

# APPENDIX 1: Options Appraisal<sup>1</sup>

## Contents

|   |    |
|---|----|
| APPENDIX 1: Options Appraisal.....                        | 1  |
| Introduction: .....                                       | 3  |
| Options .....   | 3  |
| Risks and opportunities of viable options .....           | 4  |
| Option 1: No Consensus –NOT RECOMMENDED .....             | 4  |
| Description.....  | 4  |
| Known LA Costs .....                                      | 4  |
| Opportunities .....                                       | 4  |
| Risks .....   | 4  |
| Evaluation .....  | 5  |
| Option 2: No Replacement IDB –NOT RECOMMENDED .....       | 6  |
| Description.....  | 6  |
| Known LA Costs .....                                      | 6  |
| Opportunities .....                                       | 6  |
| Risks .....   | 6  |
| Evaluation .....  | 7  |
| Option 3: Replacement IDB –PREFERRED OPTION .....         | 8  |
| Description.....  | 8  |
| Known LA Costs .....                                      | 8  |
| Opportunities .....                                       | 8  |
| Risks .....   | 9  |
| Evaluation .....  | 9  |
| Risk Assessment.....                                      | 10 |
| IDB configuration: Opportunities.....                     | 11 |
| Other Risks.....  | 12 |
| How IDBs Are Funded .....                                 | 12 |
| Capital Funds .....                                       | 13 |
| Critical Assets Overview .....                            | 14 |
| Pumping Stations .....                                    | 14 |
| Pumping Station Estimated Maintenance Cost Summary: ..... | 14 |
| Joint Local Authority Legal Advice .....                  | 15 |
| How are IDBs governed .....                               | 17 |

---

<sup>1</sup> Prepared by the East Sussex IDB Steering Committee Joint-Working Group.

|  |    |
|--|----|
| Appendix A: An Introduction to IDBs, Association of Drainage Authorities (The national representative of IDBs in England and Wales).....         | 20 |
| Appendix B: Executive Summary excerpt from Pevensey Levels Water Level Management Plan review 2014 (Environment Agency and Natural England)..... | 29 |
| Appendix C: Government Correspondence .....  | 36 |
| Letter from Owen Paterson MP, May 2014.....  | 36 |
| Letter from WDC to Eric Pickles, October 2014.....   | 38 |
| Letter from EBC to Eric Pickles, October 2014 .....  | 41 |
| Appendix D: Maps of IDD's  |    |
| CuckmereIDD.....   | 43 |
| OuseIDD.....   | 44 |
| Pevensey IDD.....  | 45 |

## Introduction:

The Environment Agency has advised that they intend to dissolve their responsibility for managing the IDD's within East Sussex. Pre-dissolution, a joint working group—the East Sussex Steering Group—has been set up to evaluate a number of options for the future management of drainage within the areas involved. The Local Authorities have met separately over the last few months to discuss the proposals and undertake an options appraisal, the conclusions of which are set out in this report.

## Options

| <b>Option</b> | <b>Description</b>                                     | <b>Additional Detail</b>   |
|---------------|--|--|
| Option 1      | No Consensus   | Defra imposes IDB (Pevensey)   |
| Option 2      | No Objection to IDB Dissolution;<br>No Replacement IDB | Drainage areas revert back to land-owner control; alternatively, recommend community-led water-level management. |
| Option 3      | New IDB  | New, independent Board to take over drainage area(s).  |

## Risks and opportunities of viable options

| <b>Option 1: No Consensus –NOT RECOMMENDED</b> |  |
|--|--|
| <b>Description</b>                             | In the event East Sussex LAs cannot arrive at a consensus as to whether or not to have a joint or regional IDB, it is likely that Defra will impose an IDB for the Pevensey IDD, and that the IDBs for Cuckmere and Ouse will effectively be lost, reverting to land-owner control <sup>2</sup> .  |
| <b>Known LA Costs</b>                          | <p>LA special levy annual contributions to Pevensey IDD to remain as the below, based on the 2014-15 forecast as per the EA Annual Report for Pevensey IDD:</p> <ul style="list-style-type: none"> <li>• WDC: £38,435</li> <li>• HDC: £9,779</li> <li>• RDC: £3,584</li> <li>• EBC: £193,186</li> </ul> <p>The above monies have been historically reimbursed from the Department of Communities and Local Government through their Revenue Support Grant. This funding is to be superseded by the Settlement Funding Assessment (SFA), which is guaranteed to continue until 2021. ESCC and WDC are pursuing the future uncertainty of this government funding with the Secretary of State</p>  |
| <b>Opportunities</b>                           | <p>None identified. However, if a replacement IDB for Pevensey is dictated, there would be future opportunities with that IDB, including:</p> <ul style="list-style-type: none"> <li>• Pevensey IDB would be primary contact for any related drainage issues, alleviating responsibility and time for participating authorities;</li> <li>• Pevensey IDB could provide specialist advice to LAs regarding SUDS approval and other drainage issues;</li> <li>• A new independent IDB for Pevensey is likely to reduce operating costs for that drainage district (relative to the situation at the moment).</li> </ul>  |
| <b>Risks</b>                                   | <ul style="list-style-type: none"> <li>• DCLG revenue support grant that offsets LA contributions not guaranteed beyond 2021 could well place an additional financial burden on some LAs.</li> <li>• If no IDB, LA may incur costs due to increased enforcement dealing with surface water drainage issues.</li> <li>• No IDB could result in loss of investment in local drainage area(s) that could adversely impact the economic viability of the area.<sup>3</sup></li> <li>• Potential that, if an IDB is set-up, special levy rates may be set that are unacceptable to individual LAs.</li> <li>• No guarantee that a new IDB would reimburse LAs of any/all incurred expenses in the setup of a new IDB.</li> <li>• Elected members may not have the time or resources to sit and make decisions on the board.</li> <li>• If no IDB, increased public anxiety and scrutiny of LAs in event of flooding; increased reputational risk to LAs if no Board.</li> </ul> |

<sup>2</sup> Pumps or assets within the Ouse and Cuckmere drainage districts would pass on to land owners or, possibly, control might be retained by the EA. At this stage it's difficult to be certain what would happen to the pumps in particular.

|                          |   |
|--------------------------|---|
|                          | <ul style="list-style-type: none"> <li>• Composition of Board may not reflect LAs best interests</li> <li>• Population in and around an IDD may be disgruntled (e.g. due to levy increases, increased occurrence of road closures, etc.), which could impact voting preferences.</li> <li>• No IDB could result in uncoordinated water level management, increasing water levels and flood risk.</li> <li>• Increased flood risk to roads (most notably, the A259) and some property due to lack of a coordinated drainage management plan.<sup>4</sup></li> <li>• Loss of Cuckmere IDD and Ouse IDD (i.e. if Defra imposes IDB, it would be for Pevensey only and the Ouse and Cuckmere wouldn't warrant own IDB/IDD) could result in greater flood risk for that drainage district.</li> <li>• Potential environmental health issues. For example, those resulting from increased threat of cross-contamination (e.g. foul drainage surcharging or compromised performance); Impact upon sewage works operating near an IDD.</li> <li>• Potential for increased/unmanaged invasive weed problems, which may have an impact on systems outside of drainage district boundaries.</li> </ul> |
| <p><b>Evaluation</b></p> | <p>This option should be avoided due to:</p> <ul style="list-style-type: none"> <li>• It may not prevent a replacement IDB, as a Pevensey IDB would likely be forced on LAs who are affected by the IDD ;</li> <li>• The Pevensey IDB would be stand-alone and would lose financial resources for Cuckmere and Ouse IDBs;</li> <li>• Lack of coordinated water level management for Cuckmere and Ouse;</li> <li>• The inability for the LAs to come to a unified decision may reflect poorly on LAs involved within the communities in and around the IDBs.</li> </ul>  |

<sup>3</sup> LAs would lose the ability to collect special levy (detailed under “known LA costs”), as well as EA contributions into IDBs/IDBs that are termed “higher land water contributions”. In 2013/14, for example, no IDB would have resulted in a loss of up to £53,000 total contribution (£31,000 for Pevensey IDD, £20,000 for Ouse IDD, and £2,000 for Cuckmere IDD). If a Pevensey IDB were imposed, the loss would be around £22,000 p.a. Source: Internal Drainage Boards in England, Annual Reports for the Year Ended 31 March 2014, Defra.

<sup>4</sup> Pevensey Levels Water Level Management Plan review 2014: Technical assessment for the future management of the Pevensey Levels Site of Special Scientific Interest, Environment Agency and Natural England, DRAFT 14/10/2014.

| <b>Option 2: No Replacement IDB –NOT RECOMMENDED</b> |  |
|--|--|
| <b>Description</b>                                   | If the LAs jointly agree not to replace the East Sussex IDB, then the three drainage districts will either revert back to land-owner control or, alternatively, LAs can recommend community-led water level management. LAs have permissive powers with regards to drainage which could in all likelihood require exercising in either scenario. Alternatively, LAs (LDC in particular) are exploring the possibility of retaining the Revenue Support Grant monies for management of drainage district(s) internally.   |
| <b>Known LA Costs</b>                                | The LA costs under this option are unknown. Whilst LAs will be relieved of obligatory annual special levy contributions to an IDB, economic repercussions in an uncoordinated and potentially unreliable water-level management approach could be adopted.   |
| <b>Opportunities</b>                                 | None identified.   |
| <b>Risks</b>   | <ul style="list-style-type: none"> <li>• If no IDB, LA may incur costs due to increased enforcement dealing with surface water drainage issues.</li> <li>• No IDB could result in loss of investment in local drainage area(s) could adversely impact the economic viability of the area.<sup>5</sup></li> <li>• If no IDB, increased public anxiety and scrutiny of LAs in event of flooding; increased reputational risk to LAs if no Board.</li> <li>• Increased accountability for LA as have permissive powers (LAs are not currently responsible for IDD).</li> <li>• Population in and around an IDD may be disgruntled (e.g. due to levy increases, increased occurrence of road closures, etc.), which could impact voting preferences.</li> <li>• No IDB could result in uncoordinated water level management, increasing water levels and flood risk.</li> <li>• Increased flood risk to roads (most notably, the A259) and some property due to lack of a coordinated drainage management plan.<sup>6</sup></li> <li>• Loss of Cuckmere IDD, Pevensey IDD and Ouse IDD could result in greater flood risk for these drainage districts.</li> <li>• Potential environmental health issues. For example, those resulting from increased threat of cross-contamination (e.g. foul drainage surcharging or compromised performance); Impact upon sewage works and other infrastructure operating near an IDD.</li> <li>• Potential for increased/unmanaged invasive weed problems, which may have an impact on systems outside of drainage district boundaries.</li> </ul> |

<sup>5</sup> LAs would lose the ability to collect special levy (detailed under “known LA costs” in Option 1), as well as EA contributions into IDBs/IDDs that are termed “higher land water contributions”. In 2013/14, for example, no IDB would have resulted in a loss of up to £53,000 total contribution (£31,000 for Pevensey IDD, £20,000 for Ouse IDD, and £2,000 for Cuckmere IDD). Source: Internal Drainage Boards in England, Annual Reports for the Year Ended 31 March 2014, Defra.

