

DEVON AREA INTERNAL REPORT

INVESTIGATION OF FINAL EFFLUENT FLOW AT FLUXTON STW.

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NRA

*National Rivers Authority
South Western Region*

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INVESTIGATION OF FINAL EFFLUENT FLOW AT FLUXTON STW.

1. INTRODUCTION

Fluxton STW discharges treated final effluent into the River Otter at National Grid Reference SY 0904 9219. An investigation was carried out to determine whether the volume of effluent discharged, exceeded its consenting agreement..

2. OBJECTIVES

The River Otter Association recently raised concerns to the River Otter Catchment Action Plan Group on the impact of Fluxton STW on the River Otter. They were concerned that recent development in the catchment had increased the flow of effluent entering the River Otter.

The Devon Area Investigation Team were requested to carry out an investigation using a Prolec 'Water Rat' flow meter positioned in the final effluent chamber. The investigation commenced intermittently during August, September and October. An intensive survey was carried out during November and December.

Rainfall data was obtained from Devon Area Hydrometric department who monitor daily rainfall from the nearby Dotton Pumping Station.

3. PROJECT TEAM

Trevor Cronin (Project Manager)
Mark Humphreys (Project Technician)
Nigel Hicks (Project Technician)

4. RESULTS

See Appendix 1 for total daily flow and rainfall results for August, September, October, November and December.

5. DISCUSSION

At Fluxton STW, the treated final effluent discharges separately from the storm sewage (See figure 1 for layout of the STW and discharges).

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The Consent to Discharge for Fluxton STW states that ' the volume of treated sewage effluent discharged under dry weather conditions shall not exceed 1100 cubic metres in any period of 24 hours '. Dry weather flow shall mean the average daily flow to the treatment works during seven consecutive days without rain (excluding a period of which includes public holidays) following seven days during which the rainfall did not exceed 0.25 millimetres on one day.

During the monitoring period the volumes discharged complied with the aforementioned consenting agreement.

6. CONCLUSION

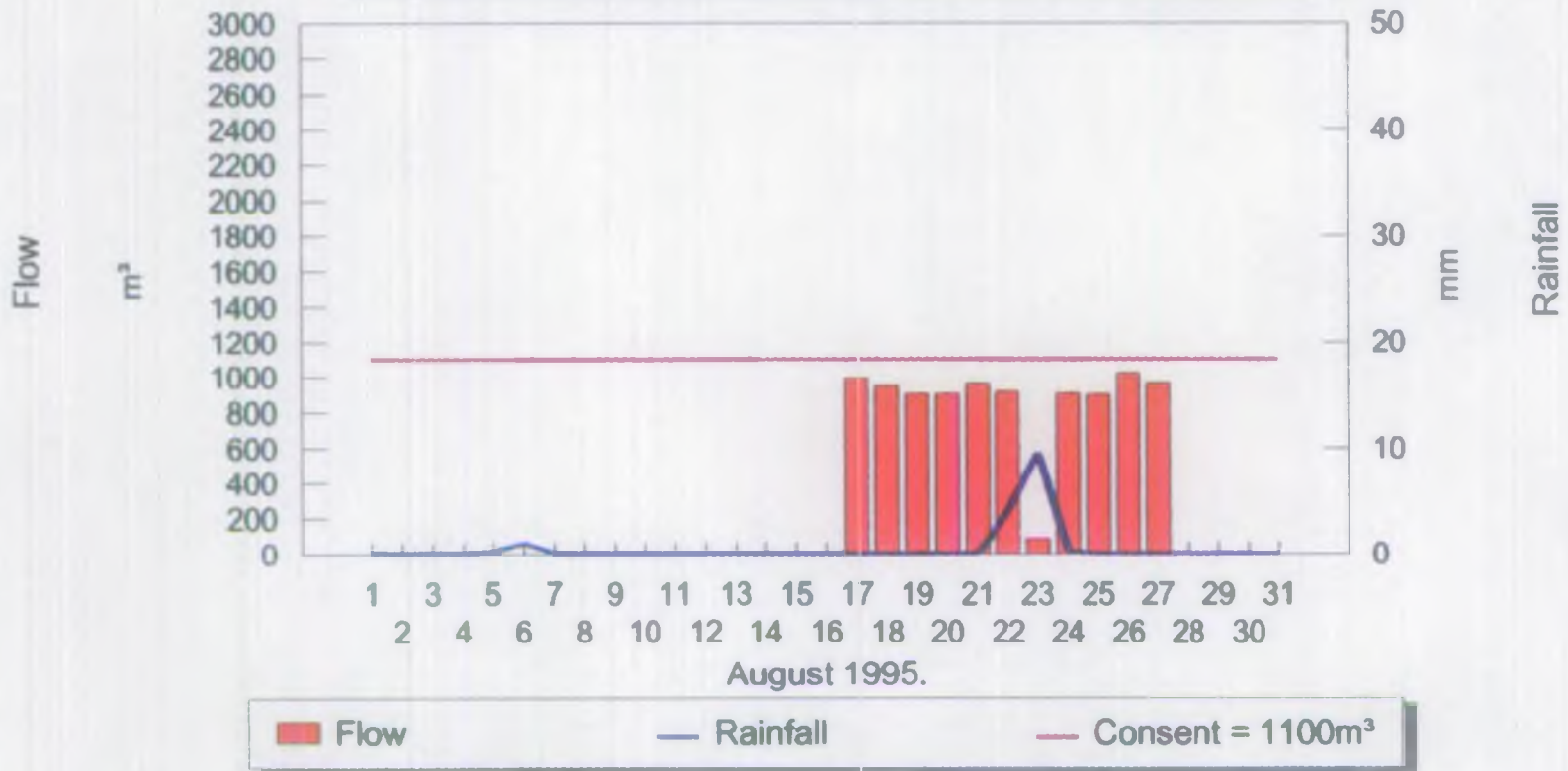
Fluxton STW did not exceed the consent to discharge as authorised by the DOE, Control of Pollution (Discharges by Authorities) Regulations 1984, during the period of monitoring..

