An introduction to Internal Drainage Boards (IDBs)



What is an Internal Drainage Board?

An Internal Drainage Board (IDB) is a local public authority that manages water levels. They are an integral part of managing flood risk and land drainage within areas of special drainage need in England and Wales.

Each IDB has permissive powers to undertake work to provide water level management within their Internal Drainage District (IDD), undertaking works to reduce flood risk to people and property and manage water levels for local needs. Much of their work involves the maintenance of rivers, drainage channels, outfalls and pumping stations, facilitating drainage of new developments and advising on planning applications. They also have statutory duties with regard to the environment and recreation when exercising their permissive powers.



The forerunners of today's IDBs date back to the time of Henry III who established a Commission for drainage of Romney Marsh in Kent in 1252. Most IDBs today were established by the Government following the passing of the Land Drainage Act 1930. The activities and responsibilities of IDBs are currently controlled by the Land Drainage Act 1991 as amended by subsequent legislation. IDBs are also defined as Risk Management Authorities within the Flood & Water Management Act 2010 alongside the Environment Agency, local authorities and water companies.

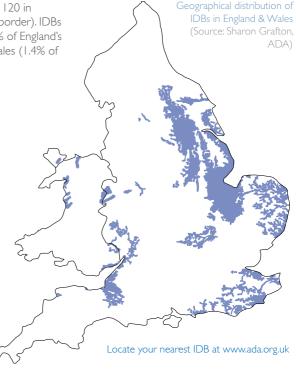
Today, there are 121 IDBs in Great Britain, 120 in England and 3 in Wales (2 IDBs cross the border). IDBs cover 1.2 million hectares of England (9.7% of England's total land area) and 28,500 hectares of Wales (1.4% of the Wales' total land area).

Where can I find an IDB?

IDBs manage drainage districts which occur in areas of special drainage need. The district each IDB covers is therefore determined by the local hydrology and not by political boundaries such as those of counties.

They either occur in broad open areas of lowland such as The Fens, Somerset Levels or Humberhead Levels or within the floodplains of rivers.

IDBs are geographically concentrated in Cambridgeshire, Kent, Lincolnshire, Norfolk, Nottinghamshire, Somerset and Yorkshire.



What are IDBs responsible for?

IDBs' primary role is to manage water levels and reduce the risk from flooding within their districts. Much of their work involves the maintenance and improvement of watercourses and related infrastructure such as pumping stations, weirs, sluices, culverts and embankments within their drainage districts.

Under the Land Drainage Act 1991, each IDB exercises a general power of supervision over all matters relating to water level management within its district. In pursuance of this role they can prohibit the obstruction of watercourses within their district. Thus, anyone constructing or altering a weir, bridge, embankment, culvert or similar obstruction must first seek the consent of the IDB before undertaking works. IDBs also have a series of bylaws relating to the management of watercourses and can designate features and structures within their district which relate to managing flood risk. A designation prevents the owners from altering, removing or replacing the structure or feature without the consent of the IDB.

IDBs input into the planning system by facilitating the drainage of new and existing developments within their districts, and advising on planning applications, specifically the use of sustainable urban drainage systems (SuDS).

IDBs conduct their work in accordance with a number of general environmental duties and promote the ecological wellbeing of their districts. They have a specific duty to further the conservation and enhancement of all designated environmental sites within their districts such as SSSIs.

Some IDBs may also have other duties, powers and responsibilities under specific legislation. For instance the Middle Level Commissioners and Witham Fourth District IDB are also navigation authorities. During drought IDBs play a key role in keeping water levels higher and facilitating the transfer of water.

Defra is the Government department responsible for IDBs and the work of an IDB is closely linked with that of the Environment Agency and Lead Local Flood Authorities (and Local Authorities over planning issues).

IDBs are not, however, responsible for watercourses designated as main rivers within their drainage districts; the supervision of these watercourses is undertaken by the Environment Agency.



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Why are IDBs so important to the UK?

Covering I.2 million hectares of England (9.7% of the total land area) and 28,500 hectares of Wales (1.4% of the total land area), IDBs have a significant operational role within the following areas:

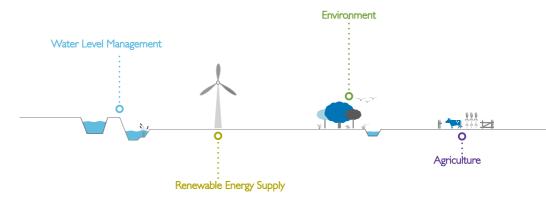
WATER LEVEL MANAGEMENT

IDBs' primary role is to manage water levels and reduce the risk from flooding within their districts.

