ETHERIDGE SHIRE COUNCIL

GILBERT RIVER IRRIGATION PROJECT

Introduction

Etheridge Shire Council (ESC) proposes to manage a Gilbert Catchment general water reserve of 390,000 ML and construct an irrigation scheme on the Gilbert River distributing 200,000ML of high reliability water to a minimum of 20,000ha of identified irrigable land in the Gilbert River Catchment. ESC has received advice from the Hon Dr Anthony Lynham MP, Queensland Minister for Natural Resources Mines and Energy that the water allocation scenario is feasible under current legislation.

Preliminary economic modelling indicates the scheme is economically feasible, and that identified irrigable land in the proposed area is suited to a wide range of viable, irrigated crops including grains, pulses, horticulture, fodder/forage and cotton.

Scope

The proposed irrigation area sits in a 5km strip either side of a 100-km section of the upper Gilbert River beginning at 'Green Hills' Station and stretching downstream to the 'Chadshunt'/'Strathmore' Stations boundary. Foundational CSIRO work, and further investigations, have identified the most appropriate dam site.

Drivers

Disadvantage:

According to the 2016 SEIFA Index Etheridge Shire faces high disadvantage. On a Statistical Area Level 1 (SA1) basis Etheridge ranks in the 3rd decile and 22nd percentile of disadvantage. This means people in Etheridge Shire face greater relative disadvantage than 78% of other local areas in Australia.

Indigenous livelihoods:

Currently local indigenous groups do not have a strong presence in the shire. This development offers opportunities for indigenous people to return to country.

Underutilised catchment flows:

The Gulf of Carpentaria receives 25.6% of the nation's water run-off, yet less than 1% of the Gulf's water is allocated for town, mining, industrial and irrigated agricultural use.

Foundational work:

Extensive, robust study has been devoted to the concept of irrigated agriculture on the Gilbert River:

1. The 2013 CSIRO report: *Agricultural Resource Assessment for the Gilbert Catchment* (Petheram et al. (2013)) and The 16 technical reports underpinning that report: https://publications.csiro.au/rpr/pub?pid=csiro:EP1312941 https://www.csiro.au/en/Research/LWF/Areas/Water-resources/Assessing-water-resources/Flinders-Gilbert/Technical-reports

2. The 2009 Gulf Savannah Development Investment Report, *Gilbert River Irrigation Area Investment Report,* and later 2014 update: http://www.gulf-savannah.com.au/projects/water

Markets:

Growing North Queensland population centres are creating markets for viable, localised, agricultural production.

Proximity to Asian markets, and counter seasonality with Asian agricultural production, enhances opportunities.

Synergies with cattle industry:

The advent of irrigated crop production in the region will establish irrigated forage/fodder production and a substantial local supply of cost-efficient cotton seed for the cattle industry.

Isolation from Adverse Coastal Weather Events and Disease Incursions:

Cropping activities in the proposed Gilbert River Irrigation Project area will be isolated from adverse weather events (cyclones) and disease/pest incursions in coastal areas of North Queensland (e.g. Panama disease in bananas).

Environmental Impact:

The proposed irrigation project does not impact the Great Barrier Reef.

An irrigation scheme of this scale will have environmental impacts; however the total volume of water flowing down the catchment in an average year means downstream impacts are relatively benign.

Catalytic development:

The Gilbert River Irrigation Project should be considered in the context of invigorating responsible agricultural development across the whole of Northern Australia. This project will be catalytic to the social and economic advancement of Northern Australian communities.

Supporting Infrastructure:

The proposed irrigation area is supported by sealed, all-weather roads accessing the ports of Cairns and Townsville, and current work on the Hann Highway facilitates access to southern markets.

Georgetown has a registered, sealed airstrip able to land medium passenger and freight aircraft. A further three sealed airstrips are situated at Mount Surprise, Forsyth and Einasleigh.

Capital Expenditure

According to preliminary economic modelling the total nominal capital expenditure is estimated to be in the region of $450 million including the dam and water distribution infrastructure, but excluding land purchase and development. These figures are subject to detailed design work and costings currently occurring as part of the development of the Detailed Business Case.

Project Stage

ESC is currently formulating a **Detailed Business Case** (DBC), funded under the Queensland State Government Maturing the Infrastructure Pipeline Program Stage 2 (MIPP2), which is due in March 2020. Jacobs Australia has been engaged to deliver the DBC and has commenced activities in the area.

Discussions with the Queensland Coordinator General's Office indicate the project will be designated a 'Coordinated Project' enabling negotiation of state legislative obligations.

Funding and Investment

The scheme infrastructure will be funded by private investment in pre-sold water coupled with federal government loan support under a business model that locks in water investment as a precursor to construction. Water presale proceeds are expected to exceed $120 Million.

The Detailed Business Case will define the funding parameters of the proposed project and inform both public and private investment interest.

Benefits

Preliminary economic and financial modelling estimates gross benefits from agricultural production in the region of $536 million. The 2014 Gulf Savannah Development Investment Report estimates that $19.2 million of the identified total variable input costs for the Gilbert River Irrigation Area would remain in the local economy long term.

