

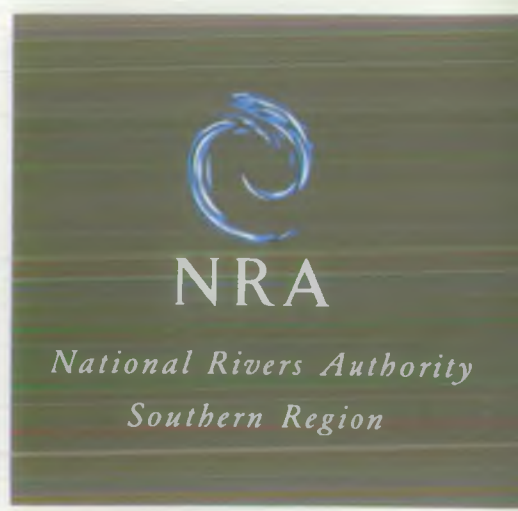
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THE RIVER DARENT CONSERVATION PROJECT



A solution for the Darent

Since its formation in 1989 the NRA has been carrying out an investigation into ways of overcoming problems of low river flows which occur in the River Darent. It is acknowledged that abstraction of underground water for public supply is at the heart of these difficulties and a joint NRA/TWUL plan to improve flows was announced in early 1993.

In short the plan is to close two abstractions, reduce four others, to augment or top up summer river levels and ensure that less water is wasted through leaks in water pipes. Additional water will be brought in from surface reservoirs using the London water ring main.

This is planned to happen between 1993 and 1998 with substantial improvements by 1996. It is expected to cost £12 million, shared by NRA and TWUL.

As well as returning flows to the Darent the NRA has a duty to conserve and enhance the environment (S.16 of Water Resources Act 1991). The NRA commissioned environmental consultant Jeremy Purseglove to examine the Darent for opportunities to improve the river, its banks and adjacent countryside.

Jeremy Purseglove works for Consultants Mott MacDonald (see panel).

To do the study Jeremy walked the length of the river and noted those places suitable for enhancements. In his report presented to the NRA in late 1992 illustrations and photographs were used to highlight particular examples with ideas for improving sites.

These enhancements are not a solution or an alternative to solving the low flow problem, but rather as an activity complementary to the joint NRA/TWUL action plan, preparing the landscape for the return of the river.

Opportunities range from new pools and weirs, to screening ugly fencing along public access.

The illustrations show a selection of the opportunities for improvements in and around the river which the NRA wishes to promote.

The best way forward

The best way forward is for the NRA to join with the existing conservation group, the North West Kent Countryside Project, which has been operating in the area for nine years.

In this way everybody benefits from a collaborative venture – the residents, visitors, the project group and all the organisations associated with running the group.

The NRA will fund an additional full-time Countryside Officer who will specialise in Darent catchment duties. This Officer will supervise those schemes proposed by Jeremy Purseglove and others already identified by the Project Group. The NRA will also contribute financially and support field work. This will complement other work being carried out by the NRA's Conservation Section.

Any person or group who would like to help either by volunteering or sponsorship should contact the NWKCP Manager at the address on this leaflet.

Biography of Jeremy Purseglove



Jeremy Purseglove is a well-known environmental consultant and conservationist.

In 1988, his book "Taming the Flood" was the basis for a Channel 4 television series and won the Sir Peter Kent Conservation prize.

He has 20 years' experience of landscape and conservation work and presently works for civil engineering consultants Mott MacDonald (Cambridge).

He has carried out several river studies on behalf of the National Rivers Authority, including the River Cray in Kent and the Bourne Rivulet and Wallop Brook in Hampshire.

He has previously worked for Kent County Council on coastal River Thames projects and for Severn Trent Water as Senior Conservation Officer.

While at Severn Trent, he pioneered many of the changes to the way land drainage activities are now carried out. These new standards have since become the basis of a change in law which requires the water industry to make environment enhancements as part of any work.



