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THREE VALLEYS WATER



## **BRITISH DISABLED WATER SKI ASSOCIATION**

# **RISK ASSESSMENT**

Water Skiing is a potentially hazardous sport involving deep water and powerful boats. These notes are intended to minimise risks to all participants. If you spot any potential hazard, it is your duty to act; report it to stop it happening. If you see an accident, report it and help us to ensure it does not happen again.

Brian Marris—Southern Region Chairman  
Version IV—May2006

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BRITISH DISABLED WATER  
SKI ASSOCIATION

**HAZARD**

**WHO MIGHT BE HARMED**

**CONTROL MEASURES**

Assessment

**40**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Winches**

**HAZARD**

Hawser

Trip hazard  
Whip caused by breaking  
Trailers running down slipway

Motor

Slack  
Overheating

**WHO MIGHT BE HARMED**

Operator  
Spectators  
Children

**CONTROL MEASURES**

Trip warning sign under hawser  
Boatshed door to be kept shut  
No winches left running unattended  
All operators to report defects to manager  
Winches only to be used for trailers on slipway.  
No rope extensions to be used.  
Only operators in boatshed while launching.  
Operators aware that hawser will become slack if trailer not assisted by the operator.  
Area fenced.

Assessment

**1**

**REVIEW PROCEDURES**

All duty officers to be vigilant of hawser condition.  
Manager to monitor hawsers annually.  
All new operators supervised initially.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**LPG boat refuelling**

**HAZARD**

Escaping gas  
Explosion

Cold burns caused by skin contact with liquid gas or high pressure vapour  
Gas build-up in bilges

**WHO MIGHT BE HARMED**

Operator/refueller  
Boat crew

**CONTROL MEASURES**

Boats only to be refuelled by drivers familiar with LPG fittings.  
Head and arms to be at one side when disconnecting.  
No smoking in any boat or on any jetty at any time  
Engine compartment blower to be on during refuelling and until boat has reached speed to allow free-flow of air clean air.

Assessment

**2**

**REVIEW PROCEDURES**

Discuss at new helpers/instructor days.  
New drivers to be supervised initially.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**HAZARD**

**WHO MIGHT BE HARMED**

**CONTROL MEASURES**

Assessment

**39**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**HAZARD**

**WHO MIGHT BE HARMED**

**CONTROL MEASURES**

Assessment

**38**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Edge Triple Bar**

**HAZARD**

Sensory overload  
Skier alone  
Hitting  
Single instructor  
Skis fall off

Confusion, misunderstanding  
Skier fails to let go  
Handles hit pupil  
Insufficient support  
Confusion

**WHO MIGHT BE HARMED**

Skier  
Instructors  
Boat crew

**CONTROL MEASURES**

Single instructor talks, simple instructions, one at a time..  
Instructors do not release before pupil.  
Separated handles rotate through 90°/180°.  
Discuss options of stopping/continuing before leaving.  
Discuss prior to starting, lead instructor controls letting go.

Assessment

**3**

**REVIEW PROCEDURES**

Discuss at new helpers/instructor days.  
Pair experienced/ less experienced instructors



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Boom**

**HAZARD**

Line failure  
Height  
Impact  
Tangle  
Drowning

Boom swings back into boat  
Incorrect height for skier  
Skier hits rear of boat  
Skier catch in ropes  
Instructor falls in

**WHO MIGHT BE HARMED**

Skier  
Instructors

**CONTROL MEASURES**

Check snap shackle before use.  
Attach safety line, such should carry zero load.  
Brief crew and passengers on balancing boat  
**AT ALL SPEEDS.**  
Remove all unused handles.  
Driver not to make clockwise or rapid turns.

