. Any activity that produces a negative externality, the expense of which is not being incurred or quantified, is effectively receiving an inherent hidden subsidy. That being, no price is paid for the ecological damage that the linear economic model creates and that the corresponding business/consumer practices amplify. This principle is as true as it is for the plastic waste in our ocean, as it is for the carbon in the atmosphere. Make no mistake there is a price that is being paid, first and foremost by the environment and secondarily through the expense incurred in the actions required to rectify the externality.

I appreciate that ideally, we shouldn't be aiming to deploy taxation as a primary method to solve all our problems. However, I think this argument is often just an appeal to ideology rather than an objective assessment based solely on logic, economics and the impact on socio-environmental systems. We must not be overly hesitant to apply such methods when and where the evidence suggests it is a prudent approach and is of net benefit in the totality of circumstances. If taxation only serves to curb particular behaviours, that is exactly the result we need in this instance.

As the world experiences historically low oil prices we cannot ignore that these downward price fluctuations will only serve to reduce costs and/or improve the margins on virgin plastic production, adding further weight to the rationale that governments ought to be using policy mechanisms to address the growing pricing disparity between recycled and virgin plastic.

I am increasingly of the view that taxing virgin plastic production is a promising course of action, particularly if we commit to re-deploying the revenue generated to assist the industry in overcoming the barriers and challenges they face in improving the viability of recycled plastic and in implementing circular economies. This will enable us to address issues pertaining to achieving economies of scale, improve research and development initiatives, and assist with mitigating the logistical challenges faced in regional and remote Australia. This type of policy action suddenly makes recycled plastic a far more competitive and compelling option, whilst materialising the true cost of virgin plastic production.

The viability of a regional recycling hub pilot program:

The majority of submissions were quite supportive of the concept of a regional recycling pilot program. However, concerns were raised regarding the ability for the program to be self-sustaining, particularly given the current market conditions and policy settings. This is where we have to give greater credence to the environmental considerations and the cost of not taking action to address the tremendous amount of waste that ends up in our oceans. The overall viability of such initiatives will be reliant on the uptake of recycled material across production and manufacturing processes. Improving said uptake is largely dependent on putting upward pressure on the cost of virgin material as previously mentioned.

There is a tremendous amount of good will from Local Council's within the region—Cairns Regional Council has indicated in a number of its positioning and advocacy documents that it is working to establish itself as a leading regional waste re-processing hub. This aligns well with the concept of a regional pilot program. Cairns Regional Council has already made significant

investment in a new Materials Recovery Facility, which is a timely addition and provides the opportunity to consider whether additional local processing capabilities are warranted in pursuit of a more circular economic model for the region.

Cairns Regional Council is supportive of the concept and suggests the development of a hub and spoke network that works to improve regional consolidation of waste streams and includes the co-location of compatible secondary processing facilities, presenting a significant opportunity. However, more work is required on all fronts to ensure viability of the pilot program is achievable. There is a myriad of pre-existing capacity and capability in our region, although we have gaps specifically around plastics re-processing technologies—typically the viable recovered plastics to date have been sent down south for further processing. If we can enable our region to handle such additional processing requirements, avoiding our southern reliance, whilst remaining largely commercially viable, we can achieve a fully circular model. In the process we will avoid a lot of the additional costs, double handling and other negative externalities associated with waste reprocessing logistics.

New and emerging technologies:

Technology will form part of our path out of this mess and it is likely we will need to deploy a range of technological solutions to meet the growth in waste currently anticipated. I appreciate the concerns of environmentalists who have resoundingly suggested that incineration of waste is not the right path to go down. I tend to agree, but there is some really promising technology involving the conversions of end-of-life waste plastic into diesel. I mentioned this in my last report and I have since received a proposal from the owners offering more details about its potential usefulness in our region. By definition this is not incineration—through the use of heat and pressure, diesel is created and with some refinement it is appropriate for use in combustion engines. We need to explore all of these options and it is my hope that we will see this technology form part of the mix of technological solutions for a regional recycling pilot program.

I also received a submission from a company that produces soluble bags, offering a unique potential solution for alternative materials. The bags are made from a base of polyvinyl alcohol in a patented process. What you end up with is a bag that becomes soluble in water. I understand that there is some nuance with respect to the development process as to the variability of the bag's structural integrity under different temperature conditions. For instance, you wouldn't want to be walking home in the rain with your groceries if the bag breaks down at the first sign of room temperature moisture. Conversely if the bag only dissolves in boiling hot water, then its effectiveness when lost into the ocean may be questionable. Provided the right balance is met and the costs for deployment across traditional fast-moving consumer goods and other industries are acceptable, this could pose a significant opportunity.

Cleaning up the mess:

A number of proposals suggested that wide scale clean-up efforts are needed, particularly across remote beaches as they receive less care and attention than more publicly accessible beach locations. Given the remote nature and inaccessibility of such locations it is likely Governments will need to subsidise such efforts or offer other assistance measures to enable the proper management of such locations.