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March 1993



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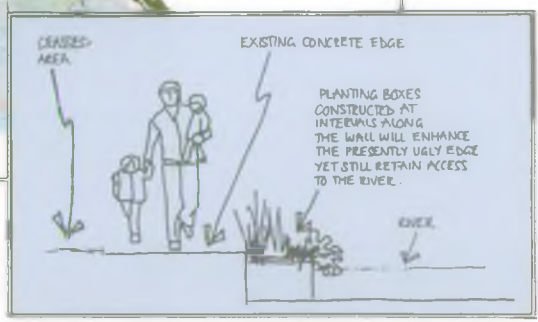
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Printed on environmentally friendly paper
The major fibrous content is made from Bagasse -
sugar cane residue previously burnt as waste

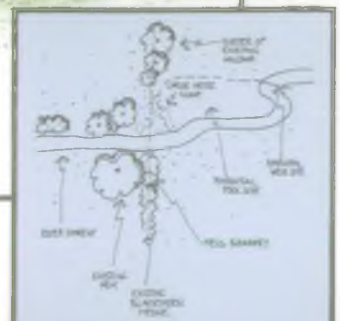
Examples of Enhancements

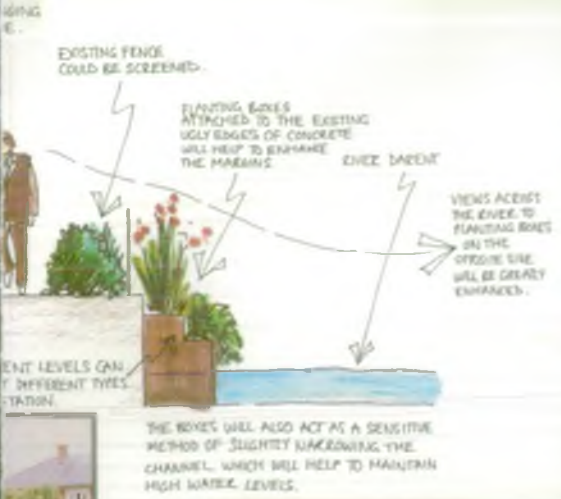


As the river passes through Eynsford an ugly concrete margin could be greatly enhanced by the construction of planting boxes at intervals along this stretch. The construction of weirs here has already helped to hold water back.



The land belonging to Park Farm here is an ideal location for the creation of a pool on conservation grounds.





The river, as it runs through Wellcome's land, is channelled by ugly concrete sides. These could be greatly enhanced by the construction of planting boxes along the riverbank.



The Darent Valley footpath could be made far more attractive as it approaches Allington Castle by moving the path and planting a thicket of blackthorn to screen the existing unsightly security fence (above).

