

# Health & Safety Guidelines for the Thames & its Foreshore

**Produced by the  
Thames Explorer Trust  
on behalf of the  
Thames Estuary Partnership**

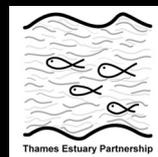
Supported by:



European  
Regional  
Development  
Fund



Port of London  
Authority



Thames Estuary  
Partnership



## 1. INTRODUCTION

- 1.1 Purpose of the guidelines
- 1.2 Target audience
- 1.3 About the guidelines
- 1.4 Producing the guidelines
- 1.5 Updating the guidelines
- 1.6 Using the guidelines

## 2. IDENTIFYING HAZARDS AND CONTROLLING RISKS

- 2.1 Risk assessment
- 2.2 Assessing risks at specific sites
- 2.3 Assessing alarm and rescue facilities at specific sites
- 2.4 Training group leaders
- 2.5 Assessing the participants
- 2.6 Informing participants of risks and how to minimise them
- 2.7 Organising groups to minimise the risks
- 2.8 Preparing safety equipment
- 2.9 Assessing conditions on the day of the visit
- 2.10 Informing the London Coastguard of a foreshore visit
- 2.11 Insurance cover

## 3. SPECIFIC HAZARDS AND MEASURES TO CONTROL RISKS

- 3.1 Water-borne diseases
- 3.2 Decaying organic matter
- 3.3 Tides and currents
- 3.4 Foreshore access
- 3.5 Slippery surfaces, muddy areas and contaminated substrata
- 3.6 Rubbish
- 3.7 Wash from river craft
- 3.8 Extreme weather conditions
- 3.9 Riverside roads
- 3.10 Objects falling onto the foreshore
- 3.11 Unsafe railings
- 3.12 Illness or injury
- 3.13 Disruptive behaviour

## 4. ACCIDENT AND EMERGENCY PROCEDURES

- 4.1 Developing accident and emergency procedures
- 4.2 General principles for accident and emergency procedures
- 4.3 Giving first aid
- 4.4 Calling the emergency services
- 4.5 Developing recording procedures
- 4.6 Communicating information about incidents

## 5. PROTECTING THE HEALTH OF THE RIVER AND ITS WILDLIFE

- 5.1 Avoiding damage to river banks and water quality
- 5.2 Protecting wildlife
- 5.3 Reporting damage

## APPENDICES

- 1 Organisations responsible for river management and safety
- 2 Sources of useful information
- 3 Examples of risk assessments
- 4 Sample check list for assessing the safety of a site
- 5 Information sheet sent to school teachers or youth leaders
- 6 Introductory talk given by group leaders before Thames21 river clean-ups
- 7 Suggestions for a code of conduct for young people on the riverside and foreshore
- 8 Suggestions for an equipment check list
- 9 Sample accident and emergency procedures



# I. INTRODUCTION

## I.1 Purpose of the guidelines

This document aims to provide simple practical guidelines and information on health and safety considerations for those working on the foreshore and riverside of the Thames estuary with supervised groups of members of the public.

There is immense value in providing safe access to the Thames. Close contact with the water helps people appreciate and understand this environment through investigation of its ecology, heritage, water quality and the physical nature of the river itself. It is also a potentially dangerous area: the danger partly lies in people not appreciating the power of the Thames and its changing nature. It is not a force to be under-estimated and can be unpredictable.

The list of potential hazards and risks could suggest that the river, particularly on the foreshore, is a place best avoided. However, with common sense and good planning, risks can be minimised. What follows is intended to ensure that the public can enjoy the Thames in safety.



**High profile events on the foreshore raise awareness of the value of the Thames**

## I.2 Target audience

These guidelines are for use by organisations providing supervised activities by the Thames and on the foreshore, led by a trained member of staff or volunteer. Participant groups could be school parties or youth organisations, adult groups on study days, or local community groups doing enhancement projects or foreshore clean-ups.

These guidelines are not intended for distribution to participant groups. However, the appendices offer suggestions on the key information that can be provided to participants.

This document is not intended to provide advice for the organisation of unsupervised public events nor unaccompanied visits by individuals, although much of the information is relevant to these cases.

The guidelines are based on the experience of organisations working mainly on the Thames estuary upstream of Tilbury, particularly in the Greater London area. They do not cover all the risks and hazards relating to a more marine environment

such as at Southend or the non-tidal river above Teddington. However, much of the information provided is relevant to work in outer estuaries, coastal areas and non-tidal rivers.

## I.3 About the guidelines

This document identifies the major hazards and risks associated with activities undertaken particularly on the foreshore, but also beside the Thames. It also suggests ways of minimising risk, suggests emergency procedures to deal with incidents and offers useful background information.

Much of what follows is common sense and is based on the experience of organisations already working on and along the river. Some of the information - for example, on crossing roads - may appear obvious, but is worth mentioning, as it is often the known and obvious risks that are not adequately dealt with.

In order to make this document as concise and practical as possible, background information on general health and safety regulations has been kept to a minimum. The publications listed in Appendix 2 are a useful source of further information.

## I.4 Producing the guidelines

The information has been gathered after consultation with statutory organisations dealing with river safety and with organisations providing activities for the public.

The production of this document is part of the action plan of the *Education and Awareness Action Group* of the *Thames Estuary Partnership*.

## I.5 Updating the guidelines

What follows is the best information available to date. It is hoped that this document will provide a stimulus for those working with the public on the Thames to review health and safety procedures regularly and to supply any new information to the *Thames Estuary Partnership Education and Awareness Action Group*. (See inside cover for contact details). This will enable the group to review the guidelines periodically and update them when necessary.

## I.6 Using the guidelines

It is important to realise that these are only guidelines. They may not cover all situations. However, it is hoped that the information will provide a basis for developing or improving health and safety procedures.

It is recommended that organisations offering river activities prepare:

- written risk assessments for each site worked
- health and safety procedures to minimise risks
- emergency procedures
- codes of conduct for different groups outlining behaviour which will minimise risks
- recording procedures for incidents, near misses and unusual events
- check lists for items such as safety equipment

These documents can help ensure that

- a common standard is set for all staff and sites
- standards can improve in the light of experience
- new knowledge is communicated effectively amongst staff
- the training of new staff is comprehensive
- protection is provided for the organisation in the case of a legal action

It is helpful, particularly in larger organisations, if a member of staff is given responsibility for health and safety and who

- keeps staff informed of issues
- ensures recording is up to date
- trains new staff
- organises regular reviews and updates of all safety procedures

## 2. IDENTIFYING HAZARDS AND CONTROLLING RISKS

A hazard can be defined as *anything that can cause harm*. Risk can be defined as *the chance, large or small, that someone will be harmed by a hazard*. This section provides suggestions on

- devising a risk assessment that can be used as a tool to control risks
- organisational methods of minimising risks

### 2.1 Risk assessment

An assessment of risk is nothing more than a careful examination of what, in your work, could cause harm to people, so that you can weigh up whether you have taken enough precautions or should do more to prevent harm.

Having a risk assessment on paper in a cupboard is not enough: **it is essential that mechanisms are put in place to inform all those involved in river activities of the risks and how to minimise them.**

Risk assessment can be broken down into 5 steps:

**Step 1 Look for the hazards** If you are doing the risk assessment yourself, walk around the site and identify what could be reasonably expected to cause harm. Ignore the trivial and concentrate on the significant hazards that could result in serious harm or affect several people. Discuss hazards with other members of staff or volunteers. They may have noticed things that were not immediately obvious.

**Step 2 Decide who might be harmed and how** Think about all the people who may be involved in a river visit, including staff and volunteers.

**Step 3 Evaluate the risks and decide whether existing precautions are adequate or whether more should or could be done** If a risk is identified, there are 2 options - get rid of the hazard or control the risk. Even when all precautions have been taken, some risks may remain. What you have to decide for each significant hazard is whether the risk is high, medium or low. If the risk is low, no action is required apart from monitoring to see that controls are maintained. Where the risk is medium, action is needed to reduce that risk through improved control measures. If the risk is high, the activity should not take place until the risk has been reduced.

Assessing risks can be difficult for something like water-borne diseases, where statistics are not available. In some cases, you may have to use anecdotal evidence gathered from your staff and other organisations.

The risk assessment should take into account factors such as type of activity; location; competence, experience and qualifications of staff; age, competence and fitness of participants; ratio of staff to pupils; quality of equipment; seasonal conditions and weather; existing controls.

It is also helpful to check whether you are complying with any legal requirements and with generally accepted

standards. For example, local authorities should have their own standards for school trips and normally copies can be obtained from the local education authority. The most relevant pieces of legislation are:

- *Management of Health and Safety at Work Regulations Act (1992)* which operates alongside the Health and Safety at Work Act (1974) which sets out a statutory duty to carry out risk assessment.
- *Health and Safety (First Aid) regulations (1981)* which details first aid requirements.
- *Activity Centres (Young Persons' Safety) Act (1995)* which makes provision for the regulation of centres and providers of facilities. This act relates to the provision of adventure activities such as caving or watersports rather than environmental education activities or conservation work.

A useful document when developing procedures to control risk is the *Code of Practice for Outdoor Adventure Providers (April 1994)* drawn up by the UK Activity Centre Advisory Committee. This Code of Practice is a statement of principles and expectations for the responsible provision of organised outdoor adventure activities. (A copy can be obtained from the Thames Explorer Trust. See Appendix 2 for contact details).

**Step 4 Record your findings** The law states that if you have fewer than 5 employees, you do not have to write anything down. If you have more, you must record the significant findings of your risk assessment. This means

- writing down the significant hazards
- recording your most important conclusions for dealing with them
- informing all those involved of these findings

The assessment must show that:

- a proper check was made.
- you considered who might be affected.
- you dealt with the obvious significant hazards.
- the precautions are reasonable and the remaining risk is low.

An organisation offering river activities at more than one site may decide that the most appropriate document is a generic one relating to common hazards with supplements for specific sites, containing maps pinpointing local hazards. A copy of the document should be filed and each group leader should have a copy. It is important to keep a copy on file, as it may be required in any action for civil liability and it shows that you have done what the law requires.

**Step 5 Review and revise your assessment regularly** It is important to review and update your risk assessments regularly with all members of staff involved in river activities. For example, a new activity may carry a new risk or an incident may have exposed ways in which current risk control is inadequate. The keeping of an incidents log is an essential part of this. (See Section 4.5).

**Examples of risk assessments are given in Appendix 3.**

## 2.2 Assessing risks at specific sites

No site is safe, but some are safer than others. The age, competence and fitness of participants should be taken into account when choosing and assessing a site.