One of the quirkier suggestions I received was to encourage beachgoers to further assist with ongoing clean-up efforts by installing unique public art structures that also operate as a repository for waste collected on the beach. The example cited in one of the submissions is Goby the Fish, a large hollow sculpture with netting surrounding it, complete with an open mouth ready to receive plastic waste. The use of public art to convey both the message of what is happening in our oceans—with wildlife ingesting plastic waste—and providing an element of fun particularly for kids to ‘feed the fish’ the waste they have collected provides a unique and interactive experience, one that has been met with some success when replicated overseas.

It was identified across a number of submissions that there are a myriad of problematic plastics currently being utilised that cause an enormous amount of damage and can be seen regularly littered through our waterways and beaches. Suggestions particularly from environmentalists recommend that many of these types of plastics be banned outright, while others suggested a more measured approach is required to ensure they are disposed of correctly or phased out in a timely manner.

The most commonly cited problematic plastics among submissions received are as follows:

- Cigarette butts
- Balloons and balloon sticks
- Oxo-degradable plastics
- Fruit and veg barrier bags
- Microbeads
- Polystyrene

Some submissions expressed a desire for harsher penalties for littering and dumping offences, while others focused on ‘less stick and more carrot’. Much emphasis was placed on the success of container deposit schemes, both those implemented domestically and those abroad. Environmental groups suggested there was a marked reduction in the number of eligible containers they were encountering when conducting clean-up efforts. This sentiment was mainly in reference to Queensland as one of the most recent jurisdictions to adopt such a scheme. The improvements witnessed by groups and individuals naturally resulted in their advocacy for an expanded scheme, with suggestions including widening the scope of eligible containers and perhaps an increase of the deposit amount.

Avoid reinventing the wheel – review reports and recommendations gone by:

We should be considering the reports from the past and look at the body of work that has already been undertaken. The *Threat Abatement Plan* and the Senate Inquiry Report *Toxic tide: the threat of marine plastic pollution in Australia* are prime examples of significant amounts of work that has been undertaken in this policy area. The arguments made from groups who had already been involved with the creation and development of each of those documents suggested that it would be advantageous if the government was to review these documents. Especially their recommendations and particularly in the context of the government’s renewed focus on mitigating the impacts from waste.

There was some disappointment expressed that those documents and their recommendations in particular had not been more closely adhered to and implemented since their release. There was some concern that the body of work created potentially answered some of the questions and concerns that were now being raised more recently with this renewed focus on waste. In order to avoid ‘reinventing the wheel’ these documents should be reviewed, and I understand this sentiment was also echoed by participants at the National Plastics Summit.

Conclusions:

There is a strong willingness from the array of stakeholders involved to help implement positive and substantial change. What precisely that change is varies depending on who you talk to and to what extent measures should be implemented also varies to some degree. It is clear though however, that we need to capture more of what is already in existence when it comes to plastics and work harder to avoid the traditional linear economic model and its impacts wherever possible.

Landfill can no longer be our answer, but this will require a coordinated and systematic approach from industry, consumers and all levels of government to address the failings of the past. We cannot afford to get this wrong, if we can harness the opportunity, make the tough but necessary decisions, there will be economic opportunities that we can leverage in order to offset the costs of transitioning from a linear economic model to a circular one.

In order to get there, we must grapple with the reality that we cannot simply recycle our way out of this problem. We won't even get close without modifying some of the policy settings, pulling the right levers and promoting consistency across jurisdictions. It appears to me we need changes across the whole value chain and from what I've seen in my time in this role there is a significant amount of enthusiasm and good will which does give me some real confidence we can make this happen.

We've made significant changes before in a range of policy areas, tobacco, asbestos, and seat belts for instance. It seems to me that virgin plastic is in need of a similar shakeup. These are big problems that we face and in my view a levy, tax or other similar mechanism is warranted under the circumstances. It would effectively level the playing field, account for the negative externality and in the process reflect the true cost of virgin plastic production. If we move to undertake any change of significance, at the same time we must be supportive and understanding of the industries that have provided us with improvements in living standards and the role that plastic has played in getting us to where we are today.

It seems incredibly clear to me that we simply will not be able to stem the tide of plastics entering our ocean if the material itself continues to be seen as virtually worthless after its first use. We must tackle this from all angles; use less of the material to begin with, support initiatives that aim to repurpose, convert or re-manufacture waste plastic into something more valuable, incentivise such behaviours and support investment to grow and promote industry led change while implementing appropriate environmental safeguards where necessary.

We cannot pretend that undertaking a monumental shift away from traditional forms of doing business won't produce some winners and losers in the process but we cannot use this as a rationale for retaining the status quo. There is a cost for not taking action, whether it's the opportunity cost of allowing other nations to take the lead on this, or the environmental damage that is occurring as a result of 'business as usual' practices. The variables in this equation aren't easily quantifiable but the consequences continue to materialise in front of us. Unless we fully commit to tackling this issue, plastic waste will continue as a blight upon the environment, a lost opportunity and another testament to the unenviable by-products of the human condition and our insatiable desire to consume.

Looking ahead: proposed activities and priorities

- Requesting a briefing with the Climate Change Authority through Minister Taylor's Office.
- Requesting a briefing with Chief Scientist Dr. Alan Finkel.
- Requesting a briefing with the Munderoo Foundation / Andrew Forrest on their work in the recycling industry overhaul.
- Work with the CSIRO, AIMS and other stakeholders to initiate a large-scale Blue Carbon demonstration project in Australia.
- Continue working with stakeholders interested in developing and advancing the regional recycling pilot project.

