

‘Bufo’ and ‘friends’ move Home

£24,000 scheme to make way for new rising main

by Dr. Georgina Holdsworth

As part of a £2.6m scheme to improve the quality of stormwater entering Faversham Creek in Kent, Southern Water included the installation of screens, electronic storm flow monitoring equipment, a new length of spill pipe, a new outfall structure and combined sewer overflow (CSO) at Abbey Road. In addition, a new 750 metre rising main has been installed to pass forward Formula A flow at first spill at the CSO between the wastewater pumping station and treatment works at Abbey Fields. Improvement to the primary treatment at Faversham wastewater treatment works included new inlet screens, monitoring equipment and improved storm water storage.



Temptation: Persuading ‘Bufo’ & his ‘friends’ to move house

courtesy: Southern Water

However, during environmental investigations for the scheme it was discovered that the proposed rising main would temporarily disturb an area of abandoned agricultural land that is a perfect habitat for wildlife, particularly, reptiles such as lizards, slow worms and snakes. These reptiles are protected species under the Wildlife and Countryside Act 1981 and the Countryside & Rights of Way Act 2000.

A £24,000 scheme was therefore launched to capture and move 74 common lizards (*Lacerta vivipara*), 60 slow worms (*Anguis fragilis*), a grass snake (*Natrix natrix*) and a toad (*Bufo bufo*) from the proposed pipeline route to rehouse them in a different location on the same site.

Temporary ‘habitat piles’ of logs and tree cuttings were created, into which the captured animals were released, so they had a safe place to get used to their new home. The grass along the pipeline route was then strimmed and maintained at ground level to make it ‘unfavourable’ for more animals to enter it during the construction period.

Capture and release work took most of the summer. Therefore, at the release site a permanent place for reptiles to hibernate (hibernaculum) was built to help them survive the winter. The 15m hibernaculum is a metre deep, filled with logs and hardcore and topped with soil and - it even has drainage. The animals enter the hibernaculum at the bottom and spend the winter curled up in gaps between the rubble.

Construction on site started in early 2005. On completion of the work the pipeline will be reinstated, the grass will grow and the area will re-colonise with reptiles. Therefore, in the long term the hibernaculum will help to enhance the overall conservation value of the site – at only a relatively small cost to the scheme.

Also as part of this K3 scheme which is being carried out by Southern Water’s East programme team of works contractors, *Morrison, Brown and Root JV*, excavations have been undertaken to establish if an ancient monastic drain is present at the proposed new CSO site under Abbey Road. Evidence for the drain has been found on land adjacent to the proposed CSO site.

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The drain itself formed part of the sewerage system for the mediaeval Royal Abbey of St Saviour's, the site of which is located less than 100m from the proposed CSO site. In August 2004, archaeologists excavated three hand dug trenches to look for the drain. Luckily for the K3 team remains of the drain were not found in the excavated areas and so construction of the new CSO is likely to go ahead later this year. The site of St Saviours Abbey is a nationally protected Scheduled Ancient Monument that stood on the site near Abbey Road from 1148– 1538 AD.

This scheme has also timetabled the construction of the new CSO outfall so that it does not disturb the birds at Faversham Creek. The outfall construction is next to the Swale Special Protection Area, which is a site internationally protected for its important populations of wild birds. Construction has been scheduled to take place after the end of March to avoid the majority of the over-wintering bird season. ■

Note on the author: *Dr Georgina Holdsworth is Environmental Impact Assessment Scientist with Southern Water.*



New home for Bufo and friends.

courtesy: Southern Water