Not 100% – but four steps closer to sustainable tourism

February 2021



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My proposals and how they were reached

Late in 2019 I published *Pristine, popular... imperilled?*, an investigation into the environmental pressures resulting from tourism activity in Aotearoa.¹ Two key insights emerged from that work.

First, the persistent growth of New Zealand's tourism industry in recent decades had created a set of increasingly serious environment issues. From the greenhouse gas emissions associated with long-distance travel to the pressure on wastewater networks from seasonal peaks, tourism was found to be less environmentally benign than it had often been made out to be.

Second, the increase in visitor numbers that was – at the time – forecast would only serve to exacerbate those pressures. I concluded that business-as-usual growth had the potential to undermine the very thing that New Zealand's tourism industry is based on – the quality of our natural environment.

Rather than move immediately to propose remedies, I asked for feedback on two issues. Firstly, was the problem statement contained in the report accurate? Secondly, if it was accurate, what policy approaches might be relied upon to reduce the environmental footprint of tourism?

I received 27 pieces of feedback in response. Four main interest groups were represented: the tourism industry, central government agencies, concerned citizens and academia. Notably, none of these groups questioned the accuracy of the problem statement in *Pristine*, *popular... imperilled?*

On the basis that no one denied the mounting environmental pressures described in the report, I set out to identify a very short list of policies that could make a real difference. This report is the result of that exercise.

The shortlist was developed from the feedback provided by respondents, as well as informal comments picked up along the way. In general, the focus was on identifying interventions that could materially reduce tourism-related environmental pressures while also being practical. Where possible, consideration was also given to interventions with fewer economic side-effects and those that might further the ability of Māori to exercise tino rangatiratanga, kaitiakitanga and manaakitanga.

¹ See https://www.pce.parliament.nz/publications/pristine-popular-imperilled-the-environmental-consequences-of-projected-tourism-growth.

I have chosen to promote four concrete policy proposals that – if implemented – would help to address some of the major environmental pressures that I have described. They are:

- Introducing a departure tax that reflects the environmental cost of flying internationally from New Zealand and use the resulting revenues to support the development of low-carbon aviation technologies and provide a source of climate finance for Pacific Island nations (chapter two).
- Making any future central government funding for tourism infrastructure conditional on environmental criteria and consistent with the community's vision for tourism development as expressed in a local destination management plan (chapter three).
- Clarifying and, where necessary, strengthening the tools that the Department of Conservation (DOC) has to address the loss of wildness and natural quiet that had – prior to Covid-19 – occurred in the most popular parts of the conservation estate (chapter four).
- Introducing stronger requirements for self-contained freedom camping and improving oversight of the process for certifying compliance (chapter five).

These four proposals do not pretend to be a comprehensive response to the totality of the issues raised in my first report. But each would provide real leverage in respect of some of the environmental pressures I have identified. Each proposal is given its own chapter and should be judged on its own merits.

While each proposal stands alone, all four are informed by a common framing of the problem. The balance of this introduction explains why these proposals should be considered now, and what reform principles should guide the conversation.

Is this the right time to consider such proposals?

Barely three months after *Pristine, popular... imperilled?* was released Covid-19 brought tourism to a halt in New Zealand and around the world. International visitor arrivals to New Zealand have declined to levels last seen in the 1950s, prior to the emergence of long-haul air travel.² Weekly international arrivals numbered in the hundreds during April, May and June 2020. During the equivalent period in 2019 arrivals numbered between 40,000 and 80,000 per week.³

The cessation of international tourism has threatened the commercial viability of many of New Zealand's tourism-related businesses. International tourists have traditionally accounted for around 40 per cent of all tourism spending in New Zealand. Spending associated with an increase in domestic tourism has made up some of the shortfall,⁴ but it seems likely that total tourism spending will still fall significantly overall.

Understandably, the Government responded to the sharp economic contraction with a broad package of support measures. While the majority of these were economy-wide in nature, tourism businesses have been significant beneficiaries. Estimates from ANZ Bank New Zealand indicate that tourism businesses received \$1.35 billion (12.4 per cent) of the \$10.9 billion in wage subsidy payments made before 22 May 2020.⁵ Tourism also received industry-specific support in the form of a \$400 million Strategic Tourism Assets Protection Programme (STAPP).

² Stats NZ, 2020a.

³ Source: International travel and migration statistics, Stats NZ.

⁴ For example, in the third quarter (July, August and September) of 2020, domestic visitor spending increased in nearly all regions (Auckland and Wellington being the exception) relative to the same period in 2019, offsetting the decrease in international visitor spending in some regions (source: Monthly Regional Tourism Estimates, MBIE).

⁵ ANZ, 2020, p.5.

While the prospects of vaccines allowing economies and societies to function again look promising, it seems increasingly clear that a return to something approaching normality will not be swift. Whereas past shocks such as the 9/11 terrorist attack, the severe acute respiratory syndrome (SARS) outbreak, or the global financial crisis saw visitor arrivals return to previous levels in less than a year, that seems unlikely to be repeated. Elements of the industry that rely on a resumption of international tourism face an extremely challenging near term. Which raises the question: why press ahead with policy recommendations designed to manage the pressures of growth when the industry faces an unprecedented contraction of existential proportions?

There are two reasons for doing so. In the first place, what Aotearoa has to offer is as special and attractive as it was before the pandemic. In a world facing ongoing environmental degradation, New Zealand's relatively unspoilt natural assets coupled with the amenities of a developed country make our tourism offering if anything more attractive.

But there is a more compelling and immediate reason: the discontinuity created by Covid-19 offers an opportunity to address some of the long-standing environmental and social issues associated with New Zealand's tourism industry. There is broad support for the idea that protecting tourism livelihoods in the short term should not morph into a slow but inexorable return to the status quo in the long term. That is a view taken by a number of tourism experts in a recently published volume entitled 100% Pure Future: New Zealand Tourism Renewed.⁶ It is also the logic underlying the Government's decision to establish the Tourism Futures Taskforce.⁷

The key question is what shape tourism's re-emergence will take. In ten years' time, will tourism be generating a similar set of pressures to those described in *Pristine, popular... imperilled?* Or will the disruption resulting from Covid-19 have triggered a transition to a form of tourism that is less environmentally harmful – as well as more resilient – than its predecessor?

Any such transition will not take place by accident. It will require real changes to business models and individual tourist behaviour. That, in turn, will depend on setting aside for the moment the images and language of marketing and engaging instead with evidence and trade-offs.

I have been struck, in my encounters with the tourism industry, by its recourse to words, images and narratives that weave a spell. It is an industry that has attracted a wealth of creative talent devoted to showcasing New Zealand to best advantage. Some of the promotional material that has been produced is breath-taking. Tourism New Zealand's (TNZ) branding campaign under the slogan "100% Pure New Zealand" has been hailed as "brilliant", "visionary" and, somewhat immodestly by TNZ itself, as "100% pure genius".8

It is interesting to return to the material published to celebrate the tenth anniversary of the launch of this marketing coup in 2009. It must be one of the most self-congratulatory documents ever released by a government agency and it's not hard to understand why, given the international success the campaign achieved. But many New Zealanders have felt uneasy that the brand didn't entirely match the reality.

⁶ Bennett, 2020.

⁷ The Taskforce was tasked with two roles. First, to "advise on the broad options that will systematically align the tourism system to one that enriches both New Zealand and the wellbeing of New Zealanders, meaning that tourism will contribute more than it consumes against the four capitals: economy, society, environment and culture". Second, to "make recommendations to address the long-standing productivity, inclusivity and sustainability (environmental, social and economic) issues present in some parts of the sector" (MBIE, 2020h).

⁸ TNZ, 2009, p.8–10.

TNZ has always been careful to identify its brand as a "synthesis of everything we are – as a people, as a country and as an experience". There is no mention of the natural environment. But the imagery associated with the brand is overwhelmingly that of pristine, primaeval landscapes. And as that environment has come under pressure the industry has felt the need to repackage its messaging.

The tension was highlighted for me in the early months of the Covid-19 lockdown by a think piece from TNZ's chief executive entitled *Let's realign our tourism strategy closer to our Kiwi values*. ¹⁰ He described the need for a 'reset' in these terms:

"At Tourism New Zealand we are thinking about how we move to a values-based tourism industry. One of the most exciting things about resetting the tourism economy post COVID-19 is pushing further on the path we were on, the values based model, where we determine the kinds of visitors we want and the kinds of experiences we want in the tourism industry and the kinds of outcomes we want for New Zealand and New Zealanders.

If we align those around our values (what we think is important) things like restoring of nature, being culturally inclusive, economically rewarding, then I think we're going to set ourselves on a great path. At the heart of it we as a country need to decide if we want a million visitors in Milford Sound or a hundred thousand or just a thousand – how do we design a system that supports our values and is commercially sustainable.

The challenge for this reset is about getting the timing right so we can leverage it to do things in a smart restorative way. We are reimagining a sector, which is amazing, but there is a cold hard reality too. We are a tourism economy; we stopped being an agriculture industry 20 years ago. Taxes from tourism's \$41bn revenue paid for our new hospitals and schools and motorways."

I am all for calculating the cold hard reality of economic benefit. An equally cold hard reality is the environmental cost that accompanies those economic benefits. I was particularly struck by one claim the article advanced:

"If you think about other industries, you acquire natural capital and either dig a hole in it, set fire to it, or change it in some way. It's quite material. Whereas much of the tourism product is simply visual consumption."

One of the reasons I wrote *Pristine, popular... imperilled?* was precisely because there was clear evidence that tourism was depleting natural capital or 'changing it in some way'. Every time a tourist flies to, from or around New Zealand, the greenhouse gas storage capacity of the atmosphere is depleted. Tourism contributes to significant claims on water and landscape modification for the extension and hardening of infrastructure. There is also a loss of wildness and natural quiet that takes place when each additional tourist is introduced to treasured sites in national parks or special beaches.

The closest the article got to broaching some of these realities was in asking whether we want "a million visitors in Milford Sound or a hundred thousand or just a thousand" and how we might design a system that supports our values and is commercially sustainable. Answering such questions would need to delve into the 'cold hard realities' of pricing, rationing, access and the need to internalise all the environmental externalities associated with noise, crowding and emissions.

⁹ TNZ, 2009, p.4.

¹⁰England-Hall, 2020.

An enquiry into these inconvenient intrusions of reality does not sit well with a marketing driven desire to create a warm glow around the idea of aligning tourism strategy with "our Kiwi values". I have come to the view that maintaining a constant flow of high level, aspirational objectives is getting in the way of "fundamental changes to the way we think about tourism and our natural assets". If we are serious about fundamental change, then it's important that we don't keep on avoiding difficult conversations about some of the pressures that manifestly undermine claims about sustainability.

I am well aware that there will be those who argue that, with the international tourism industry on its knees, this is not the moment to start difficult conversations. I don't agree. In truth, there is never a good time to raise uncomfortable issues. When times are good people don't want their party rained on. When times are tough they're in survival mode. I think we should be prepared to have a more searching conversation than one couched in the language that marketing and promotion permits us to have. If my proposals are deemed to be flawed – or too politically difficult to contemplate – so be it. It is better that they are debated and rejected than avoided.

To assist that conversation, I would like to offer some scaffolding to hang onto, specifically:

- some principles that might inform any debate about specific policies such as those I have proposed
- a framework to help understand how tourism can impose environmental pressures and the ways different policies can attempt to relieve them.

Some principles to inform any debate on specific policy proposals

I have made four specific policy proposals. Others will have their ideas. But in debating any policies designed to tackle tourism's environmental impact, it might be useful to consider three principles to guide the conversation:

- Tourism should be treated much the same as any other sector of the economy rather than being pre-emptively accorded special attention and public subsidy.
- The wishes of communities and mana whenua should be a key input into decisions about tourism developments, particularly those that would impose significant increases in environmental pressure that then have to be paid for.
- Tourists and tourism businesses should pay for the cost of the services (including environmental services) they use and the environmental impairment they impose.

Accepting these premises would be to admit that the cold hard reality of economic benefit is considered alongside the cold hard reality of any costs to the community and the environment; and that those who benefit – which is all of us in different ways – should shoulder the costs we impose. I consider each in turn

¹¹England-Hall, 2020.

Principle 1: Rather than pre-emptively according tourism special attention and public subsidy, treat it in much the same as any other sector of the economy

As discussed in *Pristine, popular... imperilled?*, policies intended to foster and support tourism growth have been a constant theme in the development of New Zealand's tourism industry. While the nature of this support has changed over time, it has certainly not disappeared.

At the outset of this investigation, I undertook a review of New Zealand's tourism-specific policy landscape. That work found that around one third of the tourism-specific policies that existed prior to Covid-19 were primarily intended to support tourism growth. The relative significance of these growth-supporting policies becomes more pronounced when considered in monetary terms. In 2019, the Government spent upwards of \$200 million supporting tourism, but less than \$50 million mitigating the environmental pressures that result from it (see Appendix).

In many cases, the support provided for tourism has not been available to other parts of the economy. The \$400 million provided to tourism businesses and other organisations (e.g. Regional Tourism Organisations and NZ Māori Tourism) by the STAPP is the most recent example. No other sector, with the exception of aviation, 12 received such generous financial assistance in the wake of Covid-19.

TNZ represents another example. Since its creation in 1991, TNZ has been funded from general taxation. In 2019, it received \$112 million. With the exception of education, tourism is the only major export industry in New Zealand to enjoy such arrangements. ¹³ Promotional and marketing activity undertaken by most other industries – dairy products, beef and lamb, wine and timber products, for example – is funded on a user-pays basis under the Commodity Levies Act 1990.

The decisions the Government makes about which parts of the economy to support or not are its prerogative. But it cannot avoid the fact that spending public money to foster tourism growth will materially contribute to the environmental pressures the industry creates.

Treating tourism in much the same way as any other sector of the economy would be desirable from an environmental perspective. It would also help to address budgetary pressures. If future governments decide to continue to provide significant subsidies to promote further growth in tourism, they should ensure that the spending envelope covers the investment that will be required to mitigate the environmental consequences of that growth.

Principle 2: The wishes of communities and mana whenua should be a key input into decisions about local tourism development

Tourism development in many New Zealand communities has, in part, been an organic process resulting from broader societal trends such as real income growth, a decline in the cost of air travel and domestic population growth.

¹²The aviation sector received \$163 million to help airlines pay passenger-based government charges (Twyford, 2020) and a \$900 million loan facility for Air New Zealand.

¹³Education New Zealand is a Crown entity tasked with delivering "strategies, programmes, and activities for promoting, together with providers and other government agencies, New Zealand education overseas" (Education Act 1989, s 270(2) (a)). In 2019, it had a budget of \$36.8 million, 86% of which was funded via the Crown, and 9% funded through industry contributions (Education New Zealand, 2019, p.13).

But it has also been driven by a conscious central government policy to disperse tourists to a greater number of places. For example, TNZ identifies spending growth in New Zealand's regions as one of its six key performance outcomes. 14 Similarly, the \$87 million allocated to tourism via the Provincial Growth Fund in 2019 was largely intended to foster tourism development in particular communities.

For the communities involved, the arrival of ever more tourists each year has not been without cost.

For one, the seasonal influx that comes with being a 'tourist destination' has made some places increasingly unpleasant during parts of the year (see the box concerning Akaroa in chapter three, for example). Furthermore, coping with visitor growth requires the development of physical infrastructure such as toilets, roads, wastewater treatment plants and accommodation facilities. Communities do not always have the financial wherewithal to fund these items. And even where they do, the cumulative development of infrastructure over time can fundamentally alter the visual and social character of a place.

It is certainly true that tourism development can result in new economic opportunities. But if those opportunities are to be truly sustainable in the long term, it is vital that any such development is on terms that local people are comfortable with. The only way of achieving that in practice is to pay much greater attention to the wishes of communities and iwi when decisions about tourism development are being made.

Principle 3: Tourists and tourism businesses should pay for the cost of the services (including environmental services) they use and the environmental impairment they impose

To date, the main approach to addressing tourism-related environmental pressures in New Zealand has been to increase the supply of mitigating infrastructure and the availability of alternative destinations.

While these investments do have a role to play, there are shortcomings to simply spending more money on the problem.¹⁵ Perhaps most importantly, the question that arises is whether ongoing investment in more tourism infrastructure and more attractions is anything other than a band-aid solution. In any high tourism demand future, relying on such an approach will necessitate repeated recourse to taxpayer funds.

A complementary approach would be to focus to a greater extent on tourism demand. That doesn't necessarily mean quantitative limits on certain activities. Rather, it could just involve asking tourists – and the tourism businesses that serve them – to pay for the ecosystem services they consume, and the environmental damages they produce.

By fairly valuing the natural capital that New Zealand's tourism industry is based upon, such an approach would offer a means for New Zealand to attract a greater proportion of high-value tourists. Further, it would force tourists and tourism businesses to internalise the true cost of using natural capital, thereby providing improving incentives for more efficient resource use.

¹⁴TNZ, 2019b.

¹⁵For example, for place-based pressures like solid waste generation or wastewater management, it is doubtful whether designing infrastructure to cope with peak periods is particularly cost-effective.

A framework for analysing environmental damage from tourism

In concrete terms, the amount of environmental pressure resulting from tourism activity in New Zealand depends on three main factors: the number of tourists we seek to welcome, the behaviour of those tourists (including their spending patterns) and the environmental footprint of the goods and services they consume (Figure 1.1).

In turn, how environmentally damaging those pressures are depends on where they occur and who is managing them. Tourism-related pressures will be of less consequence where natural systems are naturally resilient, or where management processes have been put in place to improve that resilience.

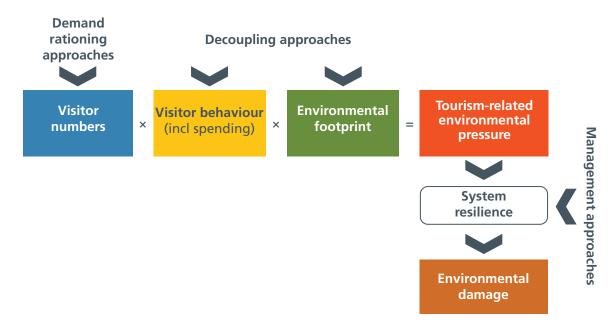


Figure 1.1: A framework for analysing environmental damage from tourism.

It necessarily follows that there are three routes available for reducing the environmental damage associated with tourism.

- 1. New Zealand could seek to welcome fewer tourists either nationwide or at particular places through the use of demand rationing tools.
- 2. Attempts could be made to decouple the environmental pressure from tourist numbers through changes in the behaviour and spending decisions of individual tourists, or reductions in the footprint of the goods and services they consume.
- 3. The focus could be on investing in system resilience as a way of reducing the environmental damage resulting from whatever level of visitation and associated pressures emerge.

To date, the main approach taken in New Zealand has been the last of these: improving the resilience of places to a given level of tourism pressure through the provision of infrastructure (see chapter three for more on this). In recent years, a succession of government programmes has provided funding for things like rubbish bins, toilets, freedom camping facilities and wastewater networks. The Tourism Infrastructure Fund and the Responsible Camping Fund, as well as the Regional Mid-sized Tourism Facilities Grant Fund that preceded them, are good examples.

Policies intended to decouple environmental pressures from tourist numbers are less common. Perhaps the headline example is the work that TNZ does attempting to promote value-led growth. In addition, the Tiaki Promise, Ko Tātou This Is Us and the educational work funded via the Responsible Camping Fund are all examples of awareness-raising campaigns intended to encourage behavioural change among tourists.¹⁶

Policies intended to mitigate tourism-related environmental damages by rationing visitor demand have been applied even less frequently. At present, the use of such policies is limited to some elements of the conservation estate. DOC restricts commercial access to national parks through the concession system, and overnight access through the hut booking system. In addition, DOC has used a variety of other measures (such as parking restrictions for the Tongariro Alpine Crossing – see chapter four) to limit day access in places where visitation growth had become problematic.

In several cases, policies that at first glance appear to be intended to ration demand (and that may, at the margin, serve that purpose) were explicitly designed to avoid any such outcome. Both the Stewart Island/Rakiura Visitor Levy and International Visitor Conservation and Tourism Levy were conceived as tools to generate revenue to fund the mitigating infrastructure described above. The respective cabinet papers and regulatory impact statements reveal that these levies were deliberately set at modest levels to avoid any chilling effect on demand.¹⁷

There is no doubt that the third approach offers the line of least resistance. I believe we should be at least prepared to debate the first two options. All three approaches involve trade-offs but they are not always equally transparent. Spending tax dollars to relieve pressures is often an easy way out that leaves underlying problems untouched. The ideas proposed in this report – which involve a mix of charges, regulation and better targeted spending – are an attempt to tackle those underlying problems.

¹⁶Policies that enable decoupling by modifying the footprint of the goods and services that tourists consume exist but tend not to be tourism specific in nature. The New Zealand Emissions Trading Scheme, for example, is likely to stimulate innovation and lead to reductions in the carbon intensity of services like accommodation and transport.

¹⁷For example, the Cabinet paper concerning the introduction of the International Visitor Conservation and Tourism Levy states that Cabinet "agreed to consult on a rate between \$25 and \$35, on the basis that this level is less than 1% of average visitor spend, and noting that the demand impacts are unclear, but likely to be low" (Office of the Minister of Tourism, 2018, p.5).



Summary and recommendations

New Zealand's tourism offering is reliant on long-haul aviation. Prior to the Covid-19 pandemic, New Zealand was experiencing considerable growth in the number of international visitors arriving by plane, as well as growing numbers of New Zealanders travelling overseas. This had resulted in a significant increase in tourism-related aviation emissions.

Notwithstanding sustained effort in global civil aviation negotiations, internationally agreed arrangements appear unlikely to significantly address rising emissions in the foreseeable future. Reducing aviation emissions is also complicated by the lack of cost-effective mitigation options for this sector. This chapter presents two policy proposals that could complement the international framework and reduce the international aviation emissions associated with tourism in New Zealand.

I recommend that:

- The Government considers introducing a distance-based departure tax that reflects the
 cost of greenhouse gas emissions generated by passengers flying from New Zealand. The
 revenue generated by the tax should be ringfenced to support research efforts to reduce
 emissions from the aviation sector and provide a source of climate finance for Pacific Island
 nations.
- Recognising the limitations of adopting a unilateral approach to reducing international
 aviation emissions, the Government should build on the credibility that such a departure
 tax would demonstrate to pursue a plurilateral agreement with like-minded countries
 willing to take more ambitious action on the issue.

New Zealand's geographic isolation makes tourism heavily dependent on long-haul aviation as the primary means of transporting visitors to New Zealand. As a result, the expansion of New Zealand's tourism industry has been coupled with a steady increase in the number of tourists arriving by air. Between 2000 and 2019, the number of visitors arriving by plane has increased steadily from 1.6 to 3.8 million. In the year ended March 2019, 98 per cent of international visitors arrived using this mode of travel. The number of New Zealanders travelling overseas displayed similar growth, with annual departures increasing from 1.2 million to 3.1 million between 2000 and 2019.1

Aviation is an emissions-intensive transport mode and has both direct and indirect effects on the climate. Direct effects relate to emissions from the combustion of aviation fuels, whereas indirect effects include emissions of nitrogen oxides, contrails and aviation-induced cirrus clouds.

Although detailed data on tourism-related aviation emissions is limited, flying international visitors to and from New Zealand was estimated to be responsible for 3,287 kilotonnes of carbon dioxide equivalent (or 26 per cent of New Zealand's tourism-related emissions) in 2017.² In terms of New Zealand's national emissions profile, this was equivalent to about four per cent of gross emissions.

Prior to the disruption created by Covid-19, tourism-related international aviation emissions had grown persistently, increasing by 25 per cent between 2010 and 2017.³ In contrast, New Zealand's gross emissions remained relatively static over the same period.⁴

While these pressures have subsided because of the Covid-19 pandemic and subsequent collapse in demand for air travel, the eventual recovery of key international markets makes it likely that this respite will only be temporary. If emissions resulting from international aviation are to be materially reduced in the longer term, policy measures that support changes in travel behaviour and the development of new technologies will be required.

Whereas other proposals presented in this report address environmental pressures specifically from tourism activity occurring within New Zealand, addressing the emissions that result from flying tourists to and from New Zealand involves several additional layers of complexity. As a result of its inherently global character, international aviation is subject to unique governance and legal arrangements, with regulatory decisions typically made at the international level. Accordingly, attempts to introduce policy measures that could address emissions from this sector have often been pursued through multilateral agreements.

These governance and legal settings are further compounded by technical challenges specific to the aviation sector. The absence of cost-effective technological solutions severely limits the set of potential mitigation strategies that can be deployed in the immediate term.

Another challenge derives from the fact that (prior to Covid-19 at least) most of the emissions associated with travel to and from New Zealand were generated by international tourists. These individuals are able to respond to any emissions price signal New Zealand might impose by simply choosing to travel to an alternative destination. Smart policy design is critically important to minimise any such carbon leakage.

¹ Source: International travel and migration statistics, Stats NZ. Data relates to the March year end.

² Parliamentary Commissioner for the Environment (PCE), 2019b. This study used a destination-based approach that excluded emissions from New Zealand residents travelling overseas.

³ PCE. 2019b.

⁴ Ministry for the Environment (MfE), 2020.

This chapter presents two policy proposals that could be implemented to reduce the emissions that result from international air travel. The first proposal involves the introduction of a distance-based passenger tax that would be levied on all international flights departing New Zealand. The revenue raised from such a tax could be used to support the development of mitigation options for the aviation sector and provide a source of climate finance for Pacific Island nations. The second proposal adopts a longer-term perspective and involves New Zealand seeking to establish a coalition of countries that would be willing to adopt a more ambitious approach to addressing emissions from international aviation.

Both proposals are intended to complement existing international agreements and legal frameworks and provide a means of making a useful response to the challenge of tourism-related emissions from international air travel.

Existing policy approaches

Mitigation options available for international aviation

As discussed by the United Kingdom's Committee on Climate Change, there are four main ways to reduce emissions from international aviation:⁵

- technological improvements (improved aircraft and engine design)
- sustainable aviation fuels and energy sources
- operational measures and optimised air traffic management
- demand management and reduced air travel volumes.

However, the implementation of these options is constrained by challenges relating to either their technical, economic or political feasibility.

Technological measures relating to improved fuel efficiency from aircraft design can offer some reductions. Research conducted on behalf of the International Council on Clean Transportation has estimated the historical improvements in fuel efficiency for commercial aircraft. Estimates show that between 1968 and 2014, the average fuel burn of new aircraft fell by about 45 per cent, or 1.3 per cent per year.⁶ However, the abatement potential is limited by protracted development and certification times and the slow rate of aircraft turnover. It is also limited by the fall in operational costs from fuel savings that accompany efficiency improvements, which, in a classic rebound effect, has allowed the aviation industry to expand and increase passenger volumes. As a result, the environmental benefits from historical improvements in fuel efficiency have been offset by growth in aviation activity.⁷

The development of sustainable aviation fuels and alternative energy sources has received considerable attention recently as a way of decarbonising air travel. These can be broadly divided into four main categories: biofuels, carbon-based synthetic fuels, hydrogen and other non-carbon-based synthetic fuels (e.g. ammonia), and battery electric.

⁵ Committee on Climate Change, 2019.

⁶ Kharina and Rutherford, 2015.

⁷ Peeters et al., 2016.

Biofuels can be produced from a range of feedstocks, including crop and forestry residues, solid waste or energy crops specifically cultivated as a fuel source. One of the key advantages of biofuel is its 'drop-in' nature – it can be used as a direct substitute for (or blended with) jet fuel in conventional jet engines. According to the International Energy Agency, more than 150,000 flights using biofuels have taken place since 2008. At present, regular biofuel distribution is available at five airports internationally: Bergen, Brisbane, Los Angeles, Oslo and Stockholm.⁸

However, the supply of low-carbon biofuels is limited. Potential producers face high up-front capital costs, and these can be difficult to justify, given limited demand for the resulting product at current prices. Over the longer term, competing demand for biofuel from other transport sectors could act as a potential barrier to widespread adoption. Most biofuels are also associated with land use change involving the conversion of natural areas to cropland. The resulting indirect emissions can offset the benefits from the use of biofuels when the full impact on the carbon cycle is considered.⁹

Carbon-based synthetic fuels are seen as offering a lower carbon – and potentially more scalable – way forward. That said, much depends on how these fuels are manufactured. As the Royal Society has highlighted, two conditions need to be met for synthetic fuel to be environmentally preferable to traditional aviation fuel.¹⁰ First, the carbon required must be derived from sustainable nonfossil sources such as biomass, direct air capture or industrial exhaust gases. Second, the energy input used to manufacture hydrogen should be low carbon. At present, the reality is that the technologies required to meet these conditions are immature and far from being cost competitive.

Electric aircraft are not considered a viable alternative for long-haul aviation because of constraints relating to battery energy density. Although hydrogen-fuelled aircraft do not face the same range constraints as electric aircraft, their climate impact is dependent on the use of renewable electricity to produce hydrogen. In addition, the physical properties of hydrogen mean that it is not strictly a drop-in fuel – its deployment would require the development of a new generation of aircraft, as well as new fuel production and distribution infrastructure.¹¹ Researchers estimate that it typically takes 40 to 65 years for a new technology to be incorporated into a completely renewed fleet.¹²

Efficiencies can also be achieved through optimised air traffic management involving more efficient use of airspace and reduced traffic congestion at airports. Such measures can lead to one-off marginal reductions in emissions but will not have a tangible impact on the carbon intensity of long-haul flights.

The final option relates to constraining future growth in travel demand through charges, fees or taxes that reflect the external cost of greenhouse gas emissions from aviation. The impact on passenger demand and the effectiveness of such measures is dependent on how responsive passengers are to changes in travel costs. However, while changes in consumer behaviour could achieve some demand reduction, the imposition of taxes tends to be politically unpopular.¹³ In addition, the unilateral adoption of demand management initiatives creates the risk of emissions leakage as consumers alter their behaviour by travelling to destinations that do not impose charges.

⁸ Le Feuvre, 2019.

⁹ World Wide Fund for Nature International, 2012; El Takriti et al., 2017; Searchinger et al., 2017; Searle et al., 2019.

¹⁰Royal Society, 2019.

¹¹The energy intensity of liquid hydrogen per unit-volume is around one fifth of that of traditional jet fuel (Thomson et al., 2020).

¹²Larsson et al., 2019.

¹³Daley and Preston, 2009; Bows-Larkin, 2015.

There is widespread acknowledgement of the difficulties associated with mitigating emissions from this sector. The United Kingdom's Committee on Climate Change considers that major technological breakthroughs in aviation are unlikely to make a significant difference to aviation emissions by 2050. The lack of cost-effective mitigation technologies has led to considerable interest in the use of offsetting to address aviation emissions in the near term. This involves airlines directly financing abatement activities in sectors that can achieve reductions at lower cost.



Source: Nicholas Susilo, Unsplash

Figure 2.1: Long-haul aviation is the primary means of transporting visitors to New Zealand. The limited set of cost-effective mitigation options creates significant challenges for managing emissions from this sector.

Existing policy initiatives: The international framework

The adoption of policy measures to address international aviation emissions is complicated by the global nature of the sector. The United Nations Framework Convention on Climate Change (UNFCCC) and the agreements made under it, including the Kyoto Protocol and the Paris Agreement, do not address emissions from international aviation. This is because the negotiating parties could not agree on how emissions from aviation should be attributed to specific countries. For that reason, the International Civil Aviation Organization (ICAO) is the primary forum for international negotiations on the issue.¹⁵

¹⁴Committee on Climate Change, 2019.