Report Recommendations:

1. Consider exploring whether a virgin plastic tax, levy or market mechanism may help to address the negative externality from plastic waste and consider leveraging the revenue generated to assist the transition to a circular economy and improve the economic viability of recycled plastic material.
2. Consider additional resourcing of the GBRMPA to enable them to take the lead on important monitoring efforts in response to bleaching events—aiming to avoid their reliance on third parties and instead enabling greater autonomy.
3. Consider reviewing the body of work and recommendations from the Senate Inquiry Report *Toxic tide: the threat of marine plastic pollution in Australia*, particularly in the context of the government's renewed focus on addressing waste management issues and associated environmental impacts.
4. Consider reviewing the body of work and objectives of the *Threat Abatement Plan for the impacts of marine debris on the vertebrate wildlife of Australia's coasts and oceans*, particularly in the context of the government's renewed focus on addressing waste management issues and associated environmental impacts.
5. Consider identifying and resolving any impediments that fall within your remit as Minister for the Environment that may be actively halting, delaying, and affecting the viability or establishment of Blue Carbon projects or initiatives, and encourage similar efforts to address any cross portfolio and cross jurisdictional issues in the same vein.
6. Where possible in your role as Minister for the Environment, throughout the COVID-19 economic recovery process, support and advocate for stimulus measures that seek to more closely align the pursuit of economic growth with improved environmental outcomes.

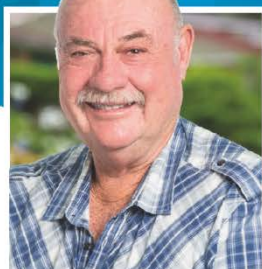
Communications and Engagement

Significant meetings and public engagement

28 th of January	AMPTO CEO – Col McKenzie
5 th of February	GBRMPA Chair – Dr Ian Poiner
10 th of February	Minister Ley and Assistant Minister Evans
12 th of February	AIMS CEO – Dr Paul Hardisty
19 th of February	GBRMPA CEO – Josh Thomas
19 th of February	GBRMPA, GBRF, RRRC, AMPTO – COTS discussion
20 th of February	Teleconference: GBRMPA – Briefing with Simon Banks
24 th of February	Minister Ley – catch up
25 th of February	Zali Steggal MP – Climate Change Bill discussion
26 th of February	Minister Andrews – AIMS discussion
2 nd of March	National Plastics Summit
4 th of March	Minister Ley – EMC discussion
4 th of March	AIMS CEO – Dr Paul Hardisty
16 th of April	ZOOM Press conference: Minister Ley, AIMS, CSIRO, GBRF Launch of the research and development phase of the Reef Restoration and Adaptation Program
1 st of May	Teleconference: Minister Ley
12 th of May	Teleconference: GBRMPA, AMPTO, Dept Environment
3 rd of June	Wet Tropics Management Authority & Terrain NRM
3 rd of June	Teleconference Briefing with CSIRO on Blue Carbon
16 th of June	Minister Taylor – Hydrogen Power
22 nd of June	GBRMPA CEO – Josh Thomas GBRMPA Chief Scientist – Dr David Wachenfeld

Appendix A

Media Releases:



WARREN ENTSCHE MP
Federal Member for **Leichhardt**

New funding for Far North Queensland environment projects

Monday, 20 January 2020

Federal Leichhardt MP Warren Entsch today announced six organisations had been awarded funding under the federal government's Communities Environment Program.

A broad range of organisations were eligible to apply for funding under the Communities Environment Program including local community clubs, not-for-profit organisations, landcare groups and schools.

Grants of between \$2500 and \$20,000 were available under the program.

Successful organisations Include:

- | | |
|------------------------------------------------------|----------|
| • Tree Kangaroo and Mammal Group: | \$20,000 |
| • Mossman Botanic Garden: | \$20,000 |
| • Kuranda Envirocare: | \$15,000 |
| • Treeforce Association: | \$20,000 |
| • Cape York Weeds and Feral Animals Inc: | \$20,000 |
| • Cairns Regional Council – Saltwater Creek Project: | \$15,000 |

Mr Entsch said the Communities Environment Program was empowering FNQ community groups to deliver practical local environmental projects that would not only raise environmental awareness but also strengthen the local community.

He said community groups across Far North Queensland are already delivering many fantastic environmental projects, whether it's planting trees, cleaning up local waterways, reducing litter or protecting native species.

"I was very pleased with the high quality of applications received from our local community and environmental organisations, and their enthusiasm to undertake practical environmental projects," Mr Entsch said.

Warren Entsch, MP, Liberal National Party, Cairns QLD 4870.



200 Mulgrave Road, Cairns QLD 4870



4051 2220



warren.entsch.mp@aph.gov.au



warrenentsch.com.au



WarrenEntschMP

“Successful projects include surveying of Lumholtz’s and Bennett’s tree kangaroo populations between Cairns and Cooktown and comprehensive flora and fauna studies of Cassowary and tree frog habitats in Kuranda.

