Appendix 2:
Stage 1 Cost Recovery Impact Statement

Establishment of a proposed new levy under the Biosecurity Act 1993 for the avocado industry to meet its cost-share commitments for any implemented operational agreements relating to response activities under the Government Industry Agreement (GIA).

Status quo

GIA enables the Ministry for Primary Industries (MPI) to implement a recommendation of the 2005 *Biosecurity Funding Review* that industry sectors should share, with government, decision-making and funding for biosecurity readiness and response activities that are of direct benefit to them.

MPI has been working with industries for several years to establish and implement GIA. Industry sector organisations are often best placed to assess whether investments in biosecurity activities will produce net benefits for their respective sectors.

Successful implementation of the GIA partnership is expected to lead to:

- increased investment by industry and government in biosecurity readiness;
- reduced production losses related to unwanted organisms;
- reduced spending on responses to unwanted organisms;
- strengthened overall industries' focus on biosecurity; and
- strengthened MPI responsiveness to industry priorities and emerging biosecurity risks arising from New Zealand's increasing levels of international trade and international visitors.

In December 2013, Cabinet confirmed:

- the GIA Deed (the Deed) as the foundation and framework for GIA to improve biosecurity readiness and response outcomes; and
- final decisions to enable the implementation of GIA.

The Deed is a government-industry partnership agreement that provides the contractual basis for Deed signatories to work collaboratively to prepare for, and effectively respond to, biosecurity risks. The principal ways for MPI and mandated industry-sector organisations, as Deed signatories, to achieve this are by:

- negotiating operational agreements under the Deed for joint decision-making on readiness and response activities; and
- jointly funding the activities through cost-shares based on the mix of public benefits and industry benefits that the activities deliver.

Operational agreements prescribe the structure, roles, responsibilities, and cost-share arrangements, based on agreed benefit shares, for managing readiness and response activities for unwanted organisms. Operational agreements can be solely for either readiness or response activities, or can be for both readiness and response activities.

The Biosecurity Act 1993 (the Act) was amended in 2012 to include a statutory authority for GIA under Part 5A. Part 5A of the Act provides the legislative framework for joint government-industry operational agreements for readiness or response under the Deed. The framework provides for the establishment of a biosecurity levy, under section 100ZB, to wholly or partly fund an industry organisation's cost-share commitments under any implemented operational agreements.

The New Zealand Avocado Growers Association Incorporated (NZAGA) was approved by the previous Minister for Primary Industries on 2 December 2015, under section 100ZA of the Act, to represent the commercial avocado growers sector (avocado sector) for the purposes of GIA.

NZAGA signed the Deed on 25 February 2016. As the mandated GIA Deed signatory representing the avocado sector, NZAGA must honour its commitments under the Deed.

As part of gaining approval to sign the Deed, NZAGA proposed the establishment of a biosecurity levy, under section 100ZB of the Act, to fund its cost-share commitments relating to response activities.

NZAGA has requested MPI to proceed with establishing the proposed biosecurity levy. The levy would be a new cost-recovery charge by NZAGA on commercial avocado growers (growers).

Policy Rationale: Why a user charge? And what type is most appropriate?

Rationale for implementing cost recovery

As the mandated Deed signatory representing the avocado sector, NZAGA must honour its cost-share commitments under the Deed. Committing to providing a share of the costs of an operational agreement is a prerequisite for an industry organisation to sign the agreement [EGI (09) 156 and associated regulatory impact statement]. Therefore cost recovery, by an industry organisation from its membership, is appropriate to enable it to meet its cost-share commitments under an operational agreement.

However, there is currently no dedicated funding mechanism to enable NZAGA to meet its cost-share commitments for any implemented operational agreements relating to response activities.

Under the terms of the Deed, each operational agreement must have MPI, as signatory for government, and one or more industry organisation signatories.

Response activities under operational agreements provide some wider public benefits. MPI, on behalf of the public, would fund any public benefits along with the agreed exacerbator contribution.[1] Each operational agreement signatory negotiates, prior to signing the agreement, its agreed cost-share of the industry benefits based on the prior agreed proportion of the benefits it expects to receive from the response.