¹⁵ICAO is a United Nations agency established in 1944 to govern and administer the implementation of the Convention on International Civil Aviation (the Chicago Convention). ICAO works with 193 member countries to reach consensus on international civil aviation standards and recommended practices. ICAO's work covers a wide range of issues relating to international aviation, including safety, security, air navigation, economic development and environmental protection.

The 1997 Kyoto Protocol effectively delegated responsibility for the development of policy measures to address emissions from international aviation to ICAO. After an extensive and protracted series of international negotiations lasting almost two decades, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) was adopted by ICAO in 2016. 16 CORSIA obligations are included as an annex to the Chicago Convention and apply to all of ICAO's 193 member countries, including New Zealand.

CORSIA aims to offset the marginal growth in international aviation emissions beyond 2019 levels with the intention of stabilising net carbon dioxide emissions and achieving carbon neutral growth.¹⁷ The scheme will remain in place until 2035 and will operate as a global carbon market.¹⁸ Airlines will be required to purchase carbon credits and finance abatement activities outside the aviation sector for emissions generated by international routes. This approach provides airlines with the flexibility of achieving emissions reductions in sectors with lower abatement costs.¹⁹

The scheme will be progressively implemented in stages. Participation will be voluntary during the pilot and first phases between 2021 and 2026.²⁰ The second phase from 2027 onward will require mandatory participation of all ICAO member states with some exemptions on equity grounds.²¹

While CORSIA represents a significant step forward in terms of achieving international consensus on the treatment of aviation emissions, the scheme's ability to significantly address emissions is somewhat constrained. CORSIA's scope is limited to offsetting additional growth in emissions and does not address the already significant level of emissions from international aviation, which has been estimated at 914 million tonnes of carbon dioxide in 2019.²² Maintaining aviation emissions at current levels is problematic as it would require greater emissions reductions in other sectors and high levels of negative emissions technologies to achieve the goals of the Paris Agreement. In addition, CORSIA's focus on offsetting provides limited incentives for airlines to implement measures that reduce gross emissions.

There has also been concern regarding the effectiveness of offsetting and whether offsets represent genuine and additional reductions relative to business as usual. The concept of additionality is integral to any offsetting scheme and requires emissions abatement to only have occurred as a direct result of investment (i.e. the same reductions would not have occurred in the absence of financing).²³

¹⁶Maertens et al., 2019.

¹⁷Originally CORSIA was intended to offset emissions growth from an average of 2019–2020 baseline levels. However, as a result of Covid-19 and the subsequent collapse in demand for air travel, concerns were raised that using the original baseline would impose an unreasonable regulatory burden on the industry given prevailing economic conditions. In response, ICAO has amended the baseline to 2019 emission levels during the pilot phase of the scheme (i.e. 2021–2023), which reduces the offsetting obligations on airlines. Aspects of the CORSIA framework will be subject to periodic review, including the impact of Covid-19 on the emissions baseline beyond the pilot phase. Additional information can be found at https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-and-Covid-19.aspx.

¹⁸ICAO will conduct a special review of CORSIA by the end of 2032 to determine whether the scheme will be extended beyond 2035. In making this decision, consideration will be given to the contribution made by other mitigation options, including sustainable aviation fuels, operational improvements and aircraft technologies (ICAO, 2020b).

¹⁹Larsson et al., 2019.

²⁰New Zealand has agreed to voluntarily participate in CORSIA's pilot phase from 2021.

²¹International Council on Clean Transportation, 2017.

²²Graver, 2020.

²³Warnecke et al., 2019.

One study prepared for the European Commission has raised serious concerns around the environmental integrity of offsetting. The study found that 85 per cent of the offsetting projects implemented under the United Nation's Clean Development Mechanism had a low likelihood of being additional and are therefore likely to over-estimate emissions reductions.²⁴

In an attempt to ensure the integrity of offsets, ICAO has evaluated carbon offsetting programmes and released an approved list of eligible units (including those issued by the Clean Development Mechanism) for CORSIA's pilot phase based on established criteria. While the established criteria provides members with a set of high-level principles relating to eligible offset programmes, CORSIA does not provide detailed and specific guidance relating to practical implementation.

While CORSIA represents the primary mechanism for addressing emissions from international aviation, this measure sits alongside other ICAO initiatives. CORSIA forms part of a broader basket of measures which include aircraft technology, operational improvements and sustainable aviation fuels.²⁶ These measures are intended to achieve ICAO's aspirational goals of improving fuel efficiency by two per cent per year and achieving carbon neutral growth by 2020.

These efforts are also complemented by measures adopted by the aviation industry. The International Air Transport Association (IATA) has developed a four-pillar mitigation strategy consisting of:²⁷

- technological developments, including new aircraft and engine technologies and sustainable aviation fuels
- operational measures relating to reduced aircraft weight, enhanced air traffic management and other initiatives to enhance fuel efficiency
- infrastructure improvements relating to air traffic services, including surveillance and navigation systems and technology that allow for optimal flight profiles and routes
- economic measures that provide an incentive for emissions reduction.

The final, fourth pillar of IATA's strategy has been implemented through CORSIA, which acts as the global-market based measure for international aviation. Most elements of this strategy are considered long-term solutions, and CORSIA is intended to provide an interim measure until the abatement potential of the other three mitigation pillars can be fully realised.²⁸

²⁴Cames et al., 2016.

²⁵These criteria were used by the ICAO Technical Advisory Body to evaluate the eligibility of carbon offsetting programmes for inclusion in the scheme. The criteria include additionality; use of credible estimates regarding baseline emission levels (i.e. the emissions which would have occurred in the absence of an offsetting project); existence of monitoring and verification procedures; permanence; minimal risk of emissions leakage; avoidance of double counting; and offset projects must do no net harm (i.e. consistent with international regulations and other requirements) (ICAO, 2019). In addition to these criteria, emissions units are only eligible if they relate to abatement activities implemented from 1 January 2016 through to 31 December 2020 (ICAO, 2020a).

²⁶ICAO, 2016

²⁷IATA is an industry trade body founded in 1945 that represents the interests of 290 airlines worldwide. IATA's role includes the development of industry policy and standards on issues relating to taxation, the environment, infrastructure and government regulation.

²⁸IATA, 2020.

Existing policy initiatives: The domestic framework

In addition to CORSIA, New Zealand has implemented a range of domestic measures intended to manage emissions from the aviation sector.

The most important of these is the New Zealand Emissions Trading Scheme (NZ ETS), which requires suppliers of aviation fuel to have credits equivalent to the emissions generated. Airlines that are significant users of aviation fuel may participate directly in the NZ ETS, and this is the approach Air New Zealand has adopted for fuel used for domestic flights. It is important to note that the NZ ETS only applies to flights within New Zealand's borders, but there is ongoing discussion about whether emissions resulting from flights to and/or from New Zealand should be formally included in New Zealand's emission reduction targets. New Zealand's Climate Change Commission has been tasked with providing a recommended course of action regarding this no later than 31 December 2024.

In addition, the New Southern Sky programme aims to modernise New Zealand's air navigation system through the inclusion of new and emerging technologies, including satellite navigation. The key benefits include shorter and more efficient flight routes resulting in reduced fuel consumption and associated emissions.²⁹

Improved air traffic management practices have also been adopted. For example, traffic flow management measures that enhance coordination between airline schedules and airport capacity can avoid airborne delays and minimise engine idling on the ground.³⁰ Nationally, optimised air traffic management was estimated to have saved approximately 37,000 tonnes of carbon dioxide emissions from domestic flights per year.³¹

Several industry-led initiatives have also been introduced. For example, Air New Zealand's FlyNeutral programme allows customers to purchase certified carbon credits equivalent to the emissions generated from their travel. Air New Zealand has also trialled the use of biofuels (as well as advocating for the development of domestic production capacity and biofuel use more broadly via the BioJet Consortium) and implemented operational measures aimed at reducing fuel consumption.

While improved navigation and air traffic management practices can provide one-off emissions savings, their ability to provide significant and sustained reductions, particularly for long-haul flights, is limited. In addition, the marginal nature of such initiatives ensures that any environmental benefits can be negated by growth in passenger volumes and aviation activity. Given the limited potential of operational measures and the exclusion of international aviation from the NZ ETS, alternative policy options should be explored.

²⁹Ministry of Transport (MOT), 2016.

³⁰ MOT, 2016.

³¹MOT, 2016. Note that while optimised air traffic management systems apply to all aircraft movements, an estimate of avoided emissions could not be calculated for international aviation (Airways New Zealand, pers. comm., 7 September 2020)

Alternative policy approaches

Following a careful evaluation of the particular challenges associated with reducing emissions from international air travel, incorporating an emissions price into the cost of air travel from New Zealand was identified as the most practical way forward.

Proposal 1: Incorporate an emissions price into the cost of air travel from New Zealand

Currently, tourists are not charged for the emissions they generate when flying internationally. Incorporating an emissions price into the cost of international air travel would send a clear signal to tourists about the environmental damage caused by their private travel decisions. There are several mechanisms that could be used to incorporate an emissions price into the cost of international aviation.

Levying a tax on aviation fuel – by extending the NZ ETS to international aviation, for example – would provide the most straightforward means of incorporating an emissions price into the cost of air travel. Increasing the cost of aviation fuel would provide airlines with an incentive to implement efficiency improvements, optimise flight operations and contribute to research and development efforts. A tax on fuel would also constrain future demand growth by increasing travel costs for consumers.

However, the taxation of fuel for international aviation is prohibited by certain bilateral air service agreements and, arguably, by international law such as the Chicago Convention and ICAO Resolution, which are described in Box 2.1.

Box 2.1: Barriers to taxing aviation fuel and emissions

Chicago Convention

The Chicago Convention 1944 provides the overarching regulatory and legal framework governing international aviation. Article 24 of the convention is frequently cited as one of the key barriers to imposing a tax on aviation fuel.³²

The exact provisions of article 24 state:

"Fuel ... on board an aircraft of a contracting State, on arrival in the territory of another contracting State and retained on board on leaving the territory of that State shall be exempt from customs duty, inspection fees or similar national or local duties and charges." 33

These provisions specifically ban certain types of taxes from being charged on fuel reserves on board an aircraft on arrival that remain on board at departure. However, the article does not contain any reference to taxing the supply of aviation fuel.

In addition, article 15 of the convention is sometimes cited as a barrier to the taxation of aviation fuels. The article states:

"No fees, dues or other charges shall be imposed by any contracting State in respect solely of the right of transit over or entry into or exit from its territory of any aircraft of a contracting State or persons or property thereon."³⁴

However, a fuel tax designed to address the negative climate externalities of aviation would not constitute a charge based solely on the right of transit or entry or exit.

In summary, it is doubtful that the provisions contained within the convention forbid the taxation of the supply of aviation fuels.³⁵ ICAO acknowledges that the convention does not definitively address taxation and fiscal matters.³⁶

ICAO assembly resolutions on a global market-based measure

A more compelling barrier to the taxation of the supply of aviation fuel stems from ICAO's Assembly Resolution A39-3 regarding the implementation of a global market-based measure scheme in 2016. ICAO's Assembly Resolution A39-3 states that "CORSIA or any other scheme decided by the Assembly is to be the market-based measure applying to CO₂ emissions from international aviation".³⁷ This text confirms the exclusive nature of any ICAO-developed scheme and constrains the development by member countries of more ambitious policies to address emissions.³⁸ More recent ICAO resolutions have reaffirmed the exclusive status of CORSIA, including Assembly Resolution A40-19, which was adopted in October 2019.³⁹

³²Transport & Environment, 2019.

³³ ICAO, 1944.

³⁴ICAO, 1944.

³⁵ Larsson et al., 2019.

³⁶ICAO, 2000.

³⁷ICAO, 2016.

³⁸ Lyle, 2018.

³⁹ICAO Resolution A40-19, paragraph 18 "determines" that CORSIA will be "the only global market-based measure applying to CO₂ emissions from international aviation so as to avoid a possible patchwork of duplicative State or regional MBMs [market-based measures]" (ICAO, 2020b).

ICAO resolution on taxation

Further guidance around the taxation of aviation fuel can be found in ICAO's resolution on taxation. Clause 1a of ICAO's policies on taxation states:

"When an aircraft registered in one Contracting State, or leased or chartered by an operator of that State, is engaged in international air transport ... its fuel, lubricants and other consumable technical supplies shall be exempt from customs or other duties on a reciprocal basis".⁴⁰

ICAO deems customs and other duties to include "import, export, excise, sales, consumption and internal duties and taxes of all kinds levied upon the fuel, lubricants and other consumable technical supplies".⁴¹ This definition covers a broader range of taxes and charges than article 24 of the Chicago Convention, and could prevent New Zealand from imposing any fuel tax.

In practice, this resolution has largely been implemented through air service agreements negotiated on a bilateral or multilateral basis.

Air service agreements

Air service agreements govern and regulate the operation of commercial airlines between contracting states. Internationally, most air service agreements contain tax exemption clauses that restrict the imposition of taxes, levies or other similar charges on aviation fuel and other consumables.⁴² Any air service agreements New Zealand is a party to are legally binding.

Some air service agreements negotiated by New Zealand with partner countries prohibit the charging of taxes, duties and other similar fees on aviation fuel. These provisions vary, but they can cover both fuel brought into New Zealand by aircraft and the supply of fuel within New Zealand. Air service agreements negotiated with some of the countries that represent key international tourism markets contain provisions which prevent the imposition of any taxes on aviation fuel. As such, the option of a fuel tax is not currently a viable option for managing most emissions from international flights.

In lieu of a direct tax on fuel, there are several payment vehicles through which an emissions charge could be applied. Consideration was given to incorporating an emissions charge into the existing International Visitor Conservation and Tourism Levy (IVL). The IVL is applied to most incoming tourists and is intended to generate revenue for tourism-related infrastructure and conservation initiatives.

However, there are several challenges associated with configuring the IVL to act as an emissions charge. Firstly, extending the IVL to include Australian tourists – traditionally New Zealand's single largest visitor market – would be difficult. Australian citizens are eligible for an Australian Resident Visa on arrival and are not required to interact with the immigration system through which the IVL is levied.

⁴⁰ICAO, 2000.

⁴¹ICAO, 2000.

⁴²Faber and O'Leary, 2018.

Secondly, there are inherent constraints associated with using the immigration system to address aviation emissions. The IVL is currently charged when international travellers apply for either an electronic travel authority or entry visa. However, both forms of entry contain provisions that allow for multiple entry over their duration of validity. Therefore, if an emissions charge is applied to the IVL, visitors would only be required to pay for the emissions resulting from a first journey to New Zealand – emissions from subsequent trips would be excluded.

Thirdly, New Zealanders are exempt from the IVL on the basis that they already contribute to infrastructure and conservation initiatives through general taxation. Exempting New Zealanders from paying an emissions charge would compromise the effectiveness of the policy and could be perceived as discriminatory against foreign nationals.

A distance-based passenger tax

One option for overcoming these issues involves the adoption of a broad-based taxation instrument that is universally applied to both visitors and New Zealanders. This could take the form of a departure tax that reflects an emissions charge relating to flights from New Zealand.⁴³ Such a tax could be incorporated into the ticket price with revenue collected by airlines to avoid inconveniencing passengers and passed to the relevant collecting authority.⁴⁴

Levying a departure tax on the basis of distance travelled provides a crude means of differentiating the tax based on the emissions attributable to a particular passenger's travel. For the purpose of administrative simplicity, the tax could be differentiated based on broad distance bands. For example, a short-haul flight to Australia or the Pacific Islands would incur a lesser charge than a long-haul flight to Europe. The tax could further be differentiated by travel class to reflect the larger emissions footprint associated with business and first-class travel.

In New Zealand's case, a tax with three distance bands seems appropriate given key international tourist markets fall broadly into three distinct geographical regions: Australia/Pacific Islands, Asia, and North America/Europe. Accordingly, the tax could consist of a short-haul band that covers flights to Australia and the Pacific Islands, a medium-haul band that applies to destinations in East and South-East Asia, and a long-haul band that covers the rest of the world. Table 2.1 shows how this classification would apply to New Zealand's top ten tourism markets (as of 2019).

⁴³The question arises as to whether such a tax could co-exist with the IVL. Given the differing objectives of the two instruments, it seems clear that it could. The IVL is primarily a user-pays charge intended to ensure tourists make a fair contribution towards the provision of infrastructure and conservation initiatives. The proposed departure tax is intended to internalise the external environmental costs of air travel and, in doing so, provide incentives for changes in travel behaviour and the development of new technologies.

⁴⁴Such an approach is similar to how the existing Border Clearance Levy is collected. The levy is included in the ticket prices of both arriving and departing passengers with the aim of funding border processing functions administered by the New Zealand Customs Service and Biosecurity New Zealand (Ministry for Primary Industries (MPI), 2020).

Table 2.1: International visitor and New Zealand-resident traveller arrival numbers for 2019.⁴⁵

Internation	al visitor arri	vals to New	Zealand	New Zealand-resident traveller arrivals			
Country of residence of visitors (top ten)	Distance (km)	Visitor arrivals 2019	Estimated total emissions (ktCO ₂)	By main country visited (top ten)	Distance (km)	Traveller arrivals 2019	Estimated total emissions (ktCO ₂)
Australia	2,158	1,537,988	283	Australia	2,158	1,277,489	235
China	9,294	407,141	426	Fiji	2,155	191,183	35
Japan	8,829	97,682	97	Cook Islands	3,013	107,392	28
South Korea	9,650	88,481	96	Samoa	2,890	67,046	17
Singapore	8,404	64,574	61	China	9,294	141,645	148
USA	10,480	367,958	434	Indonesia	7,673	83,183	72
UK	19,687	231,712	513	Japan	8,829	61,072	61
Germany	18,754	98,050	207	USA	10,480	205,589	242
Canada	11,354	73,037	93	UK	19,687	128,960	286
India	12,585	66,775	95	India	12,585	83,033	118

Connecting flights could be accounted for when determining a passenger's final destination and tax liability. This is similar to the approach used by other countries that have adopted distance-based taxes, where connecting flights are included based on certain criteria. For example, in the case of international connections, the United Kingdom's Air Passenger Duty extends to flights departing within 24 hours of the scheduled arrival of a preceding flight. Sweden's aviation tax also accounts for connecting flights, with the applicable tax rate based on a passenger's final destination regardless of the number of connecting flights taken. A flight is deemed to be connecting based on certain time-bound rules. In the case of connecting flights involving codeshare airlines, the tax would be collected by the airline selling the ticket.

The inclusion of connecting flights in any departure tax would ensure that the tax more closely reflects the cost of emissions associated with a journey. The alternative approach, where passengers were only charged for the first leg of their journey, would make the tax more arbitrary. It could also encourage gaming behaviour, and distort the international aviation market, by creating strong incentives to book long-haul return journeys via Australia (rather than flying direct or via a hub in Asia, for example).

⁴⁵Data relating to international passenger movement sourced from Stats NZ with flight distances based on a selected reference route. Emissions were calculated by combining information relating to passenger kilometres with aviation emissions factors published by the Ministry for the Environment (MfE, 2019).

⁴⁶HM Revenue and Customs, 2018.

⁴⁷Swedish Transport Agency, pers. comm., 25 August 2020.

It is important to acknowledge the potential risk associated with tourists seeking to avoid the tax by fragmenting their travel itineraries. For example, the introduction of the Swedish aviation tax was accompanied by Swedish travellers using neighbouring countries as a departure point for long-haul destinations to minimise their tax burden. Evidence from other European jurisdictions suggests that the extent of itinerary fragmentation among travellers is dependent on the accessibility of alternative departure points. The introduction of a distance-based passenger tax in the Netherlands in 2008 led to a large reallocation of Dutch passengers to airports in neighbouring countries. In contrast, the German passenger tax was not associated with any significant substitution effect, which may be partly explained by the lack of easily accessible departure points in neighbouring countries.

New Zealand's relative isolation and lack of convenient alternative departure hubs may minimise the risk of itinerary fragmentation. In addition, liability for additional charges and taxes at intermediate destinations and risks relating to non-protected flight transfers may also disincentivise such behaviour. In the case of New Zealand, alternative international departure points for travellers include both Australia and Fiji, with both countries levying a tax on departing passengers. The Australian passenger movement charge consists of a flat fee of approximately NZ\$65 per passenger, while the departure tax in Fiji levies a charge of approximately NZ\$140 per passenger. While neither tax is levied on transiting passengers, they may still discourage itinerary fragmentation by increasing the cost of stopover visits intended to minimise tax liability.

Distance-based passenger taxes are relatively common in Europe (see Table 2.2).⁵¹ In some cases, these taxes are also differentiated by class of travel. While the original policy objective of some of these taxes may have been to generate revenue, they are increasingly seen as a means to advance climate mitigation objectives by constraining demand growth.

For example, the United Kingdom's Air Passenger Duty was introduced in 1994 to ensure international aviation made a fair contribution to public finances. While the tax was initially seen as having secondary benefits for climate mitigation, the existence of the duty and revisions to rates are now increasingly justified on climate grounds.⁵² The Air Passenger Duty applies a charging schedule differentiated by distance and travel class. Another example of a distance-based passenger tax is the French eco-tax introduced in 2020. The tax is differentiated by distance with revenues earmarked specifically for public transport initiatives in France.

⁴⁸Swedish Transport Agency, pers. comm., 25 August 2020.

⁴⁹It was estimated that the introduction of the tax led to approximately one million Dutch passengers departing from foreign airports (Gordjin and Kolkman, 2011).

⁵⁰Falk and Hagsten, 2018.

⁵¹CE Delft and SEO Amsterdam Economics, 2019.

⁵²Seely, 2019a, b.

Table 2.2: Selected European distance-based air passenger taxes.

Country	Тах	Year of introduction	Tax rate and distance group ⁵³ Per-passenger tax rate for lowest class of travel (if applicable) as at July 2020. Rates and tax structures are subject to change.	
Austria ⁵⁴	Air Transport Levy	2011	€3.50 for short-haul flights €7.50 for medium-haul flights €17.50 for long-haul flights	
F	Solidarity Tax/Eco Tax	2006/2020	€2.63 for domestic and short-haul destinations €7.51 for other destinations	
France ⁵⁵	Civil Aviation Tax	1999	€4.63 for domestic and short-haul destinations €8.32 for other destinations	
Germany ⁵⁶	Air Travel Tax	2012	€12.90 for domestic and short-haul destinations €32.67 for medium-haul destinations €58.82 for long-haul destinations	
Sweden ⁵⁷	Air Travel Tax	2018	SEK62 for domestic and short-haul destinations SEK260 for medium-haul destinations SEK416 for long-haul destinations	
United Kingdom ⁵⁸	Air Passenger Duty	1994	£13 for domestic and short-haul destinations £80 for other destinations	

Some countries have explicitly acknowledged that passenger taxes can be introduced relatively easily with minimal legal risk while alternative policy approaches are explored. For example, Sweden's Air Travel Tax is designed to address emissions while more effective measures, including the removal of tax exemption provisions in air service agreements, are pursued with international partners.⁵⁹

⁵³Note that the distance descriptors used in Table 2.2 (e.g. short haul) are intended to be generic only. For detailed and specific information, refer to the website of the relevant administering agency listed in the footnote.

⁵⁴Austrian Ministry of Finance, 2020.

⁵⁵French Ministry of Ecological and Solidarity Transition, 2020.

⁵⁶German Federal Customs Service, no date.

⁵⁷Swedish Tax Authority, no date.

⁵⁸HM Revenue and Customs, 2019.

⁵⁹Swedish Transport Agency, pers. comm., 25 August 2020.

Despite their relatively widespread implementation, passenger taxes have been the subject of legal challenges based on the Chicago Convention. For example, legal arguments have been levelled as to whether a passenger tax constitutes a breach of article 15 of the convention by imposing a charge on departure. However, in the case of legal proceedings in several European countries, article 15 has been interpreted as a non-discrimination clause designed to prevent a contracting state from restricting the activities of foreign registered airlines. If that interpretation is correct, a proposal to levy the tax on a universal basis would not violate article 15. In addition, the German Air Travel Tax was subject to a legal challenge on the basis that it violated article 24 of the convention. The resulting legal proceedings found that as the passenger tax was unrelated to the fuel introduced to a territory aboard an aircraft, the tax did not violate article 24.62



Source: Schwede66, Wikimedia Commons

Figure 2.2: Stirling Point, Bluff – one of the southernmost points in New Zealand – marks distances and directions to different locations around the globe. A departure tax that varies according to distance to destination could provide a means of aligning the charge with the environmental impact attributable to a passenger's flight.

While a passenger tax differentiated according to distance bands is an administratively simple option which minimises potential legal risk, it is an approach that has several limitations. The use of distance bands is a blunt mechanism and could lead to passengers on flights of differing lengths being subject to similar charges. In addition, such a tax provides little incentive for passengers to choose airlines with a relatively small greenhouse gas footprint, or for airlines themselves to invest in developing lower carbon technologies to reduce that footprint.

⁶⁰Article 15 of the Chicago Convention states: "No fees, dues or other charges shall be imposed by any contracting State in respect solely of the right of transit over or entry into or exit from its territory of any aircraft of a contracting State or persons or property thereon" (ICAO, 1944).

⁶¹Faber and Huigen, 2018.

⁶² Faber and Huigen, 2018.

An alternative passenger tax configuration, where the amount of tax payable was more closely correlated with emissions generated, could potentially address these deficiencies. Calculating the tax on the basis of actual distance travelled, travel class, aircraft fuel efficiency and the type of fuel used would ensure it more accurately reflected the emissions generated by each passenger. Furthermore, by setting the tax according to aircraft fuel efficiency and fuel type, airlines that have already invested in these measures would derive a competitive advantage in the form of lower passenger tax rates. This would also provide operators with an ongoing incentive to invest in more efficient aircraft and make greater use of sustainable aviation fuels.

Such an approach would be more complex to administer and could also create additional legal risk. This is because it would be more closely correlated to a passenger's fuel consumption. For example, previous attempts to reform the United Kingdom's Air Passenger Duty to a per flight tax based on distance and maximum take-off weight were abandoned because of legal concerns. These concerns focused on whether a per flight tax would effectively constitute an indirect tax on fuel and breach international law given the close correlation between distance and fuel consumption.⁶³ The obvious counter argument is that a climate-related charge related to distance and the technology being deployed is quite distinct. The point has not been litigated to date.

Hypothecation of tax revenue

The introduction of a distance-based passenger tax provides a source of scalable funding for climate-related initiatives. How much funding depends, of course, on the rate at which any such tax is imposed. Applying a range of rates to passenger movements for New Zealand's top ten tourist markets in 2019 (see Table 2.1), a departure tax could generate between NZ\$100—\$400 million.⁶⁴ The lower bound estimate is based on a tax rate of NZ\$35 per tonne of carbon dioxide – roughly equivalent to the NZ ETS price as of October 2020. For passengers travelling economy class to the United Kingdom or the east coast of Australia, for example, that would translate into departure charges of around NZ\$60 and NZ\$6 respectively.

The upper bound estimate is based on tax rates equivalent to the United Kingdom's Air Passenger Duty, but with distance bands reconfigured for New Zealand's key visitor markets as shown in Table 2.1. Passengers flying to short-haul destinations in Australia and the Pacific Islands would be subject to an NZ\$25 charge for economy class travel and NZ\$50 for non-economy class travel. Mediumhaul destinations in South-East and East Asia would see economy class passengers charged NZ\$90 and premium class travellers charged NZ\$195. A long-haul band could be applied to all other destinations, with passengers charged NZ\$155 for economy class travel and NZ\$340 for premium travel.⁶⁵

⁶³Faber and Huigen, 2018.

⁶⁴Several simplifying assumptions were employed to calculate the amount of revenue that could be generated. Figures should be interpreted in terms of order of magnitude only.

⁶⁵Tax rates for short-haul and long-haul distance bands were based on the current configuration of the United Kingdom's Air Passenger Duty, which consists of two distance bands (as described in Table 2.2). These tax rates were used to calculate a hypothetical, intermediate charge for both economy and premium class travel to medium-haul destinations.

There are three broad areas where earmarked revenue could be directed to support efforts to address both aviation emissions and associated environmental damages:

- Support for research and development activities within the aviation industry to enhance opportunities for in-sector abatement.
- Climate finance for broader climate mitigation and adaptation projects. By focusing spending in developing countries, such as those in the Pacific, there is an opportunity here to address equity as well as environmental objectives.
- Offsetting initiatives. These could be designed to complement the existing CORSIA framework (e.g. by focusing on the baseline emissions from international aviation).

The use of revenue for funding additional offsetting initiatives beyond CORSIA could create significant risks over the long term. While offsetting can slow the build-up of carbon in the atmosphere, it can disincentivise and detract from efforts to develop options that address aviation emissions at the source. This risk is particularly relevant to the aviation sector, given the current absence of cost-effective mitigation options. In addition, some types of offset are inherently risky. For example, carbon stored by forests can be quickly released back into the atmosphere in the event of fires, pests and other disturbances – risks that are likely to be exacerbated in future by climate change itself.⁶⁶

That leaves two main options for the use of revenues from any passenger tax. Allocating funding across both research and development and climate-related development aid would provide a means of reducing aviation emissions while also addressing some of the risk climate change poses to particularly vulnerable countries.

Research and development

Directing departure tax revenues towards research and development could enhance opportunities for in-sector abatement by supporting the introduction and deployment of lower carbon technologies. While research and development will not have any immediate tangible impact on emissions, it forms a critical component of long-term efforts to decarbonise the aviation sector.

Hypothecating revenue from aviation taxes for research and development appears to be increasingly perceived as an appropriate use of revenue.⁶⁷ For example, Germany recently announced its intention to reform its aviation taxation regime and hypothecate funds for the development of alternative fuels and energy sources.⁶⁸

In the New Zealand context, questions would naturally arise about how the revenues resulting from any departure tax should be spent. Ultimately, the emphasis here should be on fostering the development of a basket of technologies that, over time, have the potential to become cost-competitive substitutes for conventional kerosene-powered jet engines. As in any other area of research and development policy, reserving public money for the development of a particular 'winner' technology comes with the risk of unintended consequences and the creation of ventures whose existence relies on ongoing public financial support.

⁶⁶See chapter four of Farms, forests and fossil fuels: The next great landscape transformation? (PCE, 2019a).

⁶⁷Lyle, 2018.

⁶⁸DW, 2019.

Questions will also arise about where any revenues should be spent. For technologies in which New Zealand has well established pre-existing expertise (e.g. biofuel production), consideration could be given to funding ongoing domestic research and deployment initiatives. More generally though, given our limited size, it seems unlikely that New Zealand could foreseeably have expertise across the entire range of prospective low-carbon aviation technologies. As such, opportunities to partner with overseas research institutions could also be explored. Bilateral collaboration would provide an opportunity for New Zealand to leverage existing research capability and contribute funds towards projects that have demonstrable abatement potential.

