

Question Time	Question	Answer
06/15/2022 12:38:39	When modelling a flood related (overtopping) dam failure scenario associated with an extreme rainfall event (e.g. PMP) what background flood AEP would you recommend adopting for catchments just downstream of the dam wall?	Live answered The last time this was prescribed was in FIA guidelines for water dams in QLD (2012). It was the AEP of dam break flood rainfall x 1000. Should that be AEP of DCF / 1000? I think we are saying the same thing. Multiplying the 0.01% AEP by 1000 would be 10% AEP. Thanks for clarifying - that makes sense.
06/15/2022 12:48:55	Be interested in the panel's comment on the interaction between "current" flood knowledge and changes in design flood heights based on updated flood frequency analyses? (As one example - in a catchment used in one of Jacque's slides - levees that were designed for what was considered to be a 1% design flood in the mid 1960s are in the 2020s, considered to be overtopped in a 5% flood).	Best practice is always to use the latest (and presumably more accurate) data and modelling to inform your design flood heights and risk management measures. However, it's also important to not change design flood heights frequently due to the sometimes lengthy process of changing policies. A sensitivity assessment is always valuable in understanding the impact of changes in inputs to design flood conditions. Whether the changes are relatively minor and well within the freeboard (limits of uncertainty) may affect the decision on whether it is appropriate to change information, policy, etc. As Carrie mentioned, best practice flood risk management may not have an end point. There's always more and better data that can be gathered, more options to be tested, more consultation to be undertaken - are the compromises to "best practice" being made understood and accepted.
06/15/2022 12:49:10	When should we consider strategic retreat versus investment in mitigation?	Live answered
06/15/2022 12:49:37	After the flood risk of a region has been determined to be too high, is it better to ban new development at the region and slowly relocate the existing residents, or to allow new development but charge them (inclusive of the existing residents) with higher insurance plan?	Firstly, it should be noted that there would be a number of options to be investigated before it is declared that the flood risk being too high. The way forward needs to be based on a consultative response between government and the community and also an informed response (what is the extent and type of flood risk, where and what land use may be compatible with the level of risk, etc) . Consultation with the community may provide insight into their appetite for risk.
06/15/2022 12:52:16	Costs and benefits to underpin a business case for flood mitigation requires more than just direct damages in most cases... but how do we get reliable indicators of indirect and intangible impacts?	Live answered
06/15/2022 12:53:09	Can roof water harvesting in urban areas significantly reduce flash floods? Is there any known places where roof water harvesting is used in this regards?	Roof harvesting may improve the flood impacts for very frequent flood events, i.e. the 1 in 2 or 1 in 5 year AEP events, however it's likely that there is not much benefit for major events, such as the 1 in 100 year AEP event. Roof harvesting is part of best practice as part of Integrated Stormwater Management. Roof water harvesting is regularly applied in new developments in Australia. From our experience it only helps with the smaller more frequent flood events.
06/15/2022 12:53:57	Where does the Councils duty of care to understand, communicate and mitigate flood risk come from? Is there legislation that specifies the duty of care?	In NSW Councils have a statutory immunity in terms of advice regarding flooding (and also for anything done (or not done) in relation to flooding) provided they have "acted in Good Faith". One definition of "acting in good faith" in the legislation is that the Council has followed the process outlined in the State Government's Floodplain Development Manual
06/15/2022 12:56:31	As we know, flood risk generally influenced by the country plan (i.e. rural urban planning). Is there any way to determine the flood risk before planning our country. Is there any country as example who sustain to determine that?	Broad scale (regional or countrywide) analysis or even modelling can be carried out these days to provide an indicative, first pass flood risk guidance. From this you can then prioritise areas for more detailed/reliable assessment. This approach is increasingly common provided reasonably accurate terrain and land-use data is available along with appropriate modelling to generate flood hazard/risk mapping.
06/15/2022 12:57:44	How do we deal with the collaborative partnership approach to flood management and avoid it becoming someone else's problem all the time?	Good question! The target should be to give all stakeholders the opportunity to contribute to risk management measures and take ownership of the final risk management plan from Day 1. However, there will nearly always be unpopular measures and disagreement. To minimise disagreement, maximise the effort in listening to the community, educating the community on the pros and cons of possible measures, prioritising measures based on benefit-cost (including intangibles such as social impacts), and finally finalising the best way forward for the community as a whole.
