River Stour (Kent) Internal Drainage Board

Review of Actions Taken to Implement the Biodiversity Action Plan

2020-2025

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Introduction

Actions taken to implement the River Stour (Kent) IDB's Biodiversity Action Plan are reviewed every 5 years. The last review was completed in 2020 and can be viewed on the IDB website.

The IDB has continued working with the Kentish Stour Countryside Partnership to implement the BAP over the last 5 years.

Actions taken to achieve objectives set out in the 2020 review are listed and recommendations are made for further work. It should be noted that the BAP document is also due to be reviewed in 2025.

Objectives from 2020

In the 2015-2020 BAP review, 7 objectives were identified:

1 Ongoing survey work

2 Continue to review recommended maintenance.

3 Enhance channels in unfavourable condition.

4 Engage with landowners and Council Biodiversity Officers

5 Improve tree management.

6 Improve flows.

7 Produce Annual Update

This was a consolidation of the 12 BAP priority actions within the full BAP of 2021- 2025. A review of all 12 actions will be carried out in this 5year review, to give a complete update, due to the requirement for the full BAP to be reviewed in 2025.

Developments since 2020 which have affected delivery.

Since 2023, there has been refocussing away from routine surveys towards enhancement projects. In 2024, the IDB decided that Natural Flood Management (NFM) and tree planting would be priorities for enhancement projects. This is in line with priorities across the catchment, county and at the national level.

Biodiversity changes

The Eurasian Beaver, *Castor fiber,* population has continued to grow across the Lower Stour Marshes and spread upstream along the Stour Valley, reaching Canterbury. Further spread has been halted for now by water level control structures and an inhospitable urban environment, although further releases have been made upstream of Canterbury, so populations are expected to increase throughout the whole catchment. IDB staff are developing methods to prevent, or mitigate for, damage to water level control structures and other beaver-related issues.

Biodiversity losses nationwide have continued. Legislative changes at the national level have introduced measures such as Biodiversity Net Gain, Environmental Land Management Schemes and Local Nature Recovery Strategies. It is hoped that these will have a positive impact in future years.

Review of Work Carried out towards 12 BAP priority actions.

1 Management sheets detailing prescriptions for each individual channel will continue to be delivered. The satisfactory delivery of these prescriptions during routine operations will be monitored through site visits. Channels will be periodically resurveyed to monitor the effect of management prescriptions and one-off projects.

Less time was spent on surveys to enable more on enhancements. Twenty channels, 57.36km, were revisited between 2020 and 2025. These were prioritised according to: time since last survey; species richness (especially flora); enhancement projects (past and future); reduced regular management ops; desilting programme; reduced weed cut (50%) and priority species.

Watercourses resurveyed during BAP 2021-2025: IDBs 10, 24, 26, 27, 29, 30, 31, 86, 88, 126, 127, 129, 208, 209, 210, 222, 223, 268, 287, 294.Of the channels revisited, management techniques which had been updated in the previous surveys have overall kept floristic diversity and habitat suitable for priority species, such as the shining ramshorn snail and pea mussel reed buntings and warblers. (no species-specific surveys have been undertaken since 2012),

Baseline surveys of de-mained channels and newly adopted watercourses were also prioritised, the former were completed in 2021.

A small number of watercourses desilted over winter were checked each Spring to monitor adherence to prescriptions and look for opportunities for further enhancements through routine maintenance or one-off enhancements; written reports were produced for IDBs 30, 86, 106, 108 and 202.
Summary findings – it can be difficult to ascertain desilt actions and width - dependent on water clarity during resurveys. Desilt widths by contractors are variable and are partly influenced by access and bucket width when turning – it is recommended that contractors are made aware of the need to note bucket width when undertaking prescribed desilts. There was some bankside scraping where water vole burrows and priority plant species had been recorded which was addressed through conversations with contractors. Contractors have undertaken requested scalloped desilts, to create sinuous, narrow channels with emergent vegetation, again, results appear variable, some too narrow, some too wide.
Suggested enhancements – narrowing of desilt width where possible to increase emergent shelves, tree works to reduce shade and promote emergent/ in-channel vegetation, addition of Large Woody material to diversify flow and channel habitat, review desilt programme at the start of the season with contractors and have IDB/KSCP staff member out on site with contractors for any scalloped desilts.