Internationally, there are research institutions that focus specifically on addressing the environmental impacts associated with aviation. For example, the Aerospace Technology Institute (ATI) in the United Kingdom is a joint government and industry programme that aims to invest £3.9 billion to, among other things, develop new technologies aimed at reducing the emissions intensity of commercial aircraft.⁶⁹ The institute engages in bilateral research and collaboration with other nations to pool resources and expertise for specific projects.⁷⁰ Other examples of ongoing research initiatives include those being pursued by the National Aeronautics and Space Administration (NASA) aimed at developing new fuel-efficient designs for commercial aircraft.⁷¹

Options for decarbonising aviation are also the subject of active research by universities. The development of carbon-neutral synthetic liquid fuel derived from sunlight and air is currently being progressed by researchers at ETH Zurich in Switzerland.⁷² Other institutions such as Delft University of Technology in the Netherlands have focused on more efficient aircraft designs and sustainable energy and propulsion technologies, including synthetic kerosene.⁷³

Foreign aviation research programmes have often been established to assist their own aviation industry or advance national economic interests. Having the appropriate legal and governance arrangements in place would be needed to safeguard any investments and ensure New Zealand is able to appropriate any benefit from research activities conducted overseas.

Climate-related development aid

While the development of low-carbon aviation technology would yield benefits over the long term, it would do little to reduce emissions – and their resulting damage – more immediately. As such, a portion of departure tax revenues could be used to supplement existing public spending on climate mitigation and adaptation efforts.

Given the importance of the Pacific Islands as a tourism destination for New Zealanders (see Table 2.1), and the equity implications of introducing a departure tax on Pacific Islanders returning home, there is a strong case for focusing any additional spending it makes possible in the Pacific. That idea is also supported by the uniquely vulnerable character of many Pacific Island nations to the effects of climate change and their status as developing countries (which New Zealand and other developed countries have committed to support through the UNFCCC framework).

⁶⁹ATI, no date a.

⁷⁰ATI, no date b.

⁷¹NASA, 2020.

⁷²ETH Zurich, 2019.

⁷³TU Delft, no date.

At present, New Zealand's aid and development assistance is already heavily oriented towards the Pacific Islands, which received NZ\$447 million or about 60 per cent of New Zealand's total official development assistance for 2019/20. Of the money allocated to climate-related aid in the Pacific, NZ\$33.37 million was allocated to adaptation, NZ\$5.65 million to mitigation and NZ\$19.56 million was cross-cutting (i.e. had both adaptation and mitigation objectives).⁷⁴ Resources generated from the passenger tax could supplement existing funding channels to further support initiatives that deliver both climate mitigation and adaptation benefits, as well as contribute to broader sustainable development objectives.

For example, official development assistance from New Zealand has played a crucial role in financing renewable energy projects in Tokelau. The installation of solar grids and biofuel-powered generators has enabled the territory to transition from a sole reliance on diesel to renewable sources that fulfil domestic electricity requirements. The use of renewable energy sources not only delivers climate mitigation benefits but also has allowed Tokelau to achieve a high degree of energy independence.⁷⁵



Source: Litia Maiava, 350.org, Flickr

Figure 2.3: Tokelau is one of the first nations in the world to use almost 100 per cent renewable energy to supply their electricity needs.⁷⁶ Funds generated by a departure tax could provide a source of climate finance to contribute to the development of clean energy projects in other Pacific Islands.

⁷⁴Ministry of Foreign Affairs and Trade, pers. comm., 20 August 2020. Note: All figures are preliminary for the 2019/20 financial year.

⁷⁵Government of Tokelau, no date.

⁷⁶Radio New Zealand (RNZ), 2020b.

There is still considerable potential for the development of additional renewable energy capacity and infrastructure in many Pacific Island nations as their economies are generally heavily dependent on petroleum fuel for electricity and transport. While larger countries including Fiji and Samoa have a relatively large share of electricity derived from renewables (53 and 33 per cent respectively), the share for smaller nations tends to be marginal. Investments in additional renewable generating capacity would lower emissions by displacing diesel generation and facilitating the adoption of electric vehicles. This would enhance the energy security of these countries through increased energy diversification and reduced exposure to fuel supply disruptions.

Proposal 2: A plurilateral agreement

While a distance-based passenger tax could be implemented relatively easily by New Zealand, a unilateral approach to addressing international aviation emissions suffers from two quite fundamental limitations.

First, given New Zealand's small share of the international aviation market, any departure tax is restricted to passengers departing from New Zealand and will have only limited benefits in terms of climate mitigation or technological innovation. In addition, as aviation is an inherently global sector, there is a risk that unilateral measures could lead to emissions leakage as tourists choose other destinations.

Second, as discussed in Box 2.1, historic aviation agreements, which were not developed with climate change in mind, restrict the types of policies that nations can unilaterally implement. There is now a clear need for a more flexible and ambitious approach. While passenger taxes do present a way forward in the short term, it is difficult to design them in a way that provides the same set of direct mitigation incentives that a straightforward tax on aviation fuel would.

While these issues could be addressed through existing international frameworks (e.g. CORSIA), there is every chance that countries reluctant to adopt a more ambitious approach could derail efforts. Given that, New Zealand could explore the possibility of promoting more ambitious action on international aviation emissions via a plurilateral agreement. New Zealand has, in recent times, adopted a similar approach to other climate-related issues, notably its leadership on fossil fuel subsidies.⁷⁹

New Zealand could take a leadership role in galvanising those countries wishing to promote a higher level of ambition on international aviation emissions. This could involve working towards an agreement that would address emissions that currently fall beyond the scope of CORSIA (i.e. the estimated 914 million tonnes of carbon dioxide emissions generated in 2019).⁸⁰ The adoption of a passenger tax as an initial unilateral measure could enhance New Zealand's credibility and international standing in developing such an agreement. New Zealand could also leverage this opportunity to pursue more effective policy instruments. For example, an agreement to tax aviation fuel directly could operate on an 'opt in' basis, by only applying to flights between countries that have agreed to participate.

⁷⁷Twomey et al., 2019.

⁷⁸Pacific Community, 2019.

⁷⁹Along with Costa Rica, Fiji, Iceland and Norway, New Zealand is negotiating an Agreement on Climate Change, Trade and Sustainability. For additional information, refer to https://www.mfat.govt.nz/en/trade/free-trade-agreements/climate/ agreement-on-climate-change-trade-and-sustainability-accts-negotiations/.

⁸⁰ Graver, 2020.

One way of achieving collective action on aviation emissions through a plurilateral approach could involve the adoption of a climate club model along the lines proposed by William Nordhaus and others.⁸¹ In an international aviation context, club members could agree to remove the restrictions on the taxation of aviation fuel that are found in most air service agreements. This would eliminate the need to renegotiate air service agreements on an individual basis and would allow for the introduction of a tax on the fuel that was used on flights between member countries.

For flights between member and non-member countries, a passenger tax could be retained in order to incentivise participation and reduce emissions leakage. The passenger tax would need to be set at a sufficiently high level to incentivise participation and could be explicitly listed on tickets to raise awareness amongst passengers from non-member countries. Revenues from both taxes could be used to further support decarbonisation efforts within the aviation sector and other climate-related initiatives, including official development assistance.

In developing such an approach, a careful balance would need to be struck between collaborating with a larger group of countries and preventing less ambitious countries from impeding progress. A plurilateral agreement would quickly become bogged down in the same way the existing ICAO process has if it included less motivated countries. Working with a smaller group of motivated countries would enable more rapid progress.

What sort of impact might these proposals have?

Effectiveness: How would tourists respond to increased fare costs?

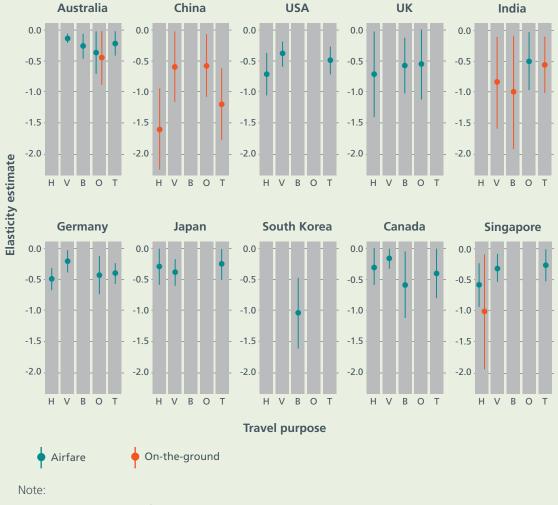
The environmental effectiveness of a passenger tax intended to reduce aviation emissions depends significantly on how tourists are likely to respond. If tourists are sensitive to the cost of travelling from New Zealand, then any increase in airfare prices will tend to reduce visitor demand.

The sensitivity of demand to changes in airfares can be estimated empirically by calculating price elasticities for key tourism markets. While measures of elasticity have previously been derived for New Zealand's tourism offering for key international visitor markets, these estimates are somewhat dated. As such, research was commissioned for this report to provide an updated understanding of the potential impact of an emissions charge on visitor demand. The results of this work (detailed in Box 2.2) indicate that international tourist arrivals are not particularly responsive to changes in the price of airfares. This suggests that for many potential visitors, New Zealand is something of a 'bucket list' destination, where fluctuations in prices make little difference to individual travel decisions.

Box 2.2: Estimated elasticities for key New Zealand tourism markets by country of origin and purpose of travel

The price elasticity of demand measures how responsive demand is to changes in the price of a good or service. For this investigation, research was commissioned to estimate how responsive visitor arrivals are to changes in both airfare and on-the-ground prices.⁸²

The research estimated price elasticities for ten key international visitor markets further disaggregated by purpose of travel. Figure 2.4 shows the estimated price elasticities that were statistically significant for both airfare and on-the-ground prices.⁸³



 $\mathbf{H} = \text{Holiday}$; $\mathbf{V} = \text{Visiting friends and relatives}$; $\mathbf{B} = \text{Business}$; $\mathbf{O} = \text{Other}$; $\mathbf{T} = \text{Total}$.

Points represent the elasticity estimate and 'whiskers' show the corresponding 90 per cent confidence interval associated with that estimate.

Figure 2.4: Estimated price elasticities by country of origin and purpose of travel.

⁸²On-the-ground elasticity estimates were calculated using a composite index that reflects the price of a typical bundle of tourism-related goods and services consumed by international visitors in New Zealand.

⁸³The absence of elasticity estimates for certain visitor markets and travel purposes in Figure 2.4 indicates the obtained results were not statistically significant. In addition, the elasticity estimates for key international visitor markets were calculated using data collected prior to the Covid-19 pandemic. Although the long-term implications are still unclear, the pandemic may have a lasting impact on travel demand and visitor behaviour and preferences. This may impact how responsive future visitors are to changes in the travel costs associated with New Zealand's tourism offering.

The estimated elasticities shown in Figure 2.4 are negative, indicating that (historically at least) an increase in airfare or on-the-ground costs has resulted in a fall in visitor demand. For the most part, the estimated elasticities fall between 0 and -1, which indicates that a one per cent increase in price results in a less than proportional fall in demand.

Across most visitor markets and travel purposes, the elasticity estimates indicate that demand is relatively unresponsive to changes in the price of airfares. For example, the estimate for holiday travellers from Germany (–0.49) implies that a ten per cent increase in airfare prices could result in a roughly five per cent decrease in arrivals. Elasticity estimates of similar magnitude were obtained for visitor segments in other key markets, including Australia and Japan.

Certain visitor segments in other key visitor markets displayed slightly greater sensitivity to the price of airfares. For holiday travellers from the United Kingdom, for example, a ten per cent increase in airfares could lead to an approximately seven per cent decrease in demand. A similar pattern was observed for holiday travellers from the United States.

Interestingly, business travellers from South Korea displayed the most sensitivity to changes in airfare prices. Any increase in the price of airfares would be associated with a greater than proportional fall in demand.

The airfare price elasticity estimates obtained for arrivals from China and India were generally not statistically significant. However, these markets were sensitive to changes in on-the-ground prices experienced in New Zealand. For certain segments within these markets, an increase in on-the-ground prices could result in a proportionately greater reduction in arrivals. As consumers typically experience airfare and on-the-ground prices differently, these estimates should not be used to infer a demand response to changes in the price of airfares.

These results are generally consistent with previous estimates for New Zealand's tourism offering. For example, work by Schiff and Becken (2011) found that demand elasticities for visitor arrivals from the United Kingdom, United States and Germany ranged between -0.29 and -0.87. Visitors arrivals from Asian markets demonstrated preferences that were more price sensitive, with elasticity estimates ranging between -1.09 and -1.55 for China, Japan and South Korea.⁸⁴

Overseas experience also provides an insight into the likely effects of implementing a tax on departures from New Zealand. Research commissioned by the airline industry in 2015 indicated that the United Kingdom's Air Passenger Duty may have suppressed demand by ten per cent.⁸⁵ Other research indicates that while the Air Passenger Duty did reduce outbound travel to some destinations, the magnitude of this effect was minor.⁸⁶ In the case of the German and Austrian departure taxes, the taxes had a negative impact on passenger demand over the short term. The tax reduced passenger volumes by nine per cent during the year of introduction and five per cent in the following year in Austria and Germany.⁸⁷

⁸⁴Elasticity estimates are not directly comparable with those presented in Figure 2.4 due to differences in methodological compilation, including the definition of visitor arrival segments and reference price indices.

⁸⁵ PWC, 2015.

⁸⁶ Seetaram et al., 2014.

⁸⁷ Falk and Hagsten, 2018.

Framed in the context of the elasticity estimates presented in Figure 2.4, the introduction of a passenger tax would have a negative impact on tourist demand, although it is likely to be modest. Obviously, the magnitude of any possible demand response will depend on the level of any such passenger tax. Economy class rates based on the United Kingdom's Air Passenger Duty, for example, would represent one per cent of a typical Australian visitor's spending while in New Zealand. This figure would be slightly higher for tourists from medium- and long-haul destinations. For example, the tax rate for an economy class fare would represent two and five per cent of average per visitor expenditure for tourists from China and the United States respectively.⁸⁸

In summary, the introduction of a tax would help to reduce aviation emissions by constraining visitor demand and, depending on how it was designed, by incentivising technological change. In addition, the tax would provide a source of revenue which could be directed towards mitigating aviation emissions and supporting wider climate adaptation efforts. As discussed earlier in the chapter, this funding should in part be directed towards supporting the development of low-carbon aviation technologies, including alternative fuel and energy sources, to provide this sector with viable mitigation options.

The implementation of a tax on international air travel also addresses the market distortions faced by New Zealand travellers. Domestic air travel is subject to a range of taxes, including goods and services tax (GST) on tickets and a carbon price signalled through the NZ ETS. In contrast, international aviation is subject to a preferential regime that excludes an emissions charge or the levying of GST on airline tickets and fuel.

This imbalance potentially creates a distortion for New Zealand travellers at the margin, which incentivises short-haul international travel. Applying a tax on international travel could address this imbalance and provide an incentive for New Zealand tourists to travel domestically, resulting in fewer emissions. For international tourists, a departure tax may result in an increase in the average duration of visit. Increased travel costs could provide an incentive for tourists to spread this fixed cost over a larger number of days. This may at least partially offset any negative economic impact from reduced tourist numbers and could decrease the emissions intensity of any visit.⁸⁹

Although the elasticity estimates presented in Figure 2.4 are not disaggregated by expenditure, it is likely that low-spending visitors are more responsive to an increase in travel costs and less likely to visit New Zealand. Accordingly, the introduction of a passenger tax may support New Zealand's transition towards a high-value tourism model.

⁸⁸ Note that calculations are based on the tax rates used by the Air Passenger Duty in the United Kingdom. Country-specific tourism expenditure estimates are derived from international tourism forecasts published by the Ministry of Business, Innovation and Employment for 2019 (MBIE, 2019a). Figures relating to average tourist expenditure were calculated by dividing total visitor spending by total visitor arrivals for each tourist market.

⁸⁹ Gössling and Higham, 2020.

Climate change and visitor perceptions

The introduction of a passenger tax would entail costs for New Zealand's tourism industry and wider economy in the form of reduced visitor numbers and consumer spending. However, these economic costs must be framed in the context of the risk posed to New Zealand's tourism offering from visitors increasingly concerned over the environmental impact of their activities. Although the primary purpose of a passenger tax is to reduce emissions from aviation, it may have the co-benefit of enhancing the resilience of New Zealand's tourism sector.

As a tourist destination heavily dependent on an emissions-intensive transport mode with limited mitigation options, New Zealand is particularly susceptible to changing consumer preferences, including *flygskam*, or flight shame. This phenomenon refers to the increasing tendency for tourists to change their behaviour and avoid air travel because of the resulting carbon dioxide emissions.⁹⁰

The introduction of a passenger tax specifically targeted at mitigating emissions from aviation may act as an 'insurance policy' for New Zealand's tourism offering. As previously noted, a passenger tax could support the adoption of a tourism model that yields greater economic benefit per unit of aviation emissions.

In addition, levying a tax directed towards research and development, with some funds directed towards climate-related initiatives in the Pacific Islands, may reduce the sector's susceptibility to changing tourist preferences. Furthermore, an emissions charge combined with proactive international action could enhance the reputational standing of New Zealand's tourism market as a climate leader and appeal to the preferences of environmentally conscious visitors.⁹¹

This is consistent with the findings of recent research conducted by Tourism New Zealand relating to consumer perceptions of travel and climate change. 92 The results indicate that three quarters of consumers expect government and businesses to lead environmental initiatives to drive change at the scale required. Such efforts could provide tangible economic benefits. For example, the research demonstrated that potential visitors are 60 per cent more likely to actively consider visiting if they perceive New Zealand as being more sustainable than competing destinations.

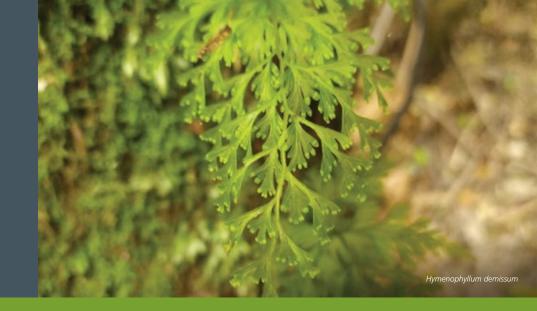
In addition, consumers were willing to respond to environmental initiatives that did not significantly detract from their holiday experience. For example, 80 per cent of potential visitors indicated they would still choose to visit New Zealand if visitor fees increased by 15 per cent, while 50 per cent of potential visitors would be willing to accommodate up to double the fees. ⁹³ Overall, this suggests that tourists would be broadly accepting and even supportive of the proposed policy measures outlined in this chapter.

⁹⁰For a more comprehensive discussion of the environmental vulnerabilities facing New Zealand's tourism sector, including flight shame, see chapter six of *Pristine*, *popular*... *imperilled? The environmental consequences of projected tourism growth* (PCE, 2019b).

⁹¹ Gössling and Higham, 2020.

⁹²TNZ, 2020.

⁹³These figures were based on research conducted prior to the Covid-19 pandemic. Although the long-term implications are unclear, the pandemic may have a lasting impact on travel demand and visitor behaviour and preferences.



Government tourism funding through a sustainability lens: Introducing environmental and social conditionality

Summary and recommendations

Sustained growth in tourist numbers has exacerbated a variety of place-based environmental pressures in New Zealand, including those associated with water quality and waste generation. To date, the Government has addressed these issues mainly by subsidising the construction of toilets, wastewater networks, rubbish bins, car parks and related infrastructure. But in the debate about who should pay for this infrastructure, the more fundamental question about whether communities actually want to accommodate more visitor growth has not been asked.

As tourism re-emerges in the wake of Covid-19, I recommend that any future central government spending on tourism-related infrastructure should be made conditional on two things:

- That it is consistent with the sort of tourism residents, mana whenua and local businesses want in their midst. This means developing a genuine, community-owned destination management plan as distinct from a destination marketing plan.
- That any infrastructure that is subsidised meets high environmental performance standards.

Mana whenua and communities situated near major tourism attractions often have little control over visitor numbers, nor the financial resources to invest in initiatives to mitigate the pressures from visitor growth. Over time, the weight of visitors can put at risk some of the qualities that made places attractive to live in and visit in the first place.

PCE's previous report on tourism – *Pristine, popular... imperilled? The environmental consequences of projected tourism growth* – highlighted some of the costs imposed on the environment and wider society by local tourism pressures, namely water quality degradation, solid waste generation and visitor density. Investment in infrastructure can help to reduce some these pressures. But, by facilitating more visitation, it can also serve to shift the environmental burden of tourism elsewhere.

Much of the existing debate has been about who should pay for this infrastructure. The consensus has been that tourists – as beneficiaries of mixed-use infrastructure – should contribute financially to its development and upkeep.¹ The creation of the International Visitor Conservation and Tourism Levy (IVL) in 2019 is recognition of that idea. It requires inbound visitors to pay \$35, money then used to address, among other things, tourism infrastructure issues. A similar rationale has been put forward in support of the 'bed tax' proposed to enable Queenstown to meet rising infrastructure costs.² Central government has come to the table and provided a variety of funding support for tourism infrastructure, like the \$100 million Tourism Infrastructure Fund (TIF).

But this debate misses a broader question about who decides the terms on which tourism takes place. Most significantly, it assumes that accommodating growth is what mana whenua and communities want. Yet, prior to Covid-19, some communities around New Zealand were expressing reservations about growth in tourist numbers.³ The sentiment is one I have encountered repeatedly during this investigation.

While existing government tourism policy, such as investing in mitigating infrastructure, has helped to address some pressures, it has largely been deaf to concerns about growth. The recent promotion of destination management planning has been welcome, but existing plans have tended to focus on accommodating growth and improving visitor experience rather than addressing host community or environmental concerns.

Through its various investments and funds, the Government has a valuable non-regulatory mechanism to address not only visitor experience and growth but also social and environmental concerns. Very simply, all government tourism funding decisions should be viewed through a sustainability lens. Investing in visitor experience cannot be separated from the experience of local communities or the physical environment they live in. After all, it is the environment and people that most visitors come to see.

This chapter proposes that if the Government wishes to continue funding tourism-related infrastructure, it should make this conditional on community and environmental criteria. To ensure that mana whenua and community views are incorporated into decision-making processes, funding decisions should be conditional on supporting their vision of tourism articulated through a local destination management plan. Environmental performance standards and green procurement processes should be embedded in any criteria that those seeking funding need to meet.

This proposal is an opportunity for the Government to help communities create sustainable solutions to the tourism pressures that they face. In practice, some infrastructure may not be funded because it will not meet these conditions. However, the current pause in international tourism provides a golden opportunity to apply a sustainability lens to funding decisions going forward to ensure that any government support for tourism promotes sustainable outcomes for communities.

¹ See New Zealand Productivity Commission (NZPC) (2019, pp.257–279) for an overview of this discussion.

² RNZ, 2020c.

³ Examples include places like Wānaka and Akaroa. The March 2020 Mood of the Nation survey also notes that 54% of those surveyed felt that predicted growth was too great (Kantar, 2020).



Source: Lawrence Murray, Wikimedia Commons

Figure 3.1: Queenstown, a popular tourist destination in the South Island. A controversial bed tax was proposed for Queenstown in 2019 to cover rising infrastructure costs. The introduction of this levy was postponed because of the Covid-19 pandemic.

Existing policy approaches

Pristine, popular... imperilled? identified six pressures associated with the growth of New Zealand's tourism industry. Some of these were national – or even global – in scale: greenhouse gas emissions and biosecurity risk are two examples. Others were much more visible at particular sites: solid waste generation, water quality degradation and visitor density.

The Government has attempted to help communities manage these place-based pressures using three main policy tools: geographic dispersal, government funding and destination management.

Geographic dispersal

The dispersal of tourists from popular destinations to less popular ones can occur for a range of reasons. To some extent, dispersal is an organic process that happens as tourists search for new places off the beaten track. But dispersal can also result from more deliberate attempts by government or industry to shape the geographic distribution of tourism activity. Whether intended or not, geographic dispersal can have both desirable and undesirable effects.

In recent years, the Government has actively pursued greater geographic dispersal of visitors. The objective has been two-fold: to promote regional economic development and to reduce environmental and societal pressures at popular destinations. Initiatives include the "5As" investment framework contained in the *New Zealand-Aotearoa Government Tourism Strategy*, ⁴ Tourism New Zealand's (TNZ) stated objective to grow regional spend, ⁵ and using the Provincial Growth Fund to strengthen regional visitor offerings. ⁶

Using geographic dispersal to address place-based environmental pressures is of debatable effectiveness. Pressure is only reduced if there is a decrease or stabilisation in visitation at popular locations. There appeared to be little evidence of this happening prior to Covid-19 – international and domestic visitor spending between gateway and non-gateway regions has remained relatively static over time.⁷

Dispersal has the potential to spread the costs of tourism. These costs can be particularly severe for the physical environment if infrastructure is not designed for visitor growth. For example, the rapid increase in visitors to Roys Peak, west of Wānaka, placed pressure on existing infrastructure resulting in complaints about congestion, rubbish and human waste, and necessitating the development of a new car park and toilet.⁸ Similarly, the lack of infrastructure to accommodate peak visitor numbers in Akaroa has led to congestion and human health and environmental issues from the lack of toilet facilities.

Visitor dispersal and growth can also create pressures on people. These pressures can mount if growth is not in line with principles such as kaitiakitanga and manaakitanga, or if the wellbeing of whānau and the environment are not considered. Examples include uneven economic development, wāhi tapu not being respected, and increased pressure on resources and physical damage. Communities are similarly affected if growth is imposed in a way that leaves them feeling it is no longer 'their' community.

The double-edged nature of geographic dispersal is most visible in small communities where significant growth in visitor numbers has taken place. One notable example is the effect of cruise tourism in Akaroa (see Box 3.1). Increasing visitor numbers in the Matamata-Piako District (linked in part to the popularity of Hobbiton) similarly highlights issues of growth, with road safety and noise issues raised by residents. Although not directly linked to central government policy, these examples highlight what can happen when dispersal is successful, bringing growth and its associated pressures with it.

⁴ The 5As are developing attractions, awareness, access, amenities and improving community attitudes towards tourism (MBIE and Department of Conservation (DOC), 2019, p.4).

⁵ TNZ, 2019b, p.14. For example, partnering with local Regional Tourism Organisations and operators to promote regions such as Wellington, Tasman, Marlborough and Nelson; encouraging road trips by Australians; and TNZ's destination readiness programme (Smol et al., 2019, p.18).

⁶ For example, \$242 million of a total of \$319 million tourism sector funding approved (excluding the TIF, which comes under the Provincial Growth Fund banner) has been allocated to 'surge' regions identified by the Minister of Regional Economic Development. As of 31 July 2020 most of this funding has gone to Te Tai Tokerau/Northland (\$63 million), Bay of Plenty (\$80 million) and West Coast (\$62 million). The remaining three surge regions are Manawatū-Whanganui (\$29 million), Tairāwhiti/East Coast (\$4 million) and Hawke's Bay (\$3 million) (Provincial Development Unit, 2020).

MBIE, 2016, p.12. Between 2017 and 2020 the annual (year-end July) international visitor spending was static, with 67% in gateway regions compared to 33% non-gateway. At the same time, domestic visitor spending was also stable at 54% gateway, and 46% non-gateway prior to 2020 (source: Monthly Regional Tourism Estimates, MBIE).

⁸ Turnbull, 2016; Price, 2018.

⁹ See PCE (2019b, pp.74–75) and Potter (2018) for a discussion of Māori perceptions of tourism and the pressures of growth.

¹⁰Tantau, 2019.

Box 3.1: Cruise tourism and Akaroa – a destination under pressure

Following the loss of access to port facilities in Lyttelton due to the 2011 Christchurch earthquakes, Akaroa became the destination of choice for cruise ships in the Canterbury region. This shift increased ship arrivals to Akaroa from 16 in 2010/11 to 86 in 2011/12, with the most recent season (2019/20) seeing 93 ships scheduled.¹¹

Rapid growth in cruise tourism has placed the town's infrastructure, including its wharf, public toilets and rubbish bins, under increasing strain. The community has experienced streets congested with people and lined with buses. This is unsurprising when between 2,000 and 4,000 cruise visitors at a time descend upon a community whose resident population is fewer than 760 people. Impacts can be even greater when multiple ships arrive in a single day or their arrival coincides with summer and school holidays when the town is already a popular domestic destination.

However, negative sentiments towards cruise tourism are not uniform in the community. Many in the town highlight its economic benefits and the additional amenities it has brought, noting that visitors are a natural part of Akaroa's longstanding status as a 'tourist town'.¹³

In these debates about community views, the environmental impacts of visiting cruise ships on wildlife, emissions, waste disposal and seabed disturbance can be lost sight of.

The pressures felt in Akaroa are a microcosm of tourism in New Zealand. Some people benefit, while others have little say and feel imposed upon. 'On whose terms' tourism is conducted emerges as a key question. Answering it is complex and intertwined with the question 'Who benefits?'

Even if there was agreement on the level of tourism the Akaroa community was happy to live with, managing numbers to stay within that limit poses practical challenges. Limiting either the number or size of cruise ships able to disembark in Akaroa might seem logical. Historically, however, there was no precedent for legal instruments restricting ships other than on navigational safety grounds by the Harbourmaster.

Recently, guidance on the seabed disturbance which can result from anchoring in the harbour has been developed and provided to the cruise industry. The guidance relates to the regional coastal environment plan, which includes rules specifying that resource consent is required for any disturbance of the seabed above a specified level. However, those rules were not designed to provide a platform to decide what level of cruise ship tourism the community is comfortable with and may not be adequate for the task.¹⁴

¹¹Wilson et al., 2015, p.215; New Zealand Cruise Association, 2019.

¹²Anecdotal evidence suggests a roughly even split between passengers staying on board, spending time in Akaroa or travelling on to Christchurch (Wilson et al., 2015, p.215).

¹³Wilson et al., 2015, p.219.

¹⁴See Regional Coastal Environment Plan for the Canterbury Region Rule 8.6–8.9 (Environment Canterbury, 2005). It is the combined effect of these rules that can limit the number of times a cruise ship may anchor in Akaroa Harbour annually. See also Environment Canterbury (2020) for guidance to vessels.

The Covid-19 pandemic has for the moment removed any cruise ship pressure. If and when the industry recommences, pressure on Akaroa is likely to be relieved with the reopening of Lyttelton Port's new cruise ship berth (combined with the new guidance on seabed disturbance). However, without an agreed vision and better mechanisms to manage visitor numbers in Akaroa, unresolved tension in the community will likely continue.

Rather than wait for the next pressure point to emerge, the current lull in the cruise industry would be an excellent time for responsible agencies to engage the community on a long-term vision and plan for managing visitor arrivals within community expectations and environmental limits in Akaroa.¹⁵



Source: Bernard Spragg, Flickr

Figure 3.2: The Majestic Princess cruise ship in Akaroa Harbour, March 2019.

¹⁵Other mechanisms to manage ship and passenger arrivals include introducing new policies and rules into the new Regional Coastal Environment Plan for the Canterbury Region and through the design of the replacement Akaroa Wharf.

Government tourism funding to mitigate place-based pressures

In 2019, the Government spent around \$250 million directly on tourism-related initiatives.¹⁶ The primary purpose of most of this spending was to support the industry's growth, either through the provision of marketing (e.g. TNZ) or of attractions and amenities (e.g. through the Provincial Growth Fund).

That said, an increasing amount of public money has also been spent on initiatives that help mitigate environmental pressures – particularly place-based ones. This money has largely been made available to local councils on a contestable basis.¹⁷

Since its creation in 2017, around \$58 million has been provided to councils via the TIF (see Box 3.2). This funding has primarily been used to develop or improve toilets, car parking, and wastewater facilities to allow councils to catch up with tourism growth. Another \$24 million has also been provided through the Responsible Camping Fund for councils seeking to address pressures associated with freedom camping (see chapter five). In addition, revenues generated by the IVL have been used to sponsor the development of some destination management plans.

