BEFORE THE HEARING COMMISSIONERS APPOINTED BY THE MANAWATU WANGANUI REGIONAL COUNCIL (HORIZONS)

IN THE MATTER of the Resource Management Act 1991 (**RMA** or **the Act**)

AND

IN THE MATTER of Proposed Plan Change 2 to the Horizons One Plan

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STATEMENT OF EVIDENCE OF DAMIEN FARRELLY ON BEHALF OF HORTICULTURE NEW ZEALAND

25 September 2020

ATKINS | HOLM | MAJUREY

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INTRODUCTION

Qualifications and experience

1. My full name is Damien John Farrelly. I am the New Zealand Good Agricultural Practice (**NZGAP**) Manager at Horticulture New Zealand (**HortNZ**). I have four and a half years of experience in the development and implementation of Good Agricultural Practice (**GAP**) standards in New Zealand horticulture.

2. I have primary responsibility for development, acceptance and implementation of the NZGAP Environment Management System (**EMS**) add-on which provides growers with a pathway to demonstrate compliance with regional council requirements for independently audited Farm Environment Plans (**FEP**).

3. I have previously worked as the Quality Systems Manager for NZGAP where I developed extensive knowledge in relevant regional and central government policy, FEPs, Environmental compliance and quality systems for Environment, Food Safety, and Social Practice.

4. I have a Bachelor of Engineering and PhD in Biosystems Engineering, where I specialised in environmental science and the biological mitigation of carbon dioxide emissions from point sources.

Expert Witness Code of Conduct

5. While this is not a hearing before the Environment Court, I can confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses produced by the Environment Court and have prepared my evidence in accordance with those rules. My qualifications as an expert are set out above. While I am an employee of HortNZ I am have been employed as an expert in my field. I am not an advocate for the positions adopted by HortNZ – rather I support those positions from my position as an expert.

6. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Purpose and scope of evidence

7. This evidence is to support the submission by HortNZ that enables growers to develop and implement their FEP via industry assurance schemes.

8. This evidence describes key elements of the assurance framework which GAP schemes, independent audits and certified growers operate within.

9. This evidence gives an overview of nutrient management in horticultural FEPs, and how this meets the requirements in Plan Change 2.

10. This evidence sets out how GAP schemes are being recognised regionally and nationally including the official recognition of the NZGAP EMS add-on in the Canterbury region.

11. In preparing my evidence I have reviewed the following documents and evidence:

    (a) Section 42a Report of Christine Foster on behalf of Manawatū-Whanganui Regional Council - 4 September 2020 (Volume 2);

    (b) Section 42a Technical Report of David John Horne on behalf of Manawatū-Whanganui Regional Council regarding on-farm Management Practices - 4 September 2020; and

    (c) The evidence from HortNZ.

Summary of conclusions

12. HortNZ supports the definition of Good Management Practice (**GMP**) and Best Management Practice (**BMP**) (page 394, Attachment P - Section 42A Report: Planning in the matter of Proposed Plan Change 2 to the One Plan), which enables the adoption of practice measures and methods to minimise contaminant losses from the land. Not all practices are practical or effective in all situations, so HortNZ supports the ability to select practices from a toolbox of GMPs and BMPs.

13. HortNZ supports the amendment of option (a) and addition of option (b) for Nutrient Management Plans (page 394, Attachment P - Section 42A Report: Planning in the matter of Proposed Plan Change 2 to the One Plan)

14. The NZGAP EMS add-on is aligned with both options (a) and (b) pathways for growers to develop and implement their nutrient management plan including inputs, outputs and adoption of management practices to minimise nutrient loss.

CERTIFIED SECTOR SCHEMES – GOOD AGRICULTURAL PRACTICE SCHEMES

15. GAP schemes provide assurance for the safe and sustainable production and supply of fruit and vegetables in New Zealand.