Rationale for NZAGA's proposed biosecurity levy

In economic terms, a club good is one where people/organisations can be excluded from its benefits at low cost, but its use by one person/organisation does not detract from its use by another. Response activities under operational agreements are examples of club goods because the response activities provide benefits that accrue to the signatories.

A levy is an appropriate cost-recovery mechanism for services which are provided to a group of beneficiaries. A fee is more appropriate where a service is provided to an identifiable party. A levy is an appropriate mechanism to fund NZAGA's cost-share for an implemented operational agreement relating to response activities because benefits from the activities accrue to NZAGA's grower membership.

Levy orders are widely used by primary sector industry organisations to implement funding arrangements. Memberships of these organisations are familiar with the processes for setting actual levy rates and levy collection for their respective levies. The Commodity Levies (Avocados) Order 2013 (commodity levy) has been in operating effectively, for funding NZAGA activities other than GIA, for over four years.

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[1] Under the Deed, an exacerbator is defined as any person (including any overseas tourist) or any organisation (including any importer of any goods) who by their action or inaction:

- contributes to the probability of, or causes, an incursion of any pest or disease; or
- contributes to the continuation, or aggravation of, pest or disease management requirements, including incursion, surveillance or response.

MPI has agreed to pay 20% of operational agreement costs as costs attributable to biosecurity risk exacerbators. The remaining 80% of the cost-share is applied to MPI and overall industry signatories in proportion to the agreed cost-share percentages in Schedule 2 of the Deed.

Payers of NZAGA's proposed biosecurity levy

All growers would be responsible for paying the proposed biosecurity levy once it was activated, and no growers would be exempt. This would be the same arrangement as for the commodity levy.

The avocado sector currently comprises around 1350 growers. The average orchard size is 2.81 hectares with an average orchard gate return of $109,270. The orchards are currently producing avocados at a rate of around 11 tons per hectare per year, on average.

High level cost recovery model (the level of the proposed fee and its cost components)

Design of proposed biosecurity levy for funding NZAGA's cost-share commitments for any implemented operational agreements relating to response activities

NZAGA's proposed maximum levy rates for its proposed biosecurity levy

NZAGA's proposed maximum levy rates are derived from modelling of past biosecurity response costs, and an understanding of the avocado sector's potential cost-share commitments under operational agreements, based on agreed benefit-shares. This included NZAGA knowing what levy:

- would be needed over a four-year period, when a voluntary grower levy was previously established for the sector's response to avocado sunblotch viroid (ASBVd);[2] and
- would be sustainable for the industry.

NZAGA had determined that:

- around $200,000 per year would cover its cost-share commitments for any large implemented operational agreements relating to response activities; and
- this would be sustainable for the industry if responses were frequent or spanned multiple financial years.

NZAGA has proposed the following maximum levy rates to achieve around $200,000 per year revenue from the proposed biosecurity levy with actual levy rates set at their proposed maximum rates:

- 5 cents (plus GST if any) per 5.5 kg tray equivalent for avocados sold in the export market; and
- 0.25% of the selling price (plus GST if any) for avocados sold in the domestic market.

The export market and domestic market proposed maximum levy rates each have a different basis, due to what NZAGA has found to be the most practical and effective means of levy collection in each market:

- exporters of avocados pay growers on the basis of what sales returns eventuate in export markets – therefore the most practical and effective way to collect the is on volume of avocados supplied for export;
- however, the most practical and effective way to collect the levy from avocados sold in the domestic market is to apply the levy on price at the first point of sale.

Levy collection

The levy would be deducted from payments to growers and paid to NZAGA by collection agents. No collection fees would be permitted to be deducted by collection agents. Growers who sell other than to, or through, a collection agent would pay the levy directly to NZAGA on an annual basis.

These levy collection arrangements would be the same as those currently in place for the commodity levy, which are discussed further in section 6.1 of Appendix 1: Impact Summary.

