

Roy Seabrook's observations on the CDC Sewerage meeting 22.1.2014:-

The objective of the meeting was to discuss problems highlighted in the Southbourne Parish Neighbourhood Plan document "Comments on Calculations" and Bruce Finch's email 13.01.2014 summarising these issues.

The meeting was well attended by all the interested authorities including Chichester and Havant District Councils, Environment Agency, Southern Water, Chichester Harbour master and Trust Chairwomen, District Head of Planning and West Sussex County Council. It was extremely beneficial to have these important issues raised in this forum.

The main part of the meeting was made up of presentations by Southbourne Parish, Environment Agency, Southern Water, Chichester District Council and Chichester Harbourmaster; this was followed by a question period.

At the start of question time, Roy Seabrook observed that the three main concerns raised by the Parish in previous correspondence and detailed in the presentation were:-

- Problems with the mathematical modelling used to estimate Dry Weather Flow.
- Discrepancy between headrooms specified by different authorities.
- Requirement for a more rigorous reporting system of all discharges.

It was agreed that none of these issues raised in Southbourne's presentation were addressed by any of the subsequent presentations at the meeting.

During the question and answer period, Southern Water stated that the headroom discrepancies were due to the use of more up-to-date flow information. There was no attempt to explain how the 2009 data was more up-to-date than the 2010 data.

In response to the question as to whether the mathematical modelling to estimate Dry Weather Flow was well-established nationally, Southern Water said that it was and the Environment Agency said it was still the subject of ongoing discussion.

The Environment Agency stated that there was no limit on the storm discharge into Chichester Harbour and that they were happy with the current situation as long as there was no observable detriment to the Harbour water quality.

Southern Water said they would consider the Parish's request for more rigorous reporting.

RAG Seabrook/4.2.14

email sent by Bruce Finch dated 13.1.2014

Hi Jane,

The issues are

- 1) Dry Weather Flow – used as a basis for calculations for the headroom at TWT plant. Previously the method of calculation looked at organic effluent plus a factor for rainfall seepage. The method used in the revised calculations does not split out DWF from the extra water added. The extra figure provided is assessed as 80% without explanation. It could as easily be 60% or 90%
- 2) The averaging over a 7 year period over emphasises the drought period – the weather pattern is very mixed so at a minimum would include even wet and dry years which would be more realistic. It also takes no account of the changes to the network load or processing systems or building during that period
- 3) The calculations provided by CDC in Amanda's e-mail dated 16.10.13 and the Southern Water position paper of 2009 predicted large headroom for both Apuldram and Thornham for the period July 2012 and July 2013. During that time period there were 76 storm discharges from these works; these are supposed to be the exception rather than the norm. This suggests the headroom figures are charitably optimistic and realistically way off.
- 4) The headroom figures for the Southern Water position paper of 2009 and the later MWH study of 2010 differ significantly. The high volume of storm discharges suggest that the MWH figure is more accurate. This is correlated by discussions with former Southern Water personnel
- 5) The 80/20 percentile figures would appear to be an under estimate as they do not include the storm discharge from Thornham and associated feeder network at the breakers yard in Nutbourne and the pumping stations in Chidham, Nutbourne and Emsworth

The upshot of this is two fold

- There remains significant doubt about the headroom available at Thornham which was a justification for earlier development at Southbourne given the headroom issues at Apuldram and Tangmere (the "headroom issue")
- To maintain the current level of treatment involves excessive use of Storm discharges (which for clarity is sewage with only primary treatment ie: bacteria removed but nothing else) which is discharged into the storm overflows in the parish and also the harbour (the "discharges issue")
- With extra development in the absence of extra investment to expand capacity at Thornham, which is not yet evident, the ability of the infrastructure to cope with extra development is in doubt

Bruce

Bruce Finch

Southbourne

Chichester District Council

