



Cape York Natural Resource Management
ABCD Framework
2016

Agriculture

CAPE YORK ABCD MANAGEMENT PRACTICE FRAMEWORK FOR WATER QUALITY

The ABCD Management Practice Framework was designed over 10 years ago to highlight and facilitate communication about the different levels, or standards, of management practice within agricultural industries, that relate to different levels of water quality (sediment, nutrients, herbicides).

The ABCD Management Practice Framework provides a definition of (and pathway to) improvement from Dated to Better Practices, through to Aspirational or 'cutting edge' practices.

It is important to specify the year of reference for any ABCD Management Practice Framework. Over time, changes in knowledge, technology, costs and market conditions may validate cutting-edge Aspirational practices so they eventually become industry endorsed best management practices within an ABCD Management Practice Framework.

A

ASPIRATIONAL

CUTTING EDGE and/or INNOVATIVE practices that require further validation to determine economic, environmental and social costs/benefits

B

BETTER PRACTICES

Industry endorsed best management practice

C

COMPLIANT

Minimum legislative requirement

D

DATED

Old and/or superseded practices

D | DATED

C | COMPLIANT

B | BETTER PRACTICES

A | ASPIRATIONAL

ABCD AGRICULTURE NUTRIENT MANAGEMENT PRACTICE

RATE AND STRATEGY

Rule of thumb	Industry wide One nutrient rate for each crop	Property specific One nutrient rate for each crop	Property specific Two nutrient rates for each crop, or Nutrient rates for all soil types and crops applied sub paddock
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TIMING

Without consideration of timing	Without consideration of timing	With consideration of timing	With consideration of timing
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PLACEMENT

Broadcast surface application	Broadcast surface application	Banded surface application, or Subsurface application	Subsurface application, or Fertigation
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CALIBRATION

Never	Once per year	Whenever fertiliser product or application rate changes	Whenever fertiliser product or application rate changes
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ABCD AGRICULTURE HERBICIDE MANAGEMENT PRACTICE

RATE AND STRATEGY

Rule of thumb	Non strategic use of residual herbicides	Paddock scale strategic use of residual herbicides	Sub paddock scale strategic use of residual herbicides
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TIMING

Without consideration of timing	Without consideration of timing	With consideration of timing	With consideration of timing
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PLACEMENT

Broadcast application	Broadcast application, or Directed application	Directed application, or Banded application	Banded application
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CALIBRATION

Never	Once per year	Whenever herbicide product changes	Whenever herbicide product changes
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ABCD AGRICULTURE SOIL MANAGEMENT PRACTICE

CULTIVATION STRATEGY

Cultivated bare fallow and crop Bare inter-rows	Minimum till fallow and crop 60% inter-row cover	Minimum till fallow, zonal till crop 100% inter-row cover	GPS Zero till fallow, zero till crop 100% inter-row cover
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TIMING

Without consideration of timing	Without consideration of timing	With consideration of timing in high risk periods	With consideration of timing throughout year
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CONTOURS, DRAINS AND ROADS

No erosion control measures in paddock, drains and roads	Some erosion control measures in paddock drains and roads	Some erosion control measures in paddock drains and roads	Erosion control measures designed for a: 50 mm/ha runoff storm event, or 75 mm/ha runoff storm event
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Photo: Amanda Hogbin

DEVELOPMENT OF THE ABCD AGRICULTURE FRAMEWORK

A new agriculture management framework for the Cape York region was developed as part of the Eastern Cape York Water Quality Improvement Plan. This new framework has been developed to better represent agricultural management practices that are applicable in the Cape York region.

The development of regionally specific management practice frameworks began over 10 years ago in the Mackay-Whitsunday, Burnett-Mary, Burdekin, Wet Tropics and Fitzroy regions of Queensland. The development of a new agriculture framework specifically for Cape York means that local management practices are better represented.

The framework is intended to support rather than duplicate industry BMP (Best Management Practice) processes and as a result does not present an exhaustive list of management practices. The main management practices that influence water quality (sediment, nutrients and herbicides) are represented.

The agriculture management practice framework is broken into three broad management areas: nutrient management practice, herbicide management

practice and soil management practice. Within each of these broad management areas, the framework is broken into categories such as strategy, timing, placement and calibration.

A separate irrigation management framework is not presented. However, irrigation scheduling, based on soil water status and crop requirements, should be considered as part of nutrient and herbicide management.

It can be used to support the development of property-specific action plans:

- through benchmarking current management practices used within properties, and
- by identifying management practices that could be adopted in specific sections of properties to improve water quality.