Assessment

**4**

**REVIEW PROCEDURES**

Discuss with all in boat prior to start.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**HAZARD**

**WHO MIGHT BE HARMED**

**CONTROL MEASURES**

Assessment

**37**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**HAZARD**

**WHO MIGHT BE HARMED**

**CONTROL MEASURES**

Assessment

**36**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Towed devices**

**HAZARD**

Head injuries  
Muscle strain  
Skis fall off  
Water in ears

Heads knocking together  
Riders unable to hold on  
Hazard to boat

**WHO MIGHT BE HARMED**

Riders

**CONTROL MEASURES**

Helmets to be worn  
Drivers not to exceed manufacturers  
maximum speed, use low speed/wash turns  
to make ride enjoyable. Devices not to be  
driven 'on the whip'.  
Observers to be vigilant about whereabouts  
of fallers. Fallers to be collected ASAP.  
Ensure riders know; how to ride, what to do,  
what not to do, required signals.

Assessment

**5**

**REVIEW PROCEDURES**

Driver/crew to assess physical capabilities of  
riders prior to each run.  
Ensure new riders know; how to ride, what to  
do, what not to do, required signals.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Bar**

**HAZARD**

Drowning  
Impairment of  
ability

Intoxication

**WHO MIGHT BE HARMED**

All

**CONTROL MEASURES**

Duty officer/bar staff have a duty of care in the amount of alcohol served to individuals,. Be aware of the proximity of water, motorway and railway.

No skier, driver, observer or instructor is to participate once having a unit of alcohol that day

Assessment

**6**

**REVIEW PROCEDURES**

Committee to review this aspect once the bar has been operational.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**HAZARD**

**WHO MIGHT BE HARMED**

**CONTROL MEASURES**

Assessment

**35**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Internet**

**HAZARD**

Broadband access Pornography

**WHO MIGHT BE HARMED**

Children

**CONTROL MEASURES**

Parents to supervise their own children.

Assessment

**34**

**REVIEW PROCEDURES**

View history log



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Buoyant Tows (Palms, Root 5 etc)**

**HAZARD**

Tied tows  
Head injuries  
Panic

Skier falls off/loses balance

**WHO MIGHT BE HARMED**

Skier  
Instructors

**CONTROL MEASURES**

Helmets to be worn  
Quick release if tows tied  
Assess whether one instructor should continue alone or one fall prior to starting.  
Be prepared to abandon if skier not happy  
In extreme cases consider joint riders for comfort.

Assessment

**7**

**REVIEW PROCEDURES**

Discuss at new helpers/instructor days.  
Discuss with carers ability/likelihood of letting go.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Boat launch**

**HAZARD**

Engine failure	Lack of oil/coolant
Control failure	Hitting banks, loss of control
Sinking	Hitting object
Fuel	Running out

**WHO MIGHT BE HARMED**

Driver  
Boat crew

**CONTROL MEASURES**

Upon each launch, prior to engine start, driver to check; oil level, coolant level, belt adjustment, fuel level.  
Upon launch driver to run boat slowly up lake until warm , check for floating objects, hazards, check smooth operation of Bowden cables. Check coolant temp, oil pressure. Check fuel level, inform secondary drivers of last refuelling time. Refuel prior to putting away.

Assessment

**8**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Work Experience Students**

**HAZARD**

General/all  
Unfamiliarity of student to Centre and sport

**WHO MIGHT BE HARMED**

Student  
Clients

**CONTROL MEASURES**

Prior to any student participating on a work experience placement there should be an induction session by the manager/committee member to include;  
Tour of site and meet manager; Action for fire and fire arrangements; Reporting of accidents; First aid facilities; Site specific safety precautions; Lifting and handling; explanation of client group and how to help/not to help groups; duties to be expected during the period of work experience,; contact hours;

Assessment

**33**

**REVIEW PROCEDURES**

Copy of this booklet to be issued prior to starting.  
Evaluate placement with student during and after placement.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Refuelling**

Spillage of fuel

**HAZARD**

Environmental hazard  
Fire

**WHO MIGHT BE HARMED**

Environment  
Operator

**CONTROL MEASURES**

Minimum amount of fuel to be kept on site  
During competitions, fuel to be either locked  
in vehicles or chained in fuel pen  
All boat to be dry fuels (no open cans on jet-  
ties or water)  
Fuel transfer only over hard surfaces.  
Landlords to be informed of any spillage.