<sup>6</sup> Pevensey Levels Water Level Management Plan review 2014: Technical assessment for the future management of the Pevensey Levels Site of Special Scientific Interest, Environment Agency and Natural England, DRAFT 14/10/2014.

|                   |  |
|-------------------|--|
| <b>Evaluation</b> | <p>This option should be avoided due to:</p> <ul style="list-style-type: none"><li>• Lack of coordinated water level management for any of the three E. Sussex drainage districts (most notably Pevensey) could result in excessive road closures and have numerous economic and development consequences in and around the drainage areas;</li><li>• Additional burden for the LAs with regards to some aspects of drainage and land owner grievances (which would otherwise be handled by an IDB).</li></ul> |
|-------------------|--|

| <b>Option 3: Replacement IDB –PREFERRED OPTION</b> |  |
|--|--|
| <b>Description</b>                                 | A new IDB (an independent risk management authority with permissive powers) would be created as part of the dissolution process of the existing EA IDB. The EA has agreed to continue the operational management throughout a reasonable transition period, under a Public Sector Cooperation Agreement, giving the participating LAs time and flexibility. IDBs, as independent statutory authorities, absorb nearly all of the risk affiliated with the drainage district(s) under its management, thereby reducing risk to LAs whilst presenting numerous opportunities and resources for both the LAs and the region.  |
| <b>Known LA Costs</b>                              | <p>LA special levy annual contributions to replacement IDB(s) to remain as the below, based on the 2014-15 forecast per the EA Annual Report for East Sussex IDD, until the new IDB(s) adjusts contributions:</p> <p><u>Pevensey IDD</u></p> <ul style="list-style-type: none"> <li>• WDC: £38,435</li> <li>• HDC: £9,779</li> <li>• RDC: £3,584</li> <li>• EBC: £193,186</li> </ul> <p><u>Ouse IDD</u></p> <ul style="list-style-type: none"> <li>• MSDC: £11,640</li> <li>• WDC: £8,834</li> <li>• LDC: £123,530</li> </ul> <p><u>Cuckmere IDD</u></p> <ul style="list-style-type: none"> <li>• WDC: £3,814</li> </ul> <p>The above monies have historically been reimbursed by the Department of Communities and Local Government through their Revenue Support Grant. This funding is to be superseded by the Settlement Funding Assessment (SFA), which is guaranteed to continue until 2021. ESCC and WDC are pursuing the future uncertainty of this government funding with the SOS.</p> |
| <b>Opportunities</b>                               | <ul style="list-style-type: none"> <li>• Reduced operating costs relative to situation today with an EA-managed IDB;</li> <li>• Opportunity to share administrative, technical, and operational resources between IDBs in time of need. This would be the case where one IDB manages two or more IDBs;</li> <li>• Improved biodiversity;</li> <li>• Continued maintenance and possible improvement of invasive weed problem;</li> <li>• Reduced accountability for LAs with an IDB, because the IDB would be accountable;</li> <li>• Decreased potential for public anxiety and scrutiny of LAs in event of flooding; decreased reputational risk to LAs and benefit of LAs being able to direct land owners to IDB with complaints, questions, etc.;</li> <li>• In the unrelated but likely event that SUDS (Sustainable Urban Drainage Systems) planning approval is transferred to LAs. An IDB would provide technical expertise and resources for LAs;</li> </ul>                            |



|                   |  |
|-------------------|--|
|                   | <p>this would be very advantageous for LAs in providing good technical guidance during the planning process.</p>   |
| <b>Risks</b>      | <ul style="list-style-type: none"> <li>• DCLG revenue support grant that offsets LA contributions not guaranteed beyond 2021 could well place an additional financial burden on some LAs.</li> <li>• Potential that, if an IDB is set-up, special levy rates may be set at an unacceptable level for individual LAs.</li> <li>• No guarantee that a new IDB would reimburse LAs of any/all incurred expenses in the setup of a new IDB.</li> <li>• Elected members may not have the time or resources to sit and make decisions on the board.</li> <li>• Composition of Board may not reflect LAs best interests</li> </ul>  |
| <b>Evaluation</b> | <p><b>This is the preferred option</b>, as the IDB—an independent statutory authority—will manage the drainage district(s) in the most effective, efficient way possible, removing any potential responsibilities from the LAs. This option of imposing replacement IDB(s) preserves the most flexibility for management of all three drainage districts most notably to benefit being, the SSSI and Ramsar designated Pevensey Levels. An IDB exists to manage water levels in a way that satisfies all regulations, whilst reducing flood risk and the risk of resulting infrastructure impacts (e.g. road closures, wastewater treatment plant functionality).</p> <p>The order of magnitude of the net benefits of the work of the Pevensey Levels IDD is approximately £16million per annum, broken down as follows<sup>7</sup>:</p> <ul style="list-style-type: none"> <li>• <b>Biodiversity £11M p.a.</b> – Protection of internationally and nationally important designated sites;</li> <li>• <b>Transport £3M p.a.</b> – Flood prevention to 13km of mainline railway, 4 railway stations, and 19 km of road including the A259;</li> <li>• <b>Food production £1.5M p.a.</b> – Flood protection to 236 ha or arable land and at least 1754 ha of grazing land;</li> <li>• <b>Recreation £1M p.a.</b>- Approximate annual income of Cooden Beach golf club.</li> </ul> |

<sup>7</sup> Pevensey Levels Water Level Management Plan review 2014: Technical assessment for the future management of the Pevensey Levels Site of Special Scientific Interest. Environment Agency and Natural England. DRAFT 14/10.2014. Refer to Appendix B for additional details.

## Risk Assessment

### Risk Score

- 0 = Negligible Impact
- 1 = Low Impact, Low Likelihood
- 2 = Low Impact, High Likelihood
- 3 = High Impact, Low Likelihood
- 4 = High Impact, High Likelihood

### Option No.

- 1 = No Consensus
- 2 = No Replacement IDB
- 3 = New IDB

|  |   | RISKS     |           |          |
|--|---|-----------|-----------|----------|
|  |   | 1         | 2         | 3        |
| Financial Risks  | DCLG revenue support grant not guaranteed beyond 2021 to offset LA contributions, placing financial burden on LA.   | 3         | 0         | 3        |
|  | If no IDB, LA may incur costs due to increased enforcement with regards to surface water drainage issues.   | 1         | 2         | 0        |
|  | No IDB could result in loss of investment in local drainage area(s) could adversely impact the economic viability of the area <sup>8</sup> .  | 3         | 4         | 0        |
|  | Potential that, if an IDB is set-up, special levy rates may be set that are unacceptable to individual LAs.   | 2         | 0         | 2        |
|  | No guarantee that a new IDB would reimburse LAs of any/all incurred expenses in the setup of a new IDB.   | 1         | 0         | 1        |
| Political Risks  | Elected members may not have the time or resources to sit and make decisions on the board.  | 2         | 0         | 2        |
|  | If no IDB, increased public anxiety and scrutiny of LAs in event of flooding; increased reputational risk to LAs if no Board.   | 2         | 4         | 0        |
|  | Composition of Board may not reflect LAs best interests.  | 1         | 0         | 1        |
|  | Increased accountability for LA (LAs are not currently responsible for IDD).  | 2         | 4         | 0        |
|  | Population in and around an IDD may be disgruntled (e.g. due to levy increases, increased occurrence of road closures, etc.), which could impact voting preferences.  | 1         | 2         | 0        |
| Flood Risks  | No IDB could result in uncoordinated water level management.  | 2         | 4         | 0        |
|  | Increased water levels and flood risk to infrastructure including roads (most notably, the A259) and some property due to lack of a coordinated drainage management plan.   | 2         | 4         | 0        |
|  | Loss of Cuckmere IDD (i.e. if Defra imposes IDB, it would be for Pevensy only and Cuckmere may not warrant own IDB/IDD) could result in greater flood risk for that drainage district.  | 2         | 2         | 0        |
|  | Loss of Ouse IDD (i.e. if Defra imposes IDB, it would be for Pevensy only and Ouse may not warrant own IDB/IDD) could result in greater flood risk for that drainage district.  | 4         | 4         | 0        |
| Environmental Risks                                      | Potential environmental health issues. For example, those resulting from increased threat of cross-contamination (e.g. foul drainage surcharging or compromised performance); Impact upon sewage works operating near an IDD. | 3         | 3         | 0        |
|  | Potential for increased/unmanaged invasive weed problems, which may have an impact on systems outside of drainage district boundaries.  | 1         | 3         | 0        |
| <b>Preferred Option Lowest Risk is Option 3, New IDB</b> |   | <b>30</b> | <b>32</b> | <b>9</b> |

<sup>8</sup> For example, if Ouse is not part of an IDB, then the EA higher level water contribution for that drainage district would be lost. In 2013/14, this would have been £20,000 per the Internal Drainage Boards Annual Report, 31 March 2014, Defra.

## **IDB configuration: Opportunities**

The strongly preferred option is Option 3: New IDB. However, as there are three drainage districts in East Sussex, there are numerous permutations that can exist under this option. The most pragmatic of these combinations follow:

1. One regional IDB managing all three IDD's (Pevensey, Cuckmere, and Ouse);
2. Three IDBs, one for each IDD;
3. Two IDBs, one for Pevensey and Cuckmere IDDs, and one for Ouse;
4. One IDB for Pevensey and Cuckmere IDDs, with the Ouse reverting to local control.

Certainly, when IDDs are rolled under the singular management of one IDB, the following opportunities present themselves:

- Decreased set-up costs;
- Decreased administrative costs and reduced operating costs to situation today with an EA-managed IDB;
- Increased resource sharing; opportunity to share administrative, technical, and operational resources between IDDs in time of need.

It is therefore recommended to have only one regional IDB, or to consolidate two IDDs under the management of one IDB (e.g. Pevensey and Cuckmere). However, simply having an IDB is preferable to not having one.

## Other Risks

There are other risks that could potentially impact on LAs or impact on other individuals and agencies that the LA is involved with. The risk to LAs is very negligible but they have been listed below for information:

- Land-owners at risk of higher drainage rates;
- If no IDB, lack of capital maintenance budget could result in expense to asset owner (likely to be either EA or, possibly, land owner) in event of unexpected asset failure (i.e. pump);
- Additional need for Natural England Enforcement under the Habitat and Species Regulations, and Wildlife and Countryside Act of 1981, this could be extremely resource intensive for this agency and incur them with increased costs if this aspect is not managed adequately;
- East Sussex County Council may have to use permissive powers in order to resolve issues under the Land Drainage Act;
- Risk enforcement against land owners.

A new IDB would absorb all risks associated with the operational management of the IDD's under its management (removing said risks from participating LAs). An example of these risks follows:

- There are no capital reserves available to transfer to any new IDB which is set up;
- Transfer of telemetry from existing proprietary-EA system to new IDB could be a costly one-time expense;
- Lack of compatibility between existing telemetry system and web interface for new IDB, resulting in levels and alerts data not being readily available, which could result in more person hours onsite;
- Existing IDB lack of follow-through on current maintenance plan (e.g. replacement of two motors scheduled for 2014/15 at Newbridge pumping station<sup>9</sup>);

## How IDBs Are Funded

As explained by the Association for Drainage Authorities (ADA), the way in which IDBs are funded follow<sup>10</sup>:

