



**WATER
FOR
FOOD**

Gascoyne Master Plan



Discussion Paper

The Master Plan will create a framework to consolidate ideas and development models and provide credible engineering concepts and designs to provide government and third parties with the incentive to invest in the region's future.

This Water for Food initiative, made possible by the State Government's Royalties for Regions program, will be developed jointly by the Departments of Water and Agriculture and Food, in consultation with other relevant government agencies and a Gascoyne Reference Group to ensure full stakeholder engagement.

It will consolidate previous strategic assessments of the Carnarvon district into a commercially-oriented, forward looking document that provides investment certainty for existing growers and future investors.

The Master Plan will establish parameters for a single bulk irrigation water supply entity,

identify infrastructure gaps and define the most appropriate measures to underpin water security and irrigation expansion.

Its focus will be on lifting productivity in the existing irrigation footprint, new land release opportunities and ideas and innovative concepts for local food processing and value adding.

The Gascoyne Master Plan will define market development strategies, export logistics requirements, and also look at ways to create uplift in the Gascoyne pastoral sector, including the feasibility of re-opening the Carnarvon abattoir.

It is envisaged the Master Plan will be developed through an appropriately qualified independent organisation/s, with an initial draft to be delivered in the third quarter of 2016.



Background

The Carnarvon agricultural district is situated on the Gascoyne River delta and supplies approximately 60 per cent of Perth's winter fruit and vegetables with a current value of \$80 million in annual production. The district also has an important pastoral sector with a gross value of \$25-35 million a year, mainly from cattle sales.

Carnarvon has always faced the challenge of dealing with extremes of nature, from prolonged dry spells to cyclones and floods.

The Gascoyne Foodbowl Initiative was established in 2012 by the Department of Agriculture and Food, made possible by Royalties for Regions. The key outcome was to grow horticultural production in the region through identifying and making available water and land for horticultural development.

Since its establishment, the Initiative has used aerial electromagnetic surveying and drilling to locate and confirm the quality and quantity of four gigalitres of water per year for horticulture in aquifers to the east of the existing Carnarvon horticultural precinct. A pipeline has been designed and will be installed by the end of September 2016 to connect to the existing borefield.

The Initiative has also electrified the borefield supplying the Carnarvon horticultural precinct.

Technical studies including soil surveys, floodway modelling, land use mapping and flora surveys have been undertaken which have identified suitable parcels of land in the order of 400 hectares.

While the Gascoyne Foodbowl Initiative was underway, in October 2013, the State Government established the Carnarvon Ministerial Advisory Committee to provide advice to Government on alleviating water shortages cause by extended periods of no river flow and reduced grower access to water in high demand periods.

The Committee's work was aimed at defining a pathway for a stronger and more sustainable future for the irrigation precinct, including the resolution of the appropriate governance requirements, infrastructure needs, water supply and water trading and pricing.

In compiling its strategic assessment over a period of 20 months, the Committee worked closely with Gascoyne Water, grower representatives, the Water Corporation, Department of Water, Department of Agriculture and Food and the Gascoyne Development Commission.

The final report, including associated technical papers and the Government response to the Committee's recommendations, was released in November 2015, with the Government endorsing two key outcomes:

- that the governance of bulk water supplies for the irrigation scheme be consolidated in a single organisation; and
- that further significant investment into infrastructure is required to optimise the system.