Assessment

**32**

**REVIEW PROCEDURES**

All drivers to be inducted.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Jump**

Impact injuries  
Broken limbs  
Dislocation

**HAZARD**

**WHO MIGHT BE HARMED**

Skier

**CONTROL MEASURES**

Solo jumping should only be undertaken at  
the level of competency.  
Instruction should only be undertaken by  
those able to jump.  
Jump guiding should never be undertaken by  
those unable to jump at that speed/height.

Assessment

**9**

**REVIEW PROCEDURES**

Prior to jumping, all involved should liaise  
and be aware of speeds/ boat position,  
requirement for safety boat.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Visually impaired**

Optimism  
Turns  
Jumping  
Impact

**HAZARD**

Skier not aware of their limitations, those of the site.  
(See jump)  
Into stationary objects (jetty, jump)

**WHO MIGHT BE HARMED**

Skier

**CONTROL MEASURES**

Drivers to over-rule skier if competency not proven.  
Guides or 'drop-off' away from jetty and at lake ends to be used unless agreed by experienced instructors.  
Drivers to allow extra distance from fixed objects.  
Observer and skier to be familiar in use of sound signals.  
Guide to be on the outside of turns.  
Quick release to be used when guide used.

Assessment

**10**

**REVIEW PROCEDURES**

All new instructors to use blackout goggles.  
New skiers to be given tactile map.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Fire**

Burns  
Conflagration

**HAZARD**

Risk of fires generally  
Loss of buildings, equipment

**WHO MIGHT BE HARMED**

All  
Equipment  
Buildings

**CONTROL MEASURES**

All buildings

Fire alarm systems installed and checked.  
Extinguishers and fire blankets distributed as advised by fire control officer and specialist contractors.

Assessment

**31**

**REVIEW PROCEDURES**

Annual checks by contractors of systems and fire fighting equipment.  
Weekly systems check and log kept by manager.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Inspection of Risks**

**HAZARD**

General time  
Related problems

**WHO MIGHT BE HARMED**

Anyone

**CONTROL MEASURES**

Annual committee inspection of site in conjunction with manager. All areas, equipment visually inspected, general tidiness, re-appraisal of hazards, re-appraisal of risk assessment of documentation.

Assessment

**30**

**REVIEW PROCEDURES**

Annual



BRITISH DISABLED WATER  
SKI ASSOCIATION

**New clients**

**HAZARD**

Presumes ability/  
capability  
Confidence

Learning difficulties, helpers not fully informed when clients are unable to give accurate, reliable responses.

**WHO MIGHT BE HARMED**

Skier

**CONTROL MEASURES**

Instructor to confirm with group leaders/ carers when learning issues evident. If in doubt request doctors letter. Adapt techniques when required.

Assessment

**11**

**REVIEW PROCEDURES**

Request written information if carer not available.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Boat shed**

Numerous

**HAZARD**

Workshop environment, unsuitable for children.

**WHO MIGHT BE HARMED**

Children

**CONTROL MEASURES**

Duty driver/manager to keep door closed  
Notice to be displayed

Assessment

**12**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Observer**

Fingers

**HAZARD**

Amputation

**WHO MIGHT BE HARMED**

Observers

**CONTROL MEASURES**

All observers qualified by course and oral examination.

Assessment

**29**

**REVIEW PROCEDURES**

Maintain list of qualified observers.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Clubhouse events**

Fire

**HAZARD**

Burns, death

**WHO MIGHT BE HARMED**

All

**CONTROL MEASURES**

During any event involving numbers of guest not familiar with building the addition exist at the rear of the building should be unlocked. The patio doors should similarly be unlocked. Fire plan shown to Walton fire safety officer.

Assessment

**28**

**REVIEW PROCEDURES**

Briefing session with all groups booking use of clubhouse,



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Chemicals**

Cleaning materials  
Oils  
Batteries

**HAZARD**

Poison

**WHO MIGHT BE HARMED**

Children  
Some adults

**CONTROL MEASURES**

Provision of lockable store for cleaning chemicals in club-house and oils etc in boat-house.

