



# Water Resource Associates

*A network of consultants in hydraulics, hydrology, groundwater & environmental issues*

**Project title:** Bocking Mill Flood Appraisal

**Summary:** Survey and Investigation of flooding and frequency analysis for urban development.

<b>Client:</b> N Chapman Associates	<b>Financed by:</b> Client
<b>Period of assignment:</b> 2001-2002	<b>Location:</b> United Kingdom
<b>Project Value:</b> £ 1 980	<b>WRA services:</b> Flood risk assessment

## Background

An old brown-field industrial site was investigated, which was the subject of a planning application for residential housing, located upstream of a footbridge over the River Pant in the town of Bocking. The site was originally a Cortaulds dyeing factory. Planning approval had been given for the site as it was believed to lie above the 1:100 year flood level. However, during the planning process, flooding occurred at the site in October 2001, inundating not only the old factory, but also a substantial number of adjacent residential properties.

WRA carried out a survey of flood levels across the area, using visible marks left by the flood, and obtained discharge data for the River Pant, from Environment Agency gauging stations upstream and downstream of Bocking. Hydrological analysis of the gauged flow data provided the basis for determining the frequency of flood events affecting the site.



Pant River Gauging Station

The Council continued to raise concerns that the 2001 flood indicated that proposed development of the site would be inadvisable.

Analysis of all information suggested that statistically the flood had rate of return well in excess of that required for planning consent, and further discussion was held with the Environment Agency to discuss the proposals.



Surveying flood levels on properties in Bocking



Evidence of flood level on the window of a local garage

Project Number 000079

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