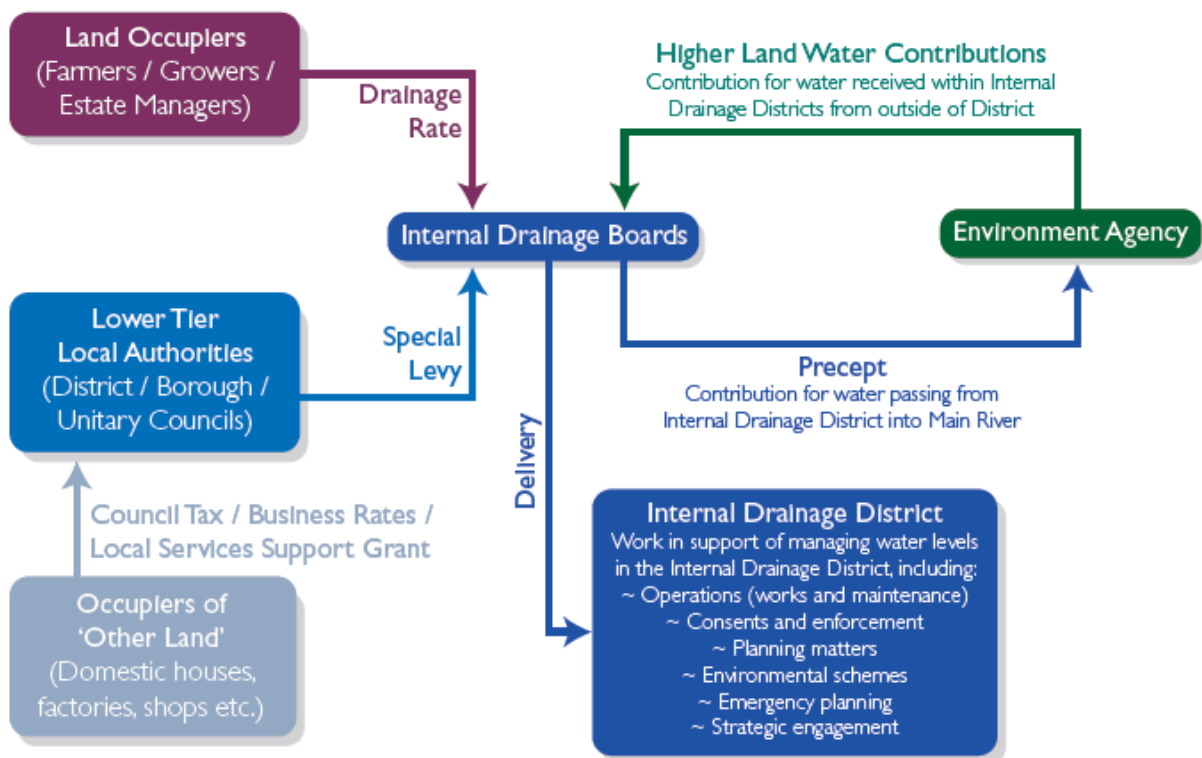
The expenses of an IDB are predominantly funded by the local beneficiaries of the water level management work they provide. Each IDB sets a budget for its planned work in the forthcoming year and any investments it needs to make for future projects. Section 36 of the Land Drainage Act 1991 determines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

---

<sup>9</sup> For more details on critical assets, refer to Critical Assets Overview section of this document.

<sup>10</sup> Excerpt from ADA Introduction to IDBs. Additional details can be found in Appendix A.



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

## Capital Funds

An on going discussion revolves around the absence of capital funds for a new IDB, which is a risk especially in the event of failure of a critical asset (i.e. pump) early in the new IDB's inception. A suggestions that could alleviate this risk, and which warrants further discussion, is to seek a soft loan from the EA that would be available to a new IDB in the event a major asset failure.

Additionally, according to Defra, issues pertaining to capital funds could be addressed **as follows** (with an IDB):

Capital funding – for replacement of assets such as pumps. All Risk management authorities, including IDBs and local authorities can apply for Flood Defence Grant in aid (FDGiA) to fund replacement of pumping stations. There is an element of FDGiA specifically to support SSSI actions and remedies, prioritised by Outcome measure 4... International designations [for which Pevensy Levels qualifies] get a higher priority for this funding.<sup>11</sup>

<sup>11</sup> Defra feedback June 2014

## Critical Assets Overview<sup>12</sup>

| IDD      | Area (ha) |       |       | Watercourses (km) |                   |       | Assets (pumps and sluices, qty); (km) |                       |                            |                    |
|----------|-----------|-------|-------|-------------------|-------------------|-------|---------------------------------------|-----------------------|----------------------------|--------------------|
|          | Urban     | Rural | Total | Main River        | OWC <sup>13</sup> | Total | Pump Stations                         | Sluices <sup>14</sup> | Watercourses <sup>15</sup> | Raised Embankments |
| Pevensey | 653       | 6060  | 6713  | 141               | 305.5             | 446.5 | 8                                     | 202                   | 105.5                      | 0                  |
| Ouse     | 1511      | 4004  | 5516  | 183               | 237               | 420   | 3                                     | 20                    | 50                         | 0.225              |
| Cuckmere | 41        | 706   | 747   | 48                | 38                | 86    | 0                                     | 17                    | 7                          | 0                  |

IDBs are stand-alone statutory authorities, who would be in charge of critical assets. This arguably removes potential liabilities from the LAs and/or landowners.

### Pumping Stations

The pumping stations are the most expensive aspect of the critical assets. There has been some consideration as to whether it would be acceptable for the EA to continue to service and maintain these. It is however unlikely to be a practical option for the following reasons:

- EA unwillingness and/or inability to retain operational control of pumping stations,
- Inability for IDB to implement the Water Level Management Plan (WLMP) or to adequately operate IDD's without ownership and/or control of all critical assets.

Representatives from this E. Sussex joint working sub-group have conducted site visits to the eight pumping stations in Pevensey IDD over the Summer 2014, accompanied by the EA Operations Delivery Team Leader for Pevensey IDD. Whilst they are significant assets, all observed stations are in reasonable working order and have been adequately maintained. However, it is recommended that a new IDB insist on the continuance of the currently-scheduled capital maintenance plan prior to inheritance of assets, including the replacement of two pump motors at Newbridge pumping station in Pevensey Levels IDD, which had been previously scheduled for 2014/15.

### Pumping Station Estimated Maintenance Cost<sup>16</sup> Summary:

|          | 10-yr Avg (£/yr) | Total 10-yr (£) | 50-yr Avg (£/yr) | Total 50-yr (£) |
|----------|------------------|-----------------|------------------|-----------------|
| Ouse     | 31,101           | 311,013         | 30,187           | 1,509,367       |
| Pevensey | 163,511          | 1,635,109       | 146,151          | 7,307,545       |

Note that the above represents average annual costs, not peak annual costs.

<sup>12</sup> Source for section comes from EA-document "TAW for East Sussex IDD Steering Group", November 2013.

<sup>13</sup> Ordinary Watercourse, includes those currently maintained and those currently not maintained by existing IDB

<sup>14</sup> Includes other water control structures

<sup>15</sup> Ordinary IDD Watercourses maintained by existing IDB; opportunity exists to expand maintenance to other watercourses in the IDD under a new IDB

<sup>16</sup> Includes regular maintenance, infrequent maintenance, and theoretical capital maintenance costs.

## Joint Local Authority Legal Advice

In August 2014 legal clarification, in the form of a Counsel's opinion, was sought around a number of aspects of this issue<sup>13</sup>.

The Conservation Habitat and Species Regulations 2010 require an appropriate authority to exercise their functions which are relevant to nature conservation so as to secure compliance with Habitat Directives. This includes any functions undertaken under the Water Resources Act 1991, the Land Drainage Act 1991 and the Natural Environment and Rural Communities Act 2006. The Habitats Directive refers to ensuring restoration or maintenance of natural habitats and species of community interest at a favourable conservation status. It also refers to avoiding deterioration of natural habitats.

The review being undertaken by Natural England of the Pevensey Level Water Management Plan is likely to have relevance in defining a 'favourable conservation status' in the Pevensey Levels area and influence the decision on what option is preferred by DEFRA. Natural England does have the enforcement responsibility to conserve biodiversity and therefore take a lead in regard to this aspect.

The only responsibility that Local Authorities have under the Wildlife and Countryside Act 1981 Act is to give Natural England notification of any activities that we are involved with that would be liable to cause damage to any flora, fauna, geographical or physical features within an SSSI. The Natural Environment and Rural Communities Act 2006 Act requires that Local Authorities must conserve biodiversity when exercising any of its functions.

District and Borough Authorities do have permissive powers under the various drainage and public health acts to deal with ponds, pools, ditches, culverts and gutters likely to be prejudicial to health. These powers can require works but local authorities have no absolute duty to exercise these powers. Only if Authorities chose to exercise these permissive powers do they then have a duty to conserve the environment.

Similarly the County Council will always need to secure compliance with the Habitats Directive whilst exercising its functions as the Lead Local Flood Authority. County has acquired additional duties, powers and responsibilities under the Flood and Water Management Act 2010 as the Lead Local Flood Authority. They must develop, maintain, apply and monitor an over-arching strategy for flood risk management across their area and then, in turn prepare and execute local plans for areas of specific flood risk. By the property-based definition of local flood risk in the 2010 Act, such plans are inevitably for built-up areas and will not include the Cuckmere Valley or the Pevensey Levels, although parts of the Ouse may be included..

ESCC have a duty to investigate flood incidents (to the extent it considers necessary and appropriate) and ascertain which authority or private owner has flood risk management responsibilities and whether that authority or owner has or is proposing to exercise those functions. They also have to duty to maintain a register of structures and features which are considered to significantly affect flood risk and this would include structures in all three current IDB areas.

If there is no Drainage Board there is little within drainage law that compels landowners to improve drainage or conserve the natural environment.

It is important to remember that there can be a contradiction between land drainage and conservation legislation, especially in the Pevensey Levels. Good practice in trying to deal with flooding issues by clearing ditches and moving water through the system as fast as possible may actually run into conflict with conservation requirements to retain water in the area to support the Natural England Water Level Management Plan which looks to manage water levels and leave plant life in ditches, in order to conserve the biodiversity of the area.

The Minister has already indicated support for the EA decision to step away from the current arrangement as evidenced by the letter to the County Council. A copy of this letter from Owen Paterson to East Sussex County Council is attached for information in Appendix III. There is a generally held view that the Minister would be unlikely to dissolve the current arrangements without ensuring something satisfactory is in place. Counsel has in fact supported that view and stated that:

*"I also think you all need to consider whether you would be better off with a newly constituted Board with the powers that affords you depending on the constitution of the new board"*

If an IDD is abolished provision would need to be made for its property and assets to be transferred. If a new IDD or IDB is set up then the transfer of current assets and liabilities including debts and unrecovered levies ought to be transferred to the new body. In one example, where a board was abolished elsewhere and no new board was put in its place assets were, ironically, transferred to the EA, as the most appropriate organisation<sup>14</sup>. In another example where there was an amalgamation of IDD's the property was transferred to the new Board that was set up<sup>15</sup>.

Additionally if the EA is in receipt of any capital funds or expects to receive funds/income to help towards the running of any assets, then the rights to these funds need also to be transferred to any new IDB. The view is and it has been expressed that assets such as pumping stations should be in a minimum acceptable condition when handed over to any new IDB (in the same manner that ESCC will only adopt a road built to an agreed standard).

Counsel also advised that need to ensure that the composition of any new board should be appropriate and suggested that would be particularly important to have a Natural England representative on the Board.

If the decision is made to set up a new IDB consideration would need to be given to any TUPE provisions that may exist as the function for managing this area would be passing from the EA to the IDB. The view is that this would be more appropriately addressed at the stage that a decision was made to set up such a board.

<sup>13</sup> In the matter of the proposal by the Environment Agency to stop acting as an Internal Drainage Board for the Internal Drainage Districts in East Sussex. Mary Cook. Cornerstone Barristers 13/08/2014

<sup>14</sup> Abolition of the Houghton and Wyton Internal Drainage District Order 2004/3423

<sup>15</sup> Amalgamation of the Foss Internal Drainage District and the Wilberfoss and Thornton Level Drainage Order 2011/810



## How are IDB's governed

IDB's are non – profit making organisations.

There is a board that governs the IDB this is made up of Elected and Appointed Members.

The elected members are elected by the ratepayers in accordance with the Land Drainage Act 1991. They may be either owners or occupiers of land in the district or nominated by the owner/ occupier of the land in the district. Drainage ratepayers are eligible to vote and elections occur every three years.

Appointed Members are appointed by the charging authorities within the district again in accordance with the Land Drainage Act 1991. They may be elected councillors, officers or others who have an interest, such as conservation or business in the district. The no of appointed members that each local authority can have on the board is dependent on the percentage of the special level that is paid.

