

Burdekin Irrigation Project

Expression of Interest Form April 2021



The Burdekin Irrigation Project (BIP) is an opportunity for Burdekin cane farmers to get impartial advice to improve on-farm irrigation water and energy efficiency. The BIP is a collaborative irrigation extension project between Sugar Research Australia (SRA), and the service providers AgriTech Solutions (ATS), Burdekin Productivity Services (BPS), Farmacist and other Consortium organisations¹. This project is funded until June 2024 through the Great Barrier Reef Foundation, as part of the Reef Trust Partnership.

Extension staff from the three service providers (BPS, ATS and Farmacist) will help Burdekin cane growers benchmark their current irrigation management practices, identify areas for increased efficiency, and implement strategies to increase the cost effectiveness of on-farm irrigation to increase both profitability and productivity.

There will be up to four Expression of Interest (EOI) rounds over the life of the project beginning with this round in April 2021. While the first round will engage with a limited number of growers, future rounds planned for July 2021, 2022 and 2023 will support a larger number of Burdekin farmers.

The project has a flexible approach and offers different levels of complexity depending on the interest and goals of the grower. **The three levels within the BIP are:**

- Level 1, provides initial benchmarking of water and energy and simple recommendations to help growers make informed decisions about their irrigation management.
- Level 2, extends the first level to provide growers with support to use water and energy information along with crop water use values to drive better irrigation outcomes. At this level some simple enabling technologies to assist in making irrigation changes are common.
- Level 3 of the BIP is targeted at growers who are interested in developing detailed plans to move towards an optimised and typically automated irrigation system.

There is no requirement for growers to progress beyond level 1 of the project. Growers taking part in the project will get help with irrigation record keeping and scheduling as well as support to develop Farm Irrigation Plans. The Burdekin Irrigation Project can provide ongoing support to growers for the life of the project.

When submitting an expression of interest to the BIP, the following commitments should be considered:

As a participant in the Burdekin Irrigation Project a grower will consent to:

- Allowing NQ Dry Tropics to check the historical Paddock to Reef Farming practice questionnaire benchmark for the nominated BIP area.
- Providing the service provider with relevant information (water and energy meter readings, pump information etc.) in a timely manner.
- Providing the service provider with accurate data whenever possible.
- Implementing a system to keep irrigation records.
- Working with the service provider to install/implement an irrigation scheduling tool/system.
- Trialling agreed recommendations made by the service provider and providing feedback on the outcome.
- Completing the Paddock to Reef (P2R) Survey.

¹Other consortium organisations include: Burdekin Bowen Integrated Floodplain Management Advisory Committee (BBIFMAC), Department of Agriculture and Fisheries (DAF) and James Cook University (JCU).

In return, the service provider will:

- Assist the grower in collecting and interpreting irrigation and energy records.
- Help the grower find and implement a suitable irrigation scheduling tool or system.
- Collate irrigation and energy information that will inform the benchmarking process and subsequent recommendations.
- Provide accurate information to the grower.
- Provide the grower with practical recommendations to improve their water/power use efficiency.
- Maintain grower confidentiality regarding their irrigation practices and any irrigation data collected through the Burdekin Irrigation Project.

If you wish to be involved in the Burdekin Irrigation Project, please submit the ***Expression of Interest*** form (see the following pages) by **23 April 2021**. The EOI must be received by close of business (5pm) on that day to be eligible.

Completed forms should be submitted to Gavan Lamb at SRA Brandon.

Hard copy forms can be dropped off at:

**Sugar Research Australia,
30962 Bruce Highway, Brandon.**

Or mailed to:

SRA, PO Box 387 Brandon Qld 4808

Or emailed to:

glamb@sugarresearch.com.au

Burdekin Irrigation Project Expression of Interest Form

Name:	
Phone number:	
Email address:	
Farm productivity group:	
Farm Number(s):	
Please attach a farm map(s) highlighting the area of the farm you would like the BIP to focus on.	

NB: Please answer the following questions in relation to the area highlighted on your farm map.

Grower questionnaire:

Q1 How do you decide when to irrigate?

	Grower experience i.e. no specific tools		In-field monitoring tools (G Dots, capacitance probes, etc)
	Weather and crop-based systems i.e. IrrigWeb.		Other, please specify:

Q2 How do you determine how much water to apply (per irrigation) ?

	It is based on a set schedule, informed by experience		Grower experience, adjusted in response to crop age and weather conditions
	I use tools that measure soil moisture or crop water use (e.g. G Dots or IrrigWeb) and adjust irrigation volume to suit.		Irrigation volumes are determined by a 'smart' automated irrigation system.

Q3 How far are you interested in going with this project and what level do you realistically want to reach? Please tick one.

