



















Commercial Vegetable Production NZGAP

New Zealand GAP (New Zealand Good Agricultural Practise) Kylie Faulkner

NZGAP provides assurance for the safe and responsible production of fruit and vegetables by its members







Food safety

We help prevent food safety issues including food illness, harmful contamination and agrichemical residues.



Environment

We actively promote sustainable farming practices including the protection of soil, water and natural resources.



Social practice

We are committed to protecting the welfare and safety of all workers in the farming and growing industries.

Our Goals Every horticulture business is able to prevent and respond to: Environmental Issues Food Safety Crisis Incidents The NZGAP certificate is trusted and recognised by growers, customers & regulators here and overseas



Access to Markets



- GLOBALG.A.P.
- GFSI
- McCainGAP
- WQA
- HARPS
- McDONALDS GLOBAL

License to Grow



- Food Act 2014
- RMA, Council Rules
- Labour Laws
- Health & Safety at Work Act

NZGAP Certification Provides

New Zealand GAP

Environment Management System

Templates

GAP IEW ZEALAND

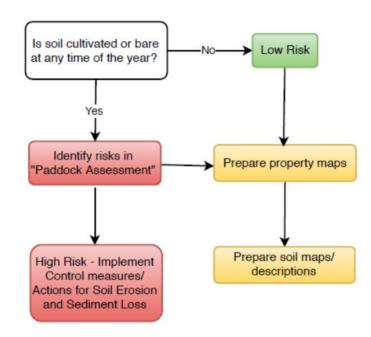


(i.e. Farm Environment Plan)

NZGAP Environment Management System Templates (v1.1 Oct 2018)

NZGAP EMS Add On (currently used by Ecan)

6A SOIL: Risk of soil erosion and sediment loss - Property Assessment



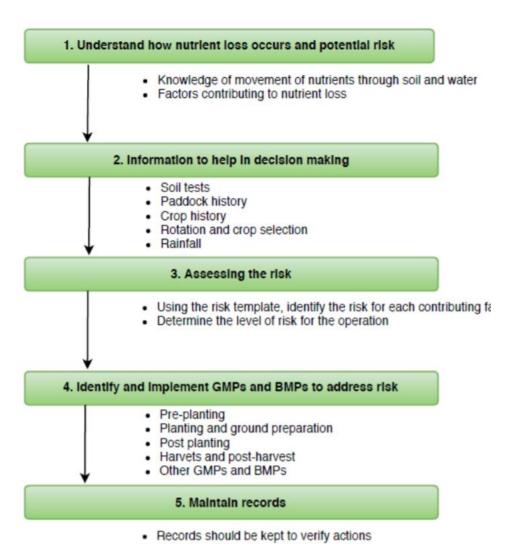
6B. SOIL: Risk of soil erosion and sediment loss – Paddock Assessment

Paddock Name/ID:						
Slope	of paddock:					
D- 44-	-1	(Note: <1 degree = Low erosion risk, >1 degree = Medi				
Paddock assessment			Complete? Yes No		n/a	
All	Identify site spe	ecific risks of this paddock (soil type, slope,	163	NO	11/4	
	1 '	terways, critical source areas)				
All	<u> </u>	ck management risks (paddock use, previous use,				
	crop type, crop	coverage, cultivation technique)				
All	Identify where	water is entering the paddocks (map or				
	description)					
All	Identify where	water leaves the paddocks (map or description)				
Inherent Risk Level (i.e. without any control measures in place):			(High / Medium / Low)			
Identif	fied site-specific r	isks:				
Identif	fied paddock mar	nagement risks:				

6C. SOIL: Soil erosion and sediment loss - Control Measures and Action Plan

Implement control measures for stopping or controlling water entering the paddock		Currently Implemented?			Date to be completed?
		Υ	N	n/a	
All	Interception drains				
All	Correctly sized culverts				
All	Benched headlands				
All	Bunds				
All	Grassed swales (controlled overland flow through the paddock)				
All	Other (specify):				
2. Imple	2. Implement erosion control measures to keep soil on the paddock		Currently		Date to be
		Implemented?			completed?
				n/a	
All	Using short row lengths (<200m)				
All	Minimised cultivation passes				
All	Wind break crops/shelter belts (wind erosion)				
>1deg	Cover crops – enhance organic matter (OM) - monitoring				
slope					
>1deg	Wheel track ripping / Wheel track dyking				
slope					
>1deg	Contour drains				
slope					
All	Other (specify):				

7A. NUTRIENTS: Process for addressing risks of Nutrient Loss



7B. NUTRIENTS: Assessing the risk of nutrient Loss

Contributing factor	Assessing extent of risk	
Soil moisture	Applications of N when soils that are saturated - high risk. Applications when soils are not saturated — lower risk Wote: It is important to assess the soil moisture status before an application to ensure that the potential for leaching is minimised. Use of foliar applications can reduce the risk	
Irrigation	Use of irrigation — high risk Note: Risk can be reduced by ensuring that irrigation is used to maintain soil moisture at target levels and applications of N timed accordingly.	
Previous crop planted and residual N in the soil	High residue crop – high risk Crop failure or lower than anticipated yield – high risk Removal of previous residue – lower risk	
Crops being grown Crop yield and quality	Shallow root vegetables – higher risk Nitrogen is used to achieve desired yield and quality. Inappropriate or excessive use can create quality issues and increase the risk of leaching – high risk	
Intensity of cropping Topography	Repeated cropping – higher risk Sloped ground – higher risk of run off	
Plant uptake of nitrogen	Low plant uptake - high risk High plant uptake - lower risk Note: There are a range of factors that contribute to the plant uptake of nitrogen and hence reduce the N in the soil able to be leached — e.g time of years, growth stage, type and form of nitrogen, rooting depth. The combination of factors need to be assessed to determine uptake for each crop.	
Timing of nitrogen	High level of base dressing at planting – high risk Applications split and matched to crop needs – lower risk	

7C. NUTRIENTS: Nutrient Loss - Control Measures and Action Plan

1. Pre-planting		Currently Implemented?			Date to
		Υ	N	n/a	
All	Plan fertiliser inputs for the crop				
All	Take into account any organic manures used				
All	Take into account any animals in the rotation				
All	Applications of N are managed to taking into account rainfall, field capacity and soil saturation levels.				
ВМР	Obtain advise from a Nutrient Fertiliser Advisor or agronomist				
2. Planting		Currently Implemented?		Date to	
		Υ	N	n/a	
All	Nutrient applications are informed by available information or fertiliser recommendations.				
All	Fertiliser applications are applied relative to the predicted uptake levels of the plant from planting to maturity.				
ВМР	Use improved fertiliser technology where appropriate (e.g. prills/coatings)				
ВМР	Controlled traffic farming technology to increase application efficiency and soil management. Advanced farming systems that make use of GPS mapping and aerial photography.				
ВМР	Crop calculators may be used if available and practical for local conditions.			-	

