

Webinar Q&A Unlocking the full value of a flood model

#	Question	Answer
1	During flood modelling what is the easiest way to classify landuse pattern of a catchment	Hi Jannatul, it really depends on what model you are using. Apply in the hydrology and hydraulic processes. This is an important question when you are addressing flooding, but not really a focus of this webinar - Unlocking the full value of a flood model
2	One of the main costs for good flood model is survey of the infrastructure. Many councils process large volume of development applications containing high-precision surveyed data, yet this information is used only once and never reused. Technically it is feasible to standardise and recycle this valuable information for future flood planning. Is there a legal or procedural pathway for enabling this kind of data sharing across local councils or state government? For precedent, surveyors have similar platform, but it is using old PDFs to extract reference points.	Great question Ivan! Yes, keeping up with the changes in topographical and catchment changes that happen over time would be much easier if we required provision of digital asset and digital elevation data as part of development approvals - this could be part of a condition of approval (but we would need to have the appropriate holistic IT architecture to store/workflow that data). I'd love to talk more about how surveyors approach this problem.
3	I'm anticipating that you will probably cover this... My concern with "getting the most out of a flood model" can sometimes extend to "using model results outside of the use of the model intended by the modeller". I am cautious in sending full model results to someone who may not fully understand "what's under the hood". Interested in your comment on this, please.	Hi Mark, great to have your perspective here! I agree, in my experience, I have certainly seen people who are not "flood modellers" using a models for purposes that it is not fit-for-purpose. That is why it is so important to have suitably qualified engineers/analysts undertaking modelling. I am of the view that is the professional and ethical responsibility of an engineer to only operate within their expertise.
4	Why do you think flood modelling cost is not proportional to the impact and value it provides ? If there's a huge flood, losses could be in the millions + potential loss to life and damage to infrastructure.	It would be great to value a model based on the avoided losses!
5	Can we measure resilience by a flood model?	Yes - but we need to set up our modelling to address this question plus we need to have a way to consider the aspects that you are assessing resilience. On a recent project we set up a Multi-criteria analysis tool. Linking results for various flood events and assessment criteria in a GIS processing, to look at resilience across the floodplain. Resilience will also need to consider damage and recoverability, beyond a flood model.
6	Some challenges from our current program of flood modelling include;	see other answer to Patrick
7	Spending lots of time and money chasing good data, deciding whether we can move to Rain-on-Gris models, not getting peer review from the start of the program including scoping and specifications. Any comments on this?	Hi Patrick, thanks for question. Yes we must make sure we have good data for terrain and calibration. Calibration or verification is often very hard in Urban Catchments due to lack of specific data. One way to help with that set up and confidence in results is to have a suitable level of reviews, early in the project. Need to be careful in scoping and specifications as we need to manage time and budget.
		Great question Patrick. You mind find Kristen Sih's award winning presentation from HWRS last year useful: How to get the best out of a peer review (https://search.informit.org/doi/10.3316/informit.T2025050600026501974887037)
		Yes Patrick, it's really important to have Peer Review from the outset. And also important to have good policy/procedures that establish a minimum "Level of Service" for our flood models. Having that strategic approach endorsed helps 'draw a line in the sand' so that we aren't constantly chasing our tail on input data.
8	Most of flood modeling softwares are based on windows system. Do you have recommendation for linux native softwares for modeling?	Hi David, I'm in the TUFLOW development team. We have a Linux version of TUFLOW FV. We are currently working on a Linux version of TUFLOW Classic / HPC. It is part of the sprint that has been created for the 2026 release.
9	Why are most flood models still text based like we're in the 1980s ?	Not for this webinar, but an interesting question. We have been asking similar questions around Australia's hydrology tools. Regarding hydrology tools there is some 'if it isn't broken don't fix it' mentality but there has also been no real investment in User Interfaces from commercial companies - something Jacobs is looking to change!
10	What is your view on AI/ML based flood models which are easy to build?	There is a lot of content on this topic covered in other AWS webinars - https://awschool.com.au/training/topic/artificial-intelligence-ai/
11	These systems are easier now with more Creative Commons data access.. How does your platform manage data licence agreements to ensure data isn't used outside of these agreements	Flood Platform is not open data, individual organisations will have the capability to grant access and set permissions to other individuals for their private datasets. We could consider allowing organisations to publish their models to the public in future but that is not available today.
12	Can you build, run and review results fully in the Jacobs platform without the need to use GIS software and separate text editors to edit tcl/ecf files etc?	No, Flood Platform does not replace your modeling building workflows or tools (QGIS, Notepad etc).
13	is it free for use	There is a free viewer license for Flood Platform however to collaborate on or manage models a paid subscription is required. See https://www.floodplatform.com/pricing for details.
14	Great presentation so far. On Jacob's Flood Platform, are the results only compatible with TUFLOW result file format, or is it capable of utilising SWMM or MIKE result files?	SWMM and HECRAS are on our roadmap but currently only TUFLOW and Flood Modeller are supported.
15	does flood platform allow models to be automatically modified when a new version of software (tufLOW) are released to take advantage of updates (SGS methods as example)?	The ability to edit models within floodplatform (for example adding new commands) is on the roadmap but will not be available in the first release. You will be able to select from different available versions of TUFLOW when running simulations.