OUSE WASHES

SUMMER FLOOD CONTROL

NRA

National Rivers Authority
Anglian Region

HISTORY

The fens, rivers, defensive banks and washes as we know them today are almost entirely man-made. The fenland area, situated where several rivers ran off higher ground into the Wash, was for centuries a wet, boggy area frequently under water and inhabited by sparse populations of fen men who lived on the numerous areas of "high" ground and who survived mainly by summer grazing, fishing, wildfowling, reed harvesting and their cunning and knowledge of the area. In 1630 Francis Russell the Earl of Bedford formed a Company of Adventurers and engaged the Dutch Engineer Cornelius Vermuyden to drain the "Great Level" of the Fens.

Cornelius Vermuyden

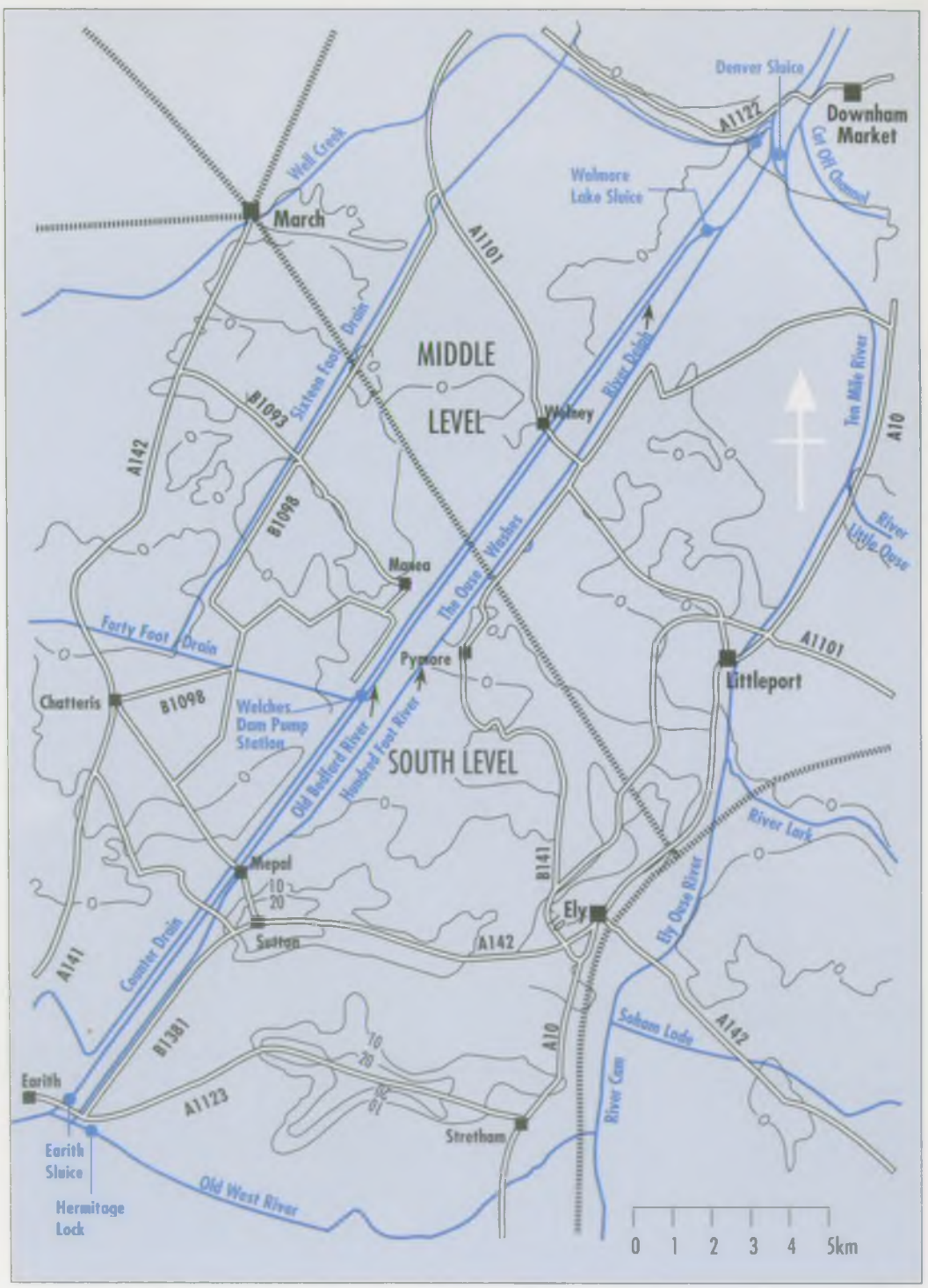
Oliver Cromwell

By 1637 the old Bedford River was complete but many of the locals complained that there was no real improvement. In 1638 the King intervened in the argument and re-engaged Vermuyden to take a fresh look at the problems. In the same year the complaining commoners appointed Oliver Cromwell of Ely as their advocate against the drainage which was seen as unfairly depriving local people of their livelihood.

