sport • inclusion • ireland

Factsheet:

Inclusive Design for Outdoor Recreation

Waterways

Over 1000km of waterways are maintained, developed, and promoted by Waterways Ireland. Waterways which are under the remit of Waterways Ireland are as follows:

- The Barrow Navigation
- The Grand Canal
- The Royal Canal
- The Shannon Navigation
- The Erne System
- The Lower Bann
- The Shannon-Erne Waterway

All of these waterways offer an incredible unique experience, one being like no other. Challenges for a person with a disability may include access one of these canals or rivers and also to gaining entry onto waterway crafts. Because each offering has its own unique charm, each will have different requirements to be accessible. This guide will not have an answer to every feature, it is aimed to create support of any plans to create more opportunities to take part in these amenities.

Design Criteria

What To Keep in Mind

- Parking bays to be close to access point
- Public Accessible WCs close proximity to access point
- Level access and the avoidance of creating a lip at the start of any boardwalk is advised

Symbols

Multi Access Symbol
Has a wide and firm surface, must meet criteria as Class 1 Trail

Challenging Access Symbol
May be narrower, slightly different surfaces with slight steep inclination, is a mixture of criteria set out for Grade 1 and Grade 2 Trail

Surfacing

Multi Access Trails	Firm, compact, stable, and non-slip. i.e. Concrete, Tarmac, bitumen macadam, dust binding, timber, and brick paving
Challenging Access Trails	Textured surface with slight inclines. i.e. Loose gravel, woodchip, and grass
Colour	Light in colour in contrast to the surrounding landscape
Drainage	Good drainage
Width	1m minimum gap is required for a person with a wheelchair to use the route/pathway, add 1.2m to allow a person walking alongside a wheelchair user.
Passing Space	• Where a route is narrower than 2000mm, passing spaces should be created in order to allow to wheelchairs to pass • 2m width required for two wheelchair users to pass easily
Upstand	Edge protection/Upstand to assist a person with a visual impairment
Viewing Areas	If a barrier is required, a perspex barrier would be most suitable
Seating areas	• Mixture of seating provided, backrests, armrests for example • Should be slightly back from main boardwalk as not to interfere with pedestrian traffic • Space alongside seats to allow for positioning of a wheelchair
Equipment and Supports	On site dual equipment made available and promoted

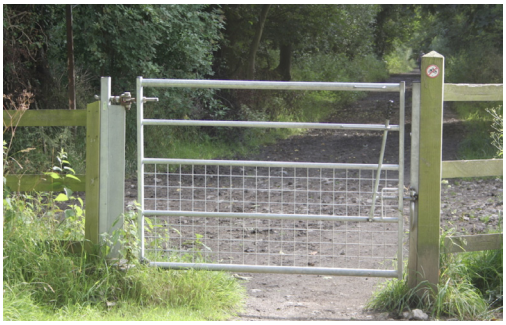
Obstacles and Barriers

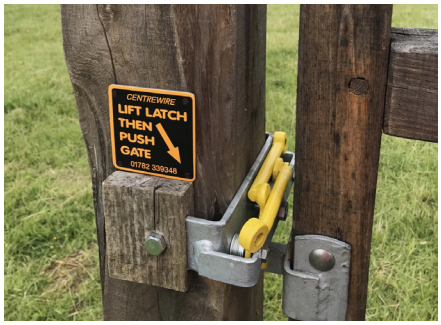
Natural Environment	• Can cause some issues for access, example Boulders or trees • Erosion • Flooding probabilities, slippery piers, and walkways • Topography • Vegetation • Embankments which are exposed
Fishing Stands	May be at a high incline, alternative access route may need to be considered

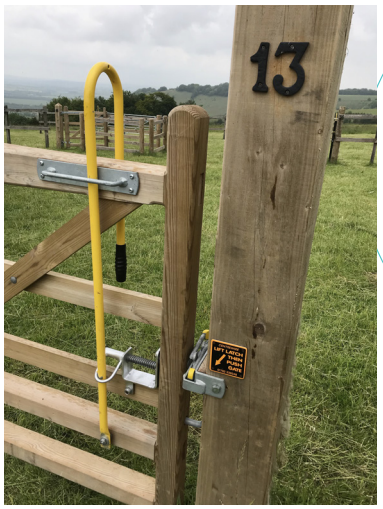
Entrance and Exit Points

Universal Design approach to be carefully planned to ensure access for all. Limited strength or restricted manual dexterity should be considered to easily gain access to a walkway adjacent to waterway.