Box 3.2: Tourism Infrastructure Fund (TIF) – a step in the right direction to mitigate place-based pressures?

The TIF is a \$100 million contestable fund (up to \$25 million a year for four years) for communities to improve visitor-related public infrastructure and mitigate pressures. It is intended to "protect and enhance New Zealand's reputation both domestically and internationally by supporting robust infrastructure which in turn contributes to quality experiences for visitors and maintain [sic] the social licence for the sector to operate". 18

A total of \$58 million in co-funding has been allocated to date (matched by recipients). Most projects are for toilets, car parks and roading. A small number of wastewater projects in places like Te Anau, Hanmer Springs and Franz Josef account for a large portion of the allocated funding, as do upgrades to site-specific tourism facilities (Figure 3.3). Examples of the larger categories shown in Figure 3.3 include:¹⁹

- \$3,991,370 to upgrade the Ohakune Water Treatment Plant
- \$301,835 for new, larger capacity toilets and sealed car park at Hot Water Beach
- \$1,670,000 for upgrade of high-use visitor areas at the Whāngārei Town Basin
- \$294,000 to build a new car park and walkways to redirect vehicles and pedestrians around the Church of the Good Shepherd, Lake Tekapo.

A review of the TIF in 2019 remarked that it "has provided a useful pressure valve for Councils and communities impacted by the significant growth in tourist numbers." There was, unsurprisingly, a consensus on the part of surveyed councils that the fund should continue as pressures remained, although views diverged on its future focus (small-scale infrastructure or large-scale and systemic projects).²⁰

¹⁶This included money for TNZ; the Provincial Growth Fund; Ngā Haerenga, the New Zealand Cycle Trail Fund; the TIF; the Responsible Camping Fund; and funding from the IVL. It does not include money for government departments such as MBIE or DOC.

¹⁷NZPC, 2019, pp.265–269.

¹⁸MBIE, 2018.

¹⁹MBIE, 2020g.

²⁰Sagebush, 2019, p.6.

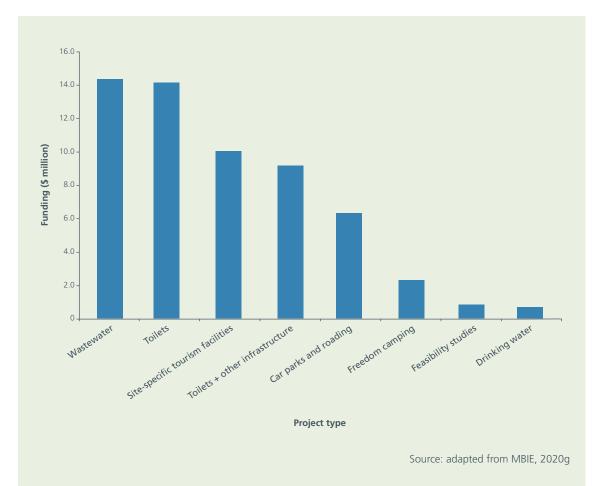


Figure 3.3: Announced funding for the TIF categorised by project type (rounds 1–4). Site-specific tourism facilities include projects that either generally improved tourism facilities at a site or were non-specific in their project description (e.g. upgrade of high-use visitor areas at the Whāngārei Town Basin).

Funding that helps to address the place-based pressures associated with tourism growth has, for the most part, been welcomed by communities.²¹ It has helped them finance the sorts of infrastructure required to accommodate a growing number of visitors. At the same time, much of this spending has been highly reactive and ad hoc (Box 3.3).²²

Rather than working with communities to establish how much visitation they are ultimately comfortable with, the approach has been to accept growth and prioritise investments that help to minimise the associated impacts. This carries risks. Over time, persistent infrastructure development can, through its effect on the landscape and by increasing carrying capacity, fundamentally change the character of a place.

²¹NZPC, 2019, p.275.

²²It has also often not addressed the issue of ongoing operating costs that come with new infrastructure, although some operating costs in the first two years can be covered by the TIF (MBIE, 2020f).

Some communities have pushed back against infrastructure development. For example, Ngāi Tūhoe opposed \$10 million from the Provincial Growth Fund to tar-seal part of State Highway 38, which goes through Te Urewera, because it did not appropriately consider negative effects from increased visitor numbers.²³ Funding for the Ōpārara Basin in the Kahurangi National Park from the Provincial Growth Fund has been equally contentious, with recreation and conservation groups describing the project as fundamentally flawed because of its focus on development and accommodating more visitors rather than managing the pressure of visitors at the site.²⁴

Box 3.3: Tourists, mixed-use infrastructure and intergovernmental transfers

There is a shortfall between the cost of mixed-use infrastructure and what international visitors financially contribute to its development and upkeep. The New Zealand Productivity Commission has estimated this shortfall is less than two per cent of council revenue in most districts.²⁵

Whereas local residents directly contribute to the development and upkeep of roads, car parks toilets and other amenities through rates and other council levies, international visitors contribute only indirectly through the goods and services they purchase locally. ²⁶ The result is that visitors do not contribute to the same level, and can impose extra costs due to the seasonal or daily peaks in demand for infrastructure and services that they create.

At the same time, international tourism generates revenue for central government, primarily via GST. Some of this revenue has been returned to councils through a number of tourism funds (e.g. the TIF). This funding has been criticised on the basis that it does not provide certainty to councils to incorporate into their future planning or to cover ongoing operational costs.²⁷

The New Zealand Productivity Commission has suggested that in addition to better use of existing funding and financing tools, central government funding for councils should be based on a transparent allocation formula. For example, funding could be based on a visitor-to-resident ratio, allowing councils to better plan and manage mixed-use infrastructure as well as assisting with ongoing operational costs.²⁸

More generally, government funding focused on mitigating place-based tourism pressures has tended to frame investment priorities in a visitor-centric way. Rather than rationalising such investments in environmental terms, the focus has typically been on improving visitor experience or preserving the sector's social licence to operate (for example, see the TIF intent described in Box 3.2).

²³Gisborne Herald, 2019.

²⁴D. Williams, 2020b.

²⁵NZPC, 2019, pp.261–263. This estimate is thought to be realistic despite being based on relatively crude data that is available (NZPC, 2019, p.263).

²⁶Domestic visitors contribute in their home district in addition to the goods and services they purchase, offsetting the need to contribute more.

²⁷NZPC, 2019, p.266.

²⁸NZPC, 2019, p.276.

There is nothing wrong with improving visitor experience, but it does raise a question about whether an opportunity is being missed to use public funding to specifically leverage better social and environmental outcomes at the same time. At present, very little of the contestable tourism funding in New Zealand has any environmental conditionality attached to it. For example, the assessment criteria for the TIF include "the extent to which the project supports attraction of visitors to a region" and "the extent to which applicants are financially constrained", but say nothing about the environmental footprint of the project.²⁹

Funded infrastructure will naturally need to meet requirements under the Resource Management Act 1991, including mitigating adverse effects. But additional benefits could be achieved by applying an environmental lens, such as green procurement principles, to infrastructure investment.³⁰

This lack of explicit environmental conditionality has also been a feature of the funding provided to tourism businesses in the wake of the Covid-19 outbreak. Of the \$230 million in business funding provided by the Strategic Assets Protection Programme (STAPP), only that provided in the form of grants had any conditionality attached to it. To be eligible for a grant, applicants were required to select and report on one outcome from each of the 'four capitals' from the Treasury's Living Standards Framework.³¹ Of the eight outcomes that were available for natural capital,³² the majority of recipients chose the option that "supports visitors to understand the expectations of them in relation to the natural environment."

The loan facilities of the STAPP do not have any sustainability conditions attached to them.

Destination management

Destination management is the coordinated management of all elements that make up a visitor destination.³³ It can be an effective approach to help manage place-based environmental and social pressures associated with tourism. It can do this in two ways. Firstly, by establishing the community's aspirations for tourism (including the level and style of visitation it is comfortable with) and the contribution it sees tourism making to community wellbeing. Secondly, by setting out practical means to achieve this outcome.

²⁹MBIE, 2018, p.2.

³⁰See, for example, European Commission (2016).

³¹MBIE, pers. comm., 30 October 2020. The four capitals are natural, human, social, and financial and physical (Treasury, 2018).

³²The outcomes available for natural capital included visitor respect for the environment; physical impacts on the environment; solid waste; greenhouse gas emissions; water use; biodiversity disruption; wastewater; and crowding (MBIE, pers. comm., 30 October 2020).

³³A destination can be described as a set of tourism related activities, attractions, attributes, experiences, products and services that are geographically connected. It is often defined in terms of visitors' needs, perceptions and experiences (DOC, 2011, p.5).

That said, destination management planning means different things to different people. While for some it represents a way to address environmental and social concerns,³⁴ for many others it offers a medium for brand development, growing visitation, improving visitor experiences and increasing productivity. Of the 16 key attributes of a destination management plan identified in the Ministry of Business, Innovation and Employment's (MBIE) *Destination Management Guidelines*, for example, seven relate to enabling tourism: brand positioning; target markets; experience and product development; access; (host) attitudes; marketing and promotion; and amenities, services and infrastructure. One attribute – environmental stewardship – relates to environmental outcomes.³⁵

What constitutes a destination also varies depending on who is conceiving it.³⁶ It can be a single place (e.g. Akaroa), or a collection of interrelated places that share common touristic elements at a locale or wider geographic scale (e.g. The Catlins or the South Island).

Regardless of the rationale, there is widespread acceptance that destination management has an important role to play in the tourism system. It is an approach increasingly being used globally (Box 3.4) and is identified as one of four priorities in the *New Zealand-Aotearoa Government Tourism Strategy* for 2019/20.³⁷

Box 3.4: Iceland destination management plans

Faced with rapid growth in tourism, Iceland is using destination management plans to improve planning and coordination of tourist flows in every region of the country.³⁸ The country has been divided into seven regions, with each region required to develop a destination management plan.

Iceland's destination management plans include a three-year action plan with identified projects having set milestones, budgets and responsibilities. The plans are designed to feed into national transport, regional and national infrastructure plans.³⁹

In recent times, the Government has supported destination management planning in two main ways. It has published a set of voluntary guidelines for how plans can be developed and their contents. This development highlights the future importance of destination management and the need to incorporate broader thinking in the planning process (e.g. leadership and structures, and risk and crisis management). The Government has also provided financial support for plan development. The Milford Opportunities Project and Westland Tourism Initiatives received \$3 million and \$3.9 million respectively from the IVL Fund. Furthermore, adoption of a destination management approach was one of the conditions imposed in return for the \$20.2 million in STAPP funding provided to Regional Tourism Organisations (RTOs).⁴⁰

³⁴Peart and Woodhouse, 2020, p.38.

³⁵MBIE, 2020b, pp.32–66.

³⁶DOC, 2011, p.5.

³⁷MBIE and DOC, 2019, p.11. Other authors have also highlighted its importance (e.g. Smol et al., 2019; p.7, Tourism Industry Aotearoa, 2019, p.4; Peart and Woodhouse, 2020, pp.26–27).

³⁸For more information see the Road Map for Tourism in Iceland (Ministry of Industries and Innovation and Icelandic Travel Industry Association, 2015).

³⁹Organisation for Economic Co-operation and Development (OECD), 2018b, p.192.

⁴⁰MBIE, 2020e.



Source: denisbin, Flickr

Figure 3.4: Milford Sound and Mitre Peak. The Milford Opportunities Project is investigating how to improve visitor experiences and uphold conservation values.

Destination management is still somewhat in its infancy in New Zealand.⁴¹ Table 3.1 highlights examples of recent plans and strategies that incorporate destination management in some form. It is notable that destination management plans are yet to emerge in places such as Queenstown or Westland where visitor growth has been highest.

⁴¹ Although the concept has been promoted by the Government since its first tourism strategy in 2001 (Tourism Strategy Group, 2001).

Table 3.1: Recent examples of destination management plans or strategies and initiating organisations.⁴²

Destination management plan	Initiating organisation
Aotea/Great Barrier Island Visitor Strategy 2018–2023	Great Barrier Local Board, with support from Auckland Tourism, Events and Economic Development
Te Hā Tāpoi: The Love of Tourism	Tourism Bay of Plenty
Central Otago Tourism Strategy 2018 to 2028	Tourism Central Otago (Central Otago District Council)
Destination AKL 2025	Auckland Tourism, Events and Economic Development
Destination Hauraki 2030	Hauraki District Council
Dunedin Destination Plan	Dunedin City Council and Enterprise Dunedin
Visit Hurunui: Destination Development Plan 2017–2022	Hurunui Tourism Board
Southland Murihiku Destination Strategy	Southland Regional Development Agency
The Catlins Community Tourism Strategy 2016–2026	Catlins Community and Venture Southland
The Coromandel: Beyond 2025	Destination Coromandel
Waiheke Island Sustainable Community and Tourism Strategy 2019–2024	Project Forever Waiheke for the Waiheke Island Local Board

There has been uncertainty about who is best placed to develop these plans. As shown in the table above, the development of destination management plans has mostly been led by RTOs or the economic development arms of local councils.

RTOs – either by tradition or by design – often have a strong focus on promoting tourism and wider economic growth. Auckland Tourism, Events and Economic Development (ATEED), for example, identifies its role as helping to "lay a strong foundation for Auckland's economic growth through a broad programme of initiatives".⁴³ There is nothing wrong with that. But it does seem reasonable to ask whether organisations tasked with pursuing growth are capable of genuinely listening to and acting upon the views of individuals and communities concerned about the impact of that growth.

Most of the destination management plans reviewed for this investigation (Table 3.1) did not contain reference to how much or what style of tourism local communities would be comfortable with (the exceptions being the community-centric plans for Aotea/Great Barrier Island, The Catlins and Waiheke Island). When a vision for how tourism should look in the future is presented, it is often couched in very general terms. For example, the vision presented by *The Coromandel: Beyond 2025* is that "the Coromandel is New Zealand's must-visit destination", and *Destination*

⁴²References in order presented: Milne et al., 2018; Tourism Bay of Plenty, 2019; Central Otago District Council, 2018; ATEED, 2018; Hauraki District Council, 2019; Dunedin City Council and Enterprise Dunedin, 2019; Hurunui Tourism Board, 2017; Stafford Strategy, 2019; Anna Coleman Consultancy Ltd and Venture Southland, 2016; Destination Coromandel, 2015; Project Forever Waiheke, 2019.

⁴³ATEED, 2020.

Hauraki 2030 notes that "the Hauraki District has a sustainable and inclusive tourism industry that contributes value to its communities, environment and visitors".44

In summary, destination management – as it is currently practised in New Zealand – is often more about enabling tourism growth than it is about providing communities with an opportunity to define what tourism would look like on their terms.

Alternative approaches

Introducing conditionality to central government tourism spending

Despite significant government effort, concerns remain about the social and environmental pressures of international tourism on local places in New Zealand. According to the Mood of the Nation survey in March 2020, 42 per cent of New Zealanders continue to think that tourism puts too much pressure on New Zealand, with pressure on infrastructure, the environment and overcrowding identified as perennial issues.⁴⁵ These issues were traversed at length in *Pristine*, *popular... imperilled?*

International tourism has all but disappeared because of Covid-19. However, it is likely to return. The need for new and improved tourism infrastructure will still be there when this occurs, as will the difficulties that communities have paying for it.

Existing funding initiatives (e.g. the TIF) have taken visitor growth as read and responded accordingly (i.e. by building more infrastructure). Moving forward, if the Government decides to finance tourism infrastructure in particular places, it should try to leverage this investment to improve planning, community engagement and environmental outcomes. The quantum of investment needed is not a matter for this report, ⁴⁶ but it should be carefully considered. ⁴⁷

Any central government funding for tourism infrastructure should be conditional on two things. Firstly, that it aligns with mana whenua and the community's vision for tourism development, expressed in the form of a local destination management plan. Tourism occurs in local communities, and those communities have the right to inform decision making about the sort of growth they are prepared to accommodate. Secondly, government funds should only be spent on infrastructure that meets high environmental performance standards in terms of design and procurement.

Applying these two conditions to all tourism-related infrastructure spending would help to create a funding system that prioritises proactive investment, reinforces environmental sustainability and ensures that the Government is investing in what communities can agree upon. Adding conditionality in terms of environmental standards and community aspirations could buy a range of co-benefits. It is interesting to conjecture where we might have been if such conditions had been attached to the \$393 million of tourism-related funding distributed to regions since 2017.⁴⁸

⁴⁴Destination Coromandel, 2015, p.4; Hauraki District Council, 2019, p.4.

⁴⁵Kantar, 2020.

⁴⁶A previous assessment in 2016 of New Zealand's tourism-related infrastructure noted that \$100 million was needed to fill the immediate infrastructure shortfall, with ongoing investment in the order of \$150 million per annum to keep pace with visitor growth (McKinsey and Company, 2016, pp.10–11). At a regional level, the Queenstown Lakes District Council has suggested that investment of \$278 million over five years was needed to keep up with the then anticipated growth (Carlaw et al., 2018, p.2).

⁴⁷As should the method with which money is distributed. However, that debate goes to the wider issue of how to distribute funding between central and local government, which is outside of the scope of this report. For a discussion on the principles and mechanisms for distributing government tourism-related funding to councils, see NZPC (2019, pp.257–279).

⁴⁸This figure includes grants announced or approved via the TIF, Responsible Camping Fund and Provincial Growth Fund from their inception to 31 July 2020.

Adding conditionality in this way is best suited to the existing system of project-based funding. However, if the Government decided to pursue the New Zealand Productivity Commission's recommendation about adopting a more formulaic approach to intergovernmental transfers (Box 3.3), the same principles and conditions should equally be implemented.

The following sections outline how conditionality could be implemented in practice. Figure 3.5 provides a high-level summary.



Figure 3.5: Flow diagram showing application processes for projects incorporating assessment against community vision and environmental standards.

Condition 1: Aligning funding with the community's vision for tourism

How can the Government ensure that tourism takes place on terms that communities are comfortable with?

Destination management planning offers a forum for communities and mana whenua to express their views about what tourism should look like in their place and plan accordingly. This is acknowledged in the Government's guidance on destination management, which notes that "adopting a [destination management] approach enables communities and destinations to respond to changing conditions and determine the type of tourism they would like to have".⁴⁹

Destination management also represents an opportunity to plan for and manage the pressures that come with visitor growth. Such pressures often accumulate incrementally over time and may not be easily accounted for under the Resource Management Act.⁵⁰ Visitor growth-related environmental pressures that could be planned for include visitor density, water quality degradation, solid waste generation and management, infrastructure development and landscape modification.⁵¹

⁴⁹MBIE, 2020b, p.13.

⁵⁰Connell et al., 2009, p.875.

⁵¹PCE, 2019b, pp.87–90.

The key challenge for Government is how best to facilitate greater adoption of destination management planning. As noted above, despite agreement on their value, not many destination management plans exist in New Zealand. And those that do exist do not always embrace local community and environmental considerations.⁵²

The proposal here is that rather than making the development of destination management plans mandatory, the Government should make access to its tourism funding conditional on their existence. The following sections discuss what the Government might require of plans – both in terms of content and the process used to develop them – in order to be eligible. The intent is not to be prescriptive, but to highlight the minimum components that should be considered as part of implementing conditionality.

Who should develop local destination management plans and how?

Who leads?

A range of organisations have interests in, and provide leadership on, tourism matters within different communities. However, local councils (territorial local and unitary authorities) are the natural fit to facilitate local destination management planning. They are often the unit of governance situated closest to the communities that are the focus of this proposal. Their core responsibilities also include planning (Box 3.5) and the delivery and management of the infrastructure and services that are required to help mitigate place-based tourism pressures. Further, local councils typically have oversight of the RTOs and Economic Development Agencies that have previously been responsible for the development of destination management plans. This would not preclude others – including mana whenua or a local community – leading or developing plans in partnership where the local context dictates and a mandate exists.⁵⁴

The alternative option would be for RTOs to continue leading the destination management planning process. However, as discussed above, RTOs are primarily set up as marketing and promotional organisations (although some have been pivoting towards more destination management).⁵⁵ RTOs will naturally have a role in providing marketing and tourism insights, but the already defined role of local councils in relation to their community makes councils better placed to lead. Delegation of planning to RTOs would be possible in some cases, but it would still be for the council to own the result of planning exercises.

⁵²Peart and Woodhouse, 2020, pp.38–39.

⁵³ The Government could also provide a financial contribution to plan development if it was deemed necessary.

⁵⁴For example, Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 provides iwi with co-management responsibilities (see PCE, 2019b, p.50).

⁵⁵Pearce, 2015.

Box 3.5: The relationship between destination management plans and other council planning documents

Despite their important role, existing council planning documents (e.g. district plans, long-term plans and annual plans) tend to be restricted in their consideration of tourism pressures. For example, tourism is mentioned in most territorial authority long-term plans, often in terms of promoting tourism to enhance economic growth. Some consideration is also given to accommodating current and anticipated growth on waste management, three waters infrastructure and facilities, but action (e.g. planned infrastructure investment) is mostly to meet expected growth.⁵⁶ As such, the process for developing long-term plans could be modified to include a greater focus on managing the pressures of tourism and the vision that communities have for it. In this way, long-term plans could potentially act as a surrogate for destination management planning.

Equally, destination management plans can act as a companion to other planning activities, allowing for a more nuanced assessment of managing tourism pressures rather than focusing on demand response and budgetary constraints. They can also be targeted to a subset of a region to ensure that local voices are not drowned out by district-wide regional priorities. Some commentators have gone so far as to suggest that destination management plans could be linked to statutory plans to give them greater weight.⁵⁷

At what scale should local destination management plans be developed?

For destination management plans to be useful, they need to reflect the views of *local* communities. The use of the word local is important. Government guidelines acknowledge that the geographic scope of destination plans should be guided by those in the destination and should not necessarily align with jurisdictional boundaries.⁵⁸

Existing plans are often created at scales where it is hard to see how a local mana whenua or community voice and vision can be represented. For instance, Southland's regional destination strategy covers a diverse set of communities, including Invercargill, Gore, Bluff, Te Anau and Stewart Island, each likely to have its own vision of what tourism should look like.⁵⁹ Pan-regional plans like the South Island destination management plan are a further step removed from communities. Plans at regional and pan-regional level can play a useful coordinating role, but distinctly local plans are needed to speak to local needs and environment. Good examples include the much discussed Milford Opportunities Project, as well as plans and strategies created for Aotea/ Great Barrier Island, The Catlins and Waiheke Island.⁶⁰

At a minimum, destination management plans should be created at the level of a single territorial authority. However, even within council boundaries there can be diverse and differing views on tourism. For example, a destination management plan created for the entire Queenstown-Lakes District would have to marry the often-competing views of Queenstown and Wānaka. Akaroa and its relationship with Christchurch City similarly illustrates the point.

⁵⁶Boddy et al., 2019, p.48.

 $^{^{\}rm 57} Perkins$ and Rosin, 2018.

⁵⁸MBIE, 2020b, p.35.

⁵⁹Stafford Strategy, 2019. For example, Bluff is in the process of developing local tourism strategy to better reflect the local context (Steyl, 2020).

⁶⁰ Anna Coleman Consultancy Ltd and Venture Southland, 2016; Milne et al., 2018; Project Forever Waiheke, 2019.

As such, a multi-layered approach could be taken where a single plan has individual sections that describe the views and aspirations of smaller geographic areas (e.g. aligning with community board areas or overlays of district plan boundaries). A benefit would be to ensure that cross-boundary differences are considered.⁶¹

Not all aspirations within and between areas will align. But having a robust development and participation process is important.

Who is engaged and how?

Those who live in or whakapapa to a place are in the best position to articulate a vision for tourism that does not 'kill the goose that lays the golden egg'.⁶² The voices of mana whenua, residents and local businesses need to be at the heart of any planning exercises (for one international example, see Box 3.6). If they are not, it is difficult to see how any resulting destination management plan can be used to inform funding decisions.



Source: itravelNZ®, Flickr

Figure 3.6: Locals or those who whakapapa to a place are the best placed to make decisions about its future. In 1989 the boundaries of Taranaki were redrawn without the agreement of Whangamōmona residents. Locals objected and declared themselves a republic. Republic Day celebrations continue to be held in Whangamōmona every second summer and draw thousands of visitors.⁶³

⁶¹There could be space for joint plans where the natural definition of a 'destination' spans across council boundaries (e.g. The Catlins), although this would be an exception rather than the rule.

⁶²To quote PCE's previous tourism report, "One does not want to invite people to visit an area, only to find that the place is ill-prepared to receive the guests, or the hosts are ambivalent or even hostile towards their visitors" (PCE, 2019b, p.24).

⁶³See https://www.nzgeo.com/stories/whangamomona/.

Box 3.6: Switzerland – community voice in creating regional nature parks

In 2007 the Swiss government created a legal framework to encourage inhabitants and enterprises to set up and manage regional nature parks to protect cultural and natural values, promote a sustainable regional economy, and raise inhabitants' and visitors' environmental and cultural awareness of the parks.⁶⁴

Parks are established on a voluntary basis and must be locally initiated. The community's commitment to the park is fundamental for its creation and the receipt of any government funding. If the proposed park qualifies as having the required environmental and cultural values, inhabitants are asked to vote on the acceptance of a park charter. If communities vote in favour, the proposal is submitted to the federal government to receive the park label and funding to contribute to its administration. The charter is renewed every ten years to ensure that community support is ongoing and that the park is meeting its strategic objectives. ⁶⁵

The charter must set out goals and measures to be achieved to receive funding. For example, communities of the Beverin Nature Park voted to pursue actions to preserve and upgrade nature and landscape quality, strengthen tourism (especially nature- and culture-based tourism) and maintain and promote the cultural diversity of the valley communities, among other actions. ⁶⁶

Federal government funding is conditional on upholding the park's charter, meeting the underlying strategic goals of the park's programme, and the enduring support of communities in the park (e.g. renewing the park charter). Local communities are also involved in institutional structures (e.g. park governance boards), formal participation processes (e.g. internal referenda) and issue-specific working groups.⁶⁷

At present, 14 regional nature parks have been created, while others have failed, partly because of a lack of community support.⁶⁸

A key question, therefore, is how stakeholders should be involved in the process of producing such a plan. Guidance produced by the International Association for Public Participation is useful in this respect. It identifies five levels of public participation, ranging from *inform* and *consult* through to more participative approaches like *involve*, *collaborate* and *empower*.⁶⁹ When placed in this hierarchy, the top-down process that has mostly been used to develop destination management plans seems ill-suited to producing a vision for tourism that truly reflects community wishes.

In contrast, improving public participation by using co-design or human-centred design to collaborate with and empower communities results in more effective design of services, more representative engagement and better buy-in to decisions.⁷⁰ Therefore, it is at the levels of *collaborate* and *empower* that plans should be developed. Such an approach also enables the principles of co-design and partnership with mana whenua to be supported.

⁶⁴In addition, this framework sets out the process for creating national parks and nature discovery parks along similar lines.

⁶⁵Swiss Parks Network, 2020a.

⁶⁶Beverin Nature Park, 2020.

⁶⁷Pütz et al., 2017, p.79.

⁶⁸Bumann, 2017, p.146; Swiss Parks Network, 2020b.

⁶⁹International Association for Public Participation, 2017.

⁷⁰NZPC, 2019, p.120.

The use of Dynamic Adaptive Pathways Planning in Hawke's Bay between Clifton and Tangoio to plan for the effects of future sea-level rise, and whaitua committees used by Greater Wellington Regional Council to implement the National Policy Statement for Freshwater Management, are examples of a collaborative approach.⁷¹ In both examples, mana whenua and communities participated in the decision-making process with a focus on values and long-term objectives, recognising their unique context. Committees and panels are used to create plans and actions, with membership designed to reflect the region they cover. Iwi and hapū are included as kaitiaki and reflect Treaty obligations. Local government is often represented by elected officials, with wider community representatives drawn directly from the community via a nomination process.⁷²

Requiring a similar process would be a way to articulate and then incorporate a community's vision for tourism into a local destination management plan. The local council would act as the facilitator for convening a standing committee or advisory group made up of mana whenua, residents and local businesses, who would then lead the development of a local destination management plan. The Aotea/Great Barrier Island Visitor Strategy is an example of this process.

Based on available data (e.g. surveys of residents and local businesses), this group could lead the development of a plan ensuring that all elements of the community and wider region (e.g. the Department of Conservation and other councils) have been able to provide initial input.

Once a draft is developed it should be open to consultation and comment, such as following the principles outlined in section 20 of the Local Government Act 2002 and the special consultation procedure in section 83. This process could be carried out at the same time as the development of a council's long-term plan to link community outcomes and minimise duplication of process. The way that feedback is sought should draw from a range of methods. Examples include online surveys, focus groups, neighbourhood forums, citizen juries, workshops and canvasing social media.⁷³

Once revised based on feedback, the final strategy should be adopted by the council and be used to guide investment decisions over the life of the plan or strategy (e.g. 10–20 years). Revision of the plan will naturally be needed to ensure it remains relevant and reflects the evolving vision that communities may have for tourism.

Expectations for what can be achieved through such a process should resist any utopian notions about collective or community decision making. There will always be vested interests either trying to promote or unnecessarily stifle growth. Creating a balanced vision for tourism in an area that reflects the diverse views of those in the community is difficult. The success of any such process will depend on, among other things, its transparency and practicality. Consultation and engagement can be costly, so the claims a process makes on time and money need to be considered carefully.

⁷¹For more information, see Hawke's Bay Regional Council (2020) and Greater Wellington Regional Council (2020). For the Wellington region, a committee called Te Upoko Taiao, which comprises six elected councillors and six mana whenua members, is responsible for overseeing the whaitua process in line with the Treaty partnership.

⁷²Lawrence et al., 2019, p.5.

⁷³NZPC, 2017, p.249.

What content is needed to attract funding support?

If government tourism funding is to be made conditional on the existence of local destination management plans, a key question will be what constitutes a local destination management plan.

To ground the content in local context, at least the following aspects should be incorporated:

- a shared mana whenua and community view on how tourism should develop in their area
- a description of local tourism pressures (environmental and social) and how they will be addressed over time
- evidence for broad-based support for both of the above.

In terms of a shared community view, efforts should be made to articulate what level of tourism the environment, mana whenua and residents can sustain, both now and in the future. The current approach of including a high-level narrative description of what tourism will ideally look like – 'sustainable and inclusive', for example – is too general to be useful. Emphasis should be placed on being more precise about what the community wants tourism to look like in, say, ten years, and the actions needed to achieve that. That might include statements like, "Visitation during peak periods does not grow beyond existing levels", "Freedom camping only takes place in areas A and B", or "Cruise ship visits do not occur on consecutive days".

The amount and style of tourism that communities are happy with, along with the contribution they see it making to community wellbeing, will naturally vary over time. As such, metrics and decision points to reassess management options are needed. Some plans already do this. For example, Great Barrier Island includes reference to a regular community survey to gauge community support and the perceived impact of tourism.⁷⁴ Tourism Bay of Plenty's plan also includes measures of residents' support for tourism as part of its future monitoring and evaluation programme.⁷⁵ However, most current plans do not articulate decision points or detail actions that should be triggered once they are exceeded.