There has been a need to increase weed cutting in some channels after resurveys, from 50 to 80 percent where phragmites has begun to dominate. Reduced cutting did not produce the results expected. Shallower waters lead to increased dominance by more rigorous plants.

Water vole signs have been lost between the initial surveys and recent surveys on some channels, most likely due to cattle poaching. They remain present in areas that suffer less cattle poaching. Cattle grazing has however been shown to maintain plant diversity in other areas. Some loss of floral diversity has also occurred where horses have grazed. Loss of priority species Tubular dropwort, *Oenanthe fistulosa*, has been noted on one resurveyed channel and one side channel since the baseline surveys. There is no clear indication as to why, however this is possibly due to nutrient levels, arable rather than grazing and heavy horse grazing.

Nutrient levels vary across the watercourses but tend to remain high, particularly in areas with narrow field margins and arable crops. Adjacent land management, rather than ditch management, may be impacting more on species loss/gain in some watercourses. Over shading has been noted to impact botanical diversity.

Ongoing management of Parrot's Feather (Myriophyllum aquaticum) has continued on Wade Marsh, IDBs 114, 142, 145. A total 5km of watercourse heavily infested prior to management; half has been clear for at least 2 years and remainder has vastly reduced coverage. Use of drone for surveys has been helpful. Adjustments to weed cut operations and timing of clearance by volunteers has made significant difference.

Enhancements on a number of channels.

Renaturalisation of IDB25 Buxford Dyke was completed in 2 phases. Large woody material and bank reprofiling has produced a more natural morphology. Ponding at lower end of project area due to water levels on fish bypass may limit silt scour and resulting benefits for freshwater ecology.

Narrowing of The Delf (Main River) at Sandwich through soft revetment, back-filling and planting into silt.

River restoration on IDB31 Shalmsford Street Dyke. Dig and dump style project to create pools and berms, narrowing channel, improving habitat for fish and invertebrates, especially Brown Trout.

Renaturalisation on IDB30 Long Reaches. Proposal to fence channel from livestock, partial scalloped desilt to narrow and diversify channel, tree work and planting, log deflectors. Funding from FIPL was explored. Project shelved due to issues with landowner approval.

Following recommendations in previous review, officers from NE, EA and other external organisations have been consulted during development of enhancement projects and in other work areas.

2 New prescription sheets will be created for newly adopted channels, following baseline surveys.

There were twelve de-mained watercourses surveyed and prescription sheets created for all between 2019 and 2022.

Location	IDB	Name	Length in metres	Survey year
Ashford-Cant	302	Upper Stour	5,382	2021
Ashford-Cant	303	Sparrow's Bridge Loop	400	2021
Sandwich/Lydden Marshes	304	South Stream (Hacklinge South)	3,218	2019
Sandwich/Lydden Marshes	305	North Stream (Hacklinge South)	1,761	2019
Wingham-Preston Marshes	306	General Valley Dyke	442	2020
Chislet Marshes	307	Hogwell Sewer	1,329	2020
Wingham-Preston Marshes	308	Lampen Stream	1,157	2021

Chislet Marshes	309	Shelvingford Stream	828	2021
Minster/Monkton Marshes	310	Minster Stream	9,800	2020
Minster/Monkton Marshes	311	Richborough Stream	9,225	2021
Sandwich/Lydden Marshes	312	Gosshall Stream	1,170	2020
Sandwich/Lydden Marshes	313	Gosshall Northern Arm	1,440	2020

