

ORC Evidence Requirements for the Walnut Industry

Revision history

| Version | Date issued | Amendment details | |
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| | | Element | Details |
| Draft | Draft | All | New ORC Evidence Framework. Approved by the Australian Walnut Industry Association. Provided to government Parties for endorsement on 22 July 2020. |
| 1.0 | 16 December 2020 | All | Endorsed by the Australian Walnut Industry Association, government Parties and the Plant Health Australia Board. |
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The Walnut Industry Owner Reimbursement Costs (ORC) Evidence Framework only applies to Owners from the walnut industry.

ORCs for the walnut industry are calculated using the formula for perennial trees (*schedule 6, part 4.4.13 of the Emergency Plant Pest Response Deed, 30 April 2020*). This formula is: **ORC = (A – B) + C + D + E + F + G + H + I**. A definition for each component of this formula (taken from schedule 6 of the EPPRD) is provided in the table on the following page.

Regional differences will need to be taken into account throughout the Evidence Framework.

The depreciation methodology that applies is Method 2 as agreed to by EPPRD Parties in early 2007. The details of Method 2 (difference between the sums of two discounted net profit/cost streams) are described in the *Guidelines for owner reimbursement costs under the plant pest deed* (Centre for International Economics, June 2004), available on the Plant Health Australia website (www.planthealthaustralia.com.au/biosecurity/incursion-management/owner-reimbursement-costs).

Key terms used in this evidence framework

| Term | Definition |
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| Authorised Person(s) | Where key variables of the ORC need to be assessed, potentially having significant financial or 'moral hazard' implications, an Authorised Person should be used in the determination of the appropriate value. Such persons: (a) should be appropriately authorised under relevant legislation and procedures (usually of the Affected jurisdiction); (b) may be involved in (without limitation) certification, audit or determination of key information as appropriate; (c) should be appropriately qualified for the specified roles; (d) need not be a government employee, but must meet relevant independence and other relevant probity requirements; (e) should be sourced from existing expertise, such as qualified agronomists or hail assessors, where possible and appropriate. |
| Jurisdictional legislative instrument | A State or Territory's gazetted notice of a regulation. |
| Lead Agency | The agency(s) of the State(s) or Territory(s) which are responsible for leading the conduct of a Response Plan (because of the occurrence of an Incident within their State(s) or Territory(s)). |
| Owner(s) | Owner(s) of a Crop, Crops or sub-group of Crops, or a property, which is/are subject to a Response Plan, or their authorised representative(s). |
| Relevant Parties | In respect of the taking of a decision or action, the Parties which may be affected (or, where they are an Industry Party, the members of which may be affected) by the decision or action. |

Note this list is not comprehensive. Refer to clause 1.1 of the EPPRD for definitions of capitalised words/terms (excluding names) used in this framework