In 1650, having fought and won the Civil War, Cromwell again called on the expertise of Vermuyden to complete the New Bedford or Hundred Foot River and a sluice at Denver.

These two channels run straight towards the Wash enclosing a flood land (The Ouse Washes) which still fills with and conveys flood water as Vermuyden intended.

These man made wetlands, between the Old Bedford and the New Bedford (or Hundred Foot) River act as a safety valve for flood water in the Great Ouse Catchment. Adjacent to and on the outer edge of those rivers are the Barrier Banks which form the rims of the water retaining area known as the Ouse Washes.



THE WASHES TODAY

Flood Conveyance and Storage

Normal flows in the Bedford Ouse pass along the Hundred Foot River to the Tidal River.

In times of high flow, water levels rise and Earith Sluice is opened to pass water along the Old Bedford/River Delph. This channel has limited capacity and excess water flows out of the river and onto the Washes.

The Washes act partly as a flood storage area and partly as a wide, shallow flood relief channel. Floodwater passes slowly along the Washes until it can rejoin the Old Bedford/River Delph and discharge through Welmore Lake Sluice to the Tidal River.

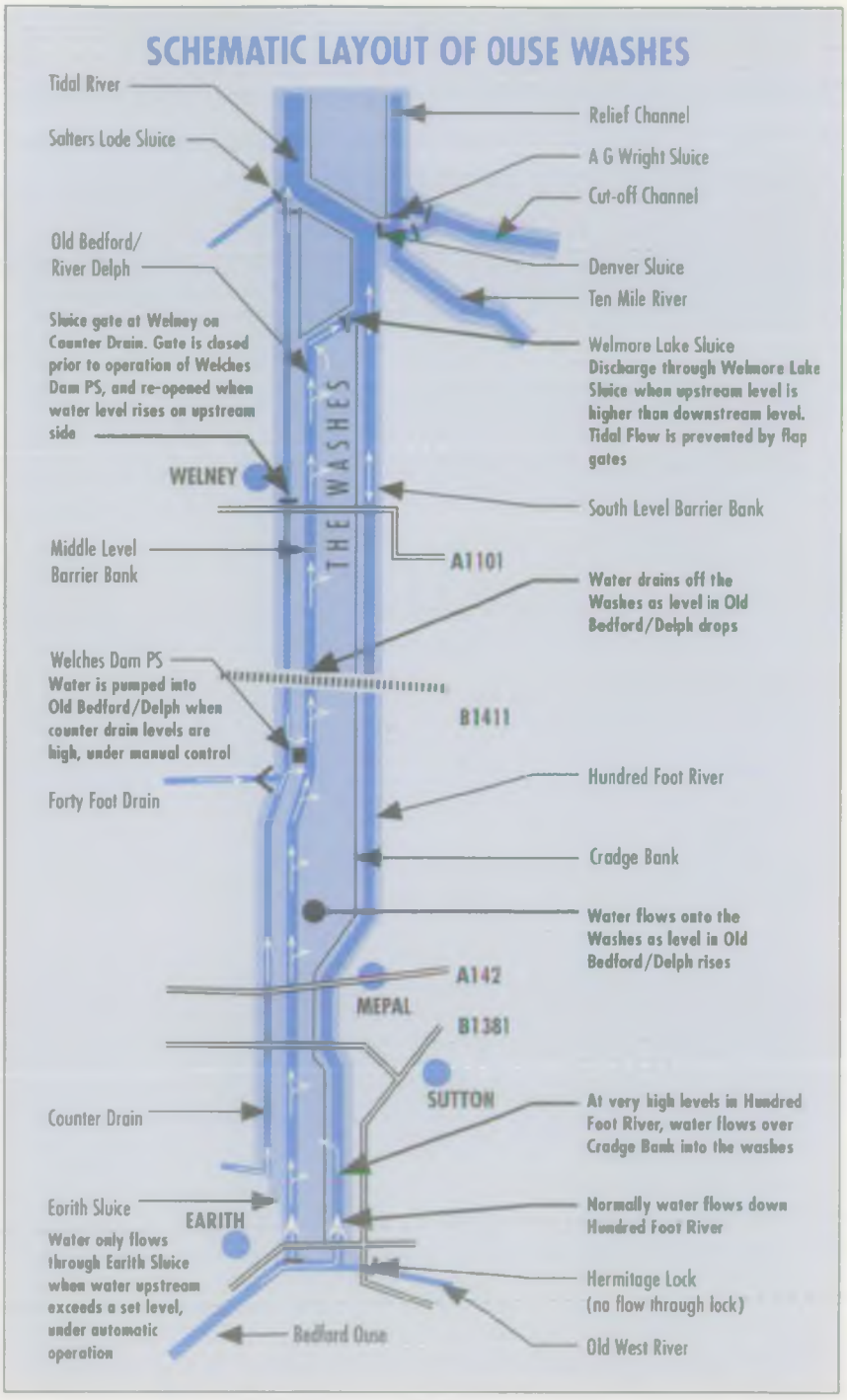
In more severe conditions, or linked with high tides, the level of water in the Hundred Foot River may also rise and flow over the Cradge Bank and onto the Washes.