16. GAP schemes are independently audited self-management assurance schemes which provide a pathway for members to demonstrate compliance with regulatory and market requirements via independent audit of recognised standards, as shown in the figure attached at **Appendix 1**.

17. GAP schemes are already recognised by New Zealand regulators as meeting equivalent compliance outcomes. The primary example is Food Act 2014 where the Ministry for Primary Industries has approved the GAP (NZGAP and GLOBALG.A.P.) assurance framework, standards, auditors, and processes so that growers can demonstrate compliance with that Act in an effective way via their GAP audit and existing food safety system.

18. Growers who meet GAP standards are able to demonstrate that required practices are in place for the production of New Zealand fresh produce to meet local and international regulatory and market requirements. GAP certification enables customers to buy with confidence in the product's safety and sustainability.

19. GAP standards in New Zealand horticulture are benchmarked to internationally recognised standards including GLOBALG.A.P. Integrated Farm Assurance (**IFA**).

20. GAP standards are benchmarked to market, regulatory and industry standards, and are supported by guidelines and codes of practice which are underpinned by regulatory and industry funded research.

Environment Management System add-on

21. NZGAP has developed an EMS add-on which provides growers with a system and pathway to demonstrate that they

are operating at GMP/BMP by developing and implementing a FEP as required by regional councils across New Zealand.

22. The core focus areas of the EMS are soil management, nutrient management, irrigation and water management, waterbody management, and biodiversity management. These are outlined in FEP requirements of land and water regional plans, and the RMA, though the National Policy Statement for Freshwater Management 2020 and the Resource Management (National Environmental Standard for Freshwater) Regulations 2020.

23. The EMS add-on has been developed for New Zealand horticulture growing systems. It empowers growers to systemise complex environmental issues by mitigating identified risks with appropriate control measures outlined in industry and council developed guidelines and codes of practice (e.g. HortNZ Code of Practice for Nutrient Management[1], Soil Erosion and Sediment Control Guideline[2], Industry-agreed Good Management Practices relating to water quality[3]).

24. The EMS add-on, industry guidelines and codes of practice are periodically updated with new information and mitigations based on the latest relevant environmental research.

25. The EMS add-on and its associated guidelines adopt a risk-based approach to environmental management and implementation of GMP and BMP.

26. Not all GMPs are appropriate for all situations and all land uses, so the EMS enables growers to select appropriate practices from a 'toolbox' of GMPs and BMPs to mitigate the environmental risks of their operation. Enabling growers to adopt a tailored combination of practices is a highly effective and practical way to make progress on the ground and achieve the desired environmental outcomes.

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[1] Horticulture New Zealand: https://www.hortnz.co.nz/assets/Natural-Resources-Documents/ES-Control-Guidelines-1-1.pdf.

[2] Horticulture New Zealand: https://www.hortnz.co.nz/assets/Uploads/Code-of-Practice-for-Nutrient-Management-v-1-0-29-Aug-2014.pdf.

[3] Environment Canterbury: https://www.ecan.govt.nz/your-region/farmers-hub/farming-resources/useful-information-and-documents/.

TRANSLATION TO TRADITIONAL CHINESE

27. HortNZ and NZGAP co-funded the translation of the EMS checklist (audit and self-assessment), FEP templates and FEP certification process into Traditional Chinese characters.

28. The translated checklist and FEP templates are freely available to download from the NZGAP website, and aim to support Chinese growers in the Horizons region (and nationwide) for whom English is a second language.

29. HortNZ has engaged with an interpreter to support growers in the Lake Horowhenua sub-catchment (Hoki 1a) to develop and implement their FEP.

NUTRIENT MANAGEMENT PLAN VIA THE EMS ADD-ON

30. HortNZ supports the amendment of option (a) and addition of option (b) for Nutrient Management Plans (page 394, Attachment P - Section 42A Report: Planning in the matter of Proposed Plan Change 2 to the One Plan).