| | Definition of Elements from the EPPRD | Evidence requirements (in hierarchical order) | Additional Information |
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| A | Loss of profit from the current Crop destroyed = a * y * p | | |
| | a = area of tree Crop destroyed. | <p>Certification/assessment of the area of Crop that is identified for destruction by an Authorised Person using one of the following methods:</p> <ol style="list-style-type: none"> 1. Accurate property maps. This will depend on the specific jurisdiction's capacity to access such information. 2. Satellite imagery. This will depend on the specific jurisdiction's capacity to access such information. 3. Aerial photographs. This will depend on the specific jurisdiction's capacity to access such information. <p>An on the ground survey, including a tree count and variety confirmation will be required to verify the Crop identified for destruction at the time of the incursion. This will be carried out by an Authorised Person.</p> | <ul style="list-style-type: none"> • The jurisdictional legislative instrument (by whatever name) will identify the quarantine zone, and the Lead Agency must hold appropriate records of the area of Crop destroyed. • Property maps need to include information on the Crop such as tree age, numbers and variety. • Aerial photographs (e.g. from drone or satellite photos) are management tools for some growers and may become an increasingly available source of information in the future. • Photos and satellite imagery must have high enough resolution to specify growing area if it is to be used. |
| | <p>y = expected yield based on Owners' past records, taking into account any biennial bearing patterns. In particular, Owners claiming above average yields (and prices) must produce auditable records of above average returns in previous years to justify additional amounts in Owner Reimbursement Costs.</p> <p>If the Owner has no records, the regional average for that Crop is to be used.</p> | <p>Certification/assessment of the yield by variety and by age of tree by an Authorised Person using one of the following methods:</p> <ol style="list-style-type: none"> 1. Actual yield determined by harvesting the Crop. 2. Expected yield for the current season calculated for the individual Owner from their auditable historical yield data averaged over 4 years. 3. Packer/processor records for the Owner for the applicable variety averaged over 4 years. 4. Averages of packer/processor records for the applicable variety for the current season, or if current season data | <ul style="list-style-type: none"> • The 4-year average takes the fluctuating yield cycle into account. • Grower harvest and sales records will need to be verified through the assessment process. • Packer records are independent and past records can be used to independently verify any grower records through the assessment process. • Nut size is unlikely to provide yield estimates but could provide a lead to price/return expectations i.e. generally larger nuts achieve higher prices. |

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| | | <p>is not available, for the previous 4 years averaged.</p> <p>5. Local area/regional average for the applicable variety for the current season, or if current season data is not available, for the previous 4 years averaged.</p> <p>If records for the appropriate varieties are not available, 4 year averages for the most similar crop type will be used for 3, 4 and 5 above.</p> <p>For new plantings without comparable Crop records, the local area/regional average for the first commercial Crop will be used.</p> | <ul style="list-style-type: none"> • The Owner will need to source and authorise the release of past data from the packer. Generally, packer fees/charges are volume and/or quality based thus the owner should hold these records for at least the past 7 years. The information would be used only for this purpose. • New property Owners will need to obtain permission from previous owners for packer data release. • The age of the trees will need to be taken into account when determining averages. • Local area/regional average should be calculated by referring to yield records from Owners in that local area/region where available or data available from the Australian Walnut Industry Association. |
| | <p>p = market price at farm gate at harvest time</p> | <p>Market price calculated using one of the following methods:</p> <ol style="list-style-type: none"> 1. Contract price for Crops applicable under the contract, if in place. This will be adjusted, according to the contract terms, using the quality and grading values of the previous season if required. These records are typically kept by Owners, packers and processors. 2. Local/regional packer/processor records averaged for the current season for the applicable variety. 3. Records for the applicable variety for the previous season sourced from: <ul style="list-style-type: none"> (a) the Owners auditable historical records. (b) local/regional packer/processor records for the Owner. 4. Verifiable local/regional averages for the current season | <ul style="list-style-type: none"> • There are a range of processes available to Owners for selling products. Owners may choose to: <ul style="list-style-type: none"> ○ pick and pack their own produce; ○ pick and then send their produce to a packing house; ○ have direct contact with retailers; or ○ sell through a merchant/agent. • All prices should be measured at farm gate. • Prices will need to consider the variability in the quality of nut taken from historical records of quality and grading values for previous seasons using parameters like size and colour. In addition, the consideration of |

