



MaMH Forum 2020

NSW Modelling and Monitoring Hub



mamh.nsw.gov.au

The annual forum is a key platform for MaMH to disseminate their learnings.

The **NSW Modelling and Monitoring Knowledge Hub** (MaMH) is a knowledge network led by a statewide representative working group, with agreed processes to coordinate and aid information sharing across government agencies and state-owned corporations in relation to water modelling and monitoring.

The NSW Government established the MaMH in 2018 to improve water management in NSW.

The working group includes representatives from:

- Department of Planning, Industry and Environment's:
 - Environment, Energy and Science division
 - Local Government and Regional Planning division
 - Manly Hydraulics Laboratory
 - Water Analytics team
- Hunter Water
- Sydney Water
- WaterNSW.

The MaMH held its second annual forum from 21 to 23 October 2020. Approximately 70 people attended the forum each day, with attendees coming from a range of NSW government agencies, as well as from the Bureau of Meteorology, the Queensland Government and the Murray–Darling Basin Authority.

Disclaimer:

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Keynote address

Anissa Levy, Chief Executive Officer, Water Infrastructure NSW, provided the keynote address and spoke about the NSW water reforms and the state government's approach to water security.

Anissa shared her experience from her time at Transport for NSW (TfNSW), where the department developed common assumptions that all teams within TfNSW could apply in the development of their models. This enabled teams to have a consistent baseline across all modelling projects. The MaMH working group will lead more discussions with other sectors to enable similar learnings.

Anissa encouraged all agencies to share information to reduce duplicate data and effort. She provided insight into her latest role in establishing the Department of Planning Industry and Environment's new Water Infrastructure group. The group will ensure a coordinated approach for water-related infrastructure decision-making for the NSW water sector. This will accelerate project decision-making and delivery, strengthen sector capabilities, and ensure efficient and strategic investment across the water sector.

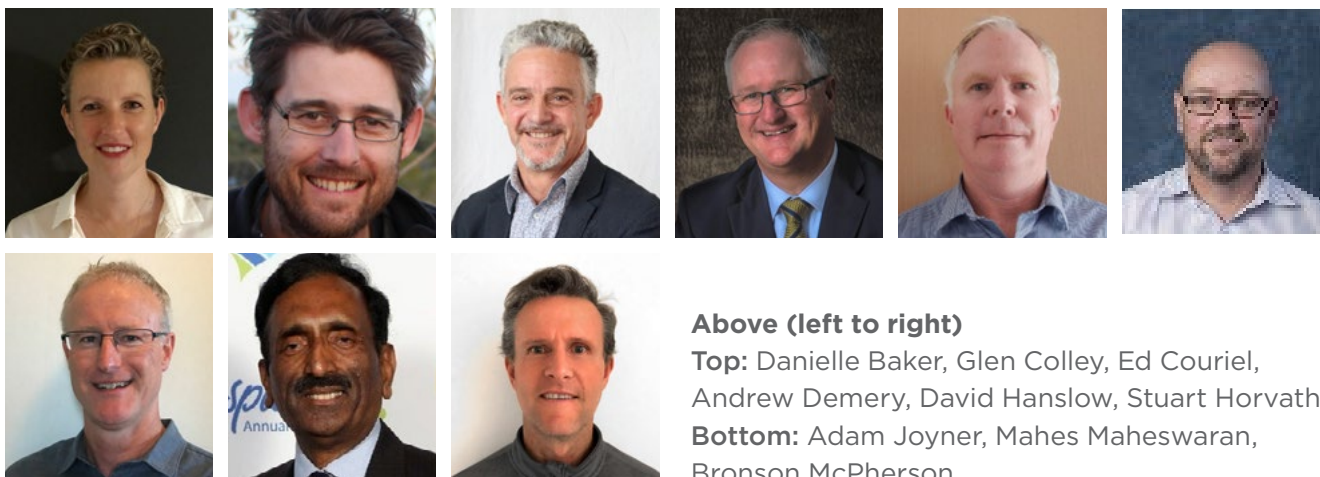


Anissa Levy

Despite being delivered virtually this year, the Forum's participation increased compared to the previous year with opportunities for more practitioners to attend.



MaMH working group member highlights



Above (left to right)

Top: Danielle Baker, Glen Colley, Ed Couriel, Andrew Demery, David Hanslow, Stuart Horvath;

Bottom: Adam Joyner, Mahes Maheswaran, Bronson McPherson

Sharing and collaboration

- ‘MaMH provides a new opportunity for professionals to share water information and modelling. Many improvements across organisations can come from this collaboration and improved communication.’
- ‘Learning about case studies and other parts of the industry is important for understanding everyone’s role and the benefits of open data.’
- ‘This group has made some great progress in joining state government agencies and state-owned corporations. The next step will be to see how this can also support councils for improved planning.’
- ‘There are many benefits of working together. The MaMH special projects have enabled the group to explore critical issues in water modelling and monitoring. There are water information and models out there, but they can be hard to find.’