[2] ASBVd is an important disease affecting avocado trees. Infections result in lower yields and poorer quality fruit.

NZAGA's proposed process for setting actual levy rates for the proposed biosecurity levy

The proposed actual levy rates for export market and domestic market avocados would be set at zero until NZAGA was required to fund its cost-share commitment for an implemented operational agreement relating to response activities.

NZAGA would only activate the proposed biosecurity levy to collect levy funds needed to meet its cost-share commitment for an implemented operational agreement relating to response activities. This is because MPI would pay NZAGA's cost-share up-front so that the response could proceed, and later invoice NZAGA for repayment.

The NZAGA Executive would aim to ensure that the actual levy rates it sets would be as equivalent as possible for both the export market and domestic market. It would determine the actual levy rates needed to be set by looking at industry returns, averaged across four years. Modelling would be used to ensure that the levy rates would be equitable and manageable for growers, whether supplying the export market or the domestic market, and levy collection may also need to be spread over several years. Once NZAGA had paid its cost-share for the response, the NZAGA Executive would re-set the actual levy rates to zero until NZAGA needed to fund its cost-share for a subsequent implemented operational agreement relating to response activities.

Main cost driver for design of proposed biosecurity levy

The main cost driver for NZAGA, under an operational agreement relating to response activities, will be its agreed cost-share negotiated between the agreement's signatories, based on its assessed benefit-share. Schedule 2 of the Deed, reproduced as Table 1 below, provides the cost-share category framework for operational agreement negotiations. The outcome of an operational agreement negotiation, for each prospective signatory to the agreement, would align with the agreed cost-share percentage for one of the 10 cost-share categories in Table 1 below.

Table 1: Cost-share categories, estimated benefit-shares, and agreed cost-shares

Cost-share categories	**Estimated benefit-share (%)**		**Agreed cost-share (%)**		
	Public	Industry	Exacerbator contribution by MPI	MPI	Industry
1	10	90	20	30	50
2	20	80	20	30	50
3	30	70	20	30	50
4	40	60	20	32	48
5	50	50	20	40	40
6	60	40	20	48	32
7	70	30	20	56	24
8	80	20	20	64	16
9	90	10	20	72	8
10	100	0	20	80	0

Response costs per response outputs

Annex 1 provides a pie-graph showing a breakdown of estimated response costs per response output components for an example level 1 Queensland Fruit-Fly (QFF) response. The estimated cost amounts are based on an actual QFF response that had a total cost around $1.5 million.

Avocado grower revenue per hectare per year

On average, an avocado grower currently produces 11 tons of avocados per hectare per year. This is equivalent to producing 2000 5.5kg trays of avocados per hectare per year.

Avocado grower costs per hectare per year

On average, avocado grower costs per hectare per year are currently around $10,000 plus contract picking costs of around $6,500 which some growers are able to reduce by managing their own picking.

Impact of proposed biosecurity levy on growers

Estimated avocado grower payment of proposed biosecurity levy if implemented in 2016/17

On average, an avocado grower currently produces 2000 5.5kg trays of avocados per hectare per year. Therefore, if the actual levy rate for the export market under the proposed biosecurity levy was set at the proposed maximum rate of 5 cents per 5.5kg tray, an avocado grower producing for the export market would, on average, pay the levy at a rate of around $100 per year (i.e. 2000 x 5 cents).

Also, if the actual levy rate for the domestic market under the proposed biosecurity levy was set at the proposed maximum rate of 0.25% of selling price, an avocado grower producing for the domestic market at the 2016/17 average market price would, on average, pay the levy at a rate of around $100 per hectare per year. This is because, at the 2016/17 average domestic market price of around $18.30 per tray, 0.25% of $18.30 would be around 5 cents.

In 2016/17, an avocado grower received, on average, an orchard gate return of $38,886 per hectare. If the proposed biosecurity levy had been implemented throughout 2016/17, growers would have, on average, paid the proposed biosecurity levy at a rate of around $100 per year for both export market and domestic market sales.