APPENDIX 1.

Total daily flow and rainfall results for August, September, October, November, and December.

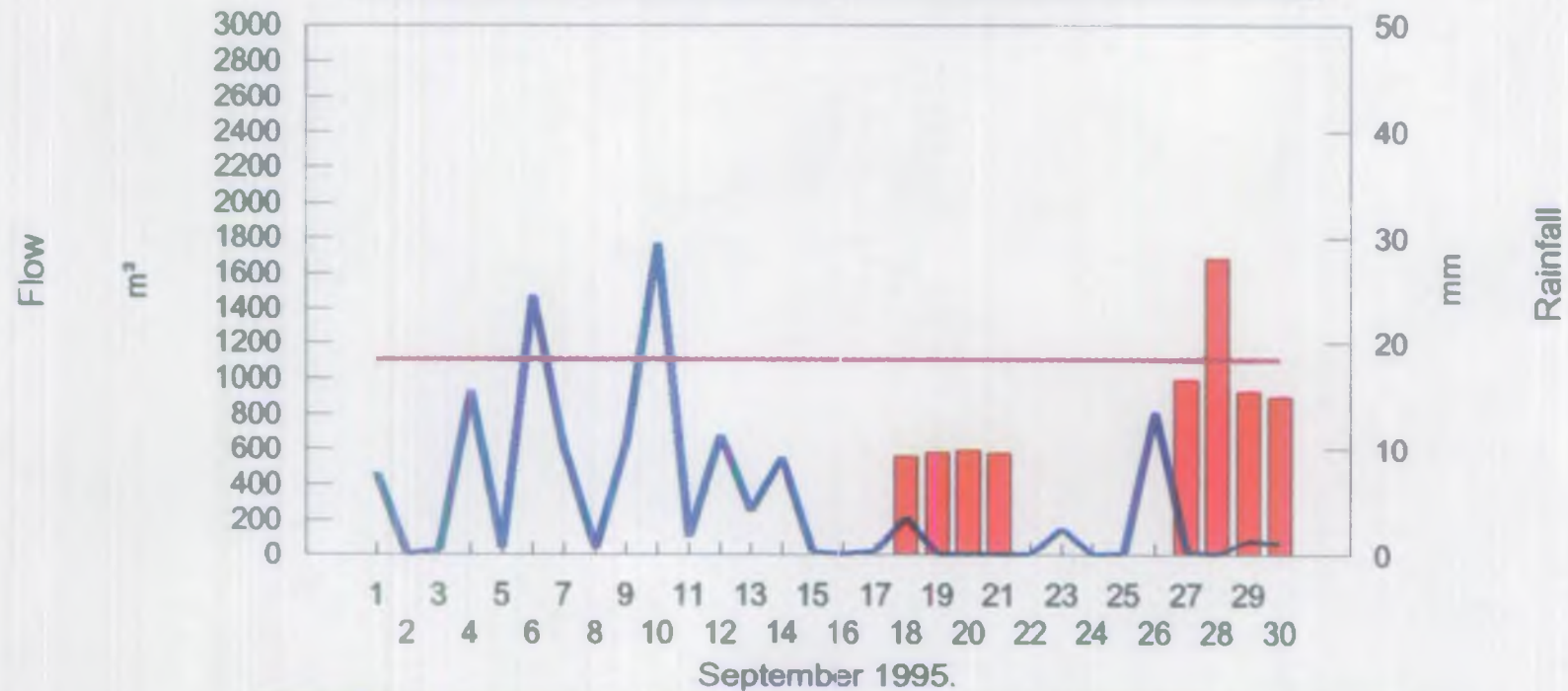
FLUXTON STW.