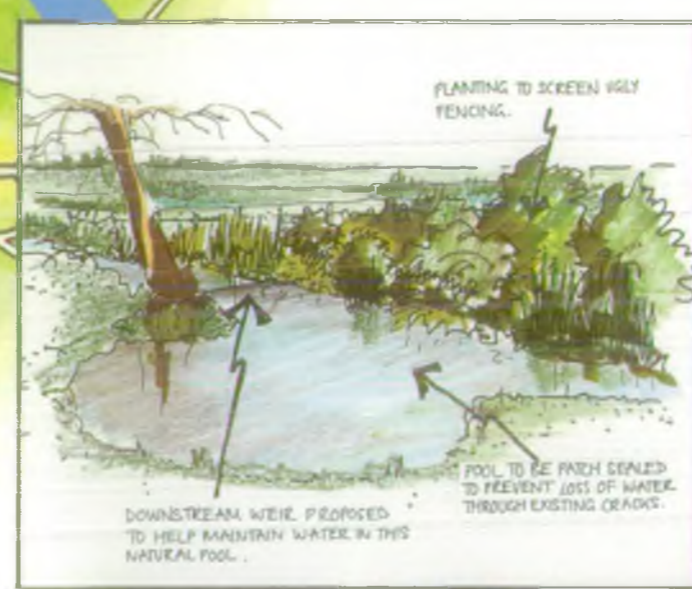


Road
 Lake or Gravel Pit
 River

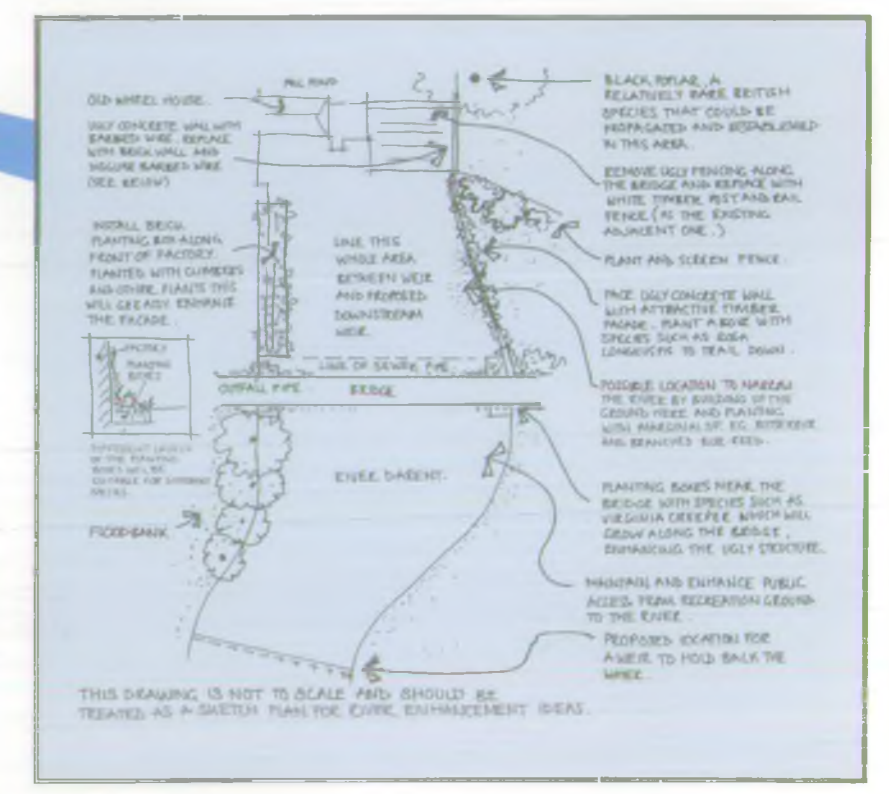


Horton Kirby Mill today (1992) the river is dry, the factory standing empty and the ugly concrete bridge.

The ugly concrete edge would look far more attractive if faced with timber boards (below).

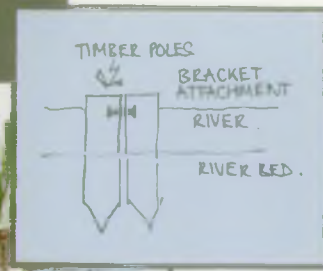


Upstream of Horton Kirby planting to screen the ugly fence, the installation of a weir, and patch sealing of the river bed will all help to enhance this naturally created pool.





Timber deflectors can be used to mimic natural rafts of vegetation (left). Poles driven into the river bed can create spits of vegetation that can also form a narrowing of the channel.



TIMBER DEFLECTORS BUILT UNOBTUSIVELY OUT FROM THE BANKS, THE POLES DRIVEN INTO THE RIVER BED, ARE A GOOD WAY OF NARROWING THE RIVER CHANNEL AND CREATING MORE INTERESTING MARGINS WITHOUT APPEARING ARTIFICIAL.



The North West Kent Countryside Project (NWKCP) was set up in 1984. It is funded by Kent County Council and the four District Councils of Gravesham, Dartford, Bexley and Sevenoaks. In 1993 the NRA joined these partners.

The Countryside Project works closely with the local community and relies on volunteers, donations and help in kind to achieve much of its work.

The Project objectives are to:

- conserve and enhance the river corridors landscape and wildlife of the area
- safeguard the interests of agriculture and forestry
- conserve areas of natural history and archaeological features
- improve public access to the countryside for informal outdoor recreation
- increase public knowledge and understanding of the countryside – to engender a sense of responsibility for our countryside among public and landowners alike
- assist economic and regeneration of the area through environmental improvement and management measures outlined above
- assist the positive enhancement of the countryside and informal recreation opportunities in the Metropolitan Green Belt and urban fringes.

As part of its commitment to enhance the wildlife, amenity and educational value of the River Darent, the NRA has also assisted with a number of community projects.

Restoration of the Gunpowder Mills Site, Dartford

Upstream of Brooklands Lake are the remains of an eighteenth century gunpowder mill which until recently were sadly neglected, overgrown and subject to vandalism.

Towards the end of 1992 a partnership including the NRA, Kent Thames-side Groundwork Trust, Kent Archaeological Rescue Unit, Dartford Borough Council and schools in the area, was formed with the intention of restoring the area and opening it to visitors, especially as the Darent Valley Path runs through the site.

Works carried out to date include clearance of invading plants, removal of litter, renovation of the remaining mill structures, bridge repairs and production of an information leaflet to encourage local people to help care for this historic site.