However, it is important to note that growers have identified that there will be a need to adopt practices across several levels to successfully manage and operate their agricultural enterprise on a year-to-year basis.

IMPROVED WATER QUALITY FOR CAPE YORK

The ABCD Management Practice Framework provides a common reference point for communication with water quality researchers, social scientists, economists, industry research and extension organisations, and land managers on:

- the level of water quality improvement that can be achieved through improved management practices
- the social and economic costs and benefits of adopting improved management practices
- the level of adoption of management practices required to achieve water quality targets
- the importance of detailed farm management planning and record keeping to achieving improved resource management, rather than a single technology or individual practice
- the type and scope of action such as Market Based Incentives (MBIs) required to achieve water quality targets.

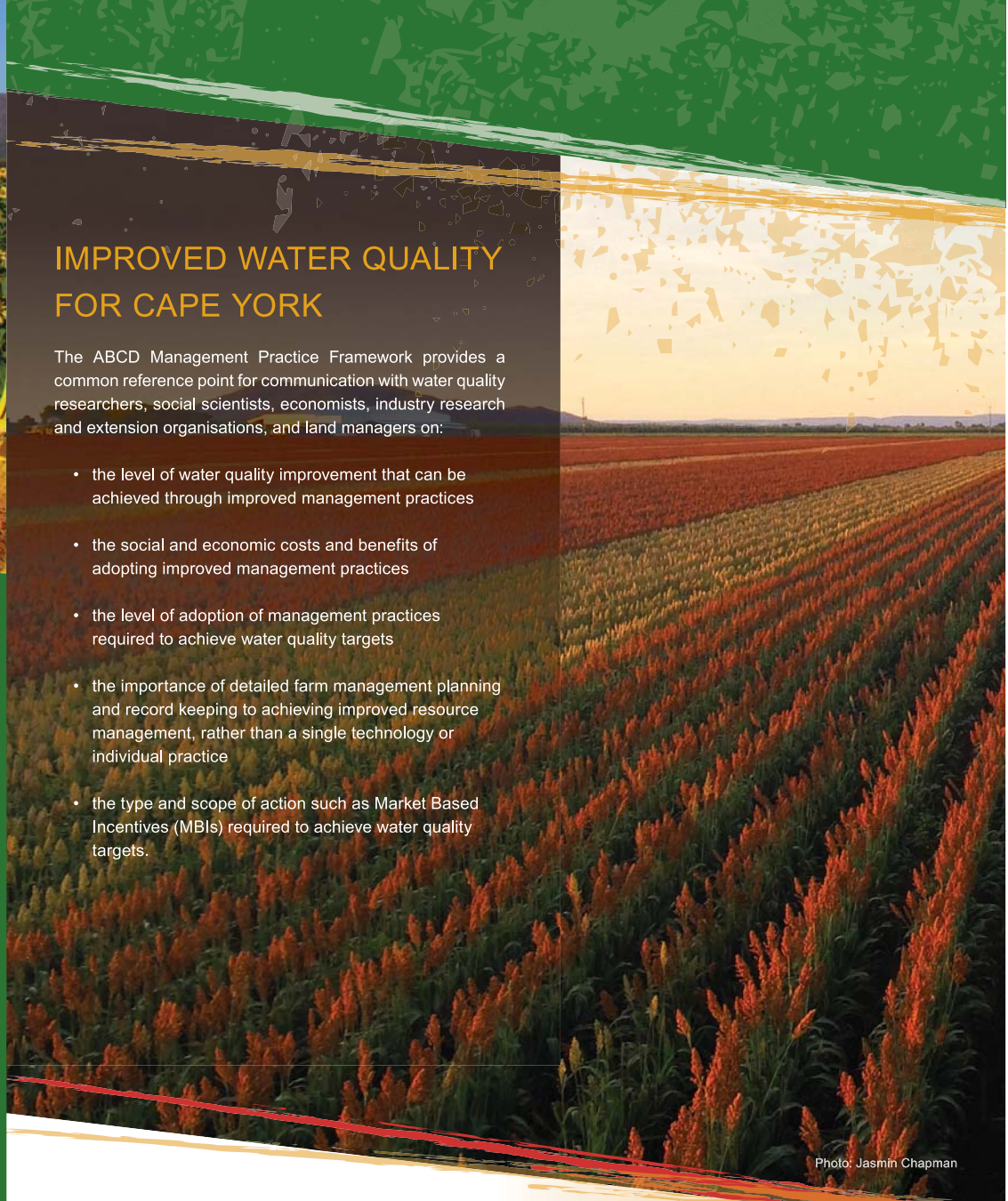


Photo: Jasmin Chapman



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