The list of hazards identified for a site can be used to generate a check list of questions such as:

- *Is the access along the waterfront away from traffic? Does it involve crossing busy roads?*
- *Are there any areas where people could accidentally fall from the bank into the water?*
- *How easy is access to the foreshore?*
- *How many egress points are there from the foreshore in case of emergency?*
- *Is the foreshore firm?*



**Getting groups down this set of City stairs needs careful planning**

Two other important considerations are:

- *Is the site accessible to emergency vehicles?*
- *Is there access to hand-washing facilities, if people will be in contact with river water?*

**Suggestions for a check list are given in Appendix 4.**

Group leaders should familiarise themselves with the site prior to a visit at a time that reflects the state of the tide expected during the event. Checking the risk assessment and the strategy for dealing with risks at that site should form part of this preparation. This allows time for "getting a feel" for the place: for example, choosing a method of determining when the tide starts to rise. Is there a fixed structure such as a jetty that is a good marker?

**It is highly recommended that the leader allows time to check over the site on the day of the visit.** The Thames is a dynamic environment and hazards such as deposited rubbish, tide levels and flow, and soft mud areas can vary on a daily basis.

## 2.3 Assessing alarm and rescue facilities at specific sites

Group leaders should also have a strategy for dealing with incidents such as accident or injury at each site. This must include identifying suitable access for emergency vehicles such as ambulances. It is essential that the group leader can describe the site precisely to emergency services and is familiar with the main surrounding land and river features. A mobile phone should form part of the leader's safety equipment, but it is worth noting the location of the nearest public phone in case the mobile fails.

The group leader should also be aware of any rescue devices that are available, for example, life buoys or throwing lines located on piers or the riverside.

It is also useful, though not essential, to know the location of the nearest hospital with an Accident and Emergency Unit in case somebody with a minor injury needs to be taken there.

## 2.4 Training group leaders

Inexperienced leaders can in themselves be a hazard: the foreshore in particular is no place for poorly trained staff.

Those leading river activities should have

- relevant experience for the activities on offer
- full supervised training in providing the activities
- an ability to lead a group (particularly important for groups of children, where discipline sometimes needs to be exerted)
- training in potential hazards and how to minimise risks
- a working knowledge of accident and emergency procedures
- a first aid certificate
- familiarity with the site where they are working

All group leaders must be informed and updated regularly of any new potential hazards, risks and control measures.

## 2.5 Assessing the participants

As has been stated, the age, competence and fitness of participants should be taken into account when planning activities and choosing sites. For example, a linear foreshore walk with difficult access may be unsuitable for people with motor difficulties or chronic asthma. Any organisation offering river visits therefore has to develop a system for finding out about participants, preferably at the planning stage, and passing this information on to the group leader.

If a booking form system is used, details can be requested at this stage. For adult groups, a quick check at the beginning of a visit may be enough. For schools booking a visit, the teacher can be asked for such details as age of the children, health problems, disabilities both physical and intellectual, and behavioural problems. A list of all participants, both children and accompanying adults, can also be requested. Such a list may prove useful in the event of an emergency.

## 2.6 Informing participants of risks and how to minimise them

It is recommended that systems be put in place to inform participants of potential risks, especially before going onto the foreshore. The degree of preparation depends on the group.

For adults, a health and safety talk at the beginning of a session may be sufficient. For groups of children, it is recommended that the school or organisation involved is sent an information sheet in advance of the visit about possible hazards and the safety measures that they themselves can take. This can be reinforced with a health and safety talk on the day of the visit and with repeated reminders when a new hazard, for example, a slippery drawdock, is about to be encountered.

**An example of an information sheet suitable for school and youth groups is given in Appendix 5.**

It may appear from this that most of a river visit will be taken up with safety talks and dire warnings. This need not be the case. In fact, it is dangerous to overload people with too much information on the day: children, in particular, will cease to pay attention after a few minutes. Clear, brisk, precise instructions are therefore to be aimed at. The safety information given should also be seen as part of the experience: the ability to operate within a particular environment safely is an important survival characteristic for any living thing.

**Points to cover in safety talks are suggested in Appendices 6 and 7.**

## 2.7 Organising groups to minimise the risks

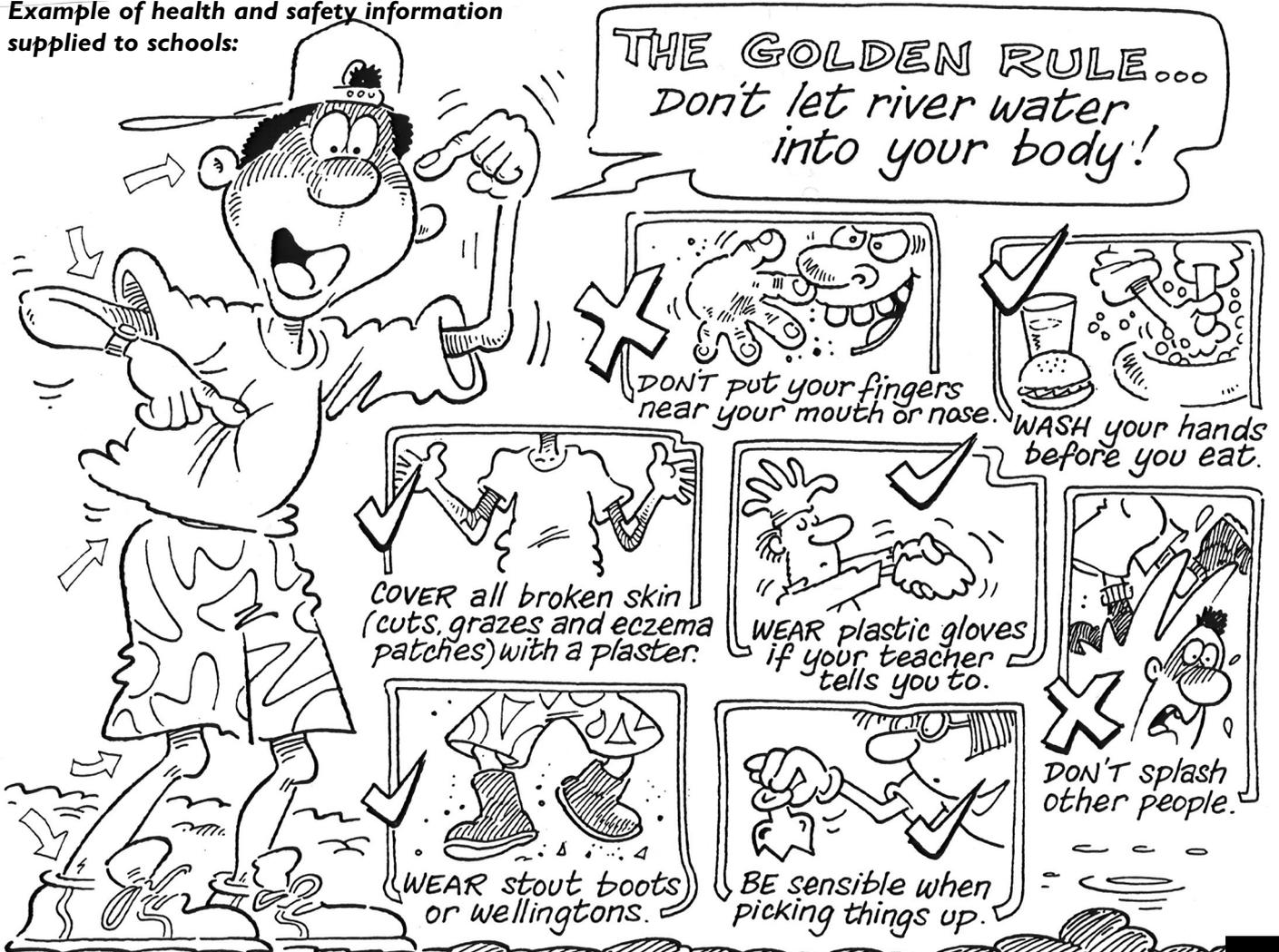
Badly organised groups are more at risk. It is recommended that codes of conduct are drawn up, tailored for different participant groups. Particularly where children are concerned, clear instructions on safe behaviour and what to do in the event of an emergency are vital.

**An example of a code of conduct is given in Appendix 7.**

The following is aimed at helping draw up codes of conduct for children of school age. However, the general principles are useful when providing activities for adults.

- **Clear instructions and purpose** Children need clear guidelines on how to keep themselves safe. This is particularly relevant to the foreshore, where the visit may be treated as "a trip to the seaside". It is also important that participants have a clear educational aim for their activities, i.e. they know what they are going to investigate and how they are going to do it. A group of children working purposefully are much safer than a group not working within an established framework.
- **Minimising the risk of dangerous behaviour** For many, the foreshore is unfamiliar territory, where risks can be

**Example of health and safety information supplied to schools:**



unappreciated. It is also an exciting area, where the instructions given on safety may be quickly forgotten. It is essential, therefore, that the group leader maintains a watchful eye on participants and reminds them of dangers if they appear to be forgotten. It may be necessary to gather the group together and reiterate safety advice. Occasionally, participants will continue to behave dangerously, for example, children who continue to throw stones or adults who wander off from the main group. In such cases, it may be necessary to abandon the foreshore visit altogether or warn an adult that they can no longer be considered part of the activity.

- **Controlling the size of the group** The group should be small enough so that the group leader can maintain adequate supervision at all times. The maximum size for a group will depend on the age of the participants and also on the number of trained staff or volunteers accompanying the group. A maximum of 30 per group leader is recommended for school parties or youth groups.
- **Adult:child ratios** Groups of young people should have a good ratio of adults to children. This can be made clear in the booking information. Local authorities provide recommendations on ratios. For example, in their *Safety Guidance for School Journeys and Off-site Activities (1997)*, LB Hounslow classes "Day visits involving activities or fieldwork ..... near a river" as a Category A activity, i.e. a high risk activity. For this they recommend the following:

group leader in consultation with the teacher in charge to decide whether it is safe to proceed with the activity.

- **Clear lines of responsibility** These should be established before commencing any river work. Accompanying adults should know what their responsibilities are and which children they are supervising. An effective means to achieve this is to subdivide the main group into smaller groups, giving each accompanying adult (not the group leader) charge of a small group. It can then be made clear that children should stay with their adult and that the adult is responsible for the safety of the children within their group. School groups can be asked to come already divided into groups with allocated adults. It is helpful if the teacher organising the trip passes on health and safety information to accompanying adults prior to the visit.
- **Keeping the group together** Risks multiply if participants get separated from the main group. It is usually appropriate, even with adults, to establish physical boundaries for activities. It is important to periodically check that the whole group is still present, particularly when leaving the foreshore.
- **Communications** It is important to establish an effective means of communication, as groups often spread out over a large area. Whistles are good over long distances. A system of signalling can be established, appropriate to the group and its activities. For example, one blast could mean *return to the group leader*; three blasts means *stop work and look around*

### London Borough of Hounslow Guidelines

#### Pupils under the age of 8 and groups which wholly or mainly comprise pupils with special educational needs:

No. of children	Teachers*	Other adults to assist teachers with supervision	Total number of accompanying adults
Up to 19	2	2	4
20-40	3	3	6

#### Pupils over the age of 8:

No. of children	Teachers*	Other adults to assist teachers with supervision	Total number of accompanying adults
Up to 19	2	-	2
20-40	2	1	3

\* LB Hounslow accepts that one of the teachers can be the group leader from the organisation providing the activity.