There were 7 watercourses adopted in 2024 – all surveyed in 2024 and new prescription sheets created except 315 and 316 – (to be surveyed at the start of 2025)

Ashford - Cant	315	Church Lane Dyke	353	
Ashford - Cant	316	Norman Road Dyke	69	
Ashford-Cant	317	Blackwall Road Dyke	302	
Ashford-Cant	318	Harville Road Stream	347	
Wingham-Preston Marshes	319	Black Hole Middle Dyke	822	
Minster/Monkton Marshes	320	Minster Crossing Dyke	308	
Sandwich/Lydden Marshes	321	Brook Street Dyke	315	

3 Aspects of the survey method will be reviewed to ensure relevant parameters are measured, best use is made of technology, and results are easily interpreted to monitor change over time.

The survey method has been reviewed over time by an experienced ecologist, undertaking the surveys with new comprehensive written guidelines completed in 2025. The survey data can now be uploaded onto Mergin Maps, a software programme that allows field data to be recorded with georeferencing.

Digital copies of existing management sheets and old survey sheets/maps can be uploaded for accessing during a survey allowing comparisons of changes that have taken place since the previous survey, particularly changes in floristic diversity, changes to surrounding land use, removal or installation of weirs, culverts or revetments.

Contractors are also able to access management sheets digitally, assisting them in the correct actions on the appropriate watercourses.

iRecord and species identification apps

A spreadsheet of notable records used to be submitted to the Kent and Medway Biological Records Centre annually. Digital records are now created in the field using iRecord, which is loaded onto the IDB's tablet. This app requires photos to be uploaded which are checked by a moderator sometime later. There is also real-time digital photo recognition, but other apps provide this function and can be useful e.g. Seek and Plantnet. All apps have their limits so identifications should be checked using other means, such as dichotomous keys, before recording.

Water quality surveys have been carried out on IDB305 North Stream to evidence effect of run-off from surrounding fields.

4 A new, simple system for rating the current condition of channels and their potential for improvement through one-off projects will be developed - these projects will be delivered as budgeting allows.

Currently there is a Management Table which holds data on each watercourse surveyed, management prescribed, issues, priority species, priority habitats, previous survey dates, enhancement recommendations and costings. This requires updating and reviewing.

IDB staff have created a priority management list for watercourses to help identify watercourses where bird nesting habitat can be improved through later cuts. This list has been mapped and discussed with the management contractor. A wider review of cutting standards and timing took place. The start of the cutting season has been delayed on low-risk watercourses and assessment is ongoing.

Guidance notes have been produced on identifying additional watercourses where switching from annual to biennial vegetation control might be appropriate.

5 In line with guidance on actions being quantitative and measurable, the IDB will work with the Kentish Stour Countryside Partnership in securing funding for surveys of priority species. These surveys will ascertain the effect of 10+ years of working to a Biodiversity Action Plan.

Shining Ramshorn Snail – A survey was undertaken of Management of Watercourses for Shining Ramshorn Snail on 9 Nov 2022 (post-vegetation management).

Location: Ash Levels – IDBs 194, 205, 207, 213 and surrounding watercourses.

Results of this survey highlighted further actions to ensure these ditches remain suitable habitat for the snail. Funding is required to undertake surveys to ascertain fully if management is helping the snail, with a view to extending appropriate habitat through reduced cutting and desilting where viable. eDNA monitoring has been explored and is a viable option for surveying.

It is expected that measures will also benefit the freshwater pea mussel Pisidium pseudosphaerium, which although not a Kent BAP species, is considered locally important, preferring well-vegetated ditches, but also occurs in IDB watercourses, as well as other molluscs and invertebrates

Water vole signs are recorded during all surveys to provide a presence/absence condition. There are historical surveys of many of the watercourses for comparison. A number of watercourses have seen a decline in water vole numbers since previous surveys, whilst they remain thriving in other locations. Factors attributed to decline include heavy cattle poaching of banksides, lack of water in the channel and mink presence. Enhancement actions are being aimed at restoring and supporting water vole populations.

