



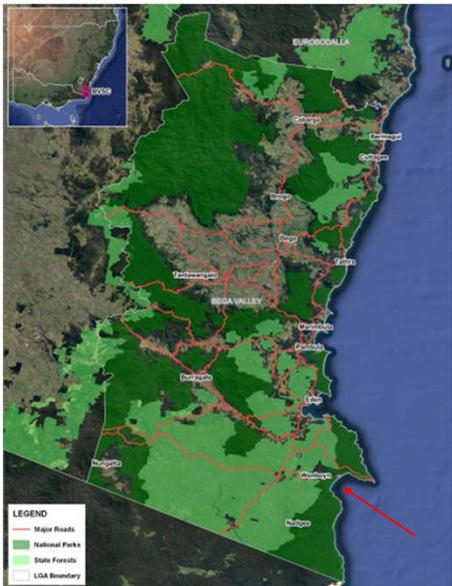
Drought, Bushfire, Flood – A tumultuous year in the life of an ICOLL

Rachel Duczynski

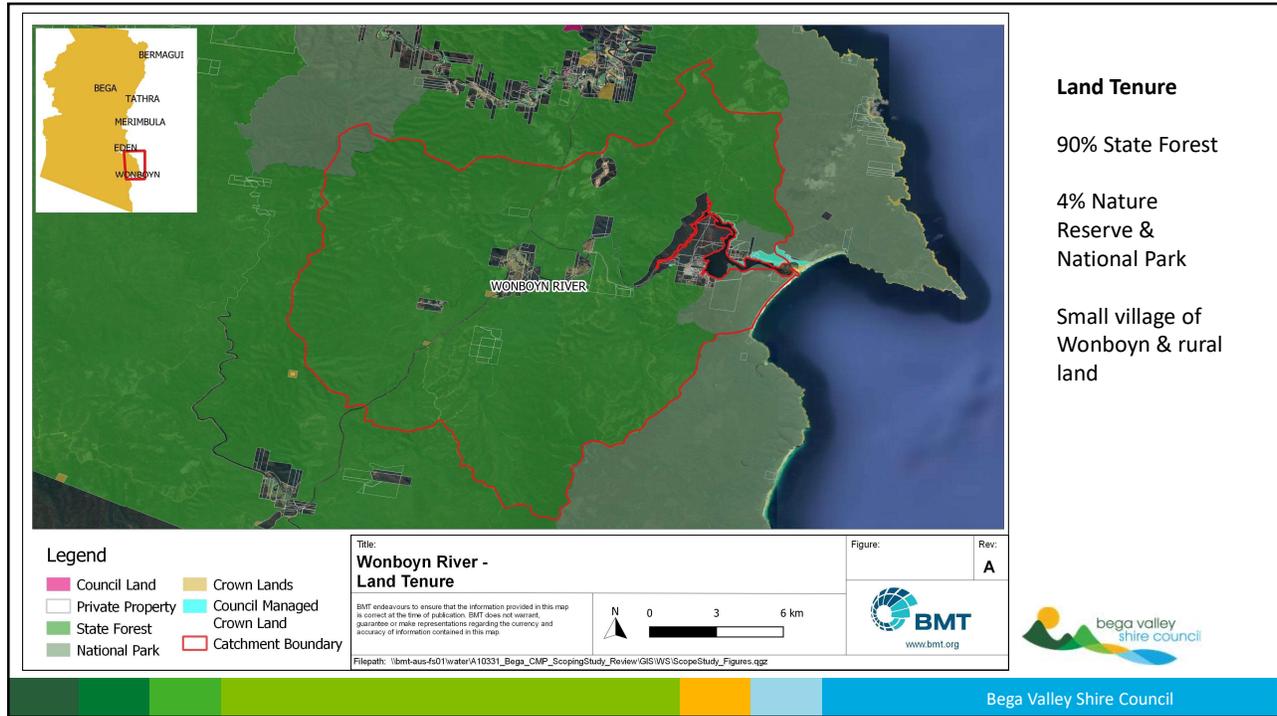


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Estuary Management

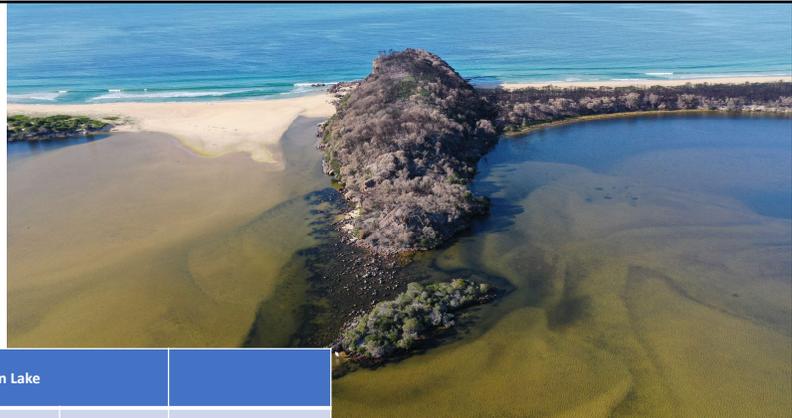


High Priority Issues:

- Protection of water quality
- Access to foreshore and lake
- Impacts of oyster leases
- Management of entrance bar
- Impacts of development
- Land use

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Entrance Closures