31. The NZGAP EMS add-on is aligned with both options (a) and (b) pathways for growers to develop and implement their nutrient management plan including inputs, outputs and adoption of management practices to minimise nutrient loss.

32. Certification of a farm plan via the EMS means that growers have met the requirements of the programme via an independent audit (Appendix 2). To meet the requirements, growers must demonstrate that they have a robust FEP in place, are progressing towards GMP/BMP, and are minimising nutrient losses from their system. If not, corrective actions must be completed within a short time period (generally 28 days).

33. The EMS links growers to a toolbox of GMPs and BMPs outlined in industry guidelines (e.g. HortNZ Code of Practice for Nutrient Management) including soil tests, planning nutrient requirements and adopting mitigations such as buffer strips.

34. The EMS also links growers to nutrient management guidelines such as the 'Nutrient Management for Vegetable Crops in New Zealand' to plan fertiliser inputs in line with scientifically proven crop demand.

35. The EMS encourages growers to use decision support tools to plan and review their nutrient use such as the Nutrient Budget for Nitrogen and Phosphorus developed by LandWISE as part of the 'Future Proofing Vegetable Production' project which

is co-funded by Horizons Regional Council. This nutrient budget enables growers to calculate how much nitrogen is needed for a crop, and allows them to compare their nutrient use to industry recognised good practice.

36. HortNZ supports the definition of GMP BMP (page 394, Attachment P - Section 42A Report: Planning in the matter of Proposed Plan Change 2 to the One Plan), which enables the adoption of practice measures and methods to minimise contaminant losses from the land. Not all practices are practical or effective in all situations, so HortNZ supports the ability to select practices from a toolbox of GMPs and BMPs.

INDEPENDENT AUDIT

37. GAP certified growers operate in an assurance framework which requires independent audits by Joint Accreditation System of Australia and New Zealand (**JAS-ANZ**) accredited certification bodies, and growers must continuously meet requirements of GAP standards to maintain certification (**Appendix 1**).

38. Certified growers are required to provide a significant amount of evidence of their practices during the audit process (including records, certificates, documentation and observations) to demonstrate that they are implementing standards as required.

39. GAP auditors use triangulation techniques to assess grower compliance including the grower interview, records/documentation checks, and observation of implementation.

40. The credibility and trust in the system, and in the horticulture sector, is underpinned by the benchmarking and acceptance of its standards by regulators and markets, and the demonstration of implementation via robust independent audit of members.

41. The GAP audit identifies any issues in an FEP as well as robustness of relevant components (e.g. nutrient management plan).

42. Any issues identified during a GAP audit must be resolved within a certain time period (generally 28 days), otherwise certification can be suspended or cancelled. Critical issues must be resolved immediately to maintain certification, and

serious issues can be escalated to the relevant regulatory body if required.

DATA MANAGEMENT AND REPORTING

43. NZGAP acts as a conduit between growers, auditors, regulators, markets and other organisations for the secure storage and disclosure of certification data where it assists the goals of NZGAP and benefits grower interests.

44. NZGAP establishes agreements with the organisations and individuals that it shares data with, and requires all users of data provided by NZGAP to acknowledge the source of the data and to abide by the terms and conditions under which the data is provided.

45. NZGAP advocates for outcomes-based reporting meaning high level reporting of assurance outcomes, rather than detailed operational farm data. Operational farm level data is sighted during the EMS audit, so regulators can have confidence that relevant outcomes are being achieved.

46. NZGAP is currently trialling a comprehensive FEP data reporting system via the recently developed 'Joining the Dots' framework, which enables development of farm level FEP reports (for growers), catchment level reports (for regulators, industry groups and the community) and industry level reports (for regulators, industry groups and the community).

47. Using the 'Joining the Dots' framework results in the generation of individualised benchmarking reports for growers to inform future decision making and prioritisation of action planning. Aggregated environmental metrics have been analysed to report on the industry's sustainability progress over time, using growers in the Lake Horowhenua (Hoki 1a) as a pilot study.