“They also include Pond Apple control works in the Mt Amos and Cooktown regions, tree planting projects along Freshwater Creek and water quality projects at Saltwater Creek to improve discharges into the Great Barrier Reef.”

“This program is all about harnessing the passion of grassroots community organisations to deliver practical local projects that directly improve our local environment.”

Media Contact: Adam Davies: 0417 010 702



THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT

THE HON WARREN ENTSCHE MP
SPECIAL ENVOY FOR THE GREAT BARRIER REEF

\$1 million to support shark control in the Whitsundays

Tuesday, 4 February 2020

The Australian Government will invest \$1 million to assist the Queensland Government in improving swimmer safety in the Whitsunday's.

The Funding will support:

- greater understanding of shark populations, their behaviour, biology and ecology
- improved reef user practices to enhance swimmer protection
- the trialing of technological advances in non-lethal shark control measures such as near real-time alerts or drone surveillance in the Whitsundays.

This investment is in addition to a wider \$4 million package that will help Queensland adopt modern technologies including smart drum lines, drone surveillance, swimmer education and safety netting, while it also reintroduces its standard drum lines.

Federal Environment Minister Sussan Ley said the Australian Government was working with marine experts to protect both swimmers and the important ecosystems of the Reef.

"It is about scientific based solutions that will support local and international tourism, educate water users and help them feel safe in the water," Ms Ley said.

Special Envoy for the Great Barrier Reef and Leichhardt MP Warren Entsch said the funding reflected the right balance in ensuring swimmer safety and the integrity of the Reef.

He said recent shark attacks in the Whitsunday's had highlighted the importance of the investment.

"Marine life is vital to the reef and the tourism industry, and we need to adopt a modern approach to ensuring swimmer safety," Mr Entsch said.

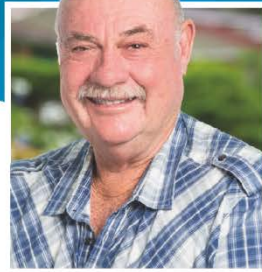
"The Whitsundays are a unique tourist destination and we need to do all that we can to help people feel safe.

“We have been working closely with communities, tourism operators and experts at the Great Barrier Reef Marine Park Authority, and this is a show of support for the people and the tourism operators in our region.”

The funding package supports the delivery of the joint Australian-Queensland Government Reef 2050 Long-Term Sustainability Plan, relevant species management and recovery plans made under the *Environment Protection and Biodiversity Conservation Act 1999* and the National Plan of Action for the Conservation and Management of Sharks.

ENDS

Environment Minister’s office: *John Brady 0427 867 638*



WARREN ENTSCHE MP
Federal Member for **Leichhardt**

National plastics summit signals changes for plastic recycling

Wednesday, 4 March 2020

The federal government has concluded the first ever National Plastics Summit reinforcing its commitment to working with industry to increase our recycling capabilities, ensuring markets for recycled products and reducing plastic waste.

Federal Leichhardt MP Warren Entsch said this week's National Plastics Summit, attended by more than 200 representatives from local and global businesses, state and local government, industry and community sectors, has set the tone for the future of plastic waste management in Australia.

"The Prime Minister has outlined three pillars of action around recycling plastic waste. First and most importantly, we need to take responsibility for our waste," Mr Entsch said.

"This is a passion of mine and one that I am determined to see implemented.

"We can all do our part in Far North Queensland such as encouraging demand for recycled products at home and by purchasing products that are re-usable, as opposed to those intended for single use.

"And, through government intervention, we know that banning the export of waste plastics will keep more of the raw stock here for remanufacturing, helping to lift industry capacity and our ability to use these materials constructively.

"These are the first of a number of measures the Morrison Government will take to build demand and capacity in the sector."

Mr Entsch said across from Capital Hill in Old Parliament House students from around Australia met with the Governor General and Her Excellency Mrs Hurley and discussed issues around plastic waste and recycling.

"It was fantastic to see and to hear students from across Australia, including Molly Steer and Jordi Turner from Cairns, get involved and show true leadership in this area," he said.

"They sent a message of hope along with the conviction that we can and should make a difference.

The federal government also announced that it would change Commonwealth Procurement Guidelines to make sure every procurement undertaken by a Commonwealth agency considers environmental sustainability and use of recycled content as a factor in determining value for money.

Warren Entsch, MP, Liberal National Party, Cairns QLD 4870.