An example is the Romney Marshes Board is set out below.

The Romney marsh board covers five electoral districts.

| <b>District</b>        | <b>Area of Drainage (ha)</b> | <b>Catchment Area (ha)</b> | <b>Area of Rated land (approx. ha)</b> | <b>No of elected members</b> |
|------------------------|------------------------------|----------------------------|--|------------------------------|
| Romney                 | 10443                        | 14552                      | 9414                                   | 6                            |
| Walland (lowland only) | 8916                         | 8916                       | 8377                                   | 6                            |
| Denge (lowland only)   | 3818                         | 3818                       | 960                                    | 2                            |
| Rother                 | 6592                         | 48240                      | 6070                                   | 4                            |
| Pett                   | 3401                         | 18380                      | 2570                                   | 3                            |
| <b>Total</b>           | <b>33170</b>                 | <b>93936</b>               | <b>27391</b>                           | <b>21</b>                    |

| <b>Charging Authority</b> | <b>% of Total Special Levy</b> | <b>No of Appointed Members</b> |
|---------------------------|--------------------------------|--------------------------------|
| Ashford Borough Council   | 2                              | 1                              |
| Rother District Council   | 21                             | 7                              |
| Shepway District Council  | 77                             | 14                             |
| <b>Total</b>              | <b>100</b>                     | <b>22</b>                      |





**Appendix A: An Introduction to IDBs, Association of Drainage Authorities  
(The national representative of IDBs in England and  
Wales)**

# An introduction to Internal Drainage Boards (IDBs)



Association of Drainage Authorities  
The national representative of IDBs in England & Wales

## 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.

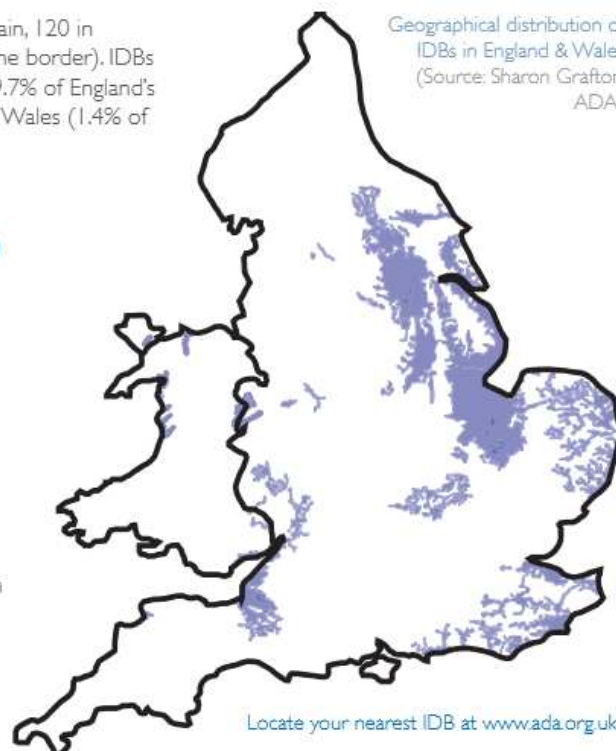
Today, there are 121 IDBs in Great Britain, 120 in England and 3 in Wales (2 IDBs cross the border). IDBs cover 1.2 million hectares of England (9.7% of England's total land area) and 28,500 hectares of Wales (1.4% of the Wales' total land area).

## 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.



## Why are IDBs so important to the UK?

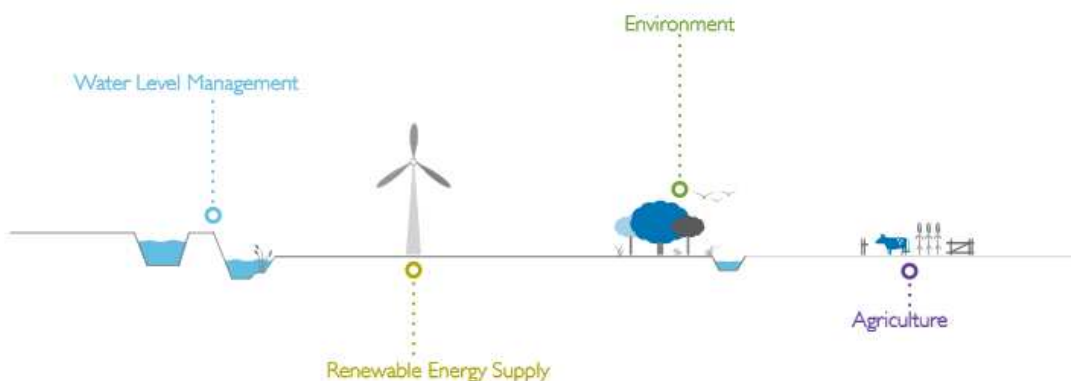
Covering 1.2 million hectares of England (9.7% of the total land area) and 28,500 hectares of Wales (1.4% of the total land area), IDBs have a significant operational role within the following areas:

### 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 (1 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 1 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

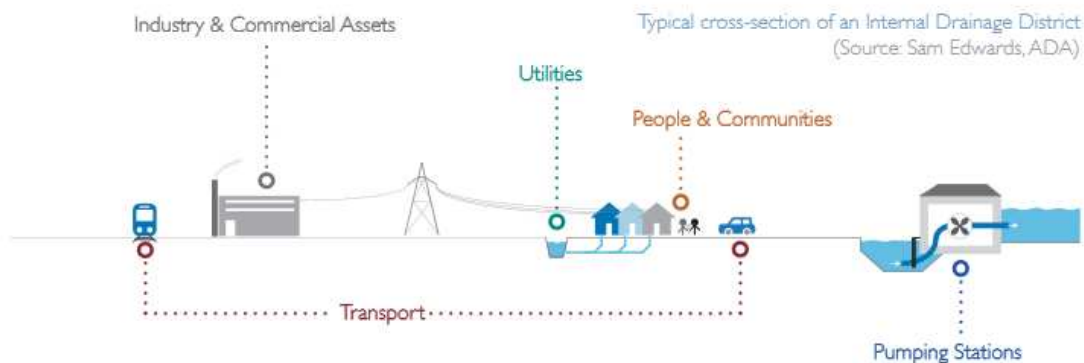
Approximately 129 miles of motorway and 910 miles of railway runs through IDB districts. Including major commuter links, such as the A1, M4, M5 and the East Coast Mainline connecting London to the South West, Wales, North East and Scotland. Without efficient and continuous water level and land management 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

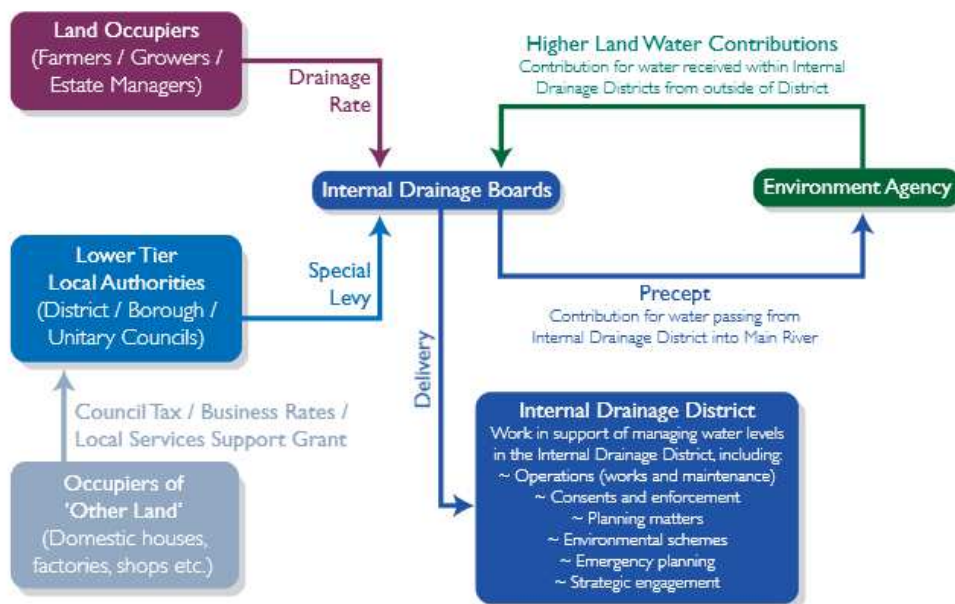
The majority of IDB districts require pumping to some degree for water level management, the rest are reliant on gravitational flows to main rivers and estuaries. 53 IDBs have more than 95% of their area dependent on pumping. 635,722 hectares of land in IDB districts rely on pumping – almost 51% of the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



## 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](http://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.

[www.ada.org.uk](http://www.ada.org.uk)

7



Association of Drainage Authorities  
The national representative of IDBs in England & Wales

## Acknowledgements

### Authors

Dr Jean Venables CBE FREng FICE MCIWEM – Chief Executive

Ian Moodie MSci – Technical & Research Assistant

Sam Edwards BSc AIEMA – Researcher & Production

### Cover photo

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

### Please respond to:

Sam Edwards

Address: 6 Electric Parade, Surbiton, Surrey, KT6 5NT

Telephone: +44 (0)20 8399 7350 | Fax: +44 (0)20 8399 1650

Email: [admin@ada.org.uk](mailto:admin@ada.org.uk) | Website: [www.ada.org.uk](http://www.ada.org.uk)



Early morning at South Walsham (Source: Pete Butler)

Booklet designed by Sam Edwards, ADA



**Appendix B: Executive Summary excerpt from Pevensey Levels Water Level Management Plan review 2014 (Environment Agency and Natural England)<sup>17</sup>**

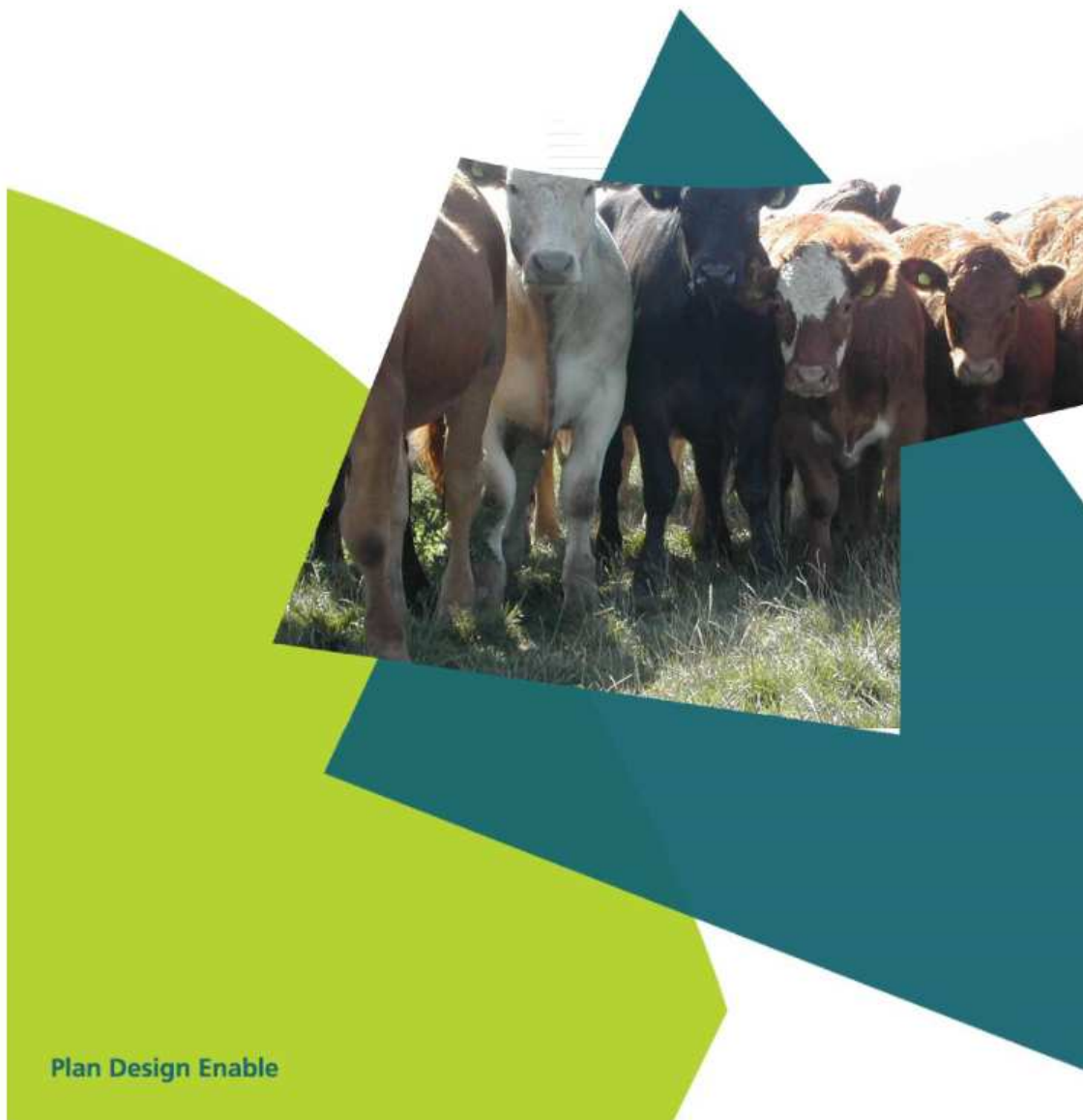
**Pevensey Levels Water Level Management Plan review 2014**