48. Data reported in the pilot case study has been sourced from independently audited FEPs, and has been collated and analysed independently by Agrilink.

LINKS TO NATIONAL FARM ENVIRONMENT PLAN PLANNING PROCESSES

49. HortNZ will seek a pathway for recognition of GAP schemes for the delivery and compliance monitoring of freshwater farm plans in upcoming regulations as proposed in the Resource Management Act Amendment Bill 2020.

50. NZGAP will seek recognition of the EMS add-on as an effective pathway for growers to develop their FEP and demonstrate compliance, pending recognition of an effective pathway for recognition of GAP schemes in the regulation.

51. The NZGAP EMS add-on already meets the intention of the amendment bill including the freshwater farm plan content, and audit of farm for compliance with certified freshwater farm plan.

52. The 'certification of a freshwater farm plan' process may require further development to meet the regulation requirements for a 'certifier' in addition to the existing independent audit process. This will be scoped out through development of the regulations. FEP advisers and auditors used in the Hokio 1a case studies would likely meet future criteria for persons to be approved for certification and audit of FEPs.

53. The EMS add-on is aligned with the Good Farming Practice (**GFP**) Action Plan for Water Quality 2018.

RECOGNITION OF THE EMS ADD-ON BY REGIONAL COUNCILS

54. The EMS ad-on has already been official recognised by Environment Canterbury (**ECan**). In April 2019 the Chief Executive of Canterbury Regional Council, Bill Bayfield, announced the recognition of then NZGAP scheme in under Plan Change 5 of the Land and Water Regional Plan. The Certificate for this is attached at **Appendix 3**.

55. On 18 December 2019, Mr Bayfield also approved the NZGAP FEP template as meeting the requirements for Farm Environment Plans in Schedule 7 of Plan Change 7 of the Land and Water Regional Plan.

56. ECan have recognised the NZGAP independent auditors employed by AsureQuality and SGS NZ Ltd as FEP auditors.

57. NZGAP and the EMS add-on is now recognised as a pathway for growers to demonstrate compliance with ECan's requirements for an independently audited FEP.

58. NZGAP and Synlait Lead with Pride are the only programmes which have been approved as by the Council as ISO accredited audit programmes.

59. The approval of the EMS add-on in Canterbury empowers growers to demonstrate that they are operating at GMP to minimise their environmental impact.

CONCLUSIONS AND RECOMMENDATIONS

60. I support the recognition of industry schemes (e.g. GAP schemes) as a pathway for growers to demonstrate compliance with requirements for Farm Environment Plans to monitor, manage and minimise loss of contaminants from the growing operation.

