

Save Our Sewage: Rescue Our River



A capacity audience attended this important public meeting chaired by Jack Woolford in the St. Mary's Parish Centre on Monday, 4th February, with a panel of six speakers.

The opening spokesman, PAT GOWEN of NORFOLK FRIENDS OF THE EARTH, presented a lucid, well illustrated and impassioned plea for full sewage treatment to protect the marine environment of our coastal waters, pointing out that sea outfalls carrying crude sewage, and designed in the immediate post-World War II period, were no longer acceptable for the changed conditions of the nineties with our greater knowledge and improved technology. Where coastal currents are fast enough dilution *may* be rapid enough to render bacteria harmless, but viruses are certainly not killed, nor are toxic chemicals neutralized and these persist even in prepared sludge, making it unsuitable even for fertilizer without tertiary treatment.

The EUROPEAN COMMUNITY authorities had registered their concern by setting mandatory standards for bathing beaches, with regular sampling to check that these standards were maintained. Only some 10% of the U.K. designated beaches at present meet these water safety standards and many have not yet been designated — hence their condition is not recorded or publicized.

Not only is HUMAN HEALTH at risk from polluted water in the most obvious ways, but less common effects are developing: skin troubles are occurring among fishermen handling contaminated fish and equipment. SEAL DEATHS have been highlighted by the media, but less publicity has been given to the 40% of the North Sea flat fish that are diseased, the infection of shellfish and the reduction in numbers of coastal birds — notably terns and puffins — not to mention the extensive spreads of toxic algae concentrated off the English and Dutch coasts.

Despite this totally unsatisfactory state of affairs the NATIONAL RIVERS AUTHORITY has given permission in some cases for the release of untreated sewage and 30% of river outfalls are not reaching the required standards. Sir Hugh Rossi has advised that proper viral counts should be taken and the results of all tests made public.

Underfunding has been blamed for the lack of action but adequate treatment methods are available and are not necessarily expensive. WYE COLLEGE, for instance, has developed a way of using sludge with straw, as long as it contains no toxic metals. Such a method would be doubly valuable by eliminating also the dioxins produced by straw burning.

116 KEN SHAVE and PETER HARNETT, representing the KENT DIVISION of SOUTHERN WATER SERVICES assured the meeting of the Company's objective to comply with the NRA standards, bearing in mind their duty to their shareholders and customers to keep costs down. By June 1992 the NRA would have to classify waters as **sensitive** or **less sensitive**, discharge into the former requiring biological sewage treatment as well as the conventional preliminary and primary processing. For less sensitive waters a 2 - 2½ kilometre long **outfall** would be adequate, whereas with chemical treatment to kill off a large number of bacteria, a shorter one would be acceptable. **Possible sitings** were between Shakespeare Cliff and the Admiralty Pier. The work was unlikely to be completed before the end of 1995.

The four basic standards to be met were:-

- i Screenings must be taken out and stay out.
- ii Waste water solids must not be recognisable.
- iii The discharge must comply with the EC bathing water standards.
- iv Storm discharge was permitted through a shorter outfall than domestic and industrial effluent.

The speakers were admirably clear and precise in their statements of the options available for sewage disposal in view of the constraints imposed upon a private company and concerned listeners therefore suspected that only modest improvements could be expected.

GEORGE RIPPON, speaking on behalf of the NATIONAL RIVERS AUTHORITY, apologised for his lack of preparation as he had been asked to replace a sick colleague at short notice.

He pointed out that legislation to control what went into river water had been enacted only in 1985 and the newly-created NRA was doing what it could with limited finance. The AUTHORITY'S LABORATORY had been set up in CANTERBURY but there were restrictions on the amount of sampling currently possible. As the River Dour met the 16 classification standard at present it was undesirable to add sewage to it.

RICHARD MONK, FORMER DEPUTY ENGINEERING MANAGER at the FOLKESTONE AND DISTRICT WATER COMPANY and still its CONSULTANT and LECTURER, explained the area's hydrology with the aid of overhead transparencies and supplied copies of four excellent information sheets to his audience. (Listed at the end of this article.)