200 Mulgrave Road, Cairns QLD 4870



4051 2220



warren.entsch.mp@aph.gov.au



warrenentsch.com.au



WarrenEntschMP

Background:

Some key industry pledges made as part of the Summit were:

- \$500 million from the Pact Group in sustainable packaging, reuse and recycling initiatives that will create new jobs.
- Nestlé and Australian recycler iQ Renew delivering a trial of soft plastic kerbside collection that will see soft plastics collected from over 100,000 homes processing 750 tonnes of the material. Nestlé also committed to reducing its use of virgin plastic by one third by 2025 and committed to procure globally AUD\$2.3billion worth of recycled food grade plastic.
- McDonalds to remove 585 tonnes of plastic cutlery from their Australian stores by the end of the year on top of its previous commitment to removing 500 million plastic straws.
- PepsiCo has pledged \$650,000 to support Greening the Green, a partnership with Clean Up Australia, REDcycle and Replas. The three-year national program aims to educate consumers on soft plastic recovery and soft plastic recycling.
- Cleanaway, Pact and Asahi have announced details of their plastic pelletising facility in Albury/Wodonga processing approximately 28,000 tonnes (900 million bottles) per year.
- QANTAS is removing 100 million single-use plastic items, such as cups, cutlery and meal boxes by end 2020 replacing them with compostable items.
- Unilever will halve the amount of virgin plastic it uses by buying more recycled plastic and reducing the amount of plastic it uses in its packaging by more than 100,000 tonnes.
- Australian Packaging Covenant Organisation will lead the development of the ANZPAC Plastic Pact, a new program within the Ellen MacArthur Foundation's Global Plastics Pact Network. ANZPAC will provide the significant intervention required to meet Australia's national plastic packaging target - that 70% of all plastic packaging will be recycled or composted by 2025.

Media Contact: Adam Davies: 0417 010 702



THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT
THE WARREN ENTSCHE MP
SPECIAL ENVOY FOR THE GREAT BARRIER REEF
GEORGE CHRISTENSEN
MEMBER FOR DAWSON

MEDIA RELEASE

Thursday, 12 March 2020

WHITSUNDAYS FUNDING AHEAD OF TOURISM ROUNDTABLE

Federal Environment Minister Sussan Ley will outline additional Morrison Government support for the Whitsundays when she joins a roundtable of tourism operators and community leaders in Airlie Beach today.

The roundtable, hosted by Federal Dawson MP George Christensen, is an opportunity to work with local tourism operators and community leaders to canvas a range of issues impacting the industry from cyclone impacts, to swimmer safety and current concerns over coral bleaching and international tourism.

"The Whitsundays is a major tourism destination and one that is a vital part of the local economy," Ms Ley said.

"The Morrison Government is investing \$1.9 billion in protecting the Great Barrier Reef through world leading science and practical environmental outcomes and today will be about hearing the concerns of the local community.

"It is important that we continue to tell the wonderful story of this region while addressing environmental challenges."

Special Envoy for the Great Barrier Reef and Leichhardt MP Warren Entsch said that the Morrison Government was working with communities along the coast to ensure the ongoing health of the Reef.

"The Reef covers thousands of square kilometres and it has a wide range of local stories and local challenges," Mr Entsch said.

"It is important to work with the people who are out there on the Reef every day and to understand their perspectives on an ongoing basis."

Federal Dawson MP George Christensen said the roundtable highlighted the pro-active approach of tourism operators in ensuring that the Whitsundays continued to attract visitors from across the region as well as those across Australia and the World.

“This is about people working together to promote this beautiful part of the world,” Mr Christensen said.

“The tourism operators in this area do an amazing job and it is an important opportunity for the Minister, the Special Envoy and the Great Barrier Reef Marine Park Authority to meet with them and discuss the challenges and opportunities.”

Key initiatives include:

- \$3.8 million will be directed through the Reef Trust to coastal habitat restoration and threatened species protection to improve the health and resilience of the Great Barrier Reef along the Mackay based Reef Catchments region. Priority actions will include improving Sandringham Wetland Complex, improving fish passage and improving the condition of coastal habitats.
- The Whitsundays will become the next focus of a groundbreaking initiative to establish a spectacular network of island refuges for marine and plant life in the Great Barrier Reef with the Morrison Government investing \$5 million through the Reef Trust as part of the Great Barrier Reef Foundation's \$14 million Reef Islands initiative.
- \$1 million to improve swimmer safety in the Whitsundays through further education to improve reef user practices, greater understanding of shark technology and the trialing of new technology in in non-lethal shark control.

Minister Ley's office:	John Brady	0427 867 638
Special Envoy's office:	Adam Davies	0417 010 702
Georg Christensen's office:	Lynn Bonanno	0408 773 207



THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT

THE HON WARREN ENTSCH
SPECIAL ENVOY FOR THE GREAT BARRIER REEF

MEDIA RELEASE EMBARGOED UNTIL 12.01, 16 APRIL

Thursday 16 April 2020

\$150 MILLION TO DRIVE INNOVATIONS TO BOOST REEF RESILIENCE

The Morrison Government today launched the research and development phase of its world leading Reef Restoration and Adaptation science Program to help preserve and restore the Great Barrier Reef in the face of rising ocean temperatures and coral bleaching.

An initial \$150 million will be invested in the new phase of the government's Reef Restoration and Adaptation work, following the government's endorsement of a two-year feasibility study led by the Australian Institute of Marine Science (AIMS) into a range of science-based interventions.

A consortium consisting of AIMS, CSIRO, University of Queensland, Queensland University of Technology, James Cook University, Southern Cross University and the Great Barrier Reef Foundation will work closely with the Great Barrier Reef Marine Park Authority.

