

# Hort360 Reef Certification Compliance



Hort360 Reef Certification  
Compliance  
2020  
Growcom Australia

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- Sediment Management
- Pesticide management
- Water Management

Business Name			
Completed by:	Signature:	Date:	

### Hort360 Reef Certification Compliance

	Management		
Element	Compliance Criteria	Evidence	
	Hort360		
Hort360	Completion of Hort360 Reef Certification module within last 12 months <ul style="list-style-type: none"> <li>• Complete the property page/s relating the property to be reef certified               <ul style="list-style-type: none"> <li>○ Property Info</li> <li>○ On-Farm Operations</li> <li>○ Lot &amp; Plans</li> </ul> </li> </ul>	Hort360 Reef Certification report and date sighted (paper or electronic) <ul style="list-style-type: none"> <li>• Hort360 Reef Certification report</li> <li>• Date of report – no older than 12 months</li> </ul>	Hort360 Reef Certification
Resources and Login <a href="http://www.hort360.com.au">www.hort360.com.au</a>			
	Identify property areas, infrastructure and local activities on a property map		Freshcare Alignment
Mapping	A property map is documented and maintained The map identifies: <ul style="list-style-type: none"> <li>• Property boundaries, roads and surrounds (farming, school, sports fields, residential, etc.)</li> <li>• Drainage lines and discharge points</li> </ul>	Property map(s) are available and identify/include all applicable areas as specified  Property map(s) can be aerial photographs, topographical map, cadastral map, self-drawn map, overlays etc.	Property map Environmental M1.2  <b>Item specific to Reef Certification</b>

	<ul style="list-style-type: none"> <li>• Natural waterways, wetlands, riparian areas and lakes</li> <li>• Areas that are, or are at risk of being, highly degraded, eroded or contaminated</li> <li>• <b>Various soil types / management zones</b></li> </ul>		
<p>Resources</p> <p>Soil information and data – QGlobe (online webinar)</p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2020/02/Where-to-look-for-soil-information.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2020/02/Where-to-look-for-soil-information.pdf</a></p> <p><a href="https://www.youtube.com/watch?v=ckbUz1ovbi8&amp;feature=youtu.be">https://www.youtube.com/watch?v=ckbUz1ovbi8&amp;feature=youtu.be</a></p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2020/02/Soil-information-and-data-online-webinar.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2020/02/Soil-information-and-data-online-webinar.pdf</a></p> <p><a href="http://www.qglobe.information.qld.gov.au/">www.qglobe.information.qld.gov.au/</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
	<b>Documentation</b>	<b>Evidence</b>	<b>Freshcare Alignment</b>
Documents	Current editions of the Hort360 Reef Certification are kept	<p>Sighted copies (print or electronic)</p> <ul style="list-style-type: none"> <li>• Hort360 Reef Certification Introduction</li> <li>• Hort360 Reef Certification Compliance</li> <li>• Hort360 Reef Certification Forms</li> <li>• Hort360 Reef Certification Interpretive Guideline</li> <li>• Hort360 Reef Certification Rules</li> </ul>	Documentation M2.1, M2.2
Records	All records and documents required to verify compliance to the Hort360 Reef Certification are legible	<p>All records sighted (print or electronic), include at a minimum:</p> <ul style="list-style-type: none"> <li>• title</li> <li>• date of issue or version number</li> <li>• business name</li> </ul>	Documentation M2.1, M2.2

		<ul style="list-style-type: none"> <li>name of person completing the record and date of completion</li> </ul>	
	As documents and records change, out-of-date versions are replaced	<ul style="list-style-type: none"> <li>All documents and records are current (a CAR to be raised if there is evidence of out-of-date documents in the system / being used).</li> </ul>	Documentation M2.1, M2.2
	All records are kept for a minimum of three years in-line with tri annual auditing	<ul style="list-style-type: none"> <li>Availability of individual records dating back 3 years</li> </ul>	Documentation M2.1, M2.2
	Complete corrective actions for non-compliance	Evidence	Freshcare Alignment
CAR	<p>A Corrective Action Record (CAR) must be completed when the requirements of the Hort360 Reef Certification, Freshcare Rules or legislation are not being met, as identified by:</p> <ul style="list-style-type: none"> <li>Routine activities</li> <li>Annual Hort360 Reef Certification module completion</li> <li>Tri-annual external audits</li> <li>A valid complaint received from a neighbour, customer or regulatory authority</li> <li>Environmental harm has occurred/may occur as a result of property activity, neighbouring activity or a natural event</li> </ul>	<ul style="list-style-type: none"> <li>Completed Form: Corrective action record (CAR), or equivalent.</li> </ul> <p>A complaints register providing a record of any external complaints / notification (from neighbours, council, customers etc.) received by the business.</p>	Complete corrective actions for any non-compliance M4.2