Under that scenario, the impact of the levy would have been around 0.26% (i.e. around ¼ of 1%) of a grower's orchard gate return per hectare).

Estimated 2016/17 total impact on growers of levies, fees, and registrations, if the proposed biosecurity levy had been implemented throughout 201617

Avocado sales volumes for the 2016/17 season were 4.7 million trays sold in export markets, and 2.2 million trays sold in the domestic market. If the proposed biosecurity levy had been implemented throughout 2016/17 with its actual levy rates set at their proposed maximum rates, the levy would have generated around $345,000 made up of around:

- $235,000 from export sales (at 5 cents/5.5kg tray); and
- $110,000 from domestic sales (at 0.25% of 2016/17 average price of $18.30/tray, equivalent to around 5 cents/5.5kg tray).

NZAGA's total commodity levy, fees, and registrations revenue for 2016/17 was $3,503,519 made up of:

- $1,682,311 from export sales (at 35 cents/5.5kg tray);
- $1,148,977 from domestic sales (at 2.8% of 2016/17 average price of $18.30/5.5kg tray);
- $336,842 from the export systems fee at 8.5 cents/5.5kg tray for exports to Australia;
- $49,063 from the exporter market access fee (at 1 cent/5.5kg tray); and
- $286,326 from registrations.

Therefore, if the proposed biosecurity levy had been implemented in 2016/17, NZAGA's total levy, fees, and registrations revenue for 2016/17 of $3,503,519 would have increased by $345,000 to become $3,848,519. This would have meant that the projected annual revenue from the biosecurity levy would have comprised around 9% of $3,848,519.

Table 2: Actual 2016/17 crop volumes, estimated 2017/18 crop volumes, and maximum leviable amounts if the proposed biosecurity levy was implemented throughout those years

	2016/17		2017/18	
Market	**Crop volume**	**Maximum leviable amount**	**Estimated crop volume**	**Maximum leviable amount**
Export	4.7 million 5.5kg trays	$235,000	2.7 million 5.5kg trays	$135,000
Domestic	2.2 million 5.5kg trays	$110,000	1.5 million 5.5kg trays	$75,000
Total	6.9 million 5.5kg trays	$345,000	4.2 million 5.5kg trays	$210,000

In Table 2 above, NZAGA's estimated export and domestic market crop volumes for the 2017/18 season are lower than the corresponding crop volumes for 2016/17. This estimated fluctuation relates to the two-year growth phenology and biennial cropping of avocado trees. NZAGA regularly expects major differences in tree growth, flowering, and the amount of fruit to harvest in each year. Biennial cropping can cause sector-wide avocado production to vary by up to around 40% to 50% between growing seasons.

Based on the estimated crop volumes for 2017/18 in Table 2 above, Table 3 below shows total estimated income from levies, fees, and registrations in 2017/18 of $2,710,714 which is made up of:

- estimated income from the proposed biosecurity levy with actual levy rates set at their proposed maximum rates; plus
- estimated income from the commodity levy, industry fees, and registrations.

Table 3: Estimated 2017/18 income from proposed biosecurity levy, commodity levy, fees, and registrations

Funding stream	Annual Rate	Estimated 2017/18 income
Proposed biosecurity levy		
Biosecurity levy (export)	5 cents/tray	$135,000
Biosecurity levy (domestic)	5 cents/tray[3]	$75,000
Other fees and levies		
Commodity levy (export)	15 cents/tray	$405,000
Commodity levy (promotions)	20 cents/tray	$520,000
Commodity levy (domestic)	55 cents/tray	$715,000
Export systems fee (fresh exports)	25 cents/tray	$650,000
Export systems fee (processing)	10 cents/tray	$10,000
Exporter market access fee	1 cent/tray	$27,000
Annual grower registrations	2 cents/tray[4]	$173,714
Total		**$2,710,714**

[3] Assuming the 2016/17 average market price is maintained for 2017/18 at around $18.30 per tray, 0.25% of $18.30 would be around 5 cents.