However, for foreshore work, it is recommended that the LB Hounslow ratios are exceeded. The group leader should not have responsibility for particular children, but should be free to keep a weather eye on the whole group.

Whenever possible, groups should aim to have a ratio of 1 adult per 6 children for all children of primary school age (up to age 11) and for young people of secondary school age, a ratio of 1 adult per 10 children. The group leader should not be included in these ratios.

Sometimes, groups arrive at the foreshore without the recommended ratios. It is the responsibility of the

(e.g. notice the wash from a passing boat) and several blasts is an *emergency signal* indicating that everyone should return as quickly (and safely) as possible to the group leader. It may be appropriate for the leader to wear a high visibility vest so they can be located quickly.

### 2.8 Preparing safety equipment

It is recommended that organisations offering river activities prepare a checklist of equipment relevant to different groups and activities. The sample check list included in Appendix 8 contains suggestions for a range of equipment, some essential and some desirable rather than essential. Items such as a



**Adults accompanying groups of children can help with supervision**

charged mobile phone could be considered essential. A sharps container may be considered essential for some activities, but only desirable for others. The group leader should not be hampered by the weight of safety equipment.

Staff of organisations offering river activities should review the issue of safety equipment regularly, possibly dividing the list into essential and desirable items.

**Suggestions for a check list for equipment are contained in Appendix 8.**

## **2.9 Assessing conditions on the day of the visit**

Conditions on the Thames are variable. A well planned visit has to take into account local conditions on the day of the visit, particularly the weather. The Port of London Authority at the Thames Barrier Navigation Centre can provide up-to-date weather information on 020 8855 0315. (See Appendix 2 for further details). Further information on these hazards is given in the next section.

## **2.10 Informing the London Coastguard of a foreshore visit**

In many cases, it is advisable to inform the Coastguard of a planned visit to the foreshore. It is not a legal requirement, but it does mean that the relevant services will be aware of which groups are on the foreshore and will be able to respond faster in an emergency. Information can be phoned through in advance or on the day of the visit to the Thames Barrier Navigation Centre on 020 8312 7380. (See Appendix 1 for more on the role of the London Coastguard).

## **2.11 Insurance cover**

Taking all necessary precautions and informing participants of possible risks may not be adequate defence in the event of a legal action. It is therefore recommended that any organisation offering activities working on or by the river has a Public Liability insurance policy that covers their staff and volunteers.

Full details about the exact nature of activities and the participants should be provided to insurers.

The most reasonable premiums appear to be those organised through companies familiar with the needs of organisations working with the public outdoors. Appendix 2 provides suggestions on possible insurers.



### 3. SPECIFIC HAZARDS AND MEASURES TO CONTROL RISKS

The following does not aspire to be definitive, but presents the major hazards identified to date and some suggestions on minimising the risks they pose. Suggestions on what to do if an accident or illness occurs are given in Section 4.

#### 3.1 Water-borne diseases

Statistics are not available on the level of risk presented by water-borne diseases, but it is essential that those working in close contact with the river water know that they are present. Bacteria and viruses enter the body through orifices (mouth, eyes, nose, ears etc) and skin whose protective surface has been broken by cuts, burns or skin conditions such as eczema.

The main potential sources of disease are:

- **Treated sewage effluent** The Thames estuary is clean enough to support a wide variety of wildlife, which has led to it being cited as one of the cleanest urban rivers in Europe. However, the Thames flows through the most densely populated area of the United Kingdom and is part of the water cycle of which we humans are part. We receive treated water from the Thames and discharge treated sewage into the river. Water and sewage are treated to a high degree and most bacteria are eliminated, though some such as *cryptosporidium* are too small to remove. However, water and sewage treatment works on the Thames are not designed to remove viruses.

Viruses can be introduced into the water cycle via human sewage. The most common dangerous ones are polio and tetanus. Risks are probably highest near the major sewage treatment works at Mortlake in west London and Crossness and Beckton to the east. Sites affected are not only downriver of these works, but also upriver on an incoming tide. However, as viruses are borne easily by water, any site along the estuary should be regarded as potentially dangerous.

- **Raw sewage discharge** Sometimes untreated sewage is discharged into the Thames in the London area, through combined sewage overflows (CSOs). This situation has a historical background. London's sewerage system dates back

to Victorian times. Bazalgette's system carries both sewage and drainage water to the sewage treatment works (normally drainage water is discharged directly into a watercourse). Because of the increase in population and a flood plain covered in concrete, the system can no longer cope. After heavy rainfall, the sewers reach capacity, and rainwater mixed with raw sewage has to be discharged into the Thames through CSOs.

This situation can result in suffocation of fish and invertebrates (sewage bacteria reduce oxygen levels) and great caution should be exercised if there are visible signs of sewage in the river or of fish deaths. However, whatever the conditions, the risk to public health from sewage derived micro-organisms is always present and precautions should be taken at all times.

Symptoms of illness caused by bacteria include stomach ache, vomiting, diarrhoea, fever, skin rashes and infection in open areas such as eyes or cuts.

- **Weil's Disease** This rare but potentially fatal disease is caused by a virus found in the urine of rats. The urine needs to be fresh to pose a risk, so a hazard is present at the site where rats have urinated either on the river bank or foreshore, or in water that has had contact with urine. The virus can be detected by a blood test and the disease is easily treatable if caught in the early stages. If left untreated, it can be fatal. Symptoms develop within 2 weeks and include flu-like illness, headaches and bruising.

#### Minimising the risk

The key control for this risk is not to let river water enter the body. This message should be constantly reiterated, especially with children.

- **Using gloves** Most groups prefer to equip themselves with gloves. These can be heavy duty for litter picks or lighter surgical gloves, for example, for work with invertebrates. However, it is best to be aware of the limitations of gloves - they can be punctured and water can get inside them.
- **Covering broken skin** Ask participants likely to come into contact with river water, whether they have any broken skin due to cuts, skin conditions such as eczema or even a torn hangnail. Broken skin should be covered with a waterproof dressing, which should form part of the first aid kit.
- **Personal hygiene** Remind participants not to eat, drink, rub eyes, suck fingers, poke fingers in ears etc after contact with the water. Strict personal hygiene should be observed until hands and nails are thoroughly cleansed. The best method of cleaning hands is with lots of clean tap water, soap and a nail brush, though antiseptic wipes could be used if these are not available. Remind participants that their footwear, equipment (nets or gloves, for example), and objects removed from the foreshore (stone or artefact samples) may be contaminated. Encourage them to change footwear before washing hands, and to store equipment and samples in a sealed plastic bag until such time as they can be thoroughly washed.



**The Thames Bubbler oxygenates water after a CSO discharge**



**Heavy duty gloves are more suitable for litter picks**

- **Potentially dangerous behaviour** Warn participants of potentially dangerous behaviour. This could include running on the foreshore (they may fall and cut themselves), picking up sharp objects such as needles, flicking water off sampling nets near people's faces, throwing stones and splashing. Children (presumably not adults) should be discouraged from shouting and screaming, as this heightens excitement and lowers concentration levels.
- **Hazardous prevailing conditions** Extra emphasis should be placed on health and safety, if it is possible that higher than normal levels of pollution are present in the river (for example, due to CSO discharge of raw sewage). If obvious evidence of sewage pollution is evident, for example in the form of dead fish or the presence of large amounts of sanitary items, the group leader may decide to change sites or restrict activities on the foreshore.



**The "no running instruction" is forgotten in the excitement of finding a crab**

- **Dealing with small cuts** If a person cuts themselves, while on the foreshore, the wound can be swilled out with tap water and a dressing applied. The victim should then be discouraged from continuing activities involving contact with water. The basic first aid kit should therefore contain a bottle of clean tap water (more sterile than mineral water).

Group leaders should be aware that it can be inadvisable to apply waterproof dressings, give first aid or offer antiseptic wipes directly to school groups: they could be supplied via the teacher and at his or her discretion. This is because if a child develops an adverse reaction, for example caused by a plaster, the group leader may be legally liable.

- **Informing medical staff** Participants should be advised that if they become ill after a river visit, they should inform medical staff that they have had contact with river water. This is important - for example, most doctors will prescribe bed rest for flu-like symptoms unless they are made aware of the possibility of Weil's disease. Similarly, illness with symptoms such as stomach ache, vomiting, diarrhoea, fever and skin rashes may be more rapidly diagnosed, if the medical staff are aware of contact with possibly contaminated water.

### 3.2 Decaying organic matter

Dead animal matter such as putrefying carcasses and fish may contain harmful bacteria and viruses.

#### Minimising the risk

Participants should be actively discouraged from picking up dead matter. If a dead animal or fish is found and inquisitive children are present, the group leader may decide to remove it by throwing it in the river (if small) or by covering it with stones. Any such matter should be handled using protective gloves.

### 3.3 Tides and currents

The Thames is tidal between Richmond and the sea. Between Richmond and Teddington, it is semi-tidal. Hazards include fast flowing water, dangerous eddies and incoming tides that can cut off access from the foreshore, all of which carry the risk of drowning or injury. An understanding of tides and currents is necessary to appreciate these hazards.

- **Tidal cycle** Tides rise and fall roughly twice every 24 hours (each cycle is approximately 40 minutes later than the previous one). The flood (rising) tide lasts roughly 5 hours and the ebb (falling) tide lasts roughly 7 hours.
- **Tidal range** The tidal range (the difference between the heights at low and high water) varies within a 14 day lunar cycle. During this 14 day period, tides get progressively higher (Spring tides) then lower (Neap tides). The greatest range occurs during Spring tides (high tides are high and low tides are low) and the smallest range occurs during Neaps (the tide does not rise so high or go out so far). The average range in central London during Springs is 6.7 metres, whereas during Neaps it is 3.69 metres.
- **Rate of flow and height of tide** The main factors affecting the rate of flow and how high the tide rises are:
  - **point of the tide** Flow is fastest on a falling tide, where

tide and river flow in the same direction. During the 6 hour period between high and low water, flow is fastest mid period and slowest around high and low water.

