



STROUD VALLEYS CANAL COMPANY

ANGLING NEAR OVERHEAD POWER LINES POLICY

The aim of this document is to assist those with responsibility for the safety of visitors recognise the hazards and manage the risks from angling adjacent to overhead electrical power lines. It sets out our approach to managing the risk through risk assessment and appropriate controls. Whilst its main aim is to protect anglers its principles can also be applied to other activities such as kite flying and/or use of sailing craft.

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MANAGING THE RISKS FROM OVERHEAD POWER LINES

1. Overview

The responsibility for overhead power lines rests with the owner, however we also have a duty of care for the safety of anyone who works, visits or uses our waterways. By assessing the risks and putting in place suitable control measures, we can demonstrate we are discharging this duty.

2. Legal requirements

The main pieces of legislation controlling our responsibilities are:

Health and Safety at Work Act 1974 (Section 3)

Occupier's Liability Acts 1957 and 1984.

Although the responsibility for power lines rests with the owner, section three of the Health & Safety at Work Act 1974 places a duty on us to ensure the safety of those visiting our sites who are not our employees. Further more the Occupiers Liability Acts' place a duty of care on us to ensure the safety of those visiting our property, this includes visitors to land or water we own or manage. This duty of care not only extends to "invited" visitors but also to anyone carrying out "discouraged activities" or who may be trespassing.

3. Who is at risk?

Anglers are recognised as the main 'at risk' group from overhead power lines consequently this document focuses on them. However as suggested previously other users/visitors may also be at risk. For example, masts and other equipment used by yacht/dinghy sailors or wind surfers, kites or communications aerials may also inadvertently contact overhead lines causing death or injury to participants.

4. Managing the risk

Our safety procedures require that all sites accessible to the public must be managed to minimize risk to their health and safety.

4.1. Recognising the hazard

Overhead electrical power lines commonly carry loads between 230 and 400,000 volts.

They are normally bare (not insulated) and usually mounted on wood, concrete or steel poles or metal towers (pylons)

Height of the lines will vary depending on their type, weather conditions and the load they carry.

Transformers, switches and connections may be positioned on poles at a reduced height to the overhead line.

Electricity can jump short distances through the air (commonly known as arcing)

Telephone wires are also supported on wooden poles which could lead to confusion and place users and assessors at risk.

To minimise the risk of an incident, ALL overhead lines should be treated as live conductors until we have clarified their use. Contact the local electricity supply company for guidance.

4.2 Assessing the risk

Where overhead lines encroach on our waters, towpaths, access routes or car parking areas:

- Never make assumptions that visitors are aware of their presence, we must:
- Assess the risks from the overhead line and
- Implement and maintain control measures appropriate to the risk

When preparing the risk assessment we must consider:

- Overhead power lines may be visible to the naked eye, however
- They may be obscured for example by trees or other vegetation
- Angling may take place in daylight hours and in darkness (particularly illegal fishing at commercial waters)
- Modern rods and poles are good conductors of electricity and reach lengths well in excess of the height of most overhead lines
- In many cases anglers may not be fully aware of their surroundings or the presence of overhead lines

4.3 Controlling the risk

Fishing pegs are not permitted within 30m of overhead power lines

Customers are warned about overhead power lines with clear, visible warning signage:

- Safety signs and safety aids are visible, clear and legible
- Safety signs are replaced as soon as possible after a problem is logged

Minimum exclusion zone to angling

The Angling and Overhead power Lines working group recommend a default exclusion distance for angling adjacent to overhead power lines of 30metres. We enforce this recommendation as our default exclusion distance for all crossings and linear lines.

Where lines run parallel to the water space for long distances but do not constitute a direct hazard (for example an overhead line situated 20 metres into a field on a 10metres wide canal) it may be possible to reduce the exclusion zone. This will be subject to the findings of a site specific risk assessment carried out by competent people.

Additional Control Measures

Risk controls may, depending on local circumstances, need to be more extensive, for example at high risk sites and/or where anglers ignore signage there may be a need for:

- verbal instruction on the bank
- briefing sessions to angling clubs or other groups
- height limit markers (goal posts) to warn of the hazard, or a mix of all.

Such additional “controls” will vary depending on:

- the location
- the type of angling e.g. is it:

- organised or casual

- at manned/unmanned locations

- carried out during daylight or darkness

4.4 Reviewing risk assessments

All risk assessments must be reviewed periodically. This will normally be at 5 yearly intervals but can be more frequent. Reviews must be carried out:

after any incident or near miss involving an overhead power line
when changes occur which affect on site conditions or use.