Much of IDBs' work involves the maintenance and improvement of watercourses and related infrastructure such as pumping stations, weirs, sluices, culverts and embankments within their drainage districts. IDBs are responsible for the maintenance of over 22,000km of watercourses located within their districts.

RENEWABLE ENERGY SUPPLY

Currently over 30 onshore windfarms and 6 planned (I operational) bio-energy power stations are located within IDB districts. Such sites will need careful water level management to avoid flooding or damage to associated infrastructure. Other renewable energy production techniques are currently being considered by IDBs with regards to powering pumping stations with micro-generation, such as solar photovoltaic, micro wind, hydro and combined heat and power plants.



ENVIRONMENT

IDBs conduct their work in accordance with a number of environmental duties, and aim to promote sustainability and the ecological wellbeing within their districts. Every IDB has its own Biodiversity Action Plan and strives to maintain watercourses as sympathetically as possible. They have a specific duty to further the conservation and enhancement of all designated environmental sites within their districts, including 398 SSSIs.

AGRICULTURE

There are approximately 50,000 farms or land-holdings within IDB districts in England & Wales growing crops and raising livestock for food. The service provided by IDBs underpins the food production of the majority in the most valuable and productive land in the UK, with over 50% of Grade I agricultural land in England situated within IDBs. Water level management by IDBs is an essential component to continuing the food security of the UK.

TRANSPORT

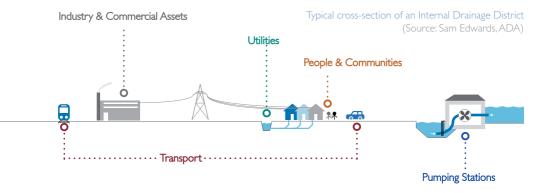
Approximately 129 miles of motorway and 910 miles of railway runs through IDB districts. Including major commuter links, such as the A1, M4, M5 and the East Coast Mainlineconnecting London to the South West, Wales, North East and Scotland. Without efficient and continuous water level and land management from IDBs, and communication with other transport authorities, loss of these transport routes would affect millions of commuters every year.

INDUSTRY & COMMERCIAL ASSETS

Although primarily rural, some IDB districts also contain several other significant industrial or commercial assets: 42 caravan/leisure parks and 68 major industrial premises (including the Port of Grimsby & Immingham in the Humber Estuary, which is the UK's largest port by cargo tonnage – importing 20 million tonnes of oil and 10 million tonnes of coal per annum – and 13th largest in Europe).

UTILITIES

Within England and Wales there are 201 operational major power stations that supply the UK's high demand for electricity. Of these major power stations 56 are located within Internal Drainage Districts, equating to 53% of installed capacity (potential maximum power output). Water supplies (both domestic and commercial) rely on effective water level and quality management, all of which would suffer from no IDB action.



PEOPLE & COMMUNITIES

IDBs play a key role in directly reducing flood risk to 600,000 people who live and/or work within IDB boundaries, and 879,000 properties (domestic and commercial). Notwithstanding this, the total infrastructure that complements these communities would also be greatly affected. Local Authorities pay a 'special levy' to IDBs for people, property and infrastructure, benefitting from their work.

PUMPING STATIONS

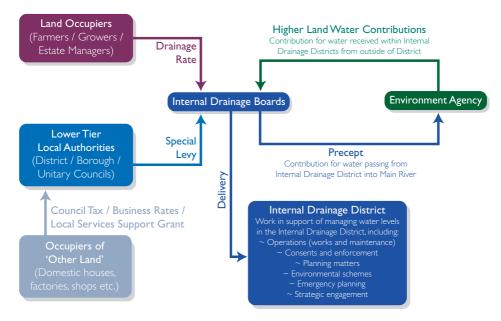
The majority of IDB districts require pumping to some degree for water level management, the rest are reliant on gravitational flows to main rivers and estuaries. 53 IDBs have more than 95% of their area dependent on pumping. 635,722 hectares of land in IDB districts rely on pumping – almost 51% of the total. This is facilitated by at least 500 pumping stations.

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How are IDBs funded?