Botanical surveys are undertaken as presence/absence of species, particularly noting diversity and presence of local and national priority species. These observations are used to help inform watercourse management sheets. These surveys are ongoing during watercourse surveys.

There are a number of priority Odanata species recorded for IDB watercourses. No specific species surveys have been undertaken in the last 10 years and should be planned into future works to ascertain impacts of management and presence related to current habitat conditions. A survey methodology has been written and priority watercourses have been identified.

Beaver signs are recorded during surveys and data shared with East Kent Beaver Advisory Group. Close links with this group are important as beavers are becoming widespread on IDB

watercourses and there can be conflict between watercourse management, landowners and beavers.

Automated data sharing with KMBRC via iRecord has been made possible.

6 **Engagement with partner organisations, external projects and initiatives will be maintained and the IDB will continue to explore how projects can be carried out in collaboration. This is especially applicable in improving water quality, where the management of surrounding land has a critical effect.**

An enhancement plan has been created and is being implemented, with links to external projects and partner organisations explored to inform this plan. This plan will be updated with other viable enhancement plans identified during surveys or informed by staff/contractors and landowners seeing possible opportunities whilst on the ground.

Within the plan - The North and South Streams Peat Restoration Project, funded through a Lowland Agricultural Peat Small Infrastructure Pilot grant was a major collaboration between IDB and KSCP, with lots of input from Natural England, the EA and Beaver Trust to install structures to raise water levels to maintain and protect this SSSI and RAMSAR lowland, fenland peat site. This work was completed in 2025.

There has been extensive collaboration with KSCP over ongoing assessment of potential Ark sites for White Clawed Crayfish.

Natural Flood Management actions are being investigated and discussed with landowners and other stakeholders.

There is currently a proposal for a collaborative project with Ashford Borough Council and Kentish Stour Countryside Partnership to reinstate a wildflower meadow alongside IDB27 Waterbrook Dyke. As has been demonstrated from watercourse surveys, the surrounding land management is important for the health of these channels. This is a good opportunity to demonstrate to the wider public what is possible for healthy waterbodies in an urban environment.

Engagement has occurred with the RSPB regarding the potential expansion of habitat for priority dragonfly species at Worth Marshes Nature Reserve on IDB314 Worth Minnis Drain.

The IDB has been working with the Local Authority on the Local Nature Recovery Strategy through the Making Space for Nature project mapping. LNRS's were introduced through the Environment Act 2021. Each local nature recovery strategy will agree priorities for nature recovery and propose actions in the locations where it would make a particular contribution to achieving those priorities.

Advice sought from local experts on reed nesting birds to support review.

7 **The IDB will continue to engage with landowners on a range of issues, including the occurrence of priority species, providing the rationale for management prescriptions for IDB channels, land management practices which affect channel health, habitat creation, and access to funding. Although mainly the responsibility of the ecological contractor, IDB staff will be provided with training and guidance to improve their confidence in engaging with landowners themselves on conservation issues.**

Landowner engagement has been ongoing over the last 5 years in different formats.

The ecological advisor attends some Board meetings to update on BAP actions and take questions regarding these.

Surveys of watercourses highlight where there are issues related to land management and ditch management. Priority species are identified and any opportunities to improve habitat are noted. This information is fed back to the IDB and individual landowners and has included water quality, identification of priority species, identification of invasive species and land management which could have negative impacts for water courses as well as possible enhancement projects.

The IDB remit is flood protection and land drainage. This is essential work which can impact BAP priorities. This was demonstrated in 2023 over a complaint regarding damage to nesting bird sites during routine bank and channel management. A full review was undertaken regarding management and bird nesting and prioritisation of watercourses to ensure best possible practice. No evidence was found that works had been carried out without correct procedure. Detailed guidance and instruction were written by the Ecological Adviser, informed by discussions with IDB staff and contractors. This guidance is provided to staff and contractors pre works along with further induction information. Training sessions separate to induction, are being planned for contractors.