The two-year RRAP feasibility study identified 43 concepts suitable for further research and development which include:

- Examining ways to collect and freeze coral larvae for use in year-round coral seeding
- seeding reefs with corals that are more resilient to heat to help coral reefs to evolve and adapt to the changing environment
- developing technologies that increase the survival rate of coral larvae and that can produce and deploy large quantities of more resilient coral larvae
- an ambitious concept to shade and cool large areas of reef at risk of bleaching by spraying microscopic saltwater droplets into clouds to make them more reflective of sunlight
- investigating methods to physically stabilise damaged reefs, after cyclone and bleaching events, to facilitate faster recovery.

The Morrison Government is committing \$100 million through the \$443.3 million Great Barrier Reef Foundation – Reef Trust Partnership with a further \$50 million in research and scientific contributions from the consortium partners. Ten per cent of the Reef Trust Partnership funding will be allocated to Traditional Owner led restoration and adaptation activities.

The Great Barrier Reef Foundation proposes to raise another \$100 million in philanthropic donations from the private sector, with R&D providers committing to a matching \$50 million in-kind investments, lifting overall investment in this critical effort to \$300 million.

Minister for the Environment Sussan Ley said the research underlined the Morrison Government's collaboration with world leading marine scientists in managing the reef.

"Climate change remains the biggest threat to the world's coral reefs and while a global response is needed to tackle emissions, Australian science can lead the way in developing adaptive technologies to help protect the reef," Minister Ley said.

"This is research that could help the reef recover from bleaching and which could assist it to adapt in the face of changing ocean temperatures."

Special Envoy for the Great Barrier Reef, Warren Entsch said that the world's best managed reef deserved the very best scientific research.

"We have an amazing natural asset that communities depend on and it is in everyone's interest that we research technologies that could help it to be more resilient," Mr Entsch said.

Chief Executive of AIMS Dr Paul Hardisty said that the new research phase was the start of a critical national effort to help sustain and safeguard our reefs for the future, and stressed that adaptation efforts needed to go hand-in-hand with reducing global emissions.

"The Reef Restoration and Adaptation Program is Australia's opportunity to shine in showing the world how we can support coral reefs to adapt and rebuild. For example, we have already seen some amazing results from the feasibility study in terms of simulated coral growth."

CSIRO Environment, Energy and Resources Executive Director Dr Peter Mayfield said that while the Reef remains the best-managed coral reef ecosystem in the world, there is broad scientific consensus of escalating threats.

"Through novel scientific approaches underpinned by ongoing and effective collaboration across the research community we aim to make a material positive impact on the Reef's health into the future," he said.

Managing Director of the Great Barrier Reef Foundation, Anna Marsden said there was strong community, business and philanthropic support for the efforts to ensure the reef remained a Global ecological icon.

"The feasibility study reveals that 71% of the Australian public support large scale efforts to help reefs adapt," Ms Marsden said.

The study also shows these efforts could result in tens of billions of dollars of net benefit to Australia, particularly to reef communities.

Environment Minister's office:

John Brady

0427 867 638

Benjamin Flores

0448 463 094

Special Envoy's office:

Adam Davies

0417 010 702



THE HON SUSSAN LEY MP
MINISTER FOR THE ENVIRONMENT

THE HON WARREN ENTSCHE
SPECIAL ENVOY FOR THE GREAT BARRIER REEF

**Twenty four tonnes of marine debris cleared from the Great
Barrier Reef**

Tuesday, 5 May 2020

More than 24 tonnes of debris including plastics, discarded fishing gear, old cigarette lighters and toothbrushes have been removed from the beaches of the Great Barrier Reef in 2019.

The debris has been removed thanks to the Australian Government's partnership with Tangaroa Blue Foundation to deliver the ReefClean project.

Launched in early 2019, ReefClean aims to remove and prevent marine debris along the Great Barrier Reef region through to 2023.

The five-year \$5 million project is delivering clean-up events, site monitoring, workshops and school engagement activities in order to tackle marine rubbish.

A report released today reported ReefClean, which is funded by the Australian Government's Reef Trust, ran 49 community clean-up activities and regularly monitored 33 beaches for marine debris during its first full year.

Federal Environment Minister Sussan Ley said this was just one of the many ways we are working to address the problem of rubbish in our waterways.

"The Morrison Government is committed to tackling the problem of waste, from our towns and cities to the sea," Ms Ley said.

"That is why we're investing \$1.9 billion dollars in protecting the Reef and funding a range of activities through the Environment Restoration Fund and the National Waste Policy to combat litter at its source."

Special Envoy for the Great Barrier Reef and Leichhardt MP Warren Entsch MP said that it was fantastic to see communities across the region coming together to preserve this national icon.

"Removing waste from the Reef is something I am passionate about," Mr Entsch said.

“The project is a wonderful initiative that is already delivering a number of great outcomes for the Reef, as well as the industries and regional communities that rely on it.”

Tangaroa Blue Foundation CEO Heidi Taylor said it has been inspiring to see more than 4,000 volunteers come forward to help us get a better understanding of the scale of the issue and find ways to deal with marine debris.

“Through the launch of this report, we not only showcase the amazing contribution of so many individuals and partners, but the data and numbers provide a clearer picture of the problem, which enables us to make a better decision on how to tackle it,” Ms Taylor said.