	<p>A Corrective Action Record must include:</p> <ul style="list-style-type: none"> <li>• Description of the problem</li> <li>• Cause of the problem</li> <li>• Whether or not the problem has occurred before</li> <li>• Short term fix (action taken to fix the problem)</li> <li>• Long term fix (action taken to prevent the problem recurring)</li> <li>• Confirmation that the short term and long term actions are completed and effective</li> <li>• Name and signature of person completing the review</li> <li>• Date of the review</li> </ul>	<ul style="list-style-type: none"> <li>• Sighted evidence of CARs that have been recorded and completed appropriately when required</li> <li>• Discussion with grower to confirm instances when CARs are/should be raised; such as <ul style="list-style-type: none"> <li>○ spray drift incidents/suspected incidents</li> </ul> </li> </ul>	<p>Complete corrective actions for any non-compliance</p> <p>M4.2</p>
	<p>Reoccurrences of non-compliance are reviewed by the owner or appropriate senior manager.</p>	<ul style="list-style-type: none"> <li>• Sighted evidence that CARs raised for reoccurring incidents are reviewed (signed/actioned etc.) by the owner or appropriate senior manager and adequate actions to rectify reoccurrences have been undertaken.</li> </ul>	<p>Complete corrective actions for any non-compliance</p> <p>M4.2</p>
<p>Refer to Hort360 Reef Certification Form</p> <ul style="list-style-type: none"> <li>• Corrective action record (CAR)</li> </ul>			

Nutrient Management			
Element	Compliance Criteria	Evidence	Freshcare Alignment
Do you conduct soil / leaf / sap / fruitlet testing?	<p>Soil sampling collected / collated annually per soil type / management zone</p> <p><b>and/or</b></p> <p>Leaf / sap / fruitlet sampling completed annually per management zone</p> <ul style="list-style-type: none"> <li>• A sampling regime recommended by a suitably qualified / experienced person</li> </ul> <p><b>And</b></p> <p>Collection / collation conducted as per industry recognised procedure</p> <p>Testing conducted by NATA / ASPAC accredited lab</p>	<p>Soil testing results linked to soil type / management zone mapping</p> <p>Leaf/sap/fruitlet testing results linked to management zone mapping</p> <p>Testing conducted by a NATA/ASPAC accredited lab</p>	<p>Select fertilisers and soil additives to minimise risk to the environment</p> <p>E5.1.1</p>
<p>Resources</p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Fertcare-Soil-Sampling-Guide.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Fertcare-Soil-Sampling-Guide.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Sampling-Procedure-Plant-Tissue.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Sampling-Procedure-Plant-Tissue.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			



Do you undertake nutrient target setting / budgeting?	Developed on a crop / soil type basis	Documents and/or calculations showing the relationship between the testing results and quantities of fertiliser applied. <ul style="list-style-type: none"> <li>• Suitably qualified person recommendations based on test results</li> <li>• Lab test results and comments / recommendations</li> <li>• NATA/ASPAC accredited labs are used</li> </ul>	Select fertilisers and soil additives to minimise risk to the environment E5.1.1
<p>Resources</p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Farm-Flow-Fertiliser-Use-Efficiency.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Farm-Flow-Fertiliser-Use-Efficiency.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Decision/Cracking%20the%20Nutrient%20Code%20optimized.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Decision/Cracking%20the%20Nutrient%20Code%20optimized.pdf</a> – refer to section 3.4 Nutrient Budgeting, Page 26-27.</p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Principles-of-Nutrient-Management.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Principles-of-Nutrient-Management.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2020/06/Soil-Wealth-Fertiliser-Program.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2020/06/Soil-Wealth-Fertiliser-Program.pdf</a></p> <p>Crop nutrient removal calculator – <a href="http://www.ipni.net/article/IPNI-3346">http://www.ipni.net/article/IPNI-3346</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
What method of fertiliser application do you use?	Various application methods (fertigation, incorporation, broadcast, banding and / or foliar) in accordance with weather conditions  Typically small amounts often  In accordance with weather conditions	Completed Form: Fertiliser and soil additive application record, or equivalent  Records of all fertiliser and soil additive applications are kept and must include: <ul style="list-style-type: none"> <li>• application date</li> <li>• location and crop</li> <li>• product used</li> <li>• rate of application</li> <li>• wind speed and direction</li> <li>• method of application/incorporation</li> </ul>	Fertiliser and soil additive application record, or equivalent E5.4.1 &/or F5.1.9  Hydroponic nutrient solution monitoring record, or equivalent E5.4.2

