

Webinar Q&A Report: AI & Operational Water Management

#	Question	Answer	Answer Name
1	Hi, Can this work for flood mapping/ catchment models in the mining sites?	Hi, yes it is possible for mining sites. At this stage it appropriate for smaller site scale catchment areas. It is released in one of our tools today, so if you have a site in mind please reach out after the webinar today and we can test the model	Matthew Piggott
		Great thanks, will reach out.	
2	I am interested to see AI applications in building high level models in particular flood inundation mapping without running hydraulic models per se. Has any work done in this area	live answered	Matthew Piggott
3	I can also see good AI applications in flood forecasting in line with my previous comment	InfoWorks ICM can be operationalise for flood forecasting using ICMLive. AI/ML will be complementary/alternative approach for flood forecasting. It can help with fast surrogate prediction, rainfall/telemetry pattern recognition and evaluating scenarios. Key steps are training across the expected operating conditions and benchmarking against the full physics-based model particularly for extreme events.	Eland Afuang
4	Is there a automation process, to design a basin based on the pre and post development flows, considering the avialable area downstream of the development.	This workflow can be automated. InfoDrainage has built-in tools for example to compare pre and post development runoff, size storage and assess discharge controls. The custom workflow using scripting in InfoWorks ICM provides an optimisation solver to iterate basin geometry i.e., depth, side slopes and outlet parameters against available land, freeboard and discharge criteria. AI/optimisation can accelerate the process while keeping the hydraulic model as the primary engineering source of truth.	Eland Afuang

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5	1. I'm curious about AI-based surrogate models — how much computational advantage do they actually give over running a physics-based model like InfoWorks ICM directly? And beyond the research motivation, what practical needs tend to make a surrogate worth building? 2. I'm very interested in building and applying Autodesk automation. I have a lot of experience in modeling and in AI. If I want to get a job at Autodesk on the water resources engineer side, what position should I apply for? I'd like to get your advice.	1) The value is scale for operational use cases. A well-trained surrogate can reduce model evaluation from hours or days to minutes even seconds, but there is an upfront cost in generating and validating training simulations. Surrogates are worthwhile when a model must be evaluated using hundreds or thousands of scenarios for forecasting, optimisation/control or rapid scenario screening. 2) I would look for job opportunities across Solutions Engineering, Customer Success/Consulting, or Product/software/AI engineering. Search Autodesk Careers and look for current or future openings.	Eland Afuang
6	Some of the SQL syntax is not recognised by ICM infoworks when generated by AI. Are there any prompts to force Generative AI to code in ICM infoworks compatible format?	The AI application e.g., ChatGPT, Claude, Cursor, etc. would require connecting to Autodesk Product Help MCP server and preferably also to the Autodesk Water Infrastructure GitHub repository.	Eland Afuang
7	Thoughts on best practice for validating/reviewing large scripts generated by ai agents? I find it challenging to use agentic outputs as they generate a lot of lines of code which can be difficult to understand and/or review.	I would avoid reviewing large scripts as one unit. Ask the agent to decompose the task into smaller tasks, state assumptions and test before implementation. The best way to validate is to run the scripts on the modelling application e.g., InfoWorks ICM and see if it produces the expected outcomes/results.	Eland Afuang
8	What are your thoughts on the risks of a breach of privacy of clients information if using AI?	I would treat AI as another external data processing service. Use only approved enterprise tools within your organisation. Autodesk is leading the way via Autodesk Trust website and publishes security, compliance and trusted AI guidance for every product capability e.g., Autodesk Assistant.	Eland Afuang
9	Professional regulatory bodies like EGBC require professionals to take full accountability for AI generated/assisted work. How would you handle risks of professional misconduct from AI mistakes? And how can AI surrogate models be defensible for regulatory submissions?	live answered	Matthew Piggott

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10	Will you be sharing the Model Calibration with AI?	This is something our development team are exploring. If you have a particular usecase, we would love to hear about it	Matthew Piggott
11	which Australian water utilities are you currently working with?	lets connect after to discuss	Matthew Piggott
12	Are there many advantages on using InfoWorks ICM over TUFLOW?	As we are from Autodesk, we would tend to have some bias answering this question :). If you would like to catch up after the webinar, we can discuss further.	Matthew Piggott
		TUFLOW is exceptional at what it does: fast, transparent, high resolution 2D hydraulics. But many projects today demand more than a hydraulic engine — they need a full catchment modelling environment. That's where InfoWorks ICM changes the game.	
13	Is the Agentic AI writing both Python scripts and Ruby Scripts?	live answered	Matthew Piggott
14	Have the surrogate models been set up in the software?	Not at this stage	Matthew Piggott
		in python?	
15	Can you use a more general use LLM from Claude or GPT to interact with your Autodesk Assistant? So the frontier model can bring more general knowledge and the local LLM brings better domain knowledge of Autodesk?	This is not supported. The Autodesk Assistant in InfoWorks ICM is hosted directly within the application based on help and knowledge based documentation. Users can connect their enterprise Claude or GPT to the Autodesk Product Help MCP server and Autodesk Water Infrastructure GitHub repository for much better context and AI training.	Eland Afuang
16	Can Autodesk Assistant be used for calibration?	Autodesk Assistant can help explain calibration workflows and troubleshoot modelling questions, but it's not currently capable of automating model calibration. Querying model data/ simulation results and automated model editing are being built and tested under development.	Eland Afuang
17	How to control token usage?	For Autodesk Assistant, currently there is no token usage. Autodesk token flex and InfoWorks cloud compute usage are separate concepts.	Eland Afuang