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| | | determined from an appropriate market source at the time of the incursion (i.e. where there are no packer/processor records available). | <p>localised 'secondary' impacts e.g. blight infection, sunburn and other production aspects if using packer/processor records or verifiable local/regional averages.</p> <ul style="list-style-type: none"> • Nut size can provide a lead to price/return expectations i.e. generally larger nuts achieve higher prices. • Owners claiming above average prices must produce auditable records of above average prices in previous years to justify additional amounts in ORCs. |
| B | Harvesting costs based on 'best practice' as estimated by State/Territory departments of agriculture, plus any other costs (such as watering or pruning costs) normally associated with Crop production between the time of tree destruction and harvest. | <ol style="list-style-type: none"> 1. Harvesting and other applicable costs estimated from Owners auditable records from 4 prior years of production as appropriate. 2. Best practice harvest and production costs will be determined by State/Territory Agriculture Departments in consultation with Relevant Parties using applicable local contract prices. | <ul style="list-style-type: none"> • Harvesting can be undertaken through a number of methods including: <ul style="list-style-type: none"> ○ Manual labour including piece work ○ Grower mechanical shaking and harvesting equipment ○ Harvest contractors. • Records of labour cost and/or grower's records of harvest times and/or contractors records can be used to measure harvest costs. |
| C | Direct costs associated with the Response Plan incurred by the Owner but not normally incurred as a production expense. | <p>This will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis.</p> <ol style="list-style-type: none"> 1. Owners auditable records from 4 prior years of production will be used to determine costs normally incurred by an Owner as a production expense. 2. A standard schedule of regional gross margins will be used to estimate normal costs based on standard local or regional contract prices as appropriate. This will be determined by State/Territory Agriculture Departments in consultation with Relevant Parties. | <ul style="list-style-type: none"> • Required actions/treatments by Owners need to be specifically defined in a Response Plan. • "Direct costs" does not include additional market access costs arising from market access restrictions imposed by jurisdictions in response to the Incident. • The legislative order needs to specify the actions/treatments required by the Owner. |
| D | Replacement value of any capital items | Replacement value of any capital items destroyed will | <ul style="list-style-type: none"> • The legislative order needs to identify the |

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| | <p>destroyed as part of the Response Plan. If there is an opportunity following the Response Plan for modernising or upgrading the orchard – for example, closer tree plantings, more expensive varieties, or trellis plantings, the level of Owner Reimbursement Costs is to be related strictly to replacing the asset that was there. If an Owner wants to introduce more technology or better infrastructure, for example, the Owner must cover any additional costs.</p> | <p>depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis.</p> <p>Replacement value of any capital items destroyed as an unintended consequence of an eradication program need to be included in this element but will not necessarily be specified in the Response Plan. Unintended destruction of capital items will be dealt with on an Owner-by-Owner basis.</p> <p>Replacement values are to be determined in accordance with a schedule of market values for items expected to be destroyed, replacing like with like (in terms of make/model), and agreed by Relevant Parties at the time of developing a Response Plan.</p> <p>Prices will be sourced from local/district suppliers identified at the time of the Incident e.g.:</p> <ul style="list-style-type: none"> • Landmark; • Elders; • Roberts; or • Other regional specialist suppliers identified. | <p>item requiring destruction.</p> <ul style="list-style-type: none"> • Known capital items requiring destruction need to be specified in a Response Plan. • However, some items cannot be replaced until the fallow period ends. The price of these items is likely to increase during the fallow period. As such, an appropriate rate of input price inflation must be determined and applied to these prices. Subsequent values are then depreciated. • Capital items for walnut orchards could potentially include: <ul style="list-style-type: none"> ○ Fences ○ Harvest bins ○ Picking bags ○ Irrigation systems ○ Protective covers e.g. bird netting ○ Support structures ○ Wind protection including vegetative wind breaks. • Replacing 'like with like' means that the Owner is reimbursed for the value of the asset that was destroyed under the Response Plan – it is the cost to replace the same type of item (i.e. same make, model, size etc), and takes into account the age of the item destroyed through a method of depreciation. • If there is an opportunity following the Response Plan for modernising or upgrading the growing facilities – for example, closer Crop plantings, or hydroponics, the level of |