- **point in the tidal cycle** Flow is fastest and high tides highest during Spring tides.
- **rainfall** Heavy rain will speed up the flow rate of an ebbing tide, as rainwater pours over Teddington Weir and is also discharged via CSOs. The flooding tide is slowed by heavy fluvial discharge. Prolonged heavy rain can also significantly raise water levels. For example, during the winter 2000-01, the foreshore was barely uncovered during Spring tides, so the flood tide often came in early and rapidly. Effects of rain are particularly noticeable in the upper reaches.
- **storm surge** A depression moving south down the North Sea can create a "lump" of water that can be pushed up the estuary by easterly winds. Combined with a Spring tide, this can make the tide come in unexpectedly early and very fast. A storm surge can also raise the predicted high tide level by 2 metres. (These are the conditions under which London is threatened by flooding.)
- **Thames Barrier closures** The Barrier can affect the rate of flow and the height of the tide. It is closed to prevent flooding and for routine maintenance.
- **Dangerous currents and eddies** Localised whirlpools and fierce flows can occur, especially around structures such as piers and jetties. These should not present a hazard to those working on the foreshore or in the water up to wellie height. However, if somebody falls into the river, it is worth being aware of this hazard around the possible points of rescue.
- **Fast incoming tides** Tides may rise faster than predicted due to factors such as storm surges, heavy rain or big Spring tides. The current may seem to indicate that the tide is falling, when in fact water levels are rising. Fast incoming tides can rapidly cut off access routes from the foreshore and can be particularly hazardous around islands. The tide does not necessarily move up the foreshore in a straight line. In some places, the tide may cut off a low-lying area around an access point before flooding the areas where groups are working. Similarly, unwary groups can be trapped on gravel banks.



**Incoming tides can quickly cut off access around islands**

## Minimising the risks

The key risk control for hazards posed by tides is to know what the tide is likely to do, make sure that there is no risk of getting cut off by the tide and by allowing good safety margins. The Thames is powerful and can be unpredictable.

- **Predicting river behaviour** A knowledge of what affects the river's behaviour will help minimise risks. Any organisation providing river activities should provide group leaders with information on tides and/or tide tables. (See Appendix 2 for available publications). Group leaders working on the foreshore should know the time of low water, whether the tides are Springs or Neaps and any conditions that may affect the tide. Make sure that leaders know how to read tide tables and to calculate the time difference between the site and London Bridge. Beware - differences are not the same for high and low water! For example, the high water difference between Hammersmith and London Bridge is 40 minutes whereas the low water difference is 2 hours.

Factors affecting tides include:

- closure of the Thames Barrier. (See Appendix 2 on how to obtain this information).
- storm surges from the North Sea. Check the weather forecast for severe depressions heading south down the North Sea.
- heavy rainfall in the Thames Basin. Check whether there are any Environment Agency flood warnings out for the area. (See Appendix 2 on how to obtain this information).
- **Minimising the risk of getting cut off by the tide** This risk can be reduced if the group leader remains constantly aware of what the tide is doing and removes the group from the foreshore in good time when the tide starts to rise. At any



**High gravel banks can also become cut off by fast rising tides**

site, it is essential that everyone always has a clear exit route from the foreshore over firm terrain. Group leaders should familiarise themselves with how the foreshore floods at a particular site. For example, does the exit route from the foreshore flood before the area where activities will take place? Are there high gravel banks that get cut off early? Which exit routes are over firm ground?

The group leader should also determine a method of checking when the tide is starting to rise. This could mean taking using a jetty or a pile as a marker, or placing a traffic cone or piece of equipment at the water's edge on arrival.

On some sites, such as on the outside of islands or on linear walks, it is recommended that activities are planned only for the period leading up to low water. Even this might be dangerous under extreme weather conditions.

On other sites, it is safe to work on a rising tide, if activities take place next to exit points from the foreshore. Linear walks can potentially be risky. The group leader must remain very aware of the nearest exit points and be constantly alert to rising tides.

### 3.4 Foreshore access

Access to the foreshore is generally made via existing steps, drawdocks or slipways. In many cases, no single authority accepts responsibility for controlling or maintaining these



**Close supervision is needed on steps to foreshore**

access points. Deposits of mud, growth of algae and accumulation of rubbish can make access slippery and hazardous. Escape from the foreshore may be made via vertical ladders, but these should only be used in an emergency as they can be slippery and difficult to climb.

### Minimising the risks

The group leader should check the safety of the access point on the day of the visit, preferably before the group arrives. This allows time to clear rubbish and mud from steps or slipways. Where practicable, a stiff broom can be used to clear a passage and a spade can be used to shovel sand, if available, onto slippery surfaces. If access is clearly dangerous, it may be necessary to find another route.

Sometimes groups will have to pass over slippery surfaces. It is advisable to check that participants are happy with this: group leaders may be legally liable if they have pressured groups or minimised the risk. In these circumstances, the group leader should allow lots of time to organise the group and give clear instructions on how to proceed. Clear warning should be given to all participants along with common sense suggestions on minimising the risk of slipping. These could include:

- keep near the wall when descending steps
- walk slowly, well spaced out in single file
- walk sideways if necessary (useful technique for steps)
- concentrate on the job in hand - no talking! (for children)
- avoid mud and green algae

One way of minimising the risk of slipping is for the group leader to select able adults to assist the others. These adults can station themselves at regular points on steps or slipways and provide a series of helping hands to the rest of the group.

### 3.5 Slippery surfaces, muddy areas and contaminated substrata

Mud or algae covering concrete structures on the foreshore such as drainage channels can present a hazard. In some areas, soft deep mud can trap the unwary. These often occur around drains and CSOs or where mudlarks have been digging and have not filled in their excavation with solid gravel. Some substrata is chemically contaminated, particularly where industry is or has been present. These areas can sometimes be identified by sticky black mud or a smell of TCP or petrol.

### Minimising the risks

The key control is to identify and avoid such areas whenever possible.

- **Crossing slippery surfaces** Give clear warning to participants about the risk of slipping. The suggestions given in 3.4 also apply here,
- **Dealing with deep mud** Getting stuck in mud is not necessarily risky, but it can cause distress. It can also generate an air of excitement in a group of young children, that can cause further incidents. Wellies and footwear can get lost in the mud making the participant vulnerable to cuts on the feet. The highest risk occurs on a rising tide where a group is making a hasty and unplanned exit from the foreshore.

It is recommended that the group leader checks the site on the day of the visit to ascertain dangerous areas. Clear instructions can then be given to the group on arrival on "no-go" areas. Disciplined unhurried exits from the foreshore will avoid high risk situations.

Mud holds great allure for some children and can trap unwary adults. Inevitably, some will occasionally get stuck. The group leader should ensure that the rest of the group is well supervised before focussing on a rescue. Care needs to be taken that the leader does not also get stuck. It may be necessary to abandon footwear to the mud. In this case, the victim should be assisted to safety and fresh footwear organised.

The victim and the rescuer may well be extremely muddy, so care should be taken over personal hygiene. Often the victim thinks the incident is funny, but occasionally may be very distressed. It is important to keep the victim focussed on personal hygiene (for example, no rubbing eyes) and to ensure that mud is cleaned from hands and the face as soon as possible. Calm reassurance that mud is not evil and that it washes off easily can help. Once the victim is calm, it is recommended that the group leader delegates care to a supervising adult and returns his or her attention to the main group.

In exceptional circumstances, for example where somebody is stuck and the tide is rising, the emergency services should be called immediately.

- **Contaminated mud or gravel** Industrial waste left on the foreshore may pose an occasional risk. The group leader should identify areas that are evil-smelling or an unnatural colour and discourage participants from contact with this material.

### 3.6 Rubbish

Rubbish can present a variety of hazards. Sharp objects such as broken glass, old steel mooring wires and contaminated needles can all puncture the skin, causing distress and increasing the risk of infection from water-borne diseases. The risk posed by AIDS-contaminated needles is present but not great, as the AIDS virus cannot live longer than a few hours



**Thames21 foreshore clean-ups help remove hazardous rubbish**

outside the body. Occasionally containers of hazardous chemicals may also be found. Wire and rope contained in deposits of rubbish can trip the unwary.

### Minimising the risks

The main risk is that participants cut themselves and get infected wounds. This risk is reduced if participants are given clear information on the risks of handling sharp objects and discouraged from handling them unless absolutely necessary. On litter picks, sharp objects will be handled, so participants need to wear thick gloves and be advised to be cautious.

Participants are also at risk from sharp objects, if they do not wear suitable footwear. The risk of wearing open toed sandals should be made clear in all written and verbal briefings.

It may be appropriate, particularly on litter picks, for the group leader to provide a sharps container for removal from the foreshore of particularly dangerous objects such as hypodermics. (For details of where to obtain these, see Appendix 2). For any foreshore activity, it is advisable, if possible, for the group leader to carry a stout pair of gloves and a container for removing dangerous waste. If potentially lethal items are discovered during a foreshore activity and a container is not available, the group leader should ensure that the item is removed or covered up, so that it will no longer pose a threat.

A lesser frequent risk comes from chemical waste, for example, cans of paint, oil drums or unidentified bottles of chemicals. Participants should be strongly discouraged from picking these up or throwing stones at them.

If a participant does suffer a cut, the wound should be washed out as soon as possible with clean water. It is recommended that the group leader carry a bottle of tap water for this purpose. Depending on the severity of the wound, the group leader may decide to delegate an adult to accompany the victim to the nearest handwashing facilities for further cleaning and ressing.

A puncture wound caused by a hypodermic can cause severe distress, often because of the fear of AIDS. The safest (and most reassuring) option is to take the casualty to the nearest hospital along with the needle in a sharps box for tests.

### 3.7 Wash from river craft

Large waves generated by passing craft do not generally pose a high risk, but they could potentially knock a small child over, who could then swallow water or possibly get swept away. The main risk experienced to date is of equipment such as survey trays being washed away and children attempting a rescue.

### Minimising the risks

To minimise these risks, the group leader can alert the group to this hazard and, where participants are children, suggest:

- adults and children keep a weather eye on the river at all times
- adults keep a close watch on children working in the river
- no working in the water above wellie height
- if the whistle blasts (say) 3 times, take a look around
- do not try to retrieve lost equipment, but inform the group leader

### 3.8 Extreme weather conditions

The river and its foreshore can be very exposed. In winter, easterly winds funnel up the estuary and in summer there may be little shade from the sun. Participants not dressed for extreme cold or heat may be affected. The temperature of the water can also be a hazard: this is especially so in winter although even in summer, temperatures may be cool. Heavy rain may make conditions slippery on the foreshore and access points. Rain or mist may make visibility poor.

#### Minimising the risks

If activities do not last longer than a couple of hours, the risk of serious illness from hypothermia or over-heating is low or medium. However, small children can cool down rapidly, especially when wet, which can lead to a lack of concentration. Similarly, participants working in the hot sun may become ill and disorientated.