Technical assessment for the future management of the Pevensey Levels Site of Special Scientific Interest

Environment Agency and Natural England

14/10/2014  
Final report

**ATKINS**



---

<sup>17</sup> Draft 14 October 2014.

## Executive Summary

### Water Level Management Plan Review 2014

Natural England and the Environment Agency have commissioned a Water Level Management Plan Review of the Pevensey Levels Site of Special Scientific Interest (SSSI), hereafter known as 'the SSSI'. The review comprises three parts:

- An assessment of the success of the 2006 Plan implementation and recommendations for improving water level management
- The development of an operating manual to help future organisations manage water levels
- A technical assessment for the future management of the SSSI

This report forms part of the technical assessments and explores the possible routes for future management of the Pevensey Levels, and the associated impacts on costs and the benefits. This includes an assessment of the impact on flooding, farming systems and conservation features from switching off the pumps.

### The economic and environmental importance of managing water levels on Pevensey Levels

The Pevensey Levels SSSI, Ramsar and Special Area of Conservation (SAC), is a nationally and internationally important wetland site of approximately 450km of freshwater ditches dissecting 3,500 ha of wet grassland. The site is nationally important for the wintering lapwing flocks which feed on the wet ditches, and is internationally important for the diversity of plants and animals found in the freshwater ditches. Stable ditch water levels year round are crucial for the nature conservation interest of the site.

The area has 60 active farms and approximately 200 landowners. Most of the SSSI is given over to cattle and sheep grazing, with some arable cropping on the periphery. The traditional farming practices on the Levels – which include extensive grazing and rotational ditch management – are linked to the exceptional biodiversity value of the SSSI (see photos below). Water level management also benefits farming practice on the Levels: by ensuring ditches provide wet fencing, drinking water and good quality grazing for livestock.



*Traditional grazing practices and poaching of ditch margins by cattle (left) are important in maintaining the wetland habitat which supports the biodiversity interest including fen rafter spider (right)*

A benefit assessment of maintaining the SSSI under the Water Level Management Plan was undertaken. This assessment used Defra's benefit assessment toolkit developed from the 'IDB Beneficiaries and Performance Indicators (FD2659)' project. The toolkit was developed through consultation with a number of

IDBs and tested with six case study IDBs. The toolkit uses benefit categories defined in the Eco-systems Services Framework which reflect the range of goods and services that the environment provides to people. The application of the tool to the SSSI quantified the following annual benefits to the local area, every year:

- Biodiversity £11M – Protection of nationally important habitats and species requiring stable water level regimes, currently provided by the IDB.
- Transport £3M – Flood protection to 13km of mainline railway, 4 railways stations, and 19km of road including the A259, Whartling Road, Sluice Road and Rickney Lane, Newbridge Road and Down Ash Road
- Food production £1.5M – Flood protection to 236ha of arable land fringing the SSSI, and at least 1754ha of grazing land in the SSSI
- Recreation £1M – Approximate annual income of Cooden Beach golf club
- Carbon -£0.15M – Loss of carbon sequestration potential.

The total benefit of maintaining the SSSI as it currently is, even without biodiversity value, equates to approximately £5M per year.

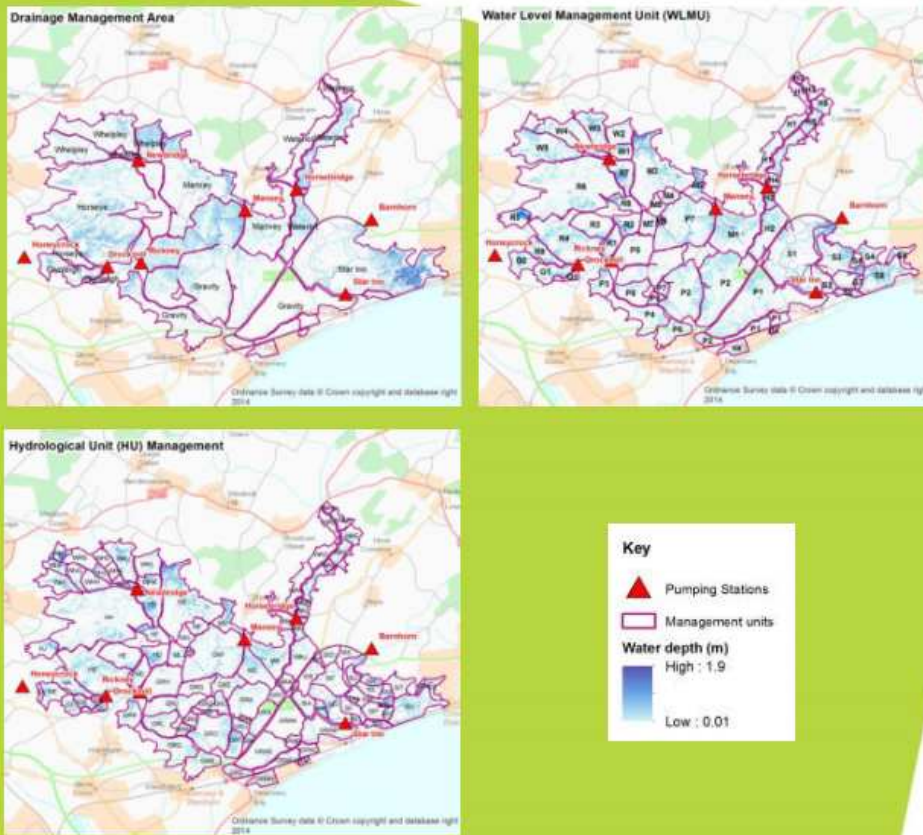
#### The current Internal Drainage Board

Water level management is currently undertaken by an Internal Drainage Board (IDB), responsible for the Internal Drainage District (IDD). An IDD is an area of special drainage need, normally administered by an IDB. An IDB gathers revenue through drainage rates from landowners and local authorities across the IDD to fund its activities which include managing water levels, land drainage and flood risk. At present, the Environment Agency operates as the IDB although in March 2016 this responsibility will be handed over to another organisation subject to the approval of the Secretary of State.

#### Current Water Level Management

The 2006 Plan appraised three scales of water level management which could achieve the objectives of the SSSI; Hydrological Units (HU), 104 units; Water Level Management Units (WLMU), 42 units; and Drainage Areas (DA), 8 areas. Hydrologically, management at the DA level was the preferred option due to the simplicity of only requiring 8 pumping stations to operate, however the loss of flexibility in water level management across large areas of the Levels was not supported by local landowners, and could lead to water levels in some parts of the SSSI being too deep or too shallow for conservation purposes. At the HU scale – water level management would be highly flexible but maintaining it at this level would be expensive to operate. HU scale management requires a greater onus on landowners to operate structures on their land using structures which are not operated by the IDB or Environment Agency.

At a WLMU scale, some of the flexibility under the HU option is retained using fewer structures and at lower cost. This was identified as the preferred option during stakeholder meetings, and was supported by the majority of local landowners as it delivers a range of benefits to local farming business. Consultation with landowners during the 2014 review, showed that water level management at the WLMU scale continues to be the favoured option.



#### Costs of managing the water levels on the Pevensey Levels

This review has provided a high level cost assessment of managing the SSSI under three alternative institutional scenarios:

1. **Independent IDB**  
A new independent IDB takes over running of the Pevensey Levels in 2016, continuing with management at the WLMU scale.
2. **IDD group**  
A group of IDBs work together in one IDD to lower running costs by exploiting the economies of scale associated with managing a larger geographical area. For example – the Pevensey IDB could be grouped with the IDBs of Ouse and Cuckmere.
3. **Riparian Ownership**  
The IDB is dissolved and riparian owners are made responsible for managing water levels based at the HU scale. This requires the management of structures on ditches owned by landowners.

As well as the direct costs of managing the SSSI by the above groups, the assessment includes additional resources that would be required by Defra and Natural England to manage the SSSI. The table below summarises the 'headline' costs under each institutional arrangement. These costs were gathered using information on the current management of the Pevensey Levels IDD, discussion with other IDBs, and drawing on a national DEFRA review of IDB costs.

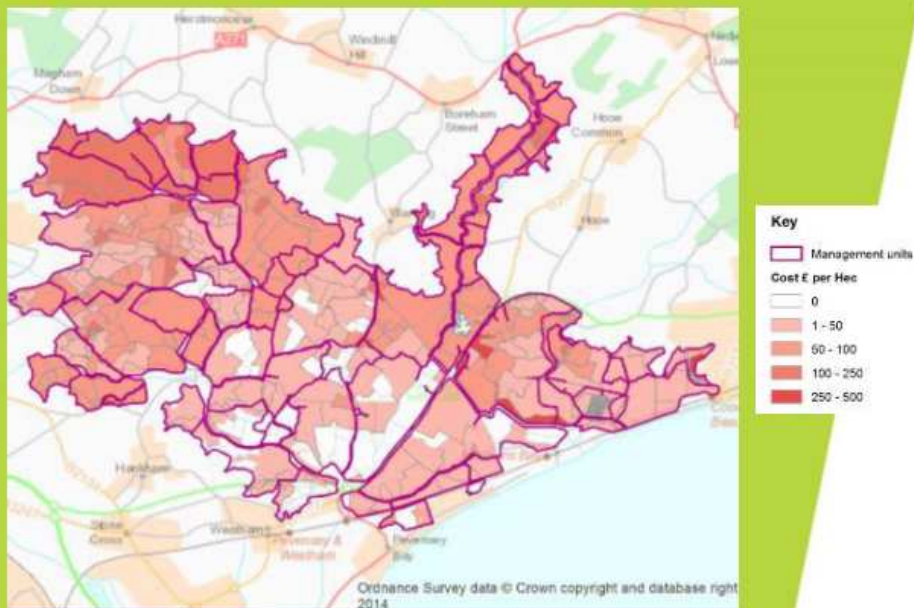


Riparian owner management of the SSSI is the most costly option overall. To the individual riparian owner, the costs will vary greatly not only based on the size of each landholding, but also on the number of structures and assets and the length of ditches requiring maintenance. Under this scenario, the costs to riparian owners could vary from zero, where a landowner has no IDB watercourses or operated structures on their land, to £500 per hectare where there is a large cluster of assets and watercourses requiring maintenance. The map below presents this variation, with an average cost of £64 per hectare.

