



Improving Saline Wastewater use: Moree Spa Industry

As water becomes more valuable and expectations for environmentally beneficial production systems increase, new and innovative waste water disposal systems are in demand. Considerable research has been done within the Moree Spa Industry to assess the medium- and long-term uses of saline waste water. This study brings together such research, and provides a framework for the spa industry to not only meet its regulatory compliance commitments with regard to spa effluent disposal, but also to develop a sustainable spa industry benefiting all stakeholders.

The Spa Industry and Moree

The Moree spa industry has existed for over 100 years, and has tremendous potential for development. This development, which will benefit not only the five spa operators, but the whole Moree District, is dependent on the industry's ability to be economically viable and meet world's best practice in terms of infrastructure, institutions and environmental management.

Wastewater Use Options

In order to provide both economic and environmental benefits it is expected that the disposal process will involve a pond system that integrates evaporation, energy generation, aquaculture, recreation activities and irrigation, with appropriate management processes developed to handle excess stormwater flows. This may involve the development of wetlands and potentially the sale of water to the environment.



Recommendations

In order to make decisions regarding water use the study recommended that the following activities be undertaken:

- Confirm water quality data,
- Assess alternative disinfection procedures,
- Estimate water value thresholds that will provide guidelines as to when alternative treatment/disposal technologies become viable,
- Complete a feasibility study of the AAP (Mehi Inland Industries) integrated effluent use proposal, and
- Assess potential locations for ponds.

Project Outcomes

With this information the industry will be in a better position to be able to evaluate, from a technical and economic point of view, the technologies and processes that affect water quality.

The completion of this work will lead into Phase II of the Action Plan, which will determine the most effective means of fully utilising the effluent spa water to benefit all stakeholders.



Project Details

Project Title: "Improving saline wastewater use in the Moree artesian spa industry"

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