The IDB have been working on habitat creation with landowners with channel narrowing occurring on the Delf and efforts to re-naturalise channels: IDB31 Shalmsford Street Dyke and IDB25 Buxford Stream. There are proposals and ongoing discussions with landowners around Natural Flood Management

Guidance for Operators – Birds Nests

A series of measures were identified as part of the review:

a) contacting landowners each year for input on presence of species on watercourses, including other conservation involvement and suggested environmental enhancements

b) update habitat assessments and watercourse-specific recommendations before commencing drainage operations to help identify potential nesting areas and implement mitigation measures accordingly

c) enhancing the training and awareness of machine operators and staff regarding wildlife protection measures

d) habitat restoration initiatives throughout the Drainage District to contribute to the revival of nesting habitats and support local biodiversity.

8 Azolla has been identified as a priority invasive species which the IDB can play a large part in helping to manage. The occurrence of this species will be mapped across the Lower Stour and a programme of management through biocontrol, with partner organisations, will begin in the Hacklinge Marshes

Azolla has been mapped and treated with the Azolla weevil over the last 4 years. Five sub-catchments have been surveyed by an ecological contractor, with historic data, with feedback from IDB staff and other watercourse stakeholders helping to direct surveying. Mapping of Azolla presence has pinpointed hotspots of reoccurrence. Weevils have been released each year on large areas of Azolla augmenting the small population of weevils that may survive over winter. Release sites have also been recorded and further surveys will continue to ascertain the impact of the weevils which have certainly resulted in a reduction of Azolla.

9 A reduction of regular maintenance of individual channels will be necessary due to the increase in total channel length under management following demaining. Channels will be identified where reduced management will have the most benefits for priority species, or the least negative impact.

A number of watercourses have already been placed under reduced management. Biennial weed cutting has been taking place over 15 watercourses for the last 5 years. This biennial weed cutting helps priority species – reed bunting, water vole, shining ramshorn snail and dragonfly species – scarce chaser particularly.

A review of this biennial management provides a rationale for choosing other waterbodies for decreased maintenance based on priority species requirements.

10 Plant diversity will be maintained and, where possible, improved. This will involve comparison of baseline and resurvey data to identify areas where plant diversity is significantly falling. Also, suitable methods will be identified and trialled to enable channels/areas of high diversity to spread to surrounding channels/areas.

Plant diversity is monitored during each watercourse survey. Surveys have been repeated on channels previously identified as floristically diverse. This diversity informs management plans and recommended enhancements.

The Biennial cutting review showed minimal loss of diversity currently however plant communities can take time to change and this requires further monitoring.
Overall, plant diversity in arable ditches has been shown to be higher where management is more regular, not less frequent.

Areas Where reduced management could bring benefits:

- unmanaged side channels with rich aquatic plant diversity.
- banks with high plant diversity where smothering by cut weeds may reduce diversity. There is the potential issue that the bank diversity will drop if not mown annually.
- grazed watercourses with high diversity
- Watercourses with biennial plant species of conservation significance. No BAP Priority plant species are biennials.

Dominance by single species such as emergents like phragmites impacts diversity hence the increased cutting from 50 to 80 percent in some management sheets.
Cattle grazing maintains floral diversity but over grazing can impact negatively. Grazing can create other issues – such as loss of water vole habitat and increased siltation.
Impacts of high nutrient levels, conversion to arable, low water levels, vegetation cutting and desilt materials left on banksides, and tree shade all impact plant diversity. These issues demonstrate the importance of individual watercourse management sheets and the need to continue to monitor those watercourses with greater floral diversity.
Plant diversity is included on the 5 year enhancement plan. The proposal is redistribution of aquatic plants from plant diverse to homogeneous watercourses after desilting. Suitable sites will be identified and work carried out with KSCP volunteers. Also included is trialling routine management operations like selective cutting to leave clumps of priority species. These actions will be informed by watercourse surveys highlighting floral diversity.

