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MINISTER FOR LOCAL GOVERNMENT AND ENVIRONMENTAL SERVICES

*Prime Minister 4*

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*This paper describes  
current plans for  
dealing with a major  
flood in London.*

*WPN  
28/7*

*Mr White,*

*MS*

As you know, the Secretary of State for the Environment is responsible for co-ordinating the Government's contingency planning for a major flood in London. I am circulating for your information the attached note by officials reviewing the current state of plans which has been agreed by the Civil Contingencies Unit.

Clearly, if there is a flood there will be very great problems and we shall have to mount enormous rescue and clearance operations. We must take all reasonable precautions, particularly to minimise loss of life, and injury, and this Paper sets out the various arrangements.

Copies of this paper go to the Prime Minister, the Chancellor of the Exchequer, the Chancellor of the Duchy of Lancaster, the Lord President of the Council and the Secretaries of State for Defence, Employment, Energy, Industry, Health and Social Security, Agriculture, Fisheries and Food, and Transport and to Sir Robert Armstrong.

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TOM KING

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## CONTINGENCY PLANNING FOR TIDAL FLOODING IN LONDON

Memorandum by the Department of the Environment

1. This Memorandum reviews the current state of planning by public authorities for dealing with tidal flooding in London.

### Flood risk and warning system

2. There is one chance in 50 that there will be a tidal flood in London in any one flood season (between late August and late April). Almost total protection will be given by the Thames Barrier which is due for completion at the end of 1982. Until then serious flooding with disastrous consequences will remain a real risk. (It is also likely that a tidal flood in London would be accompanied by flooding in the Thames Estuary and elsewhere along the East Coast of England. Some flooding occurs from time to time here even when London is not affected).

3. The GLC has for some years been responsible for warning the population of the flood risk, and for co-ordinating the plans of public bodies - including local authorities, the police, and the armed forces - for dealing with the immediate flood emergency. These plans include precautions to preserve life and property; safe-guarding the people most at risk; arrangements for mobilising emergency services and establishing communications; and plans for mutual liaison and sharing of resources. While there is always undoubtedly room for detailed improvement (of which the authorities become aware through simulation exercises, seminars and discussions), we consider that these plans are at an adequate degree of readiness for the period immediately before and during a flood.

### Effect of flooding

4. A severe London flood is probably the most damaging natural disaster liable to affect these islands. In spite of the plans referred to above, it is generally accepted that there would be

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casualties, resulting from such causes as collapse of buildings, open manholes in flooded roads and individual failure to heed warnings; and that, depending on the severity of the flood, deaths could be numbered in hundreds rather than dozens. In many areas the water will "pond" and take up to a week or more to drain away. The water will be polluted because of the flooding of sewers. There will be widespread electricity failure; structural damage to roads, bridges and buildings; and earth slippage resulting in fractured sewers and gas and water mains. Telephone communication will be disrupted, as will public transport. There is also a risk of looting and other outbreaks of civil disorder. Substantial parts of the flood area would be virtually uninhabitable and mass evacuation may be needed.

## PLANS AND RESPONSIBILITIES

5. As part of the overall arrangements for dealing with the threat of a flood emergency the Department of the Environment was, in the summer of 1979, given a remit to take responsibility for liaison with the Greater London Council (GLC) and other authorities; to maintain an over view for Departmental involvement generally; and to prepare situation reports, identifying matters requiring collective decision, for collective consideration by Ministers. To this end, DOE is equipped to set up a small Flood Emergency Unit (FEU) which will operate from Fortress House, where DOE and DTp Ministers will also be located. FEU will need to be supported by an inter-departmental group of officials, similar in composition to a Regional Emergency Committee. Collective decisions by Ministers would normally be taken by the Civil Contingencies Unit (CCU).

6. The London boroughs, emergency services, armed forces and voluntary services have contingency plans for rescue operations during and after the period of flooding. So far as dealing with looting and civil disorder are concerned the Metropolitan Police regard their normal plans as adequate. The plans of the armed forces, code-named "Operation Giraffe", include arrangements for deploying additional manpower and helicopters as required.