		<ul style="list-style-type: none"> <li>• name and signature of the person applying the fertilisers and soil additives</li> </ul> <p>Completed Form: Hydroponic nutrient solution monitoring record, or equivalent</p> <p>A record of hydroponic nutrient solution monitoring is kept and must include:</p> <ul style="list-style-type: none"> <li>• monitoring date</li> <li>• location and crop</li> <li>• pH and electrical conductivity (EC) of the feed solution</li> <li>• pH and electrical conductivity (EC) of the drainage solution</li> <li>• quantity of drainage solution</li> <li>• name and signature of the person conducting the monitoring activity</li> </ul>	
<p>Resources</p> <p>Refer to Hort360 Reef Certification Forms</p> <ul style="list-style-type: none"> <li>• Fertiliser and soil additive application record</li> <li>• Hydroponic nutrient solution monitoring record</li> </ul> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Management/Fertigation%20Management.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Management/Fertigation%20Management.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Management/Fertigation%20System%20Performance.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Management/Fertigation%20System%20Performance.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Application/Fertigation%20Compatability%20and%20Solubility.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Application/Fertigation%20Compatability%20and%20Solubility.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Decision/Cracking%20the%20Nutrient%20Code%20optimized.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Decision/Cracking%20the%20Nutrient%20Code%20optimized.pdf</a> – refer to page 38</p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			

<p>At what rate do you apply fertiliser?</p>	<p>Variable rate</p> <p>Includes:</p> <ul style="list-style-type: none"> <li>• Crop growth stage</li> </ul>	<p>Completed Form: Fertiliser and soil additive application record, or equivalent</p> <p>Completed Form: Hydroponic nutrient solution monitoring record, or equivalent</p>	<p>Fertiliser and soil additive application record, or equivalent</p> <p>E5.4.1 &amp;/or F5.1.9</p> <p>Hydroponic nutrient solution monitoring record, or equivalent E5.4.2</p>
<p>Resources</p> <p>Refer to Hort360 Reef Certification Forms</p> <ul style="list-style-type: none"> <li>• Fertiliser and soil additive application record</li> <li>• Hydroponic nutrient solution monitoring record</li> </ul> <p>Queensland Agriculture, 12/01/2016, “Prescription mapping for variability in vegetables”, YouTube, Available at: <a href="https://www.youtube.com/watch?v=f_t8d18TZ0Q">https://www.youtube.com/watch?v=f_t8d18TZ0Q</a></p> <p>HortSMART, 16/9/2015, “Yield mapping and monitoring of Queensland vegetable crops”, YouTube, Available at: <a href="https://www.youtube.com/watch?v=zCA1vFk9Ri0">https://www.youtube.com/watch?v=zCA1vFk9Ri0</a></p> <p>HortSMART, 07/09/2015, “Using technology to identify crop variability in vegetables”, YouTube, Available at: <a href="https://www.youtube.com/watch?v=q1GUN1IOD9o">https://www.youtube.com/watch?v=q1GUN1IOD9o</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
<p>Do you record nutrient applications?</p>	<p>All applications are recorded per management zone in line with nutrient targeting</p>	<p>Completed Form: Fertiliser and soil additive application record, or equivalent</p> <p>Completed Form: Hydroponic nutrient solution monitoring record, or equivalent</p>	<p>Fertiliser and soil additive application record, or equivalent</p> <p>E5.4.1 &amp;/or F5.1.9</p> <p>Hydroponic nutrient solution monitoring record, or equivalent E5.4.2</p>
<p>Resources</p> <p>Refer to Hort360 Reef Certification Forms</p>			