F.E Flow Monitoring and associated Rainfall from Dotton P S.



FLUXTON STW.

F.E Flow Monitoring and associated Rainfall from Dotton P S.



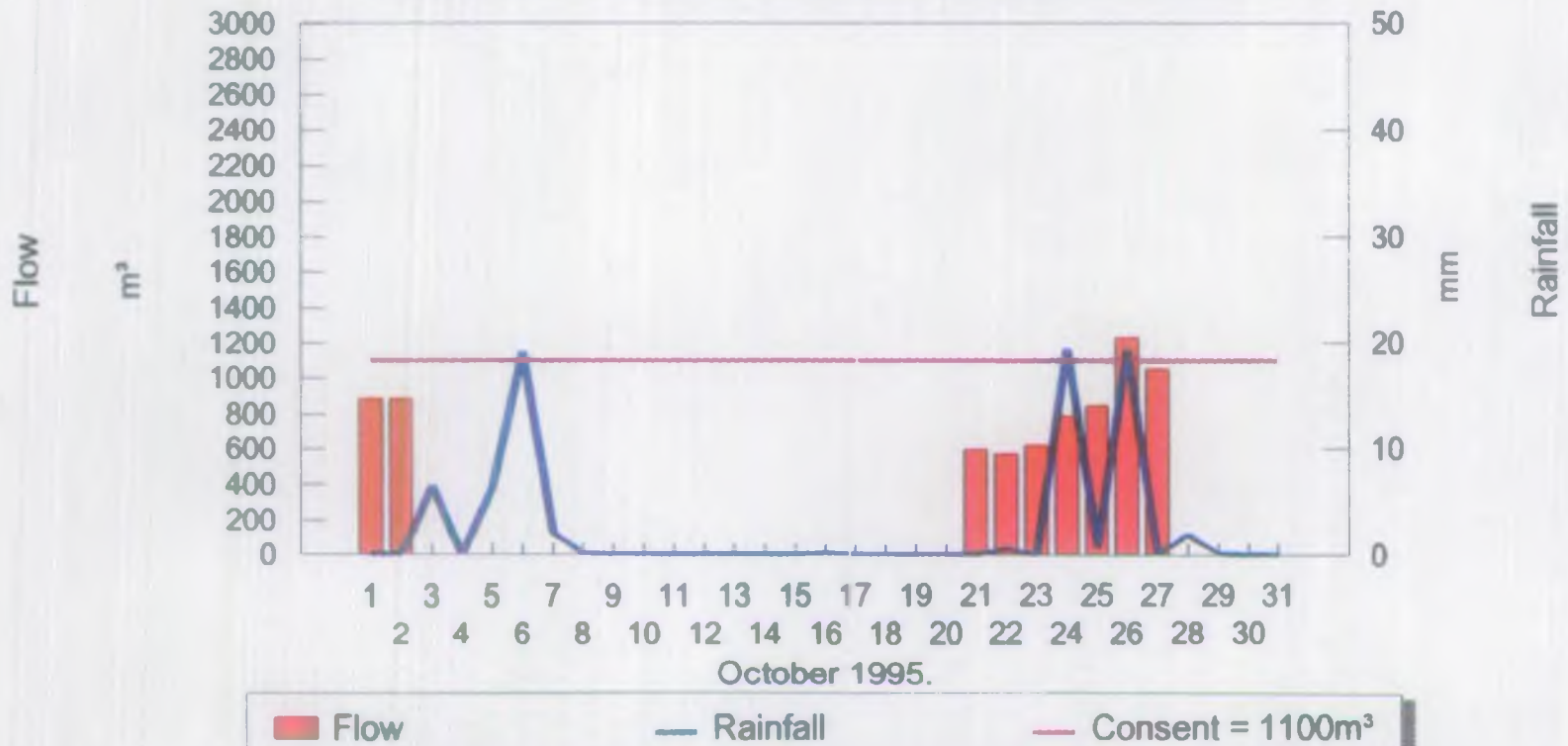
Flow

Rainfall

Consent = 1100m³

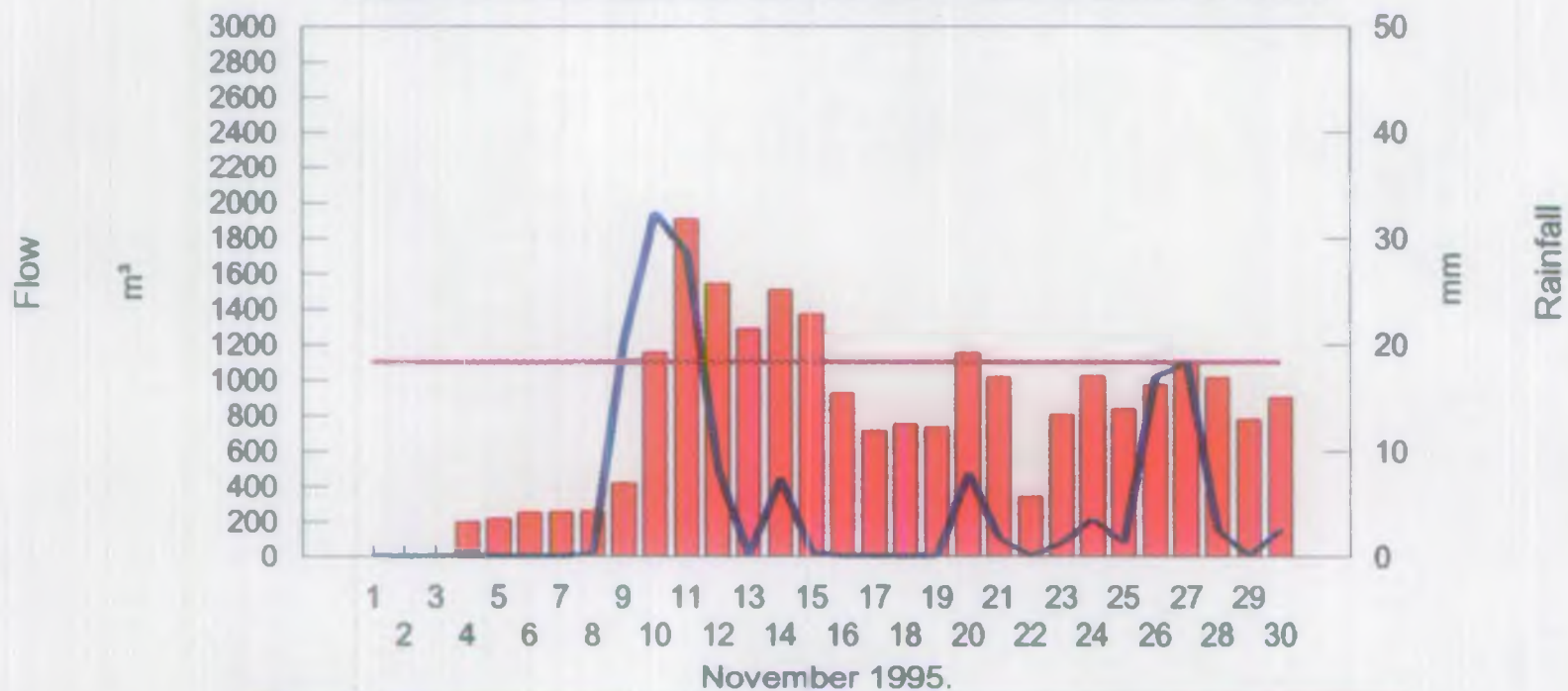
FLUXTON STW.

F.E Flow Monitoring and associated Rainfall from Dotton P S.



FLUXTON STW.

F.E Flow Monitoring and associated Rainfall from Dotton P S.



Flow

Rainfall

Consent = 1100m³

FLUXTON STW.

F.E Flow Monitoring and associated Rainfall from Dotton P S.

