London Fire Brigade – the basics

- UK’s 2\textsuperscript{nd} largest fire and rescue service (5\textsuperscript{th} largest in the world)
- Just over 5,300 whole-time firefighters
- 102 fire stations + 1 river station
- 155 pumping appliances + a further 77 specialist appliances
- Receives 200,000 + emergency calls per year
London’s flood risk

- 26 underground stations, 400 schools, 16 hospitals, 1 airport & £80bn property are within flood risk areas
- **Thames** – well protected by the Barrier – but the risk from tidal flooding remains
- **Other waterways** – less flood protection and typically shorter warning period
- **Ground & surface water** – can be unpredictable and increasing levels of risk associated with extreme weather
Hazards associated with flooding

• Disease associated with dirty water
• Drowning - 150mm of water travelling @ 3m/s can topple an adult!
• Structural collapse
• Raised drain and manhole covers
• Hidden debris
• Fires caused by arcing electrics
• ‘Human factors’
  ➢ complacency
  ➢ over-reaction & unpredictable behaviour
  ➢ driving into floodwater
Planning in advance
‘making your friends before you need them!’

• Flood risk should be assessed via Local Resilience Forum to engage all stakeholder agencies
• Partner agencies need to understand each other’s capabilities – and limitations!
• Key planning activities include
  ✓ need to identify any critical infrastructure
  ✓ develop and maintain plans and procedures
  ✓ ensure resilient 24/7 response arrangements, both “in-house” and with contractors/suppliers
  ✓ testing and exercise arrangements
Planning - anticipating an incident

- Proportional reaction to any warning
- Intelligence-led forward deployment of resources
- Plan routes and key facilities/activities (e.g. rest centres, Strategic Holding Areas)
- Other considerations include:
  - priority locations to be protected
  - business continuity implications
  - communications structure
  - how resources will be sustained
  - how to control access/egress (cordons), for both responders & the public
London Emergency Services Liaison Panel

- Established in 1973
- 3 police forces, LAS, LFB, 33 local authorities, PLA, MCA, the Military and voluntary sector
- Agreed multi-agency procedure for tackling major incidents
- Is the precursor to subsequent national guidance, such as ‘Dealing with Disaster’ & JESIP
- Incorporates 40 years of collective experience derived from a wide range of significant incidents
Role of the London Resilience Partnership

• Co-ordinate emergency response
• Promote shared situational awareness via a ‘Commonly Recognised Information Picture’
• Assess the wider implications of incident(s)
• Determine & communicate strategic aims and objectives
• Liaison with central Government
• Obtain any additional assistance required, such as from local authorities or the military
• Deal with media and public reassurance
• Recovery, debriefing and ‘lessons learned’
LFB flood response – Levels 1 and 2

- 24/7 capacity to deliver 120-150 firefighters anywhere in London within 30 minutes
- All 5300 firefighters are Water First Responders (basic rescue capability)
- 10 Fire Rescue Units
  - accredited to national standards for rescue from fast-flowing water
  - boat and dry suit - equipped
  - can lead non-specialist emergency responders for rescue/evacuation
LFB flood response – Level 3

- Levels 1 & 2 plus…..
- 20 swift water rescue personnel on recall
- Flood Response Kits:
  - 20 rigid evacuation boats
  - 5 modular floating pontoon systems
  - 125 sets of flood PPE for ‘frontline’ firefighters
- 24 Tactical Advisers
- 4 National Flood Tactical Advisors
LFB flood response - Pumping capability

- 6 strategically located High Volume Pumps (HVP)
- Capable of pumping 7000 litres per min over 3km
- HVP role is to
  - protect critical infrastructure
  - divert water at critical locations
- Limitations
  - time required to remove wide area flood
  - reliant on suitable location to pump water to
LFB flood response - Decontamination

- Flood water is normally a serious health hazard!
- The need for decontamination is sometimes over-looked at flood incidents
- 10 strategically located Incident Response Units
- Can decontaminate responders or public
- Able to decontaminate 300 persons an hour
- Requires a large open area to operate effectively
The national response to flood

- Flood incidents can require a regional or even national response
- LFB works within DeFRA’s national concept of operations
- UK fire service and NGO response is co-ordinated by FRSNCC (located in Merton)
- National fire service resources:
  - 134 FRS flood rescue teams
  - 48 HVPs
  - 72 IRUs
- May need to work with resources from outside London
Flood – “an emergency or a disruptive event...?”

- Floods can be protracted incidents and create long-term issues
- Not all floods are emergencies!
- FRS role is rescue, protect critical infrastructure & provide mass decontamination (if required)
- “Rescue vs evacuation” (dynamic response to immediate threat to life/well-being vs a planned movement of people)
- Nature and progression of incident may fluctuate (i.e. move in and out of an emergency phase)
- Emergency phase will end before a flooding incident is fully resolved
- Withdrawal of FRS assets is a key decision for strategic and tactical commanders
Look forward……

• Importance of joint planning via LRFs to ensure the right response is in place to meet local risk
• Practise arrangements via testing and exercises
• LFB’s flood response is being improved in line with ‘lessons learned’ from 2013/14 and 2015/16 floods, including:
  ✓ Better equipment
  ✓ Improved logistics
  ✓ Improved tactical advice to ensure effective use of communications
  ✓ Training
• LFB is exploring options to become more involved in flood prevention
Any questions?

Deputy Assistant Commissioner Andy Roe