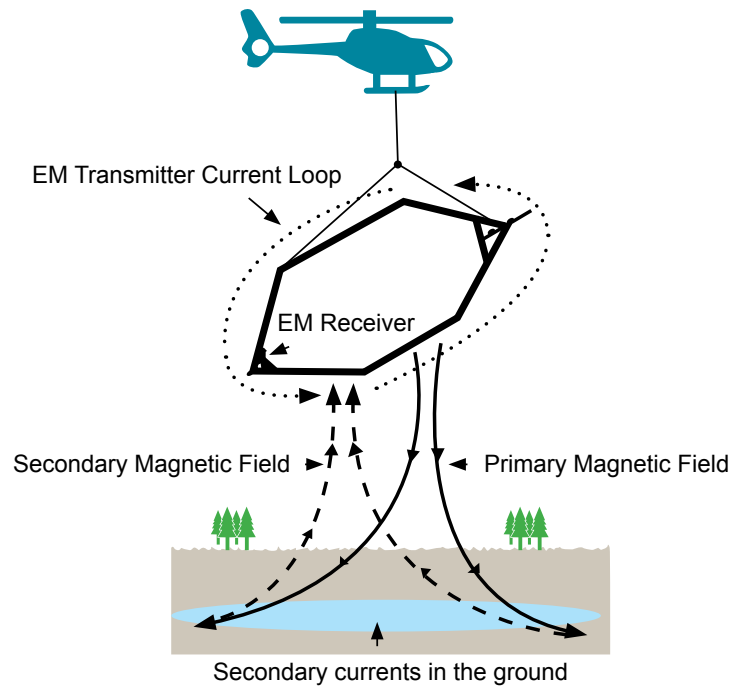


Economic focus

While the Committee's report provided a critical assessment of the challenges within the Carnarvon district in relation to water, the proposed Gascoyne Master Plan will focus on the horticultural and pastoral potential of the district and identify the measures needed to stimulate new investment and accelerate productivity.

The Gascoyne Master Plan will align with the Gascoyne Regional Development Blueprint which envisages expanding the existing 1200 hectare horticultural area to 3600 hectares over the next 35 years, with the value of annual production rising from \$80 million to \$230 million and the related workforce from 375 to 1100.

The potential of the region's pastoral sector is also acknowledged, with the Blueprint citing a potential production value increase from \$35 million to \$60 million annually by identifying suitable groundwater for irrigated fodder production and intensive grazing.



Aerial electromagnetic (AEM) surveys are used to fast track water investigations and confirm the availability of groundwater. Data from these investigations assists with assessing water movement, quality and management.

Water for Food

The Water for Food program will fund and coordinate development of the Gascoyne Master Plan as part of its \$2.6 million Middle Gascoyne Groundwater Investigation Project launched in August 2015 by the Minister for Water Hon. Mia Davies MLA.

The Water for Food program is a component of the State Government's \$350 million Seizing the Opportunity Agriculture initiative which directs Royalties for Regions investment into crucial areas of agriculture including market development, science and infrastructure, and water for productive use.

The Middle Gascoyne Groundwater Investigation project initially focused on identifying potential water sources in a study area along the Gascoyne River upstream of Rocky Pool, principally to underpin the development of the pastoral sector.

The results of the airborne electromagnetic survey and on-ground monitoring in the survey area, east and south west of Rocky Pool, has revealed there is limited groundwater potential across the middle Gascoyne River and associated palaeochannels to support irrigated agriculture.

Given these results, focusing Water for Food activity in the Gascoyne on the Gascoyne Master Plan will provide a better opportunity for the State to grow this important local industry.

Master Plan scope

Key areas to be considered during development of the Gascoyne Master Plan include:

1. Reliable access to water (water trading, single bulk water supplier, water treatment opportunities, managed aquifer recharge, access to artesian aquifer)
2. Market development (domestic and export markets, crop types, processing, pastoral diversification through irrigation, closed system agriculture opportunities)
3. Access to infrastructure (transport, processing facilities)
4. Access to capital (barriers to investment, leveraging investment, needs analysis)



Gascoyne Investment

The Gascoyne has long been acknowledged as a key player in Western Australia’s food production chain and investment of public funds to help underpin the region’s horticultural sector has accelerated in recent times.

Since 2009 the state and federal governments have spent or committed \$104.7 million into Gascoyne agricultural enhancement projects, including:



Gascoyne Foodbowl Initiative

\$25 million Royalties for Regions investment to increase horticultural production by an additional 400 hectares of new land release, matched with water resources development



Middle Gascoyne Groundwater Investigation Project

\$2.6 million Royalties for Regions investment funding to investigate agricultural and pastoral expansion opportunities upstream of Rocky Pool



Gascoyne Irrigation Pipeline Project

\$6 million Royalties for Regions investment for 31 kilometres of irrigation pipeline to transport groundwater from district borefields, improving water supply and security. (Total \$17.1 million)