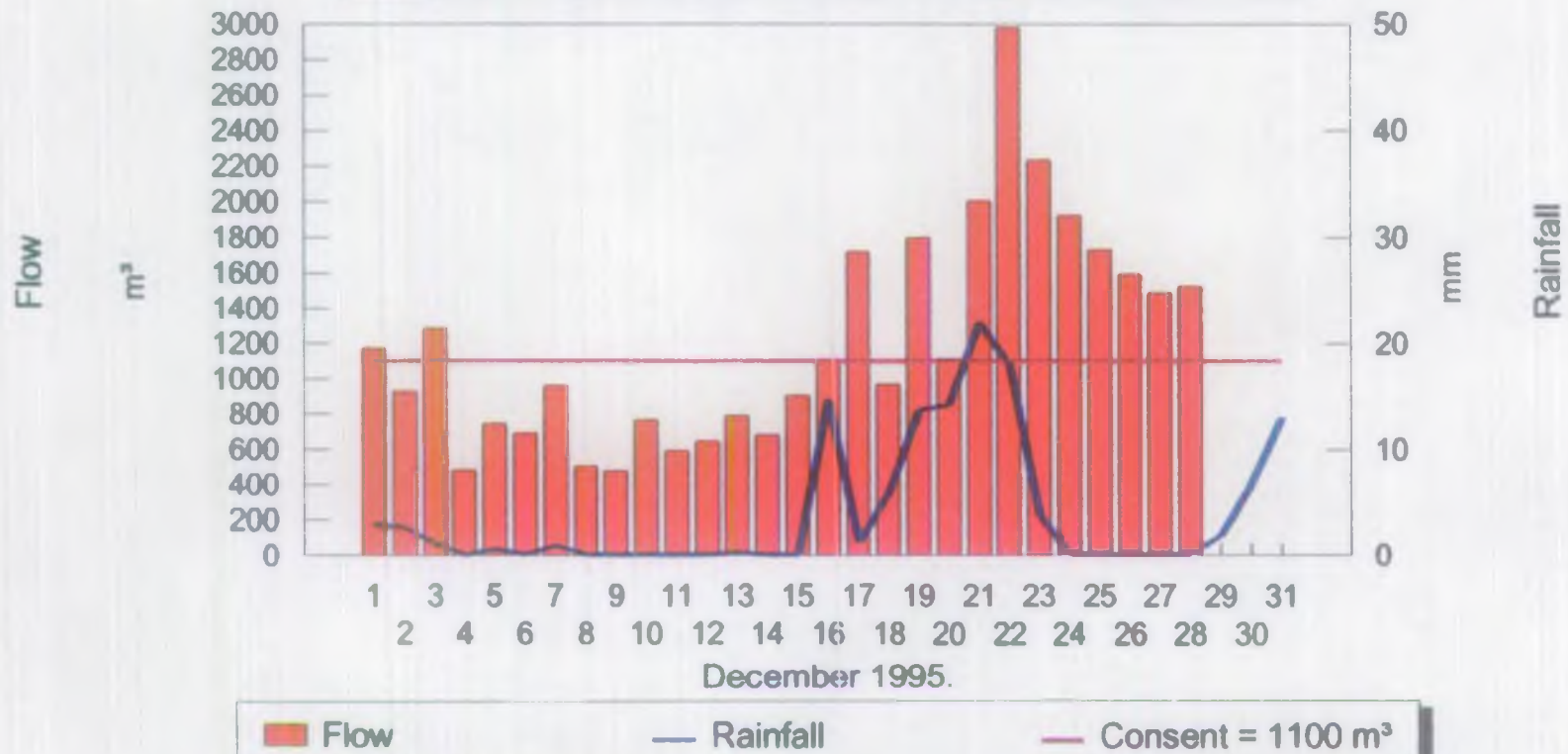
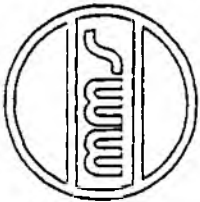


Figure 1.

Layout of Fluxton STW.

SOUTH WEST WATER



SCHEME TITLE
 OTTERY ST MARY [FLUXTON]
 SEWAGE TREATMENT

SCALE
 1:2500 DATE
 OCT 1986

DRAWN BY ORIGINATOR
 AM PROJ. ENG
 R.L

DRAWING TITLE

FLUXTON S.T.W
 OUTFALL AND SAMPLING POINTS

DRAWING N°-

26.4580 / 01/155

DESIGN GROUP

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