The group leader should assess the risk on the day, taking into account weather conditions, clothing of group, age and fitness levels. If conditions are poor, the group leader should highlight this and encourage sensible precautions. These could include:

- in winter conditions, zip up jacket and cover head
- on very hot sunny days, keep head covered
- in hot weather, carry water
- hydrate before undertaking work on the foreshore: it is not a good idea to encourage people to drink water during activities involving close contact with the water, because of the danger of ingesting river water or mud.
- adults keep an eye on children (and each other) for signs of distress



*Dressed for the weather apart from the wellies!*

- take extra care in wet conditions to avoid slipping
- keep together if visibility is poor

In really adverse conditions, the activity could be shortened or abandoned.

### 3.9 Riverside roads

Roads present well documented hazards. In some areas, a riverside road may be used by the general public as a walking area, a fact not sometimes appreciated by drivers in a hurry.

#### Minimising the risks

The risk of being knocked down by a car on a river visit can be higher than suffering injury on the foreshore. If working with children, the group leader should previously identify safe routes to the river that minimise the number of roads crossed, that offer safe crossing areas and have wide pavements. When crossing roads, accompanying adults should work as a team to ensure that the children cross safely. When walking along roads, children should stay in small groups with an adult supervising. One adult should lead and one adult should bring up the rear to collect stragglers.

### 3.10 Objects falling onto the foreshore

Objects such as beer glasses may be thrown or accidentally dropped onto the foreshore from river walks and bridges. This is a particular hazard around pubs.

#### Minimising the risks

This is not a common risk, but the group leader should be aware of the location of sites such as pubs where this is most likely to occur. This can then be made a "no-go" area if any danger is posed.



*Keep everyone on the right side of the railings!*

### 3.11 Unsafe railings

Generally safety railings along walks and on piers are well maintained. However, these can give a false sense of security. For example, gates and safety chains on piers may not be secured. Railings can present a challenge to young people, who may climb or slip beneath them. In a few areas, vertical drops to the river are not fenced off.

### **Minimising the risks**

This is generally a low risk as much of the Thames, particularly in London, is well fenced off. To minimise the risk for children, the group can be instructed not to climb on rails and walls. Where the river is not fenced off, children should be instructed to walk well away from the edge.

When working from a pier or structure jutting out into the river, the group leader should check the area first, ensuring that safety gates or chains are secure.

Risk will be minimised if children on river walks are split into small groups with a supervising adult, and are led by an adult with an adult following in the rear.

### **3.12 Illness or injury**

A participant falling ill or suffering an injury can present a hazard to the rest of the group, by distracting the group leader from his or her supervisory duty of the rest of the group.

### **Minimising the risks**

The group leader should have a clear idea of how to proceed in the event of an emergency. Clear emergency procedures should minimise the risk posed: these are dealt with in Section 4.

### **3.13 Disruptive behaviour**

A foreshore visit can be a very exciting experience, especially for young people. Safety instructions might be ignored because of over excitement or poor attention levels. Dangerous behaviour of participants can itself be a hazard and create risks for the rest of the group, for example, by splashing water around, and by distracting the group leader from his or her supervisory duty of the rest of the group.

### **Minimising the risks**

The group leader should call the participants together and make it clear that foreshore work will not continue unless safety rules are observed. The adult in charge of the group and the adult carers should be involved in this process. If dangerous behaviour continues, disruptive individuals or even the whole group should be removed from the foreshore.



## 4. ACCIDENT AND EMERGENCY PROCEDURES

However well risks are controlled, life can be unpredictable. No activity is perfectly safe. The important thing is to know how to prevent an emergency triggering further incidents and to deal with the incident as effectively as possible.

### 4.1 Developing accident and emergency procedures

Any organisation offering river activities should have a clear set of accident and emergency procedures on what to do when things go wrong. These should be drawn up in consultation with all those involved in providing activities and should be regularly updated. All group leaders should be very familiar with the procedures and be able to assess with confidence the severity of any situation.

This section does not attempt to suggest Accident and Emergency Procedures as these need to be developed by each organisation, but aims to give guidance on points to consider.

**An example of Accident and Emergency Procedures is given in Appendix 9.**

Possible categories of severity could include:

#### A. Serious accidents or illness

These can be defined as *ones where the emergency services need to be called immediately*. They could include such situations as:

- entrapment by tide or deep mud
- falling into the river
- missing person
- serious injury
- loss of consciousness

#### B. Less serious accidents or illness

These can be defined as *ones where the emergency services may need to be called or a trip to hospital may be required*. They could include such situations as:

- cuts or broken limbs
- fainting
- dehydration
- hypoglycaemic attack

#### C. Minor accidents or illness

These can be defined as *ones where outside help is not necessary*. They could include such situations as:

- minor cuts
- stomach ache
- victim getting stuck in shallow mud

### 4.2 General principles for accident and emergency procedures

General principles for dealing with any incident could include:

- if in doubt, treat any incident as serious.
- always know your exact location, so you can give clear directions to emergency services.
- always make sure that your mobile is charged (and you know

the number). Failing this, make sure you know where the nearest phone box is.

- stay calm. Take time to assess the situation and the best course of action.
- accident and emergency procedures cannot cover every incident. What you do and the order in which you do it will depend on individual circumstances.
- ensure the safety of the whole group before dealing with an incident. If children are involved, responsibility for supervision can be delegated to a responsible adult. If working on the foreshore, it may be most appropriate to assemble the main group on the riverside path.
- if time allows, discuss a course of action with the victim (if adult) or the adult in charge. (This is most appropriate in the case of illness, where the victim or adult in charge may have previous experience or information. On a more cynical note, it may also protect the group leader from legal action, if the course of action taken is not appropriate.)
- in the case of minor incidents, delegate the care of victims to a responsible adult and return your attention to the group. If adequate supervision cannot be maintained, stop activities and make appropriate arrangements for the safe dispersal of the group.
- ensure that all those concerned (the victim, those responsible for the victim, emergency services etc) are aware of any relevant risks. For example, hospital staff or family doctors should be told if there has been contact with river water.
- contact your work place as soon as possible to report a serious incident.
- ensure that relatives, schools etc are also contacted as soon as possible in the case of a serious incident.

### 4.3 Giving first aid

This is a thorny subject. Giving first aid to an adult should present no problem, so long as the adult consents. However, administering to a child can make the leader liable to legal action, for example, if allergic reactions to dressings occur. Some teachers will not give first aid, even though trained. However, it should be noted that very few prosecutions have been made as a result of first aid being administered incorrectly.

The safest option seems to be to administer first aid, where the injury or illness is serious. When dealing with less serious incidents, the leader can provide a first aid kit and all necessary support to a teacher or accompanying adult.

### 4.4 Calling the emergency services

Calling 999 alerts any of the required emergency services. You will be asked whether you require police, fire brigade, ambulance or coastguard. The operator can help you decide which services are most appropriate. Be prepared to give concise relevant details such as:

- the location. Be as specific as possible.
- the number of victims.
- a description of any injury or of the accident.
- details and descriptions of missing persons.

The emergency services that are most likely to be involved are:

Service	Nature of service
HM London Coastguard Thames Barrier Navigation Centre	co-ordination of search and rescue operations on the Thames between Canvey Island and Teddington
HM Coastguard Walton	co-ordination of search and rescue operations on the Thames downstream of Canvey Island
Royal National Lifeboat Institution (under direction of HM Coastguard)	rescue service for those in trouble on the river or foreshore and assistance in locating missing persons. "On Scene Commander" for any marine incident where more than 3 resources are in attendance.
Police (either land-based or Marine Support Unit)	assistance in the event of a crime or missing persons
Ambulance Service	assistance for injury or illness
Port of London Authority	control of navigation around the scene of an incident
<i>(See Appendix 1 for more information on these services.)</i>	

#### 4.5 Developing recording procedures

All incidents, however minor, should be recorded in a formal way, for example in an incident book or file. Group leaders should be provided with incident forms so that information can be logged immediately. "Near misses" or unusual events should also be recorded, as they too can provide vital information for improving health and safety. This could include information such as unusual tide levels or new mud banks.

Items to record could include:

- date and location of incident or event
- name of participant organisation
- names of people involved
- nature of incident
- action taken by you and others
- suggestions for reducing risks in the future

#### 4.6 Communicating information about incidents

The incident book should be seen as a dynamic tool to improve safety. Sharing information about incidents is essential if standards are to be improved and new risks identified.

Ways of achieving this could include:

- appointing a member of staff to be responsible for health and safety and communicating new information.
- making the incident book accessible.
- encouraging staff to record all incidents, even "near misses."

- encouraging staff to read the incident book regularly.
- organising regular safety reviews to refine procedures, using the incident book as a tool.

The health of the Thames should not be forgotten and no activity should result in damage to the river or its ecology. It is recommended that the health and safety information given to participants mentions protection of the natural environment.

## 5. PROTECTING THE HEALTH OF THE RIVER AND ITS WILDLIFE

### 5.1 Avoiding damage to river banks and water quality

Where natural bank remains, participants should be discouraged from climbing, walking on or digging soft banks. Plants and weeds growing out on man-made sloping and vertical banks provide a variety of habitats and participants should be discouraged from disturbing them.

Water quality can be affected by rubbish in the river. Encourage participants to remove rubbish rather than throwing it back into the water. Ensure that all equipment is removed: it is easy to leave behind items such as plastic gloves and bags, so an equipment check is useful before leaving the foreshore.



**Avoid damage to natural banks - they are often under threat from erosion from the river and Chinese Mitten crabs.**

### 5.2 Protecting wildlife

Surveying and observing fish and invertebrates is a valuable activity both in terms of monitoring the health of the Thames and in educating people about the value of the estuary as a wildlife corridor. To avoid harm to wildlife, participants should first be given information on how to minimise the impact of survey work on the specimens caught.

Handling of all specimens should be kept to a minimum. Encourage participants to handle specimens gently. Discourage participants from collecting too many fish samples and from handling them. Some fish such as smelt are sensitive and can die soon after capture. Keep surveys short and return specimens to the water as soon as possible. Wash nets thoroughly to ensure no specimens are left trapped.

If activities involve turning over stones to search for invertebrates, encourage participants to turn the stones back again. The damp, cool, dark conditions under a stone can quickly become dry and warm when exposed to sun or wind.

If collecting specimens in a specimen tray, place a rock in the tray to provide shelter from strong sunlight. In hot weather, make sure fish and invertebrates do not overheat by providing



**Using nets and spoons can minimise handling of specimens**

lots of cool water: buckets rather than trays are a better way of storing specimens under these conditions.

Birds can be disturbed by noise and rowdy behaviour. Encourage an ethos of respect, particularly amongst younger participants.

### 5.3 Reporting damage

The Environment Agency Hot Line number **0800 80 70 60** can be used to report any damage to the environment. This includes pollution incidents and distressed wildlife. As part of a river visit, it is recommended that all participants are informed of this number.