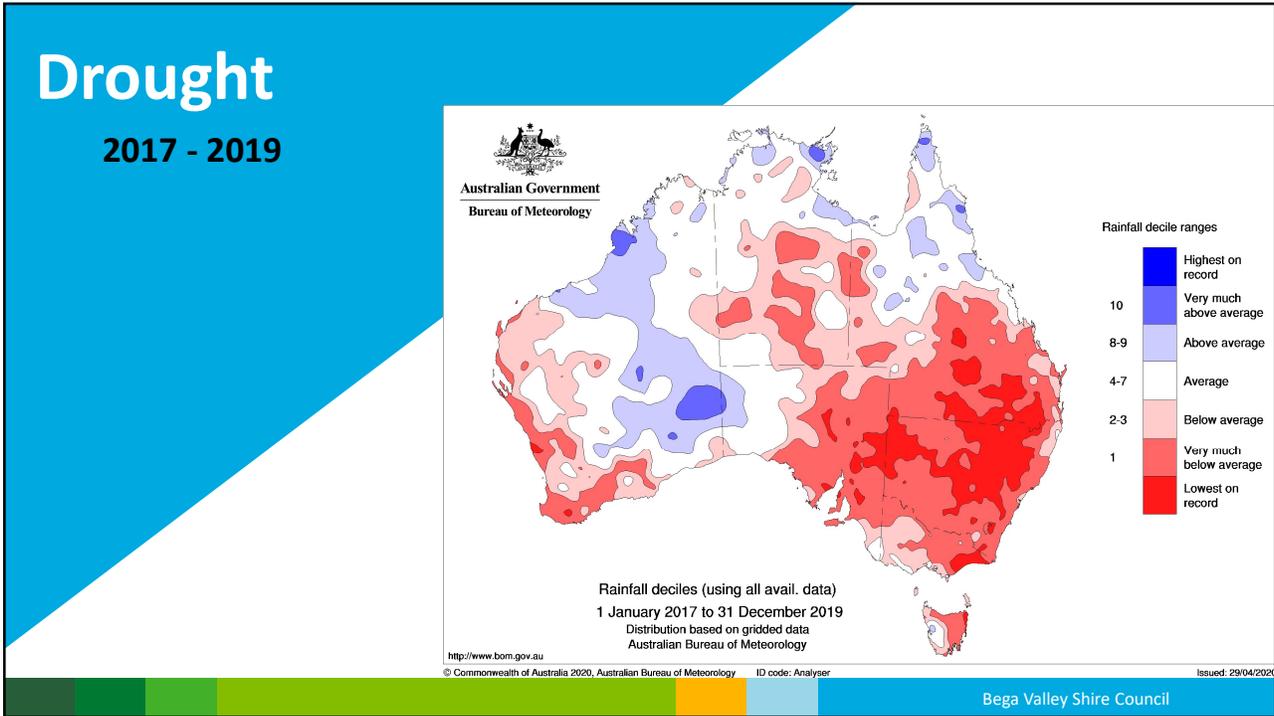


Periods of Entrance Closures, Opening and Opening Levels for Wonboyn Lake					
Entrance Closure Date	Entrance Opening Date	WL Height at Opening	Closure Duration (days)	Open Duration Prior to Closure (days)	Comment
NA	20/08/1997	NA	NA	NA	Water level recorder installed
2/09/2004	9/12/2004	1.55	98	2570	Council commenced digging a channel but opened naturally after a rainfall event
7/10/2009	15/02/2010	1.34*	131	1763	Rainfall event (*gauge records ended at 1.34m)