	Level 1 - I want to know how much water and energy I'm using and get some recommendations on how to improve efficiency and implement scheduling tools on a few blocks that I can trial.
	Level 2 - I am willing to make more changes to improve my irrigation efficiency on a majority of blocks, including using scheduling tools. At this level, some simple enabling technologies to assist in making irrigation changes are common.
	Level 3 - I am interested in moving towards an optimised and typically automated 'smart' irrigation system.

Q4 Identify (tick) up to five of your highest concerns with your current irrigation system.

<input type="checkbox"/>	Cost of water	<input type="checkbox"/>	Cost of electricity
<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Run-off losses
<input type="checkbox"/>	Productivity	<input type="checkbox"/>	Soakage
<input type="checkbox"/>	Irrigation record keeping	<input type="checkbox"/>	Scheduling irrigations
<input type="checkbox"/>	Labour availability	<input type="checkbox"/>	Impact on the environment
<input type="checkbox"/>	Applying too much water	<input type="checkbox"/>	Irrigation water quality
<input type="checkbox"/>	Water availability	<input type="checkbox"/>	Not applying enough water
<input type="checkbox"/>	Paddock layout/levelling issues	<input type="checkbox"/>	No capture of farm run-off
<input type="checkbox"/>	Deep drainage losses	<input type="checkbox"/>	Paddock/farm drainage
<input type="checkbox"/> Other, please specify:			

Q5 Identify (tick) up to five aims/aspirations for your future irrigation system.

<input type="checkbox"/>	Reduced labour	<input type="checkbox"/>	More efficient application rates
<input type="checkbox"/>	Better scheduling for crop needs	<input type="checkbox"/>	Capturing and reusing farm run-off
<input type="checkbox"/>	Reduced electricity costs	<input type="checkbox"/>	Reduced water costs
<input type="checkbox"/>	Automation	<input type="checkbox"/>	Implementing overhead/drip irrigation
<input type="checkbox"/>	Good quality irrigation records	<input type="checkbox"/>	Consistent application across the paddock
<input type="checkbox"/>	Ability to irrigate various crops effectively	<input type="checkbox"/>	Increased water availability
<input type="checkbox"/>	Improved productivity	<input type="checkbox"/>	Assistive technology (e.g. pump controllers, end of row sensors)
<input type="checkbox"/> New infrastructure, please specify:			
<input type="checkbox"/> Other, please specify:			

Q6 What would limit your ability to make a change? Tick as many as apply to you.

<input type="checkbox"/>	Infrastructure	<input type="checkbox"/>	Time
<input type="checkbox"/>	Water availability	<input type="checkbox"/>	Costs
<input type="checkbox"/>	Family support	<input type="checkbox"/>	Irrigation water quality
<input type="checkbox"/>	Concerns about production losses	<input type="checkbox"/>	Weather/seasonal concerns
<input type="checkbox"/>	Labour	<input type="checkbox"/>	No limitations
<input type="checkbox"/> Other, please specify:			

Q7 From 1 (very low confidence) to 5 (very high confidence) how confident are you that you can implement changes to your irrigation system?

1. Very low confidence
2. Low confidence
3. Neutral
4. Confident
5. Very Confident
6. Unsure
7. Prefer not to answer

Q8 Please indicate your willingness/readiness to implement changes to your irrigation management, given that these changes could affect your current management style and/or lifestyle?

1. Very willing to trial recommendations
2. Willing, as long as it is practical
3. Will consider, if it doesn't impact my lifestyle adversely
4. Interested in the process, unsure if I will implement change

Q9 Would you be interested in 'on-farm water quality monitoring' to measure the improvement from changes to your irrigation management and/or system? (BBIFMAC will be monitoring several sites which are yet to be selected).

1. Yes
2. No

Q10 Please list any goals, objectives, reservations, or additional considerations that you may have for this project:

Q11 Please indicate your preferred service provider. Note, whilst every effort will be made to accommodate your preference, your choice cannot be guaranteed (*number the boxes 1 to 3 with 1 being your preferred provider*)

	Burdekin Productivity Services
	AgriTech Solutions
	Farmacist

Privacy Consent Release

"I _____, on behalf of _____, give NQ Dry Tropics permission to provide Paddock to Reef Questionnaire benchmark information relating to historical Reef Funding received for projects on my farm(s) to Sugar Research Australia and partners, for use in the eligibility assessment for my Burdekin Irrigation Project EOI.

Any questions regarding this EOI should be directed to Gavan Lamb at SRA Brandon.

Mobile 0436 937 555 or Email: glamb@sugarresearch.com.au

Completed forms must be submitted to Gavan Lamb at SRA Brandon by 5pm on the closing date.
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Research Station
30962 Bruce Highway,
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