Mutual aspirations

- ‘The group’s alignment with making water information more accessible will help to make better decisions.’
- ‘The opportunity for this group to improve the delivery of water management in NSW will enable significant sector change.’
- ‘The MaMH builds trust across all the organisations by meeting, discussing and sharing knowledge in water modelling and monitoring for all to use.’

Opposite page (left to right)

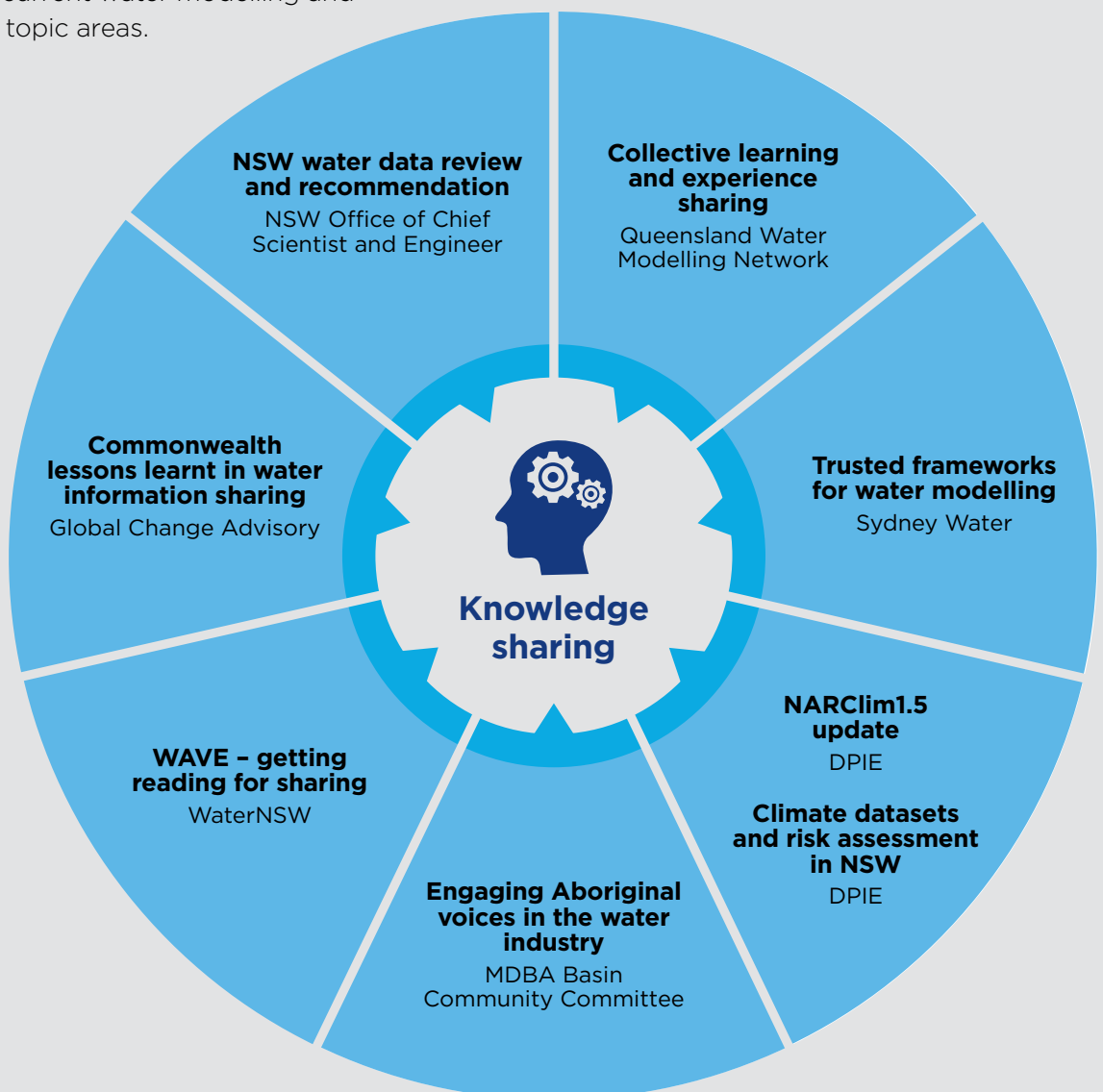
Top: Richard Beecham, Jim Bentley, Sarah Dakin, Phil Duncan, Prof. Hugh Durrant-Whyte, Piet Filet;

Bottom: Anissa Levy, Joseph Miller, Matthew Phillips, Ian Robinson, Rob Vertessy.