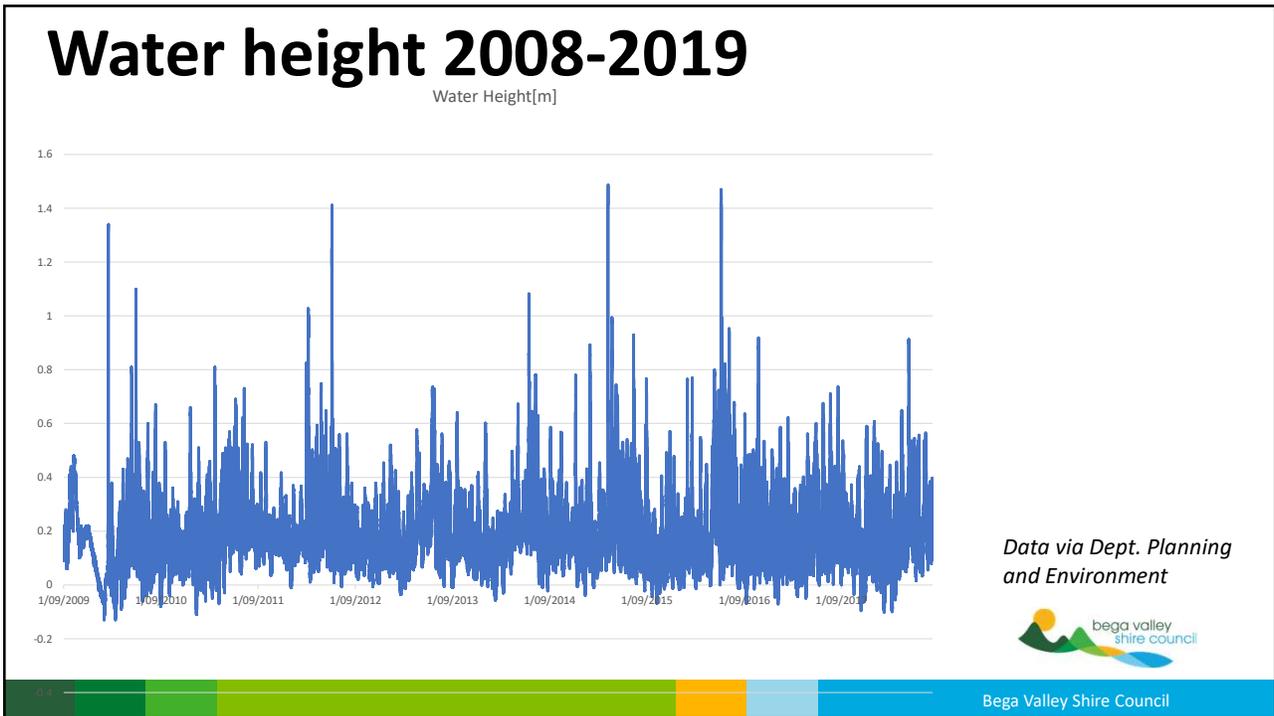


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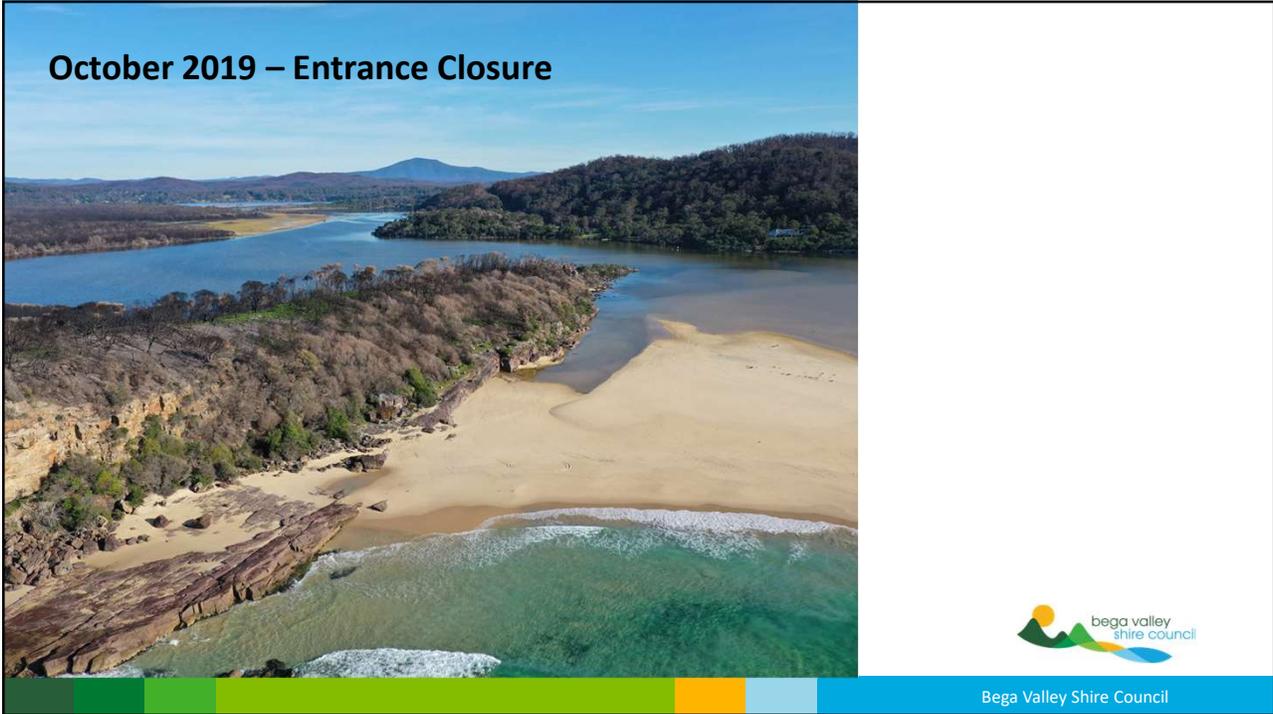
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