

Clean Coastal Catchments: project update

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Solitary Islands Marine Park

The Clean Coastal Catchments (CCC) project is funded through the NSW Government's Marine Estate Management Strategy to improve water quality for our ocean, estuaries, and coastal wetlands. CCC is working with intensive agricultural industries in key coastal areas to actively manage issues associated with production and land management that can potentially harm the marine estate. Specifically, for blueberries the project is focusing on:

On-ground works

An incentivised on-ground works program specifically for mid north coast NSW blueberry growers has commenced. This program aims to address sediment and nitrogen/phosphorus losses from farms to coastal waterways by funding interventions such as fertigation and irrigation system efficiency upgrades, erosion control measures, ground cover establishment, and water treatment, reuse and recycling systems. Throughout this process a horticulture industry best management practice program (Hort360) focused on water and nutrient management efficiencies will be trialled. This program has proven to be environmentally beneficial in the Queensland Reef Rescue Program.



Hort360 is owned on behalf of the industry by Growcom. The best management practice program uses a simple set of questions to collect your current horticultural farming practices and identifies individual areas for improvement by creating a clear objective and timeframe to work to.

By identifying areas for improvement, it also creates business efficiencies and market opportunity. Hort360 is available to all horticulture growers in Australia – for more information visit hort360.com.au





Figure 1. Hort360 is a horticulture industry best management practice program. Photo Credit: Melinda Simpson, NSW DPI

Nutrition trials

Construction has commenced of a new applied research facility at the NSW DPI Wollongbar Primary Industries Institute which will focus on identifying the optimum levels of nitrogen, phosphorus and irrigation water required to grow a blueberry crop in the NSW north coast environment. The aim of the facility is to supply blueberry producers with scientifically tested formulations and recommendations regarding the timing and amount of fertiliser application that more accurately matches crop demand for nutrients.



Figure 2. Nutrition trials at Wollongbar Agricultural Institute
Photo Credit: Diana Unsworth, NSW DPI

Monitoring and demonstration sites

Three monitoring and demonstration sites have been set up and will be used to trace all pathways of nitrogen, phosphorus and sediment at a farm scale on blueberry and greenhouse vegetable sites in the Coffs Harbour region, which adjoins the Solitary Islands Marine Park. These sites will collect data over the mid-long term (3-8 years depending on future funding allocation) and will provide credible data over a series of seasons. These sites will contain interventions which will be designed to drive adoption of best practice water and nutrient management including:

- Fully recycled substrate-based berry production which will test and refine practices on how to capture and recycle fertiliser solution run-off in blueberries (Corindi)
- A re-use system which captures greenhouse vegetable nutrient run-off and reuses it in a controlled way into blueberry crops (Woolgoolga)
- A state of the art 'digital farm' which will provide the grower with precise soil moisture and climate data via a localised weather station in order to apply the most efficient amount of water and nutrients via fertigation for crop productivity (Bucca)



Figure 3. Undertaking irrigation distribution uniformity and other irrigation assessments at the demonstration site. Photo Credit: Melinda Simpson, NSW DPI



Figure 4. Installing nutrition and irrigation monitoring equipment at one of the demonstration farms. Photo Credit: David Mitchell NSW DPI



Fertiliser Stewardship group

A Fertiliser Stewardship group has been established to engage suppliers, retailers and advisers in the fertiliser supply chain with the aim of identifying, and where required, lifting the level of technical expertise and accuracy around fertiliser recommendations provided for growers. This is run in partnership with Fertcare®, the national fertiliser stewardship accreditation program.

The CCC project will continue these initiatives through until the end of Stage One of the Marine Estate Management Strategy in June 2020.

The second stage of the project under the Marine Estate Management Strategy is expected to roll out in July 2020 subject to funding.



Department of
Primary Industries

The Clean Coastal Catchments project is funded under the NSW Government's Marine Estate Management Strategy. The ten-year Strategy was developed by the NSW Marine Estate Management Authority to coordinate the management of the marine estate.