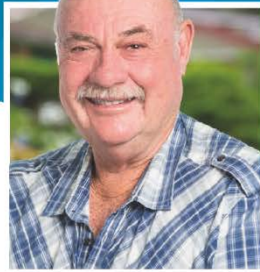
Tangaroa Blue Foundation is working with several organisations including Conservation Volunteers Australia, Reef Check Australia, Capricornia Catchments, Eco Barge Clean Seas, OceanWatch Australia, South Cape York Catchments, AUSMAP and Think Spatial to deliver this initiative.

A key aspect of ReefClean is counting and recording all debris collected in the Australian Marine Debris Initiative (AMDI) Database. This provides an opportunity to track items back to the source and identify ways to prevent them from being released in future.

To view the public outcomes report for 2019 visit www.reefclean.org

ENDS

Environment Minister's office:	<i>John Brady</i>	<i>0427 867 638</i>
	<i>Benjamin Flores</i>	<i>0448 463 094</i>
Special Envoy's office:	<i>Adam Davies</i>	<i>0417 010 702</i>



WARREN ENTSCHE MP
Federal Member for **Leichhardt**

Smart farming investment to yield positives

Friday, 22 May 2020

The Morrison Government is investing more than \$5 million – including \$49,495 in Leichhardt to help equip farmers with new skills and knowledge to improve sustainability and their bottom line.

Federal Agriculture Minister David Littleproud said 113 projects nationally will receive grants of up to \$50,000 from the third round of the *Smart Farms Small Grants* program.

“Australian agriculture has a long history of early adoption of innovation - the ingenuity of our farmers never ceases to amaze me,” Mr Littleproud said.

“They have always looked after the land and we are giving them a helping hand through this grants program to adopt best practice natural resource management methods.

“These are projects happening throughout the country and are about improving the resilience and productive capacity of farms.”

Federal Leichhardt MP Warren Entsch said Balkanu Cape York Development Corporation had been successful in the latest round of funding.

“This funding will go towards improving the capacity of Jajikal Traditional Owners to develop best practice as well as sustainable and local aquaculture projects,” Mr Entsch said.

“Traditional Owners have always been early adopters of new technologies and I look forward to seeing first-hand the outcomes of this particular project.”

For more information on the *Smart Farms Small Grants* program visit: agriculture.gov.au

Media Contact: Adam Davies: 0417 010 702

Warren Entsch, MP, Liberal National Party, Cairns QLD 4870.



200 Mulgrave Road, Cairns QLD 4870



4051 2220



warren.entsch.mp@aph.gov.au



warrenentsch.com.au



WarrenEntschMP



THE HON SUSSAN LEY MP

MINISTER FOR THE ENVIRONMENT

THE HON WARREN ENTSCH MP

SPECIAL ENVOY FOR THE GREAT BARRIER REEF

Wednesday 17 June 2020

SUPPORTING HEALTHY WATERWAYS FOR THE GREAT BARRIER REEF

Healthy Reef waterways are the focus of a \$1.8 million funding boost from the Morrison Government to engage reef communities in the continued community monitoring and reporting on water quality and waterway health in regional reef catchments.

Water quality reporting through partnerships between councils, industry, research and community groups, are an important factor in improving the quality of water flowing from the land to the Great Barrier Reef. More than 20 water quality report cards have been released by Regional Report Card Partnerships since 2012.

The money will help fund additional monitoring and reporting, increase capacity for governance and communication work, expand report card indicators and build on the Queensland Government's additional investment of \$2.5 million and the \$6.66 million both governments have provided to the partnerships since 2016-17.

Special Envoy for the Great Barrier Reef Warren Entsch said partnerships are responsible for reports on local waterway conditions, building awareness in the community, tracking changes in water quality over time as well as helping to inform future management efforts.

"These partnerships are critical to ensuring a healthy Great Barrier Reef," Mr Entsch said.

"We are the best Reef managers in the world, and this is only possible due to the strong partnerships on the ground.

"The Morrison Government remains absolutely committed to ensuring a healthy and vibrant Reef so it can be enjoyed for generations to come."

There are five partnerships in the Great Barrier Reef: the Gladstone Healthy Harbour Partnership; Fitzroy Partnership for River Health; Mackay-Whitsunday-Isaac Healthy Rivers to Reef Partnership; Townsville Dry Tropics Partnerships for Healthy Waters and Wet Tropics Healthy Waterways Partnership.

The partnerships have also developed resources to facilitate Traditional Owner cultural assessments, citizen science activities, improve knowledge about the condition of fish in freshwater basins and develop new indicators to assess waterway health.

The Morrison Government is committed to working with communities and stakeholders to improve, monitor and report on water quality within the Great Barrier Reef catchment through a range of initiatives under the Reef 2050 Water Quality Improvement Plan. To find out more about the Regional Report Card Partnerships visit: <https://bit.ly/3dVJRGJ>

ENDS

Minister Ley's office:

John Brady 0427 867 638

Ben Flores 0448 463 094

Special Envoy's office:

Adam Davies 0417 010 702



THE HON SUSSAN LEY MP
Minister for the Environment
THE HON WARREN ENTSCH MP
Special Envoy for the Great Barrier Reef



THE HON LEEANNE ENOCH MP
Minister for Environment and
the Great Barrier Reef
MICHAEL HEALY MP
Member for Cairns

JOINT MEDIA RELEASE

Monday 29th June 2020

FUNDING TO ASSESS FAR NORTH QUEENSLAND PLASTIC INDUSTRY

Regional Development Australia will receive \$150,000 in funding from the Federal Government and \$50,000 from the Queensland Government to assess the viability of a plastics industry in Far North Queensland.