[4] Grower export and domestic market registrations are due annually, while grower property registrations of $70 are a one-off cost. The 1091 total grower registrations in 2016/17 comprised 1040 market registrations and 51 property registrations. Market registrations in 2016/17 were equivalent to an average annual rate of 2 cents/tray and this rate has been assumed appropriate for 2017/18.

In Tables 2 and 3 above, if NZAGA's proposed biosecurity levy was to be implemented throughout 2017/18 with its actual levy rates set at their proposed maximum rates, it would generate an estimated $210,000 (i.e. $135,000 export plus $75,000 domestic) based on the estimated crop volumes for 2017/18 in Table 2 above.

This estimated income of $210,000 from the proposed biosecurity levy would be:

- around 7.7% of the total estimated impact of levies, fees, and registrations on growers in 2017/18 of $2,710,714; and
- more than sufficient to meet NZAGA's $38,400 cost-share for a level 3 response under the current Fruit-Fly Operational Agreement, as shown in Table 3 of Annex 2 in Appendix 1: Impact Summary.

Also, an estimated levy income of $210,000 from the proposed biosecurity levy, with actual levy rates set at their proposed maximum rates, would be consistent with NZAGA's determination that around $200,000 per year would cover its cost-share commitments for any large implemented operational agreements relating to response activities.

Summary of impact of proposed biosecurity levy on growers

NZAGA considers the impact of the proposed biosecurity levy to be manageable for growers, within the overall market context, and MPI concurs. The above analysis shows that the average proportional impact of the proposed biosecurity levy on growers, if actual levy rates were set at their proposed maximum rates and 2016/17 prices were maintained, would be around:

- 0.26% (i.e. around ¼ of 1%) of grower earnings per hectare, if it had been implemented throughout 2016/17;
- 9% of the total impact of levies, fees, and registrations, if it had been implemented throughout 2016/17; and
- 7.7% of the estimated total impact of levies, fees, and registrations if it was to be implemented throughout 2017/18.

Consultation

During the four years prior to the postal ballot, NZAGA had widely communicated to the industry that there would be costs associated with GIA commitments. NZAGA provided multiple opportunities for feedback from growers on the proposal to join GIA and establish a biosecurity levy for meeting its cost-share commitments for any implemented operational agreements relating to response activities. The opportunities for feedback included four AGMs and requests for feedback throughout all communications with growers.

Growers passed a motion at NZAGA's 2013 AGM requesting a postal ballot to determine their support for proposals to sign the Deed and establish a proposed biosecurity levy on domestic and export market avocados.

Formal consultation with growers on the proposals started in March 2015, including five grower roadshows, and concluding with the postal ballot.

The majority of feedback from growers was received during the roadshows that were held across the major growing regions of Bay of Plenty and Northland.

The question asked of growers during the postal ballot was:

"Do you support NZAGA becoming a signatory to the Deed and the establishment of a Biosecurity Act Levy on all avocados grown and sold for consumption as fresh fruit?"

Growers were given the opportunity to attend a roadshow and vote in the postal ballot.

NZAGA widely publicised the postal ballot which closed on 31 March 2015. Of the 21% voter turnout, 87% were in favour of the postal ballot question and 13% were against, when weighted by their respective avocado production volumes. Voter turnout for previous NZAGA resolutions and commodity levy votes has regularly been between 18-26%.

There was very little negative feedback from growers throughout the overall consultation, with communications from growers often being simple requests for further clarification.