The efficiency of the Washes to carry flood water relies on an open landscape being maintained. Any growth of reeds or bushes restricts the flow of water.

The Washes are grazed in Summer when flood conditions permit, and this grazing is an important feature of the maintenance of the Washes as a flood relief channel.

The Washes

Old Bedford River



THE WASHES TODAY

Environmental Interest

The function of the Ouse Washes as a flood relief channel, flood storage area and as Summer pasture land has allowed considerable ecological interest to develop.

The Washes are designated an SSSI and as an internationally important wetland have RAMSAR status and are a Special Protection Area (SPA) for wild birds. A wide variety of wetland vegetation, wildfowl, waders and invertebrates are present and include many nationally rare species.

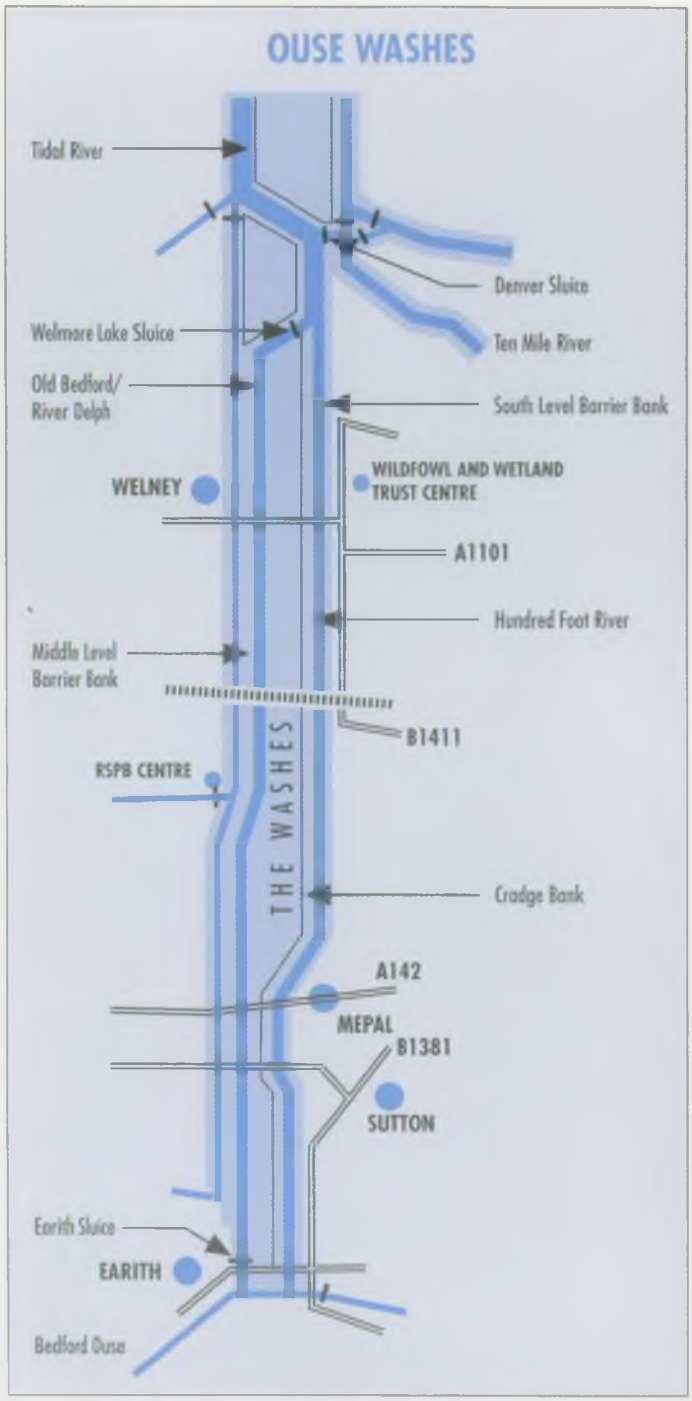
Birds

Black Tailed Godwit

Ruff and black-tailed godwit are the two waders for which the Washes are particularly noted, but many other species of wader are also present and breed here.