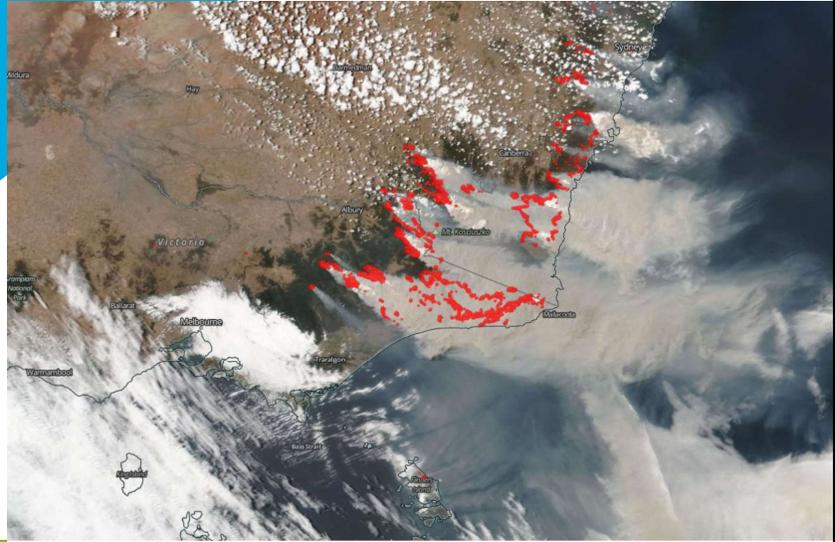
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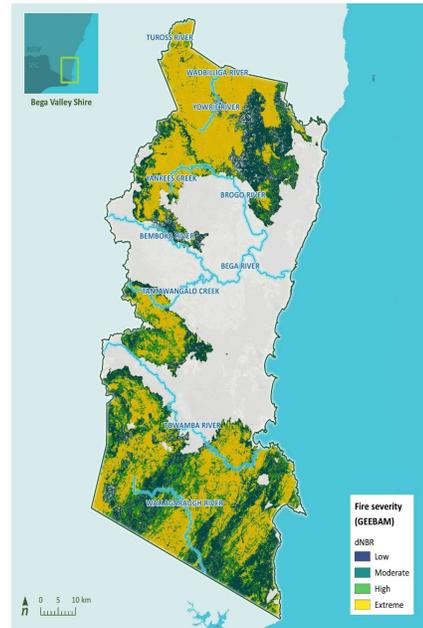
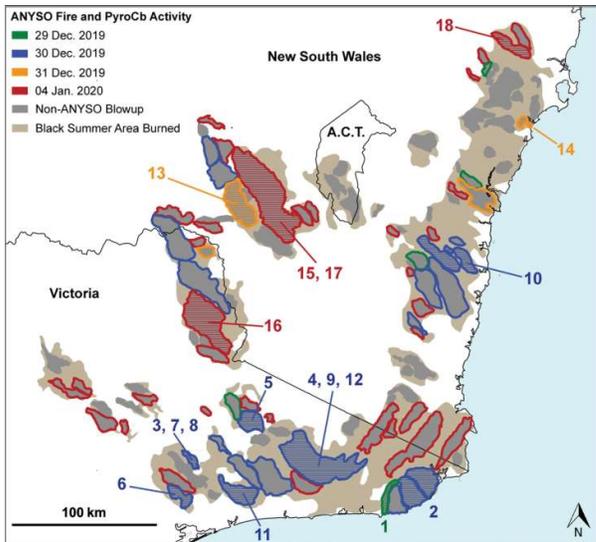
Bushfire