Special Envoy for the Great Barrier Reef Warren Entsch said the funding signalled the Morrison Government's commitment to establishing new recycling infrastructure in rural and regional Australia that would see numerous economic and environmental benefits for the region.

"This funding recognises our need to build diverse industries beyond tourism while creating new jobs for Far North Queensland," Mr Entsch said.

"If we can establish a plastics industry in an area like Far North Queensland that will see us process locally generated waste resources into useful value-added products for community benefit, including local jobs, then we can roll this out to other regional and remote communities across Australia.

"But most importantly it's good for the environment. Better managed waste means less litter and debris ending up in our precious oceans, reefs and beaches."

Federal Minister for the Environment Sussan Ley said: "this project is expected to guide future government investment decisions in regional areas and is concrete evidence of the Australian Government's strong commitment to finding practical on-the-ground solutions to managing our recycling and waste."

Queensland Minister for the Environment and the Great Barrier Reef Leeanne Enoch said establishing new plastics industries in Queensland provided a once in a generation opportunity to improve waste management and recycling capability as Australia moves to take care of its own waste.

"There are around three times as many jobs in recycling as landfill, so increasing our resource recovery is not only good for the environment, it's good for the economy," Minister Enoch said.

"We're committed to improving Queensland's recycling rate so that we can reach our target of 75% recycling by 2050."

Member for Cairns Michael Healy MP said the project was good news for the future of Cairns.

"This could lead to more recycling jobs in Cairns, which is great news for the local community.

“The vast majority of plastic waste from north Queensland is currently sorted and freighted to larger population centres for processing. Recycled products are then bought back generating more freight costs and emissions from transport.

“If we could see that work done locally, it has the potential to reshape recycling for Far North Queensland and generate more jobs right here,” Mr Healy said.

ENDS

Media:

Special Envoy: Tamara Srhoj 0438 234 306

Minister Ley: Ben Flores 0448 463 094

Minister Enoch: Debbie Turner 0437 859 987



THE HON SUSSAN LEY MP

MINISTER FOR THE ENVIRONMENT

THE HON WARREN ENTSCH MP

SPECIAL ENVOY FOR THE GREAT BARRIER REEF

MEDIA RELEASE

Monday 29 June 2020

TWO-YEAR-PILOT SEES REDUCTION OF HUNDREDS OF TONNES OF NITROGEN USED ON FARMS

The Morrison Government's innovative two-year \$2.7 million pilot program to protect and preserve ecologically significant dry and wet tropic areas in Queensland's north by dramatically reducing fertiliser on cane farms has seen a reduction of more than 700 tonnes of nitrogen across almost 6000 hectares.

Sixteen cane growers around Burdekin took part in the trial which started in 2016 and saw on average a 20 per cent reduction in fertiliser - saving farmers about \$46 a hectare per year - while maintaining and, in some instances, increasing their yield.

An additional 35 growers were contracted to the program following the success of the pilot, with the Government's Reef Trust investing a further \$6.1 million – part of an effort to reduce dissolved organic nitrogen runoff in the region by 60 per cent – under the Reef 2050 Water Quality Improvement Plan.

Minister for the Environment Sussan Ley said every tonne of nitrogen fertiliser not used on farms results in less dissolved inorganic nitrogen entering the waterways which lead to the Great Barrier Reef.

"On International Day of the Tropics it is appropriate to recognise the efforts of Queensland cane growers in helping to protect and improve the water quality of our beautiful Reef," Ms Ley said.

"This program is a tremendous example of farmers working with government and non-government organisations in the best interests of the community to bring about positive outcomes for the land, the Reef and the tropics."

Special Envoy for the Great Barrier Reef Warren Entsch said funding for projects provided under the Reef Trust partnership are bringing about practical environmental outcomes for the Reef.

"Today is a day to acknowledge that our sugar cane farmers are doing a terrific job, changing decade-long practices, which has led to a significant improvement in Reef water quality," Mr Entsch said.

NQ Dry Tropics CEO Dr Scott Crawford said farmers saved money because they were buying less fertiliser and the environment benefited because there was less chance of damaging nitrogen from farms ending up on the Reef.

“About 10 per cent of sugar producers in the district have been involved in the four rounds of the project. Interest in reducing fertiliser use is growing because farmers can see that this is not only good for the environment but also for their bottom line,” Dr Crawford said.

For more information about the Reverse Tender-Burdekin project visit:
ngdrytropics.com.au/reef-trust-tender2/

ENDS

Environment Minister's office: *John Brady 0427 867 638*

Ben Flores 0448 463 094

Envoy Office: *Tamara Srhoj 0438 234 306*