Assessment

**13**

**REVIEW PROCEDURES**

Manager to store deliveries as soon as possible.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Pets/dogs**

**HAZARD**

Biting  
Disease  
Smell

Canine toxicosis  
Hygiene

**WHO MIGHT BE HARMED**

Anyone  
Other pets

**CONTROL MEASURES**

Dissuade members from bringing dogs to the club.  
Duty officer/manage to ensure no fouling on grass area.  
Ensure owners do not allow dogs in kitchen or BBQ areas.

Assessment

**14**

**REVIEW PROCEDURES**

Inform new members, dogs are not banned but not encouraged.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Groups/school groups**

**HAZARD**

Communication

Lack of understanding of facilities,  
Techniques capabilities.

**WHO MIGHT BE HARMED**

Skier  
Group helpers

**CONTROL MEASURES**

Issue of this booklet to all groups.  
Letter inviting preliminary visit, try techniques.

Assessment

**27**

**REVIEW PROCEDURES**

Issue of this booklet to all groups.  
Letter inviting preliminary visit, notes sent.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Medical waste**

**HAZARD**

Sharps  
Clinical waste

Transmission of infection/disease

**WHO MIGHT BE HARMED**

Skier  
Instructors  
Boat crew

**CONTROL MEASURES**

Provision of yellow clinical waste bins  
Signs as to their use

Assessment

**26**

**REVIEW PROCEDURES**

Inform group leaders of appropriate groups.  
Bins changed by contractors regularly.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Bar B Q**

**HAZARD**

Burning

BBQ's

**WHO MIGHT BE HARMED**

All persons

**CONTROL MEASURES**

Limit number of person in 'Hairy hut'

Assessment

**15**

**REVIEW PROCEDURES**



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Playground**

Dogs  
Litter  
Falls

**HAZARD**

Canine toxicosis  
Cuts, eating

**WHO MIGHT BE HARMED**

Children

**CONTROL MEASURES**

Dogs never allowed in play area.  
Duty officer aware of litter, cleanliness.  
Sign warning parents to supervise their own children.

Assessment

**16**

**REVIEW PROCEDURES**

Annual weeding, daily litter check by duty officer/manager.  
Dissuade dogs from being brought to the centre.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Diving**

Death

**HAZARD**

Drowning  
Hit by boat

**WHO MIGHT BE HARMED**

Divers

**CONTROL MEASURES**

Only qualified divers invited to use lake for weight retrieval etc.  
No boats in use while divers at work unless in a segregated area.  
Reliance on divers to work within their own safety guidelines.

Assessment

**25**

**REVIEW PROCEDURES**

Make new assisting divers aware of hazards such as underwater lines, depths etc.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Instructors**

**HAZARD**

Liability

**WHO MIGHT BE HARMED**

Instructors

**CONTROL MEASURES**

All instructors must be members of both BDWSA and BWS.  
Instructors should only assist to the level of their own competency.

Assessment

**24**

**REVIEW PROCEDURES**

Experienced instructors should monitor less experienced instructors to ensure a safe and professional level of tuition is provided.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Swimming**

**HAZARD**

Deep water  
Shallow water

Drowning  
Hitting bottom

**WHO MIGHT BE HARMED**

Children  
Adults  
Tri-athletes

**CONTROL MEASURES**

Swimming area

Buoyancy aids to be worn by children, parents to supervise, signs to this effect.

Lake

No swimming alone, all swimming supervised by club members, jointly members of BTA and to abide by their code of conduct.

