

When a developer needed an urgent solution for water infiltration at a building site on Sydney's northern beaches, the Kennards Hire pump team swung into action.

Pump specialist Mark Snook vividly recalls his first visit to the site, at Brookvale.

"It was like a swimming pool. It was 100 metres long by 50 metres wide. The water was a metre deep in places!"

The SOS call had come from Brian Gillen, project manager for Hannas, the property development and civil infrastructure company.

Hannas was converting a single-storey building into a three-level industrial warehouse with mezzanine office space and basement level for storage.



They had carried out early excavation works, but a contract for the dewatering had fallen through, leaving the project at a standstill.

"The basement was below the water table and there was a lot of groundwater," Brian said

"We were in a bit of bother because we couldn't move forward until we sorted it out."

KENNARDS HIRE STEPS IN

Brian had met Mark at a function six months earlier. Mark had mentioned that he was a pump product specialist, and told Brian to call him if he ever had any water problems.

"I called him and he came out straight away with his environmental testing specialist," Brian said.

"I was giving him my two cents' worth, and Mark gave me the correct information. We're always grateful to our suppliers for the knowledge they come with."

After 30 years in the pump and water management industry, Mark took the challenge in his stride.

"We put together a plan to sink several wells, lower the pumps into them and pump out the water. We said we would help manage the water treatment with our personnel using online monitoring."

Preliminary testing of the water revealed excessive turbidity and very low pH, which meant it couldn't simply be discharged into the stormwater system.

Raising the pH levels rectified the issues, bringing the water into line with council parameters for stormwater.

REDUNDANCY KEY IN CASE OF RAIN

Mark said redundancy was built into the plan in case of major rain events.

"We put in nine wells and kept three redundant to mitigate any risk. It cost a bit more to install but when we had 40-50 mm of rain, we were able to put additional pumps in the wells and continue dewatering," he said.

"That lowered the water table sufficiently for them to be able to start their works. It's all about constructability."

Brian said there was reassurance in knowing Mark's team was monitoring the situation.

"Construction sites are always evolving and Kennards Hire was always there to monitor the ground water and respond," he said.

"It was the strategic location of each individual well that made a difference. It was also the type of well, the PVC pipes they used and the aggregate around them to make sure the water from the site flowed into the well and it wasn't getting clogged up.

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CASE STUDY > KENNARDS HIRE PUMP TEAM DRIES OUT HANNAS WORK SITE

"Once the water was free flowing and it was going into the well, we were able to discharge that through the water treatment system, which Kennards Hire supplied. That's where it mixes with the chemicals and brings down excess contaminants.

Once we got the correct readings to satisfy the council requirements we could discharge into the stormwater system."

Brian said the response from Kennards Hire was swift and professional throughout the project.

"It wasn't just the equipment they supplied, it was the service and the knowledge they displayed. They were cutting costs where they could, reducing the chemicals, until we reached the sweet spot," he said.

"They were able to turn it around very quickly and we haven't had any issues since. Importantly the site has remained dry."

If groundwater is a problem on your project, talk to the pump specialists at Kennards Hire.













Credit: Kennards Hire assists Hannas with dewatering on an industrial warehouse development project in Sydney.