<ul style="list-style-type: none"> <li>Fertiliser and soil additive application record</li> <li>Hydroponic nutrient solution monitoring record</li> </ul> <p><a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Farm-Flow-Fertiliser-Use-Efficiency.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2019/11/Farm-Flow-Fertiliser-Use-Efficiency.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
Is fertiliser application equipment (includes fertigation) properly & regularly calibrated & maintained?	Fertiliser equipment is calibrated & maintained on a seasonal basis	<p>Completed form: Calibration record (Fertiliser / Fertigation)</p> <p>Equipment used to apply fertilisers and soil additives is calibrated at least annually or as per manufacturer’s instructions. A record of calibration is kept and must include:</p> <ul style="list-style-type: none"> <li>description of method</li> <li>calibration results</li> <li>date of calibration</li> <li>name of the person calibrating the equipment</li> </ul>	<p>Calibration record</p> <p>E5.3.2</p>
<p>Resources</p> <p>Refer to Hort360 Reef Certification Forms</p> <ul style="list-style-type: none"> <li>Calibration Record (Fertiliser / Fertigation)</li> </ul> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Application/Fertigation%20System%20Performance.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Application/Fertigation%20System%20Performance.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Nutrient/Decision/Cracking%20the%20Nutrient%20Code%20optimized.pdf">https://www.hort360.com.au/wordpress/uploads/Nutrient/Decision/Cracking%20the%20Nutrient%20Code%20optimized.pdf</a> – refer to page 32</p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			

Sediment Management			
Element	Compliance Criteria	Evidence	Freshcare Alignment
Does farm run-off flow across vegetated buffers (or through buffer device) of sufficient width, type and quality before reaching a waterway or wetland?	Vegetated buffers in place, provides protection of waterways in the majority of instances	<ul style="list-style-type: none"> <li>• Contour map</li> <li>• Evidence of maintained contour banks</li> <li>• Photos / management zone walk of in-field soil erosion control measures – soil cover, drainage system, contour banks/rows, diversion banks, levelling</li> <li>• Photos / management zone walk of ground cover / grassed drains, headlands / vegetative buffers / sediment retention</li> <li>• Structure designs and management</li> <li>• Photos of riparian areas maintained</li> </ul>	<p>Manage land and soil, and minimise degradation, erosion compaction and contamination</p> <p>E2.1.1, E2.2.1</p> <p>Manage water to minimise environmental harm</p> <p>E6.3.3</p>
<p>Resources</p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Buffer%20Riparian/Sediment%20-%20Vegetated%20buffer-filter%20strips.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Buffer%20Riparian/Sediment%20-%20Vegetated%20buffer-filter%20strips.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Buffer%20Riparian/Buffer%20Strip%20Factsheet.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Buffer%20Riparian/Buffer%20Strip%20Factsheet.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Buffer%20Riparian/Designing%20filters%20strips%20to%20trap%20sediment%20and%20attached%20nutrient.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Buffer%20Riparian/Designing%20filters%20strips%20to%20trap%20sediment%20and%20attached%20nutrient.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Soil%20Conservation%20in%20Horticulture.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Soil%20Conservation%20in%20Horticulture.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
Do you have structures that collect sediment which are of sufficient size, design and are maintained efficiently?	<p>Structures / systems are working effectively</p> <p>Deemed suitable for:</p> <ul style="list-style-type: none"> <li>• structure / system catchment area</li> <li>• sediment source / farming system</li> </ul> <p>and maintenance is carried prior to spring/summer rainfall period</p>	<ul style="list-style-type: none"> <li>• Contour map</li> <li>• Photos / management zone walk of ground cover / grassed drains, headlands / vegetative buffers / sediment retention</li> <li>• Photos / management zone walk of in-field soil erosion control measures – soil cover, drainage</li> </ul>	<p>Manage land and soil, and minimise degradation, erosion compaction and contamination</p> <p>E2.1.1, E2.2.1</p>