Assessment

**17**

**REVIEW PROCEDURES**

Leaflets on use of lake by tri-athletes available to new swimmers.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Jetties**

**HAZARD**

Hitting while skiing  
Slipping  
cutting

Barnacle growth (competition jetty)

**WHO MIGHT BE HARMED**

All personnel

**CONTROL MEASURES**

Sight-line of buoys to warn skiers of dangers.  
Instruct novice skiers of danger of skiing too close to jetty.  
Insure driver is aware of any visual impairment.  
Be aware of over exuberant play.  
Be aware of algae build-up  
Clear barnacle growth prior to competitions

Assessment

**18**

**REVIEW PROCEDURES**

Prepare for competition in advance.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Pair/mono skiing**

**HAZARD**

Falls  
Hitting stationary objects  
Hitting ski  
Exhaustion  
Hyperthermia

Strains, winding  
Impact injuries, facial  
  
Head, facial injuries  
Unable to continue

**WHO MIGHT BE HARMED**

Skier

**CONTROL MEASURES**

Advise skiers to ski within their own ability envelope.  
Helmets to be worn.  
Boat crew to assist/be aware of exhaustion/  
Extreme coldness.  
Driver/observer never to allow novice skier 'on the whip' in corners.  
Offer dry suits to those with circulation problems.

Assessment

**23**

**REVIEW PROCEDURES**

Driver to check prior to every ski on the experience/competence of skier of not known.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Drivers**

**HAZARD**

Litigation  
Sunstroke/  
dehydration

An harm to skier  
Sickness, inability to work safely

**WHO MIGHT BE HARMED**

Skier  
Driver

**CONTROL MEASURES**

All drivers to hold minimum of SBDA, club driver recommended.  
Only holders of 'club driver' to supervise novice drivers.  
Only drivers specifically authorised by committee permitted to drive.  
Drivers must be members of both BDWSA and BWS.  
Drivers should acquaint themselves with every new skier, their needs and capabilities.  
Provide sun cover for boat, take breaks

**Assessment**

**22**

**REVIEW PROCEDURES**

All new drivers to go through induction and supervision period.  
Drivers require regular breaks, especially in hot weather.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Safety boat / petrol**

**HAZARD**

Fire  
Injured skiers  
Trapped fingers

Storage and transfer of petroleum spirit  
Exacerbated injuries to skier

**WHO MIGHT BE HARMED**

All personnel  
Premises

**CONTROL MEASURES**

Fuel should only be stored in approved containers in the safety boat.  
Should excess quantity be required, it is to be kept chained in the LPG cage.  
Annual practice of recovery drill with and without use of spinal board.  
Only approved drivers, driver to remain at the control while the engine is running.  
Driver briefed in danger of the ramp trapping fingers, aware of wash.

**Assessment**

**19**

**REVIEW PROCEDURES**

Discuss fuel requirements with outside operators of any form of craft. Establish storage facilities.  
Annual recovery practise



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Seated skiing**

**HAZARD**

Falls  
Hitting stationary  
objects  
Hitting ski  
Exhaustion  
Hyperthermia

Strains, winding  
Impact injuries, facial  
Head, facial injuries  
Unable to continue

**WHO MIGHT BE HARMED**

Skier  
Instructors

**CONTROL MEASURES**

Advise skiers to ski within their own ability envelope.  
Helmets to be worn.  
Boat crew to assist/be aware of exhaustion/  
Extreme coldness.  
Driver/observer never to allow novice skier 'on the whip' in corners.  
Offer dry suits to those with circulation problems.

Assessment

**20**

**REVIEW PROCEDURES**

Driver to check prior to every ski on the experience/competence of skier of not known.



BRITISH DISABLED WATER  
SKI ASSOCIATION

**Environmental**

**HAZARD**

Motorway  
Water  
Railway

Impact, death  
Deep water, drowning  
Shallow water—diving  
Extreme high voltage line, electrocution, death

**WHO MIGHT BE HARMED**

Children  
Adults with learning difficulties

**CONTROL MEASURES**

Compound fence to define safe area. Group leaders/carers should be aware of location and warn assistants and clients.  
Define swimming area with carers cautioned to supervise. All children swimming, on jetties or boats to wear buoyancy aids.

Assessment

**21**

**REVIEW PROCEDURES**

Communicate with service workers.  
Induct new group leaders.