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Contractors will stand by in case there are breaches in the river walls and military personnel will also be available to work on the repair of breaches. Arrangements for assistance by Service aircraft have recently been revised. Tasks include the evacuation of casualties; reconnaissance of the flood areas (carrying police observers), possibly extending downstream to the Kent and Essex coasts; the carriage of VIPs, including Ministers; the movement of repair teams and their equipment; general command and liaison in the likelihood of severe disruption to ground communications. In addition, a Canberra aircraft should be available for photographic reconnaissance. A RAF officer will be appointed Helicopter Force Commander, under command GOC London District. Tasking priorities will be decided by the GLC Flood Control centre.

7. Following discussions with the GLC and Borough representatives, we are satisfied that, for London as a whole, adequate plans exist for handling the massive evacuation that may be necessary. The total resident population of the risk area is around  $\frac{3}{4}$ m but it is thought impossible for the whole area to be flooded at once. Moreover many evacuees will go to friends or relations. Emergency accommodation and transport for about  $\frac{1}{4}$ m has been specifically earmarked and more can be made available. Longer term arrangements for the homeless could only be made at the time.

8. Outside London the local authorities and other public bodies in affected areas maintain contingency plans for severe flooding which are effectively an extension of their plans for "normal" floods and storms. If flooding was so severe that the county councils required help from central Government, this would be provided by Departments regionally, co-ordinated by DOE and, if necessary, through the machinery of the CCU.

The aftermath - mopping up and return to normal

9. Mopping up and getting back to normal after a serious flood will be a long and complicated business. DOE officials have examined the plans of the various public and private sector

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organisations most directly concerned. Most organisations have broadly adequate plans for bringing in the materiel and labour needed to restore their operations to normal and, where appropriate, to provide temporary services. In the absence of any direct precedent, and in the face of uncertainty about the eventual incidence and degree of damage, these plans cannot be very definite. But we consider that in most cases they are based on a realistic assessment of the likely problems. Thus, for example, it seems likely that the water authorities will face comparatively few problems restoring water supplies. On the other hand we can expect the London Underground to be severely affected. Limited services could be re-introduced on the District and Circle Lines within 2 months, but restoration of full services would take 12 months, or even longer.

10. In such conditions, there would be a clear case for the declaration of a State of Emergency; this would strengthen the powers of the organisations concerned, including the police, although the necessary arrangements would take at least 24 hours to complete.

11. The plans in two areas - electricity supply and the National Health Service - require further, more detailed comment.

## Electricity supply

12. The availability of electricity will be central to restoration work by many others including householders. Several Thames side power stations, which produce up to 10% of the nation's supplies, may be knocked out by flooding, but adequate supplies can be generated elsewhere and transmitted by the National Grid. The difficulty arises in the distribution system and at consumers' premises. A good deal of equipment - especially substations, transformer chambers and domestic meters - is at risk and would take a substantial effort to restore. The London Electricity Board (LEB), in collaboration with other Electricity Boards, the GLC and DEn, has prepared contingency plans with the object of ensuring that supplies are restored

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as soon as possible. In the case of a severe flood, however, this would be at least a week for most consumers, with the majority reconnected within a further two weeks.

13. Nine of the twenty-two main substations in the flood risk area have been "flood-proofed" by the erection of retaining walls. However the flood-proofing of the remaining thirteen main substations is not practicable because by the time planning permission had been obtained and the work completed, the Thames Barrier would have been constructed and the danger of flooding receded; nor is it for the thousands of transformer chambers and distribution cables which will have to be checked and, if necessary, refurbished for service. Consumers' installations will likewise have to be checked individually before supplies can be restored to them. To meet this workload, the LEB's plans provide for them to borrow skilled staff from other Electricity Boards, conceivably in excess of 4,000. Lines of communication have been established between the "donor" Boards and the LEB Districts in which their teams will be deployed, and the teams will be alerted as soon as a flood is confirmed, and moved in as soon after the water drains away as they can usefully be deployed. The Districts have made diverse arrangements for the accommodation of the donated staff; those least affected will place them in private homes, while others have located hotel accommodation which could be made available, or office accommodation. (In the latter case, bedding from the DHSS civil emergencies stockpile would be used to convert to sleeping quarters). Arrangements have also been made for laundry services, hot meals and re-equipment for the volunteers. Special centres would be established to co-ordinate operations, and other centres set up to answer public enquiries.