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| | | | ORC is to be related strictly to replacing the asset that was there. If an Owner wants to introduce more technology, or better infrastructure, for example, the Owner must cover additional costs. |
| E | <p>Loss of net profits for any fallow period required by a Response Plan.</p> <p>Net profit is to be standardised based on regional gross margins calculations for the Crop in question by State/Territory departments of agriculture.</p> | <p>Loss of net profits determined using one of the following methods:</p> <ol style="list-style-type: none"> 1. Owners auditable records from 4 prior years of production will be used to estimate future costs and Crop value as appropriate. 2. A standard schedule of regional gross margins will be used to estimate future costs and Crop value based on best practice. This will be determined by state/territory agriculture departments in consultation with Relevant Parties. The assumptions used in developing the gross margins will have to be considered when referring to them (e.g. age of planting, planting density). | <ul style="list-style-type: none"> • A Response Plan fallow is a compulsory non-productive time an Owner would not normally experience. If a period of fallow is not required by the Response Plan, "E" will not be included as part of the ORC assessment. • In situations where trees of different ages are destroyed, the different ages will be taken into account when calculating "E". • The primary goal should be to reduce the costs and impact of the response. Where the response allows there should be a mechanism to enable Owners to remain productive. an alternative crop could be considered by Owners, as the first option to enable them to remain productive. Where the response allows, suitable alternative crops will be identified and income from the crop deducted from the amount payable for a compulsory fallow. |

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| F | Tree destruction costs 'depreciated' depending on the age of the orchard in relation to a standardised period of rotation for the tree Crop in question. Depreciation is to be based on a straight-line method between full cost reimbursement at the beginning of commercial production of the rotation and the end of the rotation. | Costs to be determined based on best practice and applicable contract prices with reference to the lowest of 3 reasonable quotes from local suppliers for any external inputs/services required and reasonable estimates of internal/operational costs incurred. The standard period of rotation is to be considered as 30-years unless an Owner can provide evidence of a different intention. | <ul style="list-style-type: none"> • Normally, destruction will be carried out by the Lead Agency and not included as part of the ORC calculation. • If the rotation period differs from the standard the Owner will need to provide sufficient evidence to the Authorised Person for verification. Evidence may take the form of historical planting records or future planting plans for the orchard. |
| G | 'Depreciated' tree replanting costs as for tree destruction costs. If there is an opportunity following the Response Plan for modernising or upgrading the orchard – for example, closer tree plantings, more expensive varieties, or trellis plantings, the level of Owner Reimbursement Costs is to be related strictly to replacing the asset that was there. If an Owner wants to introduce more technology or better infrastructure, for example, the Owner must cover any additional costs. | Costs are to be determined based on best practice and applicable contract prices with reference to the lowest of 3 reasonable quotes from local suppliers and service providers and reasonable estimates of internal/operational costs incurred. | <ul style="list-style-type: none"> • This cost is for replacing like with like. If the Owner would like to take the opportunity to make changes to orchard design or modernise/upgrade the orchard, then the additional expense will be covered by the Owner. • Costs are typically calculated on a tree by tree basis, for a hectare of trees, or part of a hectare and based on best practice. • Trees used for replanting would typically be 12 – 24 months old at time of planting. • If the existing rootstock could be used, then the first leaf of the grafted top could be an optional starting point. |
| H | 'Depreciated' loss of profit during the non-bearing period of immature trees. | A yield curve and the comparative gross margin will be used to determine this loss. The yield curve will be prepared by the walnut industry based on best practice. | <ul style="list-style-type: none"> • The need for complete removal of old trees and site preparation may prolong the lag time to an appropriate planting window or season and delay the time taken for trees to bear nuts. This should be considered when calculating the loss during the non-bearing period of immature trees. |

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| I | Value of any stored produce on farm destroyed as a directive of the Response Plan including seed or nuts — as for annual broadacre Crops. | <p>This will depend on what the Response Plan requires and will be calculated on an Incident by Incident basis.</p> <p>Price to be determined using the applicable method as described in "A".</p> <p>The amount of any stored produce will be determined by inspection at the time of the Incident.</p> | <ul style="list-style-type: none"> • Legal transfer of ownership of nuts will vary with arrangements between an Owner and any intermediary. • The Owner sells on consignment and does not get paid until the product is sold at the end point. • If selling to a processor, that is the endpoint and the grower relinquishes ownership of the nuts on delivery. • ORCs will apply when any nuts destroyed are still owned by the grower. |