		<p>system, contour banks/rows, diversion banks, levelling</p> <ul style="list-style-type: none"> <li>• Photos / management zone walk of silt traps/drainage collection ponds or channels/runoff water collection &amp; recycling systems</li> <li>• Structure designs and management</li> <li>• Photos / management zone walk of riparian areas maintained</li> </ul>	<p>Manage water to minimise environmental harm</p> <p>E6.3.3</p>
<p>Resources</p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Soil%20Conservation%20in%20Horticulture.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Soil%20Conservation%20in%20Horticulture.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Farm%20Runoff/Sediment%20basins%20factsheet.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Farm%20Runoff/Sediment%20basins%20factsheet.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Control%20Measures/Farm%20run-off%20treatment%20systems%20toolkit.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Control%20Measures/Farm%20run-off%20treatment%20systems%20toolkit.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
<p>How do you ensure that soil is protected during non-productive cropping periods?</p> <p>(Plant bed management)</p>	<p>Annual / Pineapple</p> <ul style="list-style-type: none"> <li>• bare beds combined with green manure / cover cropping planted between (space and time) commercial crops</li> </ul> <p>and or</p> <ul style="list-style-type: none"> <li>• products such as PAM (polyacrylamide), PVA (polyvinyl acetate) or molasses which bind soil together may also be utilised in circumstances / locations where there are impediments to maintaining cover</li> </ul> <p>Must include:</p> <ul style="list-style-type: none"> <li>• vegetated drains / drainage areas, vegetated buffers</li> </ul>	<ul style="list-style-type: none"> <li>• Contour map</li> <li>• Photos / management zone walk of ground cover / grassed drains, headlands / vegetative buffers / sediment retention</li> <li>• Photos / management zone walk of plant bed (residue retention) and inter-row cover</li> <li>• Statement of tillage practice</li> </ul>	<p>Manage land and soil, and minimise degradation, erosion compaction and contamination</p> <p>E2.1.1, E2.2.1</p> <p>Manage water to minimise environmental harm</p> <p>E6.3.3</p>

	<p>Irrigation systems used are appropriate for slope %</p> <p>Trees</p> <ul style="list-style-type: none"> <li>• prunings / volunteers</li> </ul> <p>and or</p> <ul style="list-style-type: none"> <li>• products such as PAM (polyacrylamide), PVA (polyvinyl acetate) or molasses which bind soil together may also be utilised in circumstances/locations where there are impediments to maintaining cover (e.g. shade from mature tree canopy)</li> </ul> <p>Irrigation systems used are appropriate for slope %</p>		
<p>Resources</p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Fact%20Sheet_Managing%20Soil%20Erosion%20in%20Vegetables.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Fact%20Sheet_Managing%20Soil%20Erosion%20in%20Vegetables.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Sediment%20-%20Fallow%20management.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Sediment%20-%20Fallow%20management.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
<p>To reduce in-field losses your inter-rows are?</p>	<p>Annual / Pineapple / Trees</p> <p>IF a bare inter-row is maintained due to general block management / crop canopy closure you must include:</p> <ul style="list-style-type: none"> <li>• vegetated drains / drainage areas, vegetated buffers</li> </ul> <p>May also include:</p> <ul style="list-style-type: none"> <li>• diversion and contour banks, contour plantings, adequate silt traps, crop rotations, cover cropping, levelling and/or sediment retention</li> </ul>	<ul style="list-style-type: none"> <li>• Contour map</li> <li>• Photos / management zone walk of bare inter-row with grassed headlands / grassed drains at ends of blocks / ground cover / grassed drains, headlands / vegetative buffers / sediment retention</li> <li>• Photos / management zone walk of plant bed (residue retention) and inter-row cover</li> <li>• Photos / management zone walk of in-field soil erosion control measures – soil cover, drainage system, contour banks/rows, diversion banks, levelling</li> <li>• Control practices in place – options include levelling, vegetated drains / drainage areas, diversion and</li> </ul>	<p>Manage land and soil, and minimise degradation, erosion compaction and contamination</p> <p>E2.1.1, E2.2.1</p> <p>Manage water to minimise environmental harm</p> <p>E6.3.3</p>

		contour banks, contour plantings, adequate silt traps, crop rotations, cover cropping, and/or inter-row soil cover	
<p>Resources</p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Sediment%20-%20Inter-row%20management.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Sediment%20-%20Inter-row%20management.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Sediment%20-%20Row%20plantings%20on%20mound.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Sediment%20-%20Row%20plantings%20on%20mound.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
Are headlands / roads maintained to reduce runoff?	Maintenance procedures for roads and grassed / covered headlands are implemented with minimal runoff issues	<ul style="list-style-type: none"> <li>Photos / management zone walk of ground cover / grassed drains, headlands / vegetative buffers / sediment retention / roads and tracks</li> </ul>	<p>Manage land and soil, and minimise degradation, erosion compaction and contamination</p> <p>E2.1.1, E2.2.1</p>
<p>Resource</p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Soil%20Conservation%20in%20Horticulture.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Infield%20Runoff/Soil%20Conservation%20in%20Horticulture.pdf</a> – refer to pages 10-12</p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Run%20Off/Farm%20Runoff/Sediment%20-%20Run-off%20from%20on%20farm%20roadways.pdf">https://www.hort360.com.au/wordpress/uploads/Run%20Off/Farm%20Runoff/Sediment%20-%20Run-off%20from%20on%20farm%20roadways.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			