Width	1m gap is required to allow a person using a wheelchair to gain access
Mechanism	Self closing two way gates Visible latches on both sides
Latches	Easily usable Minimal strength and dexterity required
Bollard	Very visible with a high visibility collar at the top. It is advised these bollards should not be linked with a chain or rope which would restrict access to the waterway





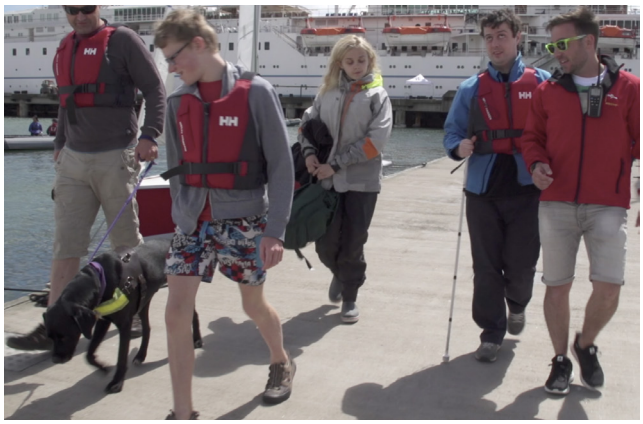


Access to Riverbanks, Fishing Stands, Jetties and Walkways

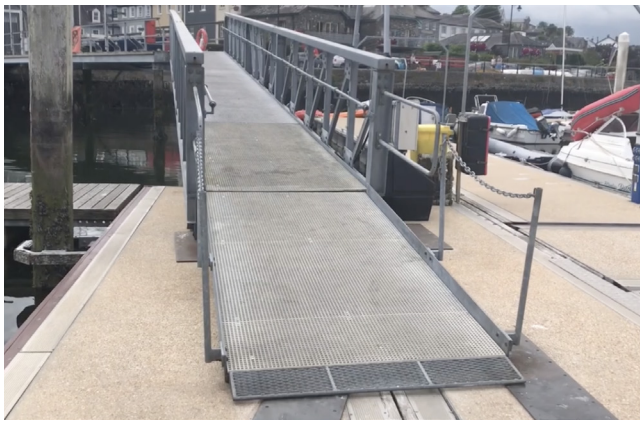
Materials to be Used	Pressure Treated Wood, Composite Decking, Pre-cast concrete forms and modified wood
Access to Boardwalks	Slight gaps in decking will increase grip in case route is wet
Slope and width	Slope and width of route should follow the same design criteria as for Multi- Access and Challenging Access
Upstand	Edge protection/Upstand to assist a person with a visual impairment ***Important to note that this may interfere with transfers to and from watercrafts, consultation is advised***
Railings	Protection added to piers and waterways where access is not needed or there is a significant change in slope
Maintenance	Regular checks will ensure safety and enjoyment for all using the waterways

Access to Water-Based Activities

Water-Based activities are often the last thing a person with a disability wants to take part in, whether from a negative past experience or simply never having the opportunity to take part. Simple changes can be made in order for everyone to take part, these could consist of possessing equipment like a transfer box or board, or slight adjustments to a canoe to increase its stability on the water. Practitioners already have the knowledge to keep safety measures paramount throughout sessions but with some guidance from this document more people with disabilities will be able to take part.



Gangways
Designed with the least possible slope, when conducting a session on the water height, whether from tidal change or rain must be taken into consideration as the slope of the gangway could change to an unsuitable level.