# APPENDICES



## APPENDIX I

# ORGANISATIONS RESPONSIBLE FOR RIVER MANAGEMENT AND SAFETY

The following is intended to give a brief overview of the different roles each organisation plays, particularly where this is relevant to the health and safety issues outlined in this document. It is useful information, but it is not essential to remember in the event of an emergency. Calling **999** will put you in touch with the correct organisation. (You will be asked whether you require Fire, Police, Ambulance or Coastguard.)

The information deals mainly with services between Teddington and Canvey Island, but makes reference to services below this point.

**HM Coastguard  
Thames Barrier Navigation Centre  
Unit 28  
34 Bowater Road  
London SE18 5TF**

**Tel 020 8312 7380**

**Role:** HM Coastguard TBNC are now responsible for the co-ordination of SAR (Search and Rescue) between Canvey Island and Teddington. (*Search and Rescue* is a generic term used to describe response to an emergency on the water). The Coastguard Station is located at the Thames Barrier Navigation Centre at Woolwich. They work alongside the Port of London Authority Vessel Traffic Service.

Emergency 999 calls from the public reporting river incidents are routed directly to the Coastguard Station at the Barrier. Rescue units are deployed directly from there using VHF Marine Radio. Available to the Coastguard are vessels from the RNLI (Royal National Lifeboat Institution) and vessels from the Marine Support Unit (Metropolitan Police), London Fire Brigade, Port of London Authority, Environment Agency, Port Health Authority and military rescue helicopters. They can also require commercial and private vessels to assist if necessary.

All emergency services, river agencies and riparian boroughs have a document listing suitable casualty pick-up points along the river. This enables land-based services such as the London Ambulance Service to co-ordinate action with river-based services. HM Coastguard will plot the location of an incident and designate suitable access points for emergency services. For this reason, it is essential that group leaders are able to give clear unambiguous information about their location.

HM Coastguard Walton are responsible for the co-ordination of SAR (Search and Rescue) downstream of Canvey Island. Contact details: *HM Coastguard, MRSC Thames, Maritime and Coastguard Agency, East Terrace, Walton on the Naze, Essex CO14 8PY (Tel 01255 67 55 18).*

**Environment Agency (Thames Region)  
Kings Meadow House  
Kings Meadow Road  
Reading RG1 8DQ**

**Tel 01189 535 000 (main switchboard)**

**Role:** The Environment Agency (Thames Region) protects and manages the Thames and is responsible for pollution prevention and control, waste minimisation, management of water resources, flood defence, fisheries, conservation, use of inland and coastal waters for recreation, and navigation on the non-tidal Thames. The Agency is responsible for handling all pollution incidents apart from oil spills, which are the responsibility of the Port of London Authority.

**London Fire Brigade  
Hampton House  
20 Albert Embankment  
London SE1 7SD**

**Tel 020 8582 3811**

**Role:** The brigade operates the *London Phoenix* based at Lambeth which responds to emergencies, including fires on vessels and on the riverside, rescue of people from the river and shipping casualties.

**London Port Health Authority  
Corporation of London  
PO Box 270  
Guildhall  
London EC2P 2EJ**

**Tel 020 8858 2751**

**Role:** The authority regulates matters relating to environmental and public health on the river, a broad remit which includes boarding and inspecting vessels arriving from other UK ports and abroad, inspection of imported food from countries outside the European Union, and control of nuisances such as noise from pleasure craft. The authority works in conjunction with the Environment Agency and the Public Health Laboratory Service, monitoring the quality of river water with particular reference to discharges into the estuary where these may affect public health. Their area of operation covers the Thames from Teddington to the sea plus the lower Medway and part of the Swale.

**Marine Support Unit (Metropolitan Police)**  
**Wapping Police Station**  
**98 Wapping High Street**  
**London NE1 9NE**

**Tel 020 7275 4422**

**Role:** The Marine Support Unit has a fleet of boats that operates in the Greater London area and is available in the case of an emergency. The unit is mainly aimed at fighting crime - they would be involved if a child went missing, for example - and provide co-ordinated action with the land-based police. The unit is also responsible for recovering and identifying bodies from the river. They operate a 24-hour emergency response from their base at Wapping, where the Contact Desk has direct communication with the Thames Barrier Navigation Centre.

Outside the London area, Essex Police have boats at both Tilbury and Southend.

**Port of London Authority**  
**Health and Safety Officer**  
**London River House**  
**Royal Pier Road**  
**Gravesend DA12 2BG**  
**Tel 01474 562 200**

**Port of London Authority**  
**Thames Barrier Navigation Centre**  
**Unit 28**  
**34 Bowater Road**  
**London SE18 5TF**  
**Tel 020 8855 0315**

**Port of London Authority**  
**Head Office**  
**Bakers Hall**  
**7 Harp Lane**  
**London EC3R 6LB**  
**Tel 020 7743 7900**

**Role:** The PLA is the navigation authority for the tidal Thames. They operate the Vessel Traffic Service, controlling ship movements from centres at Gravesend (Port Control London) and at the Thames Barrier Navigation Centre (Woolwich Radio). They maintain VHF Marine Radio coverage along the whole of the estuary. All vessels over 20 metres in length are required to maintain a continuous listening watch on Port Operational VHF channels (Channel 14 above Crayfordness or Channel 68 between Crayfordness and Southend plus the international emergency Channel 16). This means that commercial and private vessels can be made available in an emergency. PLA Harbour Service craft operate on a 24-hour basis upstream to Putney.

The PLA are responsible for responding to oil pollution incidents (all other pollution is the

responsibility of the Environment Agency). Their Hydrographic Service at Gravesend is responsible for charting the river, monitoring river levels and flow, and tide prediction.

## **Royal National Lifeboat Institute**

**Teddington Lifeboat**  
**Malcolm Miatt**  
**Honorary Secretary**  
**The Boat Shop**  
**Ferry Road**  
**Teddington**  
**TW11 9NN**  
**Tel 020 8973 0586**

**Chiswick Lifeboat**  
**Station Manager**  
**The Pier House**  
**Corney Reach Way**  
**Chiswick**  
**London W4 2UG**  
**Tel 020 8995 5534**

**Tower Lifeboat**  
**Station Manager**  
**Tower Millennium Pier**  
**Lower Thames Street**  
**London EC3 4DT**  
**Tel 020 7680 9629**

**Gravesend Lifeboat**  
**Station Manager**  
**P.L.A. Car Park**  
**London River House**  
**Royal Pier Road**  
**Gravesend**  
**Kent DA12 2BG**  
**Tel 01474 328 465**

**Role:** The RNLI has three permanently manned stations on the Thames at Gravesend, Tower Pier and Chiswick, each having one fully crewed lifeboat on 24-hour standby. A fourth station at Teddington is manned by a volunteer force. They provide a fast response for all Search and Rescue incidents between Canvey Island and Teddington.

The RNLI also has stations at Sheerness and Southend.

## APPENDIX 2

### SOURCES OF USEFUL INFORMATION

#### FIRST AID COURSES

The most popular courses for which Certificates of Competence are awarded are:

- *Emergency First Aid (Appointed Persons)* one-day course. A basic first aid course, which does not qualify the candidate as a fully qualified first aider.
- *First Aid at Work* four-day course. The certificate qualifies the holder to act as a "First Aider at Work" under the Health and Safety (First Aid) Regulations 1981.

Both certificates are valid for three years and are recognised by the Health and Safety Executive

Many organisations provide such courses. Four possibilities are:

##### **Greenwich Environmental Curriculum Centre**

**77 Bexley Road  
Eltham SE9 2PE  
Tel 020 8850 2615**

*(Courses can be specifically designed for people who work outdoors with young people and adults.)*

##### **Carlton Training**

**1 Carlton Parade  
Preston Road  
Wembley HA9 8NE  
Tel 020 8908 4050**

##### **British Red Cross (London Branch)**

**Commercial Training Centre  
163 Eversholt Street  
London NW1 1BU  
Tel 020 7388 8777**

##### **St John Ambulance**

**London (Prince of Wales's) District  
Edwina Mountbatten House  
63 York Street  
London W1H 1PS  
Tel 020 7258 3456**

#### FLOOD WARNINGS AND BARRIER CLOSURES

The best way of reducing risks caused by the hazard of rapidly rising tides or abnormally fast flowing currents is to be cautious on the day of the visit. If conditions are exceptional, information is available to help plan a safe visit.

A general indication of levels can be obtained from the **Environment Agency Floodline (0845 988 1188)** or from the Agency's 24-hour "live" flood warning service on its web site (**[www.environment-agency.gov.uk/floodwarning](http://www.environment-agency.gov.uk/floodwarning)**). These services give information on flooding in specific areas.

The quickest way of finding out about storm surges is to ring the PLA at the Thames Barrier Navigation Centre (**020 8855 0315**). They can also provide information about possible barrier closures.

#### INSURANCE

The British Trust for Conservation Volunteers organises group insurance for affiliated members. For more information, contact:

##### **BTCV (Group Insurance Section)**

**Conservation Centre  
163 Balby Road  
Doncaster DN4 0RH  
Tel 01302 572 213**

The Inland Waterways Association also organises group insurance for members. For more information, contact:

##### **Lorraine Carter**

**IWA Insurance Administrator  
56 Oakdene Drive  
Tolworth, Surbiton  
Surrey KT5 9NH  
Tel 020 8337 2276**

#### PUBLICATIONS

##### ***Tide Tables***

Any organisation offering activities on the foreshore should supply all group leaders with tide tables. These can be obtained free of charge by sending a stamped (45 pence) addressed envelope to the PLA Head Office. (See *Appendix 1* for contact details.)

##### ***Access to the River Thames, A Port of London Authority Review (1996)***

This report was produced to provide an authoritative basis for discussion on the future of steps, stairs and other landing places alongside the tidal Thames. Accompanying the report is a detailed survey of public landing facilities. It is available from the **PLA Head Office**. (See *Appendix 1* for contact details.)

##### ***Pleasure Users Guide to the Tidal Thames***

This publication is mainly aimed at those using the river for recreational purposes, particularly in boats, but contains a lot of useful information for any river user. It is available from the **PLA Head Office**. (See *Appendix 1* for contact details.)