06/15/2022 13:00:57	Can you share the link for that handbook (version 7)?	<a href="https://knowledge.aidr.org.au/media/3521/adr-handbook-7.pdf">https://knowledge.aidr.org.au/media/3521/adr-handbook-7.pdf</a>
06/15/2022 13:04:30	How the fit-for-purpose approach could be considered when integrated solutions are emphasized everyday. To me, resilience and sustainability can be compromise if we focus on the purpose only. I'm interested to hear your thoughts on this please.	Appreciated Live answered
06/15/2022 13:05:22	How often do flood risk being updated? Is it subjected to demand from client?	Flood Risk Management should be updated in response to a number of factors, including to update outdated data or when more/better recent data becomes available (i.e. new topographic data (LiDAR), when a catchment/floodplain changes significantly (e.g. in terms of new development, more or denser population) or when best practice guidance may dictate changes to inputs, methodology or approach (e.g. ARR2019 in Australia, modelling advancements, climate change predictions, etc). So does it mean generally there's no rule of thumb in terms of how many years does it take before we say let's update the flood risk management?
06/15/2022 13:06:38	Is there a risk of inconsistency in approach, when using more specific floor levels, for higher risk areas?	Live answered
06/15/2022 13:12:28	Is it possible to make some flood management infrastructures multi-purpose, especially for those in urban area? For example, some detention basin can be use as a park or playground when it's dry. Will this alleviate funding difficulties to some extent?	Yes and levee banks can become cycle or walking paths.... Thanks very much Franssen. Is there any good case studies that has been done in this area? It will be great if you can share some relevant docs or links that I can learn from. thanks. Absolutely! Multi-purpose use should always be part of the mix. Note that the flooding mechanism is important to take into account. For example, you may want to not locate public amenities where there is little or no warning time during a flash flood.
06/15/2022 13:12:55	How do you apply SFAIRP in a flood risk management framework?	Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia <a href="https://knowledge.aidr.org.au/media/3521/adr-handbook-7.pdf">https://knowledge.aidr.org.au/media/3521/adr-handbook-7.pdf</a>
06/15/2022 13:15:13	what is that book name for national flood risk management?	Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia <a href="https://knowledge.aidr.org.au/media/3521/adr-handbook-7.pdf">https://knowledge.aidr.org.au/media/3521/adr-handbook-7.pdf</a>
06/15/2022 13:17:39	As insurance companies also need to understand the level of risks when insuring private properties - is there any knowledge sharing with these industries?	My understanding is that there is not a lot of knowledge sharing as insurance companies treat their flood knowledge as IP not to be shared with competitors. It should be noted that generally, government flood studies (where available) tend to be more accurate than modelling for insurance companies who take a more holistic, possibly less accurate, approach. In many cases, Government studies are publicly available documents that can be accessed by anyone, including insurance companies.
06/15/2022 13:18:22	Is there any software that could analyse communities being cutoff by floodwaters or is it a visual inspection of the hydraulic results?	BMT's TUFLOW software has evacuation route functionality that facilitates this analysis. Cameron, if you'd like to know more please email support@tuflow.com.
06/15/2022 13:20:50	Thanks for a well-considered presentation on best practice Flood Risk Management. As practitioners know too well, Floodplain Risk Management Plans are developed with the constraints of budget and timeframes but still need to meet best practice expectations of the community and government policy. On the issue of land-use planning, what do you see as the minimum standard of a Floodplain Risk Management Plan so that future risk is contained, including the impacts of climate change?	Live answered
06/15/2022 13:22:52	acceptable risk levels often set by federal and/or provincial government disaster financial assistance programs and more recently by flood insurance	
06/15/2022 13:27:06	Don't you think climate change is a national level issue rather than council level?	It's very much a national (and global) level issue. But if Councils have the job of implementing and managing flood risk management in their jurisdictions they need to be guided by national bodies based on the latest expert scientific advice
06/15/2022 13:33:36	Be interested in the panel's comments on conjunctive probability for localised flooding (e.g. a town with a levee) where there is mainstream flooding?	
06/15/2022 13:34:30	Thanks everyone.	
06/15/2022 13:35:00	Thank you	