It is RAINFALL between October and March slowly percolating down through the chalk of the North Downs and accumulating in its fissures that provides the underground supplies upon which the Company draws throughout the year, since

most rain in the spring and summer months either evaporates or is used by plants. II7

In normal years the rise in the level of ground water is shown at the surface by the way in which CHALK STREAMS or NAILBOURNES, often rise higher up their valleys from January to March or April. Two years of lower than average winter rainfall had been followed in 1989 and 1990 by two hotter than average summers with higher evaporation rates and greater demand for water. This had resulted in reduced water in the chalk aquifer, lower river flows, a hose-pipe ban and the Company's concern over future supplies, for a water undertaking may extract only the amount permitted by licence. The HIGHEST underground water level in 1989 was barely higher than the LOWEST in 1987!

In drought years it is particularly unfortunate for the FDWC that water is still lost through NATURAL COASTAL SPRINGS and LEAKAGE from pipes. Details of the Company's measures to minimize this loss are given on the appropriate information sheet.

There had been much public misunderstanding about the amount of water used by TML for the CHANNEL TUNNEL construction. At its peak this had amounted to only 2% of the water company's total supply and none of it had come from the River Dour. When it was realised that the Company had to plan for a 2½% increase in demand each year the amount used by TML was put into proper perspective.

As soon as it was clear that drought conditions would prevent the FDWC from supplying Tunnel needs from local sources, TML BUILT ITS OWN DESALINATION PLANTS, recycling unit and reservoirs at the Shakespeare cliff site – and this after actually paying for improvements at Kingsdown Pumping Station and several kilometres of new main with the FDWC network! Far from depriving Dover district of its water TML had in fact acted as a local benefactor.

JOHN CLAYTON, DIRECTOR OF PLANNING AND TECHNICAL SERVICES FOR DOVER DISTRICT COUNCIL and last speaker on the panel, stressed the Council's function to work *for* the public. He listed its four powers related to sewage disposal including lobbying, in connection with which it had agreed to erect signs on beaches which did not meet the required EC standards.

Under the Land Drainage Act of 1976 it similarly had several powers related to the River Dour, viz:

- i the removal of barriers impeding river flow, eg supermarket trolleys.
- ii facilitating improvements such as cleaning up the river.
- iii the granting of planning permission for any river works, eg outfall siting.
- iv land management, eg the improvement at Buckland Bridge, and last but not least,
- v persuasion, eg requesting the NRA to recognise the Dour as a major river!

The ENVIRONMENT PROTECTION ACT of 1988 made provision for clean-up

118 standards in a number of fields, including amenity beaches, under which the public has the power to take the responsible organisation to court. Since the Council believes that persuasion and education are very important in such matters and preferable to legal action, it appreciates the good work being done by an active association such as THE DOVER SOCIETY and is very happy to co-operate with it.

In the ensuing QUESTION AND ANSWER SESSION the following statements were made by the speakers on behalf of their organisations.

SOUTHERN WATER SERVICES

1 It was unlikely that a combined Dover and Shepway sewage treatment plant would be built on grounds of cost — both initial and running costs.

2 Consideration would be given to TERTIARY SEWAGE treatment only IF THE NRA DESIGNATED THE LOCAL WATERS AS SENSITIVE. It would comply with regulations but not carry out any extra treatment out of consideration for its shareholders.

3 All waste water treatment plants would meet NRA standards for both river and coastal waters.

4 The European Community is prosecuting UK water companies because operations here are more open than on the continent. The results of tests are available here and the water companies had an unfavourable press when they were privatised. (The F o E) answer is quoted later.)

5 The government has now designated fifteen beaches in Kent. Initially only Margate beach was thus classified.

6 No sludge is dumped or burnt. Farmers will use it only if it is delivered to them as a gift.

7 MEMCOR, the Australian system using a membrane, is being considered, but its use would result in significant increases in capital and running costs.

8 Broad Oak Reservoir has been proposed as a transfer system to allow undesirable organisms to die off. Nowhere is water recycled direct owing to the presence of micro-organisms.

9 The final arbiter on the quantity of water abstracted is the NRA.

10 If tertiary sewage treatment is not required under the NRA classification of the outfall area, the company will put in a facility to make it possible to include secondary and tertiary treatment later, on the assumption that improvements will be required in the future.

FRIENDS OF THE EARTH.

