

# Millbrook Flood Risk Management Scheme

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# 1977 Tidal Flooding Event



# 1981 to 2012

- No tidal flooding
- Tidal Barrier has protected Millbrook from tidal flooding over 100 times
- No main river flooding
- Risk of flooding from Main River significantly reduced

# Flooding in Nov and Dec 2012



# Modelling

- We commissioned our consultants to undertake a study of the flooding. The purpose of the modelling was to investigate:
- the main causes of flooding including testing 'lake full against 'lake dry' scenarios
- the standard of protection of the fluvial Millbrook Flood Alleviation Scheme
- Opportunities to optimise the performance of the FAS

# Modelling Outputs

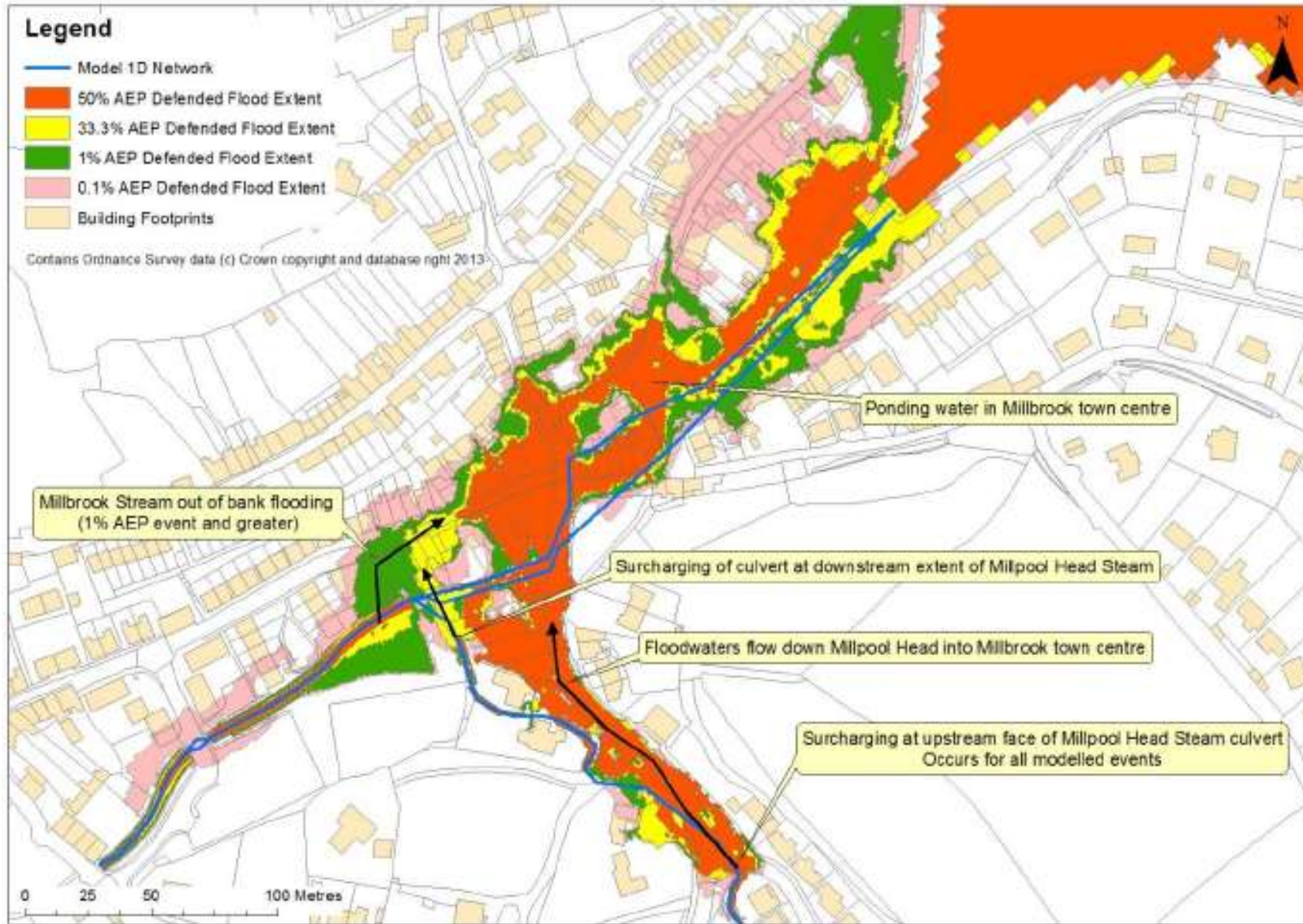


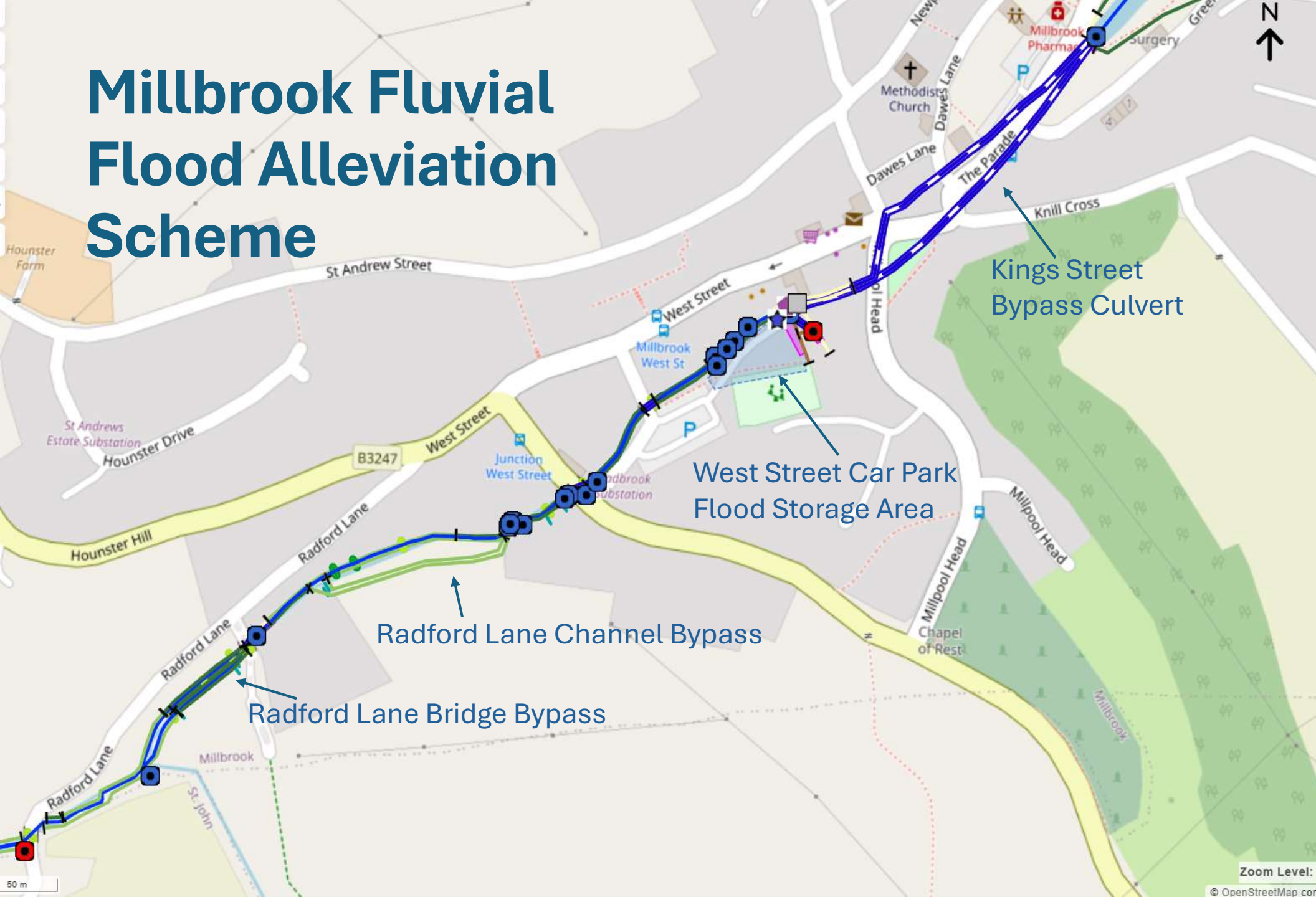
Figure 6-1 - Flood extents for the 50%, 3.33%, 1% and 0.1% AEP flood events - defended model (lake initially full)

