



the River Restoration Centre

Working to restore and enhance our rivers

Technical Advice

Icklingham Sluice, River Lark

Options assessment for Icklingham Mill Sluice

KEY INFO

Date: February 2017

Clients: Environment Agency

Type: Structural options appraisal,
flood risk management

Themes: Longitudinal connectivity,
floodplain reconnection



The Environment Agency commissioned RRC to carry out an options appraisal of the Icklingham Mill Sluice on the River Lark, Suffolk, and identify cost effective options for flood risk management. The structure is at risk of failure if it is not repaired or maintained, as well as acting as a barrier to migratory fish. Furthermore the remnant navigation channel is over-deep, over-wide and disconnected from the floodplain.

The RRC assessment included a field visit to meet the owners of the mill, and identify issues with the sluice; and a desktop study to review possible options for fish passage and geomorphological enhancement. Historical maps and aerial photographs were used to identify palaeo-channels in the landscape, which were used alongside LiDAR data to develop potential bypass channel pathways (see images). A series of options were suggested including:

- Restoration of the remnant mill channel for fish passage
- Notching the sluice gate for fish passage
- Partial or full demolition of sluice
- Larinier type fish pass
- Rock ramp fish pass channel