Local tourism pressures are often well known, but formally recognising and highlighting actions to address them is important. Existing plans often do this well in terms of issues associated with visitor experience and supportive infrastructure. In comparison, actions on environmental and community pressures are often not well developed.⁷⁶

Evidence for broad-based community support could take many forms. The use of collaborative and co-design processes to develop the destination plan (as described in the previous section) should be a minimum, with additional evidence in the form of community surveys, letters of support from affected organisations in the community, support from local iwi/hapū, or other forms of engagement.

⁷⁴Milne et al., 2018., p.22.

⁷⁵Tourism Bay of Plenty, 2019, p.37.

⁷⁶For example, the Southland destination strategy highlights sustainability as a key facet of destination management, but specific environmental recommendations only include the Fiordland National Park Management Plan and wildlife management, with a general noting of the need for improved visitor management (Stafford Strategy, 2019).

Condition 2: Making funding for tourism infrastructure conditional on meeting high environmental performance standards

To shift investment behaviour and promote environmental mitigation and protection from tourism pressures, the Government should make any funding for tourism infrastructure conditional on meeting high environmental performance standards. This is a direct approach that central government can take to encourage other tourism actors to take sustainability principles into account.⁷⁷

In theory, central government is already required to incorporate environmental considerations into its procurement decisions (see Box 3.7). Similarly, local government is encouraged to comply with the Government Procurement Rules.⁷⁸ That said, the reality is that cost pressures and immediate demands often result in environmental outcomes being deprioritised. Certainly, in the case of tourism, very little government funding has been subject to explicit environmental conditionality (see the discussion on the TIF in the earlier section on government tourism funding, for example).

This condition should be viewed as an opportunity for the Government to help communities seek out designs that use a sustainable approach and think critically about how infrastructure fits into the landscape. Partnering with communities in this way will enhance visitor experience, the experience of local communities, and the environment – which is ultimately what most visitors come to see. The Government is already trying to achieve environmental improvements across a wide range of domains, such as climate change, biodiversity, solid waste and freshwater. It seems strange not to use tourism funding to work towards at least some of these goals.

Ascribing a one-size-fits-all approach to standards (such as the specifications and types of infrastructure to be funded) is tempting as it gives a transparent measure against which the Government can assess applications. However, this sort of top-down direction is rigid and likely to hamper communities in choosing the best option for them.

An alternative way to incorporate environmental conditionality would be to require funding applicants to demonstrate an environmentally sustainable approach to the design and building of infrastructure. This might involve using products that require less energy, water and resources to produce, transport and use, and that help reduce emissions and waste.⁷⁹ For example:

- Toilets might be required to meet a minimum level of water efficiency to reduce water consumption.
- Wastewater treatment plants might demonstrate high treatment efficiency and be energy efficient.⁸⁰
- Car parks could be designed to include features to attenuate runoff, reducing contaminants and peak flows into receiving waterways.
- Public rubbish bins could be required to include recycling bins.
- All physical tourism infrastructure might be required to be built from sustainably sourced materials and required to meet energy efficiency standards.

⁷⁷OECD, 2018a, p.12.

⁷⁸MBIE, no date. Some councils, such as Auckland Council (2020), incorporate green procurement principles into their spending decisions.

⁷⁹MBIE, 2019b.

⁸⁰ European Commission, 2013.

Green (or sustainable) procurement practices offer a useful resource in this respect (see Box 3.7). Where necessary, existing life-cycle assessments and ecolabels could be used to demonstrate the environmental footprint of products. In general, the focus should be on ensuring a minimum level of environmental performance rather than prescribing how that is to be achieved.⁸¹ Thus, applicants would be free to select whatever solution best fits their context so long as the infrastructure meets certain environmental performance standards.

Box 3.7: Green public procurement

As its name suggests, green public procurement involves government incorporating environmental considerations in its spending decisions. Government spending accounts for 29 per cent of all consumption in New Zealand.⁸² As such, small shifts in how this money is spent can have a significant impact on the environmental footprint of the overall economy.

There is a large literature – including several best-practice manuals – dedicated to how green (or sustainable) public procurement should be undertaken in practice.⁸³ Two key messages emerge from this. Firstly, the 'greenness' of a particular product is multi-dimensional, encompassing everything from how sustainably sourced its constituent materials are, to how energy or water efficient the product is during use. Secondly, how environmental criteria are specified is important: performance standards provide much stronger incentives for innovation than technology mandates.

In the New Zealand context, the *Government Procurement Rules* set out how mandated agencies must carry out procurement.⁸⁴ Rule 20 relates specifically to the environment. It specifies that mandated agencies should "support the procurement of low-emissions and low-waste goods, services and works" and "encourage innovation to significantly reduce emissions and waste impacts from goods and services". Further, for some contracts, mandated agencies 'must' do so.⁸⁵ In addition, rule 20 requires mandated agencies to have regard to companion guidance on how to procure low-waste and low-emissions products.⁸⁶

Local government also has a role to play. A recent report by the Controller and Auditor-General noted that councils spend more than \$8 billion on providing and maintaining infrastructure, facilities and services each year.⁸⁷ Given the purpose of local government, the considerations set out in the above rules are also relevant to those spending decisions and are encouraged to comply with them.⁸⁸

⁸¹European Commission, 2016, p.33.

⁸²Treasury, 2019, p.8.

⁸³For example, see United Nations Environment Programme (2012), European Commission (2016), OECD (2015) and International Organization for Standardization (2017).

⁸⁴MBIE, 2019d.

⁸⁵These contracts are those relating to office supplies, light vehicles, and stationary/process heating systems (MBIE, 2019b).

⁸⁶MBIE, 2019d, p.37. This has recently been strengthened to require all mandated departments and agencies to assess the greenhouse gas emissions resulting from the materials and construction processes used in new builds (Twyford et al., 2020).

⁸⁷Office of the Controller and Auditor-General, 2020, p.1.

⁸⁸ Office of the Controller and Auditor-General, 2020, and MBIE, no date.



Protecting wildness and natural quiet in public conservation lands and waters

Summary and recommendations

A sense of wildness and natural quiet are defining characteristics of New Zealand's conservation lands and waters. For many people, encountering these qualities is the main motivation for visiting a natural area.

This chapter puts forward two sets of proposals that could halt the slow but persistent erosion of wildness and natural quiet that has resulted from tourism growth in parts of the conservation estate.

I recommend that:

- With respect to commercial access to public conservation lands and waters:
 - When granting concession applications, the Department of Conservation (DOC) should make greater use of its ability to prevent, limit the amount of or impose conditions on those activities that generate significant noise pollution.
 - When renewing concessions, DOC should make greater use of its ability to use tender processes to ensure that concessionaires pay a fair market price in return for the right to operate on public conservation lands and waters.
 - The Government should seek amendments to the Civil Aviation Act 1990 so as to ensure that DOC's requests for better controls on scenic overflight activity above conservation lands and waters are properly considered.
- With respect to day-visitor access to public conservation lands and waters:
 - DOC makes greater use of demand management tools to ensure that visitor numbers in the most popular parts of the conservation estate are consistent with the preservation of a sense of wildness and natural quiet.
 - If DOC feels that conservation legislation does not adequately provide for this, the
 Government should seek amendments to this legislation in order to clarify, i) DOC's
 ability to limit visitation in the interests of preserving people's experience, and ii) the
 set of tools that DOC can use to ration access in practice.

From the passage of the Conservation Act in 1987 to the pre-Covid-19 tourism peak in 2019,¹ international arrivals increased from fewer than one million each year to almost four million. By 2019, around 1.8 million of those individuals were visiting at least one national park during their trip.²

During the same period, New Zealand's population increased from 3.3 million to almost five million.³ And while data are scarce, many New Zealanders are also frequent visitors to public conservation lands and waters. Data from the Survey of New Zealanders undertaken by the Department of Conservation (DOC) indicate that 55 per cent of New Zealanders made at least one visit to a protected natural area in 2019.⁴

By 2019, persistent visitor growth and associated commercial activity had resulted in the localised loss of the wildness and natural quiet that have been the hallmark of New Zealand's public conservation lands and waters (Box 4.1). Put simply, a number of Aotearoa New Zealand's premier natural attractions had become difficult to visit without encountering throngs of other visitors, the intermittent buzz from planes and helicopters, or the visual effect of cruise ships, buses and cars in an otherwise natural environment.

This problem was not uniformly encountered across the conservation estate.

The places most affected were so-called 'icon' sites, where visitor numbers and associated commercial activity had been greatest. Upwards of 750,000 individuals visited each of Franz Josef Glacier Valley, Milford Sound, and Aoraki/Mount Cook Village during 2018/19,⁵ with daily arrivals reaching into the thousands during peak periods. These visitors were often accompanied by aviation and other commercial activity. Between 2010 and 2020, the number of aircraft landings in Westland Tai Poutini National Park during the summer season increased from 8,035 to 11,252.⁶ Overall aircraft activity was even greater – almost 40,000 helicopter flights took place at Franz Josef in 2017.⁷

But less well-known front-country sites were also affected as DOC and others attempted to take pressure off icon destinations by developing new attractions elsewhere. In combination with the rise of social media, this resulted in rapid – and difficult to manage – increases in visitor numbers in some places. In the three years between 2015/2016 and 2018/2019, visitors to Hooker Valley increased from around 82,000 people per year to more than 121,000 per year. Visitor numbers at Blue Pools Track (Mount Aspiring National Park) increased from around 3,500 people per year to more than 102,000 per year during the same period. Similarly, visitor numbers at Roys Peak (near Wānaka) reached 75,000 during recent years, up from virtually negligible levels just a few years earlier.8

¹ Source: International travel and migration statistics, Stats NZ.

² DOC, 2019d.

³ Stats NZ, 2020b.

⁴ DOC, 2019b, p.14.

⁵ DOC. 2019c

⁶ DOC, pers. comm., 22 September 2020 – the summer season defined as October to March.

⁷ Carroll, 2018.

⁸ DOC, 2019c.

Box 4.1: Noise and visual pollution, and the loss of wildness and natural quiet that result from it

While the quantum of visitor numbers and concession activity are good proxies for the sense of wildness and natural quiet that does (or does not) exist at a place, there are other more direct ways of establishing these values.

The two most important are noise monitoring, which objectively measures noise levels through time, and perception surveys, which seek to capture how people subjectively experience any noise (or visual) pollution. To date, noise monitoring has not been widely employed on public conservation lands and waters. DOC has developed a pilot tranquillity mapping tool for the area surrounding Fox and Franz Josef glaciers; an initial application indicates that significant areas are characterised by medium, low or very low levels of tranquillity, mostly as a result of aviation activity. It is unclear to what extent this tool could be applied more broadly.

Visitor perception surveys have received considerably more attention, but often fail to distinguish between noise and congestion and the other pressures that tourists impose on the conservation estate. For example, in Lincoln University's most recent Public Perceptions of New Zealand's Environment survey, 45 per cent of respondents felt that tourism was the main cause of damage to national parks.¹⁰ That said, it is not clear what type of 'damage' respondents had in mind when answering this question.

DOC also undertakes visitor surveys in parts of the conservation estate,¹¹ some of which relate directly to visitors' perceptions of noise. For example, a survey of visitors to the Fox and Franz Josef glacier valleys in 2015 found that around 20–25 per cent of respondents found aircraft activity annoying.¹²

Following the Covid-19 outbreak, the context has changed. New Zealanders have suddenly found themselves able to enjoy some of New Zealand's most spectacular natural attractions in relative solitude. However, as discussed in the introduction chapter of this report, tourism is likely to reemerge once travel restrictions are eased and economic confidence returns. And unless changes are made to the way it is managed on public conservation lands and waters, the same pressures that accompanied growth in the past will resurface.

This chapter puts forward two proposals that could help to future-proof the sense of wildness and natural quiet that is such a defining aspect of New Zealand's conservation lands and waters. The first involves a more stringent application of concession management tools that DOC has available to it. The second involves clarifying DOC's ability to restrict visitor numbers in situations where it is detracting from the tranquillity of a place, and giving it the tools necessary to do this in practice.

Both proposals are examples of demand management tools. In that sense they represent a shift away from the existing focus on increasing supply – either through investments in additional carrying capacity at existing destinations or through the creation of new destinations.

While the main focus is on addressing the loss of wildness and natural quiet that will likely accompany the re-emergence of tourism, these policies could also create co-benefits for ecosystems and landscapes by reducing the need for more infrastructure to accommodate visitor growth.

⁹ DOC, 2019f.

¹⁰Hughey et al., 2019, p.15.

¹¹For example, the Great Walk Guest Survey concerning visitor satisfaction on the Great Walks (DOC, 2019e).

¹²Espiner and Wilson, 2015.

Existing policy approaches

Legislative framework

The National Parks Act 1980, Reserves Act 1977 and Conservation Act 1987 set out how visitation in New Zealand's national parks and the broader conservation estate is to be managed.

National parks, as constituted under the National Parks Act, are to be preserved "in perpetuity ... for their intrinsic worth and for the benefit, use, and enjoyment of the public." The word 'preservation' is used repeatedly in section 4 of the Act. While freedom of entry and access is also enshrined in this section, it is unequivocally framed in a way that is subject to that imperative of preservation:

"subject to the provisions of this Act and to the imposition of such conditions and restrictions as may be necessary for the preservation of the native plants and animals or for the welfare in general of the parks, the public shall have freedom of entry and access to the parks, so that they may receive in full measure the inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features." 13

Not all parts of the conservation estate are national parks. Other parts of the conservation estate are managed under other legislation, including the Reserves Act and the Conservation Act. The latter establishes DOC and sets out some of its overarching functions. It states:

"to the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with its conservation, to foster the use of natural and historic resources for recreation, and to allow their use for tourism".¹⁴

In both cases, the message seems clear. Public access to the national parks is only permitted on terms that are consistent with their preservation and protection. DOC is expected to foster recreation, and allow for tourism, but only to the extent that these activities do not conflict with its conservation mandate.

It is less clear how the loss of wildness and natural quiet fits within this conservation mandate. While noise and congestion are pollutants like any other, they are not mentioned explicitly in the National Parks Act or Conservation Act. The National Parks Act does not define what is meant by "the welfare in general of the parks". And while the Conservation Act does define "natural resources", the focus is on tangible things such as landforms, species or soils, rather than intangibles like tranquillity or natural quiet.

Yet it is a fair question to ask whether the public can receive "in full measure [emphasis added] the inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features" when noise and human density are crowding in. In the so-called 'icon sites' it is arguable that the 'full measure' the Act's drafters had in mind has been seriously degraded.¹⁵

¹³National Parks Act 1980, s 4(2)(e).

¹⁴Conservation Act 1987, s 6(e).

¹⁵This language dates back to at least the early 1950s. Section 3(2)(d) of the first National Parks Act – enacted in 1952 – contains an almost identical formulation as Section 4(2)(e) of the National Parks Act 1980.

There is a sense that the number of people visiting parts of the conservation estate prior to Covid-19 was simply not foreseen when the legislation was enacted. That has not prevented DOC, in some of its more recent statutory planning documents, from making explicit reference to noise and congestion and the loss of wildness and natural quiet that can result. For example, the Conservation General Policy – the highest-level policy required by the Conservation Act – states:^{16,17}

"Recreational opportunities at places should be managed to avoid or otherwise minimise any adverse effects (including cumulative effects) on:

- i. natural resources and historical and cultural heritage where required by the relevant Act;
- ii. the qualities of peace and natural quiet, solitude, remoteness and wilderness, where present; and
- iii. the experiences of other people."

So, in principle, DOC understands the protection of wildness and natural quiet as being core values that it is required to protect under the Conservation Act.

Management plans and strategies

In addition to establishing the principles for how public conservation lands and waters should be managed, the National Parks Act, Reserves Act and Conservation Act set out how DOC should achieve this in practice.

The Acts instruct DOC to develop a hierarchy of management policies, strategies and plans (statutory planning documents), each of which cannot derogate from its parent. These include the general policies, conservation management strategies, national park management plans and conservation management plans.

These are place-specific documents that are developed by DOC through engagement with Treaty partners and in close consultation with the conservation board responsible for the region involved. ¹⁸ Other interested stakeholders are also involved. For example, when a conservation management strategy, national park management plan or conservation management plan is reviewed, DOC is required to invite public submissions on the draft documents. The strategy or plan that ultimately emerges from this process is then subject to final approval by the relevant conservation board¹⁹ or – having had regard to the views of the Minister of Conservation – by the New Zealand Conservation Authority.²⁰

¹⁶DOC, 2005, p.36.

¹⁷There are two general policies – one for national parks and one for conservation land more generally. The General Policy for National Parks also contains references to the importance of natural quiet. For example, section 8.1(c) states: "Planning and management for recreation and other opportunities for the benefit, use and enjoyment of each national park should: i) preserve national park values, including natural quiet, as far as possible" (New Zealand Conservation Authority (NZCA), 2005, p.36).

¹⁸Conservation boards were established by the Conservation Act 1987 (s 6L). Fifteen such boards currently exist, with each consisting of up to 12 members (DOC, 2020j). Members of boards are selected by the Minister of Conservation. However, in the case of nine conservation boards, specific provision is made for the election of one to three members on the basis of the recommendation of relevant iwi groups (Conservation Act, s 6P).

¹⁹For conservation management plans.

²⁰For conservation management strategies and national park management plans. The NZCA was established by the Conservation Act (s 6A). It consists of 13 members. Each member is selected by the Minister of Conservation, having regard to the interests of conservation, natural earth and marine sciences, and recreation.

There are 17 conservation management strategies, 13 national park management plans and 11 conservation management plans that are current, under review, or in development.²¹ These are required to be reviewed every ten years and in theory cover 100 per cent of public conservation lands and waters.

One of the key management approaches applied in many of these strategies and plans is visitor management zoning, which classifies public conservation lands and waters in terms of intended visitor use (according to accessibility and other criteria).²² The zones used are urban, rural, front country, backcountry and remote. In 2011, DOC also began using a destination management framework to manage all the elements that make up a site or destination – its values, attractions, the people, infrastructure, access and how the place is marketed.²³ This framework distinguishes between 'icon', 'backcountry', and 'gateway' destinations as well as 'local treasures'.

Regardless of the names used, these classifications inform decisions about the amount of infrastructure that is provided at places, and the extent to which different places are managed and promoted. The underlying philosophy seems to be that, by focusing visitors at a discrete number of icon and gateway sites, much larger tracts of public conservation land are more likely to retain a measure of wildness and natural quiet.

There has been significant debate about which sites – if any – should be prioritised for investment and promotion, and which should remain in more or less their natural state. The decision to upgrade access and viewing facilities at Ōpārara Arches in Kahurangi National Park is one recent example (see Box 4.2). DOC has argued that investment is required to mitigate the detrimental effects of growing visitor numbers and bring the access road and tracks up to an acceptable standard. However, there is a question about whether development would be necessary in the absence of a conscious decision to promote Ōpārara as an icon site (see Box 4.2).

²¹DOC, 2020i. National park management plans are required under the National Parks Act, whereas conservation management strategies are required under the Conservation Act. Conservation management plans can be required under the Reserves Act, the Conservation Act or Treaty settlement Acts.

²²This is an entirely administrative function – not one required by statute. The use of recreational zoning in New Zealand owes something to conversations with leading American conservationists (e.g. Aldo Leopold and Olaus Murie) in the 1940s (Shultis, 2001). New Zealand's first wilderness area (Otehake in Arthur's Pass National Park) was gazetted in 1955 (Barnett, 2017).

²³DOC, 2011, p.15. At the time, DOC stated that "changes suggested in this framework signal some fundamentally different thinking to deliberately align investment with the following principles: be accessible to the resident and travelling public, provide a quality experience that is appealing and safe, reflect the New Zealand character, facilitate commercially delivered recreation, share the work with others, and work within available and projected budget" (DOC, 2011, p.19).



Source: Trevor Kiatko, Flickr

Figure 4.1: Ōpārara Arches – a destination set to grow?

Box 4.2: Tourism development in the Ōpārara Basin – a timeline

Located near Karamea in Kahurangi National Park, the Ōpārara Basin is an established tourist destination, welcoming around 8,000 visitors in 2019.²⁴ The area is host to many rare native species such as the short-tailed bat, giant land snail, cave spider and whio.²⁵ It is also home to a unique – and fragile – karst terrain, including the Ōpārara Arch, reportedly the largest limestone arch in Australasia.

Largely on account of access provided by a pre-existing logging road, Ōpārara has been managed by DOC as a front-country visitor site since at least 2010.²⁶ The management objective for front-country sites is to (i) "provide a range of day-use recreational options located within easy reach of roads and highways, with facilities that meet high visitor asset management standards" and (ii) "enable people to explore a wide diversity of natural landscapes … without the burden of carrying overnight equipment or supplies".²⁷

Access and facilities have slowly been developed in the Ōpārara Basin since the early 2000s.²⁸ Since 2016, however, the idea of transforming Ōpārara into an icon site has taken hold as a way to improve the West Coast's tourism offering.

²⁴DOC, 2020f.

²⁵DOC, 2020e.

²⁶DOC, 2010b, p.188.

²⁷DOC, 2010b, p.125.

²⁸Oparara Valley Trust, 2020.

For example:

- In their 2016 *Tai Poutini West Coast Growth Study*, the Ministry for Primary Industries (MPI) and the Ministry of Business, Innovation and Employment (MBIE) recommended "developing a larger set of iconic attractions … that encourage visitors to travel across the region and stay longer". ²⁹ Ōpārara Arches was one of several potential attractions highlighted.
- In 2017, Development West Coast published the *West Coast Economic Development Action Plan 2017*, which recommended a feasibility study and business case be developed "to determine how best to improve the Oparara Arches experience and market the Arches as an iconic attraction." ³⁰ Tourism West Coast also promoted development of Ōpārara as an icon site in its 2017 marketing plan, with a goal to "increase visitor numbers from 20,000 p.a. to 66,837 p.a. by 2021". ³¹
- DOC also commissioned a report in 2017 on options for developing the Opārara Basin, which noted that the "uniquely formed cave system [is] up to the task of becoming an iconic destination of the West Coast".³²

In 2018, Development West Coast and MBIE co-funded two feasibility studies: one (by TRC Tourism) for the development of Ōpārara Arches, and one (by Opus) for upgrades to the road that accesses it. These studies identified a target of 66,000 visitors to Ōpārara by 2021 and offered a number of recommendations, including upgrading or sealing the access road to Ōpārara, creating new tracks around the site itself, installing a new suspension bridge and installing a new jetty.³³

In late 2018, DOC was awarded \$5.7 million from the Provincial Growth Fund to develop infrastructure at Ōpārara. At the time, DOC justified the funding on environmental grounds – it would "ensure the natural heritage arches and cave ecosystems of the area are protected for future generations". ³⁴ However, the description of the project put forward in the Provincial Growth Fund database states that the money was "to undertake a series of improvements recommended by the TRC tourism feasibility and business case". ³⁵

As of August 2020, work on phase one of the project at Ōpārara – upgrading track surfaces and installing flush toilets – had started.³⁶ In addition, an Assessment of Environmental Effects report concerning phase two of the project had been prepared and was being considered by the Nelson Marlborough Conservation Board.³⁷

²⁹MPI and MBIE, 2016, p.10.

³⁰Development West Coast, 2017, p.15.

³¹Tourism West Coast, 2017, p.25.

³²Lincoln University Design Lab, 2017, p.15.

³³DOC, 2018a.

³⁴DOC, 2018b.

³⁵Provincial Development Unit, 2020.

³⁶DOC, 2020f.

³⁷Nelson Marlborough Conservation Board, 2020, p.7.

There is a risk that, by increasing the physical carrying capacity of particular places, infrastructure investment can trigger a self-fulfilling dynamic of visitor growth, greater environmental pressure and the need for additional infrastructure investment.

Managing visitor demand represents another way to protect the natural character of particular places. And indeed, all of the management strategies and plans analysed as part of this investigation contain either quantitative limits on visitor numbers and/or limitations on infrastructure to achieve the same end. These apply not just to icon and gateway sites, but also in local treasure and backcountry sites. For example:

- With respect to overnight visitors, the Abel Tasman National Park Management Plan has a policy to "maintain the number of huts and campsites in the park at existing levels". 38 Similarly, the Tongariro National Park Management Plan states, "No additions and increases in the number of huts and in hut capacities are proposed. Any proposal to increase the number of huts in the park will require amendment to this plan." 39
- With respect to commercial access, the Westland Tai Poutini National Park Management Plan contains a daily limit of 85 aircraft landings on the lower parts of both Fox and Franz Josef glaciers. 40 Similarly, the Abel Tasman Foreshore Scenic Reserve Management Plan establishes a daily limit of 2,929 visitor movements entering the reserve on water taxis. 41
- With respect to day-visitor access, the Fiordland National Park Management Plan establishes
 a daily limit for the Freshwater Basin Activity Area at Milford of 4,000 people.⁴² Similarly, the
 Wellington Conservation Management Strategy establishes a daily limit for Kapiti Island of 160
 people.⁴³

It is one thing to determine limits. It is another thing to enforce them. It is widely understood that the often-breached Milford daily limit exists only on paper.

Mechanisms for enforcing limits

In the case of overnight trips, DOC has a well-defined ability to restrict numbers to levels that are consistent with the limits contained in management plans. The hut booking system, which allocates beds and tent sites in the most popular parts of the conservation estate on a first-in first-served basis, is the tool used to achieve this.

In theory, DOC has a similar ability to manage commercial access. Section 17SB of the Conservation Act gives the Minister of Conservation the power to decline concession applications if they are "obviously inconsistent" with the provisions of the Act or any other relevant statutory planning document. That said, recent experience has shown that imposing such limits is not always straightforward. In situations where concessions are already over-allocated, DOC has found it difficult to determine which operators should be required to reduce their activity levels.

³⁸DOC, 2008, p.113.

³⁹DOC, 2006, p.133.

⁴⁰DOC, 2014, p.40 and p.87.

⁴¹Tasman District Council and DOC, 2012, p.79.

⁴²DOC, 2007, p.170.

⁴³DOC, 2019g, p.133.

A complaint by Federated Mountain Clubs concerning helicopter landings on the Ngapunatoru Plateau in Fiordland in 2016 illustrates this point. As acknowledged in the Ombudsman's decision document, DOC had "decided not to implement a process to allocate the limited aircraft landing opportunities for the Ngapunatoru Plateau, as it anticipated there would be significant difficulties in designing a fair and reasonable process that would not be at risk of challenge." 44



Source: Laura Beasley, Flickr

Figure 4.2: Helicopter above Milford Sound. Aircraft activity in Fiordland has been a contentious issue in recent years.

In the case of day trips, DOC has a more restricted set of tools available to limit numbers to levels consistent with those contained in management plans. This was brought to light in several places prior to Covid-19. Perhaps most notably, visitor numbers at Milford Sound during recent summers regularly exceeded the 4,000 person per day limit set out in the Fiordland National Park Management Plan.⁴⁵ During January and February 2018, for example, this limit was exceeded on 20 days, with visitor numbers reaching a peak of 5,771 individuals on 22 February.

⁴⁴Ombudsman New Zealand, 2018, p.5.

⁴⁵Dobson et al., 2018, p.224.

Within national parks, a permit can be required for access to specially protected areas.⁴⁶ Under section 56 of the National Parks Act, the Minster of Conservation can also make bylaws to (among other things):

- "(c) [exclude] the public from any specified part or parts of any park
- (d) [prescribe] the conditions on which persons shall have access to or be excluded from any park or any part of any park, or on which persons may use any building or facility in a park, and fixing charges for the admission of persons to any part of any park set apart for any specified purpose of public recreation and for the use of any such building or facility".

But these tools have not been widely used, ⁴⁷ and there is a level of doubt as to whether the powers under section 56 can be used to limit visitor numbers purely in the interests of preserving peoples' experience. ⁴⁸

Recently, in situations where DOC has sought to impose limits on day visitors, whether for conservation, experiential, health and safety, biosecurity or other reasons, it has been testing several alternative approaches to bylaws and regulation. The recent decisions to introduce parking restrictions at the beginning of the Tongariro Alpine Crossing and the ski fields on Mount Ruapehu, as well as parking fees in Milford Sound, are examples of this. By forcing visitors to rely to a greater extent on commercial transport, DOC regained some control over the number of visitors via the concessions system.

But DOC has also used other tools to try to influence visitor numbers. These include the use of its social media platform (as well as the other marketing material it produces) to 'de-promote' places and divert visitors to less frequented alternatives. In addition, DOC has in some cases made the decision not to invest in new infrastructure (or even to remove existing infrastructure) in order to discourage visitor growth at particular places. The decision to remove the shelter and toilets from the Cape Kidnappers coastal track – while motivated by health and safety concerns – is one example.

Alternative policy approaches

What else is available?

Trying to address the loss of wildness and natural quiet that results from high levels of visitation by supplying more services and more access is problematic. Investing in new infrastructure at already popular natural attractions can, by fostering additional growth, serve to make the problem worse (see Box 4.3, for example).

Similarly, developing new attractions with the intention of dispersing visitors elsewhere can simply transfer the burden to a larger number of sites. The ongoing search for places yet to be discovered, together with DOC's attempts to divert visitors to new attractions (Ōpārara, for example), mean that the number of sites suffering acute pressure is only likely to grow as tourism re-emerges in the wake of Covid-19.

⁴⁶See section 13 of the National Parks Act 1980.

⁴⁷One example of where these bylaws have been used is in Kahurangi National Park. Section 10 of the Kahurangi National Park Bylaws 2009 specifies that groups of 10 or more people may not stay in the park for more than one night and, where they stay in or around a hut, may not use more than half of the hut's sleeping places.

⁴⁸Read as a whole, the Act may only allow for restrictions where they are necessary to preserve native plants and animals or for the 'welfare in general' of the park involved.

It is tempting to counter this concern by pointing to the sheer scale of New Zealand's public conservation lands and waters and the fact that there is plenty of remaining wildness and natural quiet even if the Milfords and Mt Cooks were multiplied several times over. The problem with that argument is that it tries to disconnect wildness and natural quiet from particular sites. But it is particular sites that people want to visit, and those qualities are intrinsic to them. Furthermore, the sheer ease of access that helicopters in particular provide means that few areas of the DOC estate are, in access terms, any longer truly remote.

Box 4.3: Visitor growth and infrastructure development at Milford Sound

Historical experience at Milford Sound illustrates some of the shortcomings of trying to keep up with tourism demand through building ever more infrastructure.

In 1992, 247,000 people visited Milford Sound. In the same year, the decision was made to develop new harbour facilities, associated buildings and car parks in what is now known as the Freshwater Basin Activity Area.⁴⁹ The design criteria for this development was that it should be able to cater for up to 4,000 visitors per day.⁵⁰

By 2018, 946,000 people were visiting Milford Sound each year,⁵¹ and daily visitor numbers were regularly exceeding 4,000 people. Visitor growth during the preceding decades had resulted in a range of social and environmental pressures, particularly during peak periods. These included overcrowding, noise and congestion; a loss of visual amenity; and parking spillovers along State Highway 94.

In response, there have been renewed calls to invest in more infrastructure.