Pesticide Management			
Element	Compliance Criteria	Evidence	Freshcare Alignment
In an effort to reduce pesticide use on farm do you use any Integrated Pest Management (IPM) methods?	A full complement of IPM measures are implemented with a range of control strategies used	<ul style="list-style-type: none"> <li>Completed Form: Pest and disease monitoring record, or equivalent.</li> <li>Completed Form: Preventive pest and disease control program, or equivalent.</li> </ul>	Select pest and disease control strategies to minimise risk to the environment  Preventive pest and disease control program  E4.1.3
Resources  Refer to Hort360 Reef Certification Forms <ul style="list-style-type: none"> <li>Pest and disease monitoring record</li> <li>Preventive pest and disease control program</li> </ul> <a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Best-practice-IPM.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Best-practice-IPM.pdf</a> <a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Management%20&amp;%20Safety/Integrated%20Crop%20Management.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Management%20&amp;%20Safety/Integrated%20Crop%20Management.pdf</a> <a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/IPM%20case%20study.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/IPM%20case%20study.pdf</a>  Refer to Hort360 Reef Certification Interpretive Guideline			
Are you maintaining accurate spray diaries?	Spray use is recorded electronically as per industry standards and reviewed annually for ongoing decision making	Records of all pre-harvest chemical applications are kept and must include: <ul style="list-style-type: none"> <li>application date</li> <li>start and finish times</li> <li>location and crop</li> <li>chemical used (including batch number if available)</li> <li>rate of application and quantity applied</li> <li>equipment and/or method used to apply the chemical</li> </ul>	Avoid potential for spray drift & record  E4.6.1, E4.6.2, E4.9.1  and / or  F4.5, F2.1, F4.8

		<ul style="list-style-type: none"> <li>wind speed and direction</li> <li>withholding period (WHP) or earliest harvest date (EHD)</li> <li>method of disposal of leftover chemical solutions</li> <li>name and signature of the person who applied the chemical</li> </ul>	
<p>Resources</p> <ul style="list-style-type: none"> <li>Pre-harvest chemical application record</li> </ul> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray_Application_Basics.PDF">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray_Application_Basics.PDF</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
How do you determine crop / pest chemical requirements?	Using your own and agronomist recorded crop monitoring results, action thresholds and labelled rates	<ul style="list-style-type: none"> <li>Completed Form: Pest and disease monitoring record, or equivalent.</li> <li>Completed Form: Preventive pest and disease control program, or equivalent.</li> </ul>	<p>Select pest and disease control strategies to minimise risk to the environment</p> <p>Preventive pest and disease control program</p> <p>E4.1.3</p>
<p>Resources</p> <p>Refer to Hort360 Reef Certification Forms</p> <ul style="list-style-type: none"> <li>Pest and disease monitoring record</li> <li>Preventive pest and disease control program</li> </ul> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Best-practice-IPM.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Best-practice-IPM.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Management%20&amp;%20Safety/Integrated%20Crop%20Management.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Management%20&amp;%20Safety/Integrated%20Crop%20Management.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/IPM%20case%20study.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/IPM%20case%20study.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			