4th January 2020



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Low level 'reverse' opening

Opened at ~0.2m AHD

Aims:

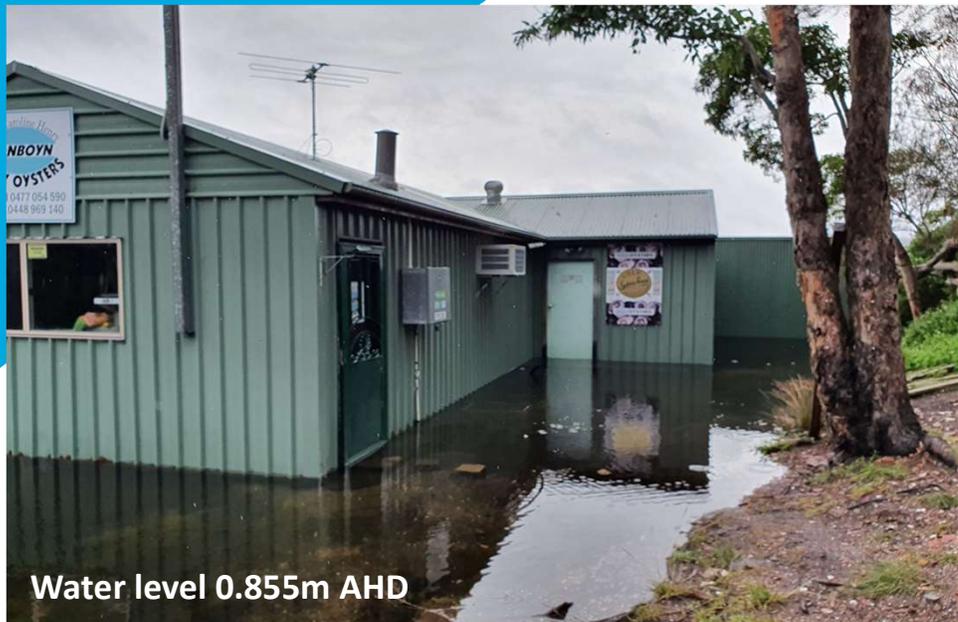
- Allow for flushing of bushfire debris
- Buffer bushfire impacts at entrance
- Allow water in and improve salinity at entrance
- WQ monitoring buoys installed by DPE



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Flood

March 2020



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Infrastructure Challenges

	0.5-0.75m AHD	0.75-1m AHD	1-1.4m AHD
Private Jetty	13	3	1
Oyster Shed	5	3	
Private Shed	3		
Private access road		1	




Water height 0.735m AHD



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May 2018
Water level
0.01 - 0.2 AHD



18 May 2020
Water level
0.74 AHD







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Entrance Management Considerations

- Minimal public infrastructure around the lake
- High value oyster industry which is the main economic driver in the town
- Low lying oyster sheds, private boat sheds and jetties
- Community perception the lake should always be open
- Minimising environmental impacts
- Factoring in flexibility/adaptation



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Entrance Management Policy

Interim Trigger (five years from adoption of the Policy)

The entrance to Wonboyn Lake may be opened in the following circumstances:

- Water level at or above 1m AHD; or
- Water level between 0.75m – 1m AHD for a period of at least 2 months, or significant rainfall is predicted in the catchment (100mm+)
- No more than two lower level openings <1m AHD are to be undertaken within a 12-month period.