Knowledge sharing



Twelve presentations from water sector representatives were shared during the forum. These covered current water modelling and monitoring key topic areas.



Workshop findings

The MaMH working group's year two project findings were presented and workshopped for the next stages of the MaMH's work. Participants at the forum were given the opportunity pick one of four workshop topics, and to discuss the topics in relation to opportunities and applications for water information and modelling. Workshop topics were:

1. collaboration
2. discovery
3. metadata
4. open information.

Here are the top three findings from each workshop group.

1
Collaboration



What do we have in common to allow us to collaborate?

- Set common goals for the people of NSW (e.g. cost-effectiveness, great outcomes).
- Build online-capable platforms with many organisations using common software.
- Have a single, consistent information source and alignment across agencies.

2
Discovery



What does great water information discovery look like?

- It enables workflow with three to four clicks to get to the area of interest and custodian contact, with a good geospatial search interface.
- We can see what is available (catalogue) in a single location (with consistent entry way for all water data types).
- It leads to collaboration, conversation, more exploration and innovation.

3
Metadata



Why is metadata so complicated and is it a showstopper for data discovery? What if we adopted four metadata fields (location, title, custodian name, custodian contact)?

- It will be a useful minimum set of metadata with which to discover information. Further metadata is required to enable assessment of the value of the information.
- That there are no technical reasons that all water data cannot be made discoverable.
- 'Knowing' about the data requires dedicated/extra resources and the data user will need to speak to the custodian of the data.

4
Open information



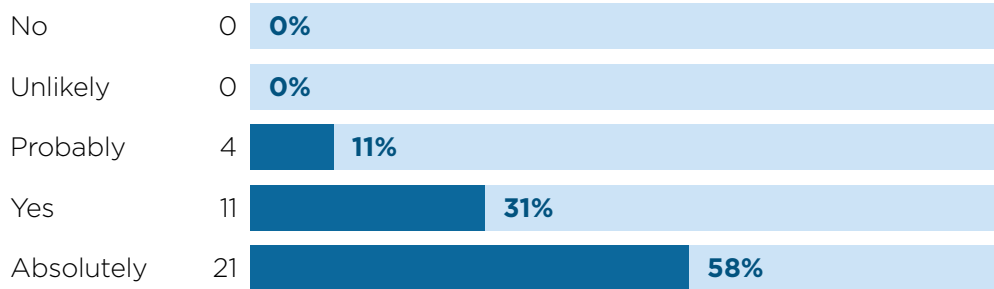
Open water information is policy – how can it be implemented now in your organisation?

- Start small, test, sharing basic information (or one item at a time) and gradually increase.
- Have secure funding to enable the transition – each organisation is at a different position to manage open information.
- Consider and define the exceptions to the principle, and publish audits of datasets not shared and why.

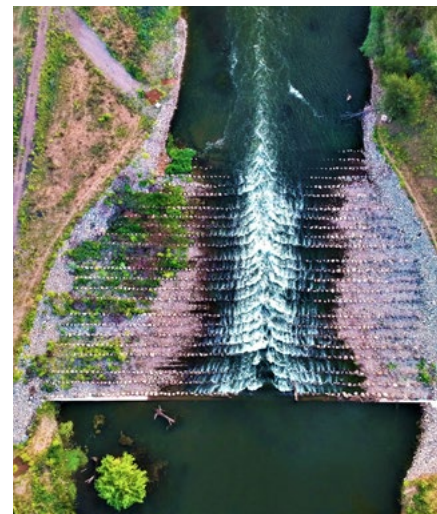
A valuable exercise

In the post-forum survey, all participants commented they found the forum very valuable and all said they would or were likely to recommend this forum to work colleagues.

Would you recommend this forum to your colleagues?



To provide feedback or get more information and flyers on our key achievements, visit www.mamh.nsw.gov.au



Top: View onto Mount Warning from Tweed River. Murwillumbah, NSW. NSW Department of Planning, Industry and Environment/©Don Fuchs

Middle: Aerial view of Weir rock ramp. NSW Department of Planning, Industry and Environment/©Tim Collins

Bottom: Chichester Dam, Dungog. NSW Department of Planning, Industry and Environment/©Jaime Plaza Van Roon



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