##### ***Riverside Code Literature***

The Port of London Authority has produced a set of literature aimed at teaching young people how to behave safely next to the Thames. These excellent resources

include a full colour leaflet, an A4 full colour poster, a photocopyable black and white poster, a photocopyable A3 game, and a Literacy Hour book aimed at 5 to 7 year olds. All are available free of charge from the

**Health and Safety Adviser  
Port of London Authority  
London River House  
Royal Pier Road  
Gravesend DA12 2BG  
Tel 01474 562 200.**

***Safety at Inland Water Sites and Safety on British Beaches***

The first publication is suitable for those working on the upper estuary, while the second is appropriate to the marine zone. They are available from the

**Royal Society for the Prevention of Accidents  
ROSPA House  
Edgbaston Park  
353 Bristol Road  
Birmingham B5 7ST  
Tel 0121 248 2222.**

***The Foreshore of the River Thames***

Primarily an educational resource for primary level to provide classroom activities following a foreshore visit, this schools pack contains information on tides and planning a safe river visit. It is available from

**Thames Explorer Trust  
The Pier House  
Corney Reach Way  
London W4 2UG  
Tel 020 8742 0057.**

## **RISK ASSESSMENTS AND TRAINING**

Thames21 and Thames Explorer Trust are two organisations with long experience of working on the foreshore with a range of groups. They are happy to share this experience and can supply copies of the risk assessments and other safety documents, extracts of which appear in the following appendices. Both organisations are charities and there may be a small charge for assistance given, depending on the amount of work involved.

**Thames21  
c/o Corporation of London  
Walbrook Wharf  
Upper Thames Street  
London EC4R 3TD  
Tel 020 7236 1281**

**Thames Explorer Trust  
The Pier House  
Corney Reach Way  
Chiswick  
London W4 2UG  
Tel 020 8742 0057**

The Thames Explorer Trust can also provide training on organising safe foreshore activities.

## **SHARPS CONTAINERS**

Sharps disposal bins can be obtained from a number of sources including laboratory suppliers such as

**RFL Slaughter Ltd  
Units 11 and 12  
Upminster Trading Estate  
Warley, Upminster  
Essex RM14 3PF  
Tel 01708 227 140,**

and educational suppliers such as  
**GLS Educational Supplies Ltd  
1 Mollison Avenue  
Enfield EN3 7XQ  
Tel 020 8805 8333 and**

**Philip Harris Education  
Lynn Lane, Shenstone  
Lichfield  
Staffordshire WS14 0EE  
Tel 01543 480 077.**

**APPENDIX 3A**

**APPENDIX 3B**



## APPENDIX 4

### SAMPLE CHECK LIST FOR ASSESSING THE SAFETY OF A SITE

*The following questions are designed to help assess a particular site for hazards such as those detailed in Section 3. A map identifying locations of specific hazards can then be drawn up accompanied by measures to control the risks.*

- Is there access to hand-washing facilities, if the group will be in contact with river water?
- Is the access along the waterfront away from traffic? Does it involve crossing busy roads?
- Are there any areas where people could accidentally fall from the riverside into the river?
- Is access to piers and jetties safe? Are there gates or chains that could be left open? Any slippery surfaces?
- How easy is access to the foreshore?
- Are access stairs or drawdocks prone to algae or silting up?
- Are there alternative access points if the first is too slippery or dangerous?
- How many egress points are there from the foreshore in case of emergency?
- Are there areas where rubbish collects that could endanger access?
- Are there areas containing large amounts of dangerous rubbish that need to be avoided?
- Is the foreshore firm?
- Are there areas where the gradient of the foreshore suddenly becomes steep? (i.e. areas where people paddling might suddenly encounter deep water)
- Are there permanent areas of mud that pose a risk?
- Are there slippery surfaces, for example over drains, on the foreshore?
- Are there signs of chemical contamination?
- Are there any CSOs in the area?
- How do the tides behave locally? Does the foreshore flood evenly? Are there areas such as gravel banks that get cut off first?
- How long does the exit route between the activity area and land stay safe after the tide starts to rise?
- Are there any unusual currents or eddies locally?
- Are there any good local markers (for example, jetties) that can be used to check whether the tide is rising?
- Is the foreshore vulnerable to objects falling from above? For example, are there any local pubs?
- Is there an easy way of establishing a safe area to work, for example, between a bridge and set of stairs?
- Is there local shelter in case of extreme weather conditions?
- Is there safety equipment available, for example, life buoys?

#### Other considerations

- How can the group be moved around the site in an organised fashion? For example, is there a quiet place to give a safety talk?
- How will getting down steps onto the foreshore be organised? Where will bags be stored?
- Is the site accessible to emergency vehicles?
- Where is the nearest public phone?
- Where is the nearest toilet?
- Where is the nearest Accident and Emergency Unit?

## APPENDIX 5

# INFORMATION SHEET SENT TO SCHOOL TEACHERS OR YOUTH LEADERS (THAMES EXPLORER TRUST)

### PLANNING A SAFE RIVER VISIT

*Please read these notes before your visit to help us ensure that your visit is happy and safe!*

#### **Aim of safety advice**

A well planned river visit can make a significant contribution to the educational development of young people. As with any outdoor activity, there are potential hazards - it is the aim of the Trust to offer activities within a safe and structured framework.

#### **Responsibility for safety**

A Trust staff member will lead activities and will take all reasonable steps to ensure the safety of the pupils while carrying out these activities.

#### **However you are ultimately responsible for the safety of your pupils during your visit.**

#### **Preparing the trip**

**The following steps are recommended.**

**Preparatory site visit** If at all possible, have a look at the site shortly before your visit. This will help you to assess potential hazards and also get maximum educational value from the activities. If you are visiting the Trust's base, a member of staff will be there to advise you.

**Class preparation** Involve your class as much as possible with planning the trip. Children who come with a clear purpose tend to be calmer and more focused. Planning methods of work and discussing how to minimise hazards is educational and makes for a well organised, safer visit. Please discuss sensible behaviour near water and the need to respect the river wildlife. The Trust can supply worksheets or education packs to help this preparation process.

**Adequate supervision** Make sure that you have organised enough accompanying adults. We recommend for primary schools a ratio of 1 adult to 6 children. If children are under the age of 8, this is a minimum requirement where foreshore activities are undertaken. If you are having problems with getting enough helpers, please let us know - we may be able to organise volunteer help.

**Allocating groups** Before coming to the river, please divide your class into small groups and allocate a named adult helper to each group. This ensures that we do not waste time organising your class on arrival and it gives the adults a chance to get to know their group beforehand.

**Briefing helpers** Please make sure that accompanying adults are well briefed - you could give each adult a copy of this safety

advice. Explain to helpers that they will be responsible for caring for the children in their group. Where possible, brief helpers on the educational aims of the visit.

**List of participants** It is advisable for you to bring a written list of pupils and adults participating plus a contact name and number for your school. A copy of this can be given to the accompanying Trust staff member. This list is helpful in case of accident but also if something happens to you!

**Factors affecting individual safety** Please let the Trust know before your visit of any pupils who may have special needs or disabilities. These might include physical disabilities such as asthma, diabetes or epilepsy, restricted mobility, learning or language difficulties. It is important for Trust staff to be aware of any factors that may affect safety and to know that children are able to understand and carry out the activities suggested.

**What to bring** The Trust will provide the equipment necessary for the fieldwork activities (apart from paper and pencils). Plastic bags are very useful to carry home "finds" and dirty wellies or shoes. Most schools insist that pupils wear plastic gloves when undertaking activities in contact with water (see Avoiding Potential Hazards below). The Trust does not supply these so

**PLEASE BRING YOUR OWN PLASTIC GLOVES IF YOU NEED THEM.**

#### **Avoiding potential hazards**

**Working by a river** Any open water is potentially hazardous. Visits may include a *river walk* or activities on a *public pier* such as measuring rate of flow. River walks and the piers we use have safety railings and are designed for public use. Please ensure that your class does not climb over walls or railings and keeps within safety rails at all times. Activities also take place on the *foreshore* either in pools or along the water margin. Access to the foreshore may be slippery. The foreshore shelves gradually and rate of flow along the water's edge is not fast around low water. Please ensure that your class behaves sensibly near water. Your Trust staff member will point out obvious hazards to you on the day such as deep mud or slippery steps.

#### **Simple rules could include:**

- stay aware that you are near a river
- stay on the river walk and within safety rails
- no pushing, running or throwing stones

### **Simple rules could include (continued):**

- keep with your group
- do not go into water above wellie height
- avoid mud - keep to pebbly parts of the foreshore
- listen to and carry out instructions

**Tides** Work on the foreshore is governed by the tides, which vary on a daily basis. Normally activities will be timed to take place two hours before low water and up to two hours after low water depending on the site. It is therefore important to

- arrive punctually to allow for a full session
- leave the foreshore promptly when instructed

**Waterborne disease** Unlike tap water, water in ponds and rivers has not been treated and will contain various micro-organisms, so there is a small possibility of contracting disease. Many rivers, for example, receive cleaned sewage effluent. Another much publicised disease is Weil's Disease, a bacterial infection carried in rats' urine. The chances of infection are slight, but sensible precautions should be taken.

### **Precautions include:**

- wearing plastic gloves when in contact with water
- wearing sturdy footwear
- avoiding picking up sharp objects that may cut the skin. Do not put wet objects into your mouth.
- covering freshly broken skin (i.e. where scab has not formed) and eczema with waterproof plaster before contact with water
- instructing pupils that they should not allow water to get into their bodies, e.g. through sucking fingers or rubbing eyes
- no splashing!
- washing hands after activities and particularly thoroughly before eating or drinking

**Should any illness occur within 2 weeks of contact, medical advice must be taken, and inform your doctor that you have been in contact with untreated water.**

## **During your visit**

**Safety talk** On arrival and before undertaking any fieldwork activities, a Trust staff member will run through the main safety points mentioned in this advice with your class. We hope that your pupils will already be familiar with most points! There will also be a short briefing session with you and adult helpers to make sure everyone knows their areas of responsibility. This session is seen as an educational activity in itself.

**Staying in groups** Before starting activities, the class will normally divide into smaller groups each with an adult helper. The class will usually work in the same group throughout the session. Please make sure your pupils stay within earshot of their adult helper. This is particularly important when working on the foreshore. It is dangerous for children to go off on their own.

**Walking to and from activities** If the class needs to walk any distance, please ensure that there are adults

## **SENSIBLE CLOTHING IS VERY IMPORTANT!**

In the letter to parents informing them of the trip, please emphasise the need for sensible footwear and clothing. The following points are essential:

**clothing appropriate to weather** The children need to wear clothes appropriate to the weather: rain, cold or heat. Children who are cold, wet or overheated do not work well.

**foreshore activities** If work on the foreshore is planned, children will need:

- **old clothes.** These are essential as the children will get muddy and possibly wet.
- **a spare pair of footwear.** If possible, each child should bring wellies - explain that they will not be able to go into the water without them. Failing this, an old pair of trainers or shoes can be worn. Footwear should be stout and should cover the toes - open toed sandals are not appropriate as there may be sharp pieces of rubbish on the shore.
- **a spare pair of socks** in case feet get wet is useful.
- **a plastic bag** to carry home muddy wellies or trainers keeps the coach driver happy!

at the front and the back of the group. In this way, we will not risk losing anyone.