<p>To reduce the loss of chemicals via spray drift you?</p>	<p>Spray in accordance with label requirements</p> <p>In appropriate weather conditions</p> <p>Using on site weather information (temperature, relative humidity, wind speed and wind direction) and recorded</p> <p>Using fit for purpose spray equipment to control droplet spectrum with appropriate spray buffers in place</p>	<ul style="list-style-type: none"> <li>Review chemical application record for wind speed and direction.</li> <li>A record of actual or suspected (contractor, neighbour, council) spray drift incidents is sighted.</li> </ul>	<p>Avoid potential for spray drift</p> <p>E4.6.1 &amp; E4.6.2, E4.9.1 &amp;/or</p> <p>F4.5, F2.1, F4.8</p>
<p>Resources</p> <p>Refer to Hort360 Reef Certification Forms</p> <ul style="list-style-type: none"> <li>Pesticide Application Record</li> </ul> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Application%20and%20Drift%20Management%20BGordon%20presentation.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Application%20and%20Drift%20Management%20BGordon%20presentation.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray%20Drift%20Best%20Practice%20Guidelines%20July11.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray%20Drift%20Best%20Practice%20Guidelines%20July11.pdf</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray_Application_Basics.PDF">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray_Application_Basics.PDF</a></p> <p><a href="https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray%20Drift%20Management%20CSIRO.pdf">https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Spray%20Drift%20Management%20CSIRO.pdf</a></p> <p>Refer to Hort360 Reef Certification Interpretive Guideline</p>			
<p>Is chemical application equipment properly &amp; regularly calibrated?</p>	<p>Spray equipment is calibrated annually according to manufacturer's instructions and checked for efficiency at every use &amp; recorded</p>	<p>Completed Form: Calibration Record (Pesticides) or equivalent</p> <ul style="list-style-type: none"> <li>Maintenance detailed on service/maintenance record.</li> <li>Records of servicing/parts available.</li> <li>Manufacturer's instructions (if calibrating to a frequency documented by manufacturer).</li> <li>Demonstration/explanation of calibration methods.</li> <li>Calibration certificates</li> </ul>	<p>Maintain and calibrate chemical application equipment</p> <p>E4.7 and or F4.6</p>

Resources

Refer to Hort360 Reef Certification Forms

- Calibration Record (Pesticides)

<https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/boom%20sprayers.pdf>

<https://www.hort360.com.au/wordpress/uploads/Pesticide/Application/Calibration%20%20Guide%202009.pdf>

Refer to Hort360 Reef Certification Interpretive Guideline

**Water Management**

Element	Compliance Criteria	Evidence	Freshcare Alignment
Do you know the rate of water applied by your irrigation system (i.e. mm/hr or L/hr)?	Application rate suited to soil type and volume applied meets crop stage requirement  Annually measure volume of water applied	Completed Form: Maintenance and Service – Irrigation application rate record, or equivalent	Manage water use on property  E6.1.3

Not Applicable – non irrigated farming system

Resources

Refer to Hort360 Reef Certification Forms

- Maintenance and Service - application rate record

<https://www.hort360.com.au/wordpress/uploads/Irrigation/Irrigation%20Management/Water%20Management.pdf>

<https://www.hort360.com.au/wordpress/uploads/Irrigation/Water%20Supply/Estimating-how-much-water-should-be-applied.pdf>

Refer to Hort360 Reef Certification Interpretive Guideline

Do you have a procedure for determining when to irrigate and how much to apply?	Use objective tools (at least one) <ul style="list-style-type: none"> <li>(e.g. Tensiometers, Capacitance Probes, Time Domain Reflectance Systems, Weather Stations, Evaporation Pan, Satellite / Drone imagery)</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring records such as <ul style="list-style-type: none"> <li>Soil moisture monitoring data, weather condition data, weather station data</li> </ul> </li> <li>Photo / written evidence / management zone walk of monitoring equipment used to determine requirements</li> </ul>	Water management program E6.1.2
Not Applicable – non irrigated farming system			
Resources Refer to Hort360 Reef Certification Forms <ul style="list-style-type: none"> <li>Water management program</li> </ul> <a href="https://www.hort360.com.au/wordpress/uploads/Irrigation/Irrigation%20Management/Scheduling%20Tools.pdf">https://www.hort360.com.au/wordpress/uploads/Irrigation/Irrigation%20Management/Scheduling%20Tools.pdf</a> <a href="https://www.hort360.com.au/wordpress/uploads/Irrigation/Irrigation%20Management/Positioning%20of%20soil%20water%20monitoring%20tool.pdf">https://www.hort360.com.au/wordpress/uploads/Irrigation/Irrigation%20Management/Positioning%20of%20soil%20water%20monitoring%20tool.pdf</a> <a href="https://www.hort360.com.au/wordpress/wp-content/uploads/2019/12/Horticulture-manufacturers-factsheet.pdf">https://www.hort360.com.au/wordpress/wp-content/uploads/2019/12/Horticulture-manufacturers-factsheet.pdf</a> Refer to Hort360 Reef Certification Interpretive Guideline			

