The Holocene Evolution
of the London Thames

for the London Underground Limited
Jubilee Line Extension Project

MoLAS MONOGRAPH 5

Jane Sidell, Keith Wilkinson,
Robert Scaife & Nigel Cameron

Museum of London Archaeology Service
# CONTENTS

## PART 1 BACKGROUND AND METHODOLOGY

### Introduction

1. The Jubilee Line Extension Project
2. History of the project
3. Objectives of the palaeoenvironmental project
4. This volume

### Project methodology

1. Introduction
2. Fieldwork
3. Assessment
4. Analysis

### The palaeoenvironmental context of the JLE project

1. Introduction
2. Late Quaternary geology and geomorphology of the Jubilee Line Extension
3. Late Devensian and Holocene vegetation and environmental change in London

## PART 2 SITE STRATIGRAPHIC AND PALAEENVIRONMENTAL DATA

### Holocene environments in Westminster

1. Introduction
2. The archaeology of Thorney Island
3. Storey’s Gate
4. Parliament Square
5. Palace Chambers South
6. Westminster Underground Station
7. St Stephen’s East
8. Conclusions: the sedimentation and environment of Westminster

### Middle and Late Holocene environments in west Southwark

1. Introduction
2. The archaeology of Southwark
3. Joan Street
4. Union Street
5. Conclusions: the sedimentation and environment of west Southwark

### Holocene environments in Rotherhithe and Canning Town

1. Introduction
PART 3  CORRELATION, DISCUSSION AND CONCLUSIONS

Late Glacial and Holocene development of the London Thames

Introduction ....................................................... 103
Lithostratigraphic sequences: depositional environments, chronology and diagenesis ................................. 104
The braided river of the Late Devensian .......................... 106
A meandering river of the Early and Middle Holocene .......... 107
Transition to a tidal river ........................................ 109
The tidal river of the Late Holocene .............................. 110

Holocene vegetation development in London

Introduction: the natural vegetation ................................ 111
Influences of the Neolithic ........................................ 112
The Bronze Age woodland ........................................ 113
The Iron Age ....................................................... 115
Roman and post-Roman periods ................................. 115

The interaction of environmental change and human habitation

Introduction ....................................................... 118
Prehistoric site location, taphonomy and representation ........ 118
The influence of the changing river on human occupation .... 121
The Jubilee Line Extension and future palaeoenvironmental studies of the London Thames ........................... 122

Appendix: Analytical methodologies

Introduction ....................................................... 125
Sedimentology ..................................................... 125
Biostratigraphy .................................................... 127
Dating .............................................................. 128
Topographic modelling ........................................... 129

French and German summaries .................................... 130

Bibliography

The Research Archive ............................................ 132
Published works and other reports ............................... 133
Index .............................................................. 139