*Cost and benefit (annual average) summary of managing the water levels of the Pevensy Levels in different institutional arrangements*

| Institutional arrangement | Hydrological arrangement | Total costs | Principal risks and benefits - pumps on  |
|---------------------------|--------------------------|-------------|--|
| 1. Independent IDB        | WLMU                     | £343k       | <ul style="list-style-type: none"> <li>Organised and cost effective water level management – no increase in Natural England management costs</li> </ul>  |
| 2. IDD Grouping           | WLMU                     | £312k       | <ul style="list-style-type: none"> <li>Organised and cost effective water level management. – no increase in Natural England management costs</li> <li>Reduced administration costs compared with the IDB.</li> </ul>  |
| 3. Riparian Owners        | HU                       | £539k       | <ul style="list-style-type: none"> <li>Low direct running costs of water level management (although these costs would represent significant proportion of farmers' income).</li> <li>Significant impact on local farming businesses.</li> <li>Increase in Natural England management costs for SSSI</li> <li>Management unlikely to be effective, increasing damage to the SSSI and reducing farm income.</li> </ul> |

Current annual land drainage rates paid by landowners for the management of the IDB are £2 per hectare. Based on the 2013 Farm Business Survey, annual profits for lowland rough grazing of cattle and sheep in the south east of England equate to £4 per hectare. In summary, the cost to riparian owners of riparian owner management would be many times their profits, making the current farming businesses on the SSSI financially unsustainable. In addition, the cost of management would have a significant negative impact on land prices, making it difficult for farmers to sell land.



#### Additional issues and costs following IDD dissolution

The Local Authority would have powers over and responsibilities for ordinary watercourses. These include every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than a public sewer) and passage through which water flows, but which does not form part of main river. Local Authority responsibilities would include:

- Carrying out works to manage flood risk contributing to the local flood risk management strategy
- Serving notice on riparian owners failing to maintain a watercourse adequately to manage flood risk
- Consenting Flood Defence works

It is expected that the Local Authority would need to serve notice on riparian owners more frequently than at present if the IDD were dissolved. Taking on the additional duty of consenting on Flood Defence works in an SSSI would be further complicated by the need for accompanying Habitat Regulations assessments. These processes will require additional Local Authority resources – in addition to the costs estimated above.

Natural England would require more resources to ensure the delivery mechanisms available for water level management work. Additional resource would be required for the surveillance of structures, serving management schemes, and enforcement actions – estimated as an additional £263k per year (Appendix C provides more information on the cost calculations).

#### Investigating other scenarios for water level management on Pevensy Level

Whilst the drainage area scale management of the SSSI (see map below) was discounted during the 2006 review, management of the 8 drainage areas by a new IDB or IDD group would provide a cost saving of 10%. This option is being re-appraised as part of the 2014 review.

The pumping stations account for approximately two thirds of the running costs of the IDB and IDD group. This review has included a high level assessment of the impact of turning off the eight pumping stations on the Levels. Given that average actual evapo-transpiration exceeds rainfall volumes in the months of April to July but rainfall exceeds evaporation rates over the course of a year, switching off the pumping stations would cause approximately two thirds of the area to be wet for eight months of the year on average, which is likely to have an impact on the flood defence asset residual life. The maps below show the simulations for turning all pumps off during the 2013 / 2014 winter period which saw one of the wettest winters on record.

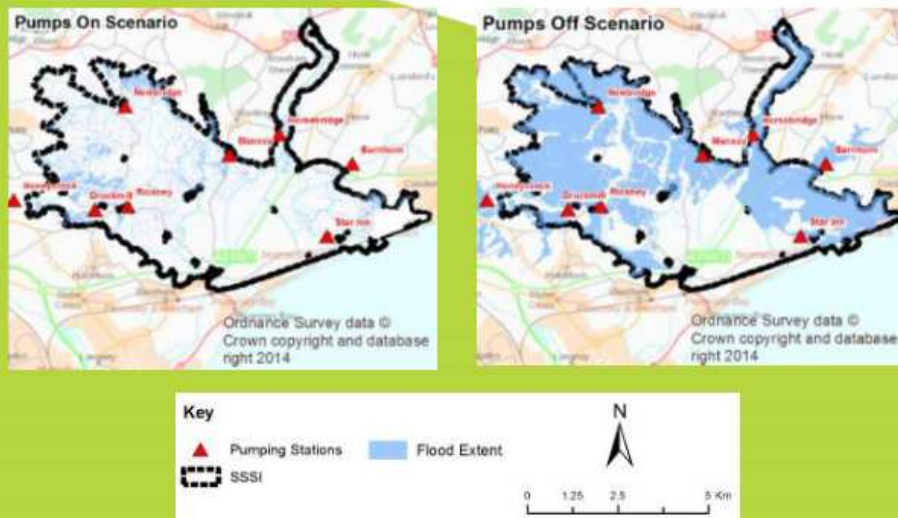
This winter period was tested since the active operation of the pumps and structures by the IDB led to minimal flooding of the SSSI, and therefore this period was a suitable test-case for a pump off situation. A winter rather than summer scenario was tested since it is in winter when the pumps are most active across the Levels, and when the majority of the electricity running costs occur. Net evaporation losses in the summer means that the pumps are generally only required during high intensity storms or in areas of high discharge inputs e.g. discharge from the Hailsham South sewage treatment works.

Switching off the pumps would not only affect the conservation value of the SSSI which requires stable water levels throughout the year (see Appendix E for more information), but would make the current farming businesses on the Levels unsustainable. Farmers currently participating in Environmental Stewardship Schemes would be unable to deliver them. Whilst the simulation switched off all eight pumps, switching off only one or two would be expected to have a similar level of impact in the individual pumped drained area affected, since these operate as isolated units. Reducing the pumping operation rather than switching them off would reduce the antecedent water attenuation capacity of the Levels – this could increase the risk of flooding. However, there may some scope to reduce the operation of the pumps by raising the pump trigger levels above their current level during drier periods of the year. This would help support the conservation objectives of the SSSI where the summer pump levels are depressing water levels. Switching off isolated pumps or reducing pump operations would require consultation with local landowners.

Apart from management of the SSSI at the HU, WLMU and DA scale with the pumps in operation – there are no other viable options identified which would successfully balance the requirements of the local landowners and current conservation objectives. Reducing the operation of the pumps (and hence the costs) however is being examined as part of the current 2014 review.

*Cost summary of managing the water levels of the Pevensy Levels at a WLMU and DA scale*

| Institutional arrangement | Total costs at WLMU scale | Total costs at DA scale | Pump costs |
|---------------------------|---------------------------|-------------------------|------------|
| 1. Independent IDB        | £343k                     | £308k                   | £217k      |
| 2. IDD Grouping           | £312k                     | £281k                   | £196k      |



### Conclusions

- IDB and IDD group management of the SSSI will provide organised and cost effective water level management. The IDD group being slightly more cost effective due to low administration costs
- Riparian owner management is the most costly scenario going forwards
- Riparian owner management will lead to additional costs to landowners from funding water level management, and potential losses in income from agri-environment scheme fines. This situation would make current farming systems on the SSSI financially unsustainable
- Under riparian owner management there is an increased risk that structures will be incorrectly operated, requiring additional resource in Natural England as well as from Local Authorities to perform their flood risk management duties
- In all cases, water level management of the SSSI delivers benefit many times its cost of operation: ~£5M (transport, food, recreation), and ~£11M (biodiversity), per year
- IDB and IDD group management of the SSSI at the DA rather than WLMU scale could provide a 10% cost saving in future management. This change would require further appraisal against the SSSI conservation objectives and discussion with the local landowners
- Pumping station costs amount to approximately two thirds of the total running costs of the SSSI
- Switching off the pumping stations would deliver a large cost saving to the organisation managing the SSSI. However, the frequency and extent of flooding would affect the conservation value of the site, reduce the residual life of flood defence assets, and make current farming systems on the SSSI unsustainable

### Recommendations


Riparian owner management of the SSSI does not appear to be a sustainable scenario for the Pevensy Levels, nor does switching off the pumps. It is therefore recommended that, when the Environment Agency cannot continue to act as IDB, a new independent IDB or an IDD group is established to continue the strategic and successful management of the SSSI whilst the pumps remain in operation.


The 2014 review is examining water level management of the SSSI over the short to medium term. A longer term strategic review of the sustainability of the SSSI under future climate change should be considered – particularly the viability of current management practices under predicted sea level rises and more intense rainfall events, both of which may affect the ability of the structures and pumps to maintain the desired water levels for conservation and farming purposes.

## Appendix C: Government Correspondence

### Letter from Owen Paterson MP, May 2014

Scanned & forwarded to Nick Claxton, Tom Schindl & Tom Crabshaw 30/5/14

  
Department  
for Environment  
Food & Rural Affairs



Nobel House  
17 Smith Square  
London SW1P 3JR

T 08459 335577  
helpline@defra.gsi.gov.uk  
www.gov.uk/defra

Councillor Keith Glazier  
Leader East Sussex County Council  
County Hall  
St Anne's Crescent  
Lewes  
East Sussex BN7 1UE

Our ref: 342797

*nd* May 2014

**The Rt Hon Owen Paterson MP**  
From the Secretary of State

*Owen Paterson*



Thank you for your letter of 19 March about the Environment Agency's plans in relation to the Internal Drainage Districts that it currently manages in East Sussex.

As you know, for historic reasons the Environment Agency currently administers eight Internal Drainage Districts (IDDs) in the south east of England, including three in East Sussex. These are the only remaining areas in the country where the Environment Agency effectively acts as an Internal Drainage Board, and the role the Agency fulfils there is primarily concerned with local land drainage rather than managing flood risk to people and property.

It is important that the Environment Agency should focus its efforts and resources on those areas where the consequences of flooding for communities, businesses, property and infrastructure are greatest. This is in line with its strategic role and flood risk management responsibilities as set out under the Flood and Water Management Act. I feel strongly that responsibility for managing local watercourses more appropriately sits with expert local bodies, including local authorities and Internal Drainage Boards, since these bodies are best placed to take decisions on local priorities in discussion with their communities. I am keen that we should enable such bodies, and individuals such as riparian landowners, to act effectively at local level to achieve the outcomes that communities want to see.

I therefore support the Environment Agency's objective in transferring the management of these districts to local ownership, as soon as practically feasible.

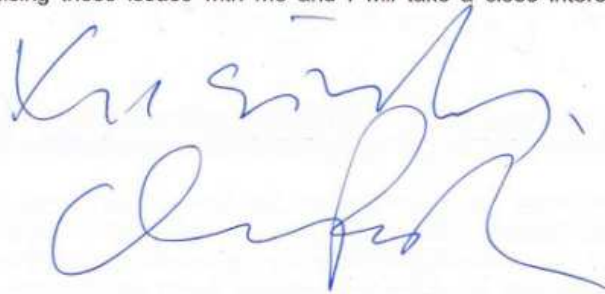
I understand that there have already been extensive local discussions on the most effective way of managing watercourses in these areas on a local basis going forward, including

  
 INVESTORS  
IN PEOPLE

through an East Sussex Steering Group which was established in May 2013 and is chaired by the local Rivers Trust. I welcome the work that your authority has already put into this, and I recognise that some complex issues have been under discussion particularly in relation to the Pevensey area. I would now encourage your councils to play a leading role in seeking to build a local consensus on the preferred solution for future management of water levels in these areas and in driving this forward. I have asked the Environment Agency and Natural England to stand ready to work with you and other local interests in addressing any barriers to the preferred local solution.

