

# WaPUG

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## WALLINGFORD PROCEDURE USERS GROUP (WaPUG)

6TH NOVEMBER, 1986 GLASGOW

Mr. W. T. Greer, Director of Sewerage for Strathclyde Regional Council, welcomed delegates to the 1986 Autumn meeting at the Council Chambers, Glasgow. He urged delegates to take advantage of sophisticated computer programs and equipment for sewerage analysis but to remember that human judgement is even more important in the determination of satisfactory solutions.

The meeting was chaired by W. F. Gow of Strathclyde Regional Council.

### SESSION 1: PRESENTATION OF PAPERS AND DISCUSSION PERIOD

#### Presentations"-

1. Hydraulic Design for Sewer Rehabilitation.  
A. R. Eadon, Severn-Trent Water Authority
2. The Lyneburn Case Study.  
W. K. AuYeung, Dundee College of Technology.
3. The Borehamwood Case Study.  
N. R. Harding, Hertsmere Borough Council.

#### Discussion:-

- G. Collins, Fife Regional Council  
How detailed should data collection be for accurate WASSP predictions?
- W. AuYeung  
Refer to paper by R. M. Ashley entitled "Minimum Flow Survey Networks" presented at the 1985 Autumn meeting.
- D. Balmforth, Sheffield City Polytechnic  
A number of criteria are included in the proceedings of a recent conference at Sheffield Polytechnic
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- R. Ashley, Dundee College of Technology  
Asked Mr. Eadon why STWA did not use a cost benefit approach nor WASSP-OPT ? Questioned the assumption that return flood periods can be equated with return rainfall periods.
- A. Eadon  
Cost benefit analysis can be used but people's perception of required performance varies and it can be difficult to establish criteria. Everybody expects the same level of service but this is not always possible.

The optimising method, WASSP-OPT , is only applicable to greenfield sites and is not often used. For the time being design storms must be used for predictions. Time series rainfall will be more realistic when available.

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A. Harden, Travers Morgan and Partners.

Mr. Eadon refers to a small amount of surcharging as reasonable performance but a large amount of surcharging as inadequate performance.

Can a boundary be defined?

A. Eadon

All levels of service are related to flooding not surcharging . A desirable level of performance is no surcharging but it is possible to define a boundary between the levels of service given in terms of flooding frequency and deduce equivalent surcharging at a given frequency of return period by modelling. This is what the viewfoil represented.

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D. Balmforth

Questioned the use of the same criteria for the replacement of sewers and tanks?

A. Eadon

An overtopping criteria which may be based on cost benefit principles is suggested in the paper.

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B. Wilkinson, Yorkshire Water Authority

YWA aim to provide all customers with an equal level of service in relation to flooding frequencies. However, this is difficult to achieve in flat areas or where storage options are considered. Designing for larger return period storms results in considerable cost increases. Asked Mr. Eadon if the STWA Stage I and II procedures incorporate design horizons and if the development of unallocated land is considered?

A. Eadon

Stage I includes design horizons but further increases are not made during Stage II. Expressed a personal view that committed and planned development should be included but that "tomorrows people should perhaps take care of tomorrows problems with tomorrows technology".

Re-adoption of minimum upgrading criteria for Stage I and maximum upgrading criteria for Stage II should ensure that an adequate life is achievable for the new investment and any unforeseen development should only require additional rehabilitation investment in other areas.

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