**Communication** The Trust staff member leading the activities carries a whistle. **One blast** means finish off activities and return to the designated meeting place. **Several repeated blasts** is an emergency signal and means return as quickly as possible but without running.

**First aid** The Trust staff member carries a small first aid kit which you are welcome to use if a child is, for example, cut. The Trust staff can not administer first aid personally except in serious cases.

**Emergency situation** If there is any kind of problem, please inform the Trust staff immediately. Normally, a mobile phone will be available, should emergency services be needed.

## **Protecting the environment**

Last but not least is the need to ensure the health and safety of the wildlife that inhabits the river.

### **Good practice includes:**

- keeping noise levels down. Remind your pupils that shouting can disturb birds, particularly when nesting.
- replace any stones that are overturned when looking for invertebrates - small creatures can die if left exposed.
- be gentle with river creatures. Careful handling of animals such as crabs ensures that we learn about rather than damage the environment.
- return live specimens to the river after examination. Some specimens may be taken back to base for further study and will be returned to the river later by a staff member.

## APPENDIX 6

# INTRODUCTORY TALK GIVEN BY GROUP LEADERS BEFORE THAMES21 RIVER CLEAN-UPS

### WELCOME

- **Welcome** everybody and introduce the group leaders.
- Ask everybody to **register** their details on the attendance sheet.
- Tell the volunteers the aim of the day and the **areas of foreshore to be cleaned**.
- Ask volunteers only to **collect items which are unnatural to the river** such as metal and plastic.

### HEALTH AND SAFETY TALK

- It is essential that all volunteers **wear protective rubber gloves** provided for litter picking.
- **Cover any cuts or grazes** with a waterproof plaster if they are likely to come into contact with the water or objects to be collected.
- **Do not touch your eyes or mouth** at any time until your hands are clean.
- **Use the antiseptic wipes** provided to clean your hands.
- **Pick up single items** of litter only, do not scoop a handful.
- **Look out for sharp objects**, particularly hypodermic needles.
- If any needles are found, report them to the group leader and place them in the sharps box provided.
- **Take care when lifting heavy objects**, work in pairs.
- **Avoid muddy areas** of the foreshore, some patches can be deceptively deep.
- **Take care around slippery steps** and access points to the river.
- **Never wander off alone**, always work together in small groups.
- **Keep an eye on the rising tide**, it comes in at a depth of at least one metre/ hour.
- Be aware of **Weil's Disease**, a very rare disease which is passed on through contact with rats' urine. It is exceptionally rare in a fast-flowing tidal river like the Thames. Symptoms include flu-like illness, bruising and severe aches, and they would become apparent within two weeks. If you are concerned, tell your doctor you have been working near water.
- **Thames21 has a risk assessment** form which is available to look at.
- Ask volunteers to report any **medical conditions** to the group leader after the introductory talk.

### AFTER THE CLEAN-UP

- Please **tick your name on the attendance sheet at the end of the clean-up** or whenever you finish to show that you have left the site.
- **Leave gloves and welly boots** at the designated meeting point if borrowed.
- **Help yourself to newsletters and information leaflets**.
- **Leave any comments for the group leader** on the comments sheet.

## APPENDIX 7

# SUGGESTIONS FOR A CODE OF CONDUCT FOR YOUNG PEOPLE ON THE RIVERSIDE AND FORESHORE

It is important not to overload young people with too much information. The following are briefing notes for group leaders, giving the key messages to include in a safety talk on the day of the visit:

### What are the dangers?

- falling in the river.
- slipping or falling over.
- getting stuck in the mud.
- getting cut.
- getting an infection from river water.
- getting lost.

### How can we prevent these accidents happening?

- no climbing on rails and walls; no ducking through rails or safety chains.
- do not go into the river further than half-way up your wellies even to rescue equipment.
- no running or pushing.
- take extra care on slippery surfaces.
- do not go into deep mud. Stay on firm stones.
- do not pick up sharp objects. Tell the group leader if you find one.
- do not let water into your body so
  - do not put fingers near your mouth, eyes, ears or nose.
  - do not rub your eyes with your sleeve.
  - no eating or drinking until you have washed your hands.
  - no splashing or throwing things in the water.
  - cover fresh cuts and broken skin with a plaster.
- stay with the adult in charge of you.

### How can we protect wildlife?

- move around quietly.
- turn stones over again when you have collected your specimen.
- make sure creatures have enough water and do not get too hot.
- do not leave any rubbish.

### How will we know what to do?

- listen carefully to instructions.
- if you hear the whistle blow once, go to your adult and rejoin the group leader (do not run!).
- if you hear the whistle blow 3 times, that's a "Look out" signal. Take a look around - there may be a wave coming.
- If you hear the whistle blow several times, that's an emergency signal. Go to your adult and follow instructions (do not run!).

### Who will look after me?

- you will work in a small group.
- an adult will be in charge of your group.
- stay with your adult at all times.

## APPENDIX 8

### SUGGESTIONS FOR AN EQUIPMENT CHECK LIST

The items on the checklist have all been identified as useful by organisations working on the Thames. It is not suggested that all these items should be carried at all times. For example, some equipment is not appropriate for a group making a short visit but would be required at a large event. It is recommended that organisations make up lists appropriate to different events, distinguishing between equipment that is essential and that which is desirable.

<b>mobile phone</b>	<input type="checkbox"/>	<b>first aid kit</b>	<input type="checkbox"/>
<b>first aid kit</b>	<input type="checkbox"/>	<b>antiseptic wipes</b>	<input type="checkbox"/>
<b>watch</b>	<input type="checkbox"/>	<b>water supply for handwashing</b>	<input type="checkbox"/>
<b>loud hailer</b>	<input type="checkbox"/>	<b>soap</b>	<input type="checkbox"/>
<b>tide times for the day</b>	<input type="checkbox"/>	<b>bottle of fresh water (to swill wounds)</b>	<input type="checkbox"/>
<b>list of participants</b>	<input type="checkbox"/>	<b>broom (to sweep steps)</b>	<input type="checkbox"/>
<b>list of any special needs / medical conditions</b>	<input type="checkbox"/>	<b>shovel (to put sand on steps)</b>	<input type="checkbox"/>
<b>emergency contact phone numbers</b>	<input type="checkbox"/>	<b>sharps container</b>	<input type="checkbox"/>
<b>suitable carrying bag for equipment</b>	<input type="checkbox"/>	<b>plastic bags (to carry muddy equipment)</b>	<input type="checkbox"/>

# APPENDIX 9

## SAMPLE ACCIDENT AND EMERGENCY PROCEDURES (THAMES EXPLORER TRUST)

*If in doubt, treat all incidents as serious. The following are guidelines only. What you do and the order in which you do it will depend on individual circumstances.*

### 1. Serious accidents or illness (i.e. where emergency services need to be called immediately)

- Ensure the safety of the whole group, i.e. do not allow accident to divert attention from supervising rest of group. For example, you may ask accompanying adults to remove children from foreshore.
- Decide on course of action with group leader, for example, teacher in charge.
- Give first aid, if appropriate.
- Call 999 in the event of a serious accident or suspected serious accident.  
Be prepared to give:
  - the location of the accident.
  - the number of injured.
  - the nature of the injuries.
- Inform the TET office (020 8742 0057) as soon as possible.
- Give assistance to the adult in charge to contact the school/relatives as appropriate.

### 2. Less serious accidents or illness (i.e. where medical attention may be necessary )

- Ensure the safety of the whole group, i.e. do not allow accident to divert attention from supervising rest of group. For example, you may ask accompanying adults to remove children from foreshore.
- Decide on course of action with group leader, for example, teacher in charge.
- Help administer first aid, if appropriate.
- Give advice to group leader on nearest hospital, if appropriate. If a car is used, suggest that another person in addition to the driver should accompany the casualty to hospital.
- Inform the TET office (020 8742 0057) as soon as possible.
- Give assistance to the adult in charge to contact the school/relatives as appropriate
- If adequate supervision of site activities cannot be maintained, cancel the activity and make appropriate arrangements.

### 3. Minor accidents or illness (i.e. where medical attention is probably not necessary)

TET staff may not administer first aid for minor treatment. However they can provide a first aid kit, fresh water and advise on options where appropriate. If skin is broken, wound should be flushed with fresh water and the wound covered. The injured person should wash hands as soon as possible. If necessary, the injured person should not continue with any activity involving contact with river water.

### 4. Person falling in river

TET staff should not enter the water to perform a rescue except as a last resort. They should also discourage accompanying adults from this course. River flows in the tidal Thames are strong and the water in winter months is cold. Use all other means where possible:

- Throw a life ring or any other floating material, if available.
- If the victim is near the foreshore, adults can form a human chain and wade in to recover them.
- If the victim is out of reach, assign 2 adults to maintain a constant watch on the position of the victim. Try to choose someone with a mobile phone if this does not delay matters. They should not take their eyes off the victim as it is easy to lose contact. They should follow along the river path where possible.
- Call 999 immediately. Be prepared to give:
  - the location of the victim.
  - a contact number.
- Ensure the safety of the whole group - delegate this responsibility to an accompanying adult.
- Alert passing boats by shouting or blowing whistle, and ask for assistance.
- If at Chiswick, send an adult to alert the TET office (0208 742 0057) for further assistance.
- Have a first aider ready to administer first aid.
- As a last resort and only if you are a trained lifesaver AND YOU DO NOT THINK YOU WILL COMPROMISE YOUR OWN SAFETY, enter the water to effect rescue. If at all possible, take some kind of buoyancy aid with you.

### 5. Getting cut off by tide

Action to take will depend to a certain degree on factors such as location and number of people trapped. However, general guidelines are:

- Ensure the safety of those who are not trapped - delegate this responsibility to an accompanying adult.
- Give clear and appropriate instructions to those trapped. For example, direct them to nearest safety ladder or chain. If on an island, keep group together under supervision away from water.
- Call 999 immediately. Be prepared to give:
  - the location and numbers trapped.
  - a contact number.
- In cases of extreme urgency, alert passing boats by shouting or blowing whistle, and ask for assistance. However, rescues are best carried out by the statutory authorities.
- If at Chiswick, delegate an adult to alert the TET office (020 8742 0057) for further assistance.

## **RECORDING PROCEDURE FOR TET STAFF**

All incidents, however minor, should be recorded. If working at the Chiswick site, log information in the incidents book. This is currently stored in the second drawer of the TET desk. If off site, use the log sheet provided.

### ***You will need to record:***

- date of incident
- location of incident
- name of participant organisation
- names of people involved
- nature of incident
- action taken by you and others

***Staff are requested to record all unusual incidents*** even if they have not been mentioned above (e.g. fights, theft) or information that could help improve safety in the future (e.g. unusual tides, unexpected happenings).