While I do not see a case for delaying further the action necessary to dissolve the EA operated IDBs in West Sussex, I do recognise that there will be a need for support and flexibility from the Environment Agency to enable the transition to new local management arrangements. In particular, I agree that the transfer of the IDD's to local management should be properly supported through transferring knowledge as part of the transition process and provision of clear, up to date records. The Agency would also be flexible in considering any request to undertake work on behalf of a local authority or other local management body on a temporary basis during the period whilst alternative management arrangements are put in place and bedded in.

I am grateful to you for raising these issues with me and I will take a close interest in progress going forward.



**THE RT HON OWEN PATERSON MP**



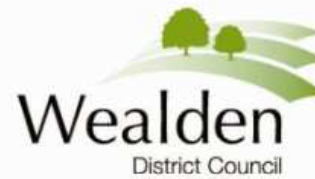
## Letter from WDC to Eric Pickles, October 2014

OUR REF: LtrODowling031014

ASK FOR:

DATE: 3<sup>rd</sup> October 2014

YOUR REF:



Rt Hon Eric Pickles MP  
Secretary of State for Communities  
and Local Government  
2 Marsham Street,  
London,  
SW1P 4DF

Portfolio Holder for Public Health and Community  
Safety

Dear Secretary of State

### **Proposed Dissolution of Environment Agency Administered Sussex Internal Drainage Districts – Funding Arrangements**

The Environment Agency (EA) have advised Wealden District Council that a decision has been taken at their Management Board to divest themselves of the responsibility for 'acting' as the Internal Drainage Board' (IDB) for the three EA administered Internal Drainage Districts (IDD) within East Sussex. It is understood that Department of Communities and Local Government (DCLG) and Department of Environment, Food and Rural Affairs (Defra) are supportive of the decision and have encouraged the EA to work towards alternative management arrangements for the existing EA administered IDD.

East and West Sussex Council wrote to Owen Paterson in March 2014 and they received a response from Defra in 22<sup>nd</sup> of May which confirmed that the Department supported the EA objective to transfer the management of the IDDs to local communities.

This Council is concerned about the proposal and is currently considering its view on this and on potential options for the future management of East Sussex IDDs.

One of the main issues is the funding for management of drainage and flooding issues. This Council has and still receives monies from the Department of Communities and Local Government through its Revenue Support Grant (to be superseded by the Settlement Funding Assessments SFA) to assist the Council in being able to fund the costs of managing the IDDs. The amount has been based upon the Special Levy that this Council has collected from its tax payers and passed on to the EA.

The funds comprise an important element in funding the managed IDDs. The difficulty for Wealden District Council is that there is a degree of uncertainty as to the future of the Settlement Funding Assessment. The Council is therefore writing to you to ask for clarification as to whether this funding will continue to be provided for this Local Authority if an independent IDB is set up and also whether the funding will continue if the decision is taken that the IDDs are no longer required within the locality.

Wealden District Council, Vicarage Lane, Hailsham, East Sussex BN27 2AX

T 01323 443322 DX 38303 Hailsham

E [info@wealden.gov.uk](mailto:info@wealden.gov.uk) W [www.wealden.gov.uk](http://www.wealden.gov.uk)



We understand that this is a concern for all the Local Authorities within East Sussex but Wealden are particularly affected as the Pevensey Level and Cuckmere IDD's lie almost entirely within this Authority's area. We therefore have significant concerns that the financial burden for this proposal will be passed on to our residents and this Local Authority.

In fact the perception is that this burden may increase as it is understood that neighbouring districts are concerned about the amount that they pay and may seek to lower their contribution in the medium to long term.

It would therefore be appreciated if you could confirm the following:-

- If the decision was taken that an IDB is not required would Local Authorities still receive this SFA grant and be able to use this to fund the management of drainage and flooding works within its area. Would this Local Authority need to demonstrate that this funding had been ring fenced to this area?
- If a replacement IDB is proposed can you provide clarification as to what the position will be in regard to the SFA? Would the Local Authority still continue to receive this grant and how long would this be guaranteed for.
- If an IDB was set up and the Local Authorities concerned wished to amend their level of contribution would DCLG amend the amount of SFA accordingly and redistribute the amount provided to each Local Authority to cover any increased burden that may be incurred.
- Is it possible for a Local Authority to reduce their proportion of the Special Levy that they collect for an IDD? It is understood that this contribution is linked to the non-agricultural land value and is it likely or possible for the non-agricultural land value to be reassessed. Could you confirm how the level is calculated and whether there is a mechanism for varying the amount that is sent to a future IDB?

It is understood that East and West Sussex County Councils are also writing to you for clarification in relation to funding. Wealden District Council does however have particular issues in this case and wanted to ensure that we received some reassurances from your department as to what the situation would be if a decision was made to dissolve the existing IDD's without the provision for a direct replacement managed by an independent IDB.

The Pevensey Levels IDD lies almost entirely within the area of Wealden District Council geographical boundary and it is an internationally designated Ramsar site and a Special Area of Conservation. There is a risk of flooding throughout the IDD. The Pevensey Levels are largely on a flat coastal plain and the river outfalls and surface water drains can become tide-locked by high tides. This can contribute to river flooding during periods of high flows. When flooding occurs from Main Rivers or ordinary watercourses parts of the IDD can become inundated for several days, as land drainage can be restricted. Surface water and groundwater are additional sources of flood risk within the District and can contribute to increased water levels in ditches and standing water on fields.

The EA have provided information that assesses the order of magnitude of the net benefits of the work of the Pevensey IDD as being approximately £16million per annum.

The most significant benefits of the work of the IDD are:

- Protecting internationally and nationally important designated sites £11m
- Reducing damages as a result of flooding of road infrastructure, including diversionary costs and costs of delays (c £3m pa)
- Preventing loss of food production (c £1.5m pa)
- Reducing damages as a result of flooding of residential properties (c £1.25m pa)

Clearly the situation that occurred last winter across the country, particularly in the Somerset Levels, has raised the level of concern about the future management of these areas. This Local Authority are trying to ensure that we have sufficient information to make an informed decision as to what would be the best option for our area and look forward to receiving your response.

Yours sincerely,

Councillor Claire Dowling  
**Portfolio Holder for Public Health and Community Safety**  
**Wealden District Council**

---



**Letter from EBC to Eric Pickles, October 2014**

Rt Hon Eric Pickles MP  
Secretary of State for Communities and Local Government  
2 Maresham Street,  
London,  
SW1P 4DF

13<sup>th</sup> October 2014

Dear Secretary of State

**Proposed Dissolution of Environment Agency Administered Sussex Internal Drainage Districts – Funding Arrangements**

The Environment Agency (EA) have advised Eastbourne Borough Council that a decision has been taken at their Management Board to divest themselves of the responsibility for 'acting' as the Internal Drainage Board (IDB) for the three EA administered Internal Drainage Districts (IDD) within East Sussex. It is understood that Department of Communities and Local Government (DCLG) and Department of Environment, Food and Rural Affairs (Defra) are supportive of the decision and have encouraged the EA to work towards alternative management arrangements for the existing EA administered IDD.

East and West Sussex County Councils wrote to Owen Paterson in March 2014, and they received a response from Defra on 22<sup>nd</sup> May, which confirmed that the Department supported the EA objective to transfer the management of the IDBs to local communities.

This Council is concerned about the proposal and is currently considering its view on this, and on potential options for the future management of East Sussex IDBs.

One of the main issues is funding for the management of drainage and flooding issues. This Council has and still receives monies from DCLG through its Revenue Support Grant (RSG), to assist us in being able to fund the costs of managing the IDD. The amount has been based upon the Special Levy that we collect from our tax payers, and pass on to the EA. The monies comprise an important element in funding the managed IDBs. The difficulty for Eastbourne Borough Council is that there is a degree of uncertainty as to the future of the RSG. I am therefore writing to you to ask for clarification as to whether this funding will continue to be provided for this local authority if an independent IDB is set up, and also whether the funding will continue if the decision is taken that the IDBs are no longer required within the locality. This is of course also a concern for all of the local authorities within East Sussex.

It would therefore be appreciated if you could confirm the following:-

- If the decision was taken that an IDB is not required, would local authorities still receive the RSG and be able to use it to fund the management of drainage and flooding works within our area? Would this local authority need to demonstrate that this funding had been ring fenced to this area?

- If a replacement IDB is proposed can you provide clarification as to what the position will be in regard to the RSG? Would the local authority still continue to receive this grant and how long would this be guaranteed for?
- If an IDB was set up and the local authorities whose areas also fall within the IDD wish to amend their level of contribution, would DCLG amend the amount of RSG accordingly and redistribute the amount provided to each local authority to cover any increased burden that may be incurred?
- Is it possible for a local authority to reduce their proportion of the Special Levy that they collect for an IDD? It is understood that this contribution is linked to the non-agricultural land value and is it likely or possible for the non-agricultural land value to be reassessed. Could you confirm how the level is calculated and whether there is a mechanism for varying the amount that is received by a future IDB?

It is understood that East and West Sussex County Councils, and Wealden District Council are also writing to you for clarification in relation to funding. This is a matter of concern for us, as the Pevensey Levels IDD lies within the areas of Wealden District Council and Eastbourne Borough Council, and there is a risk of flooding throughout the IDD. It is an internationally designated Ramsar site and a Special Area of Conservation. The Pevensey Levels are largely on a flat coastal plain and the river outfalls and surface water drains can become tide-locked by high tides. This can contribute to river flooding during periods of high flows. When flooding occurs from the main river or ordinary watercourses, parts of the IDD can become inundated for several days, as land drainage can be restricted. Surface water and groundwater are additional sources of flood risk and can contribute to increased water levels in ditches and standing water on fields.

The EA have provided information that assesses the net benefits of the work of the Pevensey IDD as being approximately £16 million per annum. The most significant benefits of the work are protecting internationally and nationally important designated sites, reducing damages as a result of flooding of road infrastructure, including diversionary costs and costs of delays, preventing the loss of food production, and reducing damages as a result of flooding of residential properties.

Clearly the situation that occurred last winter across the country, particularly in the Somerset Levels, has raised the level of concern about the future management of these areas. We are keen to ensure that we have sufficient information to make an informed decision as to what would be the best option for our area, and look forward to receiving your response.