Milford Sound Tourism – the entity tasked with the management of public infrastructure and facilities in Milford Sound – has recently pushed for the development of new accommodation and parking facilities. In 2017, the chairman of Milford Sound Tourism noted that increasing accommodation capacity along the Milford–Te Anau corridor to 150,000 guest nights per year was a priority.⁵² In 2019, the general manager of Milford Sound Tourism acknowledged that it was investigating the feasibility of establishing a multi-story car park at Milford Sound.⁵³

DOC itself has also been active in this space. In 2017, it redeveloped the Cascade Creek campsite – the closest such facility to Milford Sound – to increase capacity to 300 visitors per night.⁵⁴ More recently, DOC has considered transforming a three-hectare site at Little Tahiti – 2.5 kilometres south of Milford Sound – to provide additional camping or parking facilities.⁵⁵

All of this begs the question: What happens when the capacity of this infrastructure is once again saturated? Will the solution be to build more again, thereby accelerating the creeping loss of landscape values, quiet and the sense of wildness that once made Milford Sound so special?

⁴⁹DOC, 2007, p.154.

⁵⁰DOC, 2007, p.156.

⁵¹Milford Opportunities Project, 2020.

⁵²The previous level was 60,000 guest nights per year (Harding, 2017).

⁵³Nicoll, 2019.

⁵⁴Wilderness, 2017.

⁵⁵Harding, 2017.

If the pressures associated with tourism in the conservation estate are to be addressed in the long term, a greater focus on managing demand will be necessary. I am making two specific proposals that should be considered if we are serious about halting the steady erosion of wildness and natural quiet. The first involves a more stringent application of concession management tools that DOC has available to it. The second involves clarifying DOC's ability to restrict visitor numbers in situations where it is detracting from the tranquillity of a place, and giving DOC the tools necessary to limit visitor numbers in practice.

In focusing on these two proposals I have deliberately not focused on promoting modifications to the process that DOC uses – in conjunction with its Treaty partners, conservation boards and other stakeholders – to establish what an acceptable level of visitor activity is at particular places. Whatever the decision reached there, the hard question is whether any proposed ceiling on the level of visitation is consistent with the legislation and whether DOC is prepared and has the tools required to enforce limits in a timely and reliable way.

Proposal 1: Get serious about concessions

In 2017, DOC was managing 1,297 concessions for commercial recreational activity on public conservation lands and waters.⁵⁶ The majority of these related to guiding (581), motorised transport (flights, boats, vehicles – 379) or events (100).

While the number of individual concessions declined slightly in the years leading up to 2017, that does not necessarily reflect a fall in overall activity. In many cases, an individual concession provides the recipient operator with the right to undertake multiple events, flights or tours, the number of which may well have changed over time. The Fiordland National Park Management Plan, for example, allows for the number of Milford Aerodrome landings granted to concessionaires to increase at a rate of 4.5 per cent per annum.⁵⁷

In return for the right to undertake commercial activity on public conservation lands and waters,⁵⁸ DOC levies a set of activity-specific concession fees (see Box 4.4). In the 2019 financial year, these fees generated \$27 million in revenue for the Crown.⁵⁹ That is a small sum relative to DOC's total budget (\$430 million in the year ended 2019) or DOC's expenditure on the management of recreational opportunities (\$164 million in the year ended 2019).⁶⁰ It is also small relative to the income the Crown generates from regulated access to other publicly owned natural resources. Royalty payments received from oil and gas operators, for example, amounted to \$268 million in 2019.⁶¹

⁵⁶MfE, 2018.

⁵⁷DOC, 2007, p.228.

⁵⁸With respect to aviation, DOC can only use the powers provided by section 17 of the Conservation Act to regulate flights that depart from, land on or hover over public conservation lands and waters. As such, DOC has no formal control over 'overflight' activity. This issue is discussed further in a subsequent section of this chapter.

⁵⁹DOC, 2019a, p.136.

 $^{^{60}\}text{DOC},\,2019\text{a},\,p.65$ and p.103.

⁶¹New Zealand Petroleum and Minerals, 2019.

Box 4.4: The structure of activity fees for concessions and their relationship to fair market value

The way concession fees are structured varies according to the activity involved.

For some activities (including aircraft, parking for commercial operators, and some guiding), fees are levied on a specific basis. So, for example, commercial bus operators seeking parking pay an annual fee of \$1,050 per concession and per vehicle.⁶² Similarly, aircraft operators pay \$21 for a single drop-off or pick-up, or \$39 where multiple sites are involved. Rates are slightly higher where glacier landings are involved.⁶³

For other activities (including watercraft activities and ski field operation), fees are levied on an *ad-valorem* basis. Operators pay a percentage of their overall revenue – typically between 3.5 and 7.5 per cent – as their base activity fee. Premiums reflecting the uniqueness of the land involved, the availability of any pre-existing infrastructure, and the exclusivity of the concession can be added to this.⁶⁴

Section 17Y(2) of the Conservation Act gives the Minister of Conservation the ability to set the rent, fee or royalty relating to a concession at the 'market value'. Recently, there has been a shift towards trying to set activity fees at a level that reflects this value.⁶⁵ In 2018, DOC's Acting Director for Planning, Permissions, and Land noted that "in the past, some concessionaires have been paying less than market value and we are now in an ongoing process of identifying and increasing those fees where appropriate".⁶⁶

The relationship between current concession fees and fair market value is unclear. However, given that some of the concession activity allowed for by national park management plans is fully or even over-allocated,⁶⁷ it seems unlikely that current fees exceed what the market would be prepared to pay.

DOC is not required to promote commercial activity on the lands and waters it is responsible for. The Minister of Conservation noted in mid-2020 that "a commercial concession is a privilege, not a right, on public conservation land".⁶⁸ Under the Conservation Act, DOC is merely required to 'allow for' tourism's use of natural and historic resources, provided that use is not inconsistent with their conservation. The legislation is more encouraging towards recreation, which is to be 'fostered', but again only if it is consistent with the overall reasons for which public land is protected.

It is important to underline the very limited statutory recognition accorded tourism in DOC's legislation because its operational response to tourism gives the impression that it is an industry whose demands it feels obliged to accommodate. DOC's 2013 decision to allow an additional 60 helicopter landings per day onto Franz Josef Glacier because glacier retreat had made foot access unsafe has that feel about it.⁶⁹

⁶²DOC, 2020d.

⁶³DOC, 2020d.

⁶⁴DOC, 2020h.

⁶⁵DOC, pers. comm., 15 September 2020.

⁶⁶Nicoll, 2018.

⁶⁷DOC, pers. comm., 16 September 2020.

⁶⁸D. Williams, 2020a.

⁶⁹DOC, 2014, p.40. The limit prior to that was 25 landings per day. In 2019, the provision for 60 additional landings on Franz Josef was carried over into the draft update of the Westland Tai Poutini Management Plan. Provision was also made for 60 additional landings on lower Fox Glacier for similar reasons (DOC, 2020c, p.120).

Given the noise, visual pollution and emissions created by motorised activities, as well as the limited financial benefits to the Crown in return for allowing them, there is a question as to whether many of its responses are indeed consistent with the use of the resources entrusted to its care. DOC could take a much stronger position on concession management, only allowing commercial activity when it is on terms more favourable than those that are currently imposed. The following section sets out two proposals that DOC could pursue in that respect.



Source: PCE

Figure 4.3: A sign warning visitors about helicopter noise on Roberts Point Track, near Franz Josef Glacier.

Stricter conditions on concession activity

DOC could apply a more stringent environmental lens when considering concession applications. In seeking a justification for doing so, it need look no further than the Conservation Act. The granting of concessions can only be justified if their exercise is not *inconsistent* with the conservation of the resources it cares for. The word conservation is defined as:

"the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations".⁷⁰

It would be hard to argue that wildness and natural quiet are not intrinsic values. Maintaining them so they can be appreciated and enjoyed depends on the limitation of activities that degrade them. Noise, visitor density and increasingly intrusive infrastructure present obvious risks that, if accommodated, will be inconsistent with the values and resources for which DOC is responsible.

⁷⁰Conservation Act 1987, s 2.

For example, limiting noise and visual pollution from sightseeing flights might mean restricting operations to particular times or days so as to create periods during which these exceptional (and exceptionally sought after) elements of the conservation estate could be appreciated in the absence of noise from mechanised transport. It might also mean requiring more widespread use of noise-reducing technologies.^{71,72} The limitations necessary to ensure that the granting of concessions is not inconsistent with the purposes for which these places are preserved are site specific and need to be elaborated in management documents much as they are now. What is needed is a re-engagement with both the letter and the spirit of the legislation that governs these places.

Clearly, introducing more stringent environmental conditions on concessions would create new costs for tourism operators. While that would no doubt be unpopular with operators, it would be entirely consistent with the idea that businesses allowed the privilege of using public conservation lands and waters for commercial gain should do all they can to protect them from degradation. As it stands, certain classes of (mostly motorised) activity detract from the natural resources contained in the conservation estate, as well as New Zealanders' ability to enjoy those resources (through the effects of noise, congestion and visual pollution).

DOC already has the ability to impose environmental conditions on concession applications. Section 17X of the Conservation Act gives the Minister of Conservation the power to:

"impose such conditions as he or she considers appropriate for the activity ... including (but not limited to) conditions relating to or providing for—

(a) the activity itself, the carrying out of the activity, and the places where it may be carried out".

But the degree to which these powers are exercised is limited.⁷³ One example concerns the noise abatement certifications that aviation operators in Aoraki/Mount Cook, Westland and Fiordland National Parks are required to hold. These certifications can be issued by the Aviation Industry Association or Qualmark and require pilots and operators to demonstrate awareness of operational practices that can mitigate noise levels (e.g. operating at higher altitudes or ensuring that operations avoid sensitive areas where possible).^{74,75} However, many of these noise-reducing practices are voluntary in nature, and a lack of monitoring makes it difficult to assess the extent to which they are adopted. In addition, there is no requirement for operators to invest in available noise-reducing aircraft technologies.

Even with the adoption of improved operating practices and the more widespread use of noise-reducing technologies, it is inevitable that certain levels of aviation or cruise activity will create significant noise and visual pollution.

⁷¹For example, electric marine engines are emerging quickly, and are significantly quieter and less emissions-intensive than their petrol-powered equivalents. Concessions to provide commercial water transport could be made conditional on their use.

⁷²According to the Aviation Industry Association (2016), "Technology is becoming available to make an impact on sound reduction in existing fixed wing aircraft and manufacturers are working to develop lower sound levels in new generation helicopters. Some quieter aircraft are already available."

⁷³Dinica (2017, p.1824) states that "there is little evidence of meaningful environmental requirements included in concessions, of the type recommended in international guidelines, such as concrete measures taken regularly to achieve biodiversity conservation outcomes; the use of renewable energy/fuels and or environmentally friendly methods for wastes' management, wastewater treatment and transportation".

⁷⁴DOC, 2020b.

⁷⁵Aviation Industry Association, 2016, p.11.

At present, the acceptable level of such activities is set out in the relevant national park management plan and established through a collaborative process involving DOC, conservation boards, the public, the New Zealand Conservation Authority and the Minister of Conservation (see the 'Management plans and strategies' section earlier in this chapter). While this acceptable level of activity is – in many cases – fully allocated among concessionaires, ⁷⁶ that does not necessarily have to be the case.

DOC has to be open to the possibility that some activities are simply inconsistent with the values that require protection. Section 17U(2)(b) of the Conservation Act gives the Minister of Conservation the ability to "decline any application if the Minister considers that ... there are no adequate methods or no reasonable methods for remedying, avoiding, or mitigating the adverse effects of the activity, structure, or facility." If noise and visual pollution on the conservation estate are to be materially reduced, more frequent use could be made of this provision in specific cases.

Seeking a fair return from commercial activity in the conservation estate

Imposing stricter environmental conditions on concessions will increase pressure on concessionaires. This in turn raises questions about the adequacy and fairness of the process by which concessions come to be granted by DOC.

Historically, concessions to provide commercial recreational activities on public conservation lands and waters have been allocated on a first-in first-served basis.⁷⁷ Once the activity limits set out in the relevant management strategy or plan are reached, no further concessions can be granted. That has become problematic in situations where demand for concessions to provide a particular activity exceeds the prescribed limits (e.g. the Ngapunatoru example discussed earlier) – DOC has lacked a clear process for deciding which operators should be favoured. It has also resulted in fairness concerns. Incumbent operators are favoured when concessions are renewed, whereas newer, potentially more innovative firms tend to be frozen out.

Allocating access on a first-in first-served basis has created another issue: rents. For activities where demand for concessions outstrips supply, the operators that are granted access are – by virtue of their market position and the uniqueness of their offering – likely to be extracting significant economic rents. At present, DOC captures some proportion of these rents through activity-specific concession fees. However, as noted in Box 4.4, the level at which fees are currently set probably falls below that implied by fair market value. While the existence of rents is not necessarily a problem in itself, it is certainly appropriate to ask whether they should more appropriately accrue to the public owners of New Zealand's conservation lands and waters than the shareholders of a select few tourism operators.

Allocating concessions via a competitive tender process could help to address the above issues. DOC already makes use of tenders for certain classes of commercial activity (e.g. livestock grazing or the use of built infrastructure), 78,79 but it could extend their use more widely.

⁷⁶DOC, pers. comm., 16 September 2020.

⁷⁷Dinica, 2019, p.258.

⁷⁸For example, as of September 2020, DOC was seeking expressions of interest for the use of the Officers Mess Building in Takapuna Historic Reserve and for grazing land on Aotea/Great Barrier Island (DOC, 2020a).

⁷⁹Where DOC has used a competitive process to allocate commercial opportunities, it has applied a weighted criteria approach to determine the successful bid. Rather than awarding the concession to the highest bidder, this approach takes into account a range of other factors (e.g. an applicant's previous experience, business plan or relationship with the land) (DOC, pers. comm., 15 September 2020).

Similar approaches are used successfully in a number of other jurisdictions, including Tasmania and New South Wales in Australia, Canada, Namibia and the United States.⁸⁰ In New South Wales for example, the Department of Planning, Industry and Environment runs periodic tenders for the right to operate hospitality and tourism properties in national parks.⁸¹ These opportunities are published on the state government's procurement website, and typically include a set of conditions that interested applicants are required to meet.

Similarly, in the United States, the National Park Service uses a three-step process to allocate commercial opportunities. ⁸² In the first step, the National Park Service develops a prospectus that sets out the terms and conditions of the concession contract to be awarded, as well as the criteria to be used in selecting the best proposal. Applicants are then invited to submit proposals, including a proposed minimum 'franchise fee'. Finally, a concessions contract is awarded to the applicant whose proposal best aligns with the desired criteria.

The use of tenders to allocate recreational concessions has also received support in the New Zealand context. Box 4.5 provides a brief history of key stakeholder views.

Box 4.5: A competitive approach to concession allocation in New Zealand – well-trodden ground

The use of a competitive tender process to allocate recreational concessions on New Zealand's conservation estate has been recommended previously.

In 2000, DOC published a report titled *Management practice for allocation of recreation concessions*. At the time, visitor pressure was increasing and DOC was looking to develop a system that would "establish when to allow or restrict concessions, and under what conditions". The report offered two headline recommendations, the first of which was:

"Visitor management could be improved by integrating concession management with recreation planning. Following a spectrum of service concept, recreation planners could consider what visitor services are required, what conditions should apply, then assess who is the best to provide that service, and if a concession is the preferred choice, a tender offered." 83

In 2005, DOC introduced the possibility of tendering concessions in situations where demand for them was approaching the limits prescribed in management plans. A Concerns expressed by operators led to the involvement of the Tourism Industry Association and the then Ministry of Tourism, and resulted in the negotiation of a Limited Supply Agreement in 2008. The agreement set out a process for allocating concessions in places where demand for them exceeds the activity limits contained in DOC's various statutory management plans. Between 2008 and 2018, the agreement envisaged a Preferential Right to Apply process, whereby incumbent operators were favoured so long as they had met a set of predefined conditions. After 2018, it was envisaged that a more competitive process – in the form of a tender system – would be implemented.

⁸⁰World Bank, 2016, p.25.

⁸¹Department of Planning, Industry and Environment, 2020.

 $^{^{\}rm 82}Office$ of the Federal Register, 2020.

⁸³ Parr, 2000, p.5-6.

⁸⁴DOC et al., 2008, p.1.

⁸⁵ DOC et al., 2008.

In 2010, a DOC review of the concessions system also lent support for the greater use of tenders to allocate concessions.⁸⁶ The executive summary of this review stated, "As concession activity grows, the need for recourse to a wider range of allocation mechanisms will become more pressing and a range of options will be investigated, including through pilot studies. The establishment of the Commercial Business unit will increase capability in running effective tenders".⁸⁷ The review also called for reform to section 17ZG of the Conservation Act, which then (as now) does not explicitly allow for tenders to be used to award concessions.⁸⁸

As of September 2020, progress on these recommendations had been partial. DOC does make use of tender processes for some commercial opportunities, but typically not for the recreational concessions that are the subject of this chapter. Most recently, the Ngāi Tai ki Tāmaki Supreme Court decision (see Box 4.6) has forced DOC to review the concession system, including how concessions are allocated.

Allocating concessions to undertake commercial activity on public conservation lands and waters by tender is provided for under existing legislation, although an element of ambiguity persists. Section 17ZG of the Conservation Act, which relates to concession management, allows the Minister of Conservation to "tender the right to make an application, invite applications, or carry out other actions that may encourage specific applications". Notably, however, while this clause allows the *right to apply* for a particular concession to be allocated by tender, it does not explicitly allow *concessions themselves* to be allocated in this way.⁸⁹

That said, section 17Y(2) of the Conservation Act gives the Minister of Conservation the ability to set the rent, fee or royalty relating to a concession at the 'market value'. In practice, competitive processes – such as tenders or auctions – represent the only means of establishing what the market value of a particular concession is.

Any change to the way that recreational concessions are allocated would need to take into account the recent Ngāi Tai ki Tāmaki Supreme Court decision (Box 4.6). For the purposes of this chapter, that decision contains two key elements. First, it clarifies that, in granting concessions, DOC is required in certain circumstances to consider the possibility of according a degree of preference to its Treaty partners. Second, it clarifies that section 4 of the Conservation Act does not give hapū or iwi a power of veto over the granting of concessions. In the conservation of the conservation act does not give hapū or iwi a power of veto over the granting of concessions.

⁸⁶DOC, 2010a.

⁸⁷DOC, 2010a, p.8.

⁸⁸DOC, 2010a, p.14.

⁸⁹DOC, 2010a, p.14.

⁹⁰The relevant text of the court's decision is as follows: "The decision-maker's dismissal of the possibility of preference being accorded to an iwi with mana whenua over the land to which the challenged decisions related and of the economic benefit that could accrue to such an iwi being taken into account meant she did not give proper consideration to those possibilities as s 4 required her to do" (Supreme Court of New Zealand, 2018).

⁹¹The relevant text of the court's decision is as follows: "We accept that s 4 does not create a power of veto by an iwi or hapū over the granting of concessions in an area in which the iwi or hapū has mana whenua" (Supreme Court of New Zealand, 2018).

Box 4.6: The Ngāi Tai ki Tāmaki Supreme Court decision – and DOC's response

The Ngāi Tai ki Tāmaki case concerns the grant of concessions on Rangitoto and Motutapu islands to the Fullers Group and Motutapu Island Restoration Trust. The grant of these concessions was challenged by the Ngāi Tai ki Tāmaki Tribal Trust, which argued that no concessions should be granted to other operators in order to preserve Ngāi Tai's opportunities to develop tourism services on the islands.

In its decision, the Supreme Court noted that section 4 of the Conservation Act (which gives effect to the principles of the Treaty of Waitangi) requires more than procedural steps and that "substantive outcomes for iwi may be necessary including, in some instances, requiring that concession applications by others be declined." ⁹²

The then Minister of Conservation, Hon Eugenie Sage, responded by committing to a partial review of the Conservation General Policy and General Policy for National Parks. The scope of this work is broader than the decision specific to the Ngāi Tai case, and extends to how DOC can give effect to the principles of the Treaty of Waitangi more broadly.⁹³ This process is being conducted in partnership with whānau, hapū and iwi, and is expected to be completed by mid-2022.⁹⁴

Following the judgement in December 2018, previously planned reviews of the Aoraki/ Mount Cook National Park Management Plan and the Westland Tai Poutini National Park Management Plan were paused. As of October 2020, work on the Aoraki/Mount Cook National Park Management Plan review has restarted, but the Westland Tai Poutini National Park Management Plan remains paused.

In principle, allocating recreational concessions via a competitive tender process could support the aspirations of hapū and iwi to develop business ventures centred on the conservation estate. The current system – where new entrants are often frozen out when allowable concession activity is fully allocated – represents a barrier to such ventures (iwi-based or otherwise). In addition, there is no reason why any such tender system could not allow for – where appropriate – a certain degree of preference to be accorded to applications from mana whenua. One idea for how this might be achieved is provided in the section on implementation that follows.

Implementation

The effectiveness of using tenders more widely will depend significantly on how they are designed. The following suggestions on key design elements, including the types of activities that might be included, geographic scope, tender frequency and incorporation of the Ngāi Tai ki Tāmaki Supreme Court decision, are not intended to be comprehensive. But they serve to provide an indication of what allocating concessions via tender might look like in practice.

⁹² Supreme Court of New Zealand, 2018.

⁹³Office of the Minister of Conservation, 2019.

⁹⁴DOC, 2020g.

Activity scope: Any tender system would not need to apply to all classes of commercial recreational activity that take place on public conservation lands and waters. There is probably little to be gained by using tenders to grant concessions for activities that are uncommon or 'one off' in nature (e.g. filming or photography): the administrative costs of doing so would quickly become excessive. Rather, the primary focus should be on those classes of activity and locations where demand for concessions is approaching – or exceeds – the activity limits prescribed in DOC's statutory management strategies and plans.

Geographic scope: The simplest approach would be for the tender system to operate at the level of individual conservation management or national park management plans. That would allow the system to be linked with the activity limits that are prescribed in these plans.

Tender frequency: How frequently tenders were undertaken would need to take into account the differing capital intensities of different concession activities. For activities with larger up-front costs (heli-hiking, for example), concessions would necessarily need to be longer in duration in order to preserve an incentive to invest and enable operators to defray their capital costs. More generally though, calls for longer duration concessions would need to be balanced against the need to give potential new entrants access to the market.

Intellectual property: One issue that would require consideration if concessions were to be allocated via a tender system would be how to deal with proposals to carry out new or novel activities. Clearly, the originators of such ideas might (quite reasonably) feel aggrieved if, having applied for a concession to carry out a new activity, it was immediately put out for tender. Again, tender frequency is important here. A balance would need to be struck between preserving the incentive to develop new recreational opportunities and ensuring that third-party operators could (over time) compete for that market.

Concerns about monopolisation: Any tender system could provide opportunities for larger operators to acquire the right to be the sole provider of a particular activity in a particular place. The concern here is not so much that a monopoly provider could capture an outsize share of the economic rents on offer. Rather, the issue is that monopoly providers would potentially have incentives to shade the quality of their offering (in order to cut costs) or charge excessively high prices. These concerns could be mitigated to some extent by market discipline – operators would have little interest in increasing prices to levels beyond what tourists would be prepared to pay. They could also be addressed by ensuring successive tenders are spaced closely enough to ensure sufficiently regular competition for the market, or by tendering particular concessions in several tranches to retain at least some competition within the market.

⁹⁵These rents would largely be captured in the concession fee that would emerge from the tender process. In preparing their tender bid, operators would consider what they could charge if they won the concession. If winning the concession meant becoming a monopoly provider, operators would factor any beliefs they might have about being able to charge higher prices into their bid.

⁹⁶To be clear, however, such outcomes are certainly not precluded in the current system, with its emphasis on preserving the rights of incumbent operators.

Incorporating the Ngāi Tai ki Tāmaki Supreme Court decision: Reserving a certain proportion of allowable concession activity for Māori applicants represents one possible option. The Crown has already provided a mechanism for preferential access to certain resources by Māori. For example, under the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, money, shares and commercial fishing quota were transferred to Māori. ⁹⁷ A similar approach was taken for the Maori Commercial Aquaculture Claims Settlement Amendment Act 2011, where 20 per cent of old and new aquaculture management areas were allocated to iwi-based aquaculture organisations. ⁹⁸ However, any attempt to recognise Māori rights and interests should be the subject of appropriate engagement with Māori and ideally be jointly developed.

Economic consequences of changing the terms on which concessions are granted

A natural – and largely unavoidable – consequence of placing limits on the amount of commercial activity that can take place on public conservation lands and waters (i.e. the limits that are set out in DOC's various management plans) is the creation of economic rents. Those operators fortunate enough to be granted access can, by virtue of their market position and the uniqueness of their offering, charge prices in excess of what is required to cover their costs and generate a reasonable return on investment.⁹⁹

The social question that arises is: To whom should these rents most appropriately accrue? The proposal to allocate recreational concessions by tender would allow the Crown, on behalf of all New Zealanders, to capture a greater share of the rents associated with commercial activity on the conservation estate. It would also give DOC a more transparent means of allocating concessions, particularly in those situations where demand for them was approaching the limits specified in national park management plans.

Together with the application of stricter conditions on concessions, making greater use of tenders would have implications for tourism operators, DOC and tourists themselves.

⁹⁷MfE and Māori Crown Relations Unit, 2018, p.53.

⁹⁸MPI, 2011.

⁹⁹In economics, these rents are often referred to as differential or Ricardian rents. They result from the fact that natural resources are often of variable quality, and that economic agents with access to higher quality resources will be able to use them to generate outsize profits.



Source: Travolution 360, Flickr

Figure 4.4: Water taxis near Abel Tasman National Park. Businesses seeking to operate on public conservation lands and waters require a concession to do so, but there is a question as to how they should be awarded.

Tourism operators

The introduction of a tender system would provide a strong incentive for tourism operators to reveal the economic value that access to public conservation lands and waters provides for their businesses. That is because, in preparing their bids, operators would need to consider the possibility of losing access if outbid by competitors. Currently, they are under limited pressure to do this.

The amount that competing operators would be prepared to bid in a tender system would largely depend on two things: the terms on which the concession in question was being made available, and the beliefs that operators have about the price sensitivity of their customers.

All things being equal, a concession allowing for higher levels of activity would have more economic value associated with it than one with less activity. In the same way, a concession with more stringent environmental or other conditions attached to it would – by introducing additional costs for operators – be worth less than one with few conditions.

In preparing their bids, operators would consider what prices they could charge if they won the concession. If operators believed the market would bear higher prices, then their tender bids would reflect that.

DOC and the Crown

For DOC, allocating concessions via a tender process offers a way of achieving a stated goal of setting concession fees at a level that represents 'fair market value' (see Box 4.4). Simply asking the market what it is prepared to pay for the privilege of operating on conservation land is a straightforward approach to establishing what that value is.¹⁰⁰

By encouraging prospective concessionaires to put forward their best offer, tendering would likely translate into increased concession revenues for the Crown. But the size of any increase would depend on the terms that concessions were tendered on – terms that DOC has some control over. For example, if DOC began applying more stringent environmental conditions to concession activity, the likely effect would be to limit (or perhaps even cancel out) any increase in tender revenues the Crown could hope for. That would be consistent with DOC's mandate to put the preservation of the assets it is charged with caring for first.

Tourists

For tourists, the application of stricter environmental conditions on concessions, and their allocation by tender, would probably translate into higher prices as operators attempt to pass costs on. In effect, those purchasing the service would be being asked to pay for the noise, congestion and other environmental pressure that they were creating.¹⁰¹

That tourists (particularly international tourists) should contribute an economic return directly to the Crown seems reasonable given that taxpayers foot far larger bills to maintain the conservation estate than is ever reflected in concession activities. Such a result would be consistent with the oft-heard refrain that New Zealand should pursue value over volume if key environmental and social objectives are to be met. Continuing to cater to low budget travellers for fear of becoming uncompetitive only risks returning to the pre-Covid status quo.

Possible unintended consequences of allocating concessions via tender

For aviation activity, strengthening the terms on which concessions are available could encourage operators to offer an increased number of scenic overflights, and thereby bypass the concession system altogether. As noted previously, DOC's ability to regulate aviation activity via the concession system is restricted to flights that take off from, land on or hover over conservation lands.¹⁰²

To some extent, this incentive also exists in the current system. Operators prepared to offer scenic flights (i.e. without landings) that depart from outside conservation lands do not need to pay a concession fee to DOC. For many tourists, such flights may not be as attractive a proposition as one involving a 'heli-hike' or glacier landing. But there is considerable demand for them. A quick online search in the Aoraki/Mount Cook area reveals a number of operators offering scenic flights from places such as Franz Josef, Glentanner and Tekapo airfields (all of which are located outside conservation lands).

¹⁰⁰ Relative to the current approach, for example, which involves a combination of market observation and independent valuation.

¹⁰¹ This is the standard economic argument for pricing externalities: removing the distortion created by people not facing the full costs of their actions.

¹⁰² Section 17ZF of the Conservation Act defines landing as including "the hovering of any aircraft and the setting down or taking on of goods or persons from an aircraft".

The relative contribution of scenic overflights to aviation-related noise pollution in public conservation lands is unknown. That said, it is an issue that has surfaced repeatedly over the last two decades. Noise from overflights featured in PCE's first tourism investigation in 1997. My predecessor Morgan Williams also published a specific paper on the issue in response to concerns "about the lack of legislative controls of noise from aircraft overflying areas valued for their tranquillity and privacy". 103 As recently as August 2020, complaints were being made about overflight activity expanding into gazetted wilderness areas such as the Adams Wilderness Area. 104

At present, DOC has few levers available to control overflight activity above conservation land. Airspace in New Zealand is controlled by the Civil Aviation Authority, whose primary responsibility is ensuring the safety of all aviation activity. That said, the Civil Aviation Act also provides a range of powers relating to the management of noise.¹⁰⁵

To date, these powers have not been used to address noise from scenic overflights above public conservation lands and waters. ¹⁰⁶ Instead, DOC has worked informally with the Civil Aviation Authority and aircraft operators to try to restrict overflight activity to particular areas within the national parks. ¹⁰⁷ This is reflected in the voluntary codes of conduct that have been developed by industry in collaboration with DOC. For example, the *Southern Alps MBZ Airspace Users Group Handbook 2018* identifies a number of noise-sensitive areas – Mount Cook summit and summit ridge, the Mueller Valley and Mueller Hut, and the Hooker Valley, for example – that should be avoided. ¹⁰⁸

The effectiveness of the advocacy-based approach that DOC has used to date is unclear. Some stakeholders are of the view that little improvement has been achieved. The New Zealand Alpine Club, for example, has noted that "advocacy to aviation controllers and operators or similar policies ... have been in management plans for a long time but clearly have been ineffective". 109 Similarly, Federated Mountain Clubs has highlighted the recent expansion of low-altitude scenic flights into wilderness areas that were previously free of them.

If noise from scenic overflights is to be addressed in the future, greater use of the tools provided by sections 28 or 29A of the Civil Aviation Act represents the most obvious way forward. That said, there is a question as to whether DOC should have greater control over when and where these tools are applied. The current situation – in which DOC is attempting to manage the effects of an activity over which it has no direct control – is problematic.

¹⁰³ PCE, 2000, p.1.

¹⁰⁴ L. Williams, 2020. Concerns about overflight activity above wilderness areas were also noted at a New Zealand Conservation Authority meeting in December 2019 (NZCA, 2019, p.9).

¹⁰⁵ For example, section 28 allows the Minister of Transport to make rules for (among other purposes) "protecting and promoting public health" or "ensuring environmental sustainability". Section 29A allows the Minister to make rules "providing for ... prohibition and restriction of airspace" for any reason in the public interest, and section 72I(3)(b) requires the Director of Civil Aviation to "take such action as may be appropriate in the public interest to enforce the provisions of this Act and of regulations and rules made under this Act".