# Modelling Conclusions

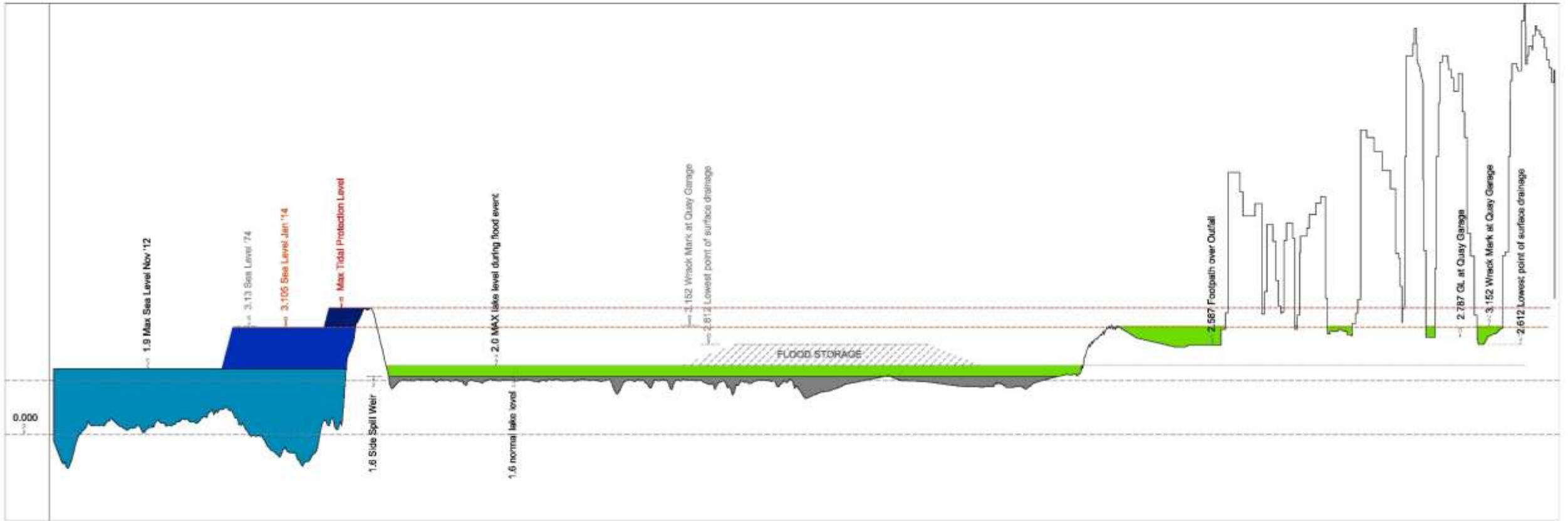
- Water levels and depths were compared at key locations - the village square, and within the lake
- When Millbrook Lake is initially dry, there is a 4cm and 2cm reduction in flood depths within Millbrook village centre for the 2% and 1% AEP events, respectively, compared to flood depths which occur when the lake is initially full. There is no difference in flooding depths or extents for the more frequent flood events (50%, 10% and 3.33% AEP).



# Millbrook Fluvial Flood Alleviation Scheme



# Lake and Town Levels



A large, light green circular graphic on the left side of the slide. Inside the circle, there are several white, stylized human figures with their arms raised, arranged in a circular pattern. The text "Questions ....." is overlaid on this graphic.

**Questions .....**