Yours sincerely,

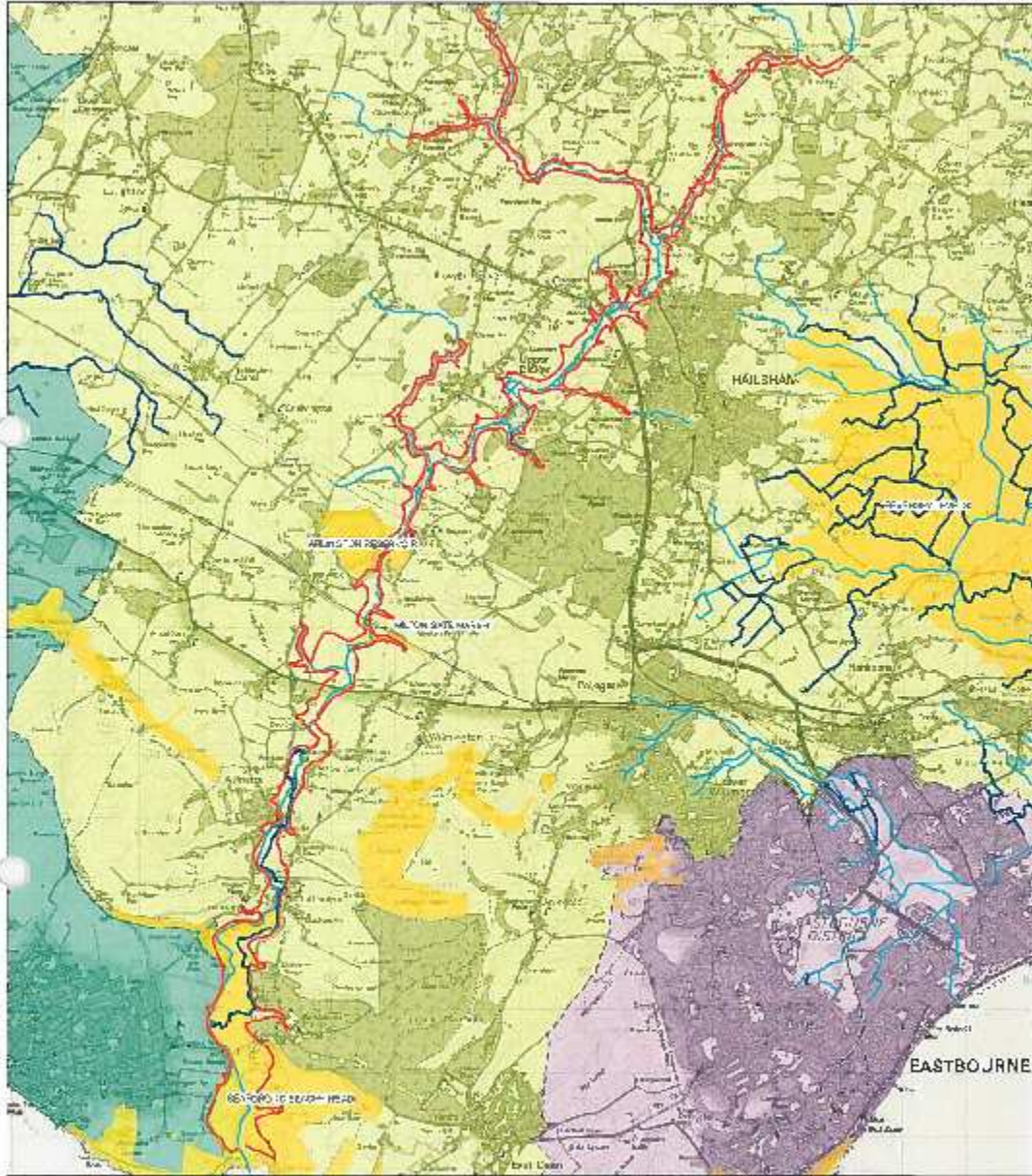
Councillor Steve Wallis

Portfolio Holder  
Eastbourne Borough Council



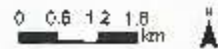
# Appendix D: Maps of IDD

## Cuckmere IDD

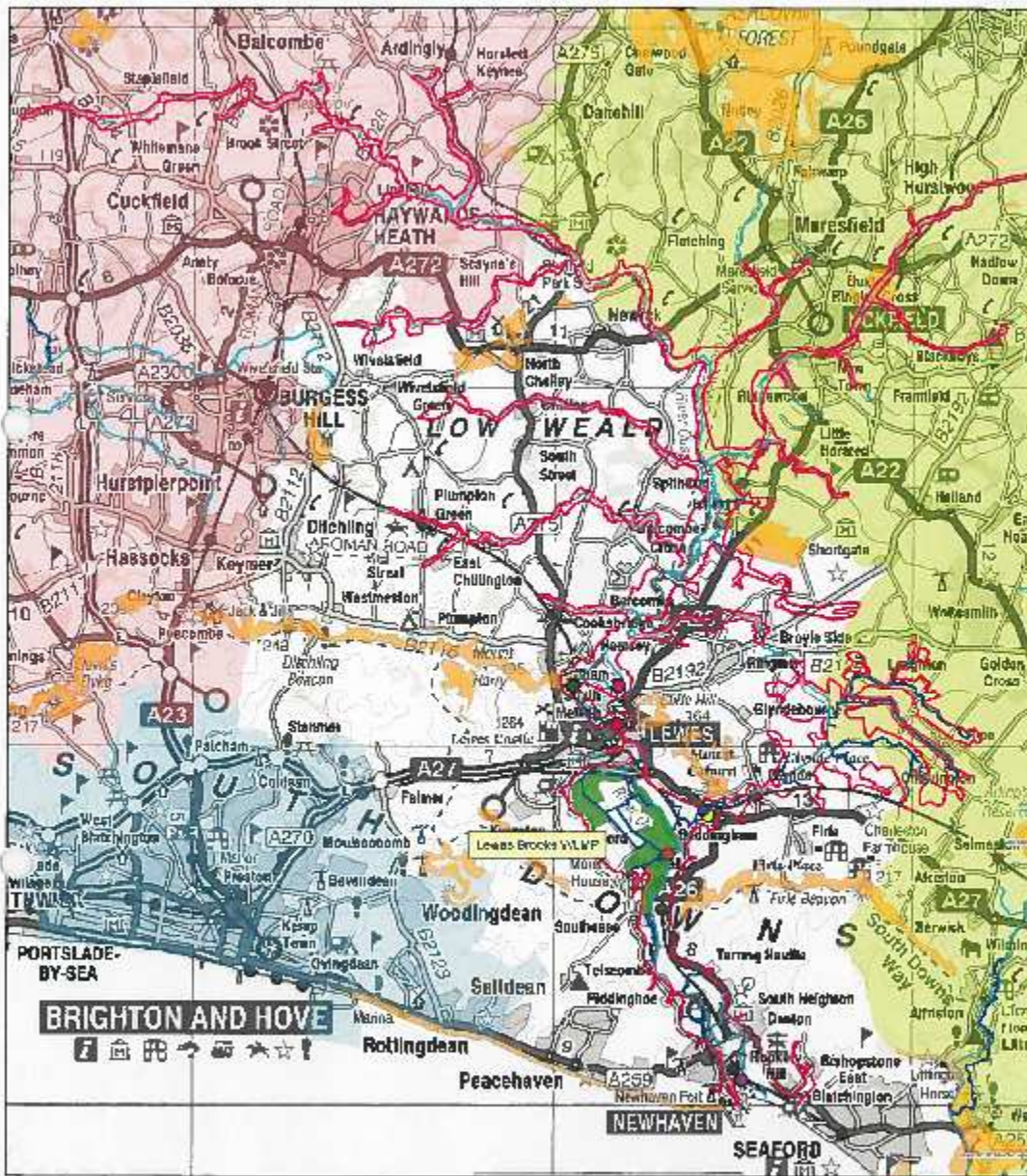


### Legend

- Cuckmere ID
- Main River
- GB Watercourse
- RSPB
- Eastbourne District (B)
- Lewes District
- Wealden District



© Crown copyright and database right 2018  
 OS Licence Number 100041102  
 © Environment Agency, copyright reserved  
 All other rights reserved



Legend

- |                          |                |                                   |
|--------------------------|----------------|-----------------------------------|
| Ouse IDD                 | New River      | Lower Sussex                      |
| Backloggs Main Pump      | U3 Watercourse | Mid Sussex District               |
| Spring (Buckingham Road) | U3 Watercourse | The City of Brighton and Hove (M) |
| Devon Main Well          | U3 Watercourse | Brighton & Hove                   |
| Cliff                    | U3 Watercourse |                                   |
| Ryecliffe                | U3 Watercourse |                                   |
| Zedwell                  | U3 Watercourse |                                   |
| Ryecliffe                | U3 Watercourse |                                   |



© Crown copyright and database right 2015  
 Ordnance Survey 100024162  
 All rights reserved. No part of this publication may be reproduced without permission.

## Pevensey IDD

### Legend

#### Pumping Stations

- Bamhom
- Drockmill
- Honeycrook
- Horsebridge
- Lottbridge (Main River)
- Manvey
- Newbridge
- Rickney
- Star Inn

Pevensey IDD Boundary

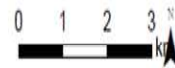
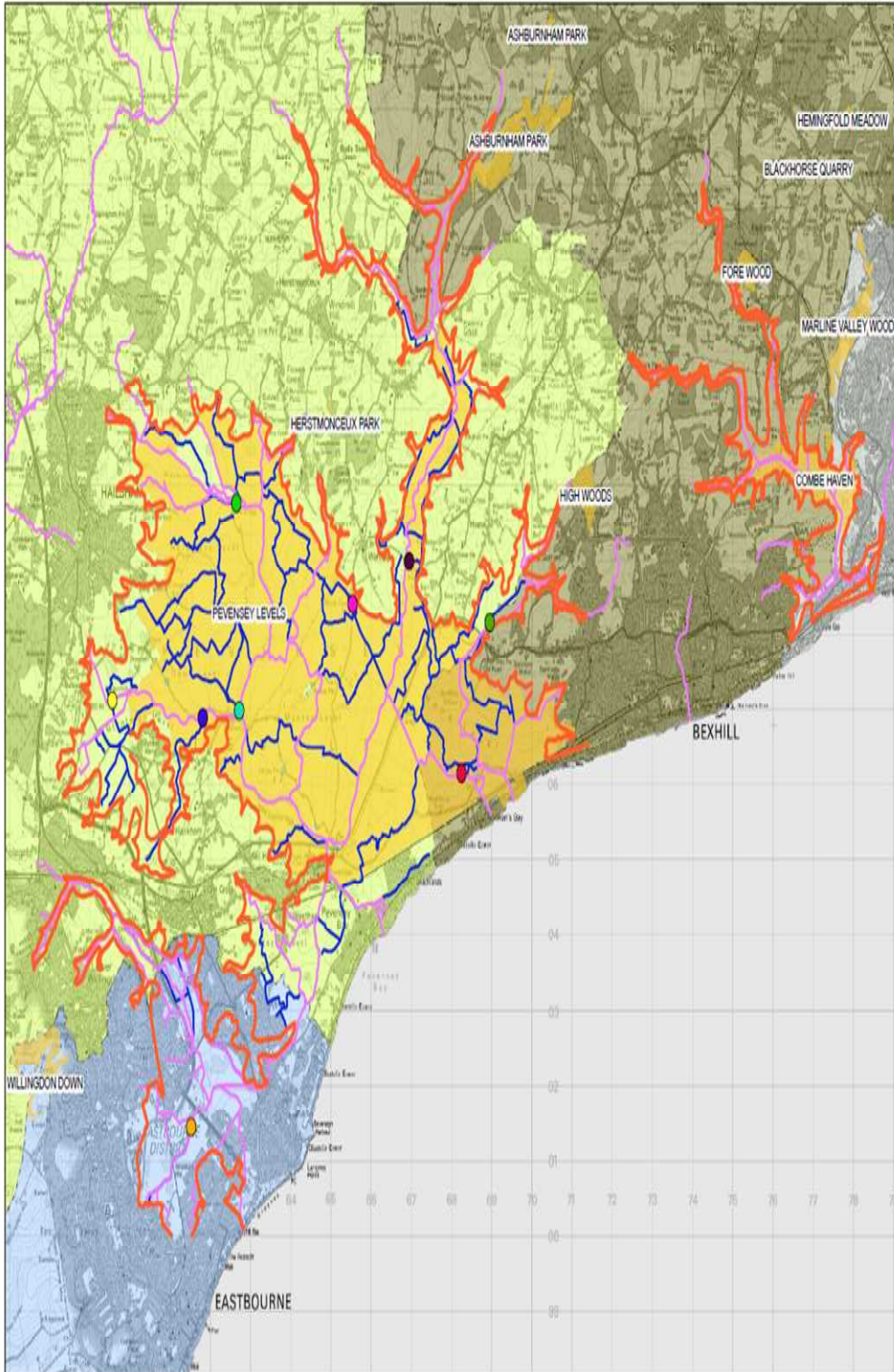
Main River

IDB Watercourse

SSSI

#### Local Authority

- Eastbourne District (B)
- Hastings District (B)
- Rother District
- Wealden District



© Crown copyright and database rights 2011  
 Ordnance Survey 100024198  
 © Environment Agency copyright and/or  
 database rights 2013. All rights reserved.