¹⁰⁶ Rules relating to noise do exist, however (Civil Aviation Authority, 2020). For example, Civil Aviation Rule Part 21 includes technical standards for noise emissions for certain types of aircraft. Civil Aviation Rule Part 93 includes noise abatement procedures for aviation activity near certain airports, including Auckland, Wellington and Christchurch.

¹⁰⁷ For example, section 10.6(c) of the General Policy for National Parks states that "the Department should work with aviation controlling authorities, aircraft operators and other interested parties to prevent the adverse effects of overflights on national park values, including the enjoyment of people on the ground" (NZCA, 2005, p.51).

¹⁰⁸ Southern Alps MBZ Airspace Users Group, 2018, p.34.

¹⁰⁹ New Zealand Alpine Club, 2019, p.16.

At present, the Minister of Transport has the power to make rules that prohibit or restrict the use of airspace for a range of reasons in the public interest. However, it isn't entirely clear that rules can be used to manage the impacts of aircraft noise on conservation lands, and the Minister is not obliged to engage with DOC about the use of the powers. Amending the Civil Aviation Act to require the Minister of Transport to consider and respond to recommendations made in this regard by the Conservation Authority, a Conservation Board or the Director-General of Conservation would give DOC a clearer basis for advocating better controls over scenic overflight activity. At the same time, clarifying in legislation that the impacts of aircraft noise on conservation lands, including on visitor experience, is a valid reason for the Minister of Transport to make such rules would help DOC to make its case.

Proposal 2: Clarify DOC's ability to use rationing tools

Clarify DOC's ability to restrict day visitors on experiential grounds

The stated reason provided by the National Parks Act for allowing freedom of entry and access to the national parks is to enable the public to "receive in full measure the inspiration, enjoyment, recreation, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features." 110

Prior to Covid-19, it was not clear that open access was resulting in the desired outcome. In 2019 daily visitor numbers at a number of New Zealand's most iconic natural attractions extended into the thousands, making it difficult for the public to experience the wildness and natural quiet that are intrinsic to those places. At the Tongariro Alpine Crossing, visitor numbers on busy days approach 3,000,¹¹¹ despite the fact that a DOC governance group considers 1,200–1,500 people to be appropriate.¹¹²

As discussed earlier, the National Parks and Conservation Acts already give DOC the ability to restrict public access to national parks in situations where it threatens things such as landforms, species or soils. DOC should also have the ability to restrict access where the weight of numbers starts to degrade the inspiration or enjoyment that can be derived from a location.

This could be done by incorporating wording along the lines of Policy 9.1(f) of the Conservation General Policy into both the Conservation Act 1987 and also the National Parks Act 1980, along with provisions expressly empowering DOC and the Minister of Conservation to require access permits in a wider range of situations. Policy 9.1(f) reads:

"recreational opportunities at places should be managed to avoid or otherwise minimise any adverse effects (including cumulative effects) on:

- i. natural resources and historical and cultural heritage where required by the relevant Act;
- ii. the qualities of peace and natural quiet, solitude, remoteness and wilderness, where present; and
- iii. the experiences of other people." 113

¹¹⁰ National Parks Act 1980, s 4(2)(e).

¹¹¹ Hampton, 2017.

¹¹² Macdonald, 2018.

¹¹³ DOC, 2005, p.36.

Make greater use of rationing tools where required

Regardless of the rationale for restricting public access to parts of the conservation estate, DOC needs an improved set of tools to ration access in practice.

As discussed earlier, DOC has to date relied on a set of inventive but often ad hoc tools to restrict visitor numbers in places where numbers threaten to exceed established limits. One approach has been to restrict private vehicle access while simultaneously using the concessions system to limit the amount of commercial transport that is available (e.g. at Kapiti Island or Tongariro). DOC has also made strategic use of its social media platform and role as an infrastructure provider to try to manage visitor levels.

As tourism numbers rebound in the wake of Covid-19, questions about the effectiveness and responsiveness of these approaches will re-emerge. Clarifying DOC's ability to use an expanded set of demand management tools would ensure it has the ability to manage any level of future demand for headline sites. The following sections focus on two tools that, to date, DOC has made little use of in the context of limiting day-visitor numbers – first-in first-served and price-based rationing.¹¹⁴

Rationing access according to first-in first-served

The use of a first-in first-served rationing approach would give DOC more control over the number of visitors at popular natural attractions. Importantly, it would also safeguard DOC's ability to manage tourism on public conservation lands and waters in any high growth future. Such an approach could be implemented in two ways.

The first – queuing at site – would preferentially grant access to those individuals who arrived first on any given day. Once visitor numbers on that day reached the prescribed daily limit, no further access would be granted. Visitors could either choose to wait, and be admitted to the area as others left, or choose to visit on an alternative day.

The second approach – reservations via an online booking system – would preferentially grant access to those individuals who booked first. This approach would closely resemble the way that DOC currently allocates access to the network of managed huts and campsites (and could also be enforced in a similar way).

Each approach has its strengths and weaknesses. For example, implementing first-in first-served queuing would require seasonal staffing of the entry point(s) to parts of the conservation estate, with the staffing costs that come with that. It would also require individuals to queue, creating wasted time that could be better used in a multitude of ways. While queuing could be avoided to some extent through the use of real-time online reporting, that would be of little use for individuals travelling significant distances to reach the site in question.

That said, the use of a reservations system has the potential to be frustrating for individuals who live near busy parts of the conservation estate, and who would otherwise undertake impromptu visits (when the weather was good, for example).

Ballot systems offer another possible means of allocating access to things in short supply. However, in the context of day visits to the most popular parts of the conservation estate, a ballot system probably isn't the most practical way forward. Decisions about when the ballot was drawn would be particularly problematic. For example, drawing ballots well in advance of the desired visit date would leave people (particularly locals) with little flexibility to spontaneously visit their local national park. In contrast, drawing ballots much closer to the desired visit date would mean international visitors to New Zealand would have little assurance of seeing the headline sites.

While research undertaken for this report did not identify any case law concerning DOC's ability to restrict access to public conservation lands and waters on a first-in first-served basis, it is an approach that seems largely consistent with existing legislation. At its simplest, implementing a first-in first-served queuing system would amount to no more than the enforcement of day-visitor limits that are already contained in some national park management plans and conservation management strategies.

If specific powers were sought, section 56 of the National Parks Act – which gives the Minister of Conservation the power to "make bylaws that are not inconsistent with the management plan for any park" for purposes including "excluding the public from any specified part or parts of any park" – could be considered.¹¹⁵

Rationing access via a price mechanism

Rationing access to New Zealand's headline natural attractions could also be achieved via a price mechanism. In those places where visitor numbers were approaching undesirable levels (either on environmental or experiential grounds), or where a first-in first-served system was resulting in significant numbers of people being turned away, the introduction of an access fee could help to moderate visitor demand.

Price-based rationing has a number of desirable properties relative to a first-in first-served approach, not least of which is the way it allocates access to individuals who value the experience the most. The corollary, of course – as discussed further below – is that pricing can serve to exclude less well-off individuals. In addition, the revenues that such charges generate could become an important source of funding for conservation efforts.

Access fees could be pitched to differentiate between domestic and international visitors, with higher rates applying to the latter. That is an approach that has been applied internationally (see Table 4.1) as well as in New Zealand (at the Waitangi Treaty Grounds, for example). Implementing it could be as simple as asking tourists to present a New Zealand driver licence or similar piece of identity on arrival at the site to access the reduced rate.

The use of access fees for protected areas is widespread internationally, with around 60 countries using them.¹¹⁶ As shown in Table 4.1, the cost of entering protected areas is often set at between \$10 and \$60, but with much higher rates in those places with outstanding wildlife offerings. In many cases, access fees differentiate between international and domestic tourists. Day access to Torres del Paine National Park in Chile, for example, costs \$48 for international tourists and \$14 for domestic tourists.¹¹⁷ In some cases, access fees also vary according to the season, with higher prices charged during peak periods.

¹¹⁵ Again though, unless the status of wildness and natural quiet is clarified in primary legislation, it is uncertain whether the powers under section 56 can be used to limit visitor numbers in the interests of improving peoples' experience. Read as a whole, the Act (in its current form) may only allow for restrictions where they are necessary to preserve native plants and animals or for the 'welfare in general' of the park involved. Whether the general welfare of the park extends to the experience it offers to visitors is a moot point.

¹¹⁶ Van Zyl et al., 2019, p.42.

¹¹⁷ Chilean Ministry of Agriculture, 2020.

Table 4.1: Access fees for protected areas in other countries. 118

National Park	Country	Foreigner fee (NZD)	Domestic fee (NZD)	Time frame
Volcanoes National Park (gorilla tracking)	Rwanda	2,295	2,295	Per day
Galápagos National Park	Ecuador	153	9	Multi-day
Amboseli/Lake Nakuru National Parks	Kenya	92	12	Multi-day
Volcanoes National Park (nature walk)	Rwanda	61	5	Per day
Torres del Paine National Park	Chile	48	14	Per day
Plitvice Lakes National Park	Croatia	46	?	Differs by season
Victoria Falls Rainforest	Zimbabwe	46	11	Per day
Kakadu National Park	Australia	43	0	Differs by season
Kruger National Park	South Africa	36	9	Per day
Yosemite National Park	United States	31	31	Multi-day
Cradle Mountain-Lake St Clair National Park	Australia	27	27	Per day
Komodo National Park	Indonesia	25	1	Per day
Manuel Antonio National Park	Costa Rica	24	<1	Per visit
Everglades National Park	United States	23	23	Multi-day
Tortuguero National Park	Costa Rica	23	3	Unknown
Kosciuszko National Park	Australia	12	12	Per day, differs by season
Banff National Park	Canada	11	11	Per day

Data from Rwanda (IREMBO, 2020), Ecuador (GalapagosIslands.com, 2020), Kenya (Amboseli National Park, 2020), Chile (Chilean Ministry of Agriculture, 2020), Croatia (Plitvicka Jezera National Park, 2020), Zimbabwe (Victoriafalls24. com, 2017), Australia – Kakadu (Parks Australia, 2020), South Africa (SANParks, 2020), United States (National Park Service, 2020b), Indonesia (Flores Komodo Expedition, 2020), Costa Rica – Manuel Antonio Park, 2020a), United States – Everglades (National Park Service, 2020a), Costa Rica – Tortuguero (Manuel Antonio Park, 2020b), Australia – Tasmania (Parks & Wildlife Service Tasmania, 2020), Australia – Kosciuszko (NSW National Parks, 2020), and Canada (Parks Canada, 2020).

Access charges already exist for a number of scenic and wildlife reserves located on New Zealand's conservation estate. Access charges to Waimangu Scenic Reserve, for example, range from \$5 for children aged between 5 and 16 to \$20 for adults. ¹¹⁹ Similarly, at Pūkaha/Mount Bruce, access costs \$6 for children and \$20 for adults. Locals receive half-price rates if they present proof of address. ¹²⁰ Importantly, these arrangements are made possible by these sites being classified as reserves. The Reserves Act allows for the cost of any infrastructure that might be required to enjoy such places to be defrayed by charging the individuals that use them.



Source: mzagerp, Flickr

Figure 4.5: Access fees are already required at some attractions on public conservation lands – here at Waimangu, for example.

Whether access fees could be used to ration visitor access to other parts of the conservation estate is uncertain. At present, section 17(1) of the Conservation Act expressly prohibits the use of pricing to ration day access to conservation areas, stating that "except as provided by or under this section, Part 3B, or section 38(1), the entry to and use of conservation areas by the public shall be free of charge". That said, the focus of this provision on conservation areas means that it may not apply to public conservation lands that are classified as national parks. In that respect, it is interesting to note that section 56 of the National Parks Act gives the Minister of Conservation the power to make bylaws for, among other things, "fixing charges for the admission of persons to any part of any park set apart for any specified purpose of public recreation and for the use of any such building or facility".

In recent years, there has been sporadic but ongoing debate about clarifying DOC's ability to introduce access fees for national parks. 121 However, the existing debate differs from the proposal here in two important respects.

First, access fees have widely been seen as a way to supplement the funding available to DOC to cope with the pressures resulting from visitor growth. While the revenue resulting from any future access fees could no doubt be used for a variety of conservation or visitor management initiatives, the rationale put forward here for their introduction is different. Rather than accepting the inevitability of ever more visitor growth and financing infrastructure to accommodate it, fees can be used to ration visitor numbers to levels consistent with preserving the character of headline natural attractions.

Second, access fees have typically been envisaged as applying across the entire conservation estate. That need not be the case – they could be restricted to those headline sites where visitor numbers were approaching undesirable levels.

The fact that access fees have not gained more traction in the New Zealand context is in large part due to three key concerns.

- **Distributional:** Asking domestic tourists to pay for day access to parts of the conservation estate is seen as an infringement on their birth right. Many New Zealanders consider that they pay their taxes for, among other things, the maintenance of conservation lands. Beyond that, there is a concern that such charges could mean that less well-off New Zealanders may not be able to afford visits to iconic sites. These are real concerns that should not be dodged. Equally, refusing to consider access fees and allowing the ongoing deterioration of some sites allows the erosion of that same birth right in a different way. These concerns could be mitigated by a differential charge for domestic tourists, and by allowing holders of a community services card to access the site at a reduced rate.
- Impracticality: Monitoring and enforcement of any access fee has often been seen as impractical because of the number of entry points into many of New Zealand's national parks. 122 That is why user fees would only make sense at specific sites where visitor levels were becoming problematic. There is no reason why an access fee would necessarily need to be charged at physical entry points. In the same way the DOC hut booking system is operated, potential day visitors could be asked to buy a permit online, with a system of spot checks used to ensure compliance.

¹²¹ Most recently by Warren Parker – the then Chairman of the New Zealand Conservation Authority – in 2016 (Mussen, 2016).

¹²² McGavin, 2016.

• Treaty of Waitangi: Asking Māori to pay for access to lands that they have an ancestral connection to would arguably be inconsistent with the principles of the Treaty of Waitangi. As highlighted in Box 4.6, DOC has particular responsibilities in this respect – section 4 of the Conservation Act requires DOC to give effect to the principles of the Treaty. One possible solution for reconciling the Crown's responsibilities to Māori with any targeted introduction of access fees would be to adopt a pricing model similar to that used for the Waitangi Treaty Grounds. This idea would involve providing mana whenua and local people who commit to adopting a kaitiaki role with free and unrestricted access to the conservation area in question. In contrast, domestic visitors from further afield would be required to pay an access fee, but one that was considerably smaller than that required of international visitors. Any options to recognise Māori rights and interests should be the jointly developed with mana whenua.

Decisions about the terms of access to public land are always sensitive, and rightly so. Most New Zealanders are proud of the environmental setting in which they live and the fact that so many people, from home and abroad, want to experience it. Limiting numbers – whether through the use of queues, reservations or charges – is already needed to protect that experience in some key destinations. A serious debate, in good faith, is needed on how we should proceed. It is not fair to leave DOC to invent work-around solutions.



Stronger requirements for self-contained freedom camping and improved oversight of the certification process

Summary and recommendations

Freedom camping is one of the most visibly contentious sectors of New Zealand's tourism industry. Its growth has resulted in a range of social and environmental pressures. The issue that has received the most attention is the tendency of freedom campers to use their natural surroundings as a toilet or place to clean dishes and clothes.

In recent years, government efforts to address this problem have focused heavily on the provision of freedom camping facilities and education campaigns. Those efforts have not resolved the issue. More attention needs to be given to the inadequate toilet facilities that are present in some vehicles certified as self-contained, and to ensuring that council officers can recover any penalties for non-compliance with local requirements.

As a result, I recommend that:

- Standards New Zealand seek to strengthen NZS 5465:2001 to require vehicles to have a permanently plumbed toilet in order to be certified as self-contained. Ideally vehicles should also have separate holding tanks for grey and black water.
- The Government reintroduces national oversight of the NZS 5465:2001 certification
 process. I suggest that Waka Kotahi NZ Transport Agency (Waka Kotahi) or MBIE be
 made responsible for this. The role should include the establishment and maintenance
 of a national register of self-contained vehicles, which would be accessible to council
 enforcement officers as well as prospective vehicle purchasers.
- The Government ensures freedom camping penalties represent a serious deterrent to undesirable camping behaviour by amending the Freedom Camping Act 2011 to require rental agencies to play an expanded role in the collection of fines.

Freedom camping, responsible camping, wild camping. Whatever name is given to it, camping on public land has a long tradition in New Zealand. Many Kiwis have fond childhood memories of loading up the family car or caravan and departing to a little-known part of the coast to spend the Christmas holidays. Places like Māhia Peninsula, the South Island's high-country lakes and much of Northland were, and continue to be, popular destinations.

With its spectacular scenery and sparsely distributed population, New Zealand is a country well-suited to this style of travel. The popularity of freedom camping continues to the present day.

Domestically, the transition of the post-war 'baby-boomer' generation to retirement age has resulted in a growing number of people choosing to spend significant periods of the year exploring New Zealand. The number of motor caravans registered in New Zealand numbered around 47,000 in 2020, having increased from around 23,000 in 2011.^{1,2} Membership of the New Zealand Motor Caravan Association (NZMCA) has also grown rapidly, reaching 96,000 individuals in late 2020.³

International tourists – prior to Covid-19 at least – were also increasingly choosing freedom camping as their preferred mode of travel. Ministry of Business, Innovation and Employment (MBIE) data indicate that the number of international visitors who did some freedom camping during their stay in New Zealand increased from 10,000 in the early 2000s to 123,000 in 2018.^{4,5} According to several visitor surveys, cost is overwhelmingly the main motivator for choosing to freedom camp.⁶

Despite the fact that freedom camping represents only a small proportion of overall tourism activity, ⁷ it is one of the most contentious elements of New Zealand's tourism industry. Particular concerns are the number of campers congregating at popular locations and car parks, the behaviour of some campers (particularly with regard to sanitation and pollution), the cost of providing amenities and services being borne by ratepayers rather than campers, and the competition freedom camping poses to commercial campgrounds.

A multitude of reports have been written on the subject by organisations as diverse as the Department of Internal Affairs, Tourism Industry Aotearoa, MBIE, and Local Government New Zealand.⁸ A petition has recently been circulated calling for freedom camping to be banned altogether,⁹ while others have argued that restricting access to public land would be inconsistent with New Zealand's Bill of Rights.¹⁰

¹ Cropp, 2017; Waka Kotahi, 2020a.

² The actual number of vehicles used for freedom camping in New Zealand is probably considerably higher. As of October 2020, 73,500 vehicles were registered with New Zealand Motor Caravan Association (NZMCA) (NZMCA, pers. comm., 16 October 2020). In addition to motor caravans, these are likely to include caravans, buses and other vehicles certified as self-contained.

³ NZMCA, pers. comm., 16 October 2020.

⁴ MBIE, 2019c.

⁵ The proportion of these visitors that purchased a vehicle for the duration of their stay (as opposed to choosing a rental vehicle to camp in) is uncertain. Recent survey data suggest that slightly more than half of international freedom campers do so in their own vehicle (Freshinfo, 2020, p.8).

⁶ A literature review undertaken for the New Zealand Responsible Camping Forum in 2017 states, "Cost is often cited as being a major motivator for choosing to freedom camp. This was the case in the study undertaken by the University of Otago (86% chose to freedom camp to save money), and Christchurch City Council's survey of 100 freedom campers in 2010, which reported that the majority of freedom campers chose to freedom camp to save money, followed by having the choice to stay where they wanted (usually by the sea) and to be close to nature. A recent study of CamperMate app users in the Clutha District by Geozone found that 89% of respondents chose freedom camping ahead of other options due to cost" (Angus and Associates Ltd., 2017, p.10).

⁷ In 2017/2018, just 3.4% of international visitors chose to freedom camp (MBIE, 2019c).

⁸ Department of Internal Affairs (DIA), 2016; Angus and Associates Ltd., 2017; Responsible Camping Working Group (RCWG), 2018; Local Government New Zealand, 2018.

⁹ Foon, 2020.

¹⁰Responsible Campers Association, 2019.

From an environmental point of view, there are a variety of concerns associated with freedom camping.¹¹ These include the greenhouse gas emissions campers generate while travelling around the country, the rubbish they occasionally leave behind at campsites, and the visual or noise pollution they can cause when concentrated in large numbers. However, the issue that receives by far the most attention is the tendency of freedom campers to use their natural surroundings as a toilet or place to clean dishes and clothes, and the disregard this shows for New Zealand's environment.

These environmental and social concerns have prompted a number of interventions by the Government. In line with recommendations contained in a report from the Responsible Camping Working Group, ¹² the Government has invested in an ever-growing network of parking places and sanitary facilities to help cater for campers without onboard facilities. It has also funded several educational initiatives – the Tiaki Promise and the Responsible Camping initiative, for example – to help improve awareness about acceptable camping practices.

What the Government has not done, in part due to the disruption caused by the Covid-19 outbreak, ¹³ is adopt the recommendation from the Responsible Camping Working Group for a review of the legislation governing freedom camping. Among other things, the Working Group noted that the enforcement tools available to councils do not provide an effective deterrent for undesirable behaviour, and that the system for certifying vehicles as self-contained is unnecessarily fragmented and open to fraud. ¹⁴

This chapter picks that narrative up, and also assesses whether the current standard for what it means to be self-contained is sufficiently stringent. The intention is to outline a policy proposal that could be quickly and easily implemented when the Government next revisits the issue of freedom camping.

¹¹A recent freedom camping survey indicated that 76% of New Zealanders thought that freedom camping has negative impacts on the local environment (Freshinfo, 2020, p.28).

¹²The Working Group recommended three main actions in the short term: funding to support councils with infrastructure, education, and enforcement; funding for improved data; and funding for a marketing and education campaign to be undertaken by TNZ. In the longer term, the Working Group recommended a series of reviews of the legislation governing freedom camping (RCWG, 2018).

¹³MBIE, pers. comm., 8 July 2018.

¹⁴RCWG, 2018.

Existing policy approaches

Legislative framework

Freedom camping is an activity that intersects many pieces of legislation. Some relate to the land and infrastructure that freedom campers use (e.g. the Reserves Act 1977, the National Parks Act 1980, the Conservation Act 1986 and the Resource Management Act 1991), while others are specific to camping and to freedom camping (e.g. the Health Act's Camping-Grounds Regulations 1985 and the Freedom Camping Act).

The Freedom Camping Act is the key piece of legislation governing camping on public land in New Zealand (Box 5.1). As noted by the Hon Kate Wilkinson – Minister of Conservation during the first reading of the Bill – the intended purpose of this legislation was to "address the negative effects of freedom camping". She noted that "freedom camping is an important part of our tourism industry and great Kiwi lifestyle, but we cannot tolerate irresponsible campers spoiling our most iconic areas with human waste and litter." ¹⁵

The Freedom Camping Act is administered by the Department of Conservation (DOC) and the Department of Internal Affairs. The activities it controls are camping – in a tent, car, caravan, campervan or other vehicle – within 200 metres of a formed road, vehicle accessible area, the sea or a Great Walks track. Those activities are permitted unless the relevant territorial authority has made bylaws to the effect that they are not, where DOC has issued a notice, or where other legislation imposes a restriction or prohibition. ¹⁶ It is important to note that the Act was never intended to target day visitors, backcountry trampers or motorists needing to pull over to avoid fatigue. ^{17,18}

The Freedom Camping Act requires local authorities to meet a number of requirements when making bylaws restricting or prohibiting freedom camping. For example, the local authority must be satisfied that a bylaw is "the most appropriate and proportionate way of addressing the perceived problem". ¹⁹ In addition, any local authority considering introducing or amending a freedom camping bylaw must undertake consultation using the procedure set out in section 83 of the Local Government Act 2002.

With respect to the enforcement of bylaws and other specified offences, the Freedom Camping Act provides for fines of:

- \$200 for infringement offences (can be varied by regulation)
- \$5,000 for various offences that involve impeding the work of enforcement officers
- \$10,000 for certain discharges that cause "significant concern to the community or users of the area or land."²⁰

¹⁵New Zealand Parliament, 2011a.

¹⁶This default position reflects the idea that freedom camping is an established tradition in New Zealand, and councils should not be able to completely ban the practice. Instead, councils can determine how permissive or restrictive rules should be based on local issues and impacts.

¹⁷Local Government and Environment Committee, 2011, p.1.

¹⁸Kevin Hague's comments during the first reading of the Bill are also illustrative in that respect: "I also say that it irritates me to see in the Freedom Camping Bill the term 'freedom camping', which I think perfectly describes the New Zealand tradition that I have referred to, as it is used to mean something quite different. Although the definition of that term in this bill will catch the genuine freedom camping I have described, it is really targeted at one particular group of people: those who travel around in campervans that do not have toilet facilities and that are, therefore, cheaper. That is what the bill is actually about."

¹⁹Section 11(2)(b).

²⁰Sections 20(2)(b) and 23.

In addition to, or instead of, the penalty for the offence, a person may be ordered to pay the costs incurred by the local territorial authority or DOC in repairing any damage done as a result of the offence.²¹

The use of these powers has varied considerably between councils. For example, the Queenstown Lakes District Council issued 3,287 infringement notices in the year ended June 2019, and utilises clamping in some key areas of high priority.²² Some councils have taken a different approach. The Tasman District Council, for example, issued 232 infringement notices during 2018/19.²³

Infringement fees may not represent a particularly effective deterrent. They have been difficult to enforce, with non-payment rates often in the order of 40 per cent,²⁴ and occasionally as high as 95 per cent.²⁵ The key problem seems to be that the time allowed for payment is 28 days from their issue. Then, if fees are not paid, another 28 days has to elapse before the issue can be lodged with the courts for enforcement action.²⁶ By that time an offending overseas visitor may well have returned home.



Source: studio tdes, Flickr

Figure 5.1: 'No camping' sign, Tolaga Bay 2011.

²¹See section 24(1).

²²In combination with the use of appropriate signage, clamping has achieved very high levels of compliance (Queenstown Lakes District Council, pers. comm., 3 September 2020).

²³Tasman District Council, pers. comm., 9 September 2020.

²⁴Of the 15,399 infringement notices issued by the Queenstown Lakes District Council over the last five years, 38% were not paid or led to court action (Queenstown Lakes District Council, pers. comm., 3 September 2020). Similarly, of 634 infringement notices issued by the Tasman District Council over the last five years, 41% were not paid (Tasman District Council, pers. comm., 9 September 2020).

²⁵Quinlivan et al., 2019.

²⁶Summary Proceedings Act 1957, s 21.

Box 5.1: The Freedom Camping Act 2011 and debate leading up to its passage

The growth of freedom camping during the mid-2000s led to growing tensions in a number of localities.

The prevailing government view at the time was that a combination of education and investment in amenities (e.g. toilets and rubbish bins) could curb ongoing environmental and social issues. The Sanitary Works Subsidy Scheme – in place between 2002 and 2008 – was available in part to help councils achieve that.

Leading up to the 2011 Rugby World Cup, however, a number of councils (e.g. Thames-Coromandel and Dunedin) attempted to ban freedom camping outright using their powers to make parking bylaws under the Local Government Act 2002 and Land Transport Act 1998.²⁷ Other councils took a less stringent approach, but lacked the enforcement tools required to prosecute undesirable behaviour where necessary.

At the same time, there were concerns that the expected influx of rugby fans could exacerbate already existing tensions around freedom camping and thereby potentially detract from New Zealand's reputation as a hospitable place to travel. An incident in April 2010, where some freedom campers used Ngā Niho Pā in Kaikōura as a toilet, added to concern and legislative action.²⁸

The Freedom Camping Act – passed into law in August 2011 – was intended to address these concerns. The Act gave local territorial authorities (and DOC) the authority to create bylaws specifying where freedom camping was restricted or prohibited.²⁹ It also gave local authorities a stronger set of enforcement tools, including the ability to impose instant fines of up to \$200 (or the amount specified in regulations, if any).³⁰

In the years following the passage of the Freedom Camping Act, there have been a number of legal challenges concerning councils' interpretation of it. Perhaps most notably, the NZMCA challenged the legality of the Thames-Coromandel District Council's bylaws on freedom camping in the High Court in 2014. The main charge – that these bylaws amounted to an effective prohibition of freedom camping within the district and were therefore inconsistent with the Freedom Camping Act – was rejected by the court, which found that the bylaw in this case was not so extensive as to amount to a total prohibition.³¹

The NZMCA also challenged freedom camping bylaws in the Westland District on similar grounds in 2013,³² and has announced its intention to do the same for the Queenstown-Lakes District in 2020.³³

²⁷New Zealand Parliament, 2011b; Otago Daily Times, 2011; RNZ, 2014.

²⁸Dangerfield, 2010; New Zealand Parliament, 2011a, c.

²⁹Notably, the Act explicitly prohibited a local authority from banning freedom camping across the entirety of its jurisdiction. ³⁰Section 23.

³¹Cooper, 2014; Massey, 2014.

³²NZMCA, 2013. The proposed bylaw was suspended, and a new bylaw adopted in 2018 (Westland District Council, 2019).

³³NZMCA, 2020.

Bylaws and management strategies

As discussed above, the default position of the Freedom Camping Act is to allow freedom camping everywhere, unless it is restricted by way of a local authority bylaw, DOC notice or other legislation.³⁴ As of September 2020, around half of New Zealand's 67 local territorial authorities had made use of that provision.³⁵ Other local territorial authorities were relying on other regulatory instruments, such as bylaws to manage stationary vehicle offences and public nuisance under the Local Government Act 2002.³⁶ Unsurprisingly, places without freedom camping bylaws (e.g. Rangitīkei and Whanganui) tend to be those where such camping has traditionally been limited, or those where a greater number of visitors (including freedom campers) have been sought.

Freedom camping bylaws developed by councils often distinguish between self-contained and non-self-contained vehicles. Vehicles that are self-contained are able to occupy a wider range of places than non-self-contained vehicles. For example, the Tasman District Council Freedom Camping Bylaw 2017 states that "persons in self-contained vehicles may camp in all public areas of the district except for those areas where freedom camping is prohibited under Clause 5 and Schedule 1 of the Bylaw".³⁷ By contrast, non-self-contained freedom camping in Tasman is restricted to a small number of sites.

The test that is typically used to determine whether a vehicle is (or is not) self-contained is the New Zealand standard for self containment of motor caravans and caravans (NZS 5465:2001).³⁸ This standard was first published in 1990, revised in 2001, and has been amended in 2012 and again in 2017. Box 5.2 provides additional information.

³⁴ Section 10.

³⁵PCE in-house calculation. An examination of council bylaws found 34 councils had a freedom camping bylaw or an equivalent bylaw made under the Freedom Camping Act. That said, it is not always obvious that a local bylaw is a camping bylaw for the purposes of the Freedom Camping Act (DIA, pers. comm., 9 September 2020).

³⁶DIA, 2016, p.34.

³⁷Tasman District Council, 2017, p.6. Similar arrangements exist in the Westland District (Westland District Council, 2018).

³⁸Standards New Zealand, 2001.

Box 5.2: Self-contained or not?