Long Term Trigger (following 5 years of the interim trigger)

The entrance to Wonboyn Lake may be opened in the following circumstances:

- Water level at or above 1.4m; or
- Water level is between 1.1m -1.4 m for at least 2 months
- Water level at or above 1.1m AHD and significant rainfall is predicted in the catchment (100mm+)



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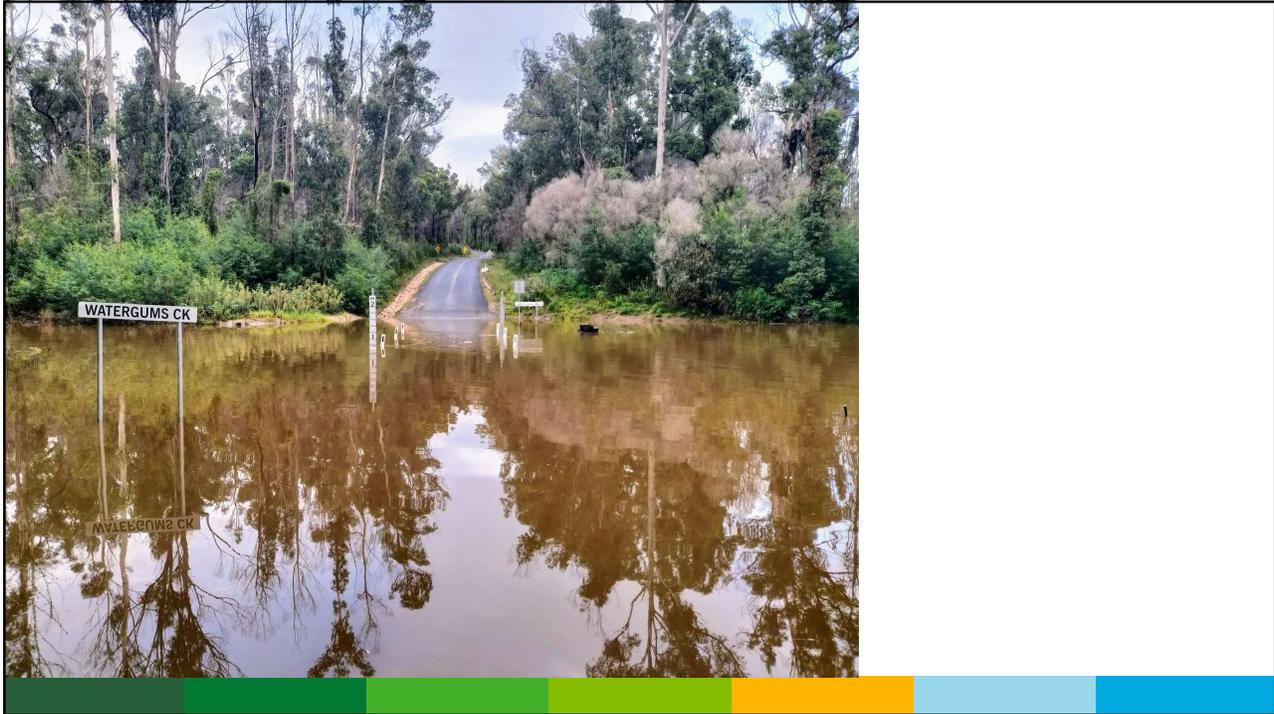
2nd June 2020

Opened at 0.98m
AHD



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Key Learnings



- Extreme circumstances require flexible thinking
- Importance of community, industry and agency relationships
- Importance of monitoring and data collection
- Adaptation requires buy in & cooperation from all agencies
- Issues with guidelines and requirements for entrance management

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