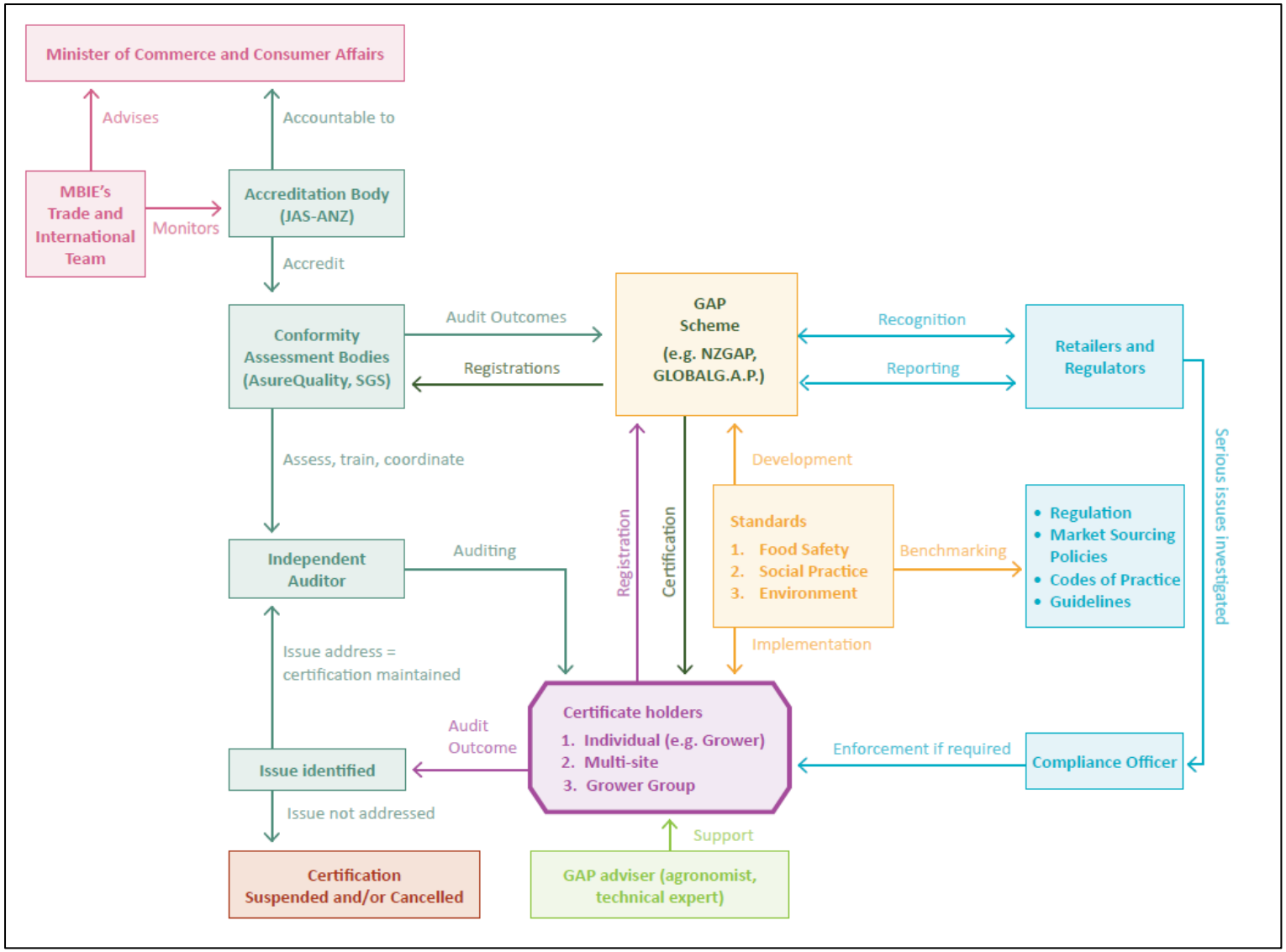
61. I support a more practical approach to nutrient management planning, which is more focused on the tangible adoption of Good and Best Management Practices, the monitoring of inputs and outputs from the system, and minimising loss of contaminants from the system.

62. I recommend recognition of a GAP certified FEP (e.g. EMS add-on) as supporting evidence for the grower's consent application, and as a pathway for growers to demonstrate that they are operating at Good/Best Management Practice, or making acceptable progress towards Good/Best Management Practice as required by the Regional Plan and their resource consent conditions.