Transition Plates
Transition plates are designed to provide a smooth transition between the gangway and the pontoon it rests on, eliminating the step between.

Accessible Fishing Stands

Consideration should be given to Accessible fishing stands. Can be provided next to all Angling points via the use of an anchored floating pontoon with access from the waterway/boardwalk.

Integration	• To increase participation in the sport of angling, integration is key. • Incorporating accessible fishing stand next to fishing stands is vital.
Linking Gangways	Minimum width of 1200mm for a person using a wheelchair.
Size of Fishing Stand	It is advised that a river/canal/lakeshore fishing stand should be minimum 2400x1800mm.
Pontoon	• Should be anchored securely to ensure no drifting and some stability. • Railings should be considered. Lowered heights to give access to castors from a wheelchair full benefit of the pontoon
Location	Are the accessible fishing stands accessible from the car park? Is the trail that leads it to in line with design criteria for Multi-Access and Challenging Access.
Upstand	Edge protection/Upstand to assist a person with a visual impairment, should be a minimum height of 150mm.
Seating	Should be considered in the development phase of accessible fishing stands.
Fishing Rod Holder	Another consideration during the development phase.

Equipment and Support

There may be specific equipment at some sites which can assist a person with limited mobility gain access to the watercraft. It is imperative that consultation between the activity provider and the person in need of assistance takes place in order to carry out the transition smoothly and most suited to the needs of the person.

Supportive Seating
Many adjustments can be made in order to create a safe experience for all. Assistive seating may include back rests, arm rests which can support a person while taking part in the activity, whether this is paddling or fishing. Considerations should include comfort aspects such as extra padding in areas of the seat.

Reduced Hand Function
During the consultation hand function should be addressed, adapted paddling equipment could be of benefit. Whether the diameter needs to be changed or a support strap put in place to increase gripping capacity. Take note that any straps should be easy release.
Sources of equipment can be found at www.activehands.com and www.creatingability.com

Equipment and Support

Reduced Upper Limb Function
Use of a smaller paddle may be considered, attachment to the buoyancy aid will assist paddle remaining in correct position, or installing a paddle pivot which the paddle can rest on would drastically increase participation for someone with reduced upper limb function. See www.creatingability.com

Crewlift
Has the capacity to list up to 160kg, used in marine centres to ensure access for people who use a wheelchair can access their boats. Fail safe design with security levels.

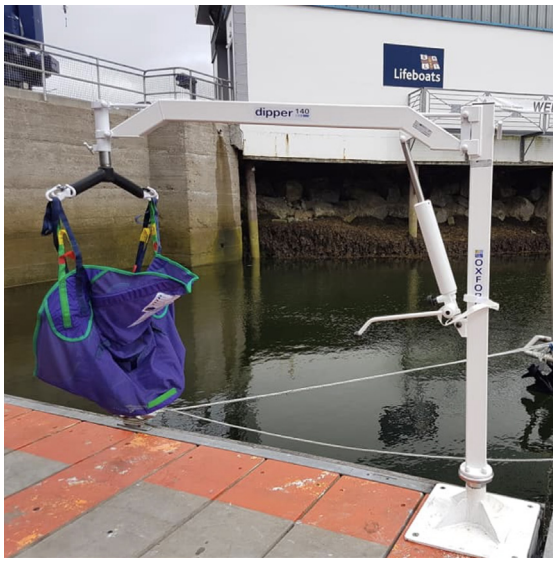
Good Upper Body Strength
Opportunity here to use a transfer box or board where the person can transfer themselves directly from chair to boat

