

### MMCP Collaboration

***Improving our understanding of the ecosystem effects of varying water levels in weir-pools of lowland floodplain rivers: What role can weir pool manipulations play in restoring the health of the Murray-River channel?***

This synthesis paper is a response to a question posed by the Murray-Darling Basin Officials Committee (BOC) in 2018, in relation to weir pool manipulation. The objectives of this theme within the MMCP is to help the BOC address specific questions as they arise. These question will have relevance to the on-going management of Basin Assets.

- Weir pools are a type of barrier across a river that is created to adjust or alter flow.
- Along the Murray River, the practice of varying weir pool levels is implemented to

#### Varying weir pool levels

- Mimic patterns of hydrology.
- Restore seasonal variability.
- Wetting and drying of littoral areas.
- Connect wetlands

#### Monitoring and Evaluation

- Need for ongoing collaboration and investment.
- Biodiversity functions in these system s needs maintaining.

#### Advantages

- Contribute to the protection and rehabilitation of biodiversity and ecosystem functions.
- Improve the productivity.
- Increase the extent of vegetation.
- Promote populations of fish.
- Connectivity to wetlands.

#### Management

- Potential to restore health of the Murray River channel.
- Restoration requires both weir pool management and flows.

#### Further information

MMCP Collaboration (MMCP) is a project supported by the Joint State Governments and the Murray-Darling Basin Authority to generate and adopt freshwater ecological knowledge through collaboration, to maintain research capability and contribute supporting science to underpin the Basin-Wide Watering Strategy.

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