11 In line with the national and regional focus on retaining and planting new trees, avoidance of damage and net loss of trees will continue to be a priority. The IDB will replace trees lost through routine operations and avoid excessive damage to trees. As a partnership action, new bankside trees will be planted where they are entirely lacking and will most benefit priority species, such as dragonflies and reed buntings.

The IDB have been working with landowners and the local government Tree Planting scheme to increase tree cover where appropriate on its watercourses. Work has been done to identify target areas for appropriate tree planting schemes. Engagement with landowners is ongoing.

Targeting Tree-planting

Two parts: sporadic bankside planting and larger areas.

- Avoid heavily shading out watercourses generally – plant on north side or very sporadically on south/east/west.
- Target areas lacking hedgerows/woods for priority species – birds, otter, toad, dragonfly e.g. near Weatherlees SSSI.
- Carefully evaluate where planting would benefit priority dragonfly species, including Scarce Chaser.
- Plant to stop silt entering watercourses.
- Wet woodland creation.
- Avoid dense planting where this will adversely affect Water Vole and Shining Ramshorn Snail habitat.

Currently one project on IDB119 Chitty Lead Dyke at Chislet delivered in March 2025 (40 trees). Agreement in principle along sections of IDB310 Minster Stream.

12 **The IDB will assist KSCP in delivering the East Kent White-Clawed Crayfish Strategy. This will include sensitive management and rigorous biosecurity on IDB channels where populations survive, helping to identify possible Ark sites, assistance with surveying and maintaining or improving habitat quality on channels where this species has been present in the recent past.**

KSCP have written the East Kent White-Clawed Crayfish Strategy and have been identifying current and potential habitat for this BAP species, including in this, IDB channels – those with gravel, stones and flowing water with suitable adjacent habitat. WCC will be bred and released into appropriate ARK sites. The IDB have been working closely with KSCP, looking at current management of potential ARK sites and discussing overlaps in enhancement projects. IDB17 Horton Priory Dyke has been assessed as high potential for an ARK site. An IDB Natural Flood Management proposal on this watercourse is being worked up with KSCP input. This project could increase the viability of habitat for WCC.

Tree planting has taken place on IDB7 Pig Brook to reduce emergent plant growth and improve silt scour with objective of increasing extent of White Clawed Crayfish habitat.

Successes and Lessons Learnt

Spring surveys of desilted channels showed some over enthusiastic desilting, with areas wider than 50 percent removed. It is likely that the subjective nature of assessing percentage of areas may confound opinions on widths and depths of desilts. Ensuring contractors are aware of why the management is the way it is and ensuring they are aware of protected/ priority species locations is important. This will be done during contractor briefings and training sessions.

Digitalisation of management sheets and data collection works well, reducing the need to enter data after surveys and allowing all access to the information as required.

Updated and standardised survey methods are important, especially when there is a change of staff.

Resurveys have shown some positive feedback for reduced management of watercourses for floral diversity but there are a number of variables which can impact and plant communities can take time to change. Later weed cuts have helped protect nesting bird species. Cattle grazing can be positive for

floral diversity but impacts negatively on water vole habitat. Tree shading, high nutrient levels, over grazing and low water levels impact negatively on floral diversity.

The LAPSIP North & South Streams project is working effectively at maintaining water levels. Issues have arisen from the power of the water and dam construction. The sluices and dams are attracting beaver attention and this is becoming a trial ground for beaver mitigation.

It has proven difficult to engage landowners in tree planting.

Enhanced watercourses require a resurvey. Plants have established well on narrowed sections of the Delf.

Parrots Feather work has shown a dramatic reduction in the presence of this invasive non-native species. Azolla presence has also reduced, this is likely due to the increased presence of overwintering weevils. Both species need to continue to be monitored.