Some growers were concerned with the potential scale of response funding commitments under operational agreements, given that avocado trees are inherently biennial cropping, with production varying by around 40% to 50% between seasons. NZAGA responded to these concerns by confirming that the NZAGA Executive would take production variability into account when it determines what actual levy rate to activate in the event of a response. That determination would look to ensure fair contributions across avocado growing regions.[5]

Communication and consultation during implementation of the proposed biosecurity levy

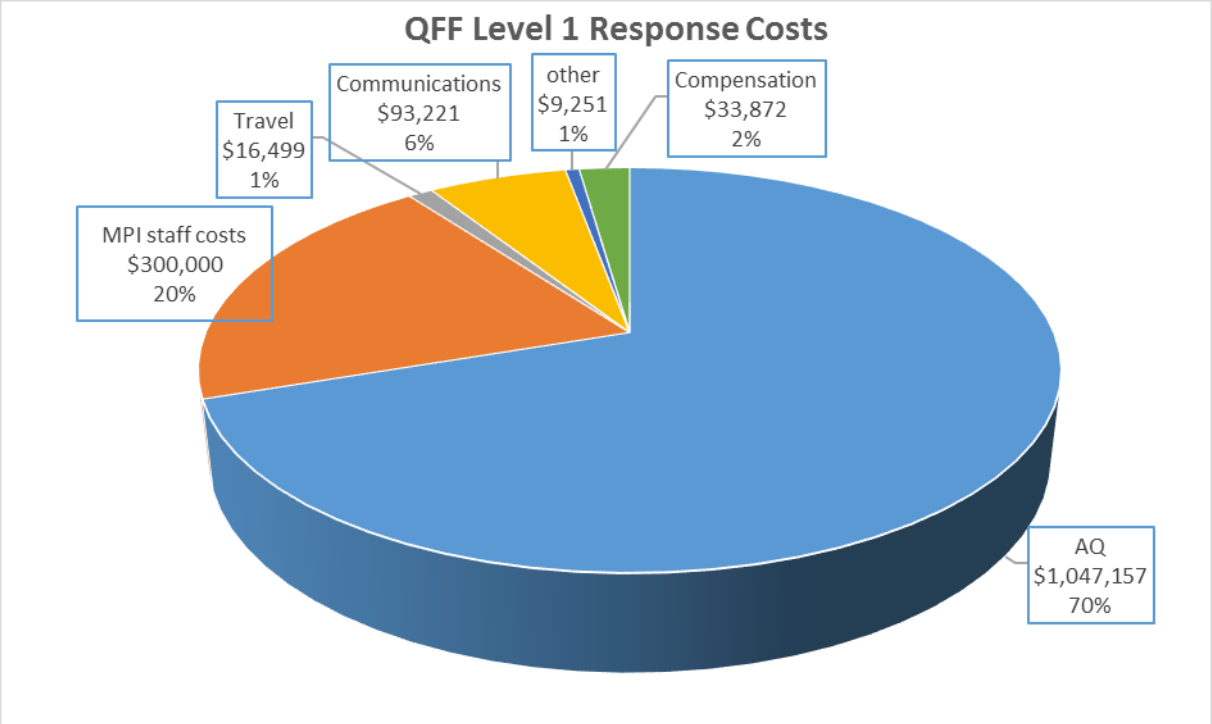
NZAGA would inform growers of publication of a Gazette notice, announcing a levy order for the proposed biosecurity levy. Growers would be reminded of the date the levy order would come into effect and the arrangement agreed to, during consultation, that the default actual levy rates for export market and domestic market avocados would be set at zero.

[5] New Zealand's main avocado growing region is the Bay of Plenty. This area is known for its warm climate and fertile soil. Whangarei and the Far North are also favourable growing regions.

The NZAGA Executive would consult with growers to ensure their views were taken into account prior to the NZAGA Executive making significant decisions relating to joint decision-making, cost-sharing, and levy arrangements under operational agreements. Consultation would be via NZAGA's existing communication channels which include e-newsletters, grower forums, annual general meetings (AGMs), and special general meetings.

The NZAGA Executive would notify growers and levy collection agents directly when the levy was to be activated by setting the actual levy rates above zero, within the maximum rates.

Annex 1: Pie graph of example Queensland Fruit Fly (QFF) Level 1 response costs



In the pie graph above, AQ is the state-owned enterprise Assure Quality that has expertise in the provision of response services. This example breakdown of a level 1 response cost is for a total cost $1.5 million.