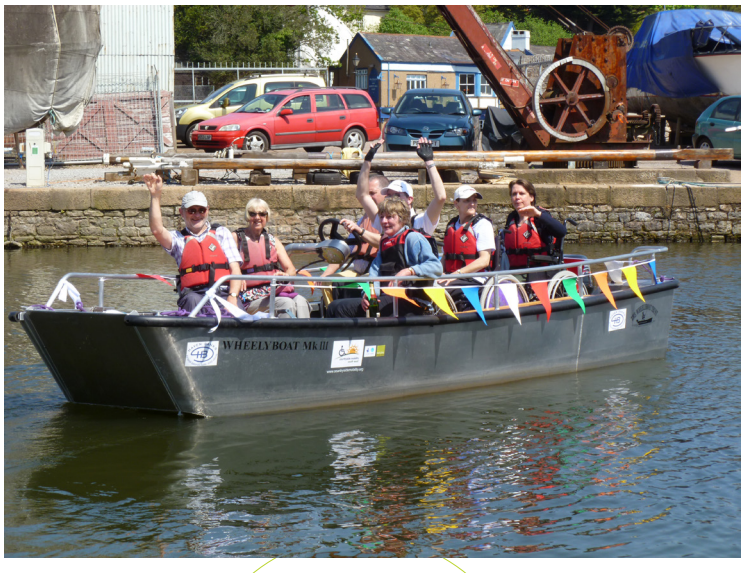
Hoists
Can be used in a multitude of marine centres. Advice should be sought on the use of any hoist. Max weight capacity must be abided by. Training must be given to anyone who is to use the hoist from qualified personnel.

Slings or Hoist Harnesses
Centres need to abide by international standards when using slings and harnesses. Care should be given not to allow person in harness to be sitting in these for two long as it may cause suspension trauma or hanging harness trauma in the lower limbs, training should be provided.

Wheelyboats
Designed to give easy access and egress to those who use a wheelchair on to the boat. Allows for activities such as Powerboating, pleasure boating, and nature watching. Non slip deck included but clamping system is present as an extra safety measure

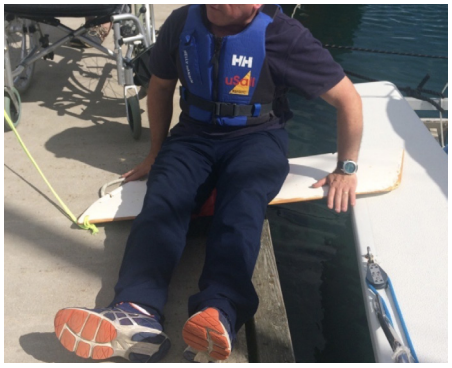
Fishing Rod
The strong arm, hands free rod holder which allows participation in the sport when there is limited or no finger strength.

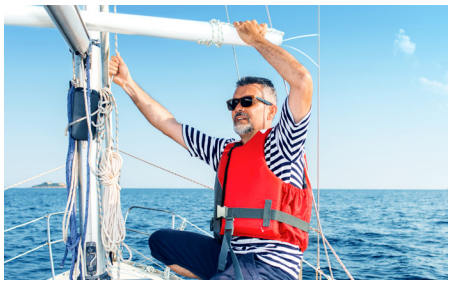




Risk Management

Dynamic Risk Assessments take place during all water sessions by all providers. Safety policies and procedures should not have to change much for all participants, but the following tips may benefit those in the practice.





Transferring to and from Boat

- Is the procedure safe for all personnel involved?
- Is there an easier way of doing it?
- Has the person who needs to be transferred been consulted in the method at which will be used?

Personal Floatation Device (PFD)

Level of physical ability must be taken into consideration when supplying a PFD. Knowledge of the difference between a life jacket and buoyancy aid will assist in the correct equipment being used

Life Jacket

Life jackets are life saving devices which fully support you in the water giving head and neck support and ability to turn someone face up if unable to thread water or unconscious.

Buoyancy Aid

These are an "Aid" intended to help you stay on the surface while treading water; it will not help you under all circumstances. BAs great in waters when the wearer is in sight of the shoreline and will be continuously in and out of the water.

Hypothermia, Hyperthermia and Dehydration

Precaution must be taken when taking part in any water based activity. Special consideration must be given to clothing, water intake and food intake. Participants who may have no sensory feelings to hot and cold will be more prone to these dangers. Also, knowledge of and location of spinal cord injuries/ impairments is vital to take into consideration as they may not have the ability to sweat below their injury level.