5. Signage

Mounting the signs

Signs adjacent to and under power lines will normally be placed on wooden totem poles; this will minimize the risk of vandalism. There will however be locations where the use of "totems" is not practical, for example in areas where vegetation may obscure the sign or where vandalism requires the use of steel or similar posts. The sign specification sheet at appendix 2 provides details of appropriate alternative signs.

5.1 Types of sign and their use

"Warning Notices"

Warning notices are erected at access points where the adjacent fishery is affected by overhead power lines; their purpose is to warn anglers of the presence of overhead lines before they reach the water front.

For the purposes of this document, "access points", are defined as any official point of entry onto SVCC waters where overhead power lines are present, this will include, accesses to canals, reservoirs, lakes, ponds, or feeder streams where angling could take place.

"Up and Downstream Signs"

Up and downstream signs are designed to warn the angler they are entering an exclusion zone, they should be installed at the extremities of the exclusion. They are installed at right angles to the walkway so they face the angler as they approach the exclusion.

"Under Crossing Signs"

Under crossing signs are designed to be used under overhead lines which cross the water space. Normally they are placed at the mid point of the exclusion (E.g. adjacent to the centre point of the overhead line at the rear of the towpath). Under crossing signs must be installed parallel to the water, in a prominent position without causing obstruction.

Parallel Lines

At some locations overhead power lines run parallel to the water for long distances. Where such lines are located within 30 metres of the fishery there is a requirement to exclude angling throughout the affected area. In such circumstances "Up and Downstream" signs are erected at the extremities of the exclusion, "under crossing signs" are then installed at frequent intervals "in line of sight" but not exceeding 200metres throughout the length of the affected area.

Application Note: As stated previously, it is possible to allow a relaxation of the 30metre default exclusion distance providing a suitable and sufficient risk assessment has been prepared that supports a change. Such a risk assessment must only be carried out by people who can

demonstrate the competence to do so.

