

D-Day harbours inspire floating housing estates for flood zones

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Ben Webster Environment Editor

When Winston Churchill ordered the construction of giant floating harbours for the Allied invasion of Normandy in 1944, he cannot have imagined that his idea would be appropriated 70 years later to build luxury lakeside homes.

Now a developer inspired by the wartime leader's Mulberry harbours is proposing to build a floatable housing estate. The idea could be adopted around the country to meet demand for new homes in attractive waterside locations without exposing the owners to the risk of flooding.

The 24 "Can-float" homes would be built on 170-tonne hollow concrete platforms designed to rise on guide poles during floods, while remaining permanently connected to dry land via a hinged ramp.

The four-bedroom homes, each costing about £1 million, would be built on the shores of Theale Lake near Reading under plans submitted to West Berkshire council.

The project would help to reduce the risk of flooding in Reading because during extreme rainfall the lake would be used to store a million cubic metres of floodwater from local rivers and streams. The floodwater could raise the level of the lake by more than half a metre but the homes would rise by the same amount, staying dry.

Floodline Developments believes that the concept could be used to alleviate flood risk in many other areas, with some of the profits from building floatable housing estates on lakes and rivers used to fund increases in floodwater storage capacity.

Restrictions on building in flood zones would not apply because the new estates would be at no risk of flooding and would also help reduce the risk for existing homes.

More than 16,000 homes were flooded after three severe storms in December. Climate scientists predict that such events will become more frequent with global warming.

Justin Meredith, Floodline's managing director, had the idea for Can-float homes while sailing in Portland harbour in Dorset, where two sections, or caissons, from Churchill's Mulberry harbour are moored. They were towed back from France after the 1944 invasion. "I saw them and thought, 'What a good idea'," said Mr Meredith.

"The Mulberry harbours have clearly



Plans have been submitted for 24 "Can-float" homes to be built on a lakeside in Berkshire. The four-bedroom houses, costing about £1 million each, could lead the way for homes to be safely built in areas prone to flooding



showed that they have longevity. They were built in the 1940s but are still there and will be there for many, many years to come. Most people would love to live by the water and here is a way it can be done safely."

Floodline is also about to submit an application for two homes in Christchurch, Dorset, and hopes to build more in other flood zones. "If we were to do it upstream of any major conurbation it would bring benefits from effective flood storage funded completely by private development," he said.

Another company is planning to combine floating homes with floating roads to provide temporary villages for people forced out of their homes. Richard Coutts, director of Baca Architects, which designed an "amphibious house" on a small island in the Thames at Marlow in Buckinghamshire, said: "During the last decade we have experienced some of the most extreme flood events and we need more adaptive architecture to respond to that."

He said that homes which could rise with floodwater were a better option than building them on raised plinths, which would be ugly and require the inhabitants to climb a flight of stairs to reach their front door.

How a Can-float house works