In 1976, the NZMCA developed a self-containment standard for use by its members (at that time around 1,000 individuals).³⁹ By 1987, growing concerns about sanitation issues at several popular South Island campsites had led the Ministry for the Environment to undertake research on freedom camping. One of the recommendations that resulted was for the adoption of a national standard on self-containment for motor caravans, caravans and boats. The existing NZMCA standard formed the basis for the new national standard approved in 1990, although the Ministry suggested that improvements could be made – such as a requirement for the separation of grey and black water.⁴⁰

NZS 5465:2001 "specifies the requirements for water supply, sanitary plumbing and drainage installation and solid waste containment in motor caravans and caravans for the purpose of obtaining a self containment certificate". 41,42

To be certified as self-contained, a motor caravan or caravan must meet the following requirements:

- Water tanks: minimum capacity of four litres per person per day, for three days (i.e. 12 litres per person).⁴³
- Sanitary fittings: a sink must be installed and adequately connected to a supply tank as well as a wastewater tank.⁴⁴
- **Toilets:** must be usable within the vehicle, including "sufficient head and elbow room whenever required, even with the bed made up". Cheap plastic cassette or portable toilets are allowable as long as they are "adequately secured" and provide "waste holding capacity for the occupants of the motor caravan or caravan for a minimum of three days". In practice, that equates to one litre per person per day.⁴⁵
- **Waste tanks:** should receive all wastewater from permanently installed fixtures (e.g. sinks) and have a capacity at least equal to the water tanks.⁴⁶

The standard also specifies who is able to certify compliance with the above requirements. Since 2012, plumbers and other "suitably qualified" persons registered under the Plumbers, Gasfitters, and Drainlayers Act 1976 have been authorised to issue compliance certificates. So has any other organisation that "operates a scheme or qualification for testing officers who shall be members of the organisation concerned" and that publishes that qualification scheme on a website.⁴⁷

³⁹NZMCA, 1999.

⁴⁰MfE, 1988.

⁴¹Standards New Zealand, 2001, p.5.

⁴²For the purposes of the standard, caravans are defined as "any structure designed for human habitation, which is capable of being moved from one place to another, by being towed, or transported on another vehicle". Motor caravans are defined as "a motor vehicle, which can be used as a place of abode and contains facilities for cooking, eating, sleeping and washing, and is not a passenger service vehicle" (Standards New Zealand, 2001, p.5).

⁴³Standards New Zealand, 2001, s 4.1.1.

⁴⁴Standards New Zealand, 2001, s 5 and s 7.

⁴⁵Standards New Zealand, 2001, s 6.

⁴⁶Standards New Zealand, 2001, s 7.

⁴⁷Standards New Zealand, 2001, s 12.1(c).

Vehicles certified to be self-contained must have a self-containment certificate in the vehicle (it need not be displayed) and display a self-contained 'warrant' in the front window or windscreen.⁴⁸ Since 2008 a bumper sticker has also been used as a way of providing enforcement officers with a quick and easy visual tool to check compliance.⁴⁹ Bumper stickers are not required to be displayed and, on their own, do not verify a vehicle's compliance. Despite that, these stickers have been problematic, as they can be bought – or counterfeit copies obtained – by vehicle owners without the other documentation.⁵⁰

Up until 2012, the Ministry for the Environment had oversight of the standard and the organisations authorised to apply it. However, following the passing of the Freedom Camping Act, that oversight was removed.

At the time, that decision was blandly explained as removal of "an ineffective and unnecessary layer of administration". ⁵¹ This remarkably complacent judgement has not been vindicated. Problems with stickers, and differing interpretations of which vehicle modifications comply with the standard, leave no doubt that oversight by a centralised, audited agency is needed. The maintenance of an accessible online database of genuinely registered vehicles and their owners would also aid enforcement efforts.

⁴⁸Standards New Zealand, 2001, s 15.1 and 15.2.

⁴⁹A green sticker was introduced in 2008 to help enforcement officers identify compliant vehicles (Imlach, 2011). In 2012 the self-containment standard was amended to make reference to this sticker (now blue). Displaying it was not made compulsory given it could degrade (being exposed to the weather).

⁵⁰While the extent of this practice is unknown, it is an issue that has received widespread media attention. In 2019, a spokesperson for NZMCA noted: "We are aware that people are able to buy those stickers and put them on their vehicles, and pass them off as self-contained" (McNeilly, 2019).

⁵¹Standards New Zealand, 2012. Restructuring and resource constraints within MfE at the time are said to lie behind the decision to remove oversight (NZMCA, pers. comm., 16 October 2020).



Source: PCE

Figure 5.2: The external self-containment sticker used to help identify vehicles that are certified as self-contained under NZS 5465:2001.

Under the Freedom Camping Act, councils are required to undertake community consultation when making, amending or revoking a freedom camping bylaw.

As of August 2020, a range of bylaw reviews were taking place around the country,⁵² mostly with the intention of restricting freedom camping to a smaller number of places. The review taking place in Marlborough is particularly noteworthy. The draft bylaw published by the Marlborough District Council in August 2020 proposes a total ban on freedom camping in non-self-contained vehicles.⁵³ Were such a move to go ahead, it would provide impetus for other communities looking to do the same.⁵⁴ There is, however, the likelihood of a legal challenge to such a step.

Government funding for the development of freedom camping infrastructure

Public spending on new parking and sanitary facilities has been a key feature of New Zealand's approach to managing the pressures associated with freedom camping. The underlying rationale seems to have been that, by making such facilities more widely available, freedom campers (particularly those in non-self-contained vehicles) would be less tempted to engage in potentially harmful activities.

⁵²These included reviews in Manawatū, Whāngārei, Marlborough, and Tasman.

⁵³Marlborough District Council, 2020, section 6.

⁵⁴Motueka and Golden Bay, for example (Sivignon, 2020).

The Sanitary Works Subsidy Scheme – in place between 2002 and 2008 – was partly used to help councils develop and upgrade the public toilet and wastewater facilities that, in many cases, are used by freedom campers. ⁵⁵ Similarly, the Regional Mid-Sized Tourism Facilities Grant Fund – in place between 2015 and 2017 – was set up to "fund projects in regions experiencing infrastructure pressure (e.g. car parks and toilets) due to an increase in visitors". ⁵⁶ This fund provided \$8.3 million over the course of two funding rounds.

When the Regional Mid-Sized Tourism Facilities Grant Fund was closed in 2017, the remaining \$11 million in funds was transferred to the Tourism Infrastructure Fund (TIF).⁵⁷ Of the 154 grants made by the TIF as of August 2020, 14 made some reference to 'freedom camping'.⁵⁸ Examples include \$220,000 to provide freedom camping facilities in Lumsden town centre, and \$286,000 for improving and expanding freedom camping facilities in the Selwyn District.

The Responsible Camping Fund – established in 2018 – has also been an important source of funding for new freedom camping facilities.⁵⁹ Since its establishment, this fund has provided \$24.3 million to councils,⁶⁰ although a significant proportion of this has been for educational and awareness-raising programmes. Of 250 individual projects funded as of February 2020, 151 have been for hard infrastructure such as site development, toilet and wash facilities, rubbish disposal or water.⁶¹ Examples from the 2018/2019 funding round include:⁶²

- **Westland District Council:** \$780,000 for new camping facilities and associated operating costs for peak season education and enforcement
- Queenstown Lakes District Council: \$530,000 for two camping hubs, new signage, education and information for campers, and an increased monitoring and compliance regime
- **South Waikato District Council:** \$428,000 for shower blocks, barbeques and shelters, solar lighting, rubbish bins, and monitoring and enforcement
- **New Plymouth District Council:** \$156,000 for extra facilities at Waiwhakaiho River mouth and a relocatable toilet and shower unit.

⁵⁵Ministry of Health, 2003, p.1; New Zealand Parliament, 2011a.

⁵⁶MBIE, 2020a.

⁵⁷MBIE, 2017a, p.11.

⁵⁸PCE – in-house calculation.

⁵⁹Although recently the focus seems to have shifted away from hard infrastructure. In the 2020 application round, grants are not available for capital costs or permanent infrastructure (MBIE, 2020c).

⁶⁰MBIE, pers. comm., 30 October 2020.

⁶¹MBIE, 2019e, 2020d.

⁶²MBIE, 2019f

Education and awareness

A considerable effort has also been made in recent years to educate and improve awareness about responsible freedom camping practices. Government-sponsored initiatives include:

- the Tiaki Promise, which includes a focus on responsible camping
- funding for freedom camping ambassadors in high-use areas (typically via the Responsible Camping Fund)
- Tourism New Zealand (TNZ) campaigns on responsible camping practices⁶³ most recently, to gain access to free Wi-Fi at the network of i-SITE visitor information centres, people were required to view a video on responsible camping practices
- funding for the development of freedom camping apps for example, the CamperMate app, which among other things provides real-time information about campsite vacancy, was developed with the help of funding from the Responsible Camping Fund.

Industry groups have also contributed to awareness raising by providing information to travellers on frequently used websites (e.g. freedomcamping.org).

Alternative policy approaches

What else is available?

The initiatives taken to date represent considerable effort on the part of central government and its partners. Taken together, they have helped to mitigate some of the environmental and cultural pressures that had resulted from the growth of freedom camping in New Zealand.⁶⁴

But they have also made repeated claims on taxpayer and ratepayer funds. The campervan sector and its customers have been able to socialise the environmental costs of their activities. The repeated sprinklings of public money designed to dampen down the problems have often had a 'stop-gap' feel to them with little being done to address some of the underlying problems.

At present, it is possible to arrive in New Zealand, hire or buy a small van or people mover containing a rudimentary toilet (which is unlikely ever to be used) and camp for free in some of New Zealand's most spectacular – and vulnerable – places. If the expense of paying for a vehicle certified as 'self-contained' is considered too great, then it is possible to hire or buy a small van or people mover without a toilet and make use of one of the many free public camp sites designated for such purposes.

That so many tourists want to experience New Zealand on these terms is unsurprising. Why New Zealand has been willing to offer them is less clear. They are not consistent with trying to do everything we can to minimise the risk of environmental harm and protect the quality of the experience visitors have of our outdoors, nor are they arrangements that are aligned with the prevailing narrative of pursuing 'value over volume'.

⁶³TNZ, 2018, 2019a.

⁶⁴For example, complaints concerning freedom camping in places like Queenstown were lower during the 2019/2020 summer than previously (RNZ, 2020a).

This section outlines three suggestions for how the policy landscape relating to freedom camping could be improved. The first – strengthening the existing standard for self-containment – is intended to provide an extra layer of environmental protection in places popular with freedom campers. The second – streamlining the system for the certification of self-containment – is intended to make the enforcement of freedom camping bylaws significantly easier. The third – improving the tools available for the collection of infringement fines – is intended to ensure the existing system of fees and penalties provides a serious deterrent for irresponsible behaviour.

Proposal 1: Strengthen the standard for what it means to be self-contained

The freedom camping bylaws in force around New Zealand typically allow self-contained freedom camping to take place in a much wider range of locations than non-self-contained camping. The underlying logic is that the occupants of vehicles with onboard wastewater and toilet facilities have less need to resort to potentially undesirable activities such as wastewater dumping or defecating in high-use public areas.

While that logic seems reasonable in theory, shortcomings associated with the current standard for self-containment make it questionable in practice.

With respect to toilets, for example, all that is currently required for a vehicle to qualify as being self-contained is the presence of a portable toilet of adequate size and accessibility. For the many small vans and people movers that are commonly used for freedom camping in New Zealand, meeting that requirement simply involves the installation of a small plastic box – necessarily in close proximity to the bed and living area (Figure 5.3). There is little incentive to actually use such a contraption.

The situation prior to the Covid-19 outbreak was nicely summed up in a piece of feedback I received following the release of *Pristine*, *popular*... *imperilled*?

"Currently, some of New Zealand's most vulnerable places are overrun by a plethora of blue stickered vans, cars and camper vans claiming self-contained status. Many of these have, at best, a cassette toilet tucked somewhere unobtrusive, often still in their original plastic. There is no place within the van/car to use them – and who really would want to put them on the mattress or outside the vehicle to do so?" 65



Source: PCE

Figure 5.3: Van packed with gear for camping, including a portable toilet (the grey plastic box just behind the air bed and sleeping bag).

In 2017, NZS 5465:2001 was amended to include stronger requirements relating to toilets. In particular, greater emphasis was placed on the accessibility of toilets, ⁶⁶ with the amended standard reading, "The toilet shall be usable within the vehicle, including sufficient head and elbow room whenever required, even with the bed made up". ⁶⁷

Who is to say what 'sufficient head and elbow room whenever required' amounts to? Vague language like this lends itself to abuse. It is unsurprising that the NZMCA has noted there are "certain vehicle types continuing to be certified when they do not comply with the purpose or intent" of this provision.⁶⁸ In February 2018, the NZMCA put a temporary stay on the certification of people movers and similar small car conversions, although this decision will be revisited in February 2021.⁶⁹

⁶⁶MBIE, 2017b.

⁶⁷Standards New Zealand, 2001, s 6.1.1.

⁶⁸NZMCA, 2018.

⁶⁹NZMCA, 2018.

Much more could be done. If the Government is serious about preserving the right to freedom camp while also minimising the resulting environmental and cultural harms, it could reassess the types of toilet that are acceptable. The key challenge is designing standards in such a way that allows for – and even encourages – onboard toilets to be used. Data from a recent survey of freedom campers undertaken by MBIE provide a clue as to how that might be achieved. The survey found that (i) toilets in 'premium' hire vehicles were around twice as likely to be used than toilets in 'budget' hire vehicles, and (ii) regardless of vehicle type, toilets were around twice as likely to be used if they were permanently installed.

With these findings in mind, NZS 5465:2001 could be strengthened so that toilets must be permanently plumbed, with separate holding tanks for grey and black water.

Proposal 2: Streamline the system for certifying and monitoring selfcontainment

The administration of NZS 5465:2001 is fragmented and lacks proper oversight.

Under Section 12.1 of the standard, certification of self-containment can be provided by a number of issuing authorities. Plumbers and other "suitably qualified" persons registered under the Plumbers, Gasfitters, and Drainlayers Act 1976 are eligible.

But, in theory at least, any organisation can offer certification – all that is required is the development of a training scheme for testing officers, and the publication of that scheme in a place where it can be inspected by members of the public (e.g. a website). This carries 'light touch' self-regulation to an extreme that wouldn't be tolerated in many other industries.

The lack of a centralised registry makes it difficult to know how many active issuing authorities and testing officers there are in New Zealand. The NZMCA oversees 647 testing officers throughout the country.⁷² Similarly, New Zealand Lifestyle Camping has 105 testing officers listed on its website.⁷³

This level of fragmentation creates two separate sets of issues:

- It makes consistent oversight of certification standards difficult. The NZMCA noted this in a 2018 press release stating that "testing officers throughout the country have developed varying interpretations of the new toilet requirements", and "we have been made aware of certain vehicle types continuing to be certified when they do not comply".⁷⁴
- It has hindered the development of an online database of certified vehicles. This makes it difficult for enforcement officers to verify that a vehicle is indeed compliant, 75 or whether the owner(s) had previously been issued warnings or fines.

⁷⁰Freshinfo, 2020.

⁷¹Freshinfo, 2020, table 9. For example, 90% of international tourists who hired a 'premium' camping vehicle with a toilet permanently installed used that toilet. The equivalent figure for premium hires with a portable toilet was 39%. Similarly, in the 'budget' hire segment, 50% of international tourists used onboard toilets if they were permanently installed. The equivalent figure for portable toilet use was 27%.

⁷²NZMCA, pers. comm., 16 October 2020.

⁷³New Zealand Lifestyle Camping Limited is a New Zealand registered company that, among other things, publishes a quarterly camping magazine and offers self-containment certifications (NZ Lifestyle Camping, 2020).

⁷⁴NZMCA, 2018.

⁷⁵In theory, all that an enforcement officer needs to see in order to verify a vehicle's compliance is the self-containment warrant affixed to the front window or windscreen. In practice though, the existence of counterfeit self-containment bumper stickers complicates this job. A freedom camping survey recently undertaken for MBIE found that 71% of the 'budget' camping vehicles hired by international visitors had a blue self-contained bumper sticker. Only 47% of those same vehicles displayed a self-containment warrant (Freshinfo, 2020).

These issues could be addressed by making a government department or other national-level organisation responsible for the oversight of issuing authorities and creating an easily accessible online database of compliant vehicles. That is a role the Ministry for the Environment has undertaken in the past (from 1990 to 2012 – see Box 5.2 above).

Re-introducing oversight is not a new idea. The Responsible Camping Working Group suggested something similar in July 2018:

"In particular, the Working Group recommends that the standard certification should be overseen by a national body (for instance, similar to the WOF [Warrant of Fitness] system), with quality checks in place. This should include keeping a register of certified vehicles, for access by councils (for enforcement reasons) and potential purchasers of vehicles, to avoid counterfeit stickers being used." ⁷⁶

A straightforward solution – and one that would offer considerable synergies with its existing responsibilities – would be for Waka Kotahi to adopt the role. Waka Kotahi is responsible for oversight of the vehicle testing system in New Zealand and maintains a database on the registration and warrant status of all registered vehicles. Local councils have access to this database for the issuing of parking fines.

There is no insuperable reason why the responsibilities of Waka Kotahi could not be extended to certification of self-containment. While the primary responsibility of Waka Kotahi is vehicle safety, it has in the past also concerned itself with environmental issues.⁷⁷ If Waka Kotahi assumed oversight of the system for certifying self-containment, individuals seeking to have their motor caravan or caravan certified could apply to do so during a warrant inspection. If successful, the conditions and duration of the certification could be uploaded to the national database in the same way that warrant details are.

In the course of this investigation, I have been made aware that Waka Kotahi considers that it is not well placed to assume oversight of the certification process – for reasons that seem scarcely overwhelming.⁷⁸ There is an established vehicle testing system – this is surely a logical home for an add-on.

If, however, the reluctance of Waka Kotahi to engage proves intractable, an alternative could be for MBIE to take responsibility for the problem. MBIE already plays a significant role in the tourism system, including the provision of policy advice to the Minister of Tourism and the management of various tourism investment funds. It also houses Standards New Zealand – the organisation that is responsible for the self-containment standard.

Registered plumbers and other suitably qualified persons registered under the Plumbers, Gasfitters, and Drainlayers Act could continue to certify vehicles as self-contained, but with oversight from MBIE.

⁷⁶RCWG, 2018.

⁷⁷For example, in its 2019/2020 Annual Report, Waka Kotahi identified "starting implementation of a prioritised work programme to deliver on the government's environmental targets for the transport sector" and "valuing environmental and public health impacts appropriately in investment decision making" as targets to achieve in 2021 (Waka Kotahi, 2020b, p.73).

⁷⁸Two main objections are given. First, that the primary concern of Waka Kotahi is vehicle safety, not environmental matters. Second, that certifying self-containment requires plumbing and electrical expertise that is beyond the scope of mechanics (Waka Kotahi, pers. comm., 22 October 2020).

Either way, a key outcome of oversight by a central agency would be to support enforcement efforts. The details of vehicles meeting the standard could be uploaded to a database, whether in the hands of Waka Kotahi or MBIE.

As of October 2020, the Government had yet to take any action in response to the Responsible Camping Working Group's recommendation on certification of the self-containment standard. It should. There will be a cost to such a measure that will be borne, ultimately, by those who freedom camp. This is entirely appropriate and consistent with the principle that, where possible, the costs of environmental protection should be paid for by those whose activities pose a risk.

Proposal 3: Ensure freedom camping fees and penalties represent a serious deterrent for undesirable behaviour

Creating an easily accessible online database of vehicles certified as self-contained will aid the enforcement of freedom camping bylaws. However, there remains a question about whether the existing set of infringement fees – and means of collecting them – provides a sufficient deterrent for undesirable freedom camping behaviour.

As discussed earlier in this chapter, the Freedom Camping Act gives council and DOC officers the power to issue \$200 fines for offences including not complying with bylaws or (minor) dumping of waste. Such fines are frequently issued, but they are not always paid. In some cases – such as in the Mackenzie District – payment rates have been as low as five per cent.⁷⁹

As noted, the time that has to elapse before enforcement action can be commenced gives many international tourists plenty of time to leave the country without ever paying the fine. No council could justify the cost of pursuing tourists halfway around the world for the sake of recovering \$200.80

There have been a number of calls to address the problem. In its 2018 report, the Responsible Camping Working Group noted that "the system lacks an effective collection mechanism" and recommended "a review of the compliance regime to ensure it is an effective deterrent to unwanted behaviour".⁸¹ Councils themselves – including those for high tourism districts like Westland, Tasman and Tauranga – have also asked for better collection tools.⁸²

Perhaps the most straightforward way to increase the payment of infringement fees (while also strengthening the deterrent they are supposed to provide) would be for vehicle rental agencies to assume an expanded role in the system.

The Freedom Camping Act already allows for rental companies to be issued with an infringement notice for an offence committed by one of their customers.⁸³ The Act also allows rental companies to back-charge the fine to the credit card of the renter involved, provided the relevant rental agreement provides for that to happen.⁸⁴

⁷⁹Quinlivan et al., 2019.

⁸⁰As a DIA report said in 2016, "Delays in the current infringement process provide an opportunity for offenders to leave the country before an infringement has been paid. Once the person has left the country it becomes difficult to recover the fee without exceeding the value of the infringement and incurring cost to ratepayers" (DIA, 2016, p.46).

⁸¹RCWG, 2018, pp.2 and 7.

⁸² Freshinfo, 2020.

⁸³ Section 26(1)(b)(i).

⁸⁴ Sections 29 and 30.

Two councils are said to have been working closely with rental companies to obtain payment by this means.⁸⁵ However, there has only been limited success, largely because it is discretionary rather than mandatory for rental companies to assist.⁸⁶ In reality, rental companies can sidestep liability by simply advising the enforcement authority in writing that, at the time the offence was committed, another person was lawfully entitled to possession of the vehicle and providing the renter's name and address.⁸⁷

To address this problem, the Freedom Camping Act should be amended to remove that defence. Rental companies are best placed to recover infringement fees from renters and should be made responsible for doing so. Notably, the rental agreements issued by some rental companies already provide an ability to back-charge a hirer's credit card to recover penalties for both moving and stationary vehicle offences.⁸⁸ There is no reason why freedom camping offences should be treated any differently.

Of course, not all illegal freedom camping takes place in hired vehicles. In the Queenstown-Lakes District, only 42 per cent of infringement notices during 2018/19 were to hired vehicles. ⁸⁹ In the Tasman District, only about 25 per cent of infringement notices concerned hired vehicles. ⁹⁰ While data are scarce, it is well known that many international freedom campers buy a vehicle at the beginning of their trip. Furthermore, the majority of domestic freedom campers probably also camp in their own vehicle. Fines issued to New Zealand residents, however, are relatively easily pursued.

Clearly, increasing the involvement of rental companies will do little to deter undesirable camping practices by those visitors who purchase a vehicle for the duration of their stay in New Zealand. One option would be to ensure that information about any outstanding fines was registered against the vehicle and made easily available to prospective purchasers. While the legal liability for paying these fines would remain with the owner that received them (in the same way that it does for parking infringements, for example), the mere provision of this information may make it more difficult to sell a vehicle when departing the country. That could, in turn, provide at least some incentive for freedom camping-related fines to be paid.

Alternatively, consideration could be given to making greater use of clamping where there is a suspicion that fines may not be paid. Provision is made for this under sections 37 and 38 of the Freedom Camping Act, which gives enforcement officers the power to seize and impound property in certain situations. Some local authorities (such as the Queenstown Lakes District Council) already make use of this provision, particularly where repeat offending is involved.

⁸⁵DIA, 2016, p.41.

⁸⁶Initial discussions with council officials indicate that rental companies have been unwilling to pursue fines from renters due to extra administration costs and concerns about loss of business.

⁸⁷This is because section 22(5) of the Freedom Camping Act 'imports' the defence for stationary vehicle offence that applies under section 133A(4) of the Land Transport Act 1998.

⁸⁸ See, for example, clauses 48-52 of the Hertz New Zealand Rental Service agreement Terms and Conditions (Hertz, 2020).

⁸⁹Queenstown Lakes District Council, pers. comm., 10 September 2020.

⁹⁰Tasman District Council, pers. comm., 10 September 2020.



Source: Michal Klajban, Wikimedia Commons

Figure 5.4: Lake Poaka campsite, South Island. This is a free camping site administered by DOC, with a long-drop toilet available and a maximum stay of four nights.

Analysis and discussion of the proposals

Economic implications of introducing stronger requirements for freedom camping

Introducing more stringent requirements for freedom camping – and enforcing them more rigorously – is likely to increase the cost of this mode of travel, although not all freedom camping tourists would be affected. Little would change for the many tourists who currently make use of campervans with permanently installed and plumbed toilets.

The main impact would fall on those tourists who currently use small vans or people movers to camp in. Under a strengthened standard for self-containment, it may well be difficult for such vehicles to gain certification. That would leave those tourists facing a choice between using the smaller number of places reserved for non-self-contained vehicles, spending more on a vehicle that could achieve the self-containment standard, or making use of hostel or motel accommodation.

Introducing stronger requirements for self-containment would also have an impact on some vehicle rental companies. In particular, those operators that specialise in smaller vans or people movers may not be able to continue marketing them as being self-contained. Operators wanting to continue serving that segment of the tourism market would probably need to invest in vehicles capable of meeting the new standard.

At the level of the overall economy, introducing tougher requirements for freedom camping could reduce demand for New Zealand's international tourism offering, at least among some visitor segments. However, the magnitude of any such effect is unlikely to be large. Data from MBIE indicate that in 2018, only 123,000 international visitors took part in some form of freedom camping during their stay in New Zealand.⁹¹ Individually, these visitors spent \$100 per day on average – around half that of a typical international tourist.^{92,93} In aggregate, they spent around \$540 million during their stay – around three per cent of all international spending.⁹⁴

While the changes proposed in this chapter are unlikely to be popular with certain segments of New Zealand's tourism industry, it is worth considering what the existing business models are based on. Allowing tourists to camp in vehicles fitted out with rudimentary toilets that are unlikely to ever be used only works because New Zealanders have been forced to accept the environmental damage that inevitably results. That might have been acceptable when tourism was an emerging industry, but it is increasingly difficult to justify when freedom campers at particular sites number in the hundreds.

Getting serious about the environmental footprint of freedom camping would result in a range of environmental and social benefits. It would mean less litter and human waste at places popular with self-contained freedom campers, and less of an eyesore for the residents who live nearby.

To the extent that stricter freedom camping requirements trigger behavioural change, they could also have economic benefits. For example, instead of buying a small van at the beginning of a trip and selling it again at the end – a transaction that has little value for New Zealand's economy⁹⁵ – it may be that some tourists would spend more money staying in campgrounds or hostels. Stricter requirements for self-containment could also focus demand for better appointed rental campervans at the premium end of the market.

It is that sort of outcome that illustrates what pursuing value over volume might mean in practice.

⁹¹MBIE, 2019c.

⁹²MBIE, 2019a.

⁹³This spending appears to differ considerably between different types of freedom campers. For example, recent survey data suggests that international tourists who purchase a vehicle for the duration of their stay spend around \$38 per day (Freshinfo, 2020, p.22). In contrast, international tourists that hire a premium camping vehicle spend around \$150 per day (or \$83 when the costs of vehicle hire are excluded).

⁹⁴This percentage is calculated on the basis of the roughly \$16 billion that international tourists spent in New Zealand during 2018 (Stats NZ, 2018).

⁹⁵Particularly if, as is often the case, it takes place between international visitors.



Table 6.1: New Zealand's tourism policy landscape in 2019. For mitigating policies, the approach used to address environmental pressures has been included. N/A indicates not applicable.

Policy	Lead agency ⁱ	Relevant legislation	Policy type	Approach	
Mitigating					
Concession management	DOC	Conservation Act 1987	Economic	Limit numbers	
Great Walk access arrangements	DOC	Conservation Act 1987	Regulation	Limit numbers	
IVL investment – conservation ⁱⁱ	DOC	Immigration (International Visitor Conservation and Tourism Levy) Amendment Act 2019	Public provision	Manage impacts	
Other DOC access restrictions and demand management	DOC	Conservation Act 1987	Regulation	Limit numbers	
Freedom camping regulations	DOC and DIA	Freedom Camping Act 2011	Regulation	Decouple pressures	
Destination management planning guidelines	MBIE	N/A	Voluntary	Manage impacts	
Responsible camping funding – behaviour	MBIE	N/A	Education and awareness	Decouple pressures	
Responsible camping funding – infrastructure	MBIE	N/A	Public provision	Manage impacts	
Tiaki Promise	MBIE	N/A	Education and awareness	Decouple pressures	
Tourism Infrastructure Fund	MBIE	N/A	Public provision	Manage impacts	

MARPOLiii	MOT	Unknown	Regulation	Decouple pressures
CORSIAiv	MOT	Unknown	Economic	Manage impacts
Ko Tātou This Is Us	MPI	N/A	Education and awareness	Decouple pressures
Rakiura visitor levy	Unknown	Southland District Council (Stewart Island/Rakiura Visitor Levy) Empowering Act 2012	Public provision	Manage impacts
Supporting				
IVL investment – tourism ^v	MBIE	Immigration (International Visitor Conservation and Tourism Levy) Amendment Act 2019	Public provision	Manage impacts
Maintaining the Quality of Great Rides Fund	MBIE	N/A	Public provision	_
New Zealand Cycle Trail Enhancement and Extension Fund	MBIE	N/A	Public provision	-
Promotion of Tourism Careers – Building the Tourism Workforce programme	MBIE	N/A	Public provision	-
Provincial Growth Fund – tourism	MBIE	N/A	Public provision	_
Tourism New Zealand marketing	MBIE	New Zealand Tourism Board Act 1991	Public provision	-
Tohu Whenua	МСН	N/A	Education and awareness	_
NZ Māori Tourism	TPK	N/A	Public provision	-

Notes:

- ¹ Agencies: Department of Conservation (DOC), Department of Internal Affairs (DIA), Ministry for Culture and Heritage (MCH), Ministry for Primary Industries (MPI), Ministry of Business, Innovation and Employment (MBIE), Ministry of Transport (MOT), Te Puni Kökiri (TPK).
- ii International Visitor Conservation and Tourism Levy (IVL).
- As of December 2020, New Zealand had only signed up to elements of the International Convention for the Prevention of Pollution from Ships (MARPOL), although it will accede to Annex VI in late 2021. For more see the Ministry of Transport website: https://www.transport.govt.nz/area-of-interest/maritime-transport/marpol/.
- iv Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). See chapter two for more details
- Yes Some of the IVL investments tourism will also help to mitigate tourism pressures, such as funding for Destination Management.

Table 6.2: Tourism-specific public spending in 2019. n.d. indicates no data.

Spending target	Programme name	2019 funding (\$ millions)			
Support growth					
Dramatian and marketing	Funding for Tourism New Zealand	111.7			
Promotion and marketing	Funding for NZ Māori Tourism	4.2			
Attractions, amenities and access	Provincial Growth Fund – tourism	87.2			
	New Zealand Cycle Trail Enhancement and Extension Fund	7.3			
	Maintaining the Quality of Great Rides Fund	2.7			
	IVL investment – tourismi	2.1			
	Tohu Whenua	n.d			
Skills training	IVL investment – tourism	5.2			
Address environmental concerns					
Mitigating infrastructure	Tourism Infrastructure Fund	24.1			
	Responsible Camping Fund	7.4			
Destination management planning	IVL investment – tourism	6.9			
Protect and enhance biodiversity	IVL investment – conservation	4.5			
Education and awareness raising	Tiaki Promise	n.d.			
	Ko Tātou This Is Us	n.d.			

Note:

ⁱ International Visitor Conservation and Tourism Levy (IVL).



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