MERI Plan
A plan for monitoring, evaluating, reporting and improving the Healthy Waterways Strategy (HWS)
October 2019 Sharyn RossRakesh
Outline & acknowledgements

- Context (strategy development)
- MERI plan
- Key points

Helen Watts

Michelle Dickson

Amanda Wealands
Context
Co-designing the Healthy Waterways Strategy
Context – HWS development
“Merri Creek Management Committee (MCMC) is strongly supportive of the objectives of the Healthy Waterways Strategy and is very interested in participating in the delivery of the Strategy.”
Increase **access** along waterways by 34 km.

**Environmental water** reserve is increased by 7 GL/year by 2028.

Progressively implement **stormwater harvesting**. Around 16.9 GL/year of stormwater harvested and 3.0 GL/year **infiltrated**.

Establish 435 km and maintain 648 km of continuous **vegetated buffers** along at least 80% of priority reaches.

**Wetlands**: Eg Implement key actions in the Ramsar Site Management Plan

**Estuaries**: Eg Enhance estuarine vegetation
Example of long term key value targets

<table>
<thead>
<tr>
<th>Key values</th>
<th>Birds</th>
<th>Fish</th>
<th>Frogs</th>
<th>Macro-invertebrates</th>
<th>Platypus</th>
<th>Vegetation</th>
<th>Amenity</th>
<th>Community connection</th>
<th>Recreation</th>
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<tbody>
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- **Current state** of Waterways Values
- **Current trajectory**: The likely outcome if current policies and effort continue
- **Target**: The targets developed through collaborative actions
- **Sub-catchment averaged by stream length (km)**

**Key value/condition**
- ↑ Key value/condition is predicted to improve from current score
- → Current key value/condition score is predicted to be maintained
- ↓ Key value/condition score is predicted to decrease from current
MERI
Developing a MERI plan for the HWS
“Monitoring, evaluation and reporting provides a mechanism to check and adjust implementation, performance objectives and targets to respond to changing conditions, successes or failures, and evolving challenges during the life of the Strategy.”
Program Logic

assumptions

externalities
## Key Evaluation Questions

<table>
<thead>
<tr>
<th>Evaluation question</th>
<th>When it is asked</th>
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</thead>
<tbody>
<tr>
<td>KEQ No. 1 - To what extent have the performance objectives of the Strategy been achieved?</td>
<td>• Annual</td>
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<td>• Event-based (as needed)</td>
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<tr>
<td>KEQ No. 2 - To what extent has progress been made towards the longer term environmental condition targets for rivers, wetlands and estuaries?</td>
<td>• Mid-term (2022)</td>
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<td>• End of Strategy (2026)</td>
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<td>KEQ No. 3 – What is the state of waterway values?</td>
<td>• Mid-term (2022)</td>
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<td>• End of Strategy (2026)</td>
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<td>KEQ No. 4 - To what extent have the delivery methods of the Strategy been cost effective and efficient?</td>
<td>• Mid-term (2022)</td>
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<td>• End of Strategy (2026)</td>
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<td>KEQ No. 5 – To what extent have legacy items been identified and managed for?</td>
<td>• End of Strategy (2026)</td>
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</table>
Pathways for learning and improving

Pathways
- annual reporting
- mid-term evaluation
- end of strategy evaluation
- ‘Red Report’
- Tracking implementation short term indicators
- Research and intervention monitoring
- Surveillance monitoring
- Business processes
- Catchment Forums
- Regional Leadership Group
KEQ No. 1 - To what extent have the performance objectives of the Strategy been achieved?

Sub-question 1a. What progress has been made towards achieving the regional and sub-catchment performance objectives?

Sub-question 1b. Have the fundamental changes required to implement the strategy in full been made? If not, why not?

Sub-question 1c. To what extent has the HWS influenced emergency and critical events (if, and as they occur) and to what extent have critical events impacted on the achievement of the Strategy? How effective was the response to the event in minimizing impact?

Sub-question 1d. To what extent has the delivery of the Strategy been safe?

Output indicators – eg area of vegetation established, volume stormwater harvested

Investigations

Review

Expert review

Case study/outcome narratives

Summit workshops
KEQ No. 2 - To what extent has progress been made towards the longer term environmental condition targets for rivers, wetlands and estuaries?

- Detailed monitoring plans
- Mix of field based & remote sensing
- Specific indicators for rivers, wetlands and estuaries
- Changes may take many years ie beyond life of strategy
- Citizen science data
KEQ No. 3 – What is the state of waterway values?

Sub question 3a. To what extent are key values on the predicted trajectory?

Sub-question 3b. Have macroinvertebrates exceeded acceptable risk thresholds?

Sub question 3c. How have the ecosystems services and benefits as defined through the System of Environmental Economic Accounting changed as a result of investment in waterways?

- Detailed monitoring plans
- Mix of traditional and eDNA
- Specific indicators for rivers, wetlands and estuaries
- Changes may many years ie beyond life of strategy
- Citizen science data

- Report annual status
- Bugs as leading indicator
- Deep dive at mid term & end

safety
KEQ No. 4 - To what extent have the delivery methods of the Strategy been cost effective and efficient?

Sub-question 4a. How, and in what ways, has collaboration enabled effective and efficient delivery of the Strategy?

Sub-question 4b. How has monitoring and research contributed to effective and efficient delivery of the Strategy?

Sub-question 4c. To what extent has data been used to inform and validate models, assumptions and to inform adaptive management?

Sub-question 4d. How appropriate were our interventions in achieving the intended outcomes and aligning with needs of beneficiaries?

Sub-question 4e. How has Traditional Owner and Aboriginal Victorian knowledge informed, and been advanced through Strategy implementation?

Reviews

Reflective interviews

Comparative methods

Expert review

Social surveys
Sub-question 5a. Which programs should continue or be modified and are resources being planned for?

Sub-question 5b. What are the long term arrangements for managing and resourcing maintenance of outcomes?
Evaluation

**Step 1** – Define scope of evaluation for each performance objective

**Step 2** – Agree relevant performance criteria and credible evidence

**Step 3** – Gather mix of credible evidence

**Step 4** – Synthesize and make sense of evidence to make judgements

**Step 5** – Report use, social results to appropriate audience

**Step 6** – Record decision and update process, program, system, plan or strategy
# Physical and policy context

- Climate, water resource, landuse
- Policy challenges and achievements

# Implementation context

(highlights, achievements and learnings)

- Flows, water quality, stormwater
- Habitat, vegetation, pests
- Community places
- Cultural values
- Engaged communities
- Collaborative governance
- Adaptive management and research

- ‘on-track’
- Some progress
- Off track

# Key values and conditions

(status and trends)

- Macroinvertebrate trends
Eg of condition and value monitoring - Macroinvertebrates
Implementing the MERI Plan

The MERI plan will be implemented in three stages:

1. **Foundation** years 1-2 (2019/20-2020/21)

2. **Implementation** years 3-5 (2021/22-2023/24)

3. **Refine and adjust** years 5-10 (2023/24 – 2024/28)
THE WRAP
Take home messages
Summary – key points

- Commitment, governance, budget key ingredients to successful MERI

- Start with ‘evaluation’ and think short and long term 20+

- Phasing implementation – build on over time (but make a start)
Thank you

ADDITIONAL ACKNOWLEDGEMENTS
HWS Science panel
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Regional Leadership Group
MERI lab participants
Biodiversity & Waterways Team

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