The development is anticipated to create upwards of 500 permanent jobs in agriculture and more than 1000 across sectors.

Timeframe

Based on other Australian irrigation projects, the scheme is estimated to be operational in five years from business case funding approval:

- 2 years for planning, business case, water sales and approvals.
- 2 years for construction.
- 1 year to fill the dam.

In the best case scenario, irrigation deliveries will commence in Year 6.

Contact

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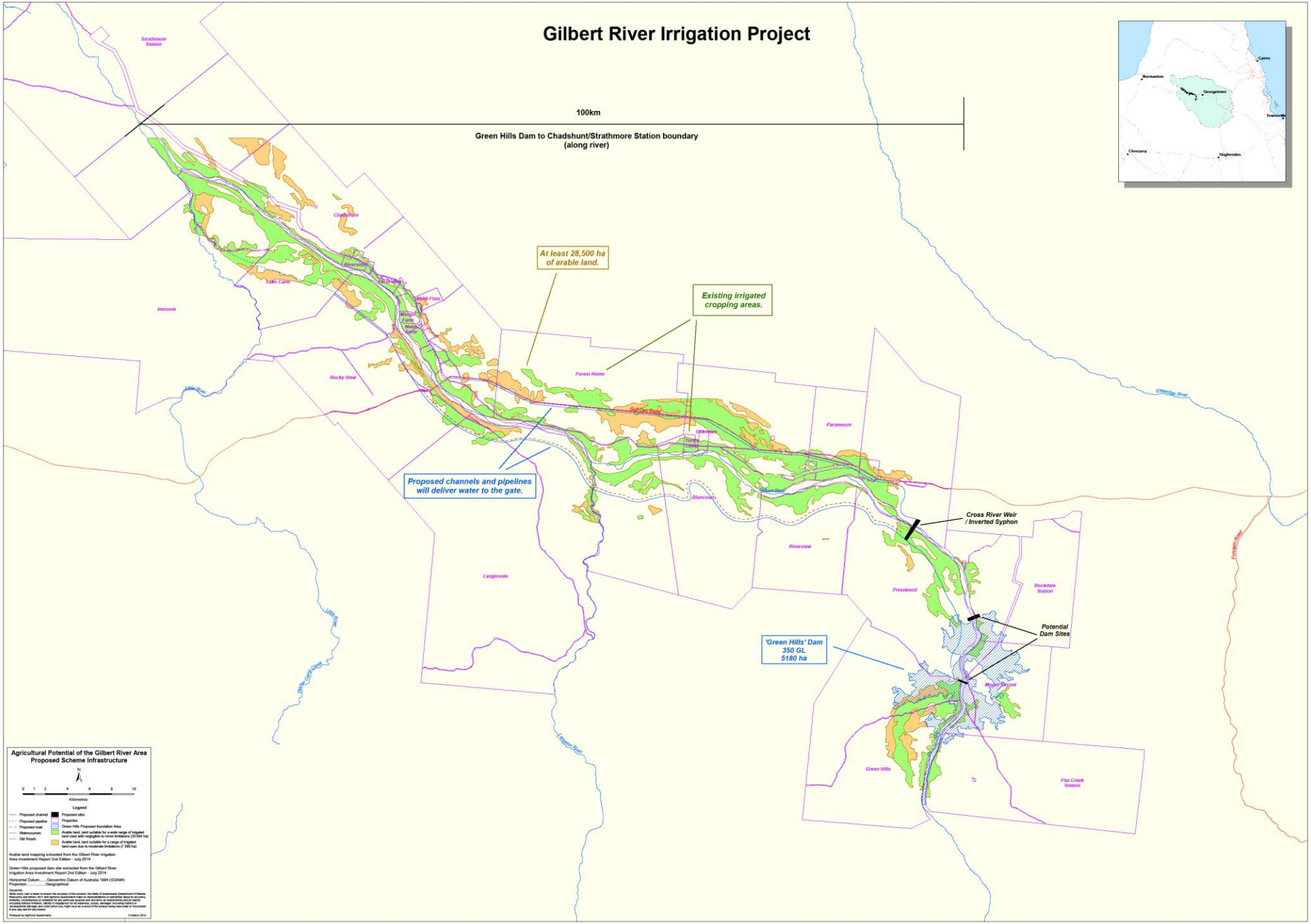
Gilbert River Irrigation Project
100km
Green Hills Dam to Chadshunt/Strathmore Station boundary
(along river)
At least 28,500 ha of arable land.
Existing irrigated cropping areas.
Proposed channels and pipelines will deliver water to the gate.
Cross River Weir / Inverted Syphon
Potential Dam Sites
'Green Hills' Dam
350 GL
5180 ha
Strathmore Station
Chadshunt
Lake Cairn
Inorunie
Rocky View
Forest Home
Paramount
Blancourt
Riverview
Langlovale
Prestwood
Rockdale Station
Green Hills
Flat Creek Station
Etheridge River
Little River
Agricultural Potential of the Gilbert River Area
Proposed Scheme Infrastructure
Kilometres
Legend