Northern Australian Infrastructure Facility

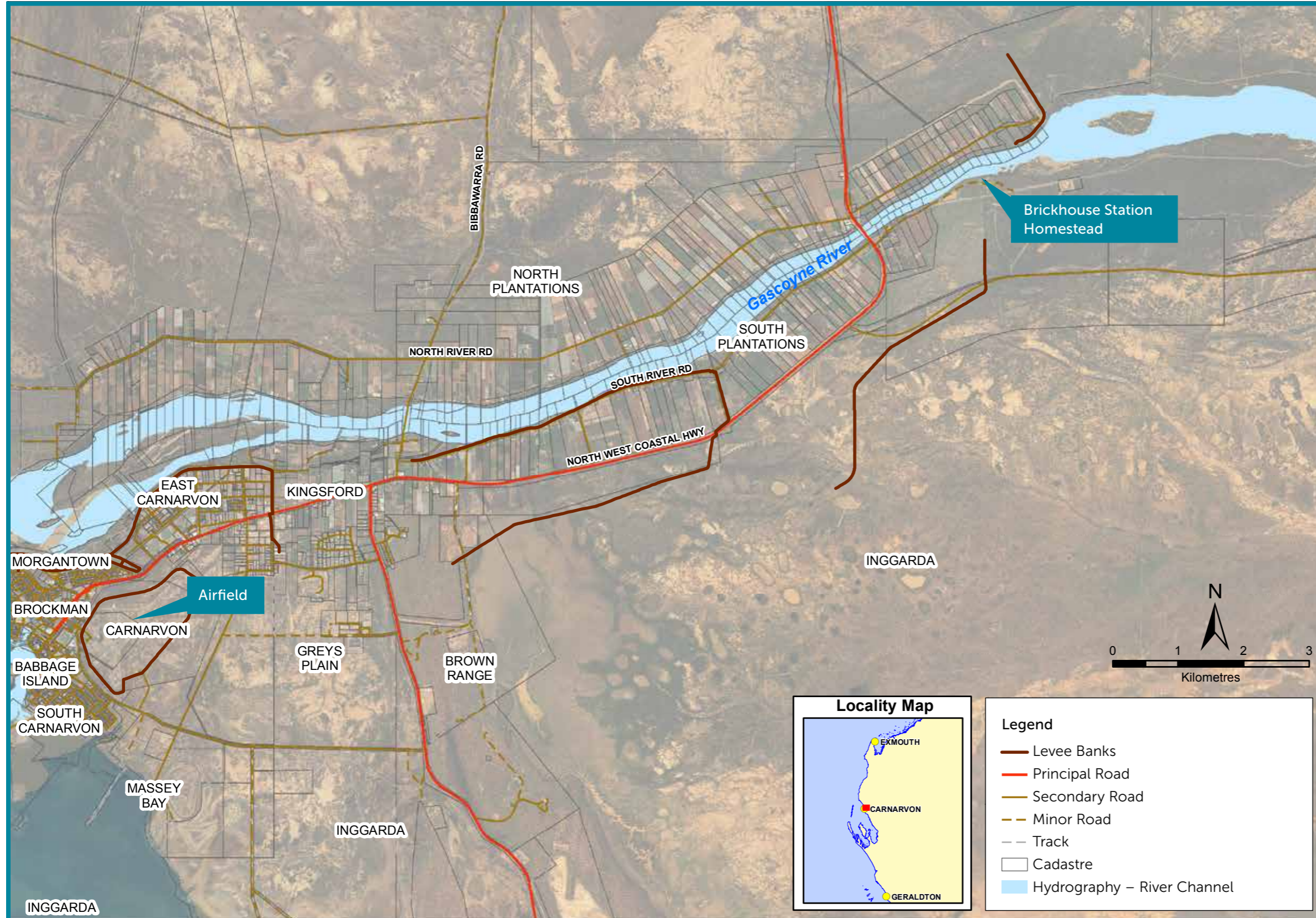
Recently, the Federal Government passed the *Northern Australia Infrastructure Facility Act 2016* which will offer up to **\$5 billion** in concessional finance to encourage and complement private sector investment in economic infrastructure.

This is a major initiative of the Federal Government’s *White Paper on Development Northern Australia*. The definition of Northern Australia now includes Carnarvon, which will provide opportunities to access this funding to grow, develop and create jobs.



Carnarvon Flood Mitigation Works

\$45 million Royalties for Regions investment to construct four major levees to mitigate and protect the horticultural sector and the community from the impacts of repeated flooding (Total \$60 million)



The Community Reference Group will establish criteria and terms of reference for the Master Plan and provide advice to the Water for Food Ministerial Steering Committee, which comprises the Minister for Water (Chair), Minister for Regional Development and Lands, and Minister for Agriculture and Food.

The group will be chaired by Vince Catania MLA, Member for North West Central and Parliamentary Secretary to the Minister for Water and comprise representatives from:

- Shire of Carnarvon
- Shire of Upper Gascoyne
- Gascoyne Development Commission
- Gascoyne Water Cooperative
- Gascoyne Food Council
- Gascoyne Growers Association
- Carnarvon Chamber of Commerce and Industry
- Department of Agriculture and Food
- Department of Water (Water for Food)
- Pastoral sector
- Growers
- Agronomic representative
- Freight and logistics representative
- Regional banking sector
- Food Processing industry
- Local Members of Parliament
- Water Corporation
- Education and training institution



Water for Food project

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