McCain Foods, Timaru processes potatoes sourced from quality growers in the Mid and South Canterbury regions, into A-grade French fries, for domestic and export markets. The McCain processing plant directly employs circa.150 full time employees and is one of the largest industrial employers of full-time employees in South Canterbury. The factory operates a 24/7 process throughout the year, and therefore indirectly employs a large number of full-time people in support industries in South Canterbury along with many seasonal/casual staff. Our growers also contribute immensely to the South and Mid Canterbury economy with employment of staff, suppliers, services, and trades. All enhancing the economic and social wellbeing of our region.

The capital expenditure into the Timaru site over the last 2 years has been over $8million. Future capital expenditure is planned as it has been consistently year on year over the last 25 years. Water is essential for growing vegetables and so is the ability to utilise good land. All potato suppliers contracted to McCain Foods are NZGAP or GlobalGAP certified. All undertake precision agriculture with methods such as variable rate fertiliser application, auto-steer technology, soil moisture monitoring, aerial/drone imagery and technology to improve agronomic precision, which is targeted at crop requirements. This is to ensure growers do not overuse resources and as a result in negative environmental impacts. McCain Foods Timaru and our growers equally contribute to a Research and Development fund, to continuously improve production efficiency and environmental impact with new improved technologies and agriculture systems. This in turn minimises crop input to optimise yield without overusing fertiliser and water.

The estimated volume of water to produce 1kg of potatoes is 287 litres. To produce 1 litre of milk is 1,020 litres, 1 kg of beef requires 15,415 litres, and 1kg of chicken meat requires 4,325 litres. One hectare of potatoes can yield two to four times the food quantity of grain crops. The potato is the 3rd most important food crop in the world after rice and wheat in terms of human consumption.

McCain Foods support environmental stewardship, and encourage all of our growers in environmental and social responsibility. All McCain plants have programs running around energy, steam and water usage.

- Vegetable production has climate change benefits, when compared to other activities. Food security is a very important consideration for climate change adaptation and response.
- Government Ministers have also indicated support for an increase in plant based production systems as an appropriate action for climate change to reduce our impacts.
- Growers are a rare resource and the numbers of growers are decreasing over time.
- We need to produce more food in the future than we are producing now. You cannot do that with less land and water, because the Grower community is already highly efficient and resource constrained. The potatoes we grow feed New Zealanders and other valued neighbouring communities such as Australia and the Pacific Islands.
• The Government has signalled it wishes to protect Highly Productive Land to grow food. Growers have long sought this as well. To grow food on highly productive land, water, cultivation and fertiliser is required.

• The NPS Freshwater and the resulting NES must provide a regulatory framework that:
  o Allows people to grow vegetables on highly productive land and ensures an appropriate allocation of resources to allow for the utility of this scarce land.
  o Encourages collective management and cooperation to achieve environmental outcomes.
  o Allows for growth in vegetable production to feed communities in the future.
  o Appropriately manages the right to grow and the social licence through a consenting framework that encourages better stewardship; and provides greater insight to regulators and the public.
  o Requires continuing improvement in environmental performance and manages both cumulative and localised impacts on freshwater.

The freshwater reforms proposed in the “Essential Freshwater” review are both a serious challenge and an opportunity for the vegetable sector. All growers and processors share the vision of healthy, clean freshwater and ecosystems. Many aspects of these reforms are supported. Growers, processors, PotatoesNZ and HorticultureNZ are committed to a new era for freshwater management.

For growers and processors to meet the challenges of managing freshwater; they need to see a future for the sector. Growers and processors see that future being in jeopardy at present. This caution to invest is often due to uncertain regulatory outcomes for vegetable growing. Increasingly, this has quite a lot to do with the regulatory approaches adopted by regional authorities for managing freshwater.

The ability for future investment and expansion will be jeopardised unless appropriate limits and scientifically proven measuring technologies are used.

We support requiring commercial vegetable growing operations to operate at good management practise but allowing the ability to increase the area of Highly Productive Land under production.

Our potato production area has increased by 12% since 2009-2013, and we know of other processing businesses and growers that have increased by substantial amounts, and are potentially looking to expand further. This has happened off a small base, and still has a very small impact. We estimate the annual area in total potato production in Canterbury to be 0.5% of the Canterbury Plains.

The investment in machinery required and knowledge for potato production is specialised, and therefore movement of producers into and out of the industry does not occur as it may do in some other crop production systems.

Farmers who lease land to Potato growers usually only supply one paddock on their properties annually. This high value crop supplements their annual income, to an acceptable level for their whole farming system. This has often been the difference between converting to dairying or, continuing with arable farming.

The potato sector, along with the other commercial vegetable sectors have traditionally been able to rotate crops across a combination of shared, leased and owned land. Process Potato Growers along with seed growers share the need for rotation to avoid soil borne diseases and poor soil health and for growing locations in close proximity to processing facilities.

The National Policy Statement on Fresh Water presents significant further obstacles and requires amendment to avoid wider effects that are mostly likely unintended.
Commercial Vegetable Production is a unique farm system where land parcels are often leased from landowners for Commercial Vegetable Production requiring routine changes in land use over the term of rotation which may last from 6 months to several years. The rotation cycle means that effects are distributed spatially and temporally across the catchment. Although they are confined in general to the versatile soils in HPL within FMU’s.

The principles for a rule framework for Commercial Vegetable Production are:
- Recognition that export and domestic vegetable growing is integrated across NZ’s regions and consistent regulation is required.
- Production is located on Highly Productive Land (HPL).
- Support existing vegetable growing with the ability for expansion within environmental constraints
- Risk based approach to good management practices aligned with NZGAP / GlobalGAP
- Crop rotation supported within HPL
- Consented activities to provide security and consistently assess risks
- Enterprise consents supported by industry led decision support tools
- Consents are granted to operator(s) not landowner’s and can be transferred
- Additional risk assessments and mitigation action for sensitive catchments
- Farm Environment Plans which are nationally consistent, independently audited and certified.

There are some critical constraints that are acknowledged by Government and the Land and Water Forum:
1. Highly Productive land (HPL) is a scarce and finite resource that has been decreasing in supply due to urbanisation and poor protection under the RMA. Government has recently acknowledged this and promulgated national direction for discussion in the form of a National Policy Statement on Highly Productive Land.
2. Available HPL is scarce; and land is expensive to lease. The cost of lease land in Canterbury has increased by 50% in the last 10-years. Growers are often now paying for the water they use from the lessor.
3. Passing on the increased costs of production is strongly resisted by customers and consumers.
4. Water resources are at critical limits in many regions; so access to water is constrained.
5. Land use regulatory controls have in many cases “grandparented” a nutrient allowance to land based on the prior activity. This cannot be used by the grower in another location.
6. Many potential lessees are constrained by their discharge benchmark; or wary of the effect of allowing the Grower lease on their own Farm Environment Plan, so access to the right land is further constrained.

The values of stewardship, food security and food production are the reasons why growers and the industry are determined to improve environmental practices; conduct actual measurement of discharges and to improve them over time through approved farm plans and conditions of consent. Work is underway currently to provide the sector with direct measurement and decision support tools for leaching of nutrients, and the sector is developing the capacity to store and provide information digitally for a better chain of custody.

Where this submission aligns with the PotatoesNZ and Horticulture NZ submissions, we support those submissions. McCain Foods supports PotatoesNZ view on Part 3 Subpart 2 - Intensification Clause 36 of the proposed National Environmental Standards for Freshwater.