14. The work that the LEB does in the immediate aftermath of a flood may be of a temporary or makeshift nature, though it should include, in domestic premises, some light and power, and a minimal cooking facility. The LEB would carefully weigh the necessity of resuming supply in particular cases against the safety risks involved, but emergency power regulations to suspend the safety regulations would be essential if the LEB were to avoid claims for damages.

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## National Health Service

15. NHS plans have been thoroughly reviewed. 19 hospitals with some 5,000 beds are in the risk area. Only limited evacuation of hospitals during the warning period is practicable and in general the hospitals plan to be self-contained for about 48 hours after flooding occurs. Thereafter the plans allow for controlled evacuation by ambulance. For very sick patients - especially those on life-support systems - special arrangements may be needed. In all cases it will be for the doctor in charge to decide whether a patient should be moved.

16. At the primary care level, the existing flood plans of health districts (in liaison with local authorities) are being augmented by plans to contact and deploy general practitioners, pharmacists and dentists. There are adequate stocks of vaccine readily available to deal with any risk of epidemics.

17. The NHS's plans include arrangements for communications between different parts of the Service and with local authorities. Plans have been made for coping with people who become seriously ill or who are injured during flooding or in the immediate aftermath; these may require evacuation by boat or helicopter.

## Organisation of Government

18. Contingency plans can do a great deal to minimise the impact of a serious flood, but in many areas action can only be taken in response to the particular circumstances of the emergency itself. For example, we have considered what plans might be made to provide alternatives to the London Underground during the long restoration period envisaged for it, but very little can be done to good purpose in advance, and it will be necessary for Ministers to make decisions at the time, for example on the requisitioning

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of privately owned transport and on traffic regulations. We have, therefore, paid particular attention to the organisation of Government itself during a flood, and to its ability to respond quickly and effectively to circumstances.

19. Much of the Whitehall and Westminster area is itself liable to flooding, and Departments have therefore made contingency plans to locate essential staff outside the risk area, north of the Thames. The Prime Minister's Office and the Cabinet Office will be located at New Court, Lincoln's Inn Fields and other Departments in other available buildings.

20. Government Departments in "exile" will communicate by telephone. Telephone communications outside the flooded area should continue to operate, even though services through it are likely to be disrupted. A directory showing the location of key personnel has been prepared by CSD and an updated version will be issued in September.

21. DOE will establish a Flood Press Unit to work alongside the FEU and maintain close liaison with the Prime Minister's Press Secretary.

## Parliament

22. Parliament is likely to wish to continue to sit whilst waters rise, and although it may then adjourn, it will need to meet within 5 days if a state of emergency is proclaimed. There may also be a requirement to sit to dispose of other essential business.

23. Plans have been made to safeguard the fabric of the Palace of Westminster during flooding. Although the building is reasonably well flood-protected it could be difficult to reach for a day or more in the event of a flood. Proposals for temporary alternative accommodation at the Connaught Rooms (off Kingsway) have therefore been agreed between the Secretary of State for the Environment, the Government Chief Whip and the Leaders of the two Houses of Parliament.

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Although the aim throughout these discussions has been to avoid publicity, the Secretary of State, with the agreement of the Prime Minister, will make a low key announcement before the summer recess, in reply to an "inspired" Parliamentary Question, so that the detailed plans could be worked out with staff of the Connaught Rooms, and Members informed about the arrangements.

Financial arrangements

24. Measures to deal with flooding on any large scale would entail substantial additional public expenditure commitments. Local authorities have powers to incur expenditure on emergencies, and can be expected to undertake immediately whatever work is necessary. But there will inevitably be pressure for Exchequer assistance towards such costs; it is suggested that initially at least, this might be offered on the same basis as has been done in the past ie to provide assistance where the net cost falling on a local authority exceeds the product of a 1p rate. The arrangements for reimbursement of exceptional expenditure by Central Government (eg services provided by the armed forces) are under consideration by the Treasury who will be approaching the Departments concerned.

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