

Issue 2
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LGMS Newsletter

The Lower Gascoyne Management Strategy

Chairman Comment

The implementation of the Strategy is progressing well with several projects nearing completion and some new projects to commence soon. Several of these projects should see the potential for increased development for existing properties and the possibility of new development.

Two projects starting soon are the surveying of soils in the Lower Gascoyne area to determine suitability for expanded horticultural development and the development of a statutory allocation plan for water resources. It is anticipated that these two projects will see the potential for more land and more water to be made available to growers.

As these projects start, two are finishing. The Ecological Water Requirements Study, which has been examining the water needs of the environment from the Gascoyne and a report into Water Efficiency are being finalised. These projects will provide some insight into how much water can be drawn from the river and if we are currently using it effectively.

The Committee will be reviewing the LGMS Business Plan on Monday, 2 July. This will include identifying the priority projects to be funded in 2001/2002. Any Changes to proposed projects will be provided in the next newsletter.

Another project that is close to release for public comment is the Floodplain Management Study, looking at preventing flood damage in Carnarvon. Some information is provided in this newsletter, but a public presentation in the near future will allow for greater public discussion.

I hope you find the information in this latest newsletter informative and of value.

Yours sincerely

Del Mills, Chairman
Local Implementation Committee

New Projects

Soil Survey/Land Capability Scoping

Agriculture Western Australia has proposed detailed soil mapping of areas already identified along the Lower Gascoyne, which may have the potential to support irrigated agricultural development. Areas to be considered include:

- ❖ Immediately east of the current irrigation area.
- ❖ Immediately north of the current irrigation area.
- ❖ Immediately east of Rocky Pool.

These areas have already shown some potential for suitability. However, soil salinity and sodicity data is required to confirm the potential of these areas. The area of new land potentially available for consideration for future development is around 4000 ha.

Allocation Plan

The Water and Rivers Commission is to undertake the development of a new allocation plan for the Lower Gascoyne. The plan will be developed in consultation with water users. It will allow for current understanding of the aquifer to be joined with the latest work on Ecological Water Requirements of the River. The new plan will also try to make available water that is not being used by some growers, and make the rules more flexible and easy to understand.

The agreed allocation policies that will be developed during the preparation of the Carnarvon Allocation Plan are important outcomes to assist the Carnarvon Irrigation Steering Committee in progressing the grower management of the irrigation water supply scheme.

It is hoped that with the approval of current water users, more water will be available and using the water will be easier. Trading in water rights also has some potential and will be considered in the preparation of the plan.



Projects Nearing Completion

Review of the Coastal Delta

This study considered the build up of sediment in the river mouth and the potential impact on flood levels that this may have. It also considered coastal erosion processes near the river mouth and Pelican Point.

A preliminary presentation of the report to LIC members was undertaken in May. The report indicates that the process of sediment build up at the river mouth has existed since the river was explored in 1882. Large river flows remove this accumulated material from the river mouth and deposit it out to sea, where wind and wave action begin to build it up once again.

The report also indicates that as river flow levels reach 2 m, the sand in the river bed begins to move along with the water flow until the water levels drop. At this point the sand drops out. This means that sand is continually being moved along in the river bed and does not build up over time. However, it does mean that sediment will build up at the river mouth and over time we will see the beaches extend further out to sea.

The report considered the possibility of dredging the river mouth and around Water Supply Island. However, the study considers that this would only provide short term benefits, that is until the river flowed greater than 2 metres again, and that this could impact on groundwater quality and change the dominant flood flow paths with potentially detrimental side effects.

The popular beach area near Pelican Point requires some more investigation into seasonal sand movements to determine a long term solution to the erosion problems. The LIC will be considering projects to address this issue in 2001/2002 at its Business Plan review meeting on 2 July.

Flood Modelling Study

This project is being jointly undertaken by the Shire of Carnarvon and the Water and Rivers Commission. The consultants, Sinclair Knight Merz (SKM), presented a preliminary draft report to the Shire Floodplain Management Committee and the LIC in May.

The study has been using the best available computer technology to simulate flood control measures along the Gascoyne River. The model area is the largest area to be modelled in the world and it takes 30 hours for the computer to run a simulation.

The model has been used to firstly look at the current areas impacted by floodwaters. This was then compared to known events and data. Once satisfied the model was working properly, it was used to look at numerous control options. The most favoured, the diversion of flood water along the old river channel, was simulated by the virtual creation of a new channel 1000 m wide, 8 km long, 5 m deep at Rocky Pool. This proposal was costed at \$25 million and did not resolve the flooding problems.

Many more scenarios were considered and the report has identified some structural and non structural works which should reduce flood damage to infrastructure and property. An overview of the initial options developed by SKM were displayed at the Water and Rivers Commission booth at the recent Carnarvon Expo.

Following feedback on the initial options SKM are currently preparing a draft report to be released at a public forum in Carnarvon in August 2001. This may require some more consideration of issues prior to the final report.

Public Meeting

The public meeting will be held:

6.30 p.m.–8.30 p.m.
Wednesday, 1 August 2001

Camel Lane Theatre
Carnarvon

For more details, contact the District Manager
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