The expenses of an IDB are predominantly funded by the local beneficiaries of the water level management work they provide. Each IDB sets a budget for its planned work in the forthcoming year and any investments it needs to make for future projects. Section 36 of the Land Drainage Act 1991 determines that these expenses of an IDB shall be met by:

- Drainage rates collected from agricultural land and buildings within the Internal Drainage District;
- Special Levies issued on District and Unitary Authorities within the Internal Drainage District;
- Contributions from the Environment Agency (see Higher Land Water Contributions (HLWC) from EA to IDB).



Flow chart of IDB finance input and outputs (Source: Ian Moodie, ADA)

Drainage Rates and Special Levies

All land and properties within a Drainage District are deemed to derive benefit from the activities of an IDB and therefore subject to contributions to the expenses of the IDB paid annually to the Board. For the purposes of rating, properties are divided into

- a) Agricultural Land and Buildings (farmhouses, barns, stables, silos etc.)
- b) Other Land (such as domestic houses, factories, shops etc).

Occupiers of all "Other Land" pay Council Tax, Business Rates or Local Services Support Rates to the District or Unitary Authority who then are charged a Special Levy by the Board in proportion to the annual value of this "Other Land".

The Board, therefore, only demands Drainage Rates direct on Agricultural Land and Buildings. The division of the expenses of the IDB raised via drainage rates versus special levy is determined by the total annual value of all agricultural land and buildings in the Internal Drainage District versus the total annual value of all other non-agricultural land and buildings within the Internal Drainage District.

As land moves out of agricultural production and is built on so the appropriate rates and levies are adjusted proportionately. The IDB can be informed of such changes either directly by the land occupier/owner or by the respective Council's District Valuer.

Note: Differential Rates | Section 38 of the Land Drainage Act 1991 enables the division of Internal Drainage Districts for the purposes of setting different drainage rates and special levies in each sub-district. In principle, Differential Rates are only used to reflect differential levels of service from an IDB. This may occur where a part of the District is pumped and another part drains under gravity, or where some parts of the District receive a reduced or enhanced level of benefit from IDB activity (e.g. significantly higher land within the District, or coastal land within the District). For more information, seek the Association of Drainage Authorities' briefing paper for IDBs on Differential Rating Orders at www.ada.org.uk.

Higher Land Water Contribution (HLWC) from EA to IDB

Higher land water contributions (also known as highland/higher level water contributions) are enabled under Section 57 of the Land Drainage Act 1991. An IDB may make an application to the Environment Agency for a contribution in relation to the quantity of water which that district receives from lands at a higher level outside of the Board's district.

It provides funding to contribute to additional water management pressures and therefore additional pumping/maintenance required to manage water from higher in a catchment entering an IDB's Drainage District. Applications for HLWC are made on an annual basis, and their payment are at the discretion of the Environment Agency.

Additional funding

IDBs can also secure grants to assist with the funding of capital and environmental works projects via Flood Defence Grant in Aid (FDGiA) from Defra, the lottery funding agencies and the European Union where appropriate. In May 2011 the Secretary of State for the Environment introduced a new Partnership Funding policy for flood and coastal risk management projects in England which encourages funding to be secured from sources other than FDGiA. Thus the level of FDGiA funding a project receives relates directly to the public benefits it delivers as set out in the Outcomes Measures guidance available on the Environment Agency's website.

Environment Agency Precept (from IDB to EA)

Section 141 of the Water Resources Act 1991 enables the Environment Agency to issue precepts to IDBs requiring payment of any amount required to be contributed by those Boards towards the expenses of the Environment Agency.

The Precept allows local funds raised by an IDB to finance works essential to the Main River (statutory designated watercourses which are the responsibility of the EA) within, adjacent or flowing from or into an IDB's Drainage District. In principle the money is raised by the EA from the IDB for the benefit of the respective District or Districts served. The payment of an EA Precept is compulsory, however an IDB may appeal this precept if they feel it unfair, and may request details of how it has been spent by the Agency.

Financial Security

Long-term certainty of finance is essential to sound water level and flood risk management. Water level management is a daily job, requiring regular action, which must be planned well in advance. In contrast, flood risk mechanisms may only be tested infrequently but must meet the standards demanded of them on these critical occasions. Both activities transcend political and spending periods as currently set out by the Government.

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Acknowledgements

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Cover photo

'Water' Vole-enteers' – Watching watervoles in an IDB channel Cliff Carson (Middle Level Commissioners)

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