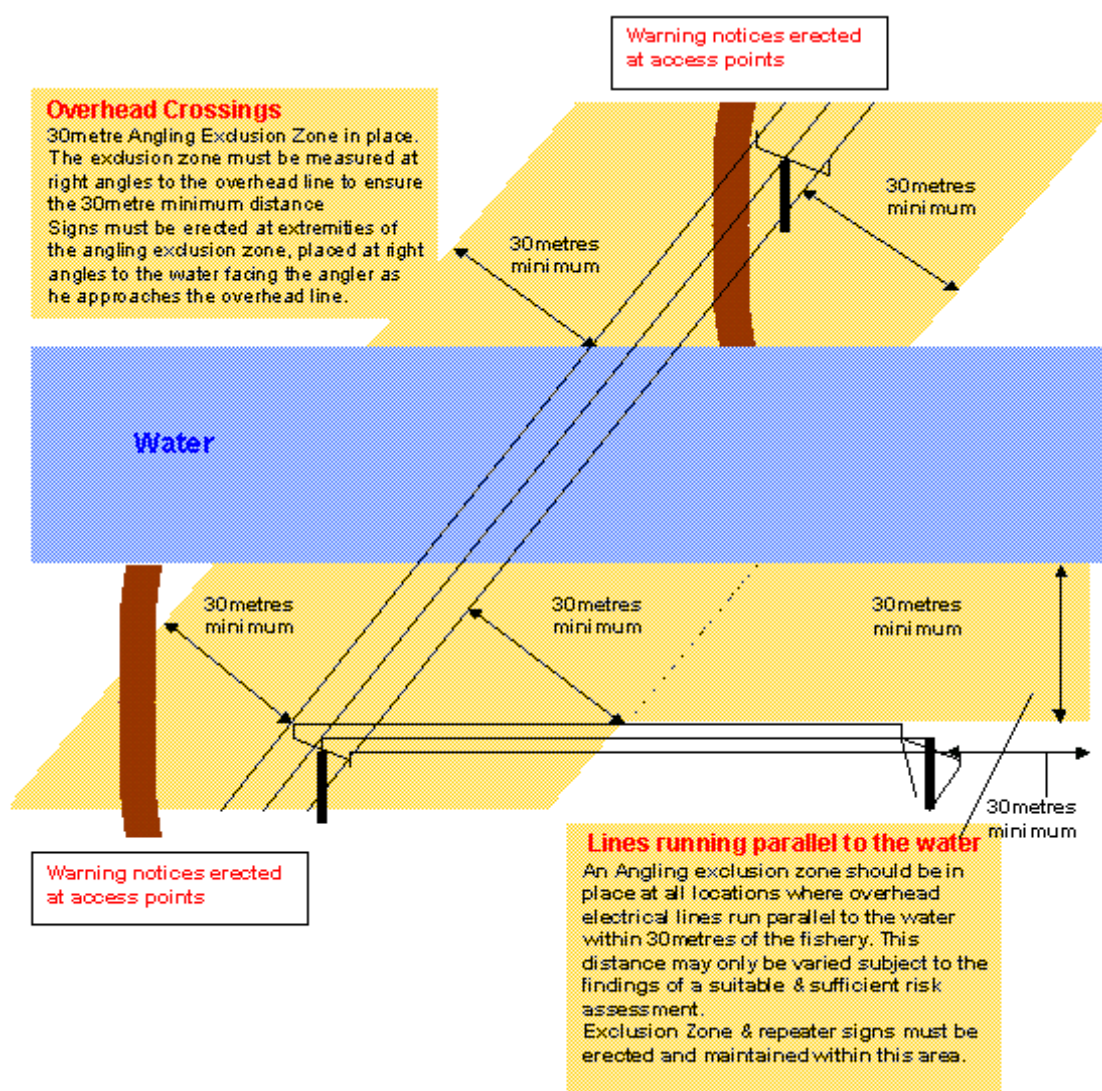
“Danger of Death” warnings

All the above signs must be supplemented by the standard safety yellow electricity warning pictogram and wording "Danger Overhead Electrical power lines". By providing this sign we also provide information on the hazard to other groups who may use the site.

5.2 Inspection & Maintenance

Inspection of overhead power line warning signs is included in lengthsman's procedures. The length inspection for every waterway must include a visual inspection of overhead power line warning signs during each inspection. If a sign or signs are defaced or missing the lengthsman must record the findings on the appropriate report form. In addition, they must inform SVCC of the finding to ensure they are re-instated in line with customer service standard. The lengthsman should warn the angler of the potential danger.

Appendix 1 Exclusion zone Detail - crossings & linear lines



The measurement is taken along the ground at right angles to the outer conductor of the overhead power line.

Appendix 2 Sign Specification

Overhead Electrical Power Line Warning Signs

How & where warning signs should be used

These are the three types of warning sign :-

Warning Notices

Warning notices should be used at access points to provide a general warning of the presence of overhead electrical power lines on approaches to the fishery and/or affecting the fishery itself.



Size:
170x170
Colours:
Black onto
Yellow
(RAL 1003)

Lowercase
letter: 9mm
Readable distance:
1.8M

**Fishery/Access
affected by overhead
electrical power lines.**

**Always carry rods,
poles and other
equipment at a low
level, parallel to the
ground.**

Size:
170x230
Colours:
Black onto
White

Lowercase
letter: 9mm
Readable distance:
1.8M

Angling Exclusion Zone Sign

Exclusion Zone Signs should be used at the extremities of the 30 metre angling exclusion zone. This type of sign is designed to warn anglers as they approach the overhead electrical power line and should be erected in a prominent position, at right angles to the water, to face the anglers as they approach the exclusion zone.



Size:
170x170
Colours:
Black onto
Yellow
(RAL 1003)

Lowercase
letter: 9mm
Readable distance:
1.8M



Size:
170x230
Colours:
Red
(RAL 3001)
and Black
onto White

Lowercase
letter: 9mm
Readable distance:
1.8M

Repeater/Under Line Signs

At some locations overhead electrical power lines may run parallel to the water for long distances, where this occurs it is recommended that 'repeater signs' are erected at frequent intervals in line of sight but not exceeding 200 metres. These signs can also be used as a reminder sign directly below the overhead crossing.

Note: This type of sign should be used in addition to the Angling Exclusion Zone signs.



Size:
170x170
Colours:
Black onto
Yellow
(RAL 1003)

Lowercase
letter: 9mm
Readable distance:
1.8M



Size:
170x230
Colours:
Red
(RAL 3001)
and Black
onto White

Lowercase
letter: 9mm
Readable distance:
1.8M

At high risk locations individual tiles with the wording "Always carry rods, poles and other equipment at a low level, parallel to the ground" can also be incorporated alongside the Exclusion Zone signs and/or the Repeater/Under Line signs

Specification Note: Due to the effects of weathering, notably the fading of the printed message caused by the sun's UV rays it is advisable to check with your sign supplier the life expectancy of the signs. Sign life can be increased by overlaminating the panel with a clear UV inhibiting film.

The exclusion zone & under line signs are supplied as units for use in a vertical format as displayed above, or side by side on one sign panel as shown below. This allows those purchasing the signs to decide on the most suitable layout/design style for the location to be signed.



**Fishery/Access
affected by
overhead electrical
power lines.**

**Always carry rods,
poles and other
equipment at a low
level, parallel to the
ground.**



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