Chalka North Area – Proposed Operating Scenarios

Scenario	Pre-conditions	Structure Operation	Preferred Frequency	Threshold (depth, level or discharge)	Duration	Preferred Timing	Maximum Interval Between Events	Water Regime Classes Targeted
Capture Flood Peak	Capture can occur when discharge at Euston exceeds 60,000 ML/d. Peaks up to a discharge of 120,000 ML/d may be captured.	Regulators are closed when the flood peak starts to recede. All regulators are required when water is stored at the maximum level. The capture of small peaks may only require K10 to be closed. Water is released from K10 when flood duration target is met.	6 years in 10	Level equivalent to flows of 75,000 ML/d	Four of these events to be 1 month long Two of these events to be 3 months long	September to February	15 years	Red Gum Forest and Woodland Black Box Woodland
			2.5 year in 10	Level equivalent to flows of 120,000 ML/d	4 weeks	September to February	20 years	
Detain Releases from TLM Area	Detention can occur when TLM inundation level is between 42.5 and 45 m AHD.	Chalka North Area regulators are closed and water is released from Oateys Regulator. All regulators are required when water is stored at the maximum level. The capture of small releases may only require K10 to be closed. Water is released from K10 when flood duration target is met.	6 years in 10	Level equivalent to flows of 75,000 ML/d	Four of these events to be 1 month long Two of these events to be 3 months long	September to February	15 years	Red Gum Forest and Woodland Black Box Woodland
			2.5 year in 10	Level equivalent to flows of 120,000 ML/d	4 weeks	September to February	20 years	

Source: Ecological Associates, 2015.

Lake Boolca Area – Proposed Operating Scenarios

Scenario	Pre-conditions	Structure Operation	Preferred Frequency	Threshold (depth, level or discharge)	Duration	Preferred Timing	Maximum Interval Between Events	Water Regime Classes Targeted
Gravity Releases to the Lake Boolca Area	The TLM inundation needs to be operated to 45 m AHD.	The Bitterang Regulator should be open as long as flow is required to the Lake Boolca Area. It is expected the peak flow rate will be approximately 100 ML/d and will inundate approximately 300 ha.	1.5 year in 10	Lake Boolca to be filled to at least 1.9 m depth	4 weeks	September and February	20 years	Black Box Woodland Episodic Wetland
Capture Flood Peak	Capture can occur when flood levels in Lake Bitterang exceed 45 m AHD (equates to a flow of approximately 140,000 ML/d)	The Bitterang regulator is closed when the flood peak starts to recede. Water may be detained in the Lake Boolca area indefinitely.	1.5 year in 10	Lake Boolca to be filled to at least 1.9 m depth	4 weeks	September and February	20 years	Black Box Woodland Episodic Wetland
Pumped Discharged to the Lake Boolca Area	The TLM inundation needs to be operated to 45 m AHD.	A temporary pump will be installed on the Bitterang Levee. The regulator will be closed at the maximum retention level. Water will be pumped from Lake Bitterang to the northern side of the levee at a rate of up to 300 ML/d to provide sufficient head for water to flow north, extending over approximately 710 ha.	1.5 year in 10	Lake Boolca to be filled to at least 2.1 m depth	4 weeks	September and February	20 years	Black Box Woodland Episodic Wetland

Source: Ecological Associates, 2015.