1 Our water companies are being taken to court for not complying with E.C. regulations within the ten years allotted. The task was perfectly feasible economically. Many of our beaches are TWENTY TIMES DIRTIER than would be acceptable in

Canada and ten times dirtier than the permitted standard in the USA. In those **II9** countries such beaches would have been closed.

2 David Plumstead, representing Shepway Friends of the Earth, wished to know why waste water was not treated for re-use and pointed out that EMPLOYING A MEMBRANE had been shown by FoE to be CHEAPER than a long sea outfall. It was used effectively in shuttles and satellites

3 Entrophication is serious down the north east and east coast of England as far as East Anglia and all along the Dutch coast. It is known that 60% of the PHOSPHATES POLLUTING THE SEA comes from urine and the rest from detergents. Clearly this form of pollution should not be allowed to continue.

4 In its concern for better sewage treatment the FoE was looking to the future, not just compliance with present regulations. Some of the effects of marine pollution proven to date had already been listed earlier in the evening. Further research might well show that catalogue of troubles to be incomplete.

NATIONAL RIVERS AUTHORITY

1 Money was gradually being allocated, but at present the organisation must cut its coat according to its cloth.

2 The speaker was not authorised to say whether the Channel waters were to be designated sensitive or not.

3 Tests had still to be made to ascertain the location of various substances. As sunny weather is good for killing off bacteria Dover Harbour had passed recent tests, but it might not do so in a normal year.

Local concern for the amount of WATER IN THE DOUR VALLEY was obvious from the questions put to Richard Monk.

FOLKESTONE AND DISTRICT WATER COMPANY.

1 Contrary to popular belief Watersend Lake *had* dried up before — in 1973, '74 and '76, prior to the building of Stonehall Pumping Station which was test-pumped for a few weeks when it was completed in 1978. No pumping had occurred since then except for four half days in November and December when the water was immediately put back into an adjacent borehole.

2 Pumping was due to start on the day of the meeting as the water at Crabble Mill was above the minimum level. All pumping would be in accordance with the rules of the NRA which was responsible for ensuring that any abstraction was not detrimental to other licence holders. The company was not allowed to pump until the measuring weir was in place on the Dour at Temple Ewell, which happened in January.

3 The FDWC actually only took 90% of the water permitted by its licence.

4 Supplies to the Channel Tunnel had come from Kingsdown or the west of the Company's area. Dour Valley water feeds Shepherdswell, Eythorne and

120 Whitfield or an outlying part of the Folkestone area. It was reiterated that *no* water from the Dour catchment was supplied to TML.

5 Any drying of the lake in the **grounds of Kearsney Manor** last year was *not* due to Dour Valley pumping. The lake was fed by its own spring as well as Dour water.

6 It could not be stressed too forcibly that neither the FDWC nor TML was responsible for any reduction in the Dour flow last summer. This was due to natural conditions in an abnormal year.

7 There was at present no indication that the Company would buy the TML **DOVER DISTRICT COUNCIL DESALINATION PLANT** when the consortium had finished with it. John Clayton brought a soothing and practical note to his part of the proceedings by suggesting that:-

1 We must look to the future in view of the current annual **increase in water consumption** and the fact that when the port declines the town of Dover may have land-based industry which will use water.

2 Before the FDWC took over the supply function the Water Resources Board earlier in the century had identified Dover as a place where **desalination** was likely to be necessary and this would be very expensive.

Richard Monk had stated that the Company supplied water at 36p per tonne delivered — a very reasonable charge.

Anne Mole expressed the view of many in the audience when she remarked that the very best method of sewage treatment should be adopted and that water, a valuable resource, should be husbanded. **Most consumers wanted full sewage treatment**, the technology was available, but was there the financial will to implement it? Obviously the public would have to pay for it. Was it enough to comply with the minimum requirements on the threshold of the twenty-first century?

At this point the Chairman brought a long and lively meeting to a close.

MAY JONES

Leaflets supplied by the Folkestone and District Water Company:-

The River Dour and the Drought.

The Channel Tunnel, Dover's Water Supplies and the Drought.

"Thirsty Work," the reprint of an article in the July 1990 edition of the Transmanche Link magazine "The Link," and Leakage of Water from a Water Distribution System

Any members still concerned about the water level in the River Dour are urged to read the first of these.