Internationally important numbers of Bewick's swan and Whooper swan are found overwintering and nationally important numbers of migrating wildfowl including teal, widgeon, gadwall, shoveler, pintail, pochard, tufted duck and coot as well as mute swans and cormorants.

The Washes support an RSPB Reserve, a Wildfowl and Wetland Centre as well as other Wildfowl interests and Beds, Cambs and Hunts Wildlife Trust.



Green Winged Teal

Plants and Vegetation

Over 300 species of higher plants have been recorded on the Washes including two nationally rare protected species - ribbon leaved plantain and least lettuce. Marsh and damp grasslands predominate.

The Old Bedford/River Delph contains several nationally scarce species including fringed yellow water-lily and river water dropwort.

Invertebrates

Whilst there are few comprehensive records of the invertebrate species there is known to be an extremely rich variety to be found in the ditches, rivers and ponds. To maintain the current environmental interest in the Washes it is essential to manage the land and water levels.

Dragonfly

Flowering Rush

Pasture must be grazed in Summer to maintain the existing flora and to provide the habitat for fauna. Breeding success in wetland birds is desirable and can be encouraged by reduction of Summer flooding.

English Nature and NRA have recently published a joint management strategy for the Washes (Introductory Paper).

Landscape

The Washes are one of the last remaining UK examples of regularly flooded freshwater grazing marsh. This leads to a magnificent and unparalleled landscape.

The Ouse Washes

THE WASHES TODAY

Agriculture on the Washes

Principle agricultural activity on the Ouse Washes is summer grazing of cattle and sheep. In some washes hay is cropped and at the north end the higher washes support some arable farming.

Wildfowling

Wildfowing, a traditional occupation for the Ouse Washes, is now a significant recreational pursuit in this important inland freshwater wetland.

The Threat to the Washes

The value of the Washes as a flood relief channel, pasture land and as a nature reserve is under threat. The effect of flooding in Summer is reducing the viability of cattle grazing. Flooding also threatens the breeding success of ground nesting birds.

If grazing cannot be maintained, then the present species of grasses will be lost and sweet reed grass, Glyceria, will predominate the Washes. This is unsuitable for both grazing cattle and birds. If these circumstances persist fen carr would develop with a consequent loss in the ability of the Washes to convey flood water effectively as well as reducing the existing outstanding conservation value, a major environmental impact.

Overgrown fen

Flooded land

Grazing the washes

The Threat to the Fens

If fen carr is allowed to develop, flood flows along the Washes will be obstructed. The level of flood water would rise and the risk of serious flooding to adjacent people and property within the fenland would increase.

The work of Vermuyden and numerous subsequent drainage Engineers will be reduced. The economy of fenland will be put at risk and the environment and habitat of the Washes will be irreversibly changed.

OUSE WASHES FLOOD CONTROL

The Future Study

NRA require the nature of the Ouse Washes to be preserved as an open landscape to continue their role as a flood storage reservoir and flood relief channel (particularly in winter).

A study has been promoted to examine the causes and effects of summer flooding, and to consider options which may form part of a strategy to control or alleviate summer flooding.

This study will include detailed liaison with all users of the washes including environmental bodies, agricultural and recreational interests.

The needs of the environment will be assessed and fully considered in the development of any proposals to control summer flooding. When options have been prepared they will be assessed and published in an Environmental Statement as required by Statutory Instrument SI 1217. The study is due to be complete in 1995. Further information may be obtained, or comments concerning the Ouse Washes, addressed to the Project Manager, Gordon Heald, at NRA Anglian Region, Kingfisher House, Goldhay Way, Orton Goldhay, Peterborough. PE2 5ZR.

Flooded land

The National Rivers Authority

Guardians of the Water Environment

The National Rivers Authority is responsible for a wide range of regulatory and statutory duties connected with the water environment.

Created in 1989 under the Water Act it comprises a national policy body coordinating the activities of 8 regional groups.

The main functions of the NRA are:

Water resources	—	The planning of resources to meet the water needs of the country; licensing companies, organisations and individuals to abstract water; and monitoring the licences.
Environmental quality and Pollution Control	—	maintaining and improving water quality in rivers, estuaries and coastal seas; granting consents for discharges to the water environment; monitoring water quality; pollution control.
Flood defence	—	the general supervision of flood defences; the carrying out of works on main rivers; sea defences.
Fisheries	—	the maintenance, improvement and development of fisheries in inland waters including licensing, re-stocking and enforcement functions.
Conservation	—	furthering the conservation of the water environment and protecting its amenity.
Navigation and Recreation	—	navigation responsibilities in three regions — Anglian, Southern and Thames and the provision and maintenance of recreational facilities on rivers and waters under its control.

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