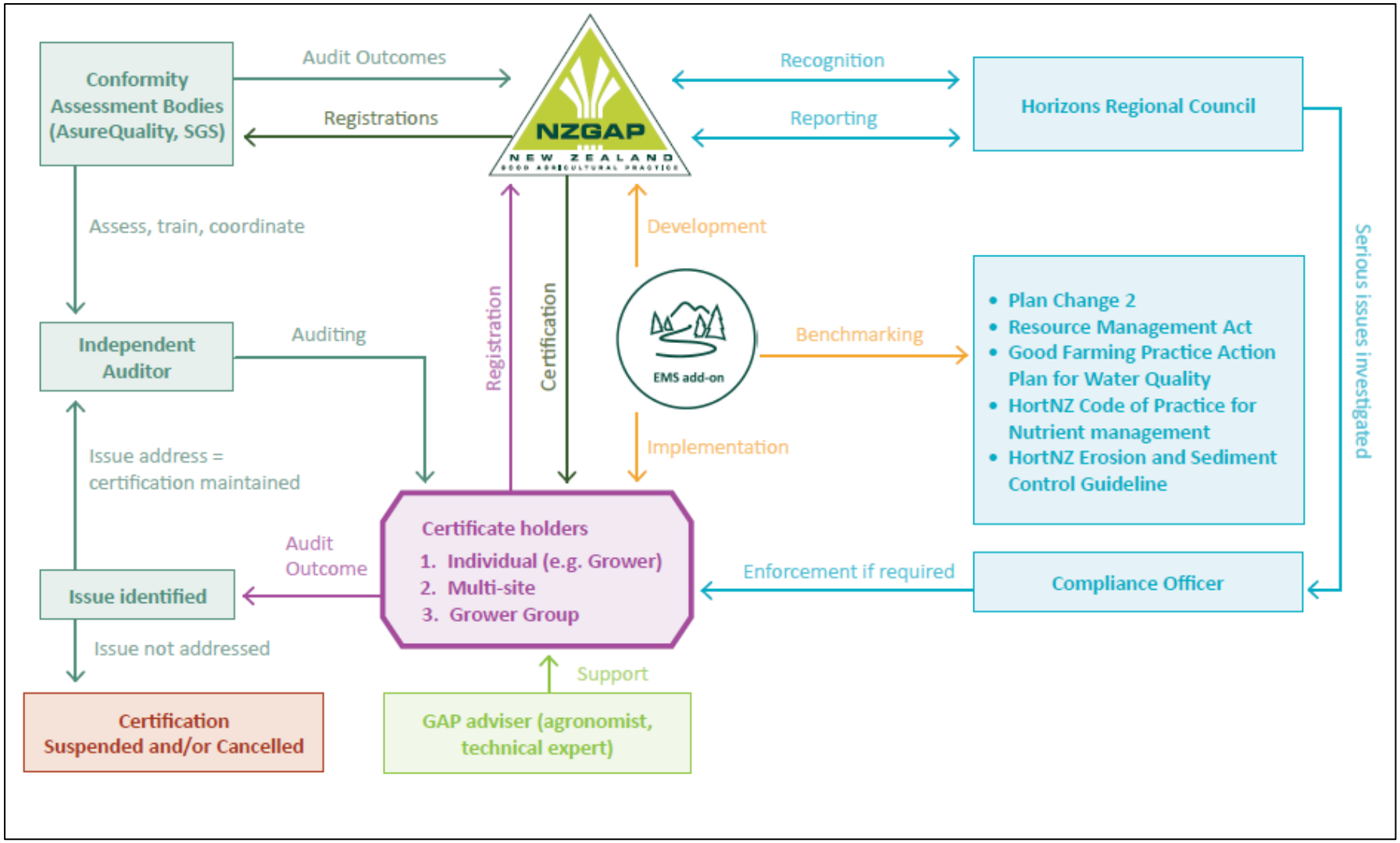
Damien Farrelly

25 September 2020

APPENDIX 1: NEW ZEALAND CONFORMANCE INFRASTRUCTURE FOR GAP CERTIFICATION



APPENDIX 2: NZGAP ASSURANCE FRAMEWORK FOR FARM ENVIRONMENT PLANS IN HORIZONS



APPENDIX 3: ISO ACCREDIATED AUDIT APPROVAL CERTIFICATE FOR NZGAP

Environment Canterbury Regional Council

ISO ACCREDITED AUDIT PROGRAMME APPROVAL

NZGAP

is approved as an ISO Accredited Audit Programme
under the Canterbury Land & Water Regional Plan

Certification valid from: 1 April 2019 To: 1 April 2022

Date 11 April 2019

Bill Bayfield
Chief Executive