Recommendations for 2025 - 2030

1 Surveys

Make more use of the Management Table to choose watercourses for resurvey. See Number 2.

Possible further tweaking needed of Mergin Maps to capture data.

Continue to explore new options for species identification and data recording in the field as new technology becomes available, especially AI.

Continue to review survey methodology with respect to repeatability, accuracy and utility of data.

Undertake Shining Ramshorn Snail and Odanata surveys. Resurvey areas where species were found in previous surveys and identify opportunities for expanding suitable habitat. Engage with landowners about owner-managed watercourses.

2 Management Planning and Review

Update the Management Table. It's been useful in targeting resurveys and will continue to help targeting enhancements and other work. Explore alternatives to Excel for recording summary data.

Start looking at how to improve floral diversity, through changes to routine maintenance and one-off projects. Retain vegetation in routine management operations, encourage natural spread and transplantation.

3 Enhancements

Continue with enhancement projects already in the pipeline e.g. cattle drinks on IDB25 Buxford Dyke at Godinton Estate.

Revisit list of projects eligible for Farming in Protected Landscapes. Revisit IDB30 Long Reaches project when circumstances allow.

Continue to develop a programme of NFM projects to be delivered over multiple years.

Persist with bankside tree-planting offers to farms. Uptake has been low, but tree/hedge planting is valuable in low tree-cover areas and for reducing silt/nutrient run-off.

Development of further partnership projects, linked into Stour Valley Restore - A Heritage Lottery Funding bid currently being led on by Kentish Stour Countryside Partnership to deliver a Landscape Scale project in the Stour Catchment. The objective - Work at a landscape scale to bring about positive

change for the Stour Valley and its important biodiversity and heritage assets bringing about a transition in the landscape from being at risk to being restored.

4 Engagement

Partner with FWAG in providing advice to landowners on funding streams for targeted biodiversity and environmental protection projects.

Encourage IDB staff to engage with landowners over biodiversity and environmental issues during routine tasks. Point staff to appropriate resources and/or provide training.

5 Communication and Training

Promote North and South Stream Peat Restoration project.

If complete eradication of Parrot's Feather is achieved on Wade Marsh, promote widely to public and within industry as best practice.

Conclusions

There has been a continuing step-change in the volume and quality of work to improve biodiversity over the last 5 years. This is the third review period since the full development of the River Stour Internal Drainage Board Biodiversity Action Plan (2010). The adoption of new watercourses over this time has required further baseline watercourse surveys as a priority to inform the overall operations program. Baseline surveys are essential, to prioritise actions to achieve the greatest biodiversity gain. These surveys have been used to prioritise watercourses where cutting of reed can be left later, protecting reed nesting birds as well as allowing the assessment overtime of desilting and weed cutting regimes for plant diversity.

Protection and enhancement of habitats that are already of high value for biodiversity has been a focus as prevention of loss is vital for small populations of priority species and important to allow recolonisation of improving areas. The peat rewetting and damming of North/ South stream at Northbourne, IDBs 304 and 305 is a good example of the work achieved through the IDB for biodiversity, protection and enhancement. It has demonstrated the unique position the IDB has, to push forward such positive achievements and their ability to bring in the various stakeholders to create effective partnerships.

There has been some loss of species signs and deterioration in some habitats, both linked to priority species. These appear to have been impacted more by general land use than IDB management and emphasise the need to increase working towards improved land management through fostering further dialogue with landowners and working with these landowners to find solutions, likely financial and tied up with government agricultural policy and environmental credits such as BNG and Nutrient Neutrality.

Contractors have become more confident over time in the expectations around they're management, through increased communications both in person and through availability of digitized information.

Overall, the number, scale and impact of projects has risen significantly with an invaluable baseline. NFM and tree planting are new areas where progress continues to be made. Partnership working has been strengthened, with a considerable degree of collaboration taking place with KSCP, KCC's Kent Plan Tree and the EA.