

# **Centre for Freshwater Ecosystems**

# Fact Sheet

# **MMCP Collaboration**

# **Vegetation Theme**

## **Background**

The movement of propagules within the landscape is an important factor in maintaining the diversity of aquatic and riparian plant communities.

Changes in flow regimes, or hydrological connectivity, are likely to significantly impact the distribution of aquatic and riparian plants. Changed connectivity may occur through the disconnection of components of the landscape (i.e. between rivers and wetlands) caused by changes in flow regime, and construction of barriers that physically impede dispersal.

It has been recognised that provision of pathways for the dispersal of seeds and propagules is important in the restoration and rehabilitation of wetlands.



#### Protect and restore water dependant ecosystems.

The maintenance of lateral connectivity is recognised as being important in the protection and restoration of aquatic ecosystems. The MMCP aims to provide managers with the tools to make informed decisions on how the operation of infrastructure (pumps/regulators) to restore lateral connectivity between rivers and wetlands will lead to changes in vegetation community by either selecting for or against seeds with specific traits.

# Ensure that water-dependant ecosystems are resilient to climate change and other risks and threats

The MMCP will provide water resource managers with the knowledge on how best to manipulate water regimes to maintain ecosystem function, including native seed dispersal and protect water dependant ecosystems as the demand for water resources increase under climate change scenarios.

### **Objectives**

- Describe the physical characteristics of seeds that will facilitate dispersal
- Understand the spatial & temporal movement patterns of wetland & riparian vegetation

#### **Outcomes**

Improved understanding how the use of infrastructure influences the dispersal of plant species & recommendations as to how to address the associated risks.





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