Pond Creation, Anthony Roper Primary School, Eynsford

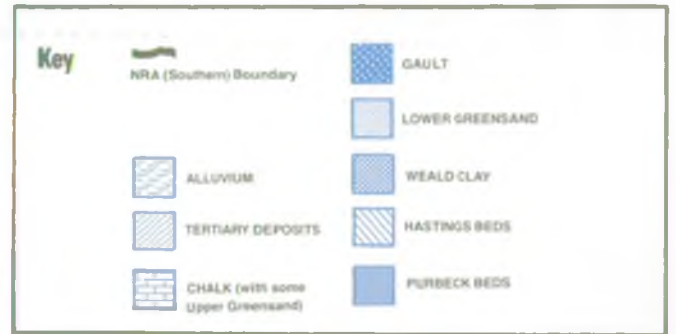
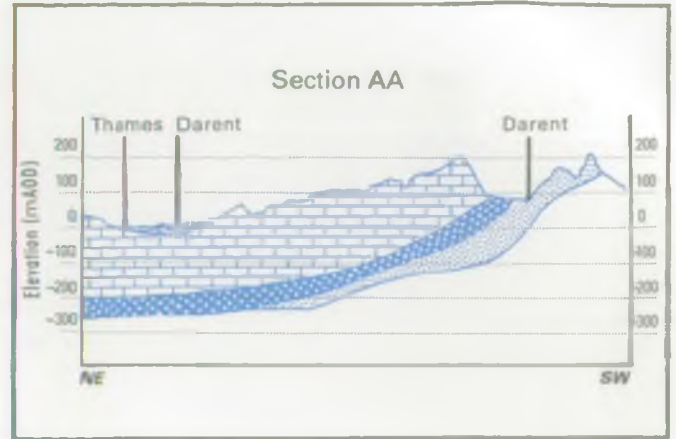
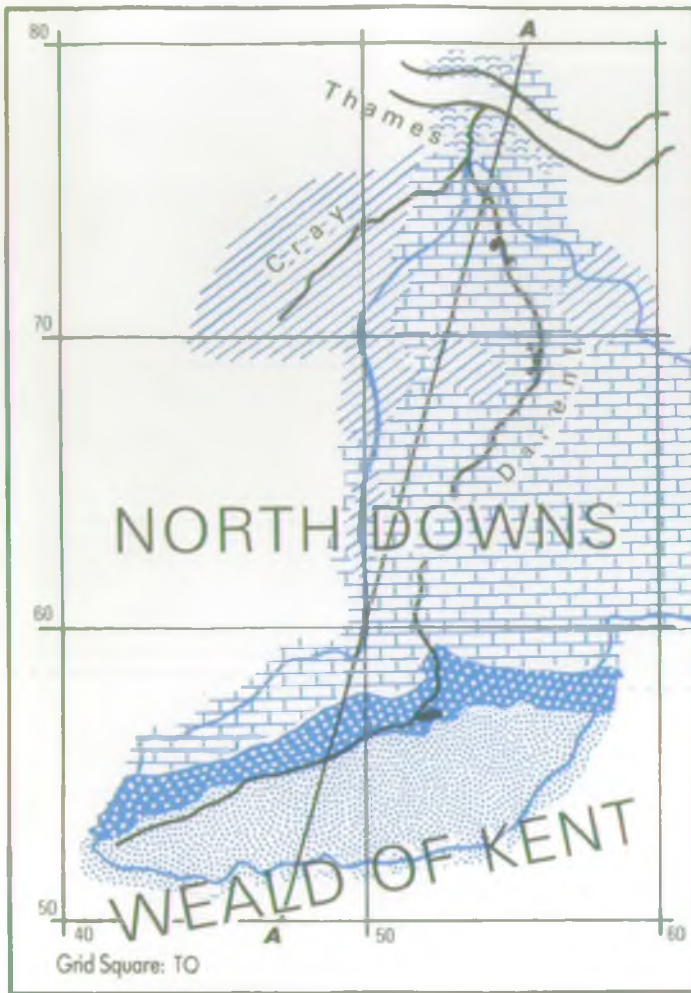
The NRA, in partnership with the School, has designed and excavated a pond in the school grounds adjacent to the River. A survey was carried out to establish ground levels in relation to water levels, especially the artificially maintained higher summer level within this stretch of the Darent, prior to work starting at the beginning of the year.

The pond is filled by the river through an inlet channel and has gently sloping sides and varied depth to attract and support a wide range of wildlife. Safety was the prime consideration as this pond will become a valuable educational resource with its care and development now a major part of environmental studies at the school. To assist this, the earth removed to create the pond has been landscaped into a sitting area for children.

Positive support

These projects and those to be initiated by the new Countryside Officer are seen by the NRA as an opportunity to give positive support to the long term enhancement of the Darent Valley through collaborative